



Peconic Estuary
Partnership

PROTECTING AND RESTORING LONG ISLAND'S PECONIC BAYS

UPDATE

March 2020

PEP CCMP Revision

- The 2020 PEP CCMP is in final stages of review
 - The CCMP was submitted to the EPA January 27, 2020 – awaiting EPA comments for final edits and approval.
- PEP is working with a graphic design contractor to develop design template for the 2020 PEP CCMP.
- Peconic Estuary Partnership Conference planned for September 25th, 2020.

PEP's Completed Projects!

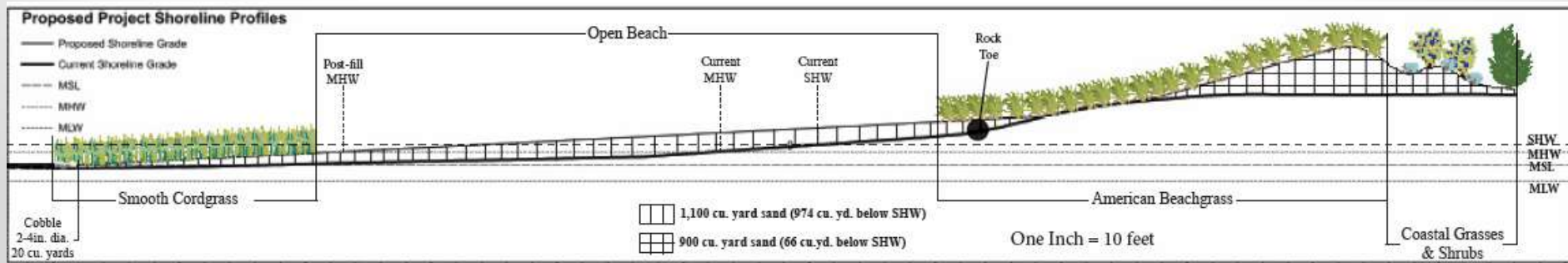
- Check out the [Priority Issues in the Peconic Estuary page](#) to view projects PEP is moving forward!
- Check out the [PEP: Making Significant Change](#) page to view PEP's impact in the region!

Living Shoreline Pilot Project- Greenport

PEP and Peconic Land Trust with Cornell Cooperative Extension (CCE)

Status: Completed August 2019, monitoring of living shoreline is ongoing.

Next Steps: Phase II of the project scope, extending the living shoreline to the entire property, has been developed by CCE and added to PEP Habitat Restoration Plan.



Seagrass Bio-optical Model

PEP and The Research Foundation of SUNY Stony Brook

Status: Model completed September 2019.

Next Steps: Final report will be released in 2020. GIS tool is being developed.



- Report includes: Site specific information to inform eelgrass management and restoration programs.
- Final Seagrass Bio-optical Model results were presented at the PEP Technical Advisory Committee Agenda on February 26th, 2020. Click here for the link to the presentation: [Living on the edge- analysis of Z. marina and potential for restoration- Kaitlyn O'Toole \(2020\)](#)

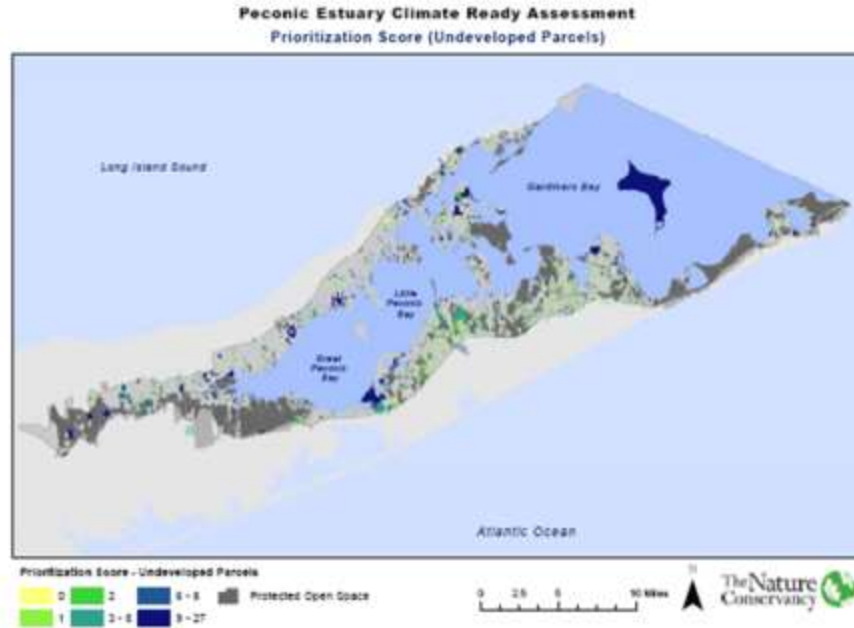
Critical Lands Protection Strategy Update and Climate Ready Assessment Services for PEP and Shinnecock Indian Nation

PEP and Anchor QEA

Status: Completed September 2019. Final reports available on PEP website.

Next Steps: Municipal Training Workshops are being planned to distribute tools and information.

Figure 13: Undeveloped Priorization with protected



Report includes:

1) Updated Critical Lands Protection Strategy (CLPS).

2) Assessment of climate change vulnerabilities for both the Peconic Estuary Program and Shinnecock Indian Nation.

Narrow Road Wetland Restoration

Status: Completed Conceptual Habitat Restoration Design in September 2019.

Southold Town and stakeholders reviewed plans.

Next steps: Engineering Design Plans will be developed.

- 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. 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.
- 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 to 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 secure funding for engineering design plans and construction.



Lake Montauk Alewife Access and Habitat Enhancement

Status: Completed Conceptual Habitat Restoration Design in September 2019.
East Hampton Town reviewed plans.

Next steps: Partial funding secured and will move forward with construction project in coordination with partners.

- 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.



Pennicott Estuary Program Conceptual Restoration Design
Big Reed and Stepping Stones Pond Culvert Replacement
Big Reed and Stepping Stones Pond Culvert Replacement
Suffolk County Parks Department
2019-2020

Scale:
1 inch = 100 feet
0 100 200 feet

Legend:
Proposed Culvert Replacement
Existing Culvert
Proposed Debris Removal
Proposed Debris Removal

Meetinghouse Creek Main Road Wetland Construction/ Restoration

Status: Completed Conceptual Habitat Restoration Design in September 2019.

Funding is secured for Engineering Design and Permitting.

Next Steps: An RFP for Engineering Design and Permitting was advertised, proposals are due April 30th. PEP will begin work with selected contractor.

- PEP recently completed a conceptual habitat restoration design plan for Meetinghouse Creek. This site is located at a large wetland area that forms the headwaters to Meetinghouse Creek in Riverhead, NY. Meetinghouse Creek is listed as an impaired waterbody on the NYSDEC Priority Waterbodies List. The wetland vegetation at this site is dominated by Phragmites.
- 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.
- PEP will work with the selected contractor and Town of Riverhead to complete the Engineering Design and Permitting services.

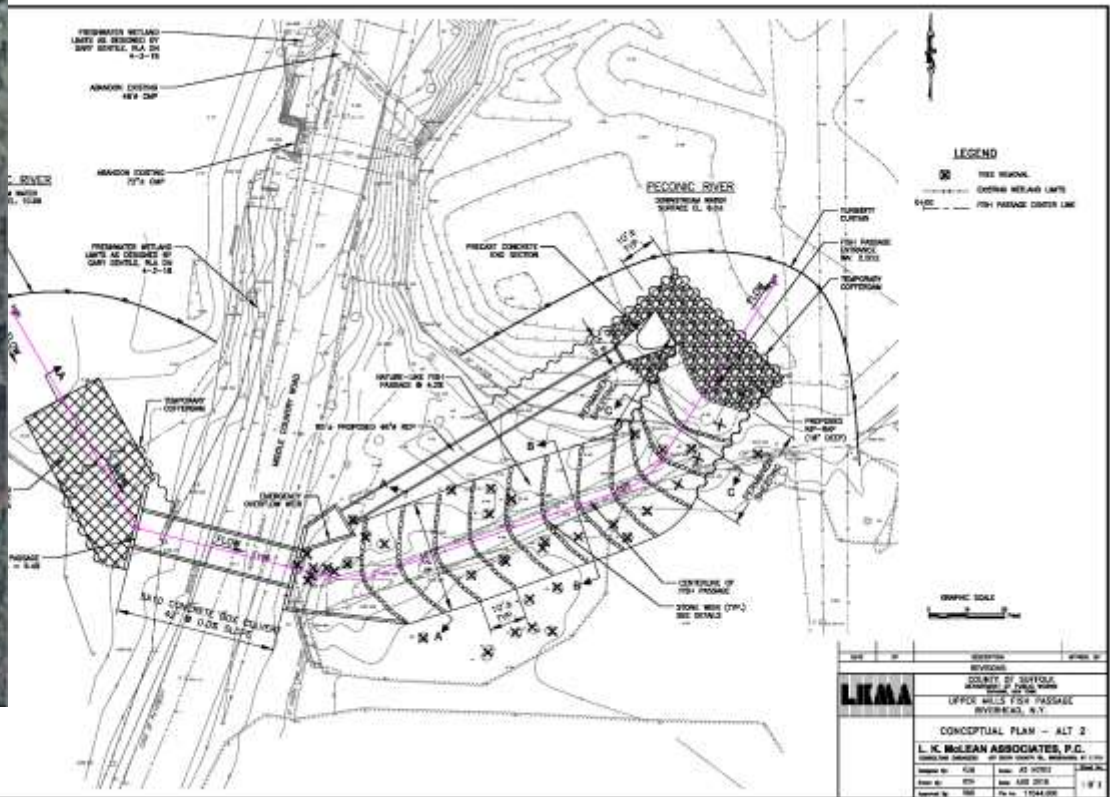


Upper Mills Dam Fish Passage

PEP and L.K. McLean Associates for engineering and permitting services

Status: Design alternative selected at April 9th, 2019 stakeholder meeting.

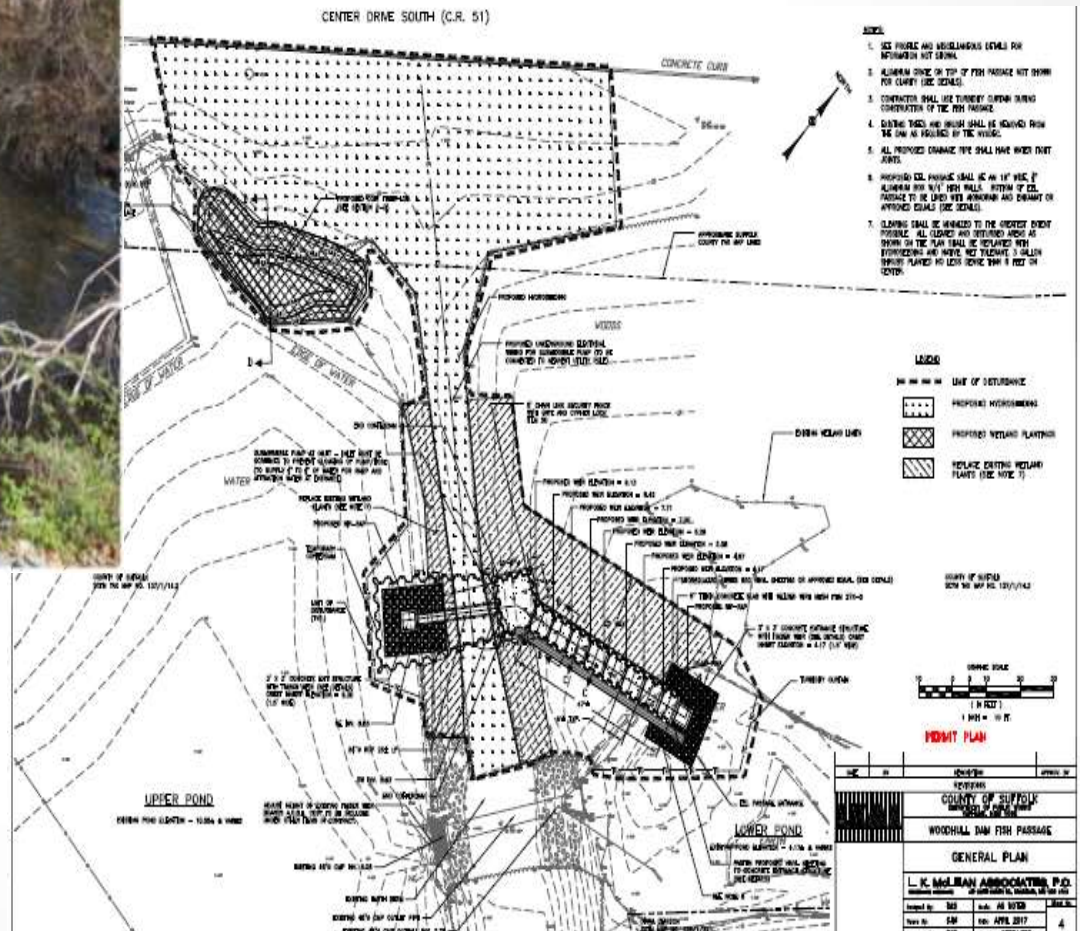
Developing engineering designs, designs and permitting work anticipated completion February 2021.



Woodhull Dam Fish Passage

PEP and Suffolk County contracted with L.K. McLean Associates

Status: PEP has secured additional funds (\$250K from Suffolk County & \$50K from USFWS) and hopes to complete construction in 2020.



Spring 2020 Alewife Monitoring

- Video camera installed at Grangebel fishway on Peconic River for second year. Suffolk County College Professor (Kellie McCartin) and students helping with video monitoring analysis.
- 25 Volunteer River Herring Surveyors trained at two workshops in February 2020.
- Alewife Monitoring QAPP under review by EPA.



Expansion and Monitoring of the Town of Southold Living Shoreline

PEP and Cornell Cooperative Extension

Status: Work is underway. Expected project completion in August 2020.



Figure 2. Location of proposed living shoreline project on Southold Town Trustee land near Suffolk County Marine Environmental Learning Center.

- Expansion to an existing Town of Southold Living Shoreline Demonstration Project.
- Goal is to establish a larger project area and the addition of monitoring services at the project site.
- Enable the quantification of nitrogen and pathogen uptake of *Spartina alterniflora* and ribbed mussels.

Peconic Estuary Solute Transport Model

PEP and United States Geologic Survey

Status: Model Development phase and scenario finalization.

Next project meeting tentatively scheduled for May 4th, 2020.

Link to [PE Solute Transport Model Webpage](#)



Objective: This Solute Transport Model will be a tool to estimate time-varying nitrogen loading rates to the Peconic Estuary

Specifically, the objectives of the investigation are to:

- 1) develop data sets representing current and historic land uses relevant to nitrogen loading in coastal watersheds
- 2) estimate current estuarine loading rates and nutrient concentrations in the aquifer, and
- 3) use these current-condition models to simulate the response to possible wastewater-management actions.

Hardened Shoreline GIS Mapping

Status: Hardened Shoreline GIS Mapping Project was presented at the PEP Natural Resources Subcommittee on June 28th, 2019.

Final report is anticipated in 2020.

- PEP completed a GIS mapping project to quantify the amount of hardened shoreline in the Estuary. The last survey was in 2003 using maps from 2001.
- The preliminary results are being reviewed and ground-truthed in advance of final report distribution.



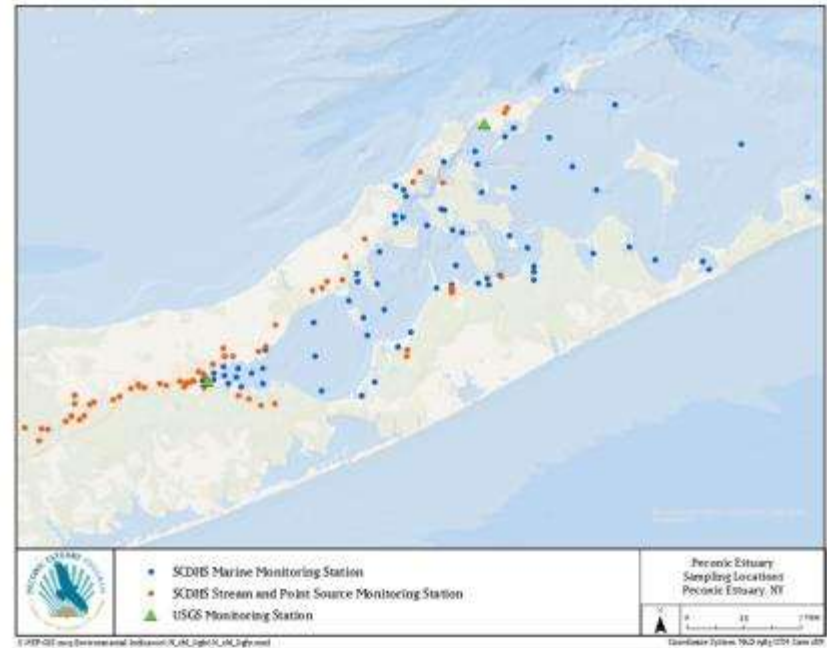
WQ Monitoring Assessment

PEP and CoastWise Partners.

Status: Held workshops to review WQ monitoring programs and developed preliminary WQ targets in Peconic Estuary.

Assessment will continue through out the year and is to be incorporated into CCMP.

- Goal of this project is to create a PEP Monitoring Strategy that will be relevant for all decision makers.
- The purpose of this project is to develop appropriate indicators of estuarine health, and ensure appropriate parameters are collected on a temporal and spatial scale to assess these indicators. The results of the project will be an updated monitoring strategy with the end goal of annual water quality reports.
- Services were recommended as a Finding of the EPA's 2017 Program Evaluation of the PEP.



Annual WQ Reporting progress:

4 parameters chosen for main WQ reporting. 3 parameters chosen to provide early warning WQ monitoring.

Organizational Assessment

PEP and CoastWise Partners.

Status: On-going

- Management and Policy Committee Joint Retreat held October 9th, 2019 and February 5th, 2020.
- Examine the relationships between all groups in the Management Conference and provide recommendations about how they can work together more effectively.
- The purpose of this project is to develop a set of guiding policies for the Management Conference and sub-groups.
- Services were recommended as a Finding of the EPA's 2017 Program Evaluation of the PEP.



Quality Assurance Project Plan Development for Supplemental Water Quality Sediment Data Collection

PEP and Tetra Tech, Inc.

Status: The project Technical Advisory Committee is reviewing the draft Quality Assurance Management Plan. Anticipated completion September 2020.

- A NYSDEC and EPA approved Quality Assurance Management Plan (QAMP) is under development;
- 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;
- Help the PEPC members and partners assess the current baseline in water quality, and effectiveness of water quality improvement interventions over time.

Peconic Estuary Ecosystem Study

PEP, NYSDEC and SUNY Stony Brook.

Expected completion Fall 2021.

Status: Advertising for a Post-Doctoral position.

- 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.

Non-point Source Pollution Management Project

PEP and Village of Sag Harbor.

Status: Ongoing. Expected completion September 2020.

Funding expires 9/30/2020

- Implement a non-point source pollution management project at Havens Beach.
- The project involves utilizing green infrastructure best management practices to treat stormwater that would otherwise flow across the beach and/ or through an existing discharge pipe directly to Sag Harbor Bay.
- The project will significantly reducing the nitrogen pollutant loads to the waterbody and improving the overall health of the Peconic Estuary.
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Nitrogen Load Reduction Assessment Project

PEP and Anchor QEA, LLC.

Status: QAPP approved. Project is ongoing. Expected completion September 2020.

Funding expires 9/30/2020

- Objective is to compile and assess the cost per pound of nitrogen reduction to groundwater for various nitrogen reduction best management practices (BMPs) currently being employed throughout the country.
- The project will provide a decision-making tool to guide cost effective management scenarios to reduce nitrogen on a subwatershed basis in the Peconic Estuary.

Education and Outreach Highlights

- PEP has engaged alewife monitoring interns to analyze video footage taken at Grangebel Park in Riverhead to determine the number of alewife using the fishway.
- During COVID-19, PEP has developed and will continue to develop new activities and educational resources for parents and teachers to utilize during this time of social distancing. This is a good time for PEP to focus on more digital engagement, revamp materials and become a resource for people. <https://www.peconicestuary.org/protect-the-peconic/outreach-and-education-programs/resources-for-educators/>
- Planning for the Conference, Estuary Day, & virtual event/citizen science trainings are underway.