



Peconic Estuary
PROGRAM

UPDATE

January 2020

PEP CCMP Revision

- The 2020 PEP CCMP is in final stages of review
 - New CCMP deadline is Jan 31, 2020 – EPA approved.
- PEP hired a graphic design contractor to develop design template for the 2020 PEP CCMP.
- Peconic Estuary Program Conference planned for September 25th, 2020.

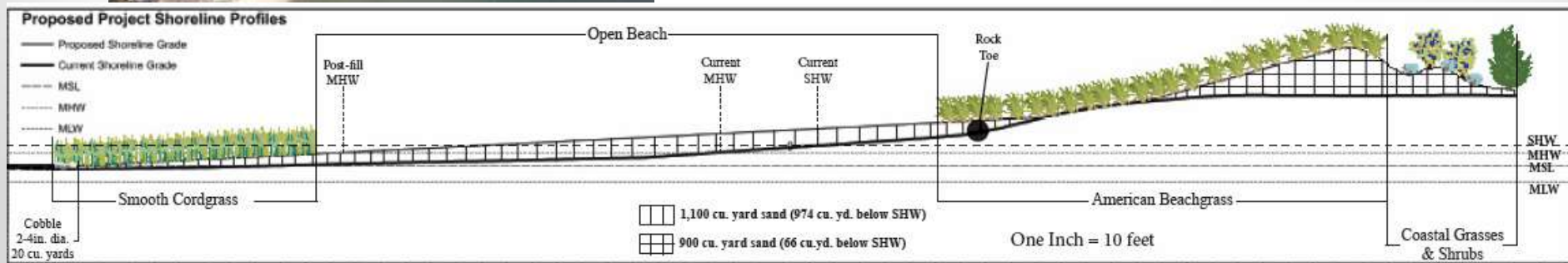
PEP's Completed Projects!

- 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

Status: Completed August 2019.



Seagrass Bio-optical Model

PEP and The Research Foundation of SUNY Stony Brook

Status: Completed September 2019.

Final report released by 2020. GIS tool is being developed.



- Report includes: Site specific information to inform eelgrass management and restoration programs.
- Seagrass Bio-optical Model presentation is on the PEP Technical Advisory Committee Agenda for February 26th, 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 report and products will be distributed.

Figure 13: Undeveloped Prioritization 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.

Conceptual Habitat Restoration Design Planning in the Peconic Estuary

PEP and Land Use Ecological Services.

Status: Completed September 2019. Final reports will be distributed.

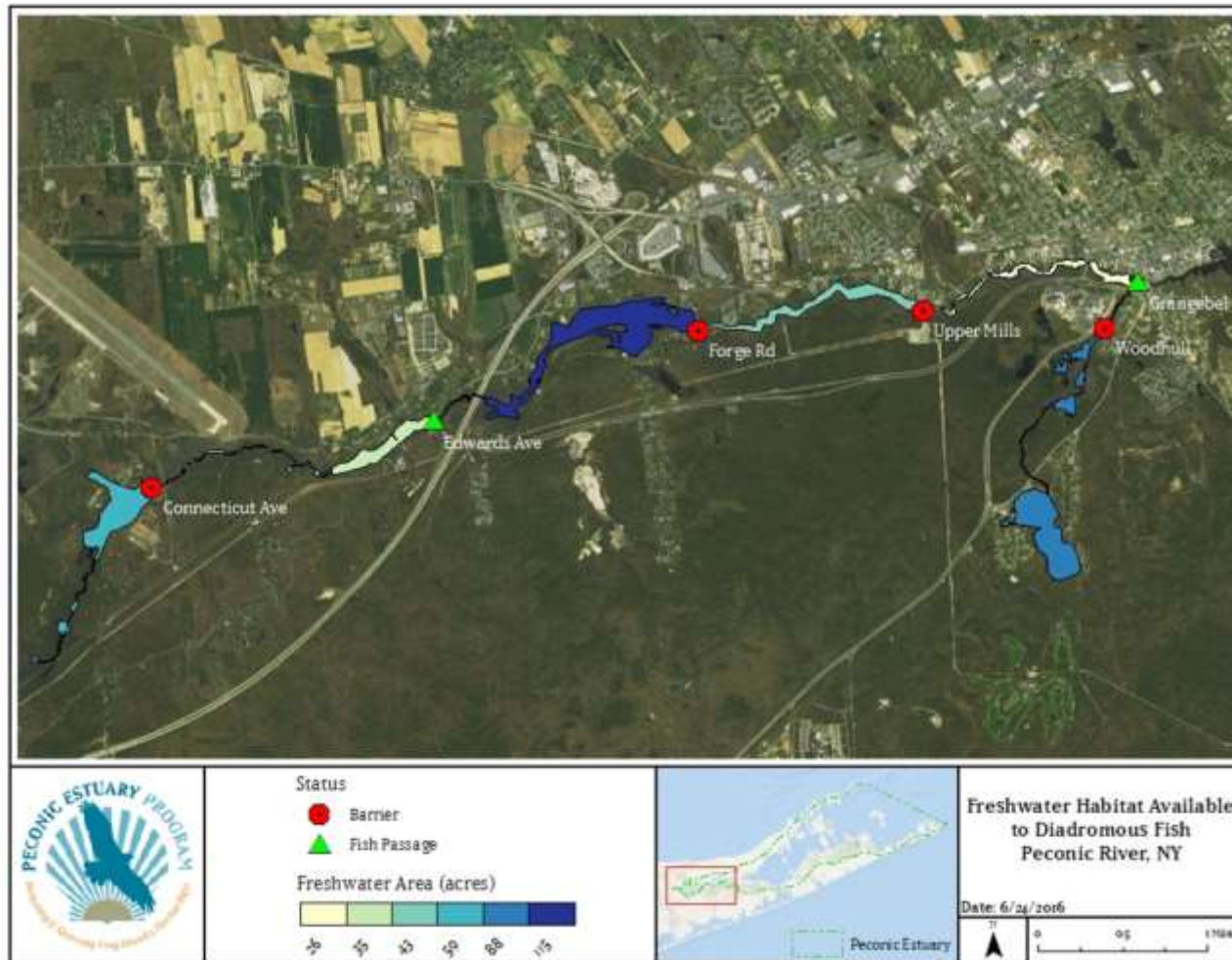
Conceptual habitat restoration designs developed for the following identified priority sites:

- a. Southold: Narrow River Road Wetland Restoration (Southold Town and stakeholders reviewed plans, Next steps: Engineering Design Plans will be developed)
- b. Southampton: Iron Point Wetland Restoration (Southampton Town reviewed plans, Next steps: Continue to monitor health of site and determine if future habitat restoration is needed)
- c. East Hampton: Lake Montauk Alewife Access and Habitat Enhancement (East Hampton Town reviewed plans, Next steps: funding secure and will move forward with construction project)
- d. Riverhead: Meetinghouse Creek Main Road Wetland Construction/Restoration (Next steps: partial funding secured, will set up project meetings to move forward on Engineering Design Plans)



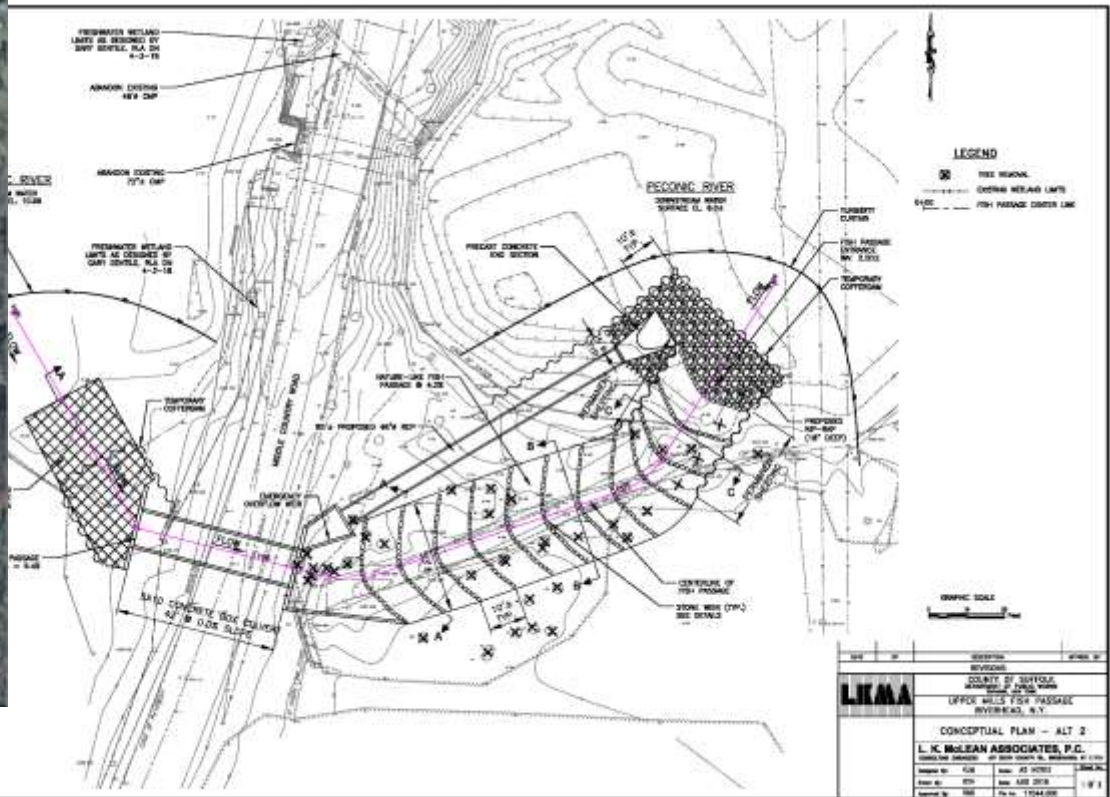
Habitat Restoration Updates

The Peconic Estuary Program is working with its partners to restore critical freshwater spawning and maturation habitat for diadromous fish on the Peconic River.



Upper Mills Dam Fish Passage

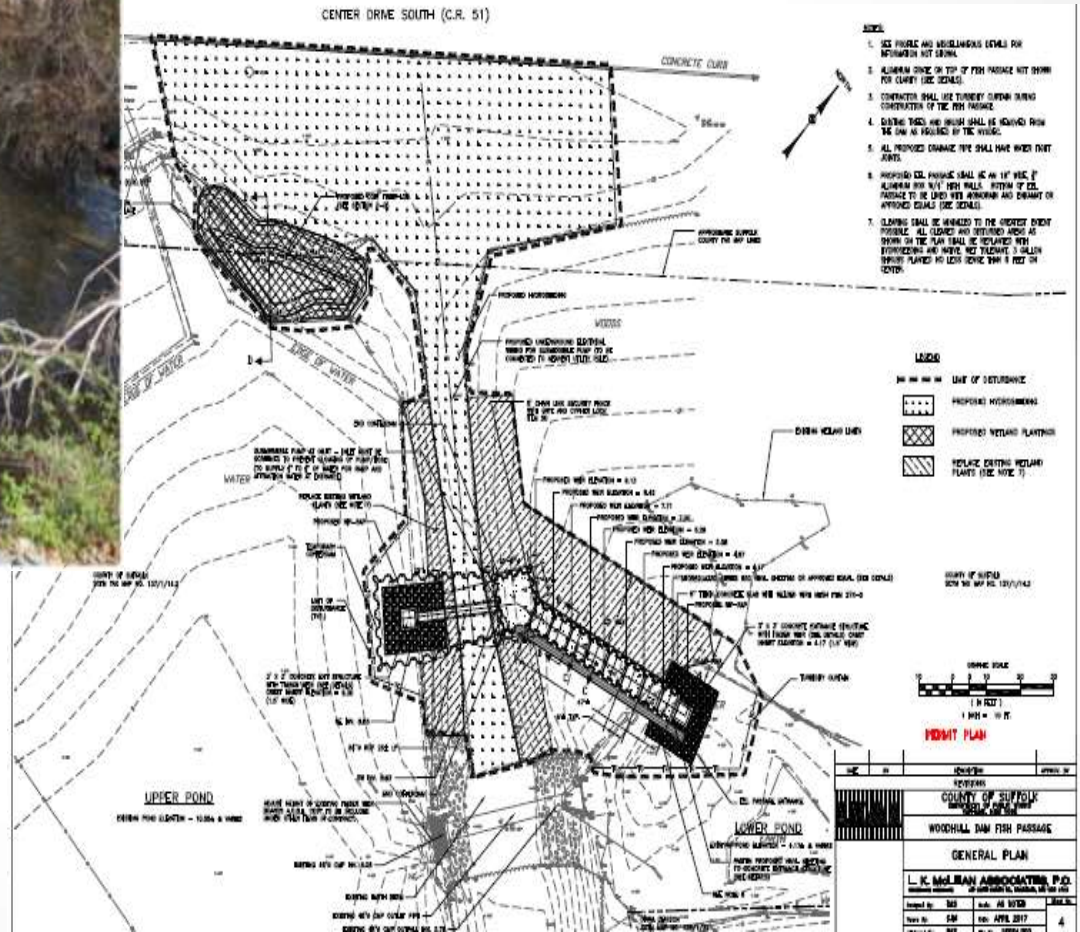
PEP and L.K. McLean Associates for engineering and permitting services
Status: Design alternative selected at April 9th, 2019 stakeholder meeting.
Developing engineering designs.



Woodhull Dam Fish Passage

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

Status: Partial funding secure - PEP is securing additional funds with a goal of completing construction in 2020.



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 on February 26th, 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.



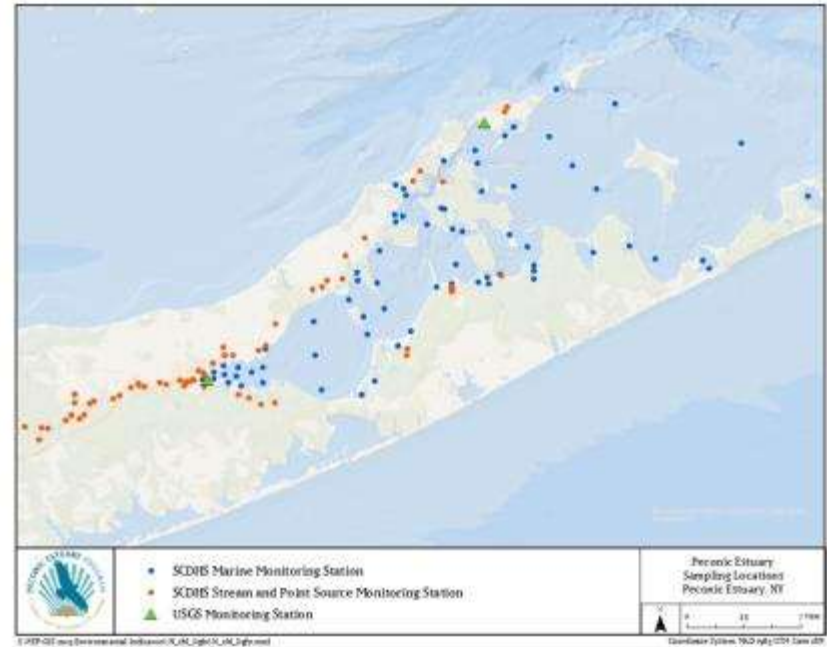
WQ Monitoring Assessment

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.
- **Next Management and Policy Committee Joint Retreat will be 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: MOU signed 12/18/2019 and advertising for a Post-Doctoral position soon.

- 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: Contracting phase. Expected completion September 2020.

Contract is in Suffolk County legal review. 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.

Nitrogen Load Reduction Assessment Project

PEP and Anchor QEA, LLC.

Status: Contracting phase. Expected completion September 2020.

Contract changes may cause project delay. 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.

2019 Education and Outreach Highlights

To be presented at the January 8th Management Committee meeting.