



Mr. Roch Baamonde, Chief
Grants and Contacts Management Branch
U.S. Environmental Protection Agency
USEPA – Region II
290 Broadway, 27th Floor
New York, New York 10007-1866

Date: June 27, 2014

RE: Suffolk County Department of Health Services Application for Clean Water Act Section 320 funds for the Peconic Estuary Program

Dear Mr. Baamonde,

Attached, please find the revised workplan and revised SF-424 and 424A associated with our application for National Estuary Program funds. The corrections/changes were requested during the grant coordinator's review. Thank you for considering this revised application. If you have any questions or comments, please do not hesitate to contact me at (631) 852-5805.

Sincerely,
Alison Branco

Director, Peconic Estuary Program

Peconic Estuary Program Support
Corrected - June 2014

Applicant: Suffolk County Department of Health Services
3500 Sunrise Highway
Great River, NY 11739

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QA/QC Plan Required: none

Project Period: October 1, 2014 - September 30, 2016

Cost: \$353,202

Background

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 (PEP) 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 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 for the Peconic Estuary are 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.

Objective

SCDHS proposes to continue serving as the PEP Program Office, implementing the PEP Comprehensive Conservation and Management Plan (CCMP). Workplan tasks address priority management items with a strong focus on nitrogen management, water quality, habitat and living resource conservation and restoration, critical lands protection, financing, and public education and outreach. The strategic focus for PEP from 2013-2016 is nitrogen

load reduction. Workplan tasks prioritize the nutrient management priority, while advancing protection and restoration of the health of the Peconic Estuary, imperative to supporting its commercial, recreational, environmental, and aesthetic values. The specific tasks designed to support this implementation are outlined below.

NEW & ONGOING TASKS (See Appendix A for report on completed tasks)

Task 2014-1A: Program Office (Ongoing Activity) - \$43,550

Partners & Roles: The Program Office located in the Office of Ecology in the Division of Environmental Quality at SCDHS; the PEP Program Director is an employee of the Department.

CCMP & Annual Workplan Priority Topics/Goals: Program administration, habitat protection/restoration, stormwater control, and nutrient management (Related CCMP Actions: M-1.2, CCMP Page 10-16).

Objectives: The Program Office provides overall leadership, management and administration to the Program on behalf of the Management Conference. The objectives of the management conference focus on protecting and restoring habitats, living resources and water quality.

Description: Carrying out CCMP implementation on behalf of the management committee, including administering grants, managing projects and associated contracts, managing activities of several committees, providing technical support to the PEP (including conducting technical projects and providing data management services), and offering public information and outreach services. The budget for the Program Office includes salary and fringe benefit support for approximately 0.32 FTE for the full-time PEP Program Director. This item also includes \$2500 in travel costs to cover transportation, lodging and meals for the program director to represent PEP at one annual NEP meeting at EPA HQ in Washington DC, date TBA – typically late February (estimated cost \$1,250) and for the program director to represent PEP at one other national NEP meeting hosted by the Association of National Estuary Programs, date and location TBD (estimated cost \$1,250). A portion of this travel will take place in the 2015 grant year because travel during the 2014 grant year will be partially supported by remaining funds in previous years' travel budgets. It also includes \$1,000 for supplies, to include a water-resistant digital camera (estimated \$300), miscellaneous office supplies (\$500), and miscellaneous field supplies, including those for Sediment Elevation Table monitoring at Indian Island County Park wetland restoration site (including aluminum plank, stools, waterproof field journals, etc. \$200)

Outputs/Deliverables & Milestones

- Report annually on: the status of implementing the identified priority actions in the CCMP; leveraging of governmental and non-governmental funds; and habitat restoration (including acquisition) efforts, according to guidelines and deadlines established by USEPA (i.e. GPRA) measures) (September).
- Assist the Management Committee in developing a plan for updating the CCMP and developing a new finance plan.
- Prepare and submit workplans, budgets, and grant applications according to schedules set by the management conference and in accordance with USEPA guidance. Expediently carry out workplan tasks; ensure that all contracts are awarded as quickly as possible with the goal of 12 months from grant award and that funds are drawn down at least semiannually (spring).
- Oversee and coordinate preparation of the Annual Workplan Strategy (September) document and annual report (December).
- Provide technical and administrative support on efforts to protecting and restoring habitats, living resources and water quality. Provide technical and administrative support to PEP committees (ongoing).
- Ensure the Program is represented at all scheduled national meetings of the NEP (typically 2 meetings per year), and represented in local, regional and national conferences, workshops and symposia.

- Plan and execute meetings of the Policy Committee (typically 1 meeting per year) and Management Committee (typically 4 meetings per year). Be responsive to inquiries and initiatives of these committees.
- Prepare “Program Evaluation” submittal consistent with USEPA guidance (2017).
- Chair a Nitrogen workgroup and with the workgroup develop a revised TMDL Implementation Strategy to address NPS nitrogen loads, including technical, regulatory, cultural, and financial considerations. Roadblocks to nitrogen load reduction will be identified and potential solutions outlined. This strategy will help stakeholders understand what is needed to achieve the nitrogen load reduction goals called for in the TMDL.
- Develop an Environmental Indicators Report, with support from the Environmental Indicators Workgroup, using data inputs from the TAC, monitoring programs, stakeholders, and other agencies.
- Assist TAC and Outreach Coordinator to develop a “State of the Bay” publication to summarize the environmental indicators report and other available information, as needed, to inform the public about the status and trends of the environmental quality of the Estuary.

Anticipated Outcomes

Short Term: See “Outputs/Deliverables & Milestones”

Intermediate: Stakeholders (governments at all levels and citizens) are implementing habitat protection efforts and restoration projects, stormwater control measures, and practices to eliminate or reduce nutrient and pathogen loadings. There is increased understanding of factors that are adversely impacting tidal wetlands and eelgrass and management options are developed to address them.

Long Term: Terrestrial and aquatic habitats support healthy and diverse populations of commercially, recreationally and ecologically important species (especially eelgrass and diadromous fish) and water quality that supports all designated uses and achieves all applicable standards, particularly with respect to dissolved oxygen, pathogens, and toxic substances.

Change in Pressure Targets: Preserved, protected and restored habitats; reduction in pathogen and nutrient loadings and stormwater volumes

Clean Water Act Core Programs: TMDL implementation, MS4 permit implementation, wetlands protection. Elements of this project prevent or mitigate the impacts of nutrient pollution.

Task 2014-2: Water Quality Monitoring (Ongoing Activity) - \$254,941

Partners & Roles: SCDHS conducts long term periodic monitoring; US Geological Survey (USGS) maintains continuous water quality monitoring station in the Western Peconic Estuary and at Orient Point.

CCMP & Annual Workplan Priority Topics/Goals: Assess environmental conditions in the Peconic Estuary and refine management programs as necessary. Water column nitrogen and dissolved oxygen concentrations are useful in assessing progress toward TMDL implementation and verifying modeling efforts. (Related CCMP Actions: N-1, N-9, N-10 CCMP pages 3-21, 3-22 and 3-36 to 3-40).

Objectives: SCDHS monitors water quality of surface and marine waters within the Peconic Estuary. SCDHS will assess water quality and bathing beach data and provide PEP with an annual water quality summary report. The NADP monitoring station will also be maintained. The USGS will continue to operate and maintain two continuous monitoring sensors in the Peconic Estuary, this year without nitrate sensors.

Description: 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. Water quality monitoring is essential to evaluate the effect of TMDL implementation on the

environment, analyze the effectiveness of programs in relation to their intended goals, and to make corrections in the course of the post-CCMP process. The data collected from this monitoring program was critical in listing the water segments in the estuary on the 303(d) list for dissolved oxygen and pathogen violations and in developing the nitrogen TMDL for select segments in the Western Estuary. Funds support 2 FTE marine monitoring program staff and USGS station maintenance by the USGS via contract with Suffolk County.

Outputs/Deliverables & Milestones

- Monitoring data made publically available (ongoing)
- Annual report on data collected (spring)

Anticipated Outcomes

Short Term: See “Outputs/Deliverables & Milestones.” 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.

Intermediate: 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.

Long Term: Water quality that supports all designated uses and achieves all applicable standards, particularly with respect to dissolved oxygen, pathogens, harmful algae, and toxic substances.

Change in Pressure Targets: These measures are necessary to assess the implementation of TMDLs for pathogens and nitrogen; prevalence of harmful algal blooms; shellfish bed closures; occurrences of bathing beach closures, and qualitative water quality goals.

Clean Water Act Core Programs: Water quality monitoring, TMDL implementation

Task 2014-3: Climate Vulnerability Assessment - \$30,000

Partners & Roles: The Program Director and NYS DEC Coordinator will work with the Climate Change Workgroup, Shinnecock Indian Nation to develop a risk-based climate vulnerability assessment.

CCMP & Annual Workplan Priority Topics/Goals: This project will re-examine all priority actions of the CCMP and subsequent priorities to determine which activities are most vulnerable to climate change impacts.

Objectives: A risk-based assessment of the priority actions in the CCMP to update goals and milestones in light of climate change and re-prioritize actions to make the Peconic Estuary Program and its products more resilient.

Description: With the leadership of the PEP Climate Change workgroup, a risk-based climate vulnerability assessment of the PEP CCMP priority actions will be conducted. Primary activities will be evaluated to determine which predicted climate impacts are likely to influence success. Vulnerabilities of the PEP’s mission, current and future projects, and prioritization systems will be identified and revisions and adjustments will be recommended. Those recommendations will inform future CCMP updates and new priority actions to be considered for adoption by the management committee.

Outputs/Deliverables & Milestones

- Risk based climate vulnerability assessment incorporating stakeholder input
- Recommendations for CCMP updates including new priority actions, changes to existing actions and adjustments to priorities

Anticipated Outcomes

Short Term: See “Outputs/Deliverables & Milestones

Intermediate: Procedures for ensuring climate change considerations are incorporated into all environmental protection and restoration activities. A CCMP designed to make the Peconic Estuary more climate resilient and a program positioned to track climate indicators, manage adaptively and participate in regional climate initiatives.

Long Term: A healthy Peconic Estuary ecosystem that enhances the capacity of eastern Long Island to cope with climate change impacts and an environment that is resilient in the face of a changing climate.

Change in Pressure Targets: These activities will enhance the long-term viability of water quality improvement efforts and habitat restoration projects.

Clean Water Act Core Programs: TMDL implementation, Water Quality Monitoring, Reduction of Non-point Source Pollution

Task 2014-4: Subwatershed Management Plan Implementation - \$24,711

Partners & Roles: Suffolk County will work with the Town of Southampton to implement one high-priority project from the Sebonac Creek Subwatershed Management Plan.

CCMP & Annual Workplan Priority Topics/Goals: P-4. Demonstrate and Implement Technologies to Remediate Stormwater Runoff; P-12. Identify Sources and Loadings of Nonpoint Sources of Pathogens; P-13. Develop and Implement Nonpoint Source Control Plans for Pathogens; P-14. Obtain Funding to Address Stormwater Runoff

Objectives: Upgrade stormwater infrastructure using best management practices to reduce nutrient and pathogen loading to the Peconic Estuary.

Description: The Program Director and NYSECCoordinator will work with Town of Southampton Engineers to finalize the project selection and ensure that engineering and construction occur in accordance with the subwatershed management plan. Best management practices will be demonstrated.

Outputs/Deliverables & Milestones

- Upgraded stormwater infrastructure.
- Presentation to inter-municipal coalition about project selection, engineering, and water quality outcomes.

Anticipated Outcomes

Short Term: See “Outputs/Deliverables & Milestones; Improved stormwater management

Intermediate: Reduced nutrient and pathogen loading to the estuary (see plan for reduction estimates for specific project options: <http://www.peconicestuary.org/reports/70aa6bc37d59b6e451014e7420de603bb37a4f93.pdf>).

Long Term: Maintenance of open shellfish beds with shellfish safe for consumption. Public and municipal staff informed about best management practices and empowered with the knowledge and confidence to implement them. Public and municipal elected officials supportive of BMP implementation for stormwater management.

Change in Pressure Targets: Decreased shellfish bed closures, decreased beach closures, decreased stormwater volumes.

Clean Water Act Core Programs: TMDL implementation, Reduction of Non-point Source Pollution

Activities of special interest: This workplan supports the **nutrient control** by investing staff time in nutrient TMDL implementation planning and technical work to refine groundwater nitrogen load estimates that inform policy and resource allocation. The **Climate Vulnerability Assessment** project is an important step toward ensuring that the PEP is incorporating climate change considerations into all project planning and prioritization and working in concert

with Executive Order 13653. Additionally, the subwatershed management plan implementation project will serve as a demonstration of effective use of **green infrastructure** to improve stormwater handling in the watershed.

Resources Requested: The total requested in this PEP grant to Suffolk County Department of Health Services is **\$353,202**. This grant will be complimented by a request for PEP support to the New England Interstate Water Pollution Control Commission (NEIWPC) for 86,609, and together these two components make up the full Peconic Estuary Program FFY2014 workplan for a total grant request of \$439,811.

Non-Federal Match: Suffolk County will provide **\$353,202** in matching funds, comprised from projects funded through the Suffolk County Water Quality Protection and Restoration Program (WQPRP) and Suffolk County Capital (SCC) funds. Anticipated match projects are:

- Diadromous Fish Passage Design and Permitting, Peconic River (SCC) - \$200,000
- Subwatershed Management Plan Implementation (SCC) - \$100,000
- Harmful Algal bloom Action Plan and Strategy (1/3 county-wide project) and PALM Assessment (WQPRP) - \$36,580
- Fertilizer Reduction Initiative (WQPRP; 1/3 county-wide project) – \$2,667
- Orient Decentralized Wastewater Pilot Engineering Study (WQPRP; approx. 1/4 of total project) - \$14,000

DETAILED BUDGET:

Workplan Category	Program Office	Water Quality Monitoring	Water Quality Monitoring	Water Quality Monitoring	Climate Ready Estuaries	Non-point Source Plans	Total
Sub-Category	Program Director	Periodic Monitoring - Boat Operator	Periodic Monitoring - Chemist	Continuous Monitoring - USGS	Climate Vulnerability Assessment	Subwatershed Management Plan	Total
Personnel	\$27,213	\$56,000	\$63,000	\$0	\$0	\$0	\$146,213
Fringe	\$12,837	\$29,000	\$30,000	\$0	\$0	\$0	\$71,837
Travel	\$2,500	\$0	\$0	\$0	\$0	\$0	\$2,500
Supplies	\$1,000	\$0	\$0	\$0	\$0	\$0	\$1,000
Contractual	\$0	\$0	\$0	\$0	\$30,000	\$24,711	\$54,711
Other	\$0	\$0	\$0	\$76,941	\$0	\$0	\$76,941
Total	\$43,550	\$85,000	\$93,000	\$76,941	\$30,000	\$24,711	\$353,202

FFY 2014 PEP Grant Application – Suffolk County Department of Health Services
Project Workplan

Grant/Amendment Number	CE-992002-18-0	CE-992002-18-1	Total CE-992002-18
Federal Fiscal Year	FFY 2013	FFY 2014	
1. Personnel	\$232,021.00	\$146,213.00	\$378,234.00
2. Fringe Benefits	\$109,445.00	\$71,837.00	\$181,282.00
3. Travel	\$3,600.00	\$2,500.00	\$6,100.00
4. Equipment	\$0.00	\$0.00	\$0.00
5. Supplies	\$1,000.00	\$1,000.00	\$2,000.00
6. Contractual	\$55,000.00	\$54,711.00	\$109,711.00
7. Construction	\$0.00	\$0.00	\$0.00
8. Other	\$401,066.00	\$430,143.00	\$831,209.00
9. Total Direct Charges	\$802,132.00	\$706,404.00	\$1,508,536.00
10. Indirect Costs: % Base	\$0.00	\$0.00	\$0.00
11. Total (Share: Recipient 50.00 % Federal 50.00 %.)	\$802,132.00	\$706,404.00	\$1,508,536.00
12. Total Approved Assistance Amount	\$401,066.00	\$353,202.00	\$754,268.00
13. Program Income	\$0.00	\$0.00	\$0.00
14. Total EPA Amount Awarded This Action	\$401,066.00	\$353,202.00	\$754,268.00
15. Total EPA Amount Awarded To Date	\$401,066.00	\$754,268.00	

APPENDIX A: Report on Completed and Ongoing Projects in Open Grants

COMPLETED PROJECTS

- **Groundwater Discharge Determination**
 - CCMP Goal: HLR-6 *Evaluate the Effectiveness of Current Policies in Preserving Eelgrass Habitat and Develop Ways to Provide Increased Protection for all Extant Eelgrass* and HLR-16 *Develop and Implement a Living Resources Research, Monitoring, and Assessment Program*
 - Lead Project Implementer(s): Research Foundation of Stony Brook University, Dr. Teng-fong Wong
 - §320 funds: \$40,000 (FFY08)
 - Accomplishments and project deliverable(s):
 - This project resulted in a better understanding of the potential for abiotic factors, primarily submarine groundwater discharge (SGD) and characteristics of the substrate to impact seagrass health and habitat suitability. In Bullhead Bay, SGD was determined to be widespread and significant, but variable over time and negatively correlated with tidal flow. In this system, SGD is an important factor impacting temperatures, but data were not sufficient to support the hypothesis that seagrass distribution was determined by SGD. This hypothesis requires further testing with a broader array of conditions.
 - Special Priority Areas: Climate Adaptation – This project contributes to the ongoing work of the Peconic Estuary Program and our partners to better understand the resilience of local seagrass populations to climate change impacts such as increased water temperature and increased precipitation (which leads to increased groundwater discharge). It also informs our efforts to adaptively manage our seagrass protection and restoration plan in the face of climate change.
 - CWA Core Program Addressed:
 - Water Quality Standards - significant: This project is an important intermediate step toward a PEP and NYS DEC goal of developing water quality standards protective of eelgrass. The impact of SGD can mitigate the effects of warming but is also a primary vehicle for the delivery of nutrients.
 - Protecting Wetlands - significant: This project represents a significant role in the protection of wetland (seagrass in this case), as it contributes to seagrass habitat restoration site selection criteria.
 - External Constraints:
 - This project was delayed relative to its initial proposed timeline due to contracting delays. This issue, which has historically impacted several projects, has been improved through adaptive management. Recent processes have been implemented to improve communications between the program office and their administrative offices. Contract drafting times have improved significantly, although contract execution continues to be a source of delays. Recent challenges associated with reduced program staffing have created additional delays in the initiation of RFP and contract processes after grant awards are made. But the program office has made important gains in the backlog of projects to be contracted, and once the backlog is resolved, project initiation times will improve.

- **Shellfish Restoration – East Hampton**
 - CCMP Goal: HLR-8 *Develop and Implement Specific Restoration Projects*; HLR-12 *Foster Sustainable Recreational and Commercial Finfish and Shellfish Uses of the Peconic Estuary that are Compatible with Biodiversity Protection*
 - Lead Project Implementer(s): Town of East Hampton Shellfish Hatchery
 - Amount of §320 funds spent on project implementation: \$42,000 (FY10).
 - Accomplishments and project deliverable(s):
 - Approximately 1,000,000 clams and 500,000 oysters were raised and seeded in East Hampton waters each year during 2012 and 2013 using §320 funds. This contributed to the overall efforts at

the East Hampton Shellfish Hatchery supported by PEP and other partners which raised and seeded approximately 17 million shellfish (valued at \$485,978) in 2012 and approximately 33 million shellfish (valued at \$719,596) in 2013.

- As these shellfish restoration activities continue, a great deal is learned about culture techniques. Hatchery practices are continually refined, overwintering locations are tested, and success is evaluated annually. These results are summarized in annual reports and shared with interested parties. The increase in yield from 2012 to 2013 is evidence of improvements in hatchery success.
 - CWA Core Program Addressed : N/A
 - External Constraints: Although contracting delays prevented this project from occurring in 2011-2012, once it began, it proceeded smoothly and finished on time for its new 2013 deadline.
- **Inter-municipal Agreement for Stormwater Management**
 - CCMP Goals: P-2 *Demonstrate and Implement Technologies to remediate Stormwater Run-off*, P-12 *Identify Sources and Loadings of non-point sources of Pathogens*; P-14 *Obtain Funding to address stormwater runoff*, N-5 and P-13 *Implement Non-point Source control Plans (for Nitrogen and Pathogens, respectively)*
 - Lead Project Implementers: PEP staff led development of IMA with contractor assistance (Nelson, Pope & Voorhis, LLC). Once complete, lead will turn over to East End Towns and Villages (with PEP providing leadership until coalition hires coordinator)
 - \$320 funds: \$25,000 (FY07); \$104,000 (FY08)
 - Accomplishments and project deliverable(s):
 - Needs assessment completed summarizing and prioritizing needs of municipalities in PEP watershed for improved compliance with MS4 General Stormwater Permit
 - Goose management Plan template and Goose Management Training Module for Municipal officials and staff
 - Good-house-keeping training module for municipal staff and contractors and municipal property management good-house-keeping inventory/check-list
 - Drafted grant application for funding of inter-municipal stormwater and other water quality management activities (suitable for Suffolk County Water Quality Protection and Restoration Program, NYS Local Government Efficiency Grant program or similar)
 - 10 municipalities have passed resolution committing to sign an inter-municipal agreement and jointly fund a coordinator for coalition efforts.
 - Drafted, legal agreement for creation of inter-municipal coalition focused on coordinated water quality management
 - CWA core programs:
 - Identifying polluted waters and developing plans to restore them (total maximum daily loads) - supporting
 - Addressing diffuse, nonpoint sources of pollution - supporting
 - Special
 - External Constraints:
 - These funds were originally planned for stormwater infrastructure planning and implementation. Since municipalities were extremely successful in obtaining other funding sources for the implementation, these \$320 funds were re-directed to this closely related task that will facilitate more effective and coordinated stormwater management, and increase the likelihood of this infrastructure funding in the future.
 - This project took several years to complete. In addition to contracting delays, the efforts of the contractor were dependent upon the progress of coalition members through the steps of developing a group, assessing needs, drafting and agreement, and adopting that agreement. A great deal more time than originally anticipated was needed to help each municipality understand the goals of the coalition.

- Although the contracted project is complete and several tools have been developed as a result, the Inter-municipal Agreement is not fully executed yet. Legal discussions are still ongoing to finalize the agreement language, but substantial changes are no longer being made and we anticipate 11 municipalities will sign on by the end of 2014.

ONGOING PROJECTS

- **Critical Lands Protection Strategy; Ongoing**
 - Project/activity Objective(s): Revise Critical Lands Protection Strategy to account for climate change impacts.
 - Project/activity Description: Re-evaluate the Critical Lands Protection Strategy to include climate change impacts. Develop updated prioritization scheme and apply it to all parcels remaining vacant or underdeveloped.
 - Partners and Their Role(s): To be accomplished via contract, not yet awarded.
 - Outputs/Deliverables: Make list and geographic-format data available to municipalities and other organizations that protect land. Displays will be presented to interested parties by PEP staff and/or the contractor.
 - Estimated Milestones: RFP to be released in September 2014, Project to begin January 1, 2015. Expected completion in January 1, 2016.
 - Estimated Budget: §320 funds: \$30,000 (FFY 2012 Climate Ready Estuaries)
 - Long-term Outcomes: Assessment of progress toward TMDL goals; refinement of implementation plan and TMDL goals for land-based loads
 - CWA core program(s): Identifying polluted waters and developing plans to restore them (total maximum daily loads); addressing diffuse, nonpoint sources of pollution
- **Nitrogen Assessment; Ongoing**
 - Project/activity Objective(s): Determine relative magnitude of non-point source nitrogen loads to the Peconic Estuary, especially groundwater loads; Develop recommendations for adaptive management of Nitrogen TMDL Implementation Plan
 - Project/activity Description: Nitrogen Workgroup will assess existing N loading models and their utility for management decision making, recommending additional information to be collected, assumptions/inputs to be updated, or new models if needed.
 - Partners and Their Role(s): Led by N workgroup (Program director and TAC chair are co-chairs), technical work may be accomplished via contract, not yet awarded.
 - Outputs/Deliverables: Report (memo) to Management Committee re: existing modeling data; Recommended PEP Official N loading estimates; Revised Implementation Plan for Peconic Estuary Nitrogen TMDL
 - Estimated Milestones: Report to Management Committee re: existing models – end of 2014; additional modeling work to be completed by 2015. Implementation Plan Recommendations by 2016.
 - Estimated Budget: §320 funds: \$100,000 (FY 11); \$55,00 (FY13)
 - Long-term Outcomes: Accelerated progress toward TMDL goals; Increased efficiency of nitrogen management regulations; optimization of nitrogen load reduction investments
 - CWA core program(s): Identifying polluted waters and developing plans to restore them (total maximum daily loads); addressing diffuse, nonpoint sources of pollution
- **Shellfish Restoration – Habitat Utilization by Juvenile Bay Scallops; Ongoing**
 - Project/activity Objective(s): Improve the success of future bay scallop restoration programs. Quantify the utility of several common species of submerged macro-algae as an alternative settling habitat for juvenile bay scallops. This leads to an assessment of the resiliency of the bay scallop population to human and climate induced succession of the submerged aquatic vegetation community from one

- dominated by seagrass to one dominated by macroalgae.
- Project/activity Description: Laboratory experiments and field observations are performed to evaluate the settlement preferences of juvenile bay scallops. The results will be used to revise scallop restoration site selection methods and will contribute to climate vulnerability assessments and inform future investment in scallop restoration and protection.
- Partners and Their Role(s): Cornell Cooperative Extension of Suffolk County.
- Outputs/Deliverables: Field Work completion (2013), final report at end of project (2014).
- Estimated Milestones: Field investigations are complete, the final report will be submitted during 2014. A presentation of results, conclusions, and management recommendations is scheduled for the PEP Technical Advisory Committee in November, 2014.
- Estimated Budget: \$320 funds: \$40,000 (FFY 2010)
- Long-term Outcomes: Increased populations of bay scallops in the Peconic Estuary
- CWA core program(s): N/A

- **Public Education and Outreach; Ongoing**
 - Project/activity Objective(s): Cultivate an informed public who supports Program objectives; Foster a sense of stewardship of the estuary in the public; Facilitate the involvement of a broad groups of stakeholders in Program goal setting and implementation.
 - Project/activity Description: This program seeks to engage the public in protection and restoration of the estuary by hosting events, conducting educational activities, providing information to the public (generally and through targeted stakeholder engagement), and facilitating the involvement of existing community groups in Estuary Program activities. Facilitates the functions of the Citizens Advisory Committee and ensures stakeholder input to the Management Committee.
 - Partners and Their Role(s): Accomplished via contract, currently: Group for the East End and CAC Chairperson, Kevin McDonald.
 - Outputs/Deliverables: Determined annually via workplan. Includes CAC meetings, outreach events, stewardship activities (e.g. beach clean-ups, plantings), etc.
 - Estimated Milestones: Report on progress annually; quarterly CAC meetings and quarterly updates to Management Committee.
 - Estimated Budget: \$320 funds: \$50,000 (FY08); \$100,000 (FY09); \$100,000 (FY12); \$104,445 (FY13)
 - Long-term Outcomes: Informed citizenry that supports Program objectives and generates political and financial support for the Estuary Program. Improved individual and community behavior that is protective of estuarine resources. Increased sense of stewardship for the Peconic Estuary among the citizens who use it.
 - CWA core program(s): N/A

- **Submerged Aquatic Vegetation Long Term Monitoring and Management; Ongoing**
 - Project/activity Objective(s): Evaluate success of seagrass restoration efforts. Refine habitat restoration site suitability indices (based on light, temperature, and seagrass extent) used in planning the extensive seagrass habitat restoration program funded by PEP and its partner agencies, primarily NYS and Suffolk County. Additionally, these data contribute to scientific studies and will be used in future seagrass management plan developed through the New York State Seagrass Protection Act.
 - Project/activity Description: Monitoring of seagrass survival and bed expansion resulting from previous habitat restoration efforts. Long-term measurements of seagrass extent and deep edge location at 6 historical sites, measurements of light, temperature, and sediment conditions at these sites.
 - Partners and Their Role(s): Cornell Cooperative Extension of Suffolk County, Christopher Pickerell
 - Outputs/Deliverables: Annual report summarizing methods and results, including maps of seagrass bed extent (current and change) and analyses of relationships between water and sediment quality parameters and seagrass success.
 - Estimated Milestones: Annual reporting, periodic status and trends assessments corresponding to Environmental Indicators Report schedule.

- Estimated Budget: \$320 funds: \$30,000 (FFY07), \$30,000 (FFY08), \$103,000 (FFY09); Additional funds from NYS. [ongoing]
- Long-term Outcomes: Progress toward PEP goal to increase seagrass coverage by 10%. Development of science-based regulatory programs to protect existing seagrass.
- CWA core program(s): Protecting Wetlands

- **National Atmospheric Deposition Program; Ongoing**
 - Project/activity Objective(s): Evaluate success of Clean Air Act policies and program in reducing atmospheric deposition of nitrogen in the Peconic region. Track progress toward nitrogen TMDL goals.
 - Project/activity Description: Monitor local atmospheric deposition of major cations in precipitation. Monitor local mercury deposition in precipitation.
 - Partners and Their Role(s): Suffolk County Department of Health Services, Office of Ecology is responsible for sample collection; University of Illinois (cations) and Frontier Global Sciences, Inc. (mercury) are responsible for data analysis; University of Illinois National Atmospheric Deposition Program is responsible for data assessment, reporting, and coordination with the national network
 - Outputs/Deliverables: Data available online, Quarterly reports of results and collection/analytical issues.
 - Estimated Milestones: Annual reporting, periodic status and trends assessments performed by PEP and EPA staff as needed (e.g. 5-year TMDL assessment)
 - Estimated Budget: \$320 funds:
 - \$36,000 (FFY07), \$5,955 (FFY08), \$15,000 (FFY09), \$15,000 (FFY10); NYSERDA funding for mercury analytical costs [ongoing]
 - Long-term Outcomes: Assessment of progress toward TMDL goals; refinement of implementation plan and TMDL goals for land-based loads
 - CWA core program(s): Identifying polluted waters and developing plans to restore them (total maximum daily loads); addressing diffuse, nonpoint sources of pollution

- **Continuous Water Quality Monitoring; Ongoing**
 - Project/activity Objective(s): 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
 - Project/activity Description: Water quality parameters, including dissolved nitrate and dissolved oxygen, salinity temperature, chlorophyll and turbidity as well as water depth measured in high frequency, and available in near-real-time, online and available to the public.
 - Partners and Their Role(s): United States Geological Survey
 - Outputs/Deliverables: Annual data report, 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.
 - Estimated Milestones: Annual data report within one year of collection.
 - Estimated Budget: \$320 funds: \$34,902 (FY07); \$13,887 (FY08); \$10,098 (FY09); \$120,000 (FY10); \$50,000 (FY11)
 - Long-term Outcomes: Assessment of progress toward TMDL goals; refinement of implementation plan and TMDL goals for land-based loads; Assessment of frequency and duration of hypoxia.
 - CWA core program(s): Identifying polluted waters and developing plans to restore them (total maximum daily loads)

- **Long Term Periodic Water Quality Monitoring; Ongoing**
 - Project/activity Objective(s): An understanding the status and trends of water quality in the estuary and the data necessary to evaluate the effectiveness of management actions.
 - Project/activity Description: Sampling and analysis of samples of physical and chemical parameters indicative of water quality and pollution impacts throughout the estuary and its tributaries. Annually, these data will be summarized and compared to previous years' data.
 - Partners and Their Role(s): Suffolk County Department of Health Services.

- Outputs/Deliverables: Annual report summarizing the year's data, comparing status and trends to previous years, making recommendations for changes to the monitoring program going forward.
- Estimated Milestones: First annual report to be completed before the end of 2014.
- Estimated Budget: \$320 funds: \$130,000 (FY07); \$153,000 (FY08); \$53,000 (FY10); \$150,000 (FY11 & 10, re-budget in FY12); \$150,000 (FY13); \$178,000 (FY14) ongoing
- Long-term Outcomes: Assessment of progress toward TMDL goals; refinement of implementation plan and TMDL goals for land-based loads; Assessment of factors impacting ecosystem health
- CWA core program(s): Identifying polluted waters and developing plans to restore them (total maximum daily loads); Establishing the Standards to Measure Success

TRAVEL

- **During the FFY2013 year, the program director traveled to Washington DC for the required Annual NEP meeting at US EPA Headquarters February 25-28. Total cost for this trip was \$1342.62.**
- **Between the time of this submission and the end of the grant year, the Program Director is scheduled to travel to participate on the Program Evaluation Team for the Buzzards Bay NEP Program Evaluation. That trip is scheduled for July 16-18, 2014 and the estimated cost is \$821.00.**

Application for Federal Assistance SF-424

* 1. Type of Submission:

- Preapplication
- Application
- Changed/Corrected Application

* 2. Type of Application:

- New
- Continuation
- Revision

* If Revision, select appropriate letter(s):

* Other (Specify)

* 3. Date Received:

4. Applicant Identifier:

5a. Federal Entity Identifier:

* 5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name:

* b. Employer/Taxpayer Identification Number (EIN/TIN):

* c. Organizational DUNS:

d. Address:

* Street1:

Street2:

* City:

County:

* State:

Province:

* Country:

* Zip / Postal Code:

e. Organizational Unit:

Department Name:

Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix:

* First Name:

Middle Name:

* Last Name:

Suffix:

Title:

Organizational Affiliation:

* Telephone Number:

Fax Number:

* Email:

Application for Federal Assistance SF-424

9. Type of Applicant 1: Select Applicant Type:

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

11. Catalog of Federal Domestic Assistance Number:

CFDA Title:

*** 12. Funding Opportunity Number:**

* Title:

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

*** 15. Descriptive Title of Applicant's Project:**

Attach supporting documents as specified in agency instructions.

Application for Federal Assistance SF-424

16. Congressional Districts Of:

* a. Applicant CD 1,2,3,

* b. Program/Project

Attach an additional list of Program/Project Congressional Districts if needed.

17. Proposed Project:

* a. Start Date:

* b. End Date:

18. Estimated Funding (\$):

* a. Federal 353,202

* b. Applicant

* c. State

* d. Local 353,202

* e. Other

* f. Program Income

* g. TOTAL 706,404

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

a. This application was made available to the State under the Executive Order 12372 Process for review on

b. Program is subject to E.O. 12372 but has not been selected by the State for review.

c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation.) Applicant Federal Debt Delinquency Explanation**

Yes No

21. *By signing this application, I certify (1) to the statements contained in the list of certifications** and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)

** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: * First Name:

Middle Name:

* Last Name:

Suffix:

* Title:

* Telephone Number: Fax Number:

* Email:

* Signature of Authorized Representative: * Date Signed:

Application for Federal Assistance SF-424

*** Applicant Federal Debt Delinquency Explanation**

The following field should contain an explanation if the Applicant organization is delinquent on any Federal Debt. Maximum number of characters that can be entered is 4,000. Try and avoid extra spaces and carriage returns to maximize the availability of space.

Empty text input area for the Applicant Federal Debt Delinquency Explanation.

BUDGET INFORMATION - Non-Construction Programs

OMB Approval No. 0348-0044

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1.		\$	\$	\$	\$	\$
2.						
3.						
4.						
5. Totals		\$	\$	\$	\$	\$

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1)	(2)	(3)	(4)	
a. Personnel	\$	\$	\$	\$	\$
b. Fringe Benefits					
c. Travel					
d. Equipment					
e. Supplies					
f. Contractual					
g. Construction					
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					
k. TOTALS (sum of 6i and 6j)	\$	\$	\$	\$	\$

7. Program Income	\$	\$	\$	\$	\$
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SECTION C - NON-FEDERAL RESOURCES

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS
8.	\$	\$	\$	\$
9.				
10.				
11.				
12. TOTAL (sum of lines 8-11)	\$	\$	\$	\$

SECTION D - FORECASTED CASH NEEDS

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	\$	\$	\$	\$	\$
14. Non-Federal					
15. TOTAL (sum of lines 13 and 14)	\$	\$	\$	\$	\$

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT

(a) Grant Program	FUTURE FUNDING PERIODS (Years)			
	(b) First	(c) Second	(d) Third	(e) Fourth
16.	\$	\$	\$	\$
17.				
18.				
19.				
20. TOTAL (sum of lines 16-19)	\$	\$	\$	\$

SECTION F - OTHER BUDGET INFORMATION

21. Direct Charges:	22. Indirect Charges:
23. Remarks:	