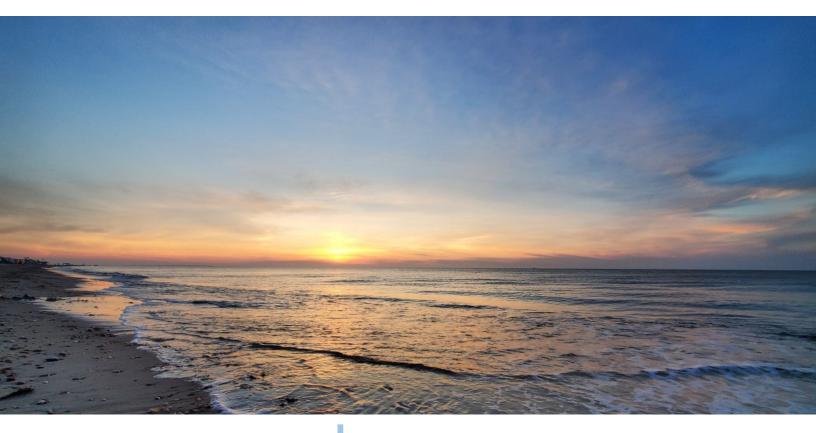


## SPRING NEWSLETTER 2021



### What's Inside?

### PEP BIENNIAL CONFERENCE 2021

On page 02, we provide a recap on PEP's first Biennial Conference. Gain access to the session recordings and resources.

### PARTNERSHIP VIDEO

On page 04, we share with you a glimpse of our partnership video. Enjoy this mini documentary on our estuary!

### ANNUAL WATER QUALITY REPORT

On page 05, PEP introduces its first annual report on the status of our water, The 2020 Peconic Estuary Water Quality Report.

### Peconic Estuary Partnership Receives a Boost in Funding From State and Local Budgets

The New York State Legislature included, as part of the Environmental Protection Fund in the annual budget, \$450,000; an increase of \$250,000 from previous years, in annual allocation for the Peconic Estuary Partnership. PEP is extremely grateful for the increased funding from the State, and thanks Assemblyman Fred Thiele, Assemblyman Steve Englebright, and Senator Todd Kaminsky for their support. The Town Boards of Southold, Shelter Island, East Hampton, and Southampton have all independently agreed to allocate a portion of the Community Preservation Funds as is allowable under the NYS CPF legislation to match a portion of our federal dollars. We thank all of our Town Boards for recognizing unanimously that working together will help PEP achieve our mission of protecting and restoring the Peconic Estuary and its watershed. This boost in funding will help advance PEP's work towards reaching the four priority Goals outlined in the PEP 2020 Comprehensive Conservation Management Plan that focus on clean waters, resilient communities, healthy habitats and wildlife, and strong partnerships.

# PEP'S BIENNIAL CONFERENCE

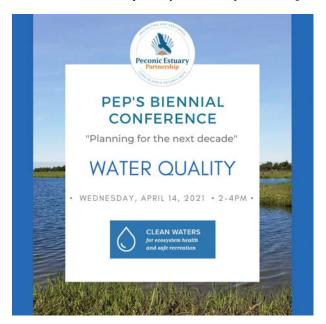
"Planning for the next decade"



By Lauren Scheer

The health of the Peconic Estuary faces challenges – and that means our community does too. Excess nutrient loading from land causes water quality to decline, climate change causes sea levels to rise, and all of these issues combined with other human activities harm our wildlife and habitats. As a result – the natural resources we depend on and the real estate and recreational opportunities we enjoy suffer. PEP's 2020 Comprehensive Conservation Management Plan (CCMP) outlines four main Goals with Actions that guide the work of our partnership to combat these challenges: **Strong Partnerships, Clean Waters, Resilient Communities, and A Healthy Ecosystem.** Although there have been many successes and improvements throughout the years (a timeline of these accomplishments can be found in the PEP 2020 CCMP), issues in and around the estuary endure. This management plan is crucial for PEP to stay on track and prioritize Actions to solve the question, "what are we going to do about it?" and reach our overarching Goals. But after all the hard work to create the management plan – what is the next step? How do we get these Actions into motion? Where do we begin?

It starts with conversations and partnership. The PEP Biennial Conference put the CCMP into motion when a group of PEP's valued partners brought their expertise, their resources, and their passion to the table to begin fruitful conversations about how we should approach the issues in the estuary that impact our communities and economy. The conference was held on April 14th, 15th and 16th to kick-start the journey of our 10-year management plan. Each session focused on a CCMP Goal and selected Actions.



# Water Quality Session Snapshot

**Goal: Clean Waters** for Ecosystem Health and Safe Recreation **Objective:** "Increase understanding of **nutrient pollution** in groundwater and surface waters, and decrease negative impacts from legacy, current, and future nutrient inputs."

#### **Selected Actions:**

**Action 17** – Plan science-based approaches for monitoring and reducing nutrient pollution.

**Action 18** – Implement science-based approaches for monitoring and reducing nutrient pollution.

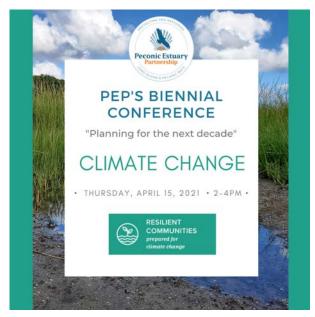
Moderator: New York State Assemblyman Fred Thiele

Panelists: Bridget Fleming, Suffolk County Legislator District 2; Christopher Gobler, Professor at SoMAS of Stony Brook University; Jim Tierney, NYSDEC Deputy Commissioner – Water and Watershed; Ken Zegel, PE, Principal Public Health Engineer of Suffolk County; and Peter Scully, Deputy Suffolk County Executive

Attendees: 123

Our moderator, Assemblyman Thiele, guided our panelists through tough questions and inspiring dialogue for the future of our water. The session's theme focused on one of the largest threats to our water quality – nutrient loading from septic systems and fertilizers which cause conditions that harm fishing, shellfishing, recreation, and tourism. Panelists discussed our current water quality impairments from nitrogen inputs, the importance of education and outreach, septic upgrades, bioextraction opportunities, the Suffolk County Subwatersheds Wastewater Plan, the Suffolk County Reclaim Our Water Initiative including the Septic Improvement Program, Long Island Nitrogen Action Plan, and the importance of legislative and funding support. Now more than ever with increased year-round residents on the East End, adaptive management, funding, science, and education are crucial stepping stones for the well-being of our economy and health of our water. Watch the recording of this session and gain access to resources here.

### ...CONTINUED



## Climate Change Session Snapshot

Goal: Resilient Communities Prepared for Climate Change
Objective: "Help local communities to take meaningful, well-informed action to prepare for and adapt to climate change impacts in the Peconic Estuary."

#### **Selected Actions:**

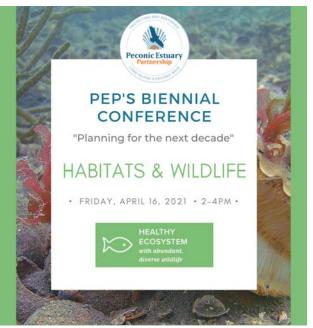
**Action 10** - Incorporate climate change considerations into new and existing projects of PEP and partner organizations. **Action 11** - Provide tools and assistance to local governments to mitigate and adapt to the impacts of climate change. **Action 14** - Increase public awareness of anticipated impacts of climate change on the Peconic Estuary and the practical ways to mitigate and prepare for them.

**Moderator:** Alison Branco, Director of Coastal Programs, The Nature Conservancy in New York

Panelists: Minghua Zhang, Nobel Prize winning Professor at SoMAS of Stony Brook University; Mark Lowery, Assistant Director, Office of Climate Change, NYSDEC; Peter Van Scoyoc, East Hampton Town Supervisor; Catherine Kent, Riverhead Town Councilwoman; Al Krupski, Suffolk County Legislator District 1

Attendees: 108

Climate Change impacts are already being felt around the East End of Long Island. Our moderator, Alison Branco, led our panelists in a discussion on mitigating and adapting to climate change impacts around our estuary. The session's theme focused on the local projections of sea level rise that are expected to increase up to 8 inches by the 2020s and up to 30 inches by the 2050s. Panelists discussed what's predicted for our area and how scientists come to those predictions, the Suffolk County Sea Level Rise Task Force, Climate Smart Communities, Community Risk and Resiliency Act, Climate Leadership and Community Protection Act, the importance of climate change in Town Comprehensive Plans, the Coastal Assessment Resiliency Plan for East Hampton, and the importance of education moving forward. Watch the recording of this session and gain access to resources here.



### Habitats & Wildlife Session Snapshot

Goal: Healthy Ecosystem with Abundant Diverse Wildlife
Objective: "Restore and protect key habitats and species diversity in the Peconic

Estuary and its watershed." Selected Actions:

**Action 30** – Monitor and protect existing eelgrass beds; where appropriate, restore and expand eelgrass beds. **Action 31** – Use available habitat quality assessment and climate change resiliency tools to prioritize wetland restoration projects identified in the 2020 PEP Habitat Restoration Plan, and implement the top priority projects. **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. **Action 35** – Monitor results of shellfish restoration efforts, share findings, and

**Action 35** – Monitor results of shellfish restoration efforts, share findings, and encourage creation of shellfish spawner sanctuaries.

Moderator: Matthew Sclafani, Cornell Cooperative Extension of Suffolk County Panelists: Alexa Fournier, Coastal Resiliency Program Manager, NYSDEC Division of Marine Resources; Nicole Maher, Senior Coastal Scientist, The Nature Conservancy in New York; Steve Schott, Habitat Restoration Specialist, CCE of Suffolk County; Brad Peterson, Associate Professor at SoMAS of Stony Brook University; Steve Tettelbach, Shellfish Ecologist, CCE of Suffolk County

Attendees: 104

The fate of our natural resources received well-deserved attention during this session. Our moderator, Matthew Sclafani, navigated our panelists through discussion on the protection and restoration initiatives for our habitats and wildlife (the health of which determines our economic success and resilient future). The session's theme focused on how resources like scallops, wetlands, eelgrass beds, and shorelines face degradation from human activities, pollution, and climate change. Panelists discussed State efforts, a recipe for salt marsh restoration, successes of living shorelines, seagrass restoration, and the recent trends of our Peconic Bay scallop populations. What does our future look like for these resources? Watch the recording of this session and gain access to resources here.

### PEP'S PARNTERSHIP VIDEO - A NEW PLAN, A NEW DECADE

By Lauren Scheer

The Peconic Estuary Partnership is excited to share with you our video that highlights the essence of our work - partnership. As we like to say, our partnership is our greatest tool to help us achieve our mission of protecting and restoring the Peconic Estuary and its watershed.

We interviewed many of our valued partners to share with us their thoughts about the Peconic Estuary, what it means to them to be a part of this partnership, and how our new management plan will guide our work into the next decade. Enjoy stunning views of our estuary and inspiring footage of our partnership efforts.

#### Watch the video here:

https://vimeo.com/533689678

### Quote Samples from the Video...

Suffolk County Executive Steve Bellone: "Water is everything to us here, and it is our obligation to ourselves and to future generations to do everything we can to enhance and protect this incredibly important natural resource...If we are not actively working to protect water quality in our region we are undercutting our future and that is why the work that the Peconic Estuary Partnership has done over these many years now and the vision you have laid out for the future is so important to the County..."

Assemblyman Fred Thiele: "...We're the stewards of it, it's great to look at but we need to keep it clean too, and so it's a reminder to me that our job is never finished when it comes to protecting the estuary, when you can look around north, south, east, west and see what a special resource that we've been bequeathed and it's our job now to make sure that the next generation gets to enjoy it just the way that we have."

**Legislator Bridget Fleming**: "...The PEP serves as a model for how to do government well because of the way we are continually reaching out to stakeholders for buy in, for comprehensive understanding of the problems that we face, the understanding that we face them together as a community and that as a community we can arrive at solutions..."

Brookhaven Town Supervisor Ed Romaine: "I have grandchildren, and I want to see, for my grandchildren, I want them to see the Long Island that I use to see. I grew up here in the 50s - I want them to understand that this island has such great potential and enjoyment for us if we use that responsibility that has been given to us to use this island and its natural resources carefully and wisely and not exploit it and not contaminate it or pollute it. We need good stewards for the environment, we need to save what is left."



### Special Thanks to our Partners

(in order of appearance)

Steve Bellone, Suffolk County Executive

**Alison Branco**, Ph.D., Director of Coastal Programs, The Nature Conservancy, New York

**Katie Petronis**, Deputy Commissioner of Natural Resources, NYSDEC

Mike Bottini, Wildlife Biologist, Seatuck Environmental Association

**John Pavacic,** Former Executive Director, Central Pine Barrens Commission

**Matthew Sclafani,** Ph.D., Cornell Cooperative Extension of Suffolk County & PEP Technical Advisory Committee Chair

Jim Gilmore, Director, Division of Marine Resources, NYSDEC

Byron Young, Retired Fisheries Biologist, NYSDEC

Fred Thiele, New York State Assemblyman

**Aisha Sexton-Sims**, Ph.D., Chief, State Revolving Fund Program Section, Water Division, Region 2 U.S. EPA & Former PEP Management Committee Chair

Pete Lopez, Former Regional Administrator, Region 2 U.S. EPA

Peter Van Scovoc, East Hampton Town Supervisor

John Bouvier, Southampton Town Councilman

Ed Romaine, Brookhaven Town Supervisor

**Javier Laureano**, Ph.D., Director, Water Division, Region 2 U.S. EPA & PEP Policy Committee Chair

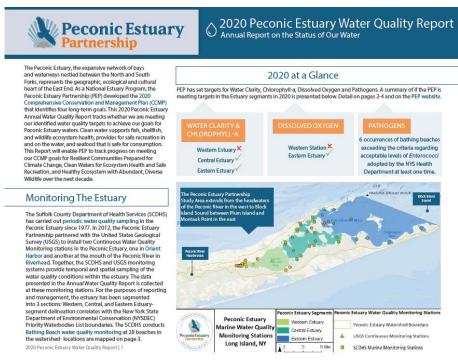
Al Krupski, Suffolk County Legislator, District 1

Bridget Fleming, Suffolk County Legislator, District 2

### PECONIC ESTUARY WATER QUALITY

By Sarah Schaefer

PEP introduces its first annual report on the status of our water - The 2020 Peconic Estuary Water Quality Report. Clean water supports fish, shellfish, and ecosystem health, provides safe recreation in and on the water, and allows seafood to be safe for consumption. That is why Clean Waters is a main Goal in the PEP 2020 Comprehensive Conservation Management Plan (CCMP). PEP has set targets to meet for Water Clarity, Chlorophyll-a, Dissolved Oxygen and Pathogens. These parameters reflect the health of our water. The 2020 Peconic Estuary Water Quality Report tracks whether PEP is meeting the identified water quality targets to achieve the Goals outlined in the PEP CCMP over the next decade. These Goals include Resilient Communities Prepared for Climate Change, Clean Waters for Ecosystem Health and Safe Recreation, and a Healthy Ecosystem with Abundant, Diverse Wildlife.



On the first page of the report, you'll find a map that shows the three estuary segments (western, central, and eastern) for the purposes of reporting and management. A summary of whether PEP is meeting targets in 2020 for the estuary segments is presented and easily viewed through Stop Light Graphics. These graphics show gradients of colors (e.g. green, yellow, red) to indicate if targets are being met. A direct management action for each parameter and segment is also shown in the report. Dive into the report here to see the status of our water in 2020. It is important to create targets and track our progress towards them so we can reach our water quality goals.



Stay the Course Target met. Continue to monitor and report annually on parameter. Continue planned projects.

Caution Small-magnitude and/or short duration failures to meet target. Review Monitoring data. Begin/ continue

Technical Advisory Committee and Management Conference development of specific management recommendations.

Alert Target not met. Continue to implement or develop management actions to get back on track.

### **Water Quality Monitoring Strategy**

The PEP finalized <u>The PEP Water Quality Monitoring Strategy</u> in 2021. The Strategy includes a summary of existing water quality monitoring programs and an assessment of whether data collected by those programs can adequately track and detect changes in water quality, which is needed to assess progress towards the PEP 2020 CCMP Goals. The Strategy also includes Next Steps to address gaps in data and/or information needed to fully assess progress towards the CCMP Goals.

#### **Water Quality Monitoring Collaborative**

To ensure effective implementation of the PEP Water Quality Monitoring Strategy, the PEP has developed a Peconic Estuary Water Quality Monitoring Collaborative (WQMC) to help advise the completion of the Next Steps from 2020 through 2023 outlined in the Strategy. The Collaborative will function as a sub-committee of the Technical Advisory Committee (TAC) and is composed of main water quality monitoring programs in the estuary, including members of New York State Department of Environmental Conservation (NYSDEC), U.S. Geological Survey (USGS), Suffolk County, Cornell Cooperative Extension (CCE), and academic and non-profit groups. The WQMC utilizes data collected by our partners to evaluate water quality:

<u>The Suffolk County Department of Health Services (SCDHS) Surface Water Monitoring</u>
<u>The Suffolk County Department of Health Services Bathing Beach Monitoring Program</u>

United States Geological Survey (USGS) Orient Harbor and Riverhead Continuous Water Quality Monitoring Stations

The WQMC is using the Peconic R-based open science package developed by the Tampa Bay Estuary Program to analyze and annually report on water quality in the Peconic Estuary.

O6 Spring 2021

### PECONIC ESTUARY PARTNERSHIP UPDATES

#### PEP's Biennial Conference 2021



The PEP 2020 Comprehensive Conservation Management Plan outlines Goals and Actions that guide the work of our partnership to combat the environmental challenges the Peconic Estuary faces. PEP held the first PEP Biennial Conference in April to begin discussions that put these Goals and Actions into motion. PEP's partners discussed "what are we going to do about it?" for Water Quality on April 14th, Climate Change on April 15th, and Habitats & Wildlife on April 16th. Recap and resources from the conference can be found on our website. Next conference should be held in 2023.

### PEP's Partnership Video - A New Plan, A New Decade

PEP launched the "Partnership Video - A New Plan, A New Decade" in conjunction with the PEP Biennial Conference in April. In this video, partners of the Peconic Estuary Partnership share why PEP's new management plan will guide crucial work towards a brighter future as we all work together. Our partnership is our greatest tool to help us achieve our mission of protecting and restoring the Peconic Estuary and its watershed. You can watch the video here: <a href="https://vimeo.com/533689678">https://vimeo.com/533689678</a>



#### 2020 PEP Habitat Restoration Plan

The Habitat Restoration Plan identifies important Peconic natural habitats with enhancement or restoration potential, includes overall habitat restoration goals, and identifies and prioritizes potential restoration projects. The Plan has been updated over the years since its creation in 2000. An Interactive GIS Map of habitat restoration projects complements the Plan. The year 2020 added 5 new projects and updated 2 projects, making a total of 46 projects in the Plan.

### **Nitrogen Load Reduction Assessment Project**

PEP is contracting with Anchor QEA to compile and assess the cost per pound of nitrogen reduction to groundwater for various nitrogen reduction best management practices 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. The project is ongoing. Expected completion is September 2021.

Project presentation at the February TAC meeting.

### 2020 Peconic Estuary Water Quality Report

The Peconic Estuary Water Quality Report will enable PEP to track progress on meeting our CCMP Goals for Resilient Communities Prepared for Climate Change, Clean Waters for Ecosystem Health and Safe Recreation, and Healthy Ecosystem with Abundant, Diverse Wildlife over the next decade. PEP has set targets for Water Clarity, Chlorophyll-a, Dissolved Oxygen and Pathogens. A summary of whether the PEP is meeting targets in the estuary segments in 2020 is presented in the Report.

#### **Peconic Estuary Solute Transport Model**

Contracting with United States Geological Survey, this Solute Transport Model will be a tool to estimate time-varying nitrogen loading rates to the Peconic Estuary resulting from wastewater and fertilizer inputs to the groundwater. The Model will be used to simulate the response of loading rates to the estuary due to possible wastewater and fertilizer-management actions. Currently the project is in the final model development phase and scenario finalization stage. Anticipated completion is for fall 2021.

https://www.peconicestuary.org/projects/clean-waters-2/peconicestuary-solute-transport-model/

### Critical Lands Protection Strategy (CLPs) and Climate Ready Assessment Services for PEP and Shinnecock Indian Nation (and the Critical Lands Protection Strategy Criteria and Ranking Tool!)

PEP contracted with Anchor QEA and the project was completed in September 2019. Final reports are available on the PEP website. They include the updated Critical Lands Protection Strategy (CLPS) and the assessment of climate change vulnerabilities for both PEP and Shinnecock Indian Nation. A Critical Lands Protection Strategy Criteria and Ranking Tool was also developed and launched in 2021 for municipalities, land stewards, and decision makers to help them decide which lands to acquire and evaluate which climate adaptation strategy is appropriate. A virtual municipal training workshop was held in January. Recording here. ArcGIS files are available to municipalities.



### ...CONTINUED

### Expansion and Monitoring of the Town of Southold Living Shoreline Demonstration Project

Peconic Estuary Partnership is contracting with Cornell Cooperative Extension. Project is underway and is an expansion to an existing Town of Southold Living Shoreline Demonstration Project contract with the Town of Southold Trustees and the Suffolk County DEDP. Goal is to establish a larger geography of the project and monitoring services to run in tandem with the existing project to quantify nitrogen and pathogen uptake results and assess the effectiveness of the living shoreline to mitigate nitrogen pollution in the Peconic Estuary with Spartina alterniflora and ribbed mussels. Check out a <a href="webpage on PEP's website">website</a> that is dedicated to this project. Expected project completion in August 2021.



### **Spring 2020 Alewife Monitoring**

A <u>video camera was installed at Grangebel fishway</u> on the Peconic River for a third year. Professor Kellie McCartin at Suffolk County Community College and her students are helping with video monitoring analysis. Alewife Count Update: 5,500+ fish are estimated to have passed through the camera in March 2021. The counting continues and results will be shared. PEP also worked with Peter Daniel of Hofstra University to install antennas below and above the camera and tag 270 fish to track fish movements. PEP is working with NYSDEC to collect fish samples for paired otolith and scale age analysis. Report on 2019 and 2020 monitoring results is in development.





### **Upper Mills Dam Fish Passage Project**

Contracting with L.K. McLean Associates for engineering design/permitting services. Design alternative selected at April 9th, 2019 stakeholder meeting. Engineering designs have been finalized and are being reviewed by PSEG/LIPA and then will be submitted to DEC for permitting. Anticipated completion is for August 2022.

### **Woodhull Dam Fish Passage Project**

PEP and Suffolk County contracted with L.K. McLean Associates to design a fish passage project at Woodhull Dam. PEP secured funds from NYSDEC WQIP, Suffolk County WQPRP, Suffolk County Capital Funds, USFWS and additional funding was awarded by the Southampton Town Board. This project will go out to bid in the next 60 days (June-July). Fish passage is expected to be constructed prior to spring 2022.

#### **New USGS Continuous Tide-Warning Station**

PEP uses a portion of its Environmental Protection Fund allocation from NYS along with contribution from USGS to support the operation and maintenance of two continuous water quality monitoring stations in the Peconic (one at the head of the Estuary near its confluence with the tidal Peconic River and the other near the Estuary mouth in Orient Harbor). We are establishing a third station at the South Ferry dock on Shelter Island. Installation of the station occurred in the fall of 2020 and will provide tide-warming capabilities and the option to add on water quality monitoring parameters. Suffolk County Capital Budget funds to add water quality monitoring equipment to this station have been secured and the PEP Water Quality Monitoring Collaborative will be discussing which parameters to add to this station at its next meeting.



### Wildlife Monitoring Network for Long Island

PEP developed a Wildlife Monitoring Network for Long Island. The Wildlife Monitoring Network is a brand and central website where wildlife monitoring surveys that are conducted for species found throughout Long Island are housed together. The goal of this outreach initiative is to increase community awareness, which in turn should increase collaboration, community participation, and data collection – furthering our understanding about Long Island wildlife and their habitats. PEP is working with Seatuck Environmental Association as cosponsors of the website. Share the link and spread the word! <a href="https://wildlifemonitoringnetworkli.org/">https://wildlifemonitoringnetworkli.org/</a>



### **Peconic Estuary Ecosystem Study**

PEP is working with partners at NYSDEC and SUNY Stony Brook on a study that will identify vulnerable species, critical habitats, and ecosystem properties within the Peconic Estuary. 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. This information has direct application to decisions affecting the use, management, and conservation of the natural resources in the bay. Expected completion is for spring 2023. Applications are currently being reviewed for a postdoctoral position.

### **HAIKU POEM**

Name: Date:

Create a Haiku Poem about a favorite creature you can find in the Peconic Estuary. The poem should have three lines with the first line having 5 syllables, the second line having 7 syllables, and the third line having 5 syllables. This poem does not have to rhyme.

iitie					
Line 1:					
Line 2:					
Line 3:					
Draw a	picture of y	our creatu	re!		

For more activities and resources for educators, go to our website here: https://www.peconicestuary.org/what-you-can-do/education-and-outreachprograms/resources-for-educators/

Newsletter Editor: Lauren Scheer

# PEP CONTACT INFORMATION \*New room number in our address\*: Riverhead County Center 300 Center Drive, Room 250S, Riverhead, NY 11901 Email: peptalk@peconicestuary.org Executive Director - Dr. Joyce Novak Program Coordinator - Sarah Schaefer State Coordinator - Elizabeth Hornstein Education & Outreach Coordinator - Lauren Scheer Education & Outreach Assistant - Adelle Molina Education & Outreach Assistant - Kaitlin Morris