

Peconic Estuary Program Public Education and Outreach Support Final Report

Prepared by Cornell Cooperative Extension of Suffolk County

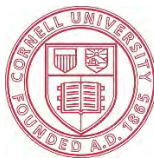
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Cornell University
Cooperative Extension
of Suffolk County

Summary: Cornell Cooperative Extension of Suffolk County (CCE) has continued to work with the Peconic Estuary Program (PEP) within the scope of their education and outreach efforts. CCE utilized their capabilities to produce materials that enhanced the PEP's visibility and relevance in the east end communities. Educational outreach was achieved through carefully planned and integrated programming. We used focused efforts within each task, unified all the goals put forth in the RFP, all while maintaining clear, concise and consistent educational outreach.

While we educated on many important estuary management topics, we focused on one single unifying topic; nitrogen and water quality. Integration of the PEP Comprehensive Conservation and Management Plan (CCMP) revision into all phases of education and outreach was achieved as well. The Education and Outreach team has completed a program that creates an informed and interactive public, including targeted social media campaigns that have increased visibility. The Citizens Advisory Committee (CAC) has continued to be reinvigorated and is more active than in recent years, and we have seen increased changes in behavior resulting from educational outreach, and through participation. This campaign resulted in a renewed interest in the Peconic Estuary Program- maintaining its role as caretaker, custodian and advocate for one of the most vital estuaries of National Significance.

Task List and Status:

- Task 1- Citizen's Advisory Committee (completed)
- Task 2- Outreach Materials (completed)
- Task 3- Green infrastructure Homeowner Rebate Program and Residential Nutrient and Toxin Management Program (ongoing)
- Task 4- Citizen Science and Volunteer Opportunities (completed)
- Task 5- Comprehensive Conservation Management Plan Revision
 - Engage stakeholders and involve them in the development and review of the CCMP revision (ongoing)

TASK 1- Citizen's Advisory Committee

Summary/Objective (from scope of work)

Citizen's Advisory Committee members are a vital component of the Peconic Estuary Program (PEP). Members help facilitate and implement the PEP management actions in their communities that benefit the environment and economy on the east end of Long Island. Our main priority was to include CAC members in the CCMP revision process by gathering members' input and have them act as liaisons for the public input portion of the CCMP revision within their community. In addition, we focused our efforts on engaging summer residents, community groups and leaders. The underrepresented environmental justice communities were also targeted for engagement in the CCMP revision process and to increase CAC membership. Between meetings, social media platforms were used to keep members engaged and informed on current Peconic Estuary activities.

Outcomes:

1A. Quarterly CAC Meetings

The quarterly Citizen's Advisory Committee (CAC) meeting locations were distributed throughout the estuary to accommodate residents from the different east end towns and increase the likelihood of

members attending meetings. Times and days of the week varied as well for the same purposes as varying the location. Agendas, flyers and other relevant information was posted regularly on the Peconic Estuary Program's Citizen Advisory Committee Facebook page. Every CAC meeting agenda included a discussion on the CCMP revision and an index card exercise with questions that would provide answers valuable to CCMP input (Appendix 1). This non-traditional way of gathering information on topics and issues most relevant to members has provided input on a more personal level by showing how people use the estuary and therefore allowing the team to intuitively understand important aspects of the CCMP revision process (See Task 1E for more details).

2016 PEP CAC Meeting Summary

2016 CAC Meetings	Time	Location	Township	Attendees
Saturday February 27	10am-12pm	Southold Town Community Center Southold, NY	Southold	16
Wednesday May 18	6pm-8pm	Sag Harbor Village Hall, Sag Harbor NY	Southampton	17
Tuesday September 13	6pm-8pm	Suffolk County Community College Culinary Center Riverhead, NY	Riverhead	17
Wednesday November 16	6pm-8pm	Floyd Memorial Library Greenport, NY	Southold	21

1B. Work with the CAC Chair to recruit ambassadors or leaders, to engage citizens to act as liaisons between towns and the PEP.

The CAC Ambassadorship program was developed to encourage members to become more involved in community engagement and education. PEP Ambassadors, and all CAC members are given "talking points" for the upcoming quarter regarding up to date "Call to Action" topics to discuss with the community in greater detail. Ambassadors were also given the opportunity to take on a small, manageable task every meeting to increase education and outreach of the PEP overarching goals. Examples include: hanging flyers, signing up for tabling events and hosting a CCMP presentation at an association meeting. This program, while in its early stages, has given citizens an active role to play in the PEP and has a lot of promise to be an effective method of involvement for a variety of people.

The Junior CAC Ambassadorship Program was also initiated to reach after-school youth clubs and organizations. Junior CAC Ambassadors would design, in conjunction with outreach staff, a project that would enhance their understanding and knowledge about the various environmental issues the Peconic Estuary faces. We made "cold contact" calls to teachers estuary-wide and Junior CAC Ambassador Flyers were also given out at the New York State Marine and Environmental Association Conference. Outreach during "A Day in the Life of the Peconic Estuary" was more effective in gaining interested parties as we had a captive audience that was very receptive to such a program (i.e. we were preaching to the choir). The Hampton Bays Middle School science teacher is interested in setting up a water quality monitoring network and a rain barrel project; other teachers expressed interest for the future as well. The Sag Harbor PTA has shown an interest in pursuing a collaboration with the Peconic Estuary Program for 2017. Ideas for future projects with the PTA are being discussed. Again, this program is in the very early stages of development and we believe it is worth continuing to try to build upon the initial successes of the first year.

1D. Work with the CAC to facilitate PEP outreach activities, especially participation in and implementation of “Call to Action” topics.

Members have expressed interest in holding more lectures during CAC meetings. Two special topic meetings were scheduled for the summer; one on the north fork, and a second on the south fork. This would satisfy the request of members for more lectures. By holding the events during the summer we would have greater success of reaching summer residents. Participants were also interested in writing letters of support for important environmental laws and regulations. A letter of support to ban plastic bags in Suffolk County was written by the CAC (Appendix 1-C).

1E. Maintain and increase participation in the CAC, with emphasis on the CCMP update.

Every CAC meeting and special topic meeting included discussion and participation of the CCMP update process and public input (Appendix 1-A). Each CAC meeting included an index card exercise aimed to gather valuable information for the CCMP revision. Results showed most members identified the vision of a healthy estuary with healthy fish and shellfish stocks. By far, the most popular reason to protect the estuary was due to interest in recreational activities, followed by preserving resources, and maintaining the economy and property values. The major concern members had about protecting the estuary was the general topic of septic/sewer/cesspool systems and the coordination and collaboration of towns and stakeholders to accomplish restoring the estuaries (Appendix 1-B). A PEP CCMP video was created for CAC ambassadors as a tool to show during stakeholder input meetings. (<https://vimeo.com/194860848>). New to the PEP, Riverhead Cablevision Channel 20 awarded a 30 minute time slot Mondays at 7:30pm from October 2016- October 2017 to the PEP to broadcast CAC meetings for those individuals who cannot attend and to recruit new members and create an interest in the program. Meeting notes are posted on the PEP website for all to view.

1F: Maintain current social media and digital communication with and within the CAC as well as new methods to promote engagement between in-person meetings.

The PEP Citizen’s Advisory Committee Facebook page is consistently updated with relevant CAC news, meeting dates and agendas. Through our continued efforts to evaluate CAC member’s interests and needs, we have found that CAC members generally prefer using email as the main platform of communication to announce meetings and stay connected between quarterly meetings. CCE continued to communicate via email with increased frequency to appeal to the majority consensus. However, Facebook is an extremely effective tool to reach different demographics and recruit new participants for outreach events. Therefore, CCE continued to update Facebook for those members who do use it, and for future members who prefer that line of communication. Meeting notes and ambassador talking points are posted on the CAC website. E-mail reminders and meeting follow-up e-mails are sent quarterly with links to the CCMP public input survey and other opportunities for participation. Meetings traditionally had call in numbers for members who could not attend a meeting. Since call in participation for prior meetings were low, for the fourth quarter CAC meeting, an invitation went out for members to sign in using Zoom, a Cornell University program to allow people to remotely attend meetings from their computers. We believe this will increase CAC participation as south fork residents are unlikely to attend meetings on the North Fork and vice versa. Web call-ins are more technologically advanced and may be more appealing to certain members of the public.

1G: Ensure PEP is represented at community events at least once a month throughout the project period.

The Education and Outreach (E&O) team has participated in 56 events in 2016 and has reached over 2,000 community members and youth through the following: general outreach events, participation at partner events, PEP sponsored events, summer farmer's markets and community festivals (see event list in Appendix 1-D for a complete list). All PEP programs including the CAC, CCMP update, Homeowner Rewards Program, stormwater and fertilizer reduction education at all outreach events. We also advertised for upcoming PEP-sponsored citizen science volunteer opportunities. CAC members were encouraged to volunteer their time to advocate for PEP CAC during outreach tabling events.

Deliverables:

See Appendix 1 for deliverables:

- CAC Meeting Agenda
- List of events for 2016
- Summary of CAC CCMP input
- Detailed CAC meeting notes can be found on the Peconic Estuary Program website at <http://www.peconicestuary.org/committee.php>

Setbacks/Challenges:

Changing locations throughout the Estuary has been successful for increasing the likelihood that members would attend meetings, however members end up only attending meetings closest to their residences. Setting up a call-in for members to attend remotely has been unsuccessful with only one member calling in for the entire 2016 contract period. However, use of Zoom seems to increase the remote viewing attendance and will continue to be used in the future. The CAC Ambassadorship program gained participation slowly. Members were hesitant to step forward to become highly involved ambassadors or take on large advocacy roles for PEP and the CCMP revision. The PEP CAC Facebook page was created and has shown little use. Members vocalized that they were unlikely to use Facebook as a main platform of communication in between meetings or for meeting announcements. During the 2016 contract period, CCE proposed to record all CAC meetings to be broadcast on Cablevision. There was a significant delay in obtaining a timeslot for the Riverhead Cablevision Channel 20 as registration occurs in September and slots are distributed for use starting in October for a 12 month period. This led to only broadcasting the fourth CAC meeting.

Ways to Improve:

1. To increase the likelihood that CAC members will attend all meetings and to keep the Peconic Estuary Program using the most advanced technology, advanced web-based, interactive software, such as Cornell University's Zoom, should be used instead of call-ins via phone.
2. To grow the CAC Ambassador Program, discrete, convenient, manageable tasks-such as hanging a flyer for an upcoming event, or checking signs at a local retail store known to sell fertilizers regarding the Suffolk County Fertilizer Application Ban should continue to be provided. As strong leaders present themselves, we will offer larger advocacy roles for interested parties.
3. Members have continually expressed interest in lecture style CAC meetings. Providing a lecture by a guest speaker on a PEP related priority topic at the end of a CAC meeting will accomplish the interests and requests of current members. By scheduling the speaker at the end of the CAC meeting guests that attend with the initial interest of the lecture will be exposed to the CAC meetings, which could increase CAC interest and membership.

TASK 2- Outreach Materials

Summary/Objective (from scope of work)

Increasing the reach of PEP's social media has allowed PEP to engage a wider range of the population. Maintaining social media on a regular basis on the CCMP revision process, PEP related topics and volunteer events has educated the public, increased PEP's visibility and allowed for interaction, communication and engagement remotely. While social media is a powerful tool for education and outreach, we also focused our efforts on creating new outreach material in multiple languages to be distributed as hard copies, as well as being made available online, to reach community members not engaged on social media.

Outcomes:

2A. Create, establish and continually update a PEP presence, based on current social marketing techniques and methods.

We continued to build upon our previous outreach campaign from 2015 by increasing our reach throughout the east end of Long Island. All platforms of social media were managed and continually updated to increase a PEP presence. Upcoming PEP volunteer events, CAC meetings, partner volunteer days, relevant estuary news, information on local elections and the Homeowner Rewards Program were some of the topics covered. Several week-long social media campaigns were held throughout the year. #IHeartEstuaries was used on Twitter, Instagram and Facebook with daily posts. #NationalEstuariesWeek and #EstuaryGo were used on all media platforms, through e-mail and our newsletter to raise awareness about The National Estuaries Program (NEP) and the Peconic Estuary Programs participation within the NEP. #PeconicEstuariesWeek was used for a photo contest during National Estuaries Week and a video was created and posted online to highlight the Peconic Estuary and all of the estuaries in the NEP. A nitrogen reduction video was created in conjunction with daily posts to raise awareness and participation in Suffolk County's Local Law banning the application of fertilizers from November 1st - April 1st. At each outreach event attended in 2016, we continued to gather email addresses by offering incentives, such as: floating PEP logo key chains with tips on boating responsibly and waterproof PEP logo card holders. All efforts have led to a substantial growth of PEP's online visibility illustrated below:

Summary of Social Media and Online Growth from Public Outreach and Education

Social Media Platform	Numbers of posts/emails	Followers at start (12/10/2015)	Followers at end (12/10/2016)	Percent Increase in Public Reach 2016
Email List (Constant Contact)	74	762	1,093	43.44%
Facebook	224	591	935	58.21%
Facebook CAC		NA	35	35.00%
Twitter	-	396	540	36.36%
Instagram	77	257	416	61.87%

2B. Produce a quarterly program newsletter that is available as an e-mail and online, using the PEP established template and distribution list.

A spring, summer and fall newsletter were created, printed and distributed at various outreach events. A web friendly version was created and uploaded to the PEP website for wide-scale access (Appendix 2-B). Each newsletter contained articles written by PEP staff, the outreach team and external experts in order to

highlight our strengths and widen the scope of material that could be covered. Each newsletter contained a “Creature Spotlight” and a list of volunteer events for the upcoming quarter. While newsletters are an important tool for education offering slightly more detailed information on important topics, the same accomplishments were reached using 3 evenly spaced newsletters instead of 4 during the 2016 contract period, which was discussed and approved by PEP staff.

2C. Improve, protect or enhance habitats and living resources by conducting public education efforts.

Promotional PEP related materials were produced to appeal to specific audiences. Specifically we designed key chain floats with the PEP logo on one side and tips on boating safety on the reverse side, as well as waterproof card holders with the PEP logo. These products along with the Shellfish brochure and Preserving Fish Habitat in the Peconic Estuary brochures were distributed to marinas and yacht clubs estuary-wide to educate boaters on the importance of protecting the estuary and the marine life that uses it. Rulers were created for teachers and school aged children during “A Day in the Life of the Peconic Estuary” and for Junior CAC Ambassadors. All promotional items were used to thank our volunteers for participation at PEP events. In celebration of World Fish Migration Day, “Reclaiming Fish Spawning Grounds in the Peconic River” was created and posted on Facebook and Vimeo (<https://vimeo.com/167339295>). This was one of our most viewed videos created and was extremely well received by the public.

2D. Conduct public education and outreach efforts related to the PEP CCMP revision, residential stormwater control and nutrient reduction, green infrastructure, vegetation preservation requirements and water reuse.

Three new brochures were created during the contract period. “Community Stormwater Stewardship Program” was created to educate people about stormwater runoff, stormwater pollution, reduction methods and our Stormwater Stewardship pilot program. A protocol was developed for volunteer samplers to accurately collect environmental parameters and water quality measurements (Appendix 4-C). “Simple Ways to Protect the Peconic Estuary” was created to identify and define best management practices (BMPs) that people can practice at home and while outdoors (Appendix 3). “Why We Should Care About The Peconic Estuary” was designed to inform and engage people primarily about the CCMP update, while also bringing to light the reasons why they should care, and participate in the protection of the Peconic Estuary. New and previously created brochures were distributed during outreach events, tabling events and given in larger quantities to partner organizations. “Simple Ways to Protect the Estuary” and “Best Management Practices” were also translated into Spanish to educate and engage the Spanish speaking community. Translated brochures were distributed to Latino Centers, Calling Centers, delis, churches, cultural centers, and Hispanic outreach centers.

A poster was created for the Restore America’s Estuaries New Orleans Conference entitled “Citizen Science: Engaging and Retaining Public Participation Through Science-based Monitoring” (Appendix 2-D). The poster highlights the many citizen science programs PEP is involved with and the importance of volunteers to advocate for the program and assist in collecting valuable data used for resource management. Green infrastructure, nutrient reduction, residential stormwater control, vegetation preservation requirements and water reuse education and outreach were heavily focused on during native garden workshops, partner events, Homeowner Rewards Program lectures and additional events (see Task 3).

The outreach team has been working closely with the PEP Program Office to update current website pages to include recent news, links to newsletters, an up to date calendar of events, and links to CAC meeting notes. The team has been heavily involved in the website update process, attending meetings, contributing ideas for content and visuals, gathering information, making maps and writing new content for the updated website. The new website will be an important step in the citizen's educational outreach efforts in the future.

2E. Host one annual conference for local stakeholders and elected officials within the Peconic Estuary focused on the CCMP revision.

The annual conference was held on Monday August 22nd from 6pm-8pm at the Stony Brook Southampton Marine Science Center entitled, “Nitrogen and our Impacts on the Estuary”. Speakers included the CAC Chairman Kevin McDonald, PEP Director Dr. Alison Branco, and Southampton Town Councilwoman Bridget Fleming, now Suffolk County Legislator. Presentations from The Nature Conservancy, the Suffolk County Department of Health Services, The Center for Clean Water Technology, and Concerned Citizens of Montauk focused on the conference topic and covered the state of the bay, ways to reduce nitrogen, and technologies being developed to reduce nitrogen. This workshop was very successful and had 65 attendees including current and new CAC members, permanent residents, seasonal residents, visitors, journalists, local organization and government representatives. This event helped to educate the public on the nitrogen management issues that the PEP is heavily involved with and increased awareness and an interest in participation with the CAC.

Deliverables:

See Appendix 2 for deliverables:

- Social media impact statistics
- Copies of developed material
- Newsletter compilation
- Citizen Science: Engaging and Retaining Public Participation Through Science-based Monitoring Poster
- Annual Conference summary

Setbacks/Challenges:

Our original proposal was to host two separate workshop-style conferences; one aimed at educating the public officials and a second dedicated strictly toward citizens. Due to scheduling conflicts, the outreach team held one workshop-style conference with great success. Social media is an important tool for communication with the public but as mentioned earlier, does not reach all demographics. Statistics can be analyzed using Facebook Ads Manager however the kinds of statistics that are produced are limited and not easy to acquire. While we initially wanted to gain participation from Spanish speaking community members regarding the CCMP revision, we discovered that most individuals didn't have a basic understanding about estuaries, the problems they face and that what we do on land directly impacts the health of the estuary. While newsletter are an important tool for education, we found that the summer newsletter has much lower readership than all other quarters. The same accomplishments were reached using 3 evenly spaced newsletters instead of 4 during the 2016 contract period. Furthermore, this frequency of newsletters was well received by the CAC members and they indicated that it also helped prevent supersaturation of outreach materials.

Ways to Improve:

1. Use a social media analytics program such as Hootsuite to improve analysis to better understand which posts are successful. By having a better understanding of which outreach methods are most successful regarding social media, we can make more knowledgeable suggestions for future work and how to maximize reach.
2. Paid Facebook “boosts” have significantly increased PEP’s reach for volunteer events and additional posts. Increasing the budget for additional posts throughout the year will further increase PEP’s visibility on Facebook.
3. We recommend continuing to build upon the introductory educational outreach materials for the Hispanic population of the east end and collaborating with programs and organizations who are well established in the Spanish speaking community to hold events increasing our educational efforts.
4. Due to the success of the annual conference, we suggest hosting more lectures on PEP related topics that are also of high interest to the public. In this way, we can reach and educate large numbers of interested community members.

TASK 3- Green Infrastructure Homeowner Rebate Program and Residential Nutrient & Toxin Management Program

Summary/Objective (from scope of work)

To increase awareness of the Homeowner Reward Program, several outreach events were held throughout the contract period and worked to gain interest, cooperation and participation of local landscapers and big box stores such as Lowe’s and Home Depot. We worked with NEIWPC to track rebates, actively took part in the approval process and maintained databases to record and track the projects that were approved as well as those that were not approved. Finished installations were documented and used to demonstrate what successful green practices can look like, how it can be beneficial for the landscape, and to inform homeowners how nature based practices are beneficial to the Peconic Estuary. CCE staff have worked closely with the NEIWPC project manager on all activities related to finance to ensure quick and easy reimbursement payments.

Outcomes:

3A. Administer and continue to recruit applications for the ongoing homeowner conservation landscaping and green infrastructure incentive.

We continued with our efforts to solicit and enroll participants in the homeowner rebate program using several different approaches. Advertisement flyers were distributed at delis, grocery stores, local markets, and coffee shops estuary-wide in May to increase awareness about the Homeowner Rewards Program (HRP). A boost in applications resulted from those efforts. E-mails highlighting the rebate program were also sent to those on our mailing list and directly to town representatives and trustees as a way to gain support and advocates for the program. The outreach team promoted the Homeowner Rewards Program and nitrogen reduction at all volunteer and tabling events and specifically scheduled Homeowner Rewards Program events to increase participation and awareness.

3B. Conduct outreach on the rebate program to increase community participation

The following events and efforts were completed in 2016:

1. Perfect Earth Project Toxic Free Lawn Seminar presentation.
2. Two Native Plant Workshop at the PEPs native garden at the Big Duck (spring and fall).
3. Homeowner Rewards Flyer distribution estuary-wide in May.

4. Tabled Long Island Native Plant Initiative Sale June 3rd and left flyers for the sale events on the 4th, 10th, 11th and for the fall sale on September 23rd and 24th.
5. Trained Bayberry employees on the rewards program guidelines to become advocates for the HRP and nitrogen reduction.
6. Presented a lecture at the East Hampton Garden Club Water Quality Problems and Solutions Conference.
7. Presented a lecture to the Landscape Architect training workshop held by Cornell Cooperative Extension Horticulture.
8. Installed five PEP rain barrels around Riverhead Town at comfort stations and in parks.
9. Perfect Earth Project Sustainable Practices for Homeowners outreach table.
10. Flyers distributed to the Sierra Club Sustainable Landscaping Seminar.
11. Flanders Riverside Northampton Community Association presentation.
12. Created a demonstration raingarden on Heidi Behr Way in Downtown Riverhead, held a volunteer planting event.
13. Produced an educational video covering the demonstration garden event and the benefits of raingardens, native plants and rain. (<https://vimeo.com/194851718>)

We successfully organized with the Program Office and Town of Riverhead officials, a demonstration rain garden installation on Heidi Behr Way in downtown Riverhead along the waterfront. The site selection was based on pre-existing flooding issues and the project was implemented with assistance from the Town. An Earth Day event was held on April 23rd for volunteers to help plant the preselected native plants from multiple local nurseries and to learn about the benefits of raingardens, rain barrels, and native plants for nitrogen reduction. An educational sign is currently in the process of being manufactured to be installed by the end of the contract period. This project was well received by the public and attracted media coverage from Riverhead Local (see deliverables for article link).

3C. Track installations and scope of the rebate program and report out on the estimated environmental benefits of the program to encourage further support and participation in the program

As a result of the extensive outreach efforts (see task 3B), the Rewards Program accomplished the following:

2016 Peconic Estuary Program Homeowner Rewards Program Summary

Number of new projects completed:	13
Number of new projects in progress:	18
Number of rain barrels installed (50 gallon):	13
Area of converted green space:	25,854 sq. ft.
Total amount in award money distributed:	\$5,243.21

3D. Implement a fertilizer/pesticide use reduction program, in coordination with other entities as appropriate, to achieve behavioral changes within the community that can be tracked and measured.

A social media campaign was held to raise awareness and participation of the Suffolk County Local Law Fertilizer Application Ban. This law prohibits the application of lawn fertilizers from November 1st to April 1st in an effort to reduce pollution sources to groundwater. Daily posts were scheduled on Facebook, and a Nitrogen Reduction video was created and posted on Facebook (www.facebook.com/pg/PeconicEstuaryProgram/videos/?ref=page_internal). A Native Garden

Workshop was held the first Saturday in November to discuss the local law, fertilizer/pesticide reduction and the homeowner rewards program. The PEP CAC members have been, and will continue to have the opportunity to check in at fertilizer sale stores to report if the mandatory signage for the local fertilizer application ban is present, as well as to ask employees about the public knowledge of the law as a part of the fertilizer/pesticide reduction program. The fertilizer survey created in 2014 continues to be part of the Homeowner Rewards Application.

3E. Engage a variety of groups to participate in the program

CCE maintained existing relationships with partners of the homeowner rewards program and sought out new potential partners and advocates of the program. We reached out to big box stores to request approval to hang Homeowner Rewards Program flyers in their gardening centers and to discuss the potential for a collaborative event. Lectures and outreach materials were given at seminars whose audiences were landscapers and landscape architects (See task 3B). The program was discussed at every PEP and PEP partner volunteer event and at local festivals.

Deliverables:

Riverhead Raingarden media coverage can be found at (<http://riverheadlocal.com/2016/04/25/volunteers-help-peconic-estuary-program-install-rain-garden-peconic-riverfront/>)

See Appendix 3 for deliverables:

- Homeowner Rewards Flyers
- Homeowner Rewards Application
- Fertilizer Survey
- Homeowner Rewards Report
- Demonstration Raingarden Compilation

Setbacks/Challenges:

Quantitative assessment of behavior changes proves to be a challenge within the program. Typically, we have found that individuals who participate in the program are already environmentally friendly and dedicated to taking time out of their schedules to participate in this program. Considering their views on protecting the estuary, there would be very little behavior changes as this group of individuals already conducts environmentally friendly practices, and it would be hard to show a detectable increase. Taking into account the time needed to find native plants, rain barrels and plant the vegetation or install the barrels, recruiting individuals that are less environmentally friendly remains a challenge. Reaching out to landscapers also proved challenging as they are already busy and either cannot, or do not want to, make the time to learn and promote the program. Big Box stores continually transferred our calls and requests for coordination showing no interest in collaboration.

Ways to Improve:

1. Participants continually express frustration on where to buy native plants on Long Island. Identifying the best places to buy native plants and what native plants are available will curb this frustration and potentially increase participation by those who find the program time demanding. Providing a plant database for easy access to identifying native vegetation species will also be beneficial for program participation.
2. As the program continues to grow, nurseries are beginning to see an increased demand for native plants. We suggest continuing to partner with nurseries to become advocates for the program, which is also economically beneficial to their business.

3. The rewards page on the PEP website is not easily accessible and we have had numerous calls and e-mails asking for help to locate the page. We suggest creating a more public friendly homeowner reward website page to reduce confusion and frustration, thereby increasing participation. Additionally, the ability for participants to apply to the program online, which is currently unavailable, would create a quicker, easier process that the community may find more appealing.

TASK 4- Citizen Science and Volunteer Opportunities

Summary/Objective (from scope of work)

Cornell University and CCE's Marine Program are national and regional leaders in providing citizen science and community-based volunteer opportunities to residents and visitors of Suffolk County and New York State. CCE's organizations have an established history of experience in engaging citizens to participate in a variety of programs and projects. The outreach team was tasked with creating and planning at least eight volunteer opportunities and recruit strong volunteer participation in alewife monitoring, coastal clean-up, invasive species removal, student citizen science collection, horseshoe crab monitoring among others designated to promote a healthy estuary. The help of 3 interns during the summer greatly increased our reach at local festivals and increased data collection for the Community Stormwater Stewardship pilot program.

Outcomes:

During the 2016 contract period, the outreach team has represented PEP at over 50 events throughout the estuary; 18 of which directly involved volunteer participation in citizen science or hands-on conservation activities. The PEP E&O team launched a new Community Stormwater Stewardship Water Quality Monitoring Pilot Program, attended events held by partner organizations (or supplied educational materials if we could not attend) and also tried to reach new segments of the citizen population (e.g. tried to attract citizens interested in history, etc.). We also participated in contractually obligated volunteer opportunities that included; the Annual Long Island Alewife Survey, hosting a Coastal Clean-Up, hosting a Ludwigia-Invasive Species Removal, and A Day in the Life of the Peconic Estuary. Events were advertised via online flyers, hardcopy flyers, event pages, on social media, local blogs and email. All PEP related topics and the CCMP public input revision process were discussed at all volunteer and citizen science events.

4A. Long Island Alewife Survey

Alewife are an important species in the Peconic Estuary ecosystem and utilize the majority of the estuary system for spawning. This species provides opportunities for volunteers to help collect scientific data and gather video data to quantify the number of Alewife utilizing restored fish passage in the Peconic River during their spawning season. During the contract period, the outreach team, with partners, solicited and trained volunteers to count fish during their annual migration upstream.

CCE hosted and participated in one of the four volunteer training session given by Seatuck Environmental Association for their Long Island Alewife Monitoring Program on March 10th with 10 attendees. The outreach team also participated in the Seatuck Organization Alewife monitoring and education demonstration at Woodhull Dam as an opportunity for legislators to learn about the spawning activities within the estuary and demonstrate the importance of fish passages. This outreach event took place on April 21st -15 participants were present.

4B. Coastal Clean-Up (Peconic River Clean-Up)

The PEP outreach team held a Peconic River debris clean-up volunteer event on March 23rd with 7 attendees. Weights of collected debris were not taken at the event, however 8 extra-large black trash bags were removed from the clean-up at Grangebel Park on the Peconic River. Half of the garbage consisted of glass liquor bottles. A majority of the remaining trash consisted mostly of various plastics-including disposable take-out containers, utensils, and grocery bags, paper bags; as well as other debris such as cardboard boxes, cigarette butts and balloons. Garbage removal at the event helped protect wildlife from harmful debris and beautified the natural landscape of the Peconic River.

4C. Ludwigia invasive species removal

The PEP heavily promoted on social media and through our email list, a Ludwigia removal event hosted by the PEP and the NYSDEC's Freshwater Fisheries unit, which was held on July 27th. There were 25 attendees at the PEP hosted event. Leading up to the event, PEP used social media to partake in New York Invasive Species Awareness Week.

5E. A Day in the Life of the Peconic Estuary

CCE has worked on all of the annual "A Day in the Life of the Peconic Estuary" programs, providing knowledge of what needs to be planned and has successfully worked with many of the experts and schools involved. The outreach team assisted as one of 20 field expert teams during "A Day in the Life of the Peconic Estuary" on October 21st. We helped 919 students and 23 teachers from 16 schools take scientific measurements, ensure that protocols were followed correctly and data was accurately recorded. Participation increased PEP's visibility not only through this program but through the training day for teachers held on October 19th. The "Ways Teachers Can Get Involved with PEP" flyer was distributed and resulted in interest from 2 teachers, which we plan to collaborate with in the spring to expand the Junior CAC program.

5F. Additional Outreach and Volunteer Events

Snowy Owl Hike, Orient Beach State Park

A pair of snowy owls was spotted at Orient Point State Park in the Peconic Estuary at the end of January. A nature hike lead by Conservation Biologist John Turner was held in February with 10 attendees to view the snowy owl pair and other marine birds in the area. This event was successful especially given the low temperatures and extreme wind chill on the day of the event. Continuing to include lead biologists, or collaborating with existing hiking groups will increase PEP's reach in terms of participants, but also broaden the topics of expertise during the hikes.

Native Plant Workshop, Big Duck Flanders

Two native plant workshops, one in April (on a week day) and a second in early November (on a weekend), were held during the contract period. Nitrogen reduction, the homeowner rewards program and the CCMP revision were major topics of discussion during both events. The November event also placed emphasis on the Suffolk County Fertilizer Application Ban. Two participants attended the spring event and 17 attended the fall event demonstrating the success of holding weekend events.

Riverhead Demonstration Raingarden Planting Day

Extensive planning went into gaining approval for installing a raingarden in Downtown Riverhead and selecting the appropriate native plants. The pre-selected native grasses, flowers, shrubs and trees were planted in the raingarden by 25 volunteers. Stormwater runoff and pollution mitigation, benefits of native vegetation, raingardens and rain barrels, the rewards program, the CCMP revision and additional PEP related topics were discussed at the event. The event was recorded by CCE videographer and the video

was uploaded to PEP's Vimeo site (see Task 3). Maintenance of the garden should include volunteer events to continue a hands on discussion about stormwater pollution reduction and related PEP topics.

Horseshoe Crab Monitoring

Four horseshoe crab monitoring and tagging events took place on two separate nights. Each night, two events were held simultaneously at two preexisting monitoring sites within the Peconic Estuary, Cedar Beach in Southold and Squires Pond in Hampton Bays. Dates were chosen based on the earliest high tides, when horseshoe crabs spawn, to ensure the highest rate of participation. A total of 20 attendees participated in the 4 events. While this rate of participation is successful considering the evening high tides of the Peconic Bays, working with youth education programs, college students and additional volunteer groups could help increase participation further. It may also be beneficial to propose a new PEP-sponsored horseshoe crab site that is different from the existing sites.

Stormwater Stewardship

The Stormwater Stewardship pilot program and protocol was established in 2016. One training day was held in March with 10 attendees and a second training day was held in June with 20 attendees. Water quality measurements were taken from the creek and the bay beach at the Suffolk County Marine and Environmental Learning Center in Southold to assist aquaculturists and gather baseline data on water quality. Three, year-round dedicated volunteers were identified along with multiple seasonal volunteers, including 3 interns. For the future, it is worth exploring adding a second monitoring site to increase participation from residents that are most interested in the selected body of water. Training days may be better suited slightly later in the spring as both training events were on the weekend. However attendance was higher at the second session. This program has the potential to grow not only in the number of sites, but the quality of the data collected, however to be most effective additional support from grants is needed to expand the program.

Marine Paddle, Coecles Harbor Shelter Island

A weekday paddling tour of Coecles Harbor Marine Trail, Shelter Island was held in August in collaboration with the Shelter Island Paddling Company for those participants who did not own their own kayak. Ten people participated in the event. Holding paddling events on the weekend may increase participation however summers months are packed with multiple events island-wide. Participants definitely enjoyed the event and holding an additional paddling event at a more convenient location may also increase attendance.

Naturalist Hike East Hampton

In honor of National Estuaries Week a nature hike was held in East Hampton. The "Ghost Trail" of the Northwest Woods attracted not only hikers but history enthusiasts as well. A total of 22 participants attended, some as far away as Nassau County. Nature hikes are very successful events and generally well attended. Future suggestions would include continuing nature hikes and combining with a novel aspect of the hike to gain interest from people interested in different subjects such as wildlife, pet history and art. Continuing to include lead biologists or collaborating with existing hiking groups will increase PEP's reach in terms of participants, and also broaden the topics of expertise during the hikes, to attract new participants.

Trash Your Line Workshop

In early December, a workshop to assemble monofilament receptacles was held. While we only had enough materials to construct 16 receptacles, there was a high degree of interest in the event and all

available spots were filled within a week of advertisement via Facebook and e-mail. Additional interested parties were encouraged to attend the lecture portion of the event and put on a waiting list for receptacle materials should an attendee not show the day of the event. Receptacles will be installed around the Peconic Estuary and collected monofilament will be sent to Berkley Fishing Line Company for recycling. Volunteers should be used in the collection of fishing line. Marinas and bait and tackle shops could serve as partners for this program and should be explored.

Setbacks/Challenges: The PEP website is difficult to navigate and finding important resources such as the calendar of events in a timely manner is challenging. Due to this, we are limiting our online reach to social media users and our e-mail contact list. Multiple online community boards have been used to increase awareness of events however this tactic is time consuming with no way of tracking the effectiveness of our efforts. Media releases are sent to multiple sources such as Riverhead Local and Dan's Paper, however PEP events frequently are not distributed through that outlet. Low attendance at a few events seemed to be partially correlated to the day of the event; overall, weekend events had higher participation than weekday events. Specifically for the Stormwater Stewardship Pilot Program, some attendees were only interested in having the waterbody they lived closest to monitored and were not interested in volunteering at the Suffolk County Marine Learning Center in Southold (SCMELC). These attendees were encouraged to start their own monitoring sites in their backyards with the guidance of PEP, and share the data.

Ways to Improve:

1. The best attended events were held on weekend and/or conducted with PEP partner organizations with a strong, dedicated volunteer base, such as Cornell Cooperative Extension, Students Taking Action for Tomorrow's Environment and Seatuck Environmental Association. Continuing to co-sponsor events will help inform the community and attract new participants.
2. Updating the PEP website to make the calendar of events easier to locate will increase awareness of our volunteer events for website visitors. In this way, we will be able to reach volunteers who do not use social media.
3. The Stormwater Stewardship Program has potential to grow. Identifying partners to add on an additional site that would be of more interest to the local residents and can help improve participation and awareness of the program and PEP. Additional funding to support the staffing and equipment needs is necessary to grow this program.

TASK 5- Comprehensive Conservation Management Plan Revision

Summary/Objective (from scope of work)

Identifying and reaching out to stakeholders to gather public input for the Comprehensive Conservation and Management Plan (CCMP) revision process was a highly prioritized task. During the first few months of the contract period, extensive energy was put forth to first identify stakeholder groups and secondly to reach out to each stakeholder to engage and involve them in the CCMP revision process. CCMP revision lectures were held with diverse groups of stakeholders to obtain feedback for the public input portion of the CCMP revision process and the topic was discussed with the goal of obtaining feedback via a survey at all volunteer and outreach events. Additionally, at each CAC meeting, the CCMP revision was a topic of discussion with feedback exercises for the participants (see Task 1). By gaining feedback from as diverse a group of stakeholders as possible, the CCMP update will include a broad range of environmental issues most important to the public and to the Peconic Estuary Program.

Outcomes:

During the first quarter, the outreach team spent extensive time identifying and categorizing the following stakeholders to contact for the CCMP update engagement: Fisherman/Baymen, Farmers, Boaters, Civic Associations, Hispanic/Minority Communities, Environmental/Conservationists, businesses, youth and government officials. Stakeholders were contacted to gather information on their meeting times/dates and willingness to participate in the CCMP process. Meetings were set up for the second and third quarters with interested stakeholders. A “Why We Should Care About the Peconic Estuary” brochure was created to introduce the idea of the CCMP update and appeal to their connection to the estuary.

The following meetings were held for the CCMP public input portion of the revision process:

1. CAC Meeting Southold Town- Peconic Community Center Peconic, NY
2. Association of Marine Industries Meeting and Presentation Riverhead, 3/15/16
3. Peconic Bay Sailing Association Meeting, 4/9/16
4. CAC Meeting Southampton Town- Sag Harbor
5. Peconic Bay Power Squadron Meeting, 5/19/16
6. Riverhead Rotary Club CCMP luncheon meeting, 6/1/16
7. CAC/CCMP Special Summer Topic Meeting Southampton Marine Science Center
8. FRNCA meeting CCMP and Rewards Program, 8/31/16
9. CAC Meeting Riverhead Town SCCC Culinary Center Main St.
10. CAC Meeting Greenport

The main process to gather feedback was through the creation of a public input survey until the independent contractor for the CCMP revision was hired to provide their expert guidance (Appendix 5). Surveys were provided at all outreach events, sent through email and posted on Facebook. CAC members were asked to facilitate this survey and information regarding the CCMP update and ways to participate. A video was also created to be shown at the beginning of CCMP meetings with stakeholders and as a tool for CAC ambassadors to collect public input at additional meetings (See Task 1E). Feedback was summarized into a table listing topics and ranked as being most to least important with overall scores for each. Nutrient and pathogen management, followed closely by critical lands protection and habitat restoration, were the most important topics listed in the surveys with the top reasons for protecting the Peconic Estuary revolving around recreational activities. While the input we collected over the contract period is valuable it should be noted that overall results may be skewed due to the lack of diversity of interests from who the input came from. Feedback from survey and from CCMP exercises conducted at CAC meetings are presented in Appendices 1 and 5.

Setbacks/Challenges:

The number of stakeholder groups within our watershed is impressive, but with administrative delays in hiring an outside contractor to aid in collecting input and scheduling public meetings, it made it difficult for the PEP staff and outreach team to attend all meetings of these user groups while conducting work in the other four tasks of the outreach work plan. Therefore, we adjusted to prioritize other tasks within the work plan during the second half of the contract period but continued to discuss the CCMP revision at all CAC meetings and public outreach events and online.

Some stakeholders were uninterested in participating in the CCMP public input, such as businesses and farmers. Other stakeholders, such as local government officials and fishermen/baymen held a general interest in the CCMP update but prioritized their own agendas when the Outreach Team followed up to set a meeting date. Youth groups tended to be more interested in hands-on activities for their students and responded better to our Junior CAC program (see Task 1). While we initially planned to include the

Spanish speaking community in the CCMP public input process by translating our survey into Spanish, we learned that a majority of their community were lacking the basic fundamental knowledge about estuaries, watersheds and the issues they face. We therefore, need to take steps to educate that stakeholder group at an introductory level first, and then ask for their input.

Of the meetings that were held, the CCMP revision process was well received and valuable information was gathered to help the contractors in the future. The baymen and fishermen however, seemed more hostile about the CCMP update with the fear of increased regulations. This group of stakeholders should be approached differently than other stakeholders. We suggest stressing that our goals are not meant to inhibit their livelihood, but rather to enhance by working together to identify major issues within the estuary to increase the overall health of the ecosystem, and promote a healthy sustainable stock of fish and shellfish.

Reserve Capacity Project:

The original proposed reserve capacity project was the “PEP Blue Ways Trail”. After extensive research by the Outreach team, it was found that public access points, parking, and permitting were significant obstacles to the creation of this paddling trail. A large effort was put forth to plan the completion of the PEP Blue Ways Trail, however, the scope of the project was just too large at this point in time, given the emphasis on the CCMP revision process. CCE summer interns, who are working with the PEP outreach team, researched and explored the logistics of a future Blueways Trail during another contract year and we can better plan for the future what is needed to accomplish this goal.

The PEP E&O contract was amended during the second quarter changing the reserve capacity work plan from the PEP Blue Ways Trail to providing educational signage that would mark the Peconic Estuary watershed line (and describing the details of a watershed) within Skipper Horton Park and Moore’s Woods in Southold. Other research has also been done to determine PEP’s involvement with access and hiking paths in public parkland on the north fork (Southold Town) as part of the “Bay to Sound Trail Initiative”. Avenues were explored to create educational materials, kiosks, or signage about micro ecosystems within Skipper Horton Park and Moore’s Woods. We aimed to hang the signs during a naturalist hike in the third quarter to commemorate National Estuaries week in September. However, we hit an unexpected barrier to implementing the amended reserve capacity project. After extensive time spent trying to coordinate and plan with the Town of Southold and Village of Greenport, it was determined that it is unlikely that all of the trails would be identified and that permission would be granted by the land owners in the desired timeframe. Our plan was to hold a trail blazing event and hang an educational sign marking the Peconic Estuary watershed line. Trail blazing is mandatory to gain access to the Peconic estuary watershed boundary, which has been delayed until 2017.

The outreach team has extensively explored every avenue to complete a reserve capacity project however, unforeseen circumstances have restricted the completion of any single project but we have laid the necessary foundation for implementation. We believe that the time and energy put forth to develop both projects is equivalent to the amount of work that would have been required to complete one reserve capacity project, and therefore still fulfilled our contractual obligations. We have also learned a lot about the time and logistics involved with both projects and the information will be used to help implement them in the future.

Appendix of Deliverables:

Task 1: Citizen's Advisory Committee

- A. CAC Meeting Agenda Sample
- B. CAC CCMP Input Summary
- C. Letter of Support
- D. List of PEP Outreach Events
- E. CAC Ambassador Talking Points Sample

Task 2: Outreach Materials

- A. Facebook Page Statistics
- B. PEP Newsletter Compilation
- C. Digital Brochures
- D. Citizen's Science RAE Poster
- E. Explore the Peconics Website Maps
- F. Annual Conference Summary

Task 3: Green Infrastructure Homeowner Rebate Program and Residential Nutrient & Toxin Management

- A. Homeowner Rewards Flyers
- B. Homeowner Rewards Application
- C. Fertilizer Survey
- D. Homeowner Rewards Program Report
- E. Demonstration Raingarden Compilation

Task 4: Citizen Science and Volunteer Opportunities

- A. Seasonal Event Flyers
- B. Volunteer Event Flyer Compilation
- C. Stormwater Stewardship Sampling Protocol
- D. Stormwater Stewardship Data

Task 5: Comprehensive Conservation Plan Revision

- A. Public Input Survey
- B. Public Input Survey Summary

APPENDIX OF DELIVERABLES

SECTION 1: CITIZEN'S ADVISORY COMMITTEE

- A. CAC MEETING SAMPLE AGENDA
- B. CAC CCMP INPUT SUMMARY
- C. LETTER OF SUPPORT
- D. LIST OF PEP OUTREACH EVENTS
- E. CAC AMBASSADORSHIP TALKING POINTS SAMPLE



PEP Citizen's Advisory Committee Meeting

Tuesday September 13th 6:00-8:00pm

**Suffolk County Community College Culinary Institute
20 East Main Street, Riverhead NY 11901**



AGENDA- FALL 2016

- 6:00PM** **Introductions, Kevin McDonald- PEP CAC Chairman**
CCMP Update- Christie Pfoertner PEP Outreach & Education Coordinator
- 6:15 PM** **Index Card Exercise Discussion**
Christie Pfoertner-PEP Outreach & Education Coordinator
- 6:45 PM** **Overview of CAC Special Topics Summer Meeting: Nitrogen and Our Impacts on the Estuary**
Dr. Alison Branco- PEP Director
- 7:00 PM** **CAC Special Topics Summer Meeting: Nitrogen and Our Impacts on the Estuary Open Discussion**
Kevin McDonald- PEP CAC Chairman
- 7:30PM** **CAC Ambassadors- Ways you can be an Active CAC Member**
Christie Pfoertner- PEP Outreach & Education Coordinator
- 7:50 PM** **Closing Remarks and Adjournment**

2016 CAC DATES TO REMEMBER

- ✓ **Saturday September 17th 10am. National Estuaries Week Nature Hike**
The Grace Estates, East Hampton. Parking on Northwest Road south of Alewife Brook Road.
- ✓ **Saturday September 17th - 24th National Estuaries Week online campaign and photo contest.**
- ✓ **November 5th 1:00pm Big Duck Native Plant Winterization Workshop. Big Duck in Flanders**
- ✓ **November 16th 6-8pm CAC Meeting. North Fork, exact location TBD**

CONTACT

cac@peconicestuary.org

Christie Pfoertner, PEP Outreach Coordinator 631/727-7850 ext. 337

PEP Citizen Advisory Committee Winter Meeting Notes
November 16th 6-8pm North Fork, Specific location TBD

Comment Cards	
3 reasons to protect Estuary	# of people / 16 cards total
I love the bay	1
Inspired to create environmental solutions/caring about planet in general	3
Avoid loss of marine life/preserve resources	5
Water quality is important/ Our livelihood depends on clean water.	2
Swimming/Boating/Recreational	9
Shellfish	3
I am concerned about my local region specifically	1
I am already involved in some conservation efforts	4
Economy/Property values	5
Historical value/Future generations/Moral obligation	3
Maintain beauty	2
Education	1

	# of people / 16 cards total
Vision of a healthy estuary	
More regulation (codes, bans)	3
Reduction in Nitrogen level	3
Clean/pristine waters and beaches (aesthetics)	2
Limited development	1
Healthy fish/shellfish stock	5
Return of eelgrass/ bay bottom restoration	3
Reduced toxin/pollutants from entering system	2
Better septic systems/sewage treatment	2
Buffer areas/ less erosion	2
Reduced harmful algal blooms	2

Concerns on cards	# of people / 20 cards total
Harmful algal blooms	1
Cost/Incentives for replacing septic tanks/Funding of new systems	3
Part-time vs year-round residents commitment	1
Coordination of towns/all stakeholders	4
Outcomes of plan, successful or not successful	1
Youth involvement	1
Future government roles	1
Septic/sewer/cesspool systems in general	7
Development concerns	1
Water quality testing	1
Banning sale of fertilizers, herbicide, pesticide	1
Nitrogen reduction	1

What would you miss most about Peconic Estuary	# of people/17 cards total
Recreation (kayak, swimming, birdwatching, fishing)	15
Open spaces	1
Seafood	3

Advice to children about protecting estuary	# of people/17 cards total
Get involved	2
Do not litter	8

Protect/respect marine life and wildlife	3
Do not be wasteful, conserve everything	2
Don't take down trees to plant a lawn	1
Talk to parents about fertilizer use	1
Use environmentally friendly house products	1
Share your knowledge with others	1

March 8, 2016

The Honorable William Spencer
Suffolk County Legislature – 18th District
15 Park Circle, Suite 209
Centerport, NY 11721

The Honorable Kara Hahn
Suffolk County Legislature – 5th District
306 Main Street
Port Jefferson, NY 11777

Memorandum in Support

*I.R. 1207-2016: Adopting a Local Law Prohibiting the Distribution of Plastic Carryout Bags
Used in Retail Sales*

Dear Legislators Spencer and Hahn:

We, the undersigned, would like to express our strongest support for I.R. 1207, a local law to prohibit the distribution of plastic carryout bags used for retail purposes throughout Suffolk County. We thank you for your laudable efforts to reduce plastics in our environment, which pollute our waterways, kill and threaten wildlife, and create unsightly litter throughout the County. We encourage your efforts to ensure the passage of the proposed law.

Justification:

Disposable plastic carryout bags have demonstrated detrimental impacts on Suffolk County's environment, public health and aesthetics for far too long. These long-lasting detriments far exceed the perceived twelve-minute convenience that a plastic bag provides. It's estimated that the U.S. alone consumes over 100 billion bags per year (Worldwatch Institute), with the average family using 1,500 annually (Natural Resources Defense Council). These bags require 2.2 billion gallons of oil to produce (Citizens Campaign for the Environment), a fact that requires demonstrable action.

Plastic bags are harmful to wildlife. Plastic bags are made from petroleum products and never biodegrade; they photo-degrade and eventually end up contaminating soils and waterways, even ending up in our food chain after being ingested by marine and other wildlife species. According to a recent study (Ocean Conservancy), plastic bags were second behind fishing gear

as posing the greatest threat to marine species that ingest these items, leading to mortality.¹ Plastic bags are the most common marine debris ingested by sea turtles. Still, hundreds of thousands of seabirds ingest plastic annually, clogging their stomachs, often leaving them to starve to death (Center for Biological Diversity).

Plastic bags continue their lifecycle as litter. County residents would be hard-pressed to find a road, beach or park that didn't have evidence of plastic bag litter dirtying these precious landscapes. Last year, 10,500 plastic bags were removed from the south shore estuary system alone. Sadly, it's also been noted that plastic bags contribute to plastic debris in parts of the world's oceans that now exceeds the amount of plankton in these waters (Algalita Marine Research Foundation). Unfortunately, it's been documented that less than 5% of plastic bags are recycled, leaving billions of bags in our waste stream.

A precedent has already been set and alternatives are available. Several nations, U.S. states, counties, villages, including several throughout Suffolk County, (Towns of Southampton and East Hampton, Villages of East Hampton, Southampton, Patchogue and Sagaponack) have successfully regulated the distribution of plastic bags. It is time for Suffolk County to be added to this list. Alternative reusable bags are readily available and are successfully used in places where bans or fees have been established.

Conclusion:

The public is ready to switch to reusable bags; it is time to eliminate damaging plastic bags from our natural environment. Banning the continued circulation of plastic bags in Suffolk County is imperative toward this end. The County has acted in the forefront of environmental and public health issues time and time again and this ban would be added to the top of its impressive list.

Thank you for taking the time to review our comments. Thank you in advance for your support for the proposal to ban disposable plastic carryout bags.

Sincerely,

Members of the Peconic Estuary Program Citizens Advisory Committee
Kevin McDonald, PEP CAC Chairman

¹ Wilcox, Chris, Nicholas J. Mallos, George H. Leonard, Alba Rodriguez and Britta Denise Hardesty. *Using Expert elicitation to estimate the impacts of plastic pollution on marine wildlife*. Marine Policy 65, p. 107-114, 2016.



List of Volunteer, Outreach, and Citizen Science Events for PEP 2016

JANUARY 2016

Volunteer:
Outreach: Friday 1/15 Pine Barrens Luncheon Outreach Table 1-4pm
Thursday 1/21 Long Island Horticultural Conference Outreach Table 8am-4pm
CCMP: CCE Horticulture, CCE Ag Stewardship, CCE Family Health/Wellness, Team meeting

FEBRUARY 2016

Volunteer: 2/13 Naturalist Hike Snowy Owls at Orient Beach State Park
Outreach: **Spring Newsletter Release**
2/10-12 I Heart Estuaries Social Media Campaign- online/daily
CCMP: **2/27 CAC Meeting /CAC Ambassador Training Workshop 10am-12pm TBD**

MARCH 2016

Volunteer: 3/10 Alewife Training at CCE 423 Griffing Ave Riverhead, NY
3/12 Community Stormwater Stewardship Water Quality Training Workshop all day
3/23 Peconic River Debris Clean-up 3:30pm
Outreach: 3/3 Rewards Presentation and table at the Perfect Earth Project conference
3/18 Long Island Natural History Conference BNL table
3/22 World Water Day online outreach –Septic and Long Island Drinking Water
CCMP: 3/15 Association of Marine Industries

APRIL 2016

Volunteer: 4/13 Big Duck Native Plant Garden Clean-Up Flanders Rd. Flanders, NY
4/21 Woodhull Dam Alewife Demonstration Event with Seatuck
4/23 Riverhead Raingarden Planting Heidi Behr Way Downtown Riverhead, NY
Outreach: 4/1 Suffolk County Science Teachers conference outreach table BNL
4/21 Cold Spring Harbor Whaling Museum
4/22 *EARTH WEEK EPA TRASH FREE WATERS CAMPAGIN*
4/23 Perfect Earth Project Earth Celebration outreach/rewards material
CCMP: 4/9 Peconic Bay Sailing Association

MAY 2016

Volunteer: 5/4 Horseshoe Crab Monitoring Event -10pm Hampton Bays and Southold
5/19 Horseshoe Crab Monitoring Event – 9:30pm S. Harbor Rd. Southold and HB
Outreach: **Summer Newsletter Release**

5/21 Fish Migration Day online outreach and video
 5/29 East End Arts Council Street Painting Day 12-5pm
 CCMP: **5/18 CAC Meeting/CCMP work 6-8pm Sag Harbor**
 5/19 Peconic Power Squadron meeting
 JUNE 2016

Volunteer: 6/22 Stormwater Stewardship Training Workshop #2
 Outreach: 6/3 LISS Citizen Science Summit Stony Brook University volunteer table
 6/3-4 and 6/10-11 LINPI Plant Sale Pesticide and Rewards Outreach
 6/18 East Hampton Gardening Club Gbler lecture
 CCMP: 6/1 Riverhead Rotary Meeting 12:00-1:30pm
 JULY 2016

Volunteer: 7/27 Ludwigia Pull Peconic River and Paddle
 Outreach: 7/10-7/16 *State Invasive Species Week online outreach*
 7/20 Landscape Architect training workshop with CCE Horticulture
 7/14 and 7/28 Alive on 25 table outreach
 7/23 Spring's Farmer's Market 9:00am-1:00pm
 7/30 Peconic River Paddle Battle Outreach Table and bag stuffers
 CCMP: Online distribution of the public input survey
 AUGUST 2016

Volunteer: 8/16 Naturalist Tour Kayaking and Paddling Event at Mashomack Shelter Island
 Outreach: 8/11 and 8/25 Alive on 25 table outreach
 8/19 Southold or Amagansett Farmer's Market
 8/27 Shelter Island Green Expo outreach table
 CCMP: **8/22 CAC Special Summer Meeting SBU Southampton Marine Science Center 5-8pm**
 8/31 FRNCA and homeowners association meeting? 6pm
 SEPTEMBER 2016

Fall Newsletter Release

Volunteer: 9/17 National Estuaries Week Nature Hike "Ghost Trail" East Hampton NY
 Outreach: 9/19-23 *National Estuaries Week- Social Media Campaign #EstuariesWeek*
Photo Contest #CelebrateTheCoast
 9/24-25 LINPI Plant Sale Pesticide and Rewards Outreach Supplies
 9/24-25 Greenport Maritime Festival Greenport Harbor, NY- all day
 CCMP: **9/13 CAC Meeting 6-8pm SCCC Culinary Center Main Street Riverhead, NY**
 OCTOBER 2016

Volunteer: 10/21 Day in the Life of the Peconic various sites around the estuary- all day
 Outreach: 10/01 NYSMEA Junior CAC outreach supply
 10/04 Distribution of Spanish materials
 10/09 Perfect Earth Project-Sustainable Landscape
 10/19 A Day in the Life Junior CAC mini lecture
 10/27 LI Sierra Club Sustainable Landscape HRP outreach supply

NOVEMBER 2016

Volunteer: 11/5 PEP Native Garden Workshop
Outreach: 11/1-5 *Nitrogen reduction social media campaign/Suffolk County Fertilizer Law Outreach*

11/3 MCP Internship Lecture, Stony Brook University

CCMP: **11/16 CAC meeting 6-8pm Floyd Memorial Library Greenport, NY**

DECEMBER 2016

Volunteer: 12/3 Monofilament Debris Container Making Workshop
Outreach: 12/10-12/16 ANEP Conference New Orleans, LA PEP poster session



Follow us on Facebook, Twitter, Instagram, and Vimeo

**For more information on Event Programming please contact Christie Pfoertner at
peptalk@peconicestuary.org**



CAC AMBASSADOR TALKING POINTS

November 2016– January 2017

CAC Ambassador Program

The purpose of the Citizen's Advisory Committee Ambassador Program is to provide members information about the Peconic Estuary Program, upcoming meetings and scheduled events to share with your community. Together we can spread the message of healthy ecosystems, clean water and ways in which people can participate to reach this common goal.

Riverhead Sewage Treatment Plant Effluent to Irrigate Indian Island Golf Course Completed

After 15 years, upgrades to the Riverhead Sewage Treatment Plant (STP) have been completed! This project upgrades the STP to the newest technology treating water at a high enough level to safely irrigate the Indian Island Golf Course. Grass and soil will remove additional Nitrogen reducing the need to fertilize. This \$24 million dollar project reduces the Nitrogen input from the STP by more than half which, will help to prevent fish kills and harmful algal blooms and improve water quality for eelgrass fish, and shellfish. Watch and share our Nitrogen Reduction video on Facebook.

Proposition One: The Community Preservation Fund (CPF)

Since its establishment in 1999, the Community Preservation Fund's (CPF) revenue has been used primarily for land preservation. The amount of land left available for protection on the East End is decreasing. Proposition One will allow a portion of the funds to be spent on water quality improvement projects, decided upon by each East End Town (Shelter Island, Southold, Riverhead, East Hampton, and Southampton)

Proposition One passed in all five towns: The CPF 2 % real estate transfer tax will be extended until 2050 and each town will be able to spend up to 20% of the CPF revenue on water quality improvement projects.

Share Peconic Estuary Posts on Facebook

This is an easy way to help PEP spread the word about what is happening in our estuary. When you share or like our Facebook posts we reach and educate more people.

CCMP Update Participation

This year the Peconic Estuary Program is embarking on a revision of the Peconic Estuary Comprehensive Conservation and Management Plan (CCMP). The Peconic Estuary is a changing system and the issues that plague it have evolved over the past decade. It's been 15 years since the Peconic Estuary Program first released our plan to conserve and restore the Peconic Estuary. Much has changed since the first plan was written and it is your turn to be a part of molding the new CCMP. Improving water quality in the Peconic Estuary is a complex issue and requires the cooperation and coordination of multiple groups. Help us refocus our efforts on the latest threats to the waterbodies of the Peconic by filling out a survey online at www.surveymonkey.com/r/P7HCVXB

Inform People About the Local Fertilizer Law

Local Law 41-2007 prohibits lawn fertilizer application between November 1st through April 1st in Suffolk County. During this time period, lawn grass doesn't grow and there-ore fertilizers are rendered useless. The purpose of this law is to reduce the amount of nitrogen released into our groundwater and surface water. Retailers are required to post signs near fertilizer displays notifying customers of the date restrictions. Violators, whether it be homeowners, landscapers or other parties risk fines of \$1,000. Watch and share our Nitrogen Reduction video on Facebook.

Clean Sweep Program and S.T.O.P.

CleanSweepNY is a NYSDEC environmental benefit project that provides for the environmentally safe and economic collection and disposal of unwanted or unusable pesticides, golf course chemicals, and mercury-containing devices. S.T.O.P. (Stop Throwing Out Pollutants) is a program where you can drop off your household hazardous materials for proper disposal instead of throwing them away. A list of accepted items for drop-off can be found at toh.li/sanitation-depa.../stop-throwing-out-pollutants.

Fishing Line Trash Receptacles 12/03

Excess fishing line is one of the most common and deadliest forms of marine trash to wildlife. Join PEP as we build monofilament waste receptacles to be distributed at beaches and fishing sites around the Peconic estuary. Cornell Cooperative Extension 423 Griffing Avenue 1st floor Riverhead, NY 11901

Audubon Marine Bird Count 12/31

Join PEP and the Audubon Society for the annual Christmas Bird Count. With your help, the data will fuel important science and conservation work. This nation-wide collaboration occurs at many locations within the Peconic Estuary. Choose your site preference (Greenport, Southold, Shelter Island or Orient Point)

The PEP on Cablevision Public Access

The Peconic Estuary Program recently received a time slot on Monday's at 7:30pm for half hour segments from October 2016– October 2017 on Cablevision Riverhead Channel 20. We will be broadcasting documents, short videos, PSAs, CAC meetings and our conferences.

About the Peconic Estuary Program

The Peconic Estuary Program (PEP) is one of 28 National Estuary Programs around the country under section 320 of the United States Environmental Protection Agency's (USEPA) Clean Water Act. The program is responsible for creating a management plan to protect the estuary. The PEP was established November 1992 after citizen groups formed in response to the Brown Tide algal bloom events in the mid 1980's and early 1990's. At that time, it became the 20th National Estuary Program in the country.

The PEP is comprised of all stakeholders within the estuary. Committee members from each stakeholder group meet quarterly to discuss concerns and solutions with the PEP program staff: "CAC" Citizen's Advisory Committee- citizens, business leaders "TAC" Technical Advisory Committee- scientists, environmental groups "MC" Management Committee- program staff, USEPA, NYSDEC, Suffolk County, local townships and east end incorporated villages. The PEP program office is located in Yaphank at the Suffolk County Dept. of Health Services, Office of Ecology. Public outreach and education is contracted annually, currently to Cornell Cooperative Extension of Suffolk County.

PEP Accomplishments

- Development of Critical Lands Protection Strategy and implementation of Community Preservation Fund to protect land from development
- Riverhead Sewage Treatment Plant effluent to irrigate Indian Island Golf Course
- Enactment of the Suffolk County Fertilizer Reduction Law (Local law 41-2007)
- Development and implementation of sub-watershed specific management plans
- Continuous long-term monitoring of water quality and sea grass distribution
- Peconic River Rock ramp passage in Grangebél Park, Riverhead and installation of eel and fish passage Edwards Avenue, Calverton
- Implementation of Peconic Estuary nitrogen and pathogen pollution reduction plans and upgrades of Sewage Treatment Plants
- Support bay scallop restoration efforts

Contact Us

SCDHS-Office of Ecology
360 Yaphank Avenue
Yaphank NY 11980

631-852-5750

**Education and Outreach
Cornell Cooperative Ext**
423 Griffing Avenue
Riverhead NY 11901

631-727-7850

Email-
cac@peconicestuary.org
peptalk@peconicestuary.org

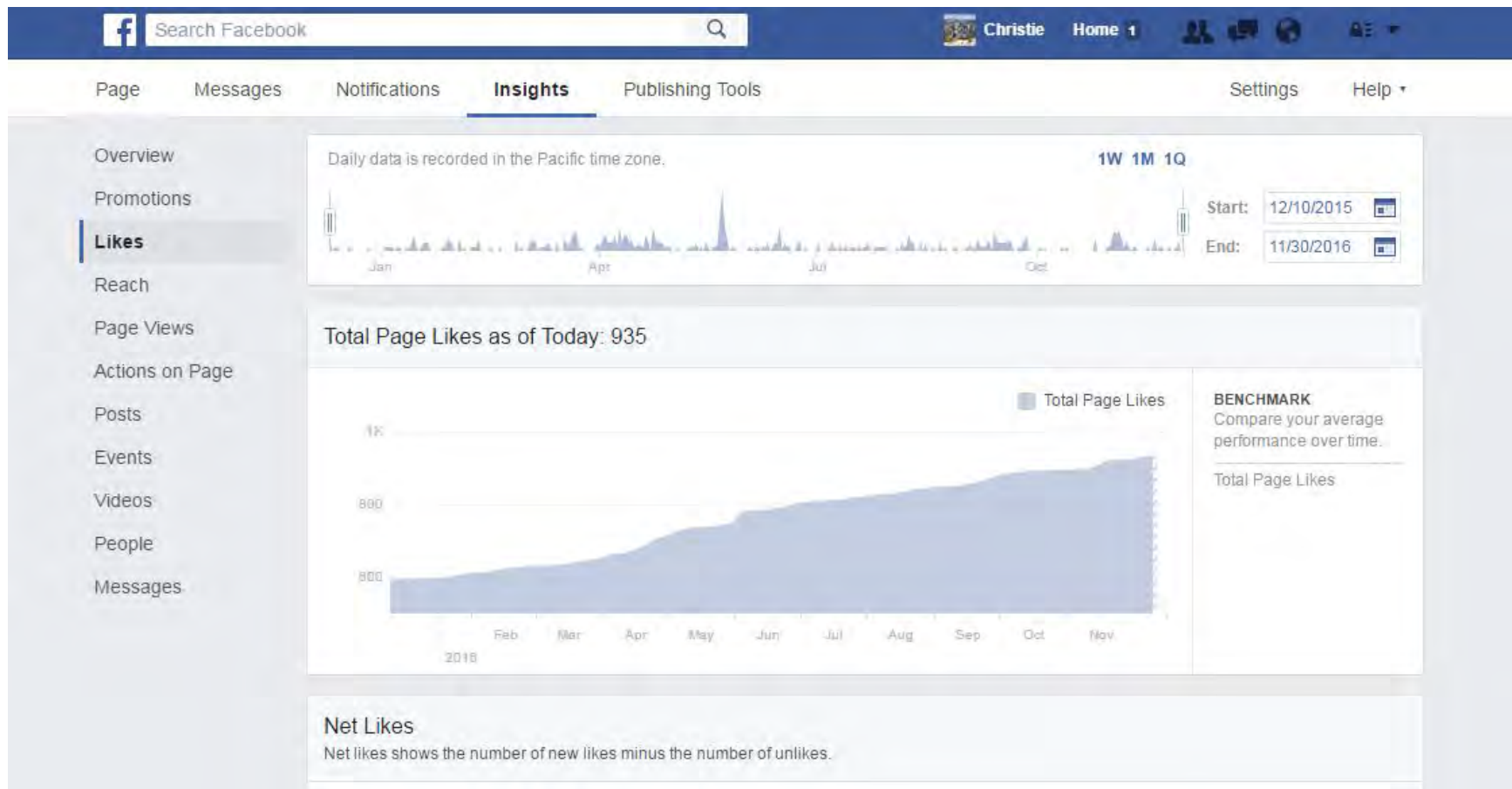
Website-
PeconicEstuary.org

Protecting and Restoring Long Island's Peconic Bays.

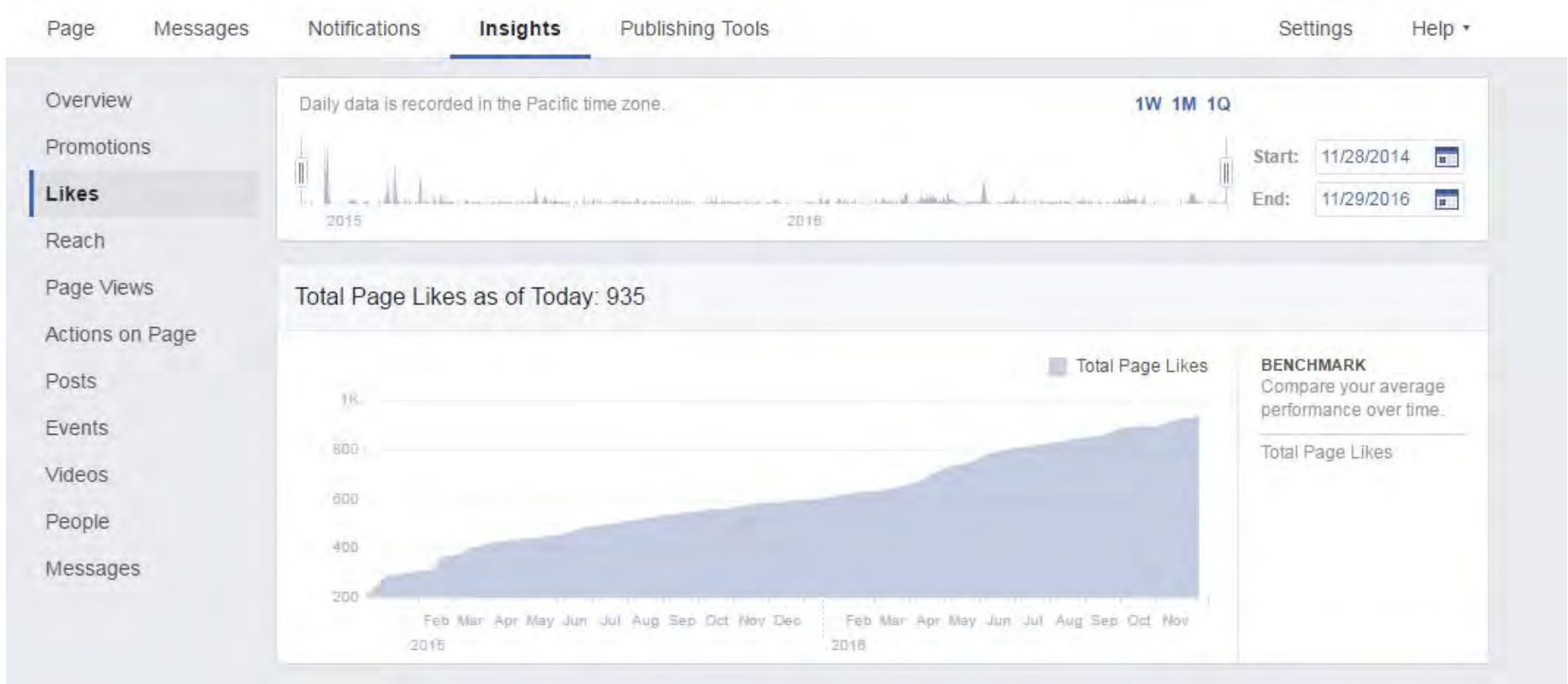
APPENDIX OF DELIVERABLES

SECTION 2: OUTREACH MATERIALS

- A. FACEBOOK PAGE STATISTICS
- B. PEP NEWSLETTER COMPILATION
- C. DIGITAL BROCHURES
- D. CITIZEN'S SCIENCE RAE POSTER
- E. EXPLORE THE PECONICS WEBSITE MAPS
- F. ANNUAL CONFERENCE SUMMARY



Facebook page likes in 2016.



Facebook page likes since November 2014.

Campaign	Region	People Taking Action	Post Reactions	Post Comments	Post Shares	Link Clicks	Page Likes
	Unknown	2465	502	21	80	20	30
Event: Trash your Line Workshop Free event	Connecticut	1	1				
Event: Trash your Line Workshop Free event	New York	53	46	3	2		
Post: "INFO FOR VOTING ON PROPOSITION ONE Tuesday..."	New York	51	38	6	17		1
Post: "Fertilizers aren't always the answer! Adding..."	New York	22	21		5		
Post: "Combatting Nitrogen in the Peconic Estuary"	Connecticut	17	1				
Post: "Combatting Nitrogen in the Peconic Estuary"	New York	1450	36	3	11		5
Event: CAC November Meeting	New York	37	27		3		1
Event: Native Plant Workshop	New York	80	64		4		5
Post: "Here is a look at all 28 National Estuaries...."	New York	1291	50	3	10		2
Post: "We love Eelgrass! Why? It stabilizes benthic..."	New York	78	70		8		2
Post: "Celerate National Estuaries Week with a Scavenger..."	New York	54	41	3	4	13	1
Post: "Participate in PEPs Week-long photo contest using..."	New York	17	15		2		3
Post: "NATIONAL ESTUARIES WEEK IS HERE!"	New York	29	19	1	7		
Post: "PEP's Fall Newsletter and Events has arrived! You..."	New York	25	12	2	5	7	
Event: Estuaries Week Nature Hike	New York	104	61		2		10

Campaigns with “boosts” receive increased post visibility and interaction.

Net Likes

Net likes shows the number of new likes minus the number of unlikes.



BENCHMARK

Compare your average performance over time.

Unlikes

Organic Likes

Paid Likes















Net Likes

WANT MORE LIKES?

Create an ad to get more people to like your Page.

[Promote Page](#)

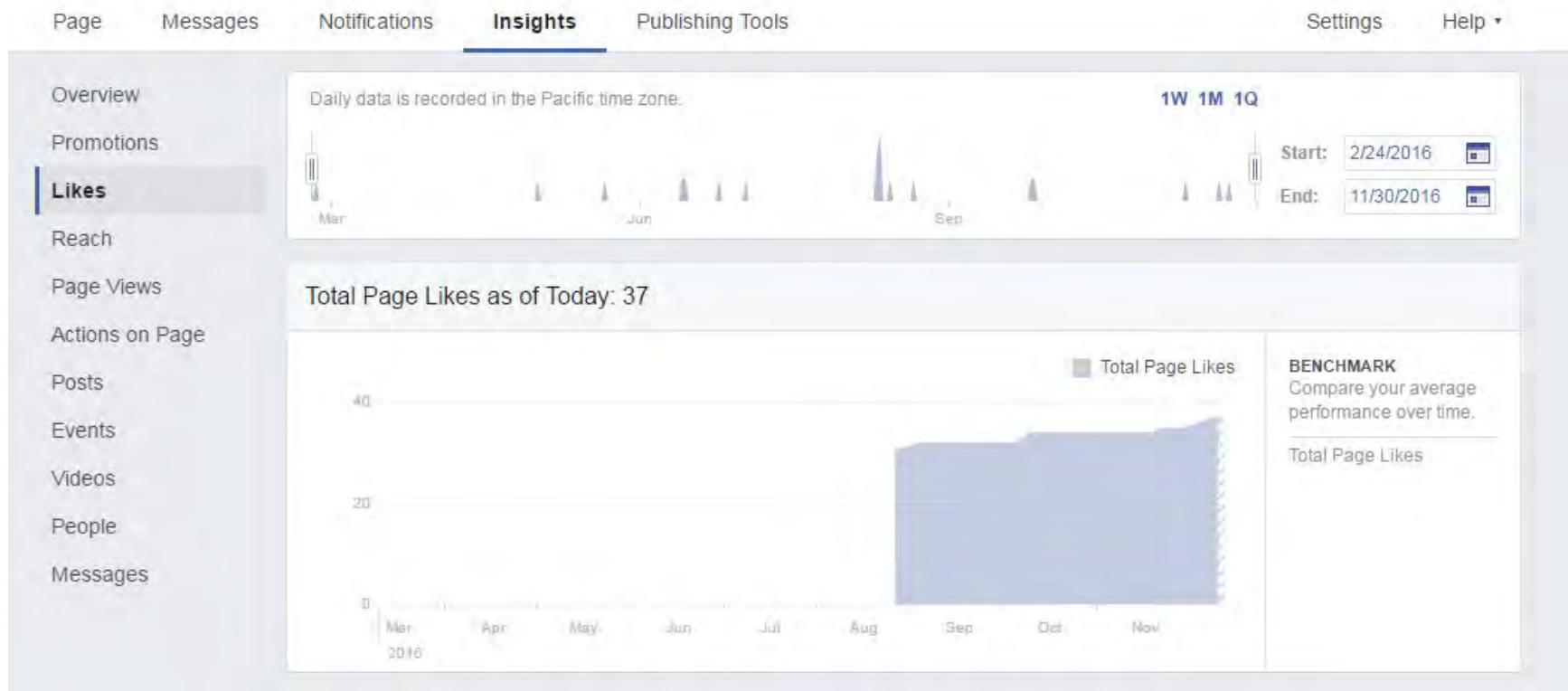
Using boosts on posts increases pages likes.

11/04/2016 12:51 pm		INFO FOR VOTING ON PROPOSITION ONE Tuesday Novemb			1.9K		78 91		View Results Boosted: \$10.00
11/04/2016 5:28 am		Join the Peconic Estuary Program TOMORROW at 1pm at the			424		2 2		Boost Post
11/03/2016 3:45 pm		LOOKING FOR A JOB HELPING THE ENVIRONMENT? The N			68		11 0		Boost Post
11/03/2016 5:26 am		Watch the weather! Although Suffolk County's Fertilizer applic			338		108 18		View Results Boosted: \$0.00
11/02/2016 5:23 am		Fertilizers aren't always the answer! Adding compost can give			608		27 45		View Results Boosted: \$2.00
11/01/2016 3:00 am		Combating Nitrogen in the Peconic Estuary			4.7K		210 155		View Results Boosted: \$15.00
10/31/2016 8:03 am		Happy Halloween from the Peconic Estuary Program!			479		13 11		Boost Post
10/28/2016 10:59 am		Peconic Estuary Program shared The Peconic Bathtub's post.			81		11 1		Boost Post
10/28/2016 9:57 am		PEP is hiring and so are some of our partner organizations. C			601		125 8		Boost Post

Campaigns with “boosts” receive increased post visibility and interaction.

Video Library				+ Live	+ Upload
Search...		Actions ▾	Filters ▾		
Video		Views	Date Added		
	Combating Nitrogen in the Peconic Estuary	2,862	Nov 1, 2016 at 2:00am Christie Lee		
	Here is a look at all 28 National Estuaries. Happy National Estuaries Week! #Estu...	2,224	Sep 20, 2016 at 4:00am Christie Lee		
	A comparison of stormwater runoff with and without a rain garden, notice the oil sli...	778	Jul 29, 2016 at 2:04pm Christie Lee		
	Our Rain garden in Downtown Riverhead collects rain water that contains polluta...	278	Jul 29, 2016 at 8:29am Christie Lee		
	Reclaiming Fish Spawning Grounds in the Peconic River Happy World Fish Migr...	3,981	May 21, 2016 at 12:00am Sherryll Huber		
	A pair of horseshoe crabs (larger is the female) looking for the perfect place to di...	22	May 20, 2016 at 10:26am Christie Lee		
	CCE assist bunker fisherman in Peconic River The NYSDEC and the Atlantic Sta...	97	May 12, 2016 at 2:50pm Sherryll Huber		

Campaigns videos with “boosts” receive increased post visibility and interaction. The first 5 videos were boosted



CAC Facebook page likes in 2016.



Peconic Estuary PROGRAM

Protecting & Restoring Long Island's Peconic Bays

PEP's New Plan for the Peconic Bays

Dr. Alison Branco– PEP Director

This year, Peconic Estuary Program is embarking on a revision of the Comprehensive Conservation and Management Plan (CCMP) – the founding document which guides all program activities. Much has changed since the original CCMP was approved in 2001. That document initiated the Peconic Estuary Program and was intended to thoroughly characterize the system and the pollution threats it faced, in addition to proposing a plan to protect it. It included an ambitious 340 management actions. There have been significant accomplishments, but new issues have emerged, science has advanced, and many problems remain unsolved.

This major CCMP revision will not only guide the Program's activities, but will articulate the regional consensus about the most important environmental challenges facing the Peconic Estuary today and the priority actions needed to address those challenges over the next 10 years. This will help local governments to prioritize their environmental protection activities, and serve as a blueprint for water quality protection efforts supported by the Community Preservation Fund. The update of the Peconic Estuary CCMP will be accomplished through a process that brings together all levels of governments and all sectors of the community surrounding the Peconic Estuary. [Continued on page 2](#)

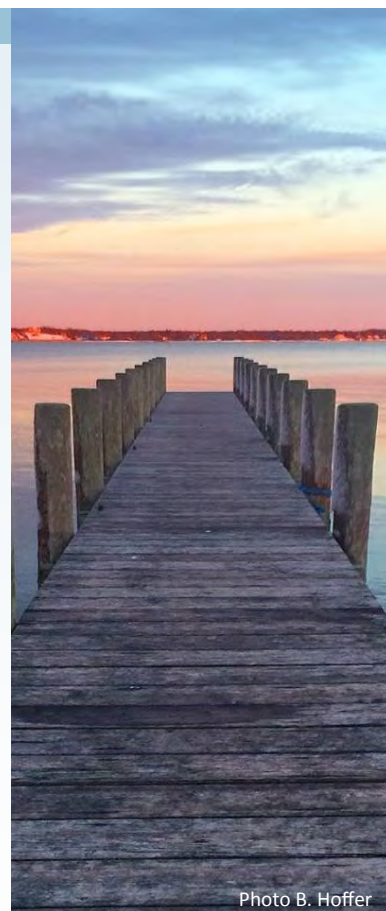


Photo B. Hoffer

SPRING 2016

Inside this issue

Peconic Estuary Protection Committee	2
Creature Spotlight: Ospreys	3
Riverhead Raingarden.....	4
Homeowner Rewards Program	4
Stormwater Pollution.....	5
Community Stormwater Stewardship Program	5
Caring About the Estuary	6
PEP Calendar of Events.....	8

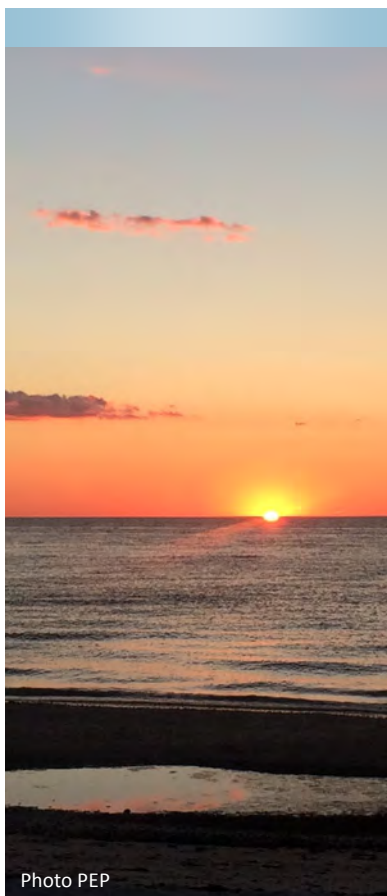


Photo PEP

PEP Creates the Peconic Estuary Protection Committee

The Peconic Estuary Protection Committee, formed in 2015, is an inter-municipal affiliation dedicated to restoring and improving water quality in the Peconic Estuary and implementing the goals of the federally-recognized Peconic Estuary Program's Comprehensive Conservation and Management Plan. Our members are the Village of Greenport, the Village of North Haven, the Village of Sag harbor, the Town of Brookhaven, the Town of East Hampton, the Town of Riverhead, the Town of Southampton, the Town of Southold, Suffolk County and the New York State Department of Transportation.

PEP initiated the development of the inter-municipal agreement having

recognized the success of similar coalitions on Long island and elsewhere. PEP funded the development of a draft agreement, completion of the first annual work plan and the initial outreach and coordination activities. The coalition operates by committee, with representative from each participating municipality. Municipal dues fund a coordinator who facilitates information and resource sharing, communication among member municipalities, joint initiative, and work plan implementation.

The Committee aims to protect, resort and enhance the Peconic Estuary to ensure a healthy and diverse marine ecosystem while balancing and maintaining recreational and commercial uses. As a unified group

[continued on page 4](#)

Water quality is a common responsibility of all community members of the Peconic Estuary watershed.

PEP Citizen's Advisory Committee Meeting

The Peconic Estuary Program (PEP) would like to invite you to participate in the Citizens Advisory Committee (CAC). The CAC holds quarterly meetings where members meet and discuss a wide variety of topics concerning the Peconic Estuary with the common goal of promoting clean water and healthy bays!

Next Meeting:

Saturday February 27, 2016

10am-12pm

Peconic Community Center
Peconic Lane, Peconic NY 11958
cac@peconicestuary.org

Plan for the Bays [continued from page 1](#)

Some of the strategic priorities for the revised CCMP will include but not be limited to:

Nitrogen Loading: While progress has been made in addressing point sources, land preservation, and air deposition, it is clear that additional focus is needed to accelerate implementation of non-point source nitrogen reductions, including those from septic systems and cesspools and residential and agricultural fertilizer.

Climate Change Adaptation: Not addressed in the original CCMP, climate change is profoundly impacting the Peconic Estuary, and our ability to manage it, through sea level rise, increasing water temperatures, changes in precipitation patterns, and ocean acidification.

Harmful Algal Blooms: The original CCMP, and the creation of the PEP itself, was triggered by devastating brown tides in the mid-1980s and early 1990s. Today, the Peconic Estuary does not have vast blooms of brown tide, but does experience a whole host of other harmful algal blooms (HABs) that must be addressed.

Habitat Restoration: There needs to be a renewed emphasis on restoration and preservation submerged aquatic vegetation, tidal wetlands and diadromous fish habitat connectivity, by adaptively managing and addressing root causes of their decline.



The Peconic population of the Osprey faced a serious population decline throughout during the latter half of the 20th century. Photo J. Woodhouse

Ospreys– Feathered Icon on the Peconic Bay Creature Spotlight by John Turner

As St. Patrick's Day approaches many people turn their thoughts to a dinner of corned beef and cabbage, soda bread, and maybe a glass or two of green beer. My thoughts are different - I think of Ospreys because, like clockwork, these remarkable birds return to their Long Island breeding haunts a day or two before, to a day or two after, St. Patty's Day. As a pair circles ceaselessly and effortlessly from on high, their distinctive piping calls fall to earthbound human ears, telling us a mated pair of fish hawks are renewing their nuptial bonds after a winter apart. Here, in the communities ringing the Peconic Bays, it is as telltale a sign that Winter is melding into Spring as the sight of a tractor plowing fields or the emergence of garden edge daffodils.

Ospreys have long been part of the ecological fabric of eastern Long Island. Several hundred years ago the population here was among the densest in the world. In fact, as recently, as the mid-19th century as many as 2000 breeding pairs were found in the Peconic system. This is a not-so-surprising fact since the bird's requirements were so easily met - abundant bays and harbors, shallow in nature and teeming with a variety of fish, with shorelines pocked by large boulders and fringed by trees providing ample sites for nesting. Today, there numbers are reduced from historic levels but have rebounded nicely from their nadir during the decades of the 50's through the 80's due to the egg shell thinning effects caused by the persistent use of the pesticide DDT, long since banned. [Continued on page 7](#)

Symbols of the PEP Logo

The Peconic Estuary Program's logo is comprised two of the most resilient animals in the Peconic Estuary; the bay scallop and the osprey. Both of these creatures faced critical population declines within the Estuary in past decades.

With the help of restoration projects and public education, both the bay scallop and the osprey are rebounding with increased habitat conservation and water quality improvements. These two are examples of what we can accomplish and symbols of a return to a healthy estuary.



PEP Homeowner Rewards Program

The Peconic Estuary Program (PEP) is providing a unique opportunity if you live within the Peconic Estuary watershed area. The PEP will provide financial rewards for homeowners who remove turf and pavement, and add native vegetation areas and/or rain barrels to their properties.

Homeowners can earn up to \$500 to offset the expense of installing green infrastructure on their properties including rain barrels, rain gardens, and native vegetation gardens. Water filtered through sand and gravel within these gardens is dramatically cleaner when it enters our aquifers and storm drains. Rain barrels offer an opportunity to catch rainwater for reuse in gardens rather than running down paved surfaces and into storm drains.

Learn more about your local estuary and all its amazing bays, while improving your property and reducing pollution from entering local waters. Funds are limited and will be granted on a first come first served basis, so don't miss out!



Photo PEP

Visit PeconicEstuary.org for guidelines and more details rewards@peconicestuary.org

Riverhead Raingarden to be Planted for Earth Day!

Town of Riverhead and PEP: Partnership to improve water quality.

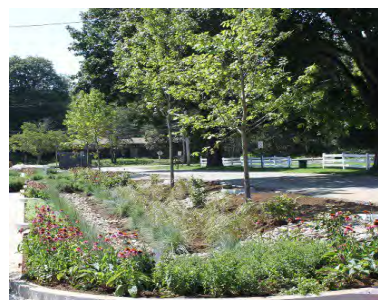
The Peconic Estuary Program (PEP) is pleased to announce a partnership with the Town of Riverhead to improve water quality within the Peconic River. Together, these two groups, along with the help of many volunteers, will be creating a rain garden near the Peconic Riverfront Park in downtown Riverhead. This rain garden will collect stormwater runoff from the adjacent parking lots and buildings. This garden will absorb and filter rainwater, polluted stormwater runoff, and excess nutrients and before it enters the Peconic River. With new educational signs, residents will be able to learn about stormwater pollution and using green infrastructure methods, like a rain garden, on their own properties.

Rain gardens filter stormwater through vegetation, sand, and gravel providing dramatically cleaner water when it enters other bodies of water. Reducing stormwater runoff can help improve water quality, reduce nutrient pollution, and help restore our natural resources. The Riverhead

rain garden will use native plants which are best adapted for our climate requiring little maintenance (watering) and reduced demand for fertilizer and pesticides.

Native plants can also provide habitat for wildlife like birds, butterflies and bees. Using native plants with berries or flowers such as red chokeberry, goldenrod or butterfly weed will attract the wildlife and add beauty to the downtown parking area. This garden will replace non-native lawn grasses and compacted soil, and help reduce erosion.

We would like to thank the Riverhead Town Board for their support, and the Riverhead Department of Engineering for their expertise and construction equipment. Look for the new rain garden near the Peconic Riverfront Park in early Spring 2016. And mark your calendars to celebrate Earth Day, get your hands dirty and help plant this new garden on *Saturday April 23rd 10:00am.* rewards@peconicestuary.org



Riverhead Raingarden Proposed project before (left) and after (right). Photos by PEP

Peconic Estuary Protection Committee continued from page 2

of stakeholder, the Committee believes that the future health and productivity of the Peconic Estuary require a coordinated effort. Members also recognize that inter-municipal cooperation is an effective and resource-efficient means to comply with EPA's Clean Water Act and New York State's Phase II stormwater regulations for small municipal stormwater sewer systems (MS4s). The Committee work plan outlines collaborative efforts toward improved water quality including sharing information and technical resources, coordinating regulatory and enforcement activities, jointly conducting outreach and education initiatives, and cooperating on planning and infrastructure programs.

For more information, please contact Rachel Gruzen, PEPC Coordinator at PeconicEstuary@gmail.com (917) 796-2128

Community Stormwater Stewardship Program Set to Start this Spring

The best way to know how effectively PEP initiatives are taking hold in the Peconic Estuary watershed is to monitor water quality parameters. Unfortunately not every creek and wetland can be regularly tested. Acquiring information about the parts of our bay closest to the shoreline can help PEP and it's partners create the most effective management plan and mitigation projects for our estuary. Members of the Peconic community are eager to help and this pilot citizen science based program will allow for just that!

Volunteers will help collect environmental parameters including temperature, pH, dissolved oxygen, nutrients, and water clarity—all important indicators of health of our local bays. At the start, this program will focus on the waters surrounding the Suffolk County Marine and Environmental Learning Center in Southold, NY and will aid aquaculturists in the healthy brooding of shellfish larvae for our surrounding waters. As membership grows, we hope the volunteer monitoring program will expand across the bay and become an estuary-wide resource in protecting and restoring the health of the Peconic Bays.

Please join us at our first training workshop of the season: Saturday March 12, 2016 from 10am-12pm at SCMELC 3960 Cedar Beach Road in Southold, NY. Pre-registration is requested, email peptalk@peconicestuary.org



Photo PEP

Citizen Science links people with science to understand and protect ecosystems.

More About Stormwater Pollution...

Stormwater runoff is water from rain or melting snow that does not soak into the ground. It flows from roofs, paved roads, bare soil, and sloped lawns. As it flows it can collect pollutants such as fertilizers, pesticides, oils and grease, animal wastes and sediments, discharging them into storm drains. This polluted stormwater ends up in the Peconic Bay, and other local water bodies such as Long Island Sound and Great South Bay. These pollutants restrict recreational use and degrade habitat for aquatic life resulting in bathing beach closures and shellfish harvesting restrictions. Top 10 things residents can do to help with stormwater pollution:

Automotive Care- Inspect and maintain your car regularly to prevent oil, antifreeze and other fluid leaks.

Washing the car- Use a commercial car wash that treats and recycles water to prevent harmful chemicals from flowing to storm drains.

Hazardous chemicals- Use the least toxic products around your home and dispose of them at approved collection centers.

Yard Waste- Leave grass clippings on the lawn and start a leaf/food compost pile to recycle nutrients and minimize the need for fertilizers.

Driveway care- Sweep driveways and sidewalks and dispose of debris properly to prevent it from entering storm drains.

Lawn care- To minimize over application, use pesticides and fertilizers sparingly, if at all. Follow directions and never apply before it rains.

Septic Maintenance- To prevent malfunctions, have your septic tank pumped regularly and never dump chemicals down household drains.

Pet care- To make sure harmful bacteria does not enter waterways, collect pet waste and dispose of it on the toilet or trash.

Recycling and Trash Disposal- Always recycle. Do not dump trash onto the street; it will be carried into storm drains and local waterways.

Spread the word- Educate your family, friends and neighbors. We are all the solution to stormwater pollution.



Photo K. Malkus



PEP celebrates the National Association of Estuary Programs' #iheartestuaries campaign this winter. Photo by PEP

Why You Should Care About the Peconic Bay

Most of us know the Peconic Bays and Peconic River as a tranquil place on Long Island's East End where we fish, harvest shellfish, boat and swim and where we all have our favorite spot to sit and relax. But why are the Peconic Bays and River such an important place and why should we care about the health of these waters?

The Peconic Estuary provides feeding and important breeding and nursery habitat, such as wetland habitat and eelgrass habitat, for fish, waterfowl, wading birds, shorebirds and invertebrates. Reeves Bay, Flanders Bay, Great Peconic Bay, Little Peconic Bay, Noyack Bay, Southold Bay, Gardiners Bay, Napeague Bay and Peconic River are part of the Peconic Estuary. An estuary is a semi- enclosed body of water where salt water from the ocean and freshwater from the land and rivers mix and these ecosystems are the most productive ecosystems in the world. The Peconic Estuary watershed is home to around 111 rare species. Some of the habitats are found nowhere else in New York State and are rarely found elsewhere in the United States.

Many economically important species, like the bay scallop, weakfish, winter flounder, and forage fish, which provide many fish species the food to survive, spend all or part of their life in the estuary. Other species such as the Piping Plover and Osprey depend on the estuary for habitat and food.

The amount of land that contributes freshwater to the estuary is almost as much as the size of the estuary itself. It is important to think about what effect your actions on land are having on the Peconic Estuary. The range of the Peconic Estuary and the land and surface water that contributes water to the estuary, the watershed, extends from the headwaters of the Peconic River, at Brookhaven National Lab, and east out from the bays to the Block Island Sound between Plum Island and Montauk Point. More than 125,000 acres of land are within the Peconic Estuary watershed and close to the same amount, 158,000 acres, of surface water are in the Peconic Estuary watershed.

The health of the estuary is important to the success of the East End economy. Peconic shellfish and fishing industries, recreation industries and tourism are inseparable from the habitat, living resources and water quality in the Peconic Estuary. If you are a fisherman or enjoy the bounties and beauty of the estuary, you know that poor water quality, especially in the western sections of the estuary in Reeves and Flanders Bay, has led to fish kills and harmful algal blooms (HABs).

Many can remember the brown tide bloom starting in 1985 and plaguing the Peconic Bays intermittently through the early 1990's

Poor water quality is the product of many factors, namely nitrogen. Nitrogen in groundwater from septic systems and fertilizers play a role in triggering and sustaining algae blooms and poor water quality in the Peconic Estuary. The negative impacts of algal blooms are broad; some algal blooms are harmful and negatively impact the ecosystem by producing toxins that cause severe illness or death in humans, domestic animals, wildlife, or aquatic organisms. Others are not directly harmful, but their presence causes aesthetic impacts and reduced recreational values resulting from discolored water, foul odors and changes in water quality such as hypoxia (low oxygen conditions). Algae produce oxygen through photosynthesis during daylight hours; but respire, using oxygen. Oxygen is used up during bacterial breakdown of organic matter, including algae that have died and sink to the bottom.

Furthermore, algae blooms and high amounts of particles in the water discolor water and decrease water clarity, diminishing the amount of light reaching submerged aquatic vegetation (SAV) and in effect reducing the extent of SAV. SAV, such as eelgrass, provide habitats needed to support shellfish and fish populations. Excess nitrogen may also cause the growth of epiphytes on eelgrass blades, thus reducing the amount of sunlight available and hindering production. Loss of SAV also reduces the estuary's natural buffering capacity for storm energy. These HABs have been found to be a contributor to the near collapse of bay scallop populations and declines in other shellfish populations and habitat. The impacts of climate change are likely to directly influence the occurrences, types, and duration of HABs. Changes in surface water temperatures, freshwater inputs resulting from precipitation, the stratification and circulation of nutrients and the alteration of photosynthesis rates due to changes in the extent of cloud cover are all likely to affect the abundance and distribution of algae.

Ospreys— Continued from page 3

Unique among birds of prey in their dependence upon fish (bald eagle come close but also prey on waterfowl and other waterbirds), ospreys display a number of key adaptations allowing them to effectively catch their slippery prey. Foremost are the sharp talons that clamp shut upon contact with a fish, with one toe that rotates so the bird can have two talons in front and two in back, enabling it to better hold on to a fish. Assisting them are spicules, sandpaper like projections on the bottom of the feet that help hold prey. After catching a fish they line it up so that its head faces forward, an adaptation to minimize wind resistance. And not surprisingly for a bird that plunges into water to nab its prey, the fish hawk's plumage is oily, helping the feathers from becoming saturated.

More conspicuous than the birds are their distinctive nests, bulky affairs made of various sized sticks, which dot the East End landscape. Ospreys are "packrats with wings" and many nests contain more than just sticks including such items as seaweed, roping, small buoys, there are even reports of nests containing a feather duster, door mat, toy doll and sailboat!

The males arrive first from their wintering grounds and "sky dance" over their nest, involving swooping and diving over it often carrying nesting material or a fish. Females typically arrive a few days later. If things go well she'll lay two to four speckled eggs and begin incubating after laying the first egg which then hatches first (these hatchlings, not surprisingly fare best, in lean years). The young develop quickly and in about two months are ready to leave for good the confines of the nest.

As the temperature drops ospreys will head south, with some traveling as far as central South America to overwinter. But as the earth moves in its orbit around the sun and Winter turns to Spring in the Northern Hemisphere, the resident ospreys return to the place where they were born. So, this St. Patty's Day when you hoist your glass of green beer to toast St. Patrick, why not also make a toast to the return of Peconic Bay's feather icon - the fish hawk.

John Turner is a Conservation Policy Advocate for the Seatuck Environmental Association and the author of "Exploring the Other Island: A Seasonal Nature Guide to Long Island".



Photo birding.com

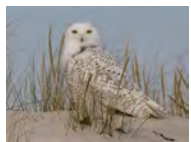


Peconic Estuary PROGRAM

Protecting & Restoring Long Island's Peconic Bays

WINTER/SPRING EVENTS 2016

February



Snowy Owl Walk

Saturday February 13th 10:00am

Learn how these seasonal visitors are an important part of the estuary food web. Our naturalists will guide you through prime birding areas of the park. Bring binoculars, cameras, and dress for the weather. Meet at the *Orient Beach State Park Ranger Office 40000 Main Road Orient, NY.*

March



Alewife River Herring Monitoring Training Workshop

Thursday March 10th 6:30-7:30pm

Each spring Alewife return from the sea to our coastal bays and rivers to spawn in freshwater. Learn about these important species role in the estuary food web and how you can help monitor the arrival of these fish for spring spawning season. *Cornell Cooperative Extension 423 Griffing Ave, 1st fl. Riverhead, NY*



Community Stormwater Stewardship Water Quality Training Day

Saturday March 12th 12:00-2:00pm

Citizen Science training day! Learn how to collect water samples and test for important environmental factors. Become a volunteer in gathering data for our local aquaculturists on the North Fork. *Suffolk County Marine Environmental Learning Center 3690 Cedar Beach Road Southold, NY*



Peconic River Cleanup, Walk, and Paddle

**Wednesday March 23rd 4:00pm
(Rain date March 30th)**

Protect the beauty and health of the wildlife on the Peconic River by attending this riverfront cleanup and paddling at Grangebel Park. Learn about the estuary,

Citizen's Advisory Committee

2016 Meeting Dates

Saturday February 27th 10am-12pm

Wednesday May 18th 6-8pm

Tuesday September 13th 6-8pm

Wednesday November 16th 1-3pm

Special Topic Summer Meetings:

Thursday July 14th NOFO July 21st SOFO

Locations to be determined

the fish passage rock ramp, and more while caring for our environment. Please bring gloves and thick-soled shoes. We will provide bags. Rain cancels. Meet at *Peconic Paddler 89 Peconic Avenue Riverhead, NY*

April



Native Plant Garden Workshop

Wednesday April 13th 4:00pm

Learn about the benefits of native plantings, raingardens, and rain barrels at the PEP native plant garden. Get your hands dirty and help mulch, weed, and collect water from the rain barrel and learn how your yard can be eco-friendly. Please bring gardening gloves and garden tools. *The Big Duck Flanders Road Rte. 24 Flanders, NY*

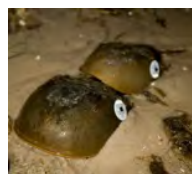


Riverhead Raingarden Planting

Saturday April 23rd 10:00am

Celebrate Earth Day with the PEP and participate in this groundbreaking event! Help plant the new raingarden to reduce storm water pollution and runoff from entering the Peconic River. Heidi Behr Way parking lot (behind Main Street, adjacent to Riverfront Park) Riverhead, NY

May



Horseshoe Crab Monitoring

Wednesday May 4th 10:00pm

Thursday May 19th 11:00pm

Get involved with the annual horseshoe crab monitoring program! Participants assist with the collection of scientific data that is used to assess and determine the management and conservation of this important species. Bring a flashlight and shoes that can get wet at the two Peconic locations.
*North Fork: South Harbor Road, Southold
South Fork: East Landing Road, Hampton Bays*

Please contact Sherryll Huber-Jones (631) 727-7850 ext. 353
or email peptalk@peconicestuary.org for more information



The Peconic Estuary Program

One of the 28 EPA designated "Estuaries of National Significance", the Peconic Estuary became a member of the National Estuary Program in 1993. PEP is an innovative partnership of local, state, and federal governments, citizen and environmental groups, businesses and industries, and academic institutions with a common goal of protecting and restoring the Peconic Bay

For more information on PEP programming and ways to get involved, please contact Sherryll Huber-Jones peptalk@peconicestuary.org (631) 727-7850 ext. 353

What can I do to help improve water quality in the estuary?

Get involved! After all, it was a group of citizens who first came together after seeing the negative impacts of brown tide on the estuary and pledged to protect the Peconic Estuary forming the PEP Citizens Advisory Committee. Concerned citizens were responsible, along with federal, state, county and local levels of government for creating the first Peconic Estuary Comprehensive Conservation and Management Plan (CCMP) in 2001. This year the Peconic Estuary Program is embarking on a revision of the CCMP. Much has changed since the first plan was written and it is your turn to be a part of molding the new CCMP. Improving water quality in the Peconic Estuary is a complex issue and requires the cooperation and coordination of multiple groups.

The Peconic Estuary is a changing system and the issues that plague it have evolved over the past decade. Issues that are expected to be addressed in the revised CCMP are nitrogen loading, climate change adaptation, harmful algal blooms and habitat restoration.

SPRING 2016

To join our mailing list please visit our website PeconicEstuary.org and follow PEP on Social Media

Peconic Estuary Program Staff

PEP Director- Dr. Alison Branco Suffolk County Dept. of Health Services

PEP State Coordinator- Julie Nace New York State Dept. of Environmental Conservation

PEP Program Coordinator- Sarah Schaefer Suffolk County Department of Health Services

Outreach and Education Coordinator- Sherryll Huber-Jones, Cornell Cooperative Extension of Suffolk County

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The Peconic Estuary Program

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Peconic Estuary PROGRAM

Protecting & Restoring Long Island's Peconic Bays



Flanders Bay, Flanders New York

Summer 2016 Estuary News

PRESIDENT OBAMA REAUTHORIZES THE NATIONAL ESTUARY PROGRAM

Washington, DC – Congressman Lee Zeldin (R, NY-1), member of the Long Island Sound Caucus and Congressional Shellfish Caucus in the House of Representatives, announced that legislation he supported in the House of Representatives to reauthorize the National Estuary Program (H.R.944/S.1523) was signed into law by President Obama on Friday, May 20, 2016. The new law authorizes \$26.5 million in funding for the National Estuary Program, which includes two nationally recognized estuaries on Long Island: the Peconic Estuary and the Long Island Sound. *Continued on page 2*

SUFFOLK COUNTY TESTS ALTERNATIVE SEPTIC SYSTEMS

This spring, the Department of Health Services toured some of the demonstration projects that are part of Suffolk County's *Innovative-Alternative Onsite Wastewater Treatment System Program*. The local testing that occurs in the "Demo Program" as it is often called, is the final step for treatment technologies before they can be approved for widespread use in Suffolk County. The Health Department anticipates approving the first group of new technologies this summer, with more to come by early next year. *Read more on page 2*

INSIDE THIS ISSUE

NEP Funding.....	2
Demo Septic Systems.....	2
Plastic Pollution.....	3
Around the Estuary.....	4-5
Menhaden	6
Get Involved.....	8
Summer Event List	
Homeowner Rewards	

SPECIAL POINTS OF INTEREST

- Learn more about the Peconic Estuary with Facts and Terms
- Citizen Science and Involvement in the Peconic Estuary.
- Riverhead Stormwater Filter Installed.
- Fish passage construction and dam repair.
- EPA Trash Free Waters Campaign



COUNTY HEALTH DEPARTMENT STUDIES NEW SEPTIC TECHNOLOGY

On a rainy afternoon, county employees and citizens alike boarded a Suffolk County Transit Bus eager to get a first-hand look at some of these systems we had all been working, in various capacities, to bring to Suffolk County to help alleviate our nitrogen pollution problems. The 15 attendees included NY State Assemblyman Steven Englebright, Paul Brady from south fork Legislator Bridget Fleming's office, and Council of Environmental Quality member Mike Kaufman. The leaders of Suffolk County's water quality team explained the pilot program, upcoming regulatory changes, and showed us four different installed systems. Along the way,

attendees spoke with manufacturers and installers, and very enthusiastic homeowners. These homeowners were part of the first wave of 19 winners of the "septic lottery" last year. The next set of winners will be announced this summer, and Suffolk County anticipates selecting 2 or more in each of the 10 towns.

Over the next decade, we hope to see many of the cesspools and septic tanks within the Peconic Estuary watershed upgraded to one of these newer technologies that reduce nitrogen loading to the groundwater, thereby reducing the load that is polluting the estuary.
~Dr. Alison Branco, PEP Director

"On the East End of Long Island, we must be committed to safeguarding our environment and improving our water quality."

COMPREHENSIVE CONSERVATION AND MANAGEMENT PLAN

PEP is poised to update the estuary's management plan. This major CCMP revision will be accomplished through a process that brings together all levels of governments and all sectors of the community surrounding the Peconic Estuary. Management topics include:

- ◆ Nitrogen loading into the estuary
- ◆ Harmful algal blooms
- ◆ Climate change adaptation
- ◆ Habitat restoration and monitoring
- ◆ Land protection
- ◆ Public Education

Email: cac@peconicestuary.org to be involved in our public input process.

REAUTHORIZATION OF THE NEP

The funding will be used for water quality and wetlands restoration, as well as other local conservation projects to restore local beaches and protect wildlife. The bill ensures that funding will be prioritized to address urgent and challenging issues that threaten the ecological and economic well-being of coastal areas including nitrogen, harmful algae blooms, and flooding or wetland loss.

Congressman Zeldin said, "On the East End of Long Island, we must be committed to safeguarding our environment and improving our water quality. Over the years, water quality on Long Island has suffered severely from issues such as pollution, overdevelopment and the dumping of dredged materials. This new law, which I was proud to support in the House, would ensure that Long Island's estuaries receive the funding needed to improve and protect our waterways. There is much we can do to improve water quality on Long Island, and I will continue working in Congress to ensure our waterways are preserved for generations to come."

"The Peconic Estuary Program is grateful to Congressman Zeldin for his support of this important bill," said Dr. Alison Branco, the program's Director. "For nearly 30 years, the National Estuary Program has demonstrated that these locally-driven, non-regulatory programs can successfully protect Estuaries of National Significance, like the Peconic Estuary and Long Island Sound. We work with the community to craft and implement action plans to solve environmental problems at the watershed level to preserve the healthy, productive ecosystem that supports our coastal economy. With this renewed mandate from Congress, the Peconic Estuary Program looks forward to updating its Comprehensive Conservation and Management Plan and tackling the challenges facing our estuaries today and into the future."



This spring volunteers collected over one hundred pounds of trash on the banks of the Peconic River. Marine debris can cause harm to wildlife and habitat Photo: PEP

PLASTIC POLLUTION IN THE PECONIC BAYS

Recent studies estimate that eight million metric tons of plastic pollution enter the world's oceans annually and the plastic pollution problem is projected to get worse every year . If left unchecked the global quantity of plastic in the ocean is projected to almost double to 250 million metric tons by 2025. It is estimated that 80% of trash in the ocean derives from land-based sources and 75% of land-based plastic pollution is the result of uncollected plastic. Initially, most of that pollution enters the streams, rivers and embayments in our estuaries and eventually ends up in boundless accumulations of trash in our oceans.

Work to reduce aquatic trash must involve the reduction of litter and trash on land and far upstream of the oceans. The best solution to the problem of plastic waste pollution in the ocean is stopping leakage in the first place, rather than treating the problem after it has already occurred. However, reducing the plastic leakage into our aquatic systems at the source is one of the greatest challenges in the battle to reduce plastic pollution.

According to the Ocean Conservancy, six of the top ten contributors to plastic in our oceans are single-use, or disposable, plastic products. Most of the single-use, or disposable plastic products are “food service ware” which includes food and beverage containers, bottles, plastic bags, food wrappers, cups, plates and cutlery and drinking straws.

How does this impact the Peconic Estuary?

Long Island is a densely populated island surrounded by three of twenty-eight estuaries designated as an “Estuary of National Significance” by the Environmental Protection Agency (EPA). They include the New York- New Jersey Harbor, Long Island Sound, and the Peconic Estuary—bordering the East End of Long Island between the north and south forks. The actions we take on land are closely tied to the health of those waters because of this geography. *Continued on page 7*

HOW YOU CAN HELP THE ESTUARY

Plant native wildflowers, grasses and trees to reduce or eliminate fertilizer & pesticide use.

Use natural cleaning products in the home, yard and on the boat

Bring old medications to local police stations for proper disposal

Wash your car over a patch of grass to reduce pollutants entering the bay via storm-water runoff.

Stay off beach dunes and be mindful of fenced off areas.

Throw out any garbage you bring to the park and beach.

Use boat pump-out stations for waste disposal.

Clean up your pet's waste when walking in the neighborhood, park, or beach.

Get reusable grocery bags and water bottles to reduce plastic consumption.

Don't boat or shellfish in eelgrass meadows.

Abide by boat speed zones to reduce erosion of the shoreline.

Follow the Suffolk County Fertilizer Law that states No Fertilizer by applied from November 1st-April 1st

Encourage others to follow these practices.

ESTUARY FACTS

The Peconic Estuary watershed lies within six east-end townships: Brookhaven, Riverhead, Southampton, Easthampton, Southold, and Shelter Island.

The estuary begins at the headwaters of the Peconic River at Brookhaven National Lab in Upton, NY.

The Peconic River is Long Island's longest river.

The Peconic Bays are contained by 453 miles of shoreline.

The estuary watershed is 46 miles long by 18 miles wide.

140 globally and locally rare species are found within the estuary.

The two most important marine habitats of the estuary are eelgrass meadows (fully submerged aquatic vegetation) and salt marshes (*Spartina* grass dominated, exposed at low tides).

The population of the watershed area varies from 100 thousand people (winter) to 280 thousand (summer).

AROUND THE PECONIC ESTUARY

RIVERHEAD STORMWATER FILTRATION

If you have spent anytime driving around Riverhead this year, you may have ended up on Roanoke Avenue, or County Road 73. Since the beginning of the year a major repaving and construction project has been taking place between Route 25 and the circle on Route 58. As with many highway projects, much of the construction will be devoted to resurfacing and paving the road. However his project will also include some technology to limit stormwater pollution reaching the nearby waterway, Merritt's Pond.

Part of the new design to help combat stormwater runoff will include permeable concrete gutters and the installation of vortechs stormwater basins. Polluted stormwater runoff is often transported by conveyance systems into our local waters. Common pollutants include oil and grease from roadways, pesticides, fertilizers, pet waste, sediments from construction and carelessly discarded trash and litter. These designs will reduce the stormwater

that reaches Merritt's pond by 50 percent.



*Workers installing vortechs stormwater basins on Roanoke Avenue, Riverhead
Photo: CCE*

Rather than a paved surface for the stormwater to flow directly over, the permeable gutter will allow for water to percolate through. For the vortechs stormwater basins, a typical leeching basin is replaced by units that will take the stormwater flow and direct it so that the unit will screen, separate and trap debris, sediment and oil. Except during exceptionally high rain fall events, all stormwater that will head toward Merritt's Pond via this conveyance system will be go through this new filtration system.

COMMUNITY STORMWATER STEWARDSHIP

Since March of this year, volunteers have been involved in water quality testing in the Peconic Bay by collecting environmental parameters including temperature, pH, dissolved oxygen, nutrients, and water clarity—all important indicators of health of our local bays. At the start, this citizen-science program will focus on the waters surrounding the Suffolk County Marine and Environmental Learning Center in Southold, NY and will aid aquaculturists in the healthy brooding of shellfish larvae for our surrounding waters. As membership grows, we hope the volunteer monitoring program will expand across the bay and become an estuary-wide resource in protecting and restoring the health of the Peconic Bays! Interested? Attend our next training workshop on Wednesday June 22nd in Southold. Email peptalk@peconicestuary.org



AROUND THE PECONIC ESTUARY

EDWARDS AVENUE FISH PASSAGE

This spring, the NYSDEC undertook a construction project to repair the deteriorating dam on the upper Peconic River under the Edwards Avenue roadway.

As part of the repair work, a newer and safer kayak launch will be installed as well as a fish ladder that will allow fish and eels to reach upstream and downstream habitats for living and spawning.

Watch our video to see other fish migration projects PEP is involved with on the Peconic River.
<https://vimeo.com/167339295>



*Fish and eel passage at the new Edwards Avenue Dam in Calverton, NY
Photo: Byron Young*

RAINGARDEN PLANTED ON RIVERFRONT

This April, the Peconic Estuary Program, in cooperation with Riverhead Town, celebrated Earth Day by planting a raingarden in Downtown Riverhead near the Peconic riverfront. Over 25 volunteers braved the rain and cold to plant native plants that were selected for the site based on their tolerance for flooding and salt and for their ability to attract native bees and butterflies. The garden, located in the parking lot behind Main Street and adjacent to Heidi Behr Way, will help filter out stormwater runoff pollution from the parking lot before it reaches the Peconic River. When informational signage is installed this summer, the raingarden will also act as an educational tool for the community. PEP also has two native plant gardens at the Big Duck in Flanders, NY and at Downs Farm Preserve in Cutchogue, NY. Visit one of PEP's ecogardens this summer!



ESTUARY TERMS

What is an estuary?

es·tu·ar·y

[ˈesCHə,were] noun

the tidal mouth of a large river, where the tide meets the stream.

What is a watershed?

wa·ter·shed

[ˈwōdər,SHed, ˈwādər,SHed] noun

an area or ridge of land that separates waters flowing to different rivers, basins, or seas.

PEP'S CITIZEN ADVISORY COMMITTEE

The PEP was created because a group of concerned citizens came together and spoke up after seeing the negative impacts of brown tide in the Peconic Bays. They formed the Brown Tide Citizens Task Force and pledged to protect the Peconic Estuary forming the PEP Citizens Advisory Committee. So get involved!



*The beginnings of the PEP CAC
A local, nonprofit advocacy group ca. 1989*

CAC SPECIAL TOPIC MEETINGS:
will be held this summer. Guest speakers will present on issues the estuary is currently facing.
July 21st (NOFO)
August 4th (SOFO)

CAC'S NEXT REGULARLY SCHEDULED MEETING:

Tuesday September 13th
6:00-8:00pm
Suffolk County Community College
Culinary Arts Center Main Street

CREATURE SPOTLIGHT: MENHADEN

Atlantic Menhaden *Brevoortia tyrannus*

Atlantic Menhaden, also known as bunker, are found in coastal waters along the Atlantic coast of North America from the Gulf of St. Lawrence to Indian River, Fla. Atlantic Menhaden average 9 in. to 12 in. and 0.5 lb. to 1.3 lb. These fish can normally live to 8 years old and grow very quickly until age 4. These fish begin to mature at age 2 and all fish are mature at age 3. Bunker are filter feeders that feed at the primary production level mainly consuming algae. These fish accomplish this by swimming with their mouths agape and gill openings spread, filtering out entrapped organisms with their feathery gill rakers.

Spawning occurs throughout the year over a broad geographical and temporal range, in Peconic Bay spawning is most intense when in water temperature is between 59°F and 64°F. Menhaden are prey for nearly all piscivorous (carnivorous eating primarily fish) fish marine mammals and seabird on the east coast of the United States, top inshore predators include bluefish, striped bass and weakfish. Mass mortalities of menhaden have been reported in many parts of the range along the coastal United States. These mortalities are usually associated with oxygen depletion in shallow water habitats. The large number of fish in warm shallow water exhaust the dissolved oxygen, but algal blooms and bacterial respiration associated with active or decaying plankton can also contribute to mass fish die offs. ~Cornell Cooperative Extension Fisheries



Schooling bunker in the Peconic River taken May 2016 near Grangabel Park and Cromwell Avenue in Riverhead. Photos: Byron Young

Menhaden populations have significantly rebounded in the estuary since their population decline a few decades ago.

BUNKER LIMITS LIFTED IN THE PECONICS

The Atlantic States Marine Fisheries Commission (ASMFC) **recently approved the DEC's** request to allow commercial fisherman to catch more menhaden in order to reduce the number that might otherwise perish during a die-off. Local commercial fishermen are working together with DEC and the Town of Riverhead to harvest as many fish from the river as possible in the coming weeks.

The removal of these additional fish is being done to 1) improve chance of survival of the remaining fish; 2) use the fish caught beneficially as bait instead of having to dispose of carcasses on the shoreline; 3) eliminate or reduce the magnitude of a fish kill.

The ASMFC has allowed New York to harvest an additional 1 million pounds of menhaden in the Peconic River as part of their episodic event program. ~New York State Department of



PLASTIC POLLUTION CONTINUED

Based on New York/New Jersey Baykeeper's estimates, at least 165 million plastic particles are floating within the New York - New Jersey Harbor Estuary waters at any given time. Approximately 85% of particles counted were microplastics (smaller than 5mm- the size of a pea) and the most abundant type of plastic present in samples was foam (38%), materials that make disposable coffee cups and packaging peanuts. When just one large piece of plastic such as a single use spoon, water bottle, or plastic bag enters our waterways and breaks down, the harmful impacts to wildlife and our own well-being from the numerous pieces of plastics used daily are uncountable.

The East End of Long Island is not as heavily populated as is the land surrounding the New York - New Jersey Harbor Estuary, but the impact of plastic in our waters is still the same. Marine debris can impact aquatic species and habitats by reducing light availability to underlying waters and depleting oxygen levels. These biological changes can reduce the ability of open water and bay bottom habitats to support life. Additionally, animals and marine life may mistake plastic in the water for food, which can cause bodily damage and lead to starvation. And plastics can absorb chemical contaminants in the water around them and when animals eat these plastic pieces the contaminants make their way up the food-chain.



Bags, Bottles, Beads, Butts, and Balloons are the 5Bs of plastic pollution in our marine waters. Photos: Shutterstock

What is EPA's Trash Free Waters Initiative?

The Environmental Protection Agency (EPA) is currently developing customized regional strategies with projects to enhance federal, state, and local programs that reduce or prevent trash from entering our watersheds and ultimately our coastal ecosystems. The EPA hopes to achieve significant reductions in the flow of **trash in our nation's waters and along our shores**. To date, the EPA has been implementing regional strategies in the Gulf of Mexico, New York/New Jersey, Puerto Rico and the EPA is well on their way to implementing regional strategies in the Mid- Atlantic States, California and the Pacific Islands. The Peconic Estuary Program is currently collaborating with partners in our watershed to work towards reaching the **EPA's long term goal of zero-loading** of trash into U.S. waters within 10 years.

Progress in Our Watershed

In 2015 Suffolk County banned micro-beads. Peconic Estuary Program Director, Allison Branco, was instrumental in gathering and assessing information about the environmental impacts of micro-beads and the logistics of banning their use, which contributed to the successful passage of the micro-bead ban bill. The Peconic Estuary Program is currently pushing Suffolk County legislation to ban single-use plastic bags.

The Peconic Estuary Program is continuing to **support Trash Free Water's initiatives in the Peconic Estuary to reduce plastics in our watershed and the world's oceans. We have many exciting activities you can get involved with and support.** Stay tuned to our events calendar for clean ups and plastic source reduction projects!



Peconic Estuary PROGRAM

Protecting & Restoring Long Island's Peconic Bays

SUMMER EVENTS 2016

June



Trash Your Line Workshop

Thursday June 16th 4:00pm

Excess fishing line is one of the most common and deadliest forms of marine trash to wildlife. Join PEP as we build monofilament waste receptacles

to be distributed at beaches and fishing sites around the Peconic estuary. *Cornell Cooperative Extension 423 Griffing Avenue 1st floor Riverhead, NY 11901.*



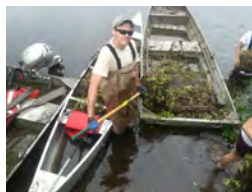
Community Stormwater Stewardship Water Quality Training Day

Wednesday June 22nd 10:00am-12:00pm

Citizen Science training day!

Learn how to collect water samples and test for important environmental factors. Become a volunteer in gathering data for our local aquaculturists on the North Fork. *Suffolk County Marine Environmental Learning Center 3690 Cedar Beach Road Southold, NY*

July



Ludwigia Removal Event

Tuesday July 12th 9:30am

Water primrose or *Ludwigia peploides* is a freshwater invasive plant in the Peconic River that out competes native

plants, reduces biodiversity, blocks sunlight to oxygen producing plants, and impedes fish habitat and recreational use of the river. Using kayaks and boats, we will remove *Ludwigia* during this day-long event. Bring water, sunscreen, and lunch. Meet at the *NYSDEC boat launch on South River Rd. Calverton, NY.*

Please contact Sherryll Jones (631) 727-7850 ext. 353 or email peptalk@peconicestuary.org for more information or to register.



August



Kayak Tour of Peconic Bay in Coecles Harbor

Tuesday August 16th 9:00am

Raindate Thursday August 18th 9:00am

Explore the Peconic Bay and its

beautiful habitats! Join PEP educators as we paddle the Coecles Harbor Marine Trail in Shelter Island! This self-guided interpretive trail shows the bounty of our estuary and the area's marine conservation efforts. Bring your own kayak or rent from Shelter Island Kayak Tours 631-749-1990 (kayaks will be delivered to launch site). Life jackets are required! Bring water, sunscreen, and a snack. *Burns Road Town Landing Shelter Island, NY*

Around the Estuary



CAC Special Topic Meetings 6:00-8:00pm

Thursday July 21st North Fork

Thursday August 4th South Fork

Join PEP as we discuss topics relevant to the protection and health of our estuary.

Presentations from local experts and impactful project leaders will share their work and experience. Summer residents are encouraged to attend! *Locations to be determined. Email cac@peconicestuary.org for more information*



Visit PEP Raingarden and Native Plant Garden Projects **Anytime!**

Learn more about stormwater and solutions to runoff pollution.

Three locations:

Heidi Behr Way Riverfront Park, Riverhead NY

The Big Duck, Rte. 24 Flanders Road, Flanders NY

Downs Farm Preserve Rte. 25 Main Road, Cutchogue NY

Look for PEP at various upcoming summer events including Alive on 25 in Riverhead, The Peconic Paddle Battle, The RBID Cardboard Boat Race.

Citizen's Advisory Committee

2016 Meeting Dates

Saturday February 27th 10am-12pm

Wednesday May 18th 6-8pm

Tuesday September 13th 6-8pm

Wednesday November 16th 1-3pm

Special Topic Summer Meetings:

Thursday July 21st NOFO August 4th SOFO

Locations to be determined



\$500 HOMEOWNER REWARDS PROGRAM

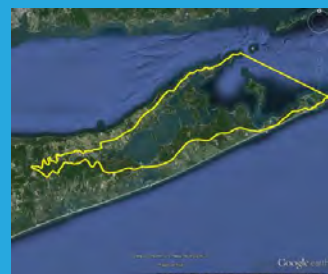
RECEIVE A REIMBURSEMENT FOR INSTALLING RAIN GARDENS, RAIN BARRELS OR PLANTING NATIVE PLANTS

In order to help reduce the amount of pollutants entering our waterways, Peconic Estuary Program is offering homeowners that live within the Peconic Estuary watershed up to \$500.

Visit **PeconicEstuary.org** to find the application, guidelines and interactive map to see if you qualify. For any questions about the rewards program please e-mail us at **rewards@peconicestuary.org**

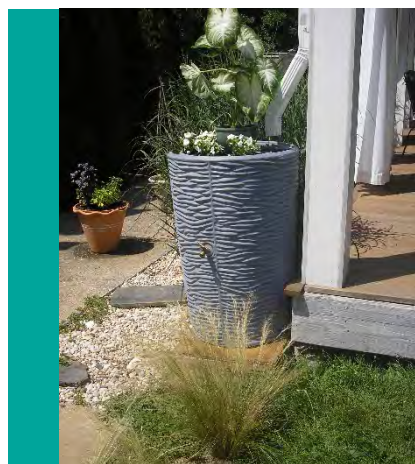


Do your part to protect our beautiful bays!



Rain Barrels collect water that would otherwise run off into our bays

Rain Gardens and Native Plants trap rain to recharge the groundwater



MORE ABOUT THE PECONIC ESTUARY PROGRAM

One of the 28 EPA designated “Estuaries of National Significance”, the Peconic Estuary became a member of the National Estuary Program in 1993. PEP is an innovative partnership of local, state, and federal governments, citizen and environmental groups, businesses and industries, and academic institutions with a common goal of protecting and restoring the Peconic Bay.

For more information on PEP programming and ways to get involved, please contact Sherryll Huber-Jones peptalk@peconicestuary.org (631) 727-7850 ext. 353

Gardiners Bay, Springs New York

HOW YOU CAN GET INVOLVED

VISIT OUR WEBSITE PECONICESTUARY.ORG

JOIN OUR MAILING LIST

FOLLOW PEP ON SOCIAL MEDIA



PECONIC ESTUARY PROGRAM STAFF

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PEP STATE COORDINATOR

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PEP PROGRAM COORDINATOR

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Fall 2016 Estuary News

NATIONAL ESTUARIES WEEK

National Estuaries Week will be observed from September 17th– September 24th 2016. This campaign is held annually in the month of September as a way to celebrate estuaries and how we benefit from a healthy thriving coastal ecosystem. Check out page 3 to learn more about the National Estuary Program, National Estuaries Week and how to get involved in the celebration.

SUFFOLK COUNTY FERTILIZER LAW

Suffolk County's fertilizer application restriction is fast approaching. This local law prohibits the application of lawn fertilizer from November 1st– April 1st. Educate yourself and others about this local law and how abiding by the regulations is important to the health of our waterways. (page 7)

INSIDE THIS ISSUE

Special Topic Meeting	2
Septic Lottery.....	2
National Estuaries Week	3
Creature Spotlight.....	4-5
A Day in the Life	6
Fertilizer Law	7
Improve Water Quality.....	8

SPECIAL POINTS OF INTEREST

- National Estuaries Week Campaign.
- Learn about bay scallops.
- Homeowner Rewards Program extended through 2017.
- Be involved in the decision making process for updating our CCMP.



CAC SPECIAL TOPIC SUMMER MEETING

On August 22nd the PEP's special topic CAC meeting titled: Nitrogen and our Impacts on the Estuary had over 60 attendees come to listen to presentations by representatives from **Stony Brook's Center for Clean Water Technology**, The Nature Conservancy, Concerned Citizens of Montauk, The Peconic Estuary Program and Suffolk County Dept. of Health Services. We would like to thank all of our presenters and attendees for showing their dedication to the health of the Peconic Estuary despite the beautiful summer weather.

Our next CAC meeting will be held on September 13th from 6-8pm at the Suffolk County Culinary Arts and

Hospitality Center located at 20 East Main Street in Riverhead. This meeting will be a continuation of the nitrogen special topic meeting and provide people a chance to discuss the presentations and ask questions. We invite all those who participated in the last meeting and those that could not attend as there will be a brief overview of the material covered in August.

The presentations from the August meeting are located on our website at peconicestuary.org. Please contact cac@peconicestuary.org for more information and keep a look out for our November CAC meeting location announcement.

RESEARCH IN THE PECONIC ESTUARY

Dr. Robert Cerrato, Professor at Stony Brook University and associates have recently released their research regarding species dynamics in the **Peconic Estuary**. Dr. Cerrato's team looked at data from the Juvenile Finfish Trawl survey conducted by the NYSDEC over the past few decades to determine marine species trends. Data analysis revealed that there was a shift around the year 2000 from a flatfish/benthic invertebrate community towards a demersal fish community. These results have implications for our understanding of the impacts of humans, pollution, climate and other factors on the ecosystem and will inform future management of key estuarine species. For more information please send us an email at peptalk@peconicestuary.org

SECOND SEPTIC SYSTEM LOTTERY INCLUDES 5 EAST END RESIDENTS

On August 2, Suffolk County Executive Steven Bellone announced the winners of the second phase lottery the County has held to select homeowner participants in a demonstration program for advanced onsite wastewater treatment technologies. As part of the County demonstration program, aimed at reducing nitrogen pollution and improving water quality, homeowners receive the installation of a free system, periodic monitoring, and maintenance for 5 years, in exchange for agreeing to test it at their home and participate in enhanced monitoring and occasional educational tours.

During round II, twenty homeowners throughout Suffolk County were chosen by lottery drawing from a long list of homeowner applicants who applied to replace a conventional cesspool or septic system with an advanced wastewater treatment system. Between Rounds I and II, more than 330 people, have applied for the demonstration program. The thirty-nine demonstrations initiated so far will help the County determine the best technologies to approve for use in Suffolk County, and give local service professionals and regulators experience with the systems in our local conditions. As part of its efforts to reduce the amount of nitrogen entering groundwater from onsite wastewater treatment systems, Suffolk County hopes to begin approving systems for general use later this year, if and when these demonstrations indicate good performance.

Five winners were chosen from Eastern Long Island in this second lottery drawing. These five homeowners represent the village of Sag Harbor, hamlets of Jamesport and Mattituck, as well as the Town of Shelter Island. The new lottery winners are on target to have their new systems, valued at approximately \$20,000, installed by the end of the winter.

National Estuaries Week Photo Contest

Use #PeconicEstuariesWeek for submission

September 17th– 24th



CELEBRATE NATIONAL ESTUARIES WEEK!

With hands-on activities that include beach cleanups, hikes, kayak trips, coastal education workshops, and more, this year's National Estuaries Week, September 17th to 24th, presents the perfect opportunity to experience America's amazing estuaries.

Estuaries are ecosystems along the oceans where freshwater and salt-water mix to create wetlands, bays, lagoons, sounds, or sloughs. These extraordinary ecosystems are not only home to unique plant and animal habitats, but provide communities with food, recreation, jobs, and coastal protection.

Since 1988, National Estuaries Week has celebrated the many ways we benefit, from healthy, thriving coastal ecosystems. National Estuaries Week is a fantastic opportunity to explore your local estuary and to take advantage of volunteer opportunities and hands-on restoration in your nearby estuary.

Of the 32 largest cities in the world, 22 are located on estuaries. The National Estuary Program, which receives EPA support, protects 28 estuaries of national significance and brings together citizens, scientists, businesses and government to preserve estuarine ecosystems. The Peconic Estuary Program protects the Peconic Estuary which is an estuary of national significance right in your backyard! The estuary includes Flanders Bay, Great Peconic Bay, Little Peconic Bay, Gardiners Bay and the contributing watershed, totaling more than 110,000 acres of land and 121,000 acres of surface water. EPA's National Estuary Program, many of Restore America's Estuaries member organizations and NOAA's National Estuarine Research Reserve System also will be hosting activities during the week. Last year's National Estuaries Week drew 16,724 volunteers who participated in 74 events and logged a combined 88,378 hours, contributing an estimated economic value of more than \$2 million according to [Restore America's Estuaries](#), which helps coordinate the event. Check out the [National Estuaries Week Events Map](#) to find an event near you.

WAYS TO CELEBRATE NATIONAL ESTUARIES

PHOTO CONTEST

Amateur photographers can submit photos of the Peconic Estuary vistas, wildlife or activities during National Estuaries Week, September 17th–September 24th. Use #PeconicEstuariesWeek to submit via Facebook or Instagram, or email to peptalk@peconicestuary.org

JOIN PEP ON A HIKE

PEP will be kicking off National Estuaries Week with a nature hike. Come learn about the estuary, the wildlife that lives here and the historical land use. Email peptalk@peconicestuary.org for more information or visit our Facebook page.

SOCIAL MEDIA

Use #EstuariesWeek and #EstuaryLove for all your social media posts on Twitter, Instagram and Facebook all week long! Need an idea for what to post? Visit estuaries.org/social-media-resources for example tweets.

VISIT AN ESTUARY

Go visit one of the 28 Estuaries Nation Wide and use #EstuaryGo when posting on social media!





CREATURE SPOTLIGHT: BAY SCALLOPS

Bay scallops, *Argopecten irradians*, are an iconic species on Long Island and are the object of a prized recreational and commercial fishery. Most people know them for their delectable adductor muscles – which may command prices of \$30 per pound, but their biology and ecology are fascinating. Their shells are the most colorful of any local marine mollusk, ranging from pure white to orange, gray or black. Rarely, they may be bright yellow, pink, maroon or purple and may have bands, stripes or chevrons on top of the base colors. The iridescent blue spots seen just inside the shells of a live bay scallop are eyes; there may be several dozens of them and they allow the scallop to effectively see changes in light intensity and movement of potential predators. When **they sense danger, scallops will swim by ‘clapping’ their two valves**, shooting jets of water to propel themselves to safety. They swim most commonly at a size of around 25 mm, but retain this ability throughout their lives.

“Their shells are the most colorful of any local marine mollusk, ranging from pure white to orange, gray or black.”

THE PECONIC ESTUARY PROGRAM IS GETTING A MAKEOVER

In 2017 the Peconic Estuary Program will launch our new website! The new website will still have all the current information but will be easier to navigate with a fresh new look.

We will be adding new information as well including a native plant database and much more!

We are excited to start a new year with a new look. Keep an eye out on Facebook for information on our website launch in 2017!

Bay scallops are functional hermaphrodites and thus alternatively release eggs and sperm during a single spawning event. In the Peconic Bays, spawning typically is initiated between late May to mid-July, but may occur as late as September-October. Spawning is cued by rapid change in water temperature (usually an increase), but may also be triggered by strong winds. After successful fertilization takes place, scallop larvae typically remain in the plankton for about 2 weeks; then, they attach to a wide range of above-bottom substrates. Historically, eelgrass has been viewed as the preferred species of submerged aquatic vegetation (SAV) to which bay scallop larvae attach, but in the Peconic Bays they will settle on at least 10 different species of seaweeds as well as shells, stones and man-made materials. While scallops remain attached above the bottom, a spatial refuge is provided from many of their common predators (crabs, whelks, oyster drills, sea stars). Growth of juvenile scallops is very rapid (10-12 mm/month), so they may only remain in the SAV canopy for days-weeks. On the bottom, bay scallops may seek refuge by attaching to the inside/underside of shells or hide under vegetation. By the time they reach a size of 35-40 mm, bay scallops have outgrown most of the common predators found in New York embayments; by the end of the first growing season (early December), most bay scallops have reached a size of >50 mm. The winter is a harsh period for bay scallops as they may succumb to burial by shifting sediments; this appears to be relatively common in unvegetated habitats (mud or sand) and/or in areas with high tidal currents. During the winter, bay scallops begin to transfer energy reserves from their adductor muscle to the gonad; shell growth resumes once waters have warmed enough in the Spring (usually around late March/early April).

In an unusual twist of life history, bay scallops usually spawn during just one year (at age 1), but most live through the fall and winter before they die of natural causes at an age of 18-22 months.



Adult Bay Scallop. Orient Harbor, August 3rd, 2016 Stephen Tettelbach

This is very advantageous for the fishery in that adult scallops can typically be fished without any overall quotas as the great majority of these scallops will die anyway if they are not caught. This peculiar life history, however, makes bay scallop populations and annual fishery landings prone to dramatic fluctuations. The commercial bay scallop fishery in New York currently opens on the first Monday of November and lasts until March 31; adults must have a raised annual growth ring and have a shell height of 2 ¼ in (=56 mm).

Historically, commercial landings of bay scallops in New York were common in Long Island Sound and embayments all over Long Island. **However, in the 1930's, eelgrass wasting disease decimated beds of the scallop's preferred habitat; scallop populations and harvests then declined dramatically in many areas.** Between 1946-2015, total annual commercial bay scallop harvests in New York ranged from 53 to ~988,000 lbs of meats (= adductor muscle, the only part of the scallop that is usually eaten in the United States). During this period, commercial harvests have come predominantly from the Peconic Bays, with occasional peak landings from Shinnecock, Moriches or Great South Bay.

In 1985, the first of a series of brown tide (*Aureococcus anophagefferens*) algal blooms occurred in Long Island waters, decimating bay scallop populations. Fishery landings declined from an annual average of 300,000 lbs of meats to ~300 lbs in 1987-1988. Restoration efforts in the Peconic Bays were initiated in 1986 and scallop populations **rebounded for a few years in the late 1980's-early 1990's.** However, a severe brown tide in 1995 again decimated stocks; the total New York commercial harvest in 1996 was a mere 53 lbs. Despite the absence of brown tide blooms in the Peconic Bays since 1995, and seemingly favorable water quality, bay scallop populations remained at very low levels and annual commercial fishery landings averaged just 1-2% of historical, pre-brown tide levels until 2008 (when the first benefits of restoration became evident. *(Continued on page 8)*

ESTUARY TERMS

What is an estuary?

A semi-enclosed coastal body of water that connects with the open sea. It is a transition zone where saltwater from the ocean mixes with freshwater from rivers and land.

What is a watershed?

An area or ridge of land that separates waters flowing to different rivers, basins, or seas.

What does brackish mean?

A mixture of fresh and saltwater typically found in estuarine areas. Water that is saline but not as salty as seawater.

What is an ecosystem?

A community of organisms and their physical environment that act as a unit.

What is groundwater?

Water that is present **underneath the Earth's surface.** Groundwater is replenished by precipitation penetrating **beneath the land's surface** and infiltration from streams.

KNOW YOUR LOCAL LAWS: SUFFOLK COUNTY (41-2007)

Local Law 41-2007 prohibits lawn fertilizer application between November 1st through April 1st.

During this time period, lawn grass doesn't grow and therefore fertilizers are rendered useless.

The purpose of this law is to reduce the amount of nitrogen released into our groundwater and surface water.

Retailers are required to post signs near fertilizer displays notifying customers of the date restrictions.

Violators, whether it be homeowners, landscapers or other parties risk fines of \$1,000.

Don't see a sign at your local retailer store informing customers of the date restriction? Mention the oversight to a manager.

See someone fertilizing during the restricted time? Remind them of the local law and why it's important to follow.

A DAY IN THE LIFE OF THE PECONIC ESTUARY

The Peconic Estuary Program is proud to be a part of a citizen science program that includes over 1,000 students across Long Island participating in hands-on scientific investigations within the Peconic Estuary, the Carmans River, the Nissequogue River and other locations. On Friday, October 21, 2016, students will, for the third year, explore various sites within the Peconic Estuary during this one day event. All data collected that day is available to the public, as well as other information about the program, at this website:

www.portaltodiscovery.org/aday/

This program was established to help students develop an appreciation for and knowledge of Long Island's River and estuary ecosystems, to collect useful scientific data in regard to the status of associated surface waters and to allow students to become stewards of water quality and natural resources.

As water quality continues to face challenges across Long Island, protecting and restoring our aquatic ecosystems has become a top priority throughout the region. In order to tackle our water issues we need to inspire younger generations as well. This innovative program does not only get students out to local waterbased ecosystems to discover hands-on science techniques, the program provides a unique learning system that allows students to step back and see a larger picture as multiple sampling sites are studied at the same time by different classes throughout each watershed and data is shared among all of them.

Over 15 partner organizations and agencies, 18 schools and over 900 students, within the Peconic Estu-

ary and River system, will simultaneously collect scientific information, analyze it and share it to portray the status of the river and **estuary ecosystems during a "Day in the Life of the Peconic Estuary."** Students will use hands-on field techniques to describe their sites, catch fish in nets, collect water and invertebrate samples, develop a biodiversity inventory of the riparian zone and analyze



water chemistry.

This event is significant in highlighting that critical relationship and will help ensure that the next generation of adult citizens and community leaders develop an appreciation and advocacy for the preservation of our river systems". A Day in the Life is successfully run each year in large part due to the many partners that participate including the Peconic Estuary Program, Central Pine Barrens Commission, NYS DEC, Brookhaven National Lab, Cornell Cooperative Extension, and Group for the East End.

For more information on teachers and partner organizations, and to schedule visits to a site, please email or call Melissa Griffiths Parrott at mgriffiths@pb.state.ny.us or (631) 655-4688.

SUFFOLK COUNTY FERTILIZER LAW

On Long Island, we depend on our groundwater for drinking water. But the nitrogen fertilizer that we apply to our lawns - especially when the grass is dormant, or not growing - can move through the soil and pollute our groundwater.

Too much nitrogen, the main ingredient in lawn fertilizers, is one of the causes of the excessive algae growth we see in our local bays. Its growth interferes with recreational water activities in-

this law is to reduce the amount of nitrogen released into the groundwater and surface water by eliminating the use of fertilizers where practicable on lawns and on County property. This will decrease the overall use of fertilizer, and optimize the use of fertilizers when they are applied.

Various factors may cause excess leaching of fertilizer nitrogen, such as the use of quick-release fertilizer and a lack of under-



Healthy Lawns Clean Water

cluding boating and swimming, changes the natural ecology of our waters, and harms the environment. Algal blooms can cloud the water, blocking sunlight from reaching underwater plant life. This is a problem because submerged aquatic vegetation serves as a spawning habitat and nursery for finfish and shellfish. In some cases, algal blooms can actually kill fish, shellfish, and other aquatic life by using up the available dissolved oxygen in the water.

To reduce excess nitrogen in the water, Suffolk County prohibits lawn fertilizer applications from Nov. 1 to April 1 to prevent nitrogen runoff from frozen ground. The law also requires retailers to post signs near fertilizer displays advising customers of the date restrictions. Violators, whether landscapers or homeowners, risk fines of \$1,000. The purpose of

standing of the fertilizer label. This results in excessive application rates of fertilizer. Soil type, lawn type and condition, timing of application, total nitrogen applied per year and un-calibrated application equipment and irrigation systems further contribute to the problem of excess leaching. To protect our water, Suffolk County encourages reducing lawn fertilizer use. When fertilizing lawns, be sure to fertilize properly, at the correct rate, and at the right time of year.



FERTILIZER FACTS

The main ingredient in lawn fertilizers is nitrogen.

Never fertilize when it's going to rain. Rainstorms do not help fertilizers absorb into soil, they wash it away.

Slow release fertilizers nourish lawns and plants gradually, over a longer period of time. That saves money and is better for the environment.

Slow release fertilizers are also called timed-released, controlled-release and slowly available fertilizer.

PEP HOMEOWNER REWARD PROGRAM EXTENDED THROUGH 2017!

We are excited to announce our Homeowner Rewards Program has been extended through 2017 with plans to continue for years to come.

The Rewards Program offers a \$500 reimbursement for homeowners interested in installing a rain garden, rain barrel or native plant garden. This incentive was introduced as a way to reduce the amount of pollution, including a reduction or elimination of fertilizers and pesticides entering our local waterways.

For more information or questions about the program please email rewards@peconicestuary.org



Visit our Demonstration Rain Garden anytime on the Peconic Riverfront in Riverhead on Heidi Behr Way.

CREATURE SPOTLIGHT CONTINUED

In 2006, an intensive restoration program was initiated by Cornell Cooperative Extension of Suffolk County and Long Island University, with the goal of jump-starting Peconic populations by planting several million hatchery-reared bay scallops at high densities, in nets and directly to the bay bottom. This strategy was designed to ensure a high probability of fertilization success upon spawning (poor fertilization success was hypothesized to be the reason that scallops populations had not recovered on their own after 1995).

Since the start of this restoration program, bay scallop larval recruitment, benthic populations of juveniles and adults, and commercial fishery landings have increased dramatically. Official NYSDEC fishery reports showed that in 2010, Peconic bay scallop landings were ~40,000lbs: 13x higher than those of pre-restoration levels. Harvest levels in 2014 and 2015 were ~88,500 and 60,000 lbs, respectively - representing the two highest annual landings since 1994. Dockside revenues and economic benefit to the regional economy (through 2015) have increased by ~\$4 million and \$40 million, respectively, since the start of this ongoing restoration program. Statistical analyses have revealed that the resurgence of Peconic bay scallop populations since 2007 has not been correlated to temporal changes in predator populations, SAV cover, water temperature, rainfall, chlorophyll-a levels or other monitored environmental factors; very strong statistical relationships have been determined for adult scallop density and larval production as well as between larval settlement, juvenile abundance and fishery landings. Thus, it is clear that the resurgence in bay scallop populations and fisheries since 2007 has been driven by dramatic increases in bay scallop larval supply resulting from the intensive restoration efforts described above.—Stephen T. Tettelbach, Professor of Biology, Long Island University

WHAT CAN I DO TO HELP IMPROVE WATER QUALITY IN THE ESTUARY?

Get involved! This year the Peconic Estuary Program is embarking on a revision of the Peconic Estuary Comprehensive Conservation and Management Plan (CCMP). The Peconic Estuary is a changing system and **the issues that plague it have evolved over the past decade. It's been 15** years since the Peconic Estuary Program first released our plan to conserve and restore the Peconic Estuary. Much has changed since the first plan was written and it is your turn to be a part of molding the new CCMP. Improving water quality in the Peconic Estuary is a complex issue and requires the cooperation and coordination of multiple groups. Help us refocus our efforts on the latest threats to the waterbodies of the Peconic.

Currently, the Peconic Estuary Program is in the process of reaching out to local businesses, organizations, community leaders and government entities to get the public's input on the new plan. Part of the

public input process includes holding meetings for the general public every quarter. These Citizens Advisory Committee (CAC) meetings are held in different locations throughout the East End to give residents of each town a chance to weigh in and facilitate public investment in the implementation of the plan.

Anyone interested in contributing their thoughts to the plan can submit a [public input survey](#) to the Peconic Estuary Program.

The Peconic Estuary Program is part of the National Estuary Program Association, as it is one of 28 estuaries designated by the EPA as an estuary of national significance. Each estuary program is required to develop a long-term plan, called the CCMP, to guide the program's efforts and priorities, based on the needs and challenges of each estuary's ecosystem.



“Help us refocus our efforts on the latest threats to the waterbodies of the Peconic.”

The program is made up of local “stakeholders” – local, state and federal governments, as well as local organizations and community members – each estuary program receives funding from all levels of government to implement the actions prioritized in the CCMP.

In the 1980s, brown tide decimated the scallop population in the Peconic Bays. It was a group of citizens who first came together after seeing the negative impacts of brown tide on the estuary and pledged to protect the Peconic Estuary, forming the PEP CAC. Concerned citizens were responsible, along with federal, state, county and local levels of government for creating the first Peconic Estuary CCMP in 2001.

Although brown tide has not occurred in the Peconic Estuary in the past few years, a whole array of other harmful algal blooms have occurred on an almost annual basis in the Peconic Estuary in recent years, suspected to be fueled by factors including nitrogen pollution. Nitrogen levels have been increasing in the waterbodies of the Peconic every year, mostly because of outdated septic systems that do not adequately remove nitrogen out of wastewater.

The new CCMP will also focus more on climate change, which has become a much more pressing issue over the past decade than it was in 2001.

Updating the CCMP will be a three-year process, the Peconic Estuary Program hopes to have a plan finalized by 2018.

The next scheduled Citizen Advisory Committee meeting will be held on September 13th from 6-8pm at the Suffolk County Community College Culinary Arts and Hospitality Center located in Riverhead's downtown.

COMMUNITY STORMWATER STEWARDSHIP PROGRAM SUCCESS

Over the summer PEP had 3 college interns working on the Community Stormwater Stewardship Program. Over the course of 8 weeks, our interns collected valuable water quality data and assisted with analyzing the results which will help aquaculturists at the Suffolk County Marine and Environmental Learning Center. We appreciated all of their help and look forward to a new group of interns next year.

If you are interested in internships for the summer of 2017, please email peptalk@peconicestuary.org

ACCOMPLISHMENTS OF THE PEP

DEVELOPMENT OF CRITICAL LANDS PROTECTION STRATEGY AND IMPLEMENTATION OF COMMUNITY PRESERVATION FUND TO PROTECT LAND FROM DEVELOPMENT

RIVERHEAD SEWAGE TREATMENT PLANT EFFLUENT TO IRRIGATE INDIAN ISLAND GOLF COURSE

ENACTMENT OF THE SUFFOLK COUNTY FERTILIZER REDUCTION LAW (LOCAL LAW 41-2007)

DEVELOPMENT AND IMPLEMENTATION OF SUBWATERSHED SPECIFIC MANAGEMENT PLANS

CONTINUOUS LONG-TERM MONITORING OF WATER QUALITY AND SEA GRASS DISTRIBUTION

PECONIC RIVER ROCK RAMP PASSAGE IN GRANGEBEL PARK, RIVERHEAD AND INSTALLATION OF EEL AND FISH PASSAGE EDWARDS AVENUE, CALVERTON

IMPLEMENTATION OF PECONIC ESTUARY NITROGEN AND PATHOGEN POLLUTION REDUCTION PLANS AND UPGRADES OF SEWAGE TREATMENT PLANTS

SUPPORT BAY SCALLOP RESTORATION EFFORTS

CAC AMBASSADOR PROGRAM

The purpose of the Citizen's Advisory Committee Ambassador Program is to provide members information about the Peconic Estuary Program, upcoming meetings and scheduled events to share with your community. Together we can spread the message of healthy ecosystems, clean water and ways in which people can participate to reach this common goal.

THE PEP ON CABLEVISION PUBLIC ACCESS

The Peconic Estuary Program recently received a time slot **on Monday's at 7:30pm for half hour segments from October 2016– October 2017** on Cablevision Riverhead Channel 20. We will be broadcasting documents, short videos, PSAs, CAC meetings and our conferences.

CLEAN SWEEP PROGRAM AND S.T.O.P.

CleanSweepNY is a NYSDEC environmental benefit project that provides for the environmentally safe and economic collection and disposal of unwanted or unusable pesticides, golf course chemicals, and mercury-containing devices. S.T.O.P. (Stop Throwing Out Pollutants) is a program where you can drop off your household hazardous materials for proper disposal instead of throwing them away. A list of accepted items for drop-off can be found at toh.li/sanitation-depa.../stop-throwing-out-pollutants.

BIG DUCK EVENT NOVEMBER 5TH

Learn about the benefits of native plantings, raingardens and rain barrels at the PEP native plant garden. Get your hands dirty and help mulch, weed and collect water from the rain barrel and earn how your yard can be eco-friendly. Please bring gardening gloves and garden tools.

SHARE PECONIC ESTUARY POSTS ON FACEBOOK

This is an easy way to help PEP spread the word about what is happening in our estuary. When you share or like our Facebook posts we reach and educate more people.

S.T.O.P. PROGRAM (STOP THROWING OUT POLLUTANTS)

The Stop Throwing Out Pollutants (S.T.O.P.) Program is designed to provide area residents with a safe, environmentally sound method of disposal of the many hazardous materials found in the average home. By bringing such toxins as antifreeze, drain cleaners and pesticides on any of the scheduled S.T.O.P. collection days, you and your family can make a significant contribution to the protection of our precious groundwater supply and the preservation of our bays and estuaries. Please join with us in cleaning our homes of hazardous material and ensuring their proper collection and disposal. Together we can ensure the continued integrity of our fragile ecosystem. -Town of Hempstead Sanitation Dept.

Items Accepted at S.T.O.P.

* Limit 6 in 5 gallon containers only.

Aerosol cans	Kerosene*
Ammonia	Lacquers
Antifreeze *	Latex & Oil-Based Paints
Asbestos (double bagged)	Oven Cleaners
Batteries - Car	Paint Strippers
Batteries - Household	Paint Thinners & Brush Cleaners
Bleach	Photography Chemicals
Bug & Rodent Killers	Polishes & Wood Preservatives
Chemistry Sets	Propane Tanks - 20 lb.
Degreasers	Solvents
Disinfectants	Spot Removers
Drain Cleaners	Swimming Pool Chemicals
Fertilizers with Herbicides	Telephone Books
Fire Extinguishers - One-Time Use	Thermostats (containing mercury)
Flammable Liquids (fire starter, gasoline and diesel fuel)	Tires (car - off rims)
Fluorescent Lamps and CFLs in shatter-proof containers including ballasts	Varnish
	Waste Oil*
	Weed Killers

Items NOT Accepted at S.T.O.P.

Ammunition	Infectious or Medical Waste,
Electronic Recyclable Waste	Sharps
Explosives	Oxygen Tanks
Fire Extinguishers - Commercial	Propane Tanks - larger than 20 Pounds
Fireworks	Radioactive Materials
	Unlabeled Materials

2016 S.T.O.P.

Times and Locations

Southold 9am– 3pm

6155 Cox Lane Cutchogue
November 19th

East Hampton 10am-3pm

Montauk Transfer Station
off Montauk Highway,
Montauk October 15th

Riverhead 8am– 3pm
Town Hwy Dept, Yard 1177
Osborn Ave

October 15th

Brookhaven 7am-3pm
(Mon-Fri)

7am– noon (Saturdays)

350 Horseblock Road #A
Brookhaven

Shelter Island 9am– 1pm

Shelter Island Recycling
Center

North Menantic Road
(Hazmat Area)

First Saturday of every
month

Town of Southampton
9am– 2pm 30 Jackson Ave
Hampton Bays

October 22nd

1370 Major's Path, North
Sea

THE PECONIC ESTUARY PROGRAM

One of the 28 EPA designated “Estuaries of National Significance”, the Peconic Estuary became a member of the National Estuary Program in 1993. PEP is an innovative partnership of local, state, and federal governments, citizen and environmental groups, businesses and industries with a common goal of protecting and restoring the Peconic Bay.

For more information on PEP programming and ways to get involved please contact Christie Pfoertner 631-727-7850 peptalk@peconicestuary.org

THE PEP STAFF

Dr. Alison Branco: Director

Sarah Schaefer: Program
Coordinator

Christie Pfoertner: Outreach
and Education Coordinator

FALL AND WINTER EVENTS

Autumn Nature Hike

Saturday September 17th 10:00am

Kick off National Estuaries Week and the beginning of fall with a nature hike through the Northwest Woods of East Hampton. This 3 mile guided hike provides views of our beautiful estuary as well as information **about the Peconic Estuary's historical land use of the Northwest Settlement.**

A Day in the Life of the Peconic Estuary

Friday October 21st

The Peconic Estuary Program will be partnering with the coordinators of a Day in the Life and serve as environmental educators for students who will simultaneously collect scientific data at various locations on a single day in the Peconic Estuary, Carmans River and Nissequogue River. The data is analyzed and used to portray the status of the waterways, the results of which are available to the public online. To learn how to get your school involved please contact melissa.griffiths@scwa.com

Native Plant Garden Workshop

Saturday November 5th 1:00pm

Rain Date Sunday November 6th 1:00pm

Learn about the benefits of native plantings, raingardens and rain barrels at the PEP native plant garden. Get your hands dirty and help mulch, weed and collect water from the rain barrel and earn how your yard can be eco-friendly. Please bring gardening gloves and garden tools. *The Big Duck Flanders Road Rt. 24 Flanders, NY*

Audubon Marine Bird Count

Saturday, December 31st

Snow Date: January 7th

Join PEP and the Audubon Society for the annual Christmas Bird Count. With your help, the data will fuel important science and conservation work. This nation-wide collaboration occurs at many locations within the Peconic Estuary. Choose your site preference (Greenport, Southold, Shelter Island or Orient Point)

The Peconic Estuary Program
SCDHS— Office of Ecology
360 Yaphank Avenue
Suite 2B
Yaphank NY 11980
Phone: 631-852-5750
E-mail: peptalk@peconicestuary.org



2016 S.T.O.P.

(Stop Throwing out Pollutants)

Times and Locations

Drop off your household hazardous materials at one of the dates listed below.

Southold 9am– 3pm

6155 Cox Lane Cutchogue

May 21st, August 20th, November 19th

East Hampton 10am-3pm

Montauk Transfer Station off Montauk Highway, Montauk **October 15th**

Riverhead 8am– 3pm

Town Hwy Dept, Yard 1177 Osborn Ave
May 14th, October 15th

Brookhaven 7am-3pm(Mon-Fri)

7am– noon (Saturdays)

350 Horseblock Road #A Brookhaven

Shelter Island 9am– 1pm

Shelter Island Recycling Center
North Menantic Road (Hazmat Area)
First Saturday of every month

Town of Southampton 9am– 2pm

30 Jackson Ave Hampton Bays

October 22nd

1370 Major's Path, North Sea

April 23rd

1404 Bridgehampton Turnpike

August 27th

66 Old County Rd, Westhampton

June 25th

Who is the PEP?

The Peconic Estuary Program (PEP) is an innovative partnership of local, state and federal governments, citizens and environmental groups, businesses and industries, and academic institutions.

As part of the National Estuary Program (NEP), the Peconic Estuary Program is charged with developing and implementing a watershed-based comprehensive management plan to address issues of concern and protect the health of the Peconic Estuary



Contact

423 Griffing Avenue, Riverhead NY 11901

Phone: 631-727-7850

Email: peptalk@peconicestuary.org

Web: peconicestuary.org

Simple Ways to Protect the Peconic Estuary



*Protecting and Restoring Long Island's
Peconic Bays*

What are BMPs?

Best Management Practices (BMPs) are ways we can change our behavior on land to prevent or reduce pollution making its way into our groundwater, bays and rivers.

Best Management Practices are simple, low tech and beneficial to the health of human and marine life. Using these practices will help protect water quality and support healthier ecosystems by protecting our estuary against pollutants such as fertilizers, pesticides, oil and gas products, and hazardous materials.

Do at Home

Plant native wildflowers, grasses and trees to reduce or eliminate fertilizer & pesticide use.

Use natural cleaning products in the home, yard and on the boat

Bring old medications to local police stations for proper disposal.

Wash your car over a patch of grass to reduce pollutants entering the bay via stormwater runoff.



Out and About

Stay off beach dunes and be mindful of fenced off areas.

Throw out any garbage you bring to the park or beach.

Avoid eelgrass meadows when fishing or boating.

Use boat pump-out stations for waste disposal.

Abide by speed zones to reduce wave induced erosion.

Clean up your pet's waste.

Get reusable grocery bags and water bottles to reduce plastic consumption.

Who is the PEP?

The Peconic Estuary Program (PEP) is an innovative partnership of local, state, and federal governments, citizen and environmental groups, businesses and industries, and academic institutions. In 1993, the Peconic Estuary became the 20th of 28 estuaries in the nation to receive the designation as an “Estuary of National Significance” by the U.S. Environmental Protection Agency (EPA).

As part of the National Estuary Program, the Peconic Estuary Program was charged with developing and implementing a watershed-based comprehensive management plan, known as the Peconic Estuary Comprehensive Conservation and Management Plan (CCMP), to conserve and protect the Peconic Estuary.

Contact Us

If you have any questions, comments or concerns please feel free to call our office or send an e-mail to peptalk@peconicestuary.org

360 Yaphank Avenue
Yaphank NY 11980
Phone: 631-852-5805
Web: peconicestuary.org



Protecting and Restoring Long Island's Peconic Bays

Why We Should Care About The Peconic Estuary



Estuary: a semi-enclosed coastal body of water, where saltwater mixes with freshwater creating important nursery and spawning habitats for a variety of marine animals including finfish and shellfish.



**Peconic Estuary
PROGRAM**

Protecting & Restoring Long Island's Peconic Bays

The Peconic Estuary

The Peconic Estuary watershed begins at Brookhaven National Lab with the headwaters of the Peconic River, spans the several bays from Flanders to Gardiners, and ends in Block Island Sound between Plum Island and Montauk Point.



Estuaries are the most productive ecosystems on earth, containing more life per square inch than the lushest rainforest canopy. The health of the estuary is directly related to our health and livelihood.

Updating the Comprehensive Conservation and Management Plan (CCMP)

Many changes have occurred in the Estuary in the past 15 years since the first CCMP was published. Some of the actions PEP determined were priorities back in 2001 are not as relevant now, it is time to step back and assess our accomplishments so far and refocus on the most important environmental challenges facing the Peconic Estuary.

To update the CCMP we will be gathering data from scientists and input from the all levels of government and all sectors of the community surrounding the Peconic Estuary to identify which topics are of the highest priority and should be addressed first.

Current Topics of Concern

- ◆ Harmful Algal Blooms
- ◆ Nitrogen & Excessive Nutrients
- ◆ Climate Change and Coastal Resiliency
- ◆ Critical Lands Protection
- ◆ Contaminants
- ◆ Habitat Restoration

Get Involved

Filling out a CCMP survey or attending a meeting are two great ways to let us know what is most important to you. Our Citizen's Advisory Committee (CAC) is always open to welcome new members!

Benefits of the Estuary

Recreational



Whether it's kayaking, hiking, fishing or even just taking a walk on the beach, the Peconic Bays are just the place to relax. Protecting the estuary helps to ensure future generations have a beautiful, safe place to enjoy the outdoors.

Economical

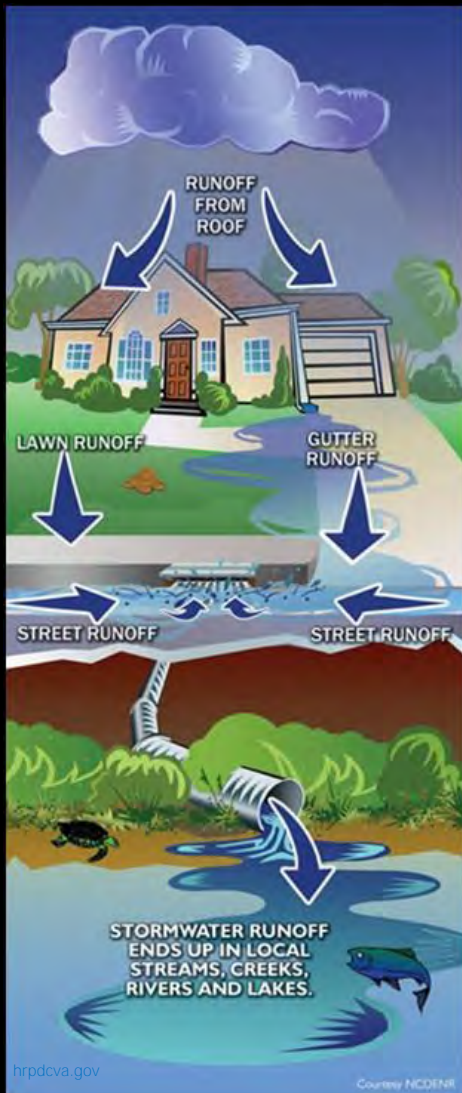


The estuary provides jobs to many people; ranging from a riverfront business owner, an environmentalist to a fisherman. People from all over come to the area to enjoy the great food and beautiful beaches.

Educational



The Peconic Bays are a great tool to teach us about the environment and the creatures that live there. Help us keep the estuary healthy and continue to educate people about Long Island's East End.



- Excess nutrients from fertilizers can cause harmful algal blooms. This can reduce oxygen levels in the water which is essential for marine life.
- Bacteria and pathogens from pets and leaking septic systems can restrict shellfish harvest.

Other ways to reduce Stormwater Pollution

Purchase time-release fertilizers and reduce fertilizer and pesticide use.

Wash your car on the lawn using recycled water.

Pick up pet waste and dispose of it in the toilet or in the trash.

Divert water from your gutters to the lawn or garden or install a rain barrel.

Replace pavement with native plants.



Peconic Estuary Program

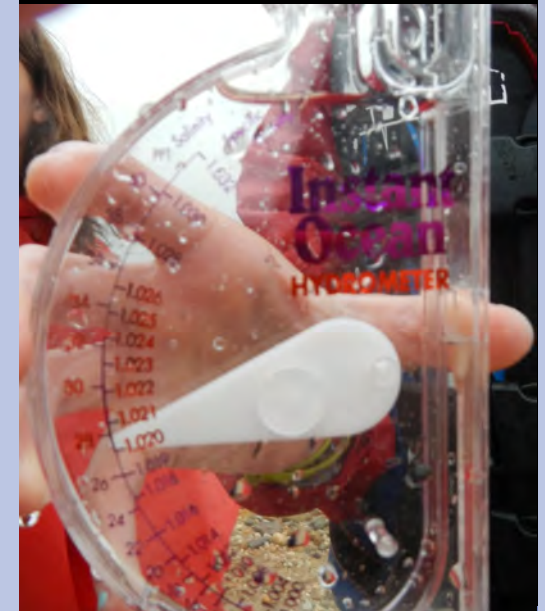
SCDHS Office of Ecology
360 Yaphank Ave,
Yaphank NY 11980

Phone: 631-727-7850 X 353

Email: peptalk@peconicestuary.org

Peconicestuary.org

Community Stormwater Stewardship Program



Help protect your local waterways by learning to monitor water quality



What is Stormwater Pollution?

Stormwater is rain or melting snow that flows over roads, parking lots, driveways, and lawns entering a storm drain system or discharged directly into nearby waterbodies.

This water carries pollutants like motor oil, sediment, pet waste, garbage, fertilizers and pesticides that can be harmful to aquatic life and create human health risks.

About the Program

The Peconic Estuary Program started a water quality monitoring program to obtain baseline data on water quality for aqua-culturists at the Suffolk County Marine & Environmental Learning Center in Southold. This program provides a hands on opportunity to improve the



Measuring dissolved oxygen, nitrates, temperature and pH consistently can help indicate when there is a problem with water quality.

healthy of our bays. Volunteers can participate based on their own availability.

In the future, we hope to expand the program to include multiple locations around the Peconic Estuary.

Training/Monitoring

Training sessions are held every year throughout the spring, summer and fall. If you have missed the training sessions or would like to find out specific dates please e-mail peptalk@peconicestuary.org. We look forward to discussing the program in greater detail with you.

Stormwater pollution is considered a non-point source. This means that the pollution comes from many areas instead of a single source like a pipe making solutions more difficult. We need everyone to do their part to keep our bays healthy.



2016 S.T.O.P.

(Deje de tirar los contaminantes!)

Times and Locations

Disponga de materiales nocivos y peligrosos que utiliza en su hogar en los sitios y fechas indicados a continuación

Southold 9am– 3pm
6155 Cox Lane Cutchogue
21 de mayo, de noviembre

East Hampton 10am-3pm
Estación de transferencia de desechos en Montauk. 15 de octubre

Riverhead 8am– 3pm
Departamento de carreteras Estación
1177 Osborn Avenue
14 de mayo, 15 de octubre

Brookhaven 7am-3pm (Lunes a Viernes) 7am-miércoles (sábados)
350 Horseblock Road #A Brookhaven

Shelter Island 9am– 1pm
Centro de reciclaje de Shelter Island
North Menantic Road (Hazmat Area)
El primer sábado de cada mes.

Town of Southampton 9am– 2pm
30 Jackson Ave. Hampton Bays:
22 de octubre

¿Qué es el PEP?

El Programa del Estuario de Peconic, PEP es una organización innovadora y con carácter de cooperación de la cual son miembros los gobiernos locales, estatales, federales, residentes, grupos ecologistas, empresas, industrias e instituciones académicas.

Es parte del Programa Nacional de Estuarios (NEP) y tiene como encomienda el desarrollo e implementación de un plan de gestión integral de la cuenca para abordar cuestiones de interés y así proteger la salud del estuario de Peconic.



423 Griffing Avenue, Riverhead, NY 11901
Teléfono: 631-727-7850
E-mail: peptalk@peconicestuary.org
Web: peconicestuary.org

Como proteger el estuario Peconic



Protegiendo y restaurando la bahía Peconic en Long Island

Cuáles son las mejores prácticas para el manejo del estuario?

Las mejores prácticas para el manejo del estuario son cambios en nuestro comportamiento que ayudan a prevenir o reducir la contaminación que se absorbe en los suelos y se transporta a nuestras aguas subterráneas, bahías y ríos.

Estas mejores prácticas son simples, de tecnología sencilla y benefician la salud de los seres humanos y la de la vida marina.

El uso de estas prácticas ayudará a proteger la calidad del agua y la salud de los ecosistemas y a reducir el impacto de los contaminantes tales como fertilizantes, pesticidas, productos de petróleo y materiales

En su hogar:

Siembre flores y hierbas nativas y árboles para así reducir o eliminar el uso de fertilizantes y pesticidas.

Use productos de limpieza naturales en el hogar el patio y en los botes.

Lleve los medicamentos expirados a las comisarías para una eliminación correcta.

Lave su auto sobre un área de hierba para evitar que los contaminantes de los detergentes fluyan hacia la bahía.



Cuando este en las áreas fuera de su hogar:

Manténgase alejado de las dunas playeras y respete las zonas cercadas o con barreras.

Tire la basura en un receptáculo adecuado luego de disfrutar de un día en el parque o en la playa.

Evite las praderas de hierba marina cuando este pescando o navegando en un bote.

Utilice las estaciones de bombeo para la eliminación de los residuos sanitarios de su bote.

Acate las zonas de límite de velocidad para así reducir la erosión inducida por la onda de su bote.

Recoja los desechos de su mascota.

Utilice bolsas reusables en el supermercado y botellas de agua reusables para reducir el consumo de plástico.

Involúcrese!

Usted nos puede ayudar a actualizar el Plan de varias formas. Una de ellas es llenando una encuesta o asistiendo a unas de las reuniones públicas patrocinadas por el PEP. Estas son algunas formas a través de las cuales usted nos puede informar sobre los temas importantes que afectan el estuario. El Comité Asesor de nuestra Comunidad (CAC) está siempre disponible para acoger a nuevos miembros!

¿Qué es el PEP?

El Programa del Estuario de Peconic, PEP es una organización innovadora y con carácter de cooperación de la cual son miembros los gobiernos locales, estatales, federales, residentes, grupos ambientalistas, empresas privadas, industrias e instituciones académicas.

En 1993, el estuario Peconic se designó entre 28 estuarios en la nación como uno "de importancia nacional" por la Agencia de Protección Ambiental de EE.UU. (EPA). Como parte del Programa Nacional de Estuarios, el Programa del Estuario Peconic (PEP) fue encargado de desarrollar e implementar un Plan Comprensivo de Manejo Ambiental enfocando las cuencas hidrográficas, para así para conservar y proteger el estuario de Peconic.

Comuníquese con Nosotros:

Si tiene alguna pregunta, comentario o inquietud, no dude en llamar a nuestra oficina o enviar un e-mail a: peptalk@peconicestuary.org

360 Yaphank Avenue

Yaphank NY 11980

Teléfono : 631-852-5805

Web: peconicestuary.org



Que es un estuario?



Un estuario es un cuerpo costero semi-cerrado de agua, donde el agua dulce se mezcla con agua salada creando hábitats importantes y criaderos para una variedad de animales marinos, incluyendo peces y mariscos.

Un estuario puede extenderse tierra adentro en el cauce de un río debido a los efectos de las mareas y marejadas ciclónicas. Los estuarios son los ecosistemas más productivos del planeta, y contienen más vida por pulgada cuadrada que el dosel de un exuberante bosque lluvioso. El bienestar del estuario afecta directamente nuestra salud y sustento.

Qué importancia tiene el estuario Peconic y su cuenca?

La cuenca del estuario del Peconic comienza en el área donde están localizados los Laboratorios Nacionales en el pueblo de Brookhaven en la cabecera del río Peconic. Se extiende desde las bahías de Flanders y Gardiner y termina en el Estrecho de Block Island entre Plum Island y Montauk Point.



Actualización del Plan Comprensivo de Manejo Ambiental del Estuario de Peconic. Producido por PEP (Programa del Estuario de Peconic)

Muchos cambios han ocurrido en el estuario en los últimos 15 años desde la publicación del Plan Comprensivo de Manejo Ambiental del Estuario Peconic. Las prioridades que el PEP (Programa del Estuario de Peconic) identificó en aquella época del 2001 no tienen tanta vigencia en la actualidad. Debemos dar un paso atrás para evaluar nuestros logros hasta el día de hoy y enfocarnos en los problemas ambientales más importantes que enfrenta nuestro estuario. Para poder actualizar el Plan estaremos compilando datos suministrados por los científicos e incluiremos además las aportaciones de todos los niveles del gobierno y todos los sectores de la comunidad que rodea la cuenca del río Peconic. Así podremos identificar cuáles son los temas de prioridad y como deben estudiarse inicialmente.

¿Por qué nos debe importar el estuario de Peconic?

- ◆ Porque así protegemos y restauramos la bahía Peconic
- ◆ Porque estaremos conscientes del impacto de las floraciones de algas nocivas
- ◆ Porque estaremos conscientes del efecto de los contaminantes
- ◆ Porque estaremos al tanto del problema del exceso de nitrógeno y otros nutrientes
- ◆ Porque estaremos conscientes de los efectos del cambio climático y sus efectos en el área costera
- ◆ Porque estaremos conscientes de los beneficios de mejorar los

Beneficios del Estuario

Recreación



Ya se trate de un paseo en kayak, senderismo, pesca o simplemente el dar un paseo en la playa, la bahía Peconic es un lugar ideal para relajarse. La protección del estuario asegura que las generaciones futuras tengan un lugar hermoso y seguro donde disfrutar de actividades recreativas al aire libre.

Económico



El estuario proporciona oportunidades de empleo a muchas personas como por ejemplo el propietario de un negocio cerca del río, un ambientalista o un pescador. Muchos turistas también visitan el área para disfrutar de la buena comida y las hermosas playas.

Educacional



El estuario Peconic es un recurso que podemos utilizar para educarnos sobre el medio ambiente y la flora y la fauna que allí viven. Ayúdanos a mantener el estuario sano y a la misma vez continuar educando a la comunidad sobre esta área única localizada en el extremo este de Long Island!

Citizen Science: Engaging and Retaining Participation Through Science-based Monitoring



Presenting Author: Christie Pfoertner Co-Authors: Sherryll Huber-Jones, Julie Nace, Sarah Schaefer, Alison Branco, Matthew Sclafani, Scott Curatolo-Wagemann

Summary

The Peconic Estuary Program (PEP) manages several citizen science projects to engage and educate the public. In addition to providing valuable information to the program, citizen science also offers the public an opportunity to participate in the field with data collection for conservation-based monitoring. Without the help of volunteers, this volume of information collected and disseminated would be impossible.

Community Stormwater Stewardship

As water quality continues to face challenges across Long Island, protecting and restoring our aquatic ecosystems has become a top priority. PEP initiated a Water Quality Monitoring Pilot Program. Volunteers help collect environmental parameters including temperature, pH, dissolved oxygen, nutrients and water clarity, which are all important indicators of the health of our local bays. Monitoring is conducted in a public friendly fashion using test strips that are easy to read. Currently, we have one pilot sampling location but we intend to expand this program to include multiple locations estuary-wide.

Step 1



Volunteers attend a lecture explaining the program and water quality issues.

Step 2



A hand-on training session allows volunteers to be familiar with the equipment.

Step 3



Volunteers sign up and sample water quality parameters based on their availability.

Step 4



Data is entered and analyzed by staff. This information will be made public for all to use.

Challenges: Some attendees are only interested in testing water bodies closest to their homes, not at our designated facility. We inform those individuals where to purchase test strips and encourage them to share the results to help broaden the program range.

Citizens Action Committee Ambassadors

The PEP Citizens Advisory Committee (CAC) members meet quarterly to discuss concerns, express ideas and actively participate in conservation plans for the Peconic Estuary. The Citizen Action Committee Ambassadors Program was established to provide CAC members more detailed information on the Peconic Estuary Program, the program's accomplishments and future plans to discuss with the community. Ambassador packets are distributed with up to date talking points quarterly.

Challenges	Resolution	Results
<ul style="list-style-type: none">Members did not seem interested in taking on larger roles within the ambassadorship program other than gaining additional information to discuss at parties.	<ul style="list-style-type: none">Alter tasks to be less demanding on members already busy lives.Assign tasks in areas most convenient for members. Example: Hang fliers at their local coffee shop.	<ul style="list-style-type: none">Members were more likely to take on smaller tasks.Holding accountability through a sign-up sheet has increased member participation.

Future plans: The PEP has already begun efforts to recruit Junior CAC members. With the assistance of the PEP, environmental clubs would design mini projects to learn about and help the Peconic Estuary.

Volunteer Alewife Monitoring

The PEP teams up the local NGO, Seatuck Environmental, every spring to recruit volunteers for monitoring the abundance and location of Alewife, (*Alosa pseudoharengus*) during spawning season. Alewife are an important source of food for wildlife and use rivers to move upstream to spawn. Unfortunately, many rivers are blocked by dams. This information has lead to fish passage and dam removal to increase populations.



Volunteer Horseshoe Crab Monitoring

In collaboration with Cornell Cooperative Extension, the PEP assists with the Horseshoe Crab Monitoring network at two sites located in the Peconic Estuary. Despite horseshoe crabs being an important source as bait for commercial fisheries, their eggs are a vital source of nutrition for wildlife. Little is known about their populations on Long Island. During sampling, horseshoe crabs are counted and tagged to assist in data collection that is used for conservation management efforts by New York State.

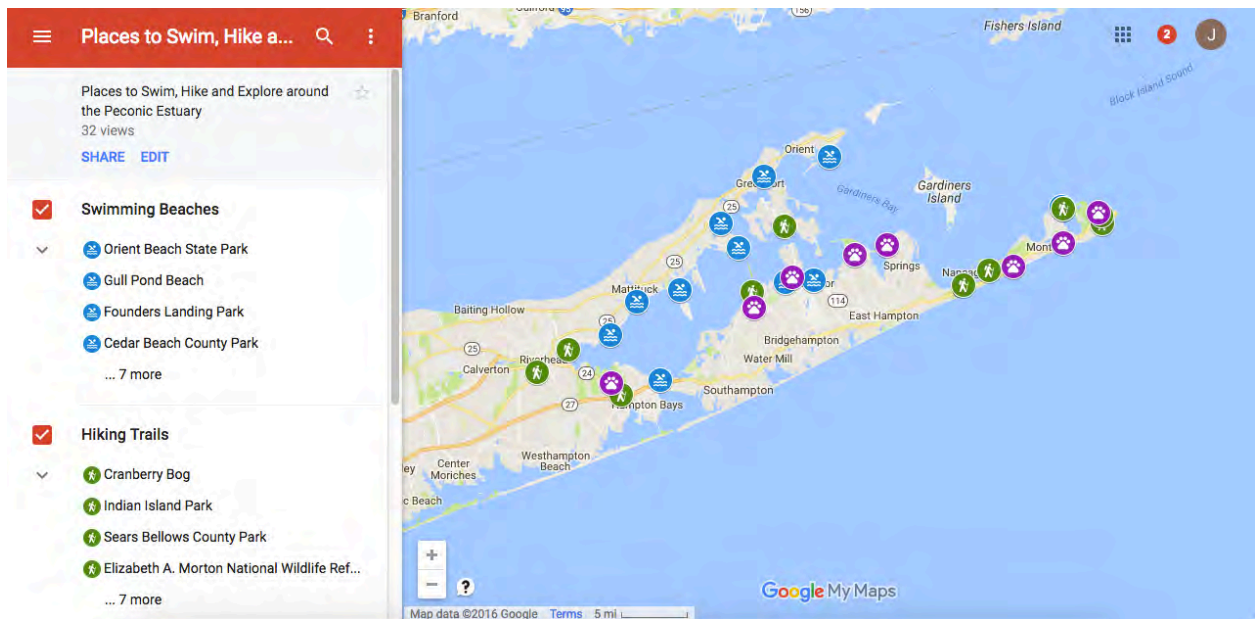
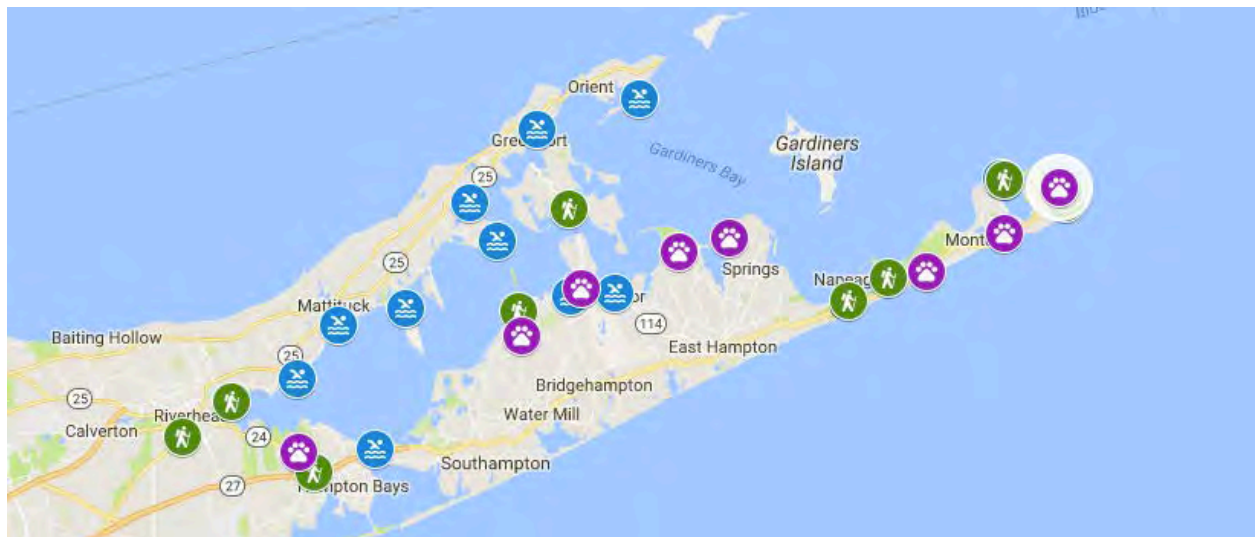
A Day in the Life of the Peconic Estuary

The PEP is part of a citizen science single day program that includes fifteen organizations and 1,000 students participating in hands-on scientific data collection at multiple sampling sites across Long Island including more than ten sites in the Peconic Estuary. In order to tackle water quality issues we need to inspire younger generations to become stewards of our ecosystems.



Conclusions

These citizen science projects contribute to monitoring of the water quality and natural resources of the estuary and aid in habitat restoration and conservation priorities for the program. Additionally, PEP has discovered that by engaging the public with focused hands-on monitoring needs, the program can retain public interest and participation at a higher level than with other traditional education and outreach methods.



Kayaking, Canoeing an...

Explore the best places to paddle in the Peconic Bays, kayak launch sites, where to find rentals and even exercise classes

43 views

SHARE

EDIT

Top Places to Paddle in the Peconic ...

Coeclles Harbor Marine Water Trail, Shel...

Hither Hills State Park

Orient Beach State Park

Peconic River Starting Point

Peconic River

Launch Sites

Accabonac Harbor, East Hampton

Causeway Beach, Cutchogue

Cedar Beach County Park, Southold

Cedar Point County Park, East Hampton

... 9 more

A map of the Peconic Bays area in Long Island, New York, showing various kayak launch sites marked with blue and yellow icons. The map includes labels for locations such as New Haven, West Haven, Orient, Gardiners Island, East Hampton, Southampton, and Montauk. The Peconic River is also visible. The map is part of a Google My Maps interface, with a search bar at the top and a list of launch sites on the left. The map shows the coastline of the Peconic Bays, with several launch sites marked along the shore. The map is centered on the Peconic Bays, showing the coastline from New Haven in the north to Montauk in the south. The map includes labels for various locations, including New Haven, West Haven, Orient, Gardiners Island, East Hampton, Southampton, and Montauk. The Peconic River is also visible. The map is part of a Google My Maps interface, with a search bar at the top and a list of launch sites on the left. The map shows the coastline of the Peconic Bays, with several launch sites marked along the shore.



PEP Citizens Advisory Committee Special Topic Meeting for

Members of the Community & Seasonal Residents

Monday August 22, 2016 5:00-8:00pm

Stony Brook South

Nitrogen and our Impacts on the Estuary

*Presentations and Discussions on
the Health of our Bays, Estuaries,
and Harbors*



The Peconic Bay Flanders, New York

Agenda:

5:00pm Introductions — Kevin McDonald, The Nature Conservancy and CAC Chairman

5:15pm Who is the Peconic Estuary Program — Dr. Alison Branco, Peconic Estuary Program Director
Presentations by local experts and advocates:

5:30pm The Status and Trends of our Local Bays

A look at the declining health of our marine waters and the cause and effects of nitrogen pollution — Chris Clapp, The Nature Conservancy

6:00pm The Role of the PEP, Local Townships and Suffolk County in Controlling Nitrogen Pollution

A background on how nitrogen has been managed in the past, what the first PEP Comprehensive Conservation and Management Plan says about it, and changing the future of nitrogen pollution with new information, science, and technology — Dr. Alison Branco, Peconic Estuary Program and Justin Jobin, Suffolk County Department of Health Services

6:30pm Research on New Technology for Removing Nitrogen from On-Site Systems

An introduction to Stony Brook University's Center for Clean Water, goals, and initiatives — Dr. Harold Walker, The Center for Clean Water Technology

7:00pm Local plans for Water Quality Improvements

Information on the Community Preservation Fund — Jeremy Samuelson, Concerned Citizens of Montauk



2016 Annual Conference Summary: Nitrogen and our Impacts on the Estuary

The Citizen's Advisory Special Topics Meeting entitled: Nitrogen and our Impacts on the Estuary served as the annual conference for the 2016 contract period. The conference included presentations from local experts and advocates from The Nature Conservancy, the Suffolk County Department of Health Services, The Center for Clean Water Technology and Concerned Citizens of Montauk. Together, the presentations covered the amount of Nitrogen in the estuary, why it is an issue, what the local government is doing to solve the issue, what new technologies are being developed to reduce nitrogen loading and how local organizations are involved in the reduction of Nitrogen to the Peconic Estuary. This group of presenters gave a well-rounded, big-picture understanding of the issue and how the issue is being tackled on many platforms.

The conference was held on a Monday evening during the summer as a way to reach seasonal residents and visitors in addition to permanent residents at the Stony Brook Southampton Marine Science Research in Southampton. In the past, CAC meetings were not held during the summer due to scheduling conflicts of members, however a lecture style meeting, which members have shown interest in, Over 65 people attended the conference including seasonal residents, visitors, and current and new CAC members successfully achieving the audience we intended to reach and far surpassing our anticipated attendance. Attendees said it was the "best CAC meeting I've ever been to". The feedback and turnout at the conference provided us with a better understanding of the style of meetings people prefer and which topics would be most appealing.

APPENDIX OF DELIVERABLES

SECTION 3: GREEN INFRASTRUCTURE HOMEOWNER REBATE PROGRAM AND RESIDENTIAL NUTRIENT & TOXIN MANAGEMENT

- A. HOMEOWNER REWARDS FLYERS
- B. HOMEOWNER REWARDS APPLICATION
- C. FERTILIZER SURVEY
- D. HOMEOWNER REWARDS PROGRAM REPORT
- E. DEMONSTRATION RIVERHEAD RAINGARDEN COMPILATION



Get money back for planting natives!

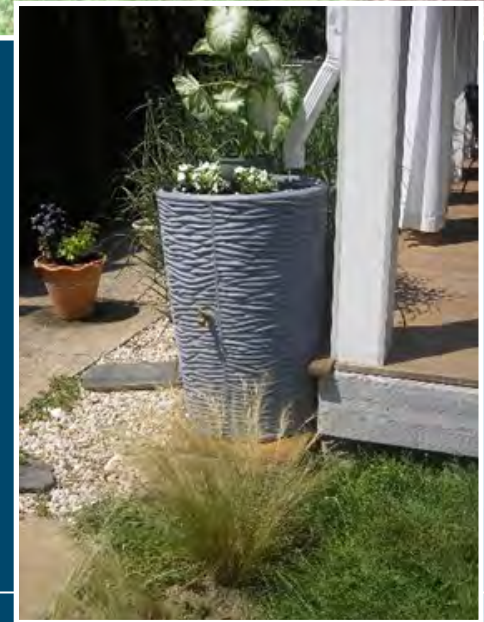
- Plant a native garden or rain garden
- Install a Rain barrel

Get up to \$500 for participating in nature based solutions for water quality issues.

Email: peptalk@peconicestuary.org

Seem too good to be true?

You must live in the Peconic Estuary watershed!



Call (631) 727-7850 ext 337



\$500 HOMEOWNER REWARDS PROGRAM

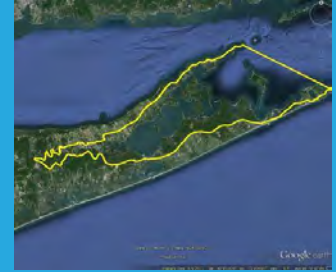
RECEIVE A REIMBURSEMENT FOR INSTALLING RAIN GARDENS, RAIN BARRELS OR PLANTING NATIVE PLANTS

In order to help reduce the amount of pollutants entering our waterways, Peconic Estuary Program is offering homeowners that live within the Peconic Estuary watershed up to \$500.

Rain gardens and native plantings must be 50sq. ft. minimum and rain barrels must be at least 50 gallons with mosquito protective netting. For any questions about the rewards program please call us at 631-727-7850x337 or e-mail rewards@peconicestuary.org

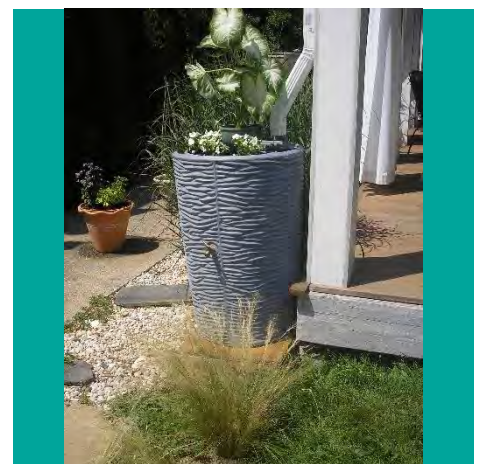


Visit our website
PeconicEstuary.org
to see if you qualify



Rain Barrels collect untreated polluted water that would otherwise run off into our bays

Rain Gardens and Native Plants trap rain to recharge the groundwater



HOMEOWNER REWARDS PROGRAM HOW TO...

So you've decided you want to participate in our Rewards Program. Here are some tips on how to get started and frequently asked questions.



Application Process

1. Visit our website (peconicestuary.org) to ensure your property is located within the Peconic Estuary Watershed boundary.
2. Download the rewards application from our website to be filled out and sent by e-mail to rewards@peconicestuary.org or by mail to 423 Griffing Avenue Riverhead NY 11901
3. Once we receive your application we will send a confirmation e-mail letting you know if you qualify and to move forward with your project.
4. After you have finished your project in its entirety you will be required to send itemized receipts and photos of the project to ensure proper installation.
5. You will receive a confirmation e-mail letting you know your project has been sent for processing and should receive a check within 4-6 weeks.

Frequently Asked Questions

1. **Is there a limit on how many rain barrels I can purchase?** You can purchase up to 5 barrels. Each individual rain barrel receives a maximum of \$100.
2. **What is conservation landscaping?** Replacing turf, lawn grass, pavement or other impermeable surfaces with native plants.
3. **Can I plant a native garden and install a rain barrel?** Yes, you may combined the two projects however no more than \$500 will be reimbursed in total.
4. **Can my landscaper do the project for me?** Yes, but the reimbursement transaction is handled with the homeowner not the landscaper.



Peconic Estuary PROGRAM

Homeowner Rewards Program



Mitigating storm water runoff into our bays can help improve water quality, reduce nutrient pollution, and help restore our natural resources.

The Peconic Estuary Program (PEP) is providing a unique opportunity for if you live within the Peconic Estuary watershed area. The PEP will provide financial rewards for homeowners who remove turf and pavement, and add native vegetation areas and/or rain barrels to their properties.

Homeowners can earn up to \$500 to offset the expense of installing green infrastructure on their properties including rain barrels, rain gardens, and native plant gardens. Water filtered through the sand and gravel within these gardens is dramatically cleaner when it enters our aquifers and storm drains. Rain barrels offer an opportunity to catch rainwater for reuse in gardens rather than running down paved surfaces and into storm drains.

Learn more about your local estuary and all its amazing bays, while improving your property and reducing pollution from entering local waters. Funds are limited and will be granted on a first come first served basis, so don't miss out! PeconicEstuary.org

Rain Gardens, Native Plantings, Rain Barrels



Land use is directly tied to the health of our bays!

Benefits of program to our marine ecosystems



Nutrients and Chemicals

Virtually everything that enters a storm water drain in the Peconic Estuary watershed empties directly into the bays- including excess fertilizer and pesticides from our yards. Harmful algal blooms and marine life die-offs have been linked to an excess of nutrients and other harmful chemicals in the Peconic Bay.



Habitat and Natural Resources

Clean water promotes a bountiful habitat for fish and shellfish. Ninety percent of our local fisheries depend on estuaries for a diverse number of commercially and recreationally important marine species. Improving water quality in the Peconic Bay is everyone's responsibility.

Details and How to Apply

For more information please visit PeconicEstuary.org



#1 Submit the attached application and fertilizer use surveys

#2 Upon approval, construct your project

#3 Submit project for final approval

#4 Receive your rebate check up to \$500

(photo Google Earth)

Guidelines

Natural Vegetation and Rain Garden Installation

Replace pavement, turf grass, or lawn with native or "native compatible" plant species only. Minimum size of garden: 50 square feet. Maximum rebate per garden installation: \$500 for soil mulch and native plants only. Receipts must be provided.

<http://www.raingardennetwork.com/build.htm>

<http://www.peconicestuary.com/projectdetails.php?pid=439&title=Peconic%20Estuary%20Rewards%20Program>

Rain Barrel Installation

Install based on manufacturers guidelines or follow DIY instructions. Mosquito netting must be included. Use appropriate mosquito protection attached to top of rain barrel. Minimum size: 50 gallons Maximum rebate per barrel: \$100/barrel or at cost

<http://www.rainbarrelguide.com/how-to-install-rain-barrels/>

Residents of Brookhaven, East Hampton, Riverhead, Shelter Island, Southampton, and Southold Townships who live within the Peconic Estuary watershed are eligible. Please contact the PEP staff office for further information.
PeconicEstuary.org

**Please send completed application and survey to Rewards@peconicestuary.org or
Peconic Estuary Program Cornell Cooperative Ext.
423 Griffing Avenue Riverhead, NY 11901 (631) 727-7850 ext. 337**



Peconic Estuary Rewards Program Application Form
(Please read guidelines and disclaimer before beginning application.)

Basic Information

Name:
 Project Address:
 Mailing Address (if different):
 Phone:
 Email:
 Building Type (e.g. single family residential):

Specific Project Description (Please provide all information requested below for each project you are proposing.) For more information please visit PeconicEstuary.org

1. Native Plant and/or Rain Garden Installation:

Dimensions:
 Describe location of project (e.g. back of house on east corner):
 Estimated cost:

2. Rain Barrel Installation:

Size of rain barrel:
 Location to be connected:
 Number of rain barrels:
 Estimated cost:

Project Cost (Estimate)

Total Estimated Cost:

Rebate Requested:

Rewards are available up to the maximum allowable, or the total cost per project, whichever is lower.

Example Project	Size	Unit Cost	Total	Allowable
<i>Example: Raingarden (50 sq. ft.)</i>	50 sq. ft.	\$250/50 sq. ft.	\$250	\$250
<i>Example: Rain Barrel (50 gl.)</i>	1 Barrel	\$100/Barrel	\$100	\$100
Totals				\$350

Project	Size	Unit Cost	Total	Allowable Reward
Totals				

|
|

Please provide a sketch of the proposed project here.

In completing this application, have you included:

- ☐ Project Description and Sketch
- ☐ List of native plants being used for Natural Vegetation and/or Rain garden projects
- ☐ Signed and read disclaimer
- ☐ Fertilizer Survey

Disclaimer:

Peconic Estuary Program and its partners are not responsible for the future of the project, or any problems associated with the project. If an application is approved, the rebate will be dependent upon approval of receipts and invoices for appropriate supplies/equipment only. One check will be issued per individual and property address. Please allow 4-6 weeks after final project approval for reimbursement. The applicant is responsible for ensuring that all projects meet all code requirements. By signing this application, you are verifying the accuracy of all above information, and asserting that you own the property or have permission from the property owner, and are confirming that you were not mandated to complete this project. You are providing your permission for the Peconic Estuary Program and its partners to use photos of your property in relevant publications. You are also providing permission for a staff member to visit the property to physically observe the project site for documentation purposes. Your signature below also states that you will maintain the project for as long as possible and avoid the use of pesticides and fertilizer. Your willingness to keep a small PEP sign visible on your property throughout the next spring/summer/fall season is appreciated. By signing below, you are acknowledging the above disclaimer. Please sign and date here:

X _____ Date _____

Please send completed application and survey to rewards@peconicestuary.org or
Peconic Estuary Program, Cornell Cooperative Ext. 423 Griffing Avenue Riverhead, NY 11901
PeconicEstuary.org 631-7247-7850 ext.337



Homeowner Questionnaire: Fertilizer & Pesticide Use

1. Please describe your landscaping practices. (I.e. just mowing, organic fertilizer/pesticides, conventional fertilizer/pesticides, etc.)

2. Approximately how many acres is your lawn? _____

3. How often do you fertilize your lawn? _____

4. What is the primary motivation for fertilizing your lawn?

5. What would motivate you to pursue an organic landscape?

6. Do you know the consequences of excess fertilizer/pesticides in marine waters? Describe.

7. Do you know the health risks associated with landscape pesticide use? Describe.

8. Are you aware of any town/county/state fertilizer bans? Describe.

9. Estimate your current yearly landscaping bill. (If you do it yourself, cost of supplies.)

10. What are you willing to pay for organic/reduced chemical landscaping per year? _____

Are you interested in maintaining an organic/reduced chemical lawn this year, and being surveyed for your opinion on results? Participants receive free lawn care advice from the Perfect Earth Project and opportunities for free lawn and landscape training sessions throughout the year.

___ Yes, I am interested. Email address and/or contact info: _____

___ No, I am not interested.

2016 Homeowner Rewards Program Report

1 COMPLETED PROJECTS

Name: Carolyn Comber

Project address: 166 Harbor Watch Ct, Sag Harbor

Amount awarded: \$300.00

Date completed: 5/17/16

Project description: Three 50-gallon barrels installed near patio and back of house



Name: Sag Harbor Historical Society

Project address: 174 Main Street, Sag Harbor

Amount awarded: \$200.00

Date completed: 5/17/16

Project description: Two 50-gallon barrels installed at rain gutters



Name: Scott Hughes

Project address: 70 Park Ave, Southold

Amount awarded: \$300.00

Date completed: 6/30/16

Project description: Three 50-gallon barrels at NW, E, and SW corners of house



Name: Deborah Kusa

Project address: 11360 Main Road, East Marion

Amount awarded: \$157.72

Date completed: 8/31/16

Project description: Two 50-gallon rain barrels with diverters installed to collect roof runoff.



Name: Stephanie Krikorian

Project address: 2 Ingalls Rd, East Hampton

Amount awarded: \$500.00

Date completed: 5/17/16

Project description: Native plantings covering 50 square feet



Name: Susan Solomon

Project address: 64 N. Midway Road, Shelter Island

Amount awarded: \$500.00

Date completed: 6/17/16

Project description: Native plant garden of 144 square feet



Name: Kara Gilmour

Project address: 8145 Peconic Bay, Laurel

Amount awarded: \$500.00

Date completed: 7/13/16

Project description: Native plant garden of 2,000 square feet



Name: Fred Foelsch

Project address: 169 Sylvan Ave, Flanders

Amount awarded: \$500.00

Date completed: 7/12/16

Project description: One 50-gallon rain barrel installed and 150 square feet of conservation landscaping



Name: George Schedivy

Project address: 349 Peconic Bay Blvd, Aquebogue

Amount awarded: \$500.00

Date completed: 10/18/16

Project description: Conservation landscaping of ½ acre (21,780 sq. ft.)



Name: Lily Dougherty-Johnson

Project address: 51 Washington Ave, Greenport

Amount awarded: \$285.49

Date completed: 11/8/16

Project description: Native plant garden of 260 square feet in front of house



Name: Ann Kelly

Project address: 12 Terry Drive, Shelter Island

Amount awarded: \$500.00

Date completed: 11/8/16

Project description: Bayberry plants installed over 450 square feet of backyard



Name: Cristina Spindler

Project address: 63 Oaks Ave, Flanders

Amount awarded: \$500.00

Date completed: 11/15/16

Project description: Native plant garden of 500 square feet



Name: George Gerle

Project address: 150 Ackerly Street, Riverhead

Amount awarded: \$500.00

Date completed: 11/15/16

Project description: One 65-gallon rain barrel and one 50-gallon rain barrel installed with a rain garden of 520 square feet



Total projects completed: **13**

Total area converted: **25,854 sq. ft.**

Total installed rain barrels: **13**

Total amount of money distributed: **\$5,243.21**

2 ONGOING PROJECTS

Name: Dan Welden

Project Address: 1649 Millstone Road, Sag Harbor

Project Description: 100 sq. ft. native planting garden to be installed on the northwest corner of the property. Two 50-gallon rain barrels to be installed on the west side of the home.

Estimated Cost: \$500.00

Name: Pamela Topham

Project Address: 15 Collingswood Road, Sag Harbor

Project Description: Three 240-liter rain barrels to be installed on the front, side, and back gutters of the home. Resubmitting to include appropriate sized barrels.

Estimated Cost: \$300.00

Name: John Severini

Project Address: 565 Gull Pond Lane, Greenport

Project Description: Native planting garden 30' x 6' located on the front lawn along the road and one 70-gallon rain barrel to be installed on the South corner.

Estimated Cost: \$500.00

Name: Isabelle Gonzaleiz

Project Address: 146 Ostrander Avenue, Riverhead

Project Description: Four 50-gallon rain barrels to be installed on the gutters of the home.

Estimated Cost: \$400.00

Name: Les Cohn

Project Address: 295 Bayview Avenue, Southold

Project Description: 4' x 13' native planting garden to be planted on the front North side of the home.

Estimated Cost: \$500.00

Name: Matt and Anne Ollen

Project Address: 480 Smith's Drive North, Southold

Project Description: Native planting garden, 140' x 5' to be planted at the back perimeter of the home.

Estimated Cost: \$500.00

Name: Joseph Vasile Cozzo

Project Address: 4030 Stillwater Ave, Cutchogue

Project Description: 195 sq. ft. of conservation landscaping in backyard along fence

Estimated Cost: \$500.00

Name: Joseph Warren

Project Address: 66 King Avenue, Flanders

Project Description: Two 50-gallon rain barrels with 300 square feet of native plants on West side of house.

Estimated Cost: \$500.00

Name: Sarah Alford

Project Address: 12 Windermere Drive, Sag Harbor

Project Description: Three 50-gallon rain barrels for corners of house, with a 15' x 20' rain garden to attract birds and butterflies.

Estimated Cost: \$500.00

Name: Samir Kabbaj

Project Address: 41 Pine Ave, Flanders

Project Description: 1,000 sq. ft. native plant garden for front of home.

Estimated Cost: \$500.00

Name: Susan Schrott

Project Address: 19 Shelterlands Path, Shelter Island

Project Description: 225 sq. ft. raingarden for front of the home.

Estimated Cost: \$500.00

Name: Pipi Deer

Project Address: 4388 Noyac Rd, Sag Harbor

Project Description: One rain barrel (needs to be updated to a 50-gallon) and sections of native plants to surround home, adding up to about 93 sq. ft.

Estimated Cost: \$458.00

Name: Kelly Koch

Project Address: 600 Indian Neck Lane, Peconic

Project Description: 200 sq. ft. natural vegetation garden to be installed behind house in southeast corner of backyard.

Estimated Cost: \$500.00

Name: Ronald Fisher

Project Address: 111 Sylvan Ave, Flanders

Project Description: 180 sq. ft. native plant garden for northwest corner of Rt. 24 and CR-105

Estimated Cost: \$500.00

Name: James Christensen

Project Address: 111 Sylvan Ave, Flanders

Project Description: 520 sq. ft. of native plant garden for southeast corner of Rt. 24 and CR-105

Estimated Cost: \$500.00

Name: Joanne Merrill

Project Address: 42 Oaks Ave, Riverhead

Project Description: 493 sq. ft. native plant project for back of home.

Estimated Cost: \$500.00

Name: Grace Loehr

Project Address: 1085 Bayview Drive, East Marion

Project Description: 500 sq. ft. native plant shade garden for back of home on west side.

Estimated Cost: \$500.00

Name: Linda Giordano

Project Address: 27 Shady Cove Lane, Sag Harbor

Project Description: Two 50-gallon rain barrels and native plant garden for right corner and back left corner of home (size unknown).

Estimated Cost: \$500.00

Total projects in progress: **18**

Total area to be converted: **5,038 sq. ft.**

Total rain barrels to be installed: **18**

Total amount of money to be distributed: **\$8,658.00**



Peconic Estuary Program Demonstration Raingarden Proposal

October 2015

Proposed Project: The Peconic Estuary Program (PEP) would like to plant a conservation landscaping rain garden near the Peconic Riverfront Park in downtown Riverhead, NY in order to 1) mitigate runoff into the river from the adjacent parking lot and buildings 2) to act as a demonstration garden to educate town residents on Stormwater pollution 3) to educate town residents on green infrastructure for their own properties. One or two informational signs will offer visitors educational information on raingardens and native plants. The project will serve to teach the public about the local estuary, while reducing pollution from entering the river.

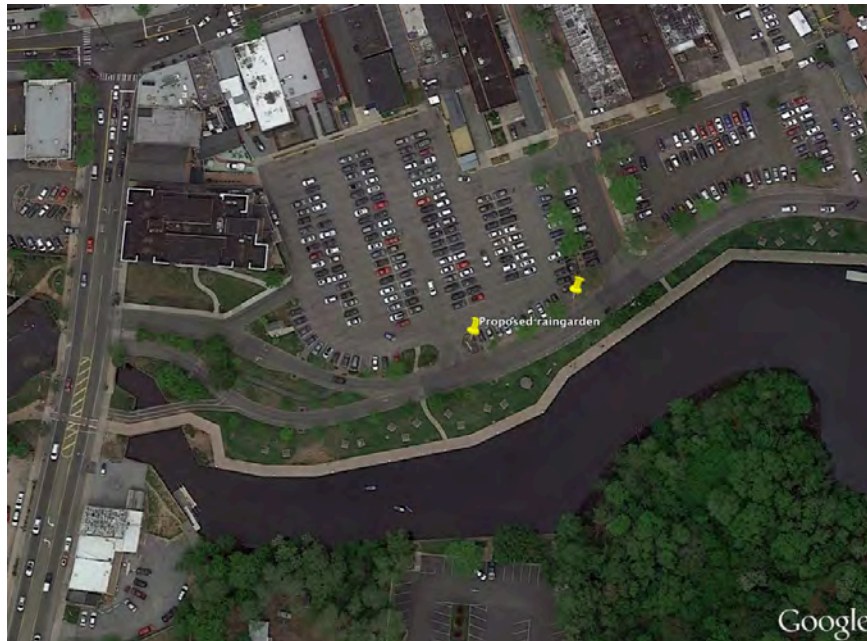
Background: In 1992, the Peconic Estuary became one of 28 estuaries in the nation to receive the designation as an “Estuary of National Significance” by the U.S. Environmental Protection Agency (EPA). Under the Clean Water Act and as part of the Association of National Estuary Programs (ANEP), the Peconic region was charged with developing and implementing a watershed-based comprehensive conservation and management plan (CCMP) with priority topics including: Brown tide, nutrients, habitat and living resources, pathogens, toxic pollutants, and critical lands protection. The Peconic Estuary Program is an innovative partnership of local, state, and federal governments, citizen and environmental groups, businesses and industries, and academic institutions charged with carrying out the goals of improved water quality and ecosystem health as outlined in the management plan. Through outreach and education, the Peconic Estuary Program seeks to foster a sense of stewardship with the community, inviting residents and visitors to share in the responsibility of conscientious land use to benefit our precious marine waters.



As part of PEP's clean-water initiative, our goal is to help mitigate stormwater pollution through educational programming to the public. Through green infrastructure projects, such as raingardens, water filtered through vegetation, sand, and gravel is dramatically cleaner when it enters our aquifers, storm drains, and water bodies. Mitigating storm water runoff into our bays can help improve water quality, reduce nutrient pollution, and help restore our natural resources. The proposed rain garden project will use native plants which are best adapted for our climate requiring little maintenance (watering) and reduced demand fertilizer and pesticides. Native plants can also provide habitat for wildlife like birds, butterflies and bees. Using native plants with berries or flowers such as red chokeberry, goldenrod or butterfly weed will attract the wildlife and add a floral aesthetic to the downtown parking area. Replacing lawn grasses and compacting soil currently in this location with plants will also reduce soil erosion with their deep roots and will absorb and filter rainwater, polluted stormwater runoff, and excess nutrients thereby preventing it from entering the Peconic River.

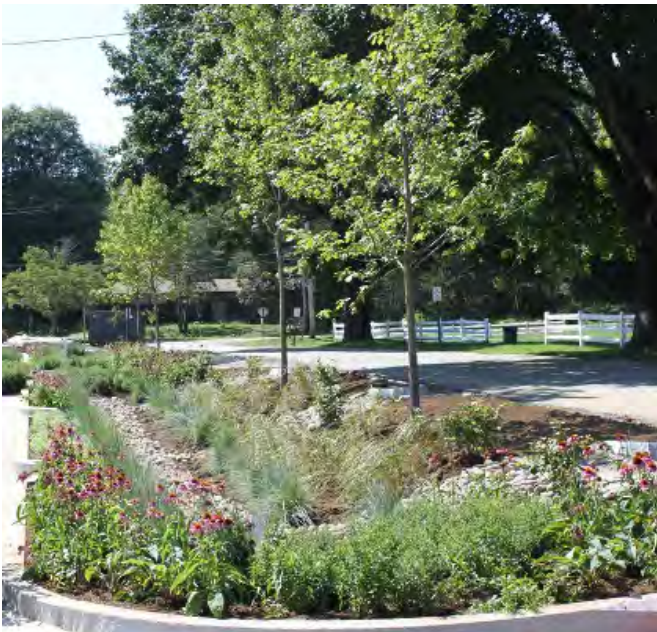
Peconic Estuary Program Demonstration Raingarden Proposal October 2015

Proposed Project Site: In conjunction with the municipality, we would like to collaborate in designing and constructing a raingarden in the existing parking area between the main street buildings and the Peconic Riverfront. This highly visible area is accessible to the public for educational purposes and is located near a storm drain where water naturally accumulates. The proposed location along a parking median currently has three trees and minimal grass and is not expected to significantly impact the number of available parking spaces. The Town would complete excavation of the area and the Peconic Estuary program will provide plants, planting material, and volunteers to complete the garden. This project would provide visual appeal as well as serve a functional purpose to reabsorb the runoff from adjacent buildings & parking areas while educating the public on Stormwater pollution, green infrastructure programs offered by PEP, and the Peconic Estuary generally.



Peconic Estuary Program Demonstration Raingarden Proposal October 2015

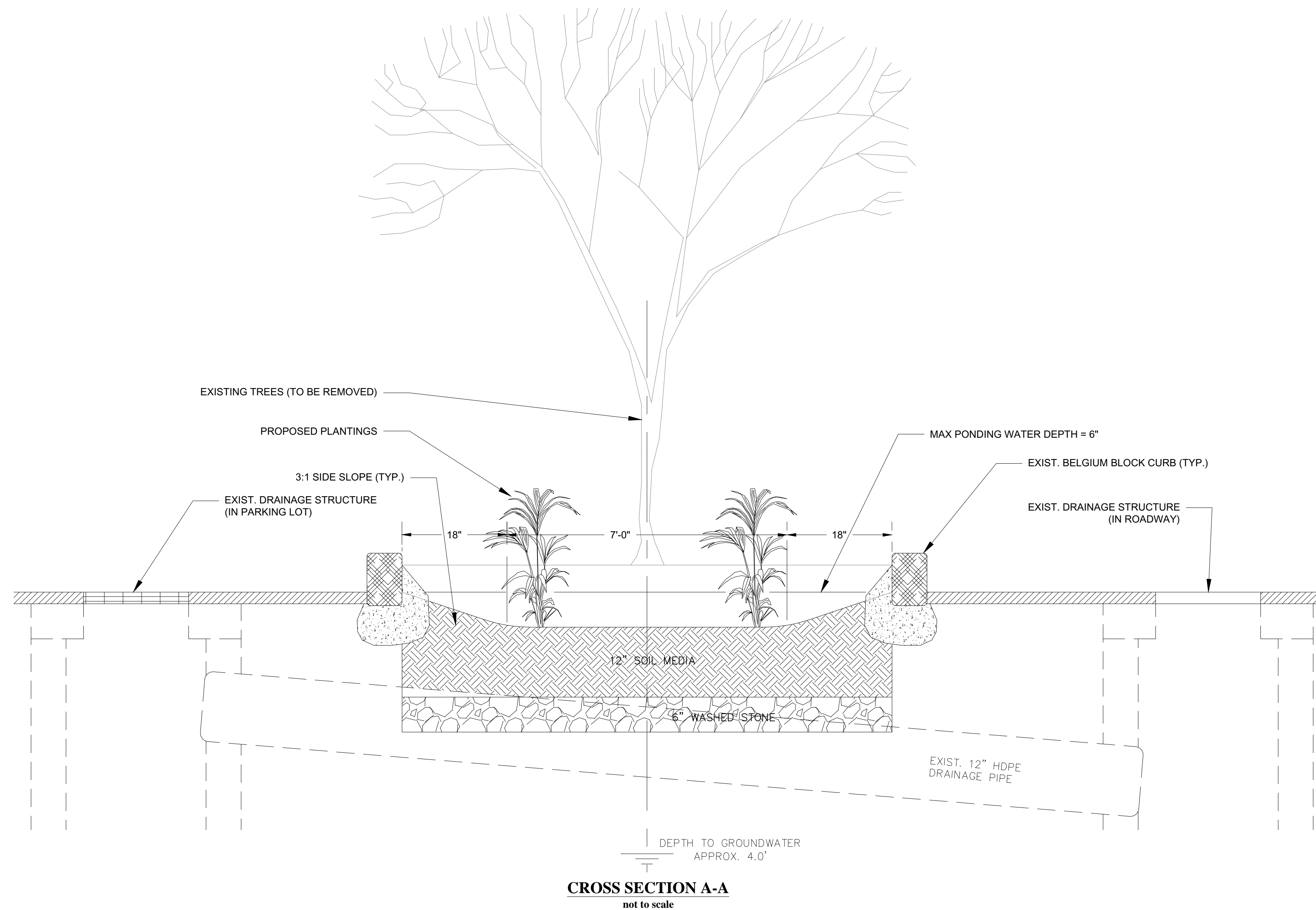
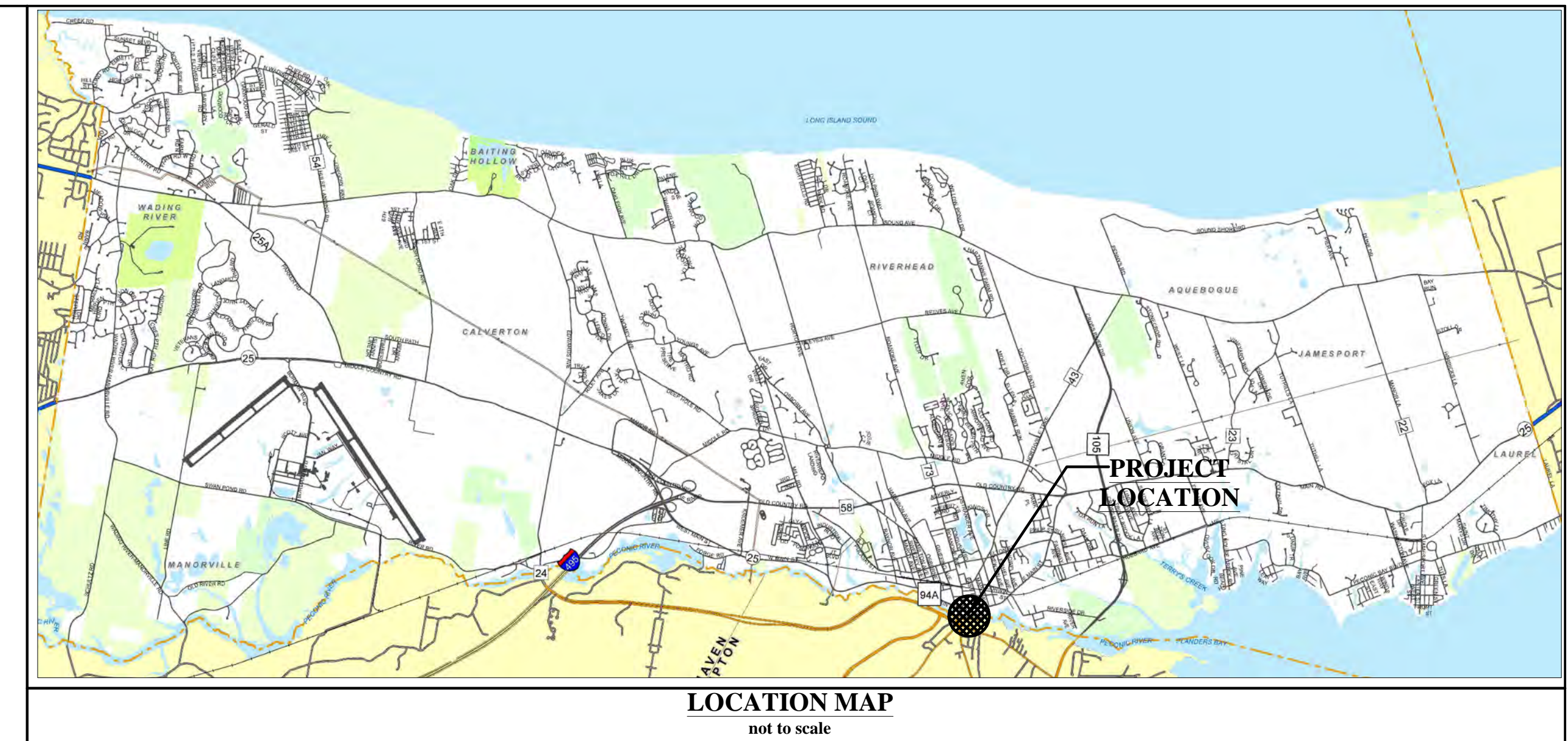
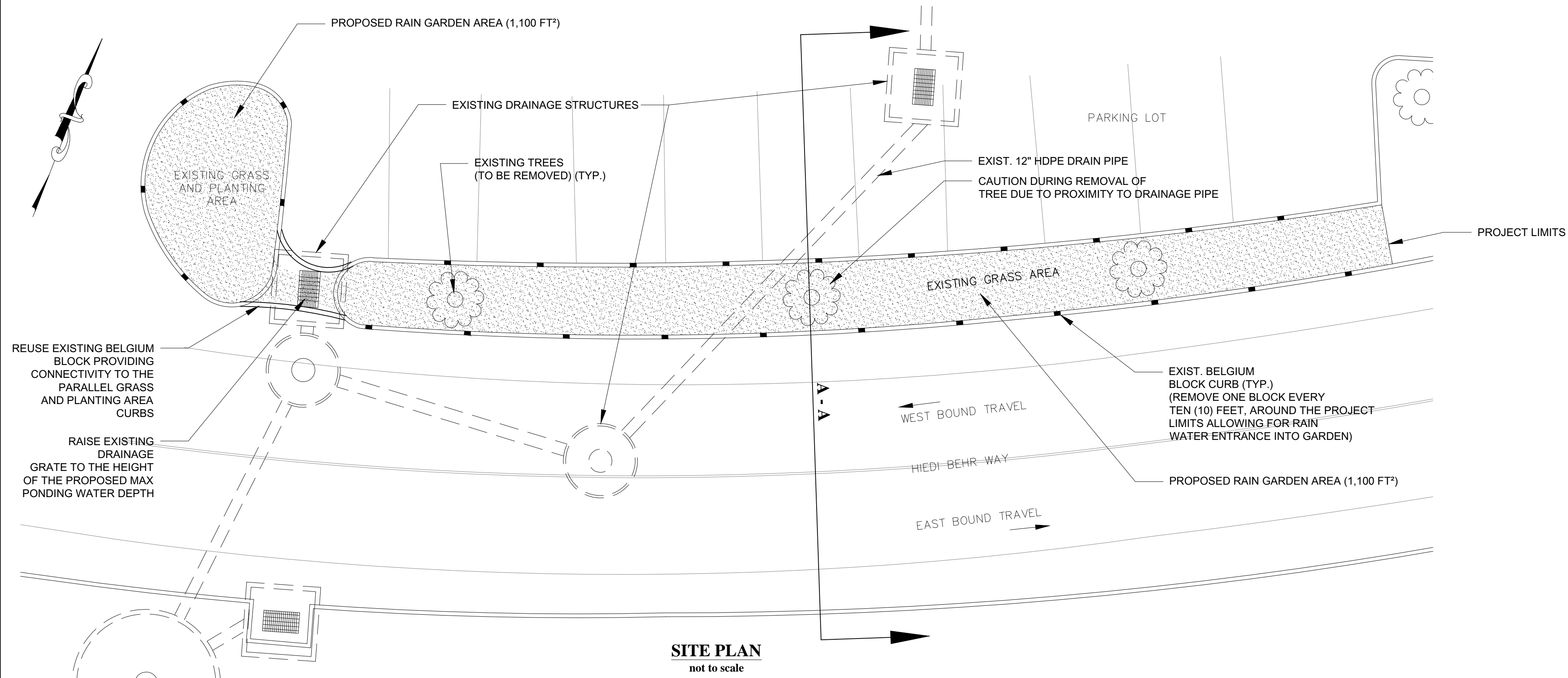
PEP would like to seek permission from the Riverhead Town Board to construct a rain garden in the proposed area and approve of one or two 2x3 waterproof educational sign(s) for the project area. Project construction may occur over a few days culminating in a public planting, educational, and press event in early Spring 2016. Currently, PEP has two existing educational demonstration gardens located at the Big Duck in Flanders and Downs Farm in Cutchogue that were introduced to the public in similar fashion in 2014. PEP staff will maintain the Riverhead garden, using volunteers for the first year in order to allow the garden to establish itself. After that, we ask Riverhead Parks Dept. to handle the minimal maintenance required these types of rain gardens. Please see attachments for further details.



Contact Information: Please visit our website to view brochures and links on Bayscaping and other useful resources for rain gardens and native plant gardens [PeconicEstuary.org](http://www.PeconicEstuary.org)

For more information on the Peconic Estuary Program please contact Sherryll Jones, PEP Education and Outreach Coordinator at sj497@cornell.edu or 631-727-7850 Ext. 353 Please visit <http://www.peconicestuary.org>





TOWN OF RIVERHEAD

200 HOWELL AVENUE

Riverhead, New York 11901

REVISIONS

<i>no.</i>	<i>date</i>	<i>description</i>
-	-	-

DATE: **7/22/2015**

SCALE:	as shown
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DESIGN BY: DD

DRAWN BY: **R Hubbs**

PROJECT TITLE

RIVERFRONT PARKING LOT

~ Rain Garden ~

SHEET TITLE

PLAN AND DETAIL SHEET

SHEET NUMBER

1 of 1



Riverhead Rain Garden Proposed Planting List

October 2015

Item	Unit Price	Quantity	Total Price	Nursery
Walkways (4)12 x 12 stomp stones	29.95	4	119.8	Amazon
Informational Sign 2x3 weatherproof	225	1	225	Wedel Signs Riverhead
Natural Cedar Mulch	4.02	50	201	Garden Center
NDS 6" Round Polished Brass Grate w/Styrene Collar	100	1	100	ASC Envirnomental, Blo
Road Sand mix	33.00/CY	32	1056	Barbato Nursery Corp.
Topsoil	28/CY	13	364	Barbato Nursery Corp
1 1/2" Washed gravel	77/CY	20	1540	Barbato Nursery Corp
SECOND QUOTE 3/4 stone for drainage	52/CY	11	(574.35)	State Material Mason St

Rectangle Rain Garden

28.5 gal. Red Sunset Maple tree	69.99	3	209.97	Lowe's
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Juncus tenuis (Path Rush)	35.70 (6ct)	12	71.4	http://www.agrecol.com
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Butterfly Weed (1gal)
Goats rue (5")

14.09
5

9
6

126.81
30 <https://jet.com/product>
<http://www.hiddensava>



New Jersey Tea (2 gal)

29

3

87 Ford Pond



Pennsylvania Sedge (3.5")

5.97

24

143.28 <https://classygroundcov>



Deer Tongue (3.5" pot)

7.25

4

29 <http://www.toadshade>.



Circle Rain Garden



New York Aster (2gal)

4.99

4

19.96

Lowe's

Common milkweed

24.38

3

73.14

<https://www.google.com/search?q=Common+milkweed&rlz=1C1GctJT4CQ&emsg=NCSI>


Sweet Everlasting (3"square)

4.25

6

25.5



Black Eyed Susan (3gal)

8

2

16

<http://sccf.org/files/con>




Maryland Goldenaster (1gal)

8

4

32 <http://scnps.org/wp-cor>

Purple love grass (3" pots)

5.49

2

10.98 <http://www.prairienurs>**TOTAL COST****4,480.84****TOTAL VOLUNTEER HOURS****100****Planting event****4 hrs****15****60****2 maintance events****2 hrs****20****40****Alternative Salt Tolerant Plant Species****Trees**

Betula papyrifera– Paper birch

Betula populifolia– Gray birch

Celtis occidentalis– Hackberry

Juniperus virginiana– Eastern red cedar

Magnolia virginiana– Sweet bay magnolia

Nyssa sylvatica– Black tupelo

Pinus rigida– Pitch pine

Populus deltoides– Eastern cottonwood

Prunus serotina– Black cherry

Quercus alba– White oak

Quercus bicolor– Swamp white oak

Quercus coccinea– Scarlet oak

Quercus palustris– Pin oak
Quercus rubra– Red oak
Quercus stellata– Post oak
Quercus velutina– Black oak

Shrubs/Vines

Amelanchier arborea– Common serviceberry
Amelanchier canadensis– Canadian serviceberry
Aronia arbutifolia– Red chokeberry
Aronia melanocarpa– Black chokeberry
Baccharis halmifolia– Groundsel tree
Cephalanthus occidentalis– Buttonbush
Clethra alnifolia– Sweet pepperbush
Gaylussacia baccata– Black huckleberry
Ilex glabra– Inkberry
Iva frutescens– Saltmarsh elder
Lindera benzoin– Spicebush
Myrica pensylvanica– Bayberry
Prunus maritima– Beachplum
Rhus copallinum– Winged sumac
Rhus glabra– Smooth sumac
Rhus typhina– Staghorn sumac
Rosa carolina– Pasture rose
Rosa virginiana– Low pasture rose
Salix discolor– Pussy willow
Sambucus canadensis– Black elderberry
Vaccinium angustifolium– Lowbush blueberry
Vaccinium corymbosum– Highbush blueberry
Viburnum dentatum– Southern arrowwood
Vitis labrusca– Fox grape

Herbs

Arctostaphylos uva-ursi– Bearberry
Cakile edethula– Sea rocket
Eupatorium album– White thoroughwort
Hibiscus moscheutos– Marsh mallow
Lathyrus maritimus– Beach pea
Lechea maritima– Beach pinweed
Limonium carolinianum– Marsh rosemary
Maianthemum canadense– Canada mayflower
Oenothera biennis– Common evening primrose
Opuntia humifusa– Eastern prickly pear
Solidago sempervirens– Seaside goldenrod
Symphyotrichum novi-belgii– New York aster

Graminoids

Ammophila brevigulata– Beachgrass

Distichlis spicata– Saltgrass

Juncus gerardii– Blackgrass

Panicum amarum– Bitter panicgrass

Panicum virgatum– Switchgrass

Schizachyrium scoparium– Little bluestem

Scirpus maritimus– Seaside bulrush

Scirpus pungens– Common threesquare

Scirpus robustus– Saltmarsh rush

Scirpus validus– Soft stem bulrush

Spartina alternifolia– Smooth cordgrass

Spartina patens– Saltmeadow grass

Spartina pectinata– Prairie cordgrass



Proposed raingarden













APPENDIX OF DELIVERABLES

SECTION 4: CITIZEN SCIENCE AND VOLUNTEER OPPORTUNITES

- A. SEASONAL EVENT FLYERS
- B. COMPILATON OF VOLUNTEER EVENT FLYERS
- C. STORMWATER STEWARDSHIP SAMPLING PROTOCOL
- D. STORMWATER STEWARSHIP DATA

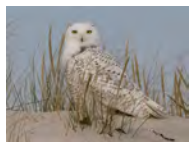


Peconic Estuary PROGRAM

Protecting & Restoring Long Island's Peconic Bays

WINTER/SPRING EVENTS 2016

February



Snowy Owl Walk

Saturday February 13th 10:00am

Learn how these seasonal visitors are an important part of the estuary food web. Our naturalists will guide you through prime birding areas of the park. Bring binoculars, cameras, and dress for the weather. Meet at the *Orient Beach State Park Ranger Office 40000 Main Road Orient, NY.*

March



Alewife River Herring Monitoring Training Workshop

Thursday March 10th 6:00-7:00pm

Each spring Alewife return from the sea to our coastal bays and rivers to spawn in freshwater. Learn about these important species role in the estuary food web and how you can help monitor the arrival of these fish for spring spawning season. *Cornell Cooperative Extension 423 Griffing Ave, 1st fl. Riverhead, NY*



Community Stormwater Stewardship Water Quality Training Day

Saturday March 12th 10:00am

Citizen Science training day! Learn how to collect water samples and test for important environmental factors. Become a volunteer in gathering data for our local aquaculturists on the North Fork. *Suffolk County Marine Environmental Learning Center 3690 Cedar Beach Road Southold, NY*



Peconic River Cleanup, Walk, and Paddle

**Wednesday March 23rd 4:00pm
(Rain date March 30th)**

Protect the beauty and health of the wildlife on the Peconic River by attending this riverfront cleanup and paddling at Grangebel Park. Learn about the estuary,

Citizen's Advisory Committee

2016 Meeting Dates

Saturday February 27th 10am-12pm

Wednesday May 18th 6-8pm

Tuesday September 13th 6-8pm

Wednesday November 16th 1-3pm

Special Topic Summer Meetings:

Thursday July 14th NOFO July 21st SOFO

Locations to be determined

the fish passage rock ramp, and more while caring for our environment. Please bring gloves and thick-soled shoes. We will provide bags. Rain cancels. Meet at *Peconic Paddler 89 Peconic Avenue Riverhead, NY*

April



Native Plant Garden Workshop

Wednesday April 13th 4:00pm

Learn about the benefits of native plantings, raingardens, and rain barrels at the PEP native plant garden. Get your hands dirty and help mulch, weed, and collect water from the rain barrel and learn how your yard can be eco-friendly. Please bring gardening gloves and garden tools. *The Big Duck Flanders Road Rte. 24 Flanders, NY*



Riverhead Raingarden Planting

Saturday April 23rd 10:00am

Celebrate Earth Day with the PEP and participate in this groundbreaking event! Help plant the new raingarden to reduce storm water pollution and runoff from entering the Peconic River. *Heidi Behr Way parking lot (behind Main Street, adjacent to Riverfront Park) Riverhead, NY*

May



Horseshoe Crab Monitoring

Wednesday May 4th 10:00pm

Thursday May 19th 11:0pm

Get involved with the annual horseshoe crab monitoring program! Participants assist with the collection of scientific data that is used to assess and determine the management and conservation of this important species. Bring a flashlight and shoes that can get wet at the two Peconic locations.
*North Fork: South Harbor Road, Southold
South Fork: East Landing Road, Hampton Bays*

Please contact Sherryll Jones (631) 727-7850 ext. 353 or email peptalk@peconicestuary.org for more information or to register.





Peconic Estuary PROGRAM

Protecting & Restoring Long Island's Peconic Bays

SUMMER EVENTS 2016

June



Trash Your Line Workshop

Thursday June 16th 4:00pm

Excess fishing line is one of the most common and deadliest forms of marine trash to wildlife. Join PEP as we build monofilament waste receptacles to be distributed at beaches and

fishing sites around the Peconic estuary. *Cornell Cooperative Extension 423 Griffing Avenue 1st floor Riverhead, NY 11901.*



Community Stormwater Stewardship Water Quality Training Day

Wednesday June 22nd 10:00am-12:00pm

Citizen Science training day!

Learn how to collect water samples and test for important environmental factors. Become a volunteer in gathering data for our local aquaculturists on the North Fork. *Suffolk County Marine Environmental Learning Center 3690 Cedar Beach Road Southold, NY*

July



Ludwigia Removal Event

Tuesday July 12th 9:30am

Water primrose or *Ludwigia peploides* is a freshwater invasive plant in the Peconic River that out competes native

plants, reduces biodiversity, blocks sunlight to oxygen producing plants, and impedes fish habitat and recreational use of the river. Using kayaks and boats, we will remove *Ludwigia* during this day-long event. Bring water, sunscreen, and lunch. Meet at the *NYSDEC boat launch on South River Rd. Calverton, NY.*

Please contact Sherryll Jones (631) 727-7850 ext. 353 or email peptalk@peconicestuary.org for more information or to register.



August



Kayak Tour of Peconic Bay in Coecles Harbor

Tuesday August 16th 9:00am

Raindate Thursday August 18th 9:00am

Explore the Peconic Bay and its

beautiful habitats! Join PEP educators as we paddle the Coecles Harbor Marine Trail in Shelter Island! This self-guided interpretive trail shows the bounty of our estuary and the area's marine conservation efforts. Bring your own kayak or rent from Shelter Island Kayak Tours 631-749-1990 (kayaks will be delivered to launch site). Life jackets are required! Bring water, sunscreen, and a snack. *Burns Road Town Landing Shelter Island, NY*

Around the Estuary



CAC Special Topic Meetings 6:00-8:00pm

Thursday July 21st North Fork

Thursday August 4th South Fork

Join PEP as we discuss topics relevant to the protection and health of our estuary.

Presentations from local experts and impactful project leaders will share their work and experience. Summer residents are encouraged to attend! *Locations to be determined. Email cac@peconicestuary.org for more information*

Visit PEP Raingarden and Native Plant Garden Projects Anytime!

Learn more about stormwater and solutions to runoff



pollution.

Three locations:

Heidi Behr Way Riverfront Park, Riverhead NY

The Big Duck, Rte. 24 Flanders Road, Flanders NY

Downs Farm Preserve Rte. 25 Main Road, Cutchogue NY

Look for PEP at various upcoming summer events including Alive on 25 in Riverhead, The Peconic Paddle Battle, The RBID Cardboard Boat Race.

Citizen's Advisory Committee

2016 Meeting Dates

Saturday February 27th 10am-12pm

Wednesday May 18th 6-8pm

Tuesday September 13th 6-8pm

Wednesday November 16th 1-3pm

Special Topic Summer Meetings:

Thursday July 21st NOFO August 4th SOFO

Locations to be determined



Peconic Estuary PROGRAM

Protecting & Restoring Long Island's Peconic Bays

FALL EVENTS 2016

September



Autumn Nature Hike
Saturday September 17th
10:00am

Kick off National Estuaries Week and the beginning of fall with a nature hike through the Northwest Woods of East Hampton.

This 3 mile guided hike provides views of our beautiful estuary as well as the Peconic Estuary's historical land use of the Northwest Settlement.



National Estuaries Week Social Media Campaign

Saturday September 17th – September 24th

Show love and support for your local waterways by using #EstuariesWeek for all of your social media posts on Facebook,

Instagram and Twitter from September 17th through September 24th. Since 1988, National Estuaries Week has celebrated the many ways we benefit from a healthy, thriving ecosystems and recognizes the special role these places play in our everyday lives.



Photo Contest for National Estuaries Week

Saturday September 17th – September 24th

Celebrate National Estuaries Week and the Peconic Estuary

by submitting your favorite estuary photo during the week long photo contest on Facebook or Instagram. Use **#PeconicEstuariesWeek** for submissions along with your name and the location where the photo was taken. You can also email your photo submission to peptalk@peconicestuary.org. The last day to submit is September 24th at 11:59pm. The winner will receive a prize and will be announced Monday September 26th.

Please contact Christie Pfoertner (631) 727-7850 ext. 337 or email peptalk@peconicestuary.org for more information or to register.



October



A Day in the Life of the Peconic Estuary
Friday October 21st

The Peconic Estuary Program will be partnering with the coordinators of a Day in the Life and serve as environmental educators for students who simultaneously collect scientific data on a single day in the Peconic Estuary, Carmans River and Nissequogue River. The data is analyzed and used to portray the status of the waterways, the results of which are available to the public online. To learn how to get your school involved please contact melissa.griffiths@scwa.com

November



Native Plant Garden Workshop

Saturday November 5th 1:00pm
Rain Date Sunday November 6th 1:00pm

Learn about the benefits of native plantings, raingardens and rain barrels at the PEP native plant garden. Get your hands dirty and help mulch, weed and collect water from the rain barrel and learn how your yard can be eco-

friendly. Please bring gardening gloves and garden tools. *The Big Duck Flanders Road Rt. 24 Flanders, NY*

December



Audubon Marine Bird Count

Saturday, December 31st
Snow Date: January 7th

Join PEP and the Audubon Society for the annual Christmas Bird Count. With your help, the data will fuel important science and conservation work. This nation-wide collaboration occurs at many locations within the Peconic Estuary. Choose your site preference (Greenport, Southold, Shelter Island or Orient Point)

Citizen's Advisory Committee

2016 Meeting Dates

Saturday February 27th 10am-12pm

Wednesday May 18th 6-8pm

Tuesday September 13th 6-8pm

Wednesday November 16th 6-8pm

Peconic Estuary Program's

Community Stormwater Stewardship Program

Training Workshop

Saturday
March 12th
2016
10am-12pm

@SCMELC
Cornell Cooperative Extension
Suffolk County Marine &
Environmental Learning Center
3960 Cedar Beach Rd
Southold, NY

Registration and information:
peptalk@peconicestuary.org
(631) 727-7850



Cornell University
Cooperative Extension
of Suffolk County



Volunteers Needed!

HELP PECONIC ESTUARY PROGRAM MAINTAIN OUR NATIVE
PLANT GARDENS AND LEARN ABOUT OUR HOMEOWNER
REWARDS PROGRAM!

Wednesday April 13, 2016
Big Duck Park Flanders Road
4:00pm

Contact peptalk@peconicestuary.org
to let us know you're coming. All tools will be provided.
Wear appropriate gloves, shoes, and sunscreen!



TEACHERS GET INVOLVED WITH THE PECONIC ESTUARY PROGRAM

Create your own Water Quality Monitoring Group!

Peconic Estuary Program has initiated a water quality monitoring program at the Suffolk County Marine & Environmental Learning Center in Southold. This program provides a hands on opportunity to improve the health of our bays. Volunteers can participate based on their own availability throughout the day, during the week or seasonally. In the future, we hope to expand the program to include multiple locations around the Peconic Estuary.

For more information and learn how to start your own water quality monitoring group please contact peptalk@peconicestuary.org or call 631-727-7850 ext 337

(More ways to get involved on the second page)

About the Peconic Estuary Program

The Peconic Estuary Program (PEP) was established in November 1992 after citizen groups formed in response to the Brown Tide algal bloom events in the mid 1980's and early 1990's. The PEP is one of 28 National Estuary Programs around the country under the United States Environmental Protection Agency's (USEPA) Clean Water Act. The program is responsible for creating and implementing a management plan to protect the estuary.



Scoy Pond, East Hampton provides a spawning area for Alewife in the spring.

Connect Art and Science

Contact the PEP to have your art group paint a rain barrel and install it either at the school or a location around town. Supplies are limited. E-mail: peptalk@peconicestuary.org or call 631-727-7850



Peconic Estuary Program's Demonstration Rain Garden, Heidi Behr Way Riverhead

Join the Junior Citizen's Advisory Committee

The PEP is seeking after-school groups of all ages to join the Junior Citizen's Advisory Committee. Students would create a project designed to improve or educate others about the local waterways and the problems they face. As Junior CAC members, students would be asked to attend a CAC meeting which, are held quarterly, to present their project to members.

To collaborate on potential projects or for more information please contact peptalk@peconicestuary.org

Nature-Based Solutions to Stormwater Pollution

Stormwater runoff is rain or snow melt that moves across impermeable surfaces picking up pollution on its way to stormwater drains and eventually local waterways. By planting a native vegetation area, native rain garden or installing a rain barrel, you can help reduce the amount of pollutants entering our local bays, rivers and creeks.

The Peconic Estuary Program can help your group obtain the plants and rain barrels necessary to carry out such a project. We offer up to \$500 in reimbursement for homeowners, associations and community groups who live in the Peconic Estuary watershed. Contact rewards@peconicestuary.org

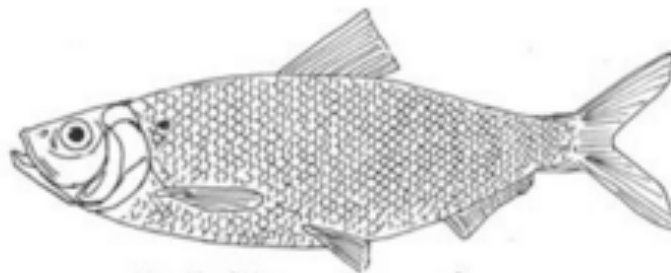




Department of
Environmental
Conservation



ALEWIFE MONITORING TRAINING



Alewife (Alosa pseudoharengus)

Please join us to learn how to monitor alewife
for the 2016 spawning season

Thursday, March 10th

6:00pm-7:00pm

Cornell Cooperative Extension

423 Griffing Avenue 1st Floor

Riverhead NY 11901

KINDLY RSVP TO:

Sherryll Huber-Jones

Peconic Estuary Program Outreach Coordinator

sj497@cornell.edu

631-727-7850 ext. 353

Workshop hosted by Cornell Cooperative Extension of Suffolk County



Cornell University
Cooperative Extension

Get your hands dirty and help mulch, weed and learn how your yard can be eco-friendly!



Native Garden Workshop

Saturday, November 5th at 1pm

The Big Duck Flanders Road Rt. 24 Flanders NY



Bring your own gardening tools and gloves if possible.

For questions or to register
call 631-727-7850 x 337 or
email:

peptalk@peconicestuary.org

TRASH YOUR LINE FREE WORKSHOP

Registration is required

peptalk@peconicestuary.org

Saturday December 3

11am-12 noon

423 Griffing Avenue

Riverhead NY 11901

Excess fishing line is one of the most common and deadliest forms of marine trash to wildlife. Join the PEPs we build monofilament waste receptacles to be distributed at beaches and fishing sites around the Peconic estuary.



*English and Spanish
informational stickers for
monofilament receptacles*

SOUTHAMPTON

9:00am-2:00pm

Hampton Bays
30 Jackson Avenue
October 22nd
631-728-5078

SHELTER ISLAND

9:00am- 1:00pm

Shelter Island Recycling Center
North Menantic Road (Hazmat Area)
October 1st
November 5th
December 3rd
Phone: 631-749-2033

S.T.O.P. Collection 2016



To help protect Water Quality in the Peconic Estuary and our drinking water supply, proper disposal of unwanted household hazardous waste and old or unused medication is a must!

DON'T DUMP HAZMAT!

Drop off your waste at your Town's sanitation center during one of the S.T.O.P. dates listed for free. Items can include old paint, batteries, and pool chemicals.

DON'T FLUSH UNUSED MEDS!

*Drop off unused prescription medications at east end Police Department drop boxes and King Kullen Pharmacies on Long Island for **FREE!***

RIVERHEAD

8:00am- 3:00pm

Town Hwy Dept. Yard
1177, Osborn Avenue
Riverhead

October 15th

Ph: 631-727-3200 x 391

BROOKHAVEN

7am-3pm (Mon-Fri)
7am-noon (Sat)

350 Horseblock
Road #A
Brookhaven

6 days a week
Ph: 631-451-8696

EAST HAMPTON

10:00am- 3:00pm

Montauk Transfer
Station off Montauk
Highway
Montauk

October 15th

Phone: 631-324-7191

SOUTHOLD

9:00am- 3:00pm

6155 Cox Lane
Cutchogue

November 19th

Ph: 631-734-7685

Horseshoe Crab Monitoring 2016

Wednesday May 4th

South Harbor Road, Southold 9pm

East Landing Road, Hampton Bays 10pm



Thursday May 19th

South Harbor Road, Southold 10:30pm

East Landing Road, Hampton Bays 11pm

Please Wear:

- Appropriate shoes/clothing (waterproof recommended)
- Flashlight or headlamp

Come learn:

- Horseshoe Crab biology
- Tagging and size measurements

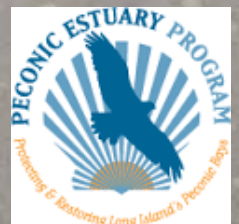
Registration is required at peptalk@peconicestuary.org



More dates , times and Island
wide locations available at
nyhorseshoecrab.org



Cornell University
Cooperative Extension
of Suffolk County



National Estuaries Week Nature Hike

Abandoned Northwest Settlement

The Peconic Estuary Program will be kicking off National Estuaries Week with a nature hike through the abandoned Northwest Woods in East Hampton. This guided 3 mile hike will explore not only the foliage and wildlife but will also provide insight into historical land uses. Parking is located on Northwest Road in East Hampton south of Alewife Brook Road.

Please wear appropriate clothing and bring water. We also encourage you to bring a camera to take photos to submit to our week long photo contest from September 17th- 24th.



SATURDAY, SEPTEMBER 17TH
10AM-12PM

THE GRACE ESTATES, NORTHWEST WOODS
NORTHWEST ROAD, EAST HAMPTON 11937



Contact Christie Pfoertner to register or for more information at 631-727-7850 x 337 or peptalk@peconicestuary.org



Bring your own kayak/SUP or rent from Shelter Island Paddle Tour 631-749-1990. Delivery to launch site included!



Launch site is at Town Landing at the end of Burns Road, Shelter Island.

Join us on the Coecles Harbor Marine Trail on Shelter Island



Salt March Ecosystem Paddle Tour

Tuesday, August 16th
9am-12pm

This self-guided interpretive trail shows the bounty of our estuary and the area's marine conservation efforts.

Life jackets are required! 18+ unless accompanied by an adult. Bring water, sunscreen, and a snack. Rain date August 18th

Email peptalk@peconicestuary.org to register

PECONIC RIVER LUDWIGIA REMOVAL

WHEN

July 27th, 2016
9:00am-2:00pm

WHERE

Peconic River Calverton
Edwards Avenue Kayak Launch

Advanced registration is required to ensure the proper number of available canoes and PFD's. Please bring waders and personal kayaks if possible as our supply is limited. Wear sunscreen and bring lunch/water.

Call: 631-727-7850 ext. 353

EMAIL: PEPTALK@PECONICESTUARY.ORG



STAY FOR A
FEW HOURS
OR ALL DAY!

JOIN PEP
AND NYSDEC

To remove water
primrose aka
Ludwigia from the
Peconic River



THIS INVASIVE
AQUATIC PLANT

Out competes
native vegetation
and degrades water
quality



Department of
Environmental
Conservation

Peconic Estuary Program
Community Stormwater Stewardship Program

Water Quality Monitoring Protocol
Spring 2016



The Peconic Estuary Program
SCDHS Office of Ecology 360 Yaphank Avenue
Yaphank NY



Cornell University
Cooperative Extension

Cornell Cooperative Extension of Suffolk County
423 Griffing Avenue Riverhead, NY 11901

Program Description

The Peconic Estuary Program (PEP) is proud to announce the start of its Community Stormwater Stewardship pilot program for the Peconic Bays. This volunteer-based, citizen science water quality testing program will focus on environmental indicators that will inform us on the health of the creeks surrounding Cedar Beach in Southold, NY. Volunteers will help collect data on important indicators of the health of our surrounding marine waters by measuring environmental parameters such as temperature, pH, dissolved oxygen, nutrient, water clarity, and (eventually) algal composition. The data collected will be used for educational purposes and will aid Cornell Cooperative Extension aquaculturists and Southold Project in Aquaculture Training (SPAT) members in the healthy brooding of shellfish larvae intended for the Peconic Bays and other bays around Long Island. As membership grows, we hope the volunteer monitoring program will expand to offer high school and college internships and include additional sites on the north and south forks of Long Island. An estuary-wide, volunteer-based water quality monitoring program has the potential to be a valuable resource and educational tool in protecting and restoring the health of the Peconic Bays.

Schedule and Safety Protocol

During the pilot season of the monitoring program, water quality testing will take place at the CCE SCMLEC facility between the hours of 8:00am-5:00pm while staff is at the facility. There will be a schedule distributed to those who are regularly available during the spring months of 2016. Water quality monitoring kits will be available at SCMLEC and must be returned after each testing to be made available to all volunteers.

FOR YOUR SAFETY

- ✓ Volunteers are permitted on the SCMELEC property during regular facility operating hours. Volunteers must check in at the front desk and sign the log that they participated on a given day.
- ✓ Some samples will be taken from a dock. Please use EXTRA caution when working on these docks and be mindful of where you step. Do not run.
- ✓ When on the dock you must use a life jacket. If you are not a comfortable swimmer, please do not enter the water to collect a sample without a life jacket.
- ✓ Do not swim off the dock or while in your role as a water quality volunteer.
- ✓ Do not stick hands near the pumps that are running near the docks.
- ✓ Move indoors immediately during lightning storms. Do not enter the beach or dock area

or attempt to collect samples during heavy storms or wave action.

- ✓ Use caution when handling any display tanks and marine animals at the facility
- ✓ Use caution and wear safety goggles and gloves when handling any lab-based chemicals.
- ✓ All high school interns are required to be supervised by a CCE staff member at all times.
- ✓ First aid kits and AED are located inside the SCMELC facility.

Taking Data Measurement

When you arrive at SMCELC, please check-in at the front desk with our lead administrator. She will give you a nametag and give you the data sheets and testing equipment we trained on to use. This is located in a red cooler under the table in the main office labeled "Stormwater"

If you are not a strong swimmer or are unsteady on a dock, please use a lifejacket while collecting the water samples. One can be provided for you if you request it when you check-in. Please record all of the environmental parameters **before** you collect the water (remember the temperature and oxygen levels of the water can change the longer it sits around).

Use the "Tides Charts Near Me" Free app to fill out tides and outside air temperature. There are tide and atmospheric instruments in the office hallway if you don't have that information on your smart phone. When you are finished, please rinse off the equipment with fresh water from the squirt bottle in the cooler and return the cooler and data sheet to the main office. Sign-out so we know you have safely returned from the beach and/or dock.

WIND SPEED

Water is moved by wind and can diminish or accentuate the tide flow. Wind can also mix the water column thus resuspending particles and affecting oxygen levels.

Conversely, a lack of wind can create layers of differing temperatures and salinities in the water called stratification. It is important to determine what affect wind is having on the water at the time of sampling.

Test Procedure:

1. Remove protective case
2. Turn on the flow meter by pressing the middle round button
3. Hold the flow meter fan into the wind. Be sure to stand in the open so buildings don't affect the wind speed
4. Write down the wind speed on the data sheet once the number has stabilized.



*Be sure “AVG” is displayed on the screen below the wind speed. If it is not, use the arrow buttons to adjust the settings.

WATER CLARITY AND DETERMINING TURBIDITY

Measuring turbidity in environmental applications, such as the oceans, rivers and lakes, a Secchi disk can be used. This is a black and white disk that is lowered into the water until it can no longer be seen. At that depth (called Secchi depth) the correlating number is recorded as a measure of the clarity in the water. The advantage in using this device in open waters is the ability to measure turbidity at various depths where multiple turbidity layers are present (LaMotte 2016).

Test Procedure:

1. Lower the disk into the water using the attached line.
2. When you can no longer see the disk clearly or distinguish between the light and dark markings, note the depth of the water at this point using the markings on the line. This your secchi depth and should be recorded on the data sheet.



SALINITY, DISSOLVED OXYGEN, WATER TEMPERATURE AND BAROMETRIC PRESSURE

SALINITY: The measure of all the salts dissolved in water. Salinity is usually measured in parts per thousand (ppt or ‰). The average ocean salinity is 35ppt and the average river water salinity is 0.5ppt or less. This means that in every kilogram (1000 grams) of seawater, 35 grams are salt (USEPA 2016).

DISSOLVED OXYGEN (DO): A measure of how much oxygen is dissolved in the water. DO can tell us a lot about water quality and how much oxygen is available to marine life in the water column and on the bay bottom (USGS 2016).

WATER TEMPERATURE: A physical property expressing how hot or cold water is. As hot and cold are both arbitrary terms, temperature can further be defined as a measurement of the average thermal energy of a substance. Temperature is an important factor to consider when assessing water quality because it can affect metabolic rates, photosynthesis production, and the other environmental parameters we are testing for (Fondriest 2016).

BAROMETRIC PRESSURE: The weight of the overlying air pressing down on the earth. It is also known as air pressure. Low barometric pressure means the overlying air is rising, whereas high pressure means the overlying air is sinking. Barometric pressure has important effects on water chemistry and weather conditions. Barometric pressure affects the amount of gas that can dissolve in water. More gas, such as oxygen, can dissolve in water under higher barometric

pressure than under lower barometric pressure. For instance, more oxygen is dissolved in water at sea level than at high altitudes. (Fondriest 2016).

Measuring dissolved oxygen, salinity and barometric readings will be conducted on one of two YSIs.

YSI (preferred)

1. Open the black zipper case that contains the YSI
2. Connect the probe to the base of the YSI. Remove the storage holder and attach the protective cage.
3. Press the green button to turn on
4. Place the probe into the sample and wait for readings to stabilize. (this will take 10minute for D.O. readings) *NOTE- make sure probe is suspended in water, do not have the probe resting on the sea floor
5. Once the values have stabilized, record the temperature in °C
6. Record water temperature, barometric pressure in mmHg, dissolved oxygen in mg/L, and salinity in ppt
7. Use the arrow buttons if necessary to move through the menu of parameters.
8. Rinse the probe with distilled water from the squirt bottle. Remove the protective cage and put storage case back on. ***NOTE: Make sure there is a small amount of fresh water is still in the storage holder.
9. Detach the probe from the YSI and place back in the case.
10. Place the YSI back in the case and return the equipment to the main office

YSI 85 *(Does not have barometric pressure readings)

Test Procedure:

1. Press the green button to turn on the YSI
2. Lower the probe into the water (how deep?)
3. Press "MODE" until the screen reads "SALINITY"
4. Record the salinity measurement once the value has stabilized.
5. Record the temperature on the bottom right of the screen.
6. Press and hold the green button to shut off the YSI
7. Use distilled water from the squirt bottle to rinse the probe of any salt water. Be sure to rinse out the hole on the probe as well.



***If bottle does not work, check to see if hose is connected to the lid.

When you are finished with the squirt bottle, be sure to disconnect the hose from the lid to avoid water leaking.

BACTERIA COLIFORM COUNTS **only performed upon request of PEP staff

Fecal coliform is found in the stomachs of all animals including people, pets and wildlife. High fecal coliform numbers in water samples indicate that harmful pathogens and parasites could also be present. For that reason, bathing beaches can be closed off to swimmers when coliform is high, for example, right after a rain event.

Test Procedure:

1. Twist and remove paddle from vial. Fill vial to 40mL fill line with water sample.
2. Replace paddle
3. Allow contact time of 15 seconds, then remove the paddle.
4. Empty the vial, replace the paddle into the empty vial.
5. Place vial in incubator overnight located in the storm water lab.
6. AFTER 18-24 hour incubator period- Compare the colony density to the Colony density panels. If colony density is less than 300 CFU/100mL, count individual colonies to obtain a total.
7. Place paddle in autoclave garbage (white can in storm water lab).

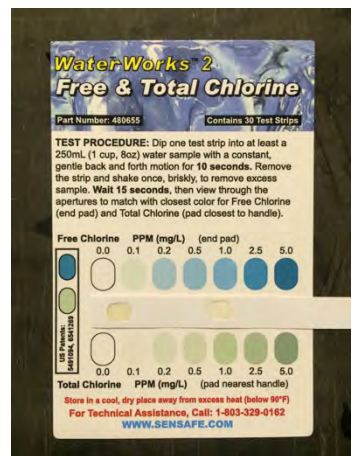


FREE AND TOTAL CHLORINE

Adding chlorine to water supplies destroys and deactivates disease producing microorganisms. Free chlorine is amount of chlorine in a water system and refers to both the hypochlorous acid and the hypochlorite ion. Chlorine can react with other compounds like organic nitrogen and ammonia to produce chloramines. Total Chlorine measures free chlorine and any chloramines.

Test Procedure:

1. Obtain a sample of water. Dip one test strip into the sample with a constant back and forth motion for 10 seconds.



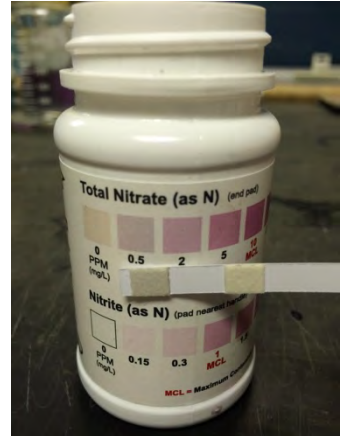
2. Remove the strip and shake once to remove excess sample.
3. Wait 15 seconds, then view through the apertures to match the closest color for Free Chlorine (end pad) and Total Chlorine (pad closest to handle).
4. Record both values on the data sheet
5. Free Chlorine Check

NITRATES AND NITRITES

Nitrogen is an essential nutrient that is required by all plants and animals however nitrogen cannot be used by most plants and animals and must be converted into another form like Nitrate (NO_3^-) or Nitrite (NO_2^-). Although essential for life, too much nitrogen can lead to eutrophication, and subsequent degradation of water quality.

Test Procedure:

1. Dip one test strip into the water sample for 2 seconds, then remove.
2. Wait 1 minute, then match to the closest color Total Nitrate (end pad) and Nitrite (pad closest to handle)
3. Record both values on the data sheet *It is important to complete color matching within 1 minute

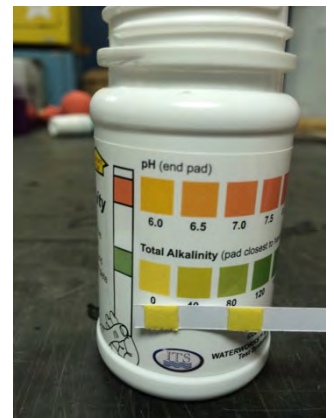


PH AND TOTAL ALKALINITY

Alkalinity measures the ability of the water to neutralize an acid or the water's ability to resist pH changes. pH is a measure of how acidic or basic a water sample is, or the degree of ion concentration. A large change in either measurement can negatively affect an organism's function.

Test Procedure:

1. Dip one strip into the water sample for 10 seconds *without motion*.
2. Remove strip. Immediately match pH (end pad) and Total Alkalinity (pad closest to handle) to the color chart. *It is important to complete color matching within 15 seconds



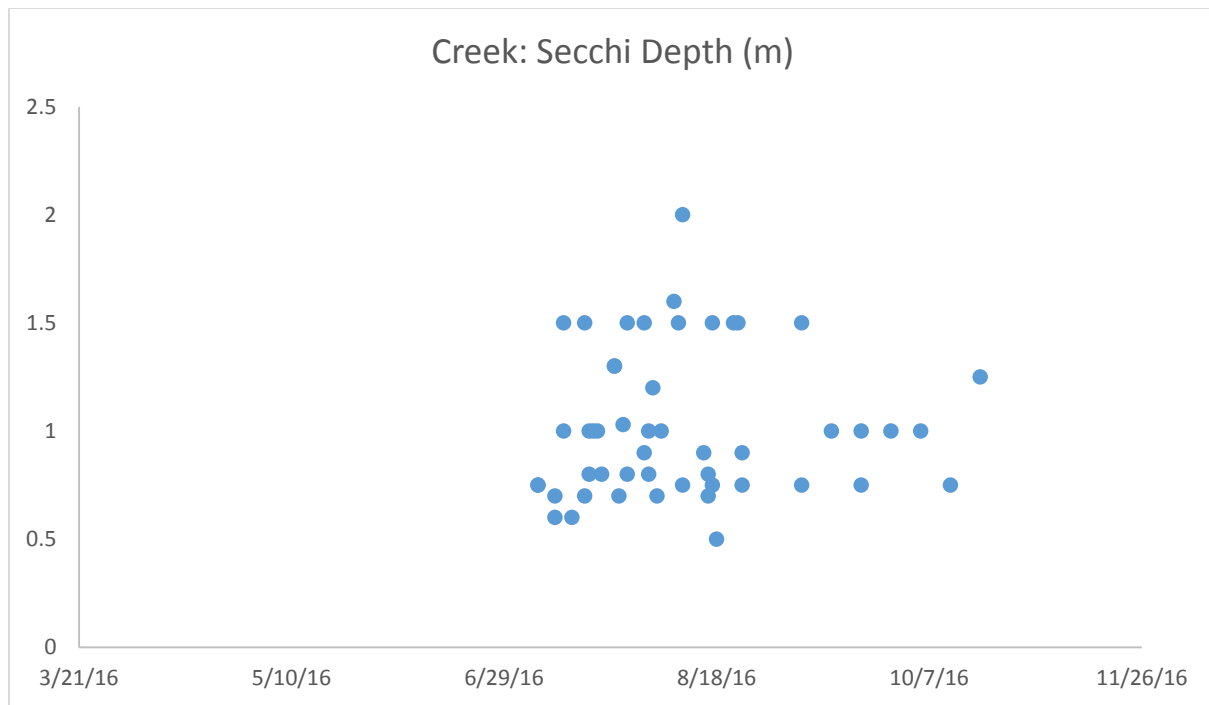
CONCLUSION

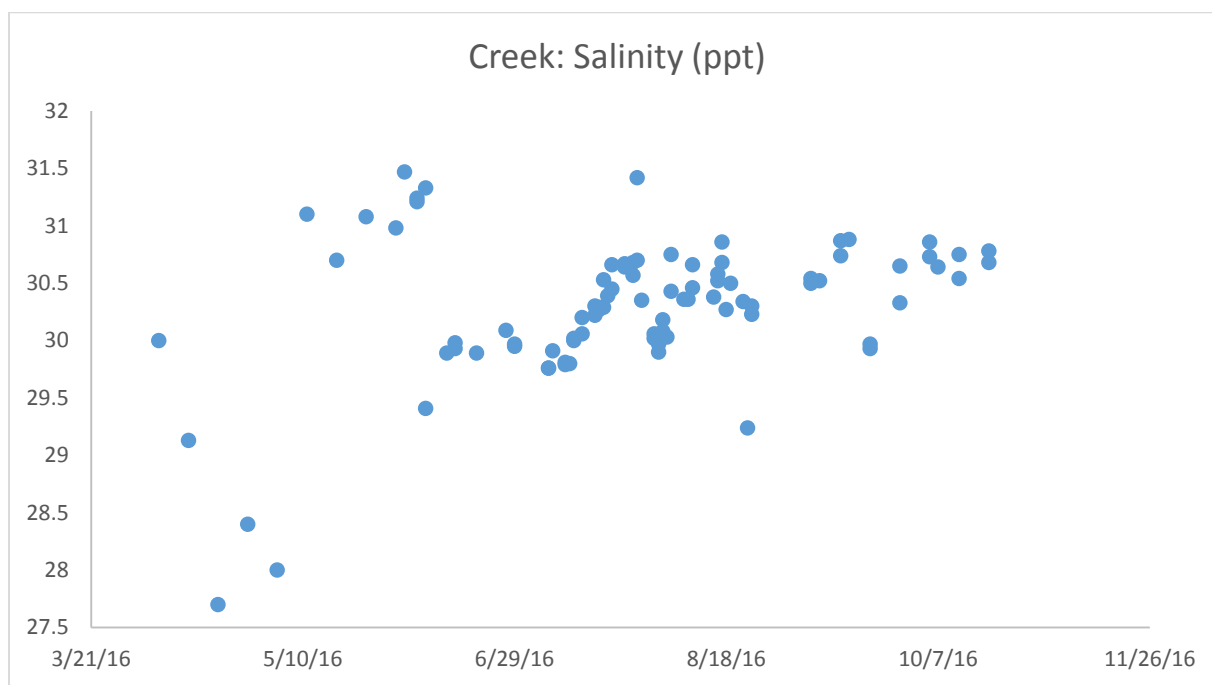
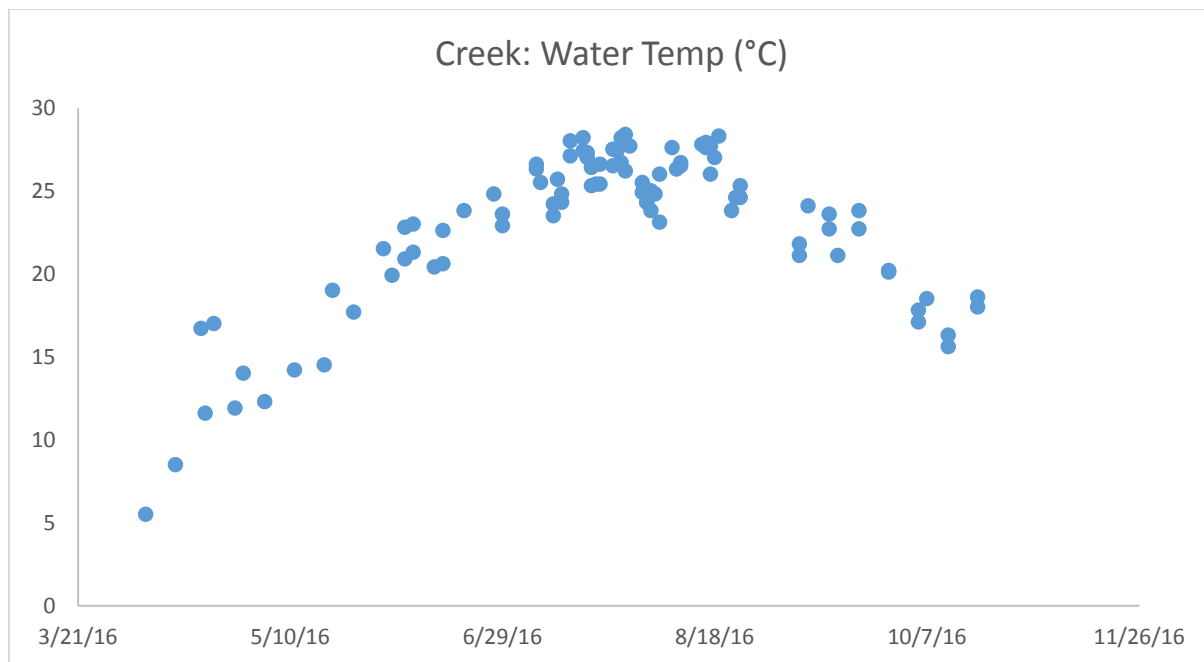
By the end of the season, the Community Stormwater Stewardship Program will have:

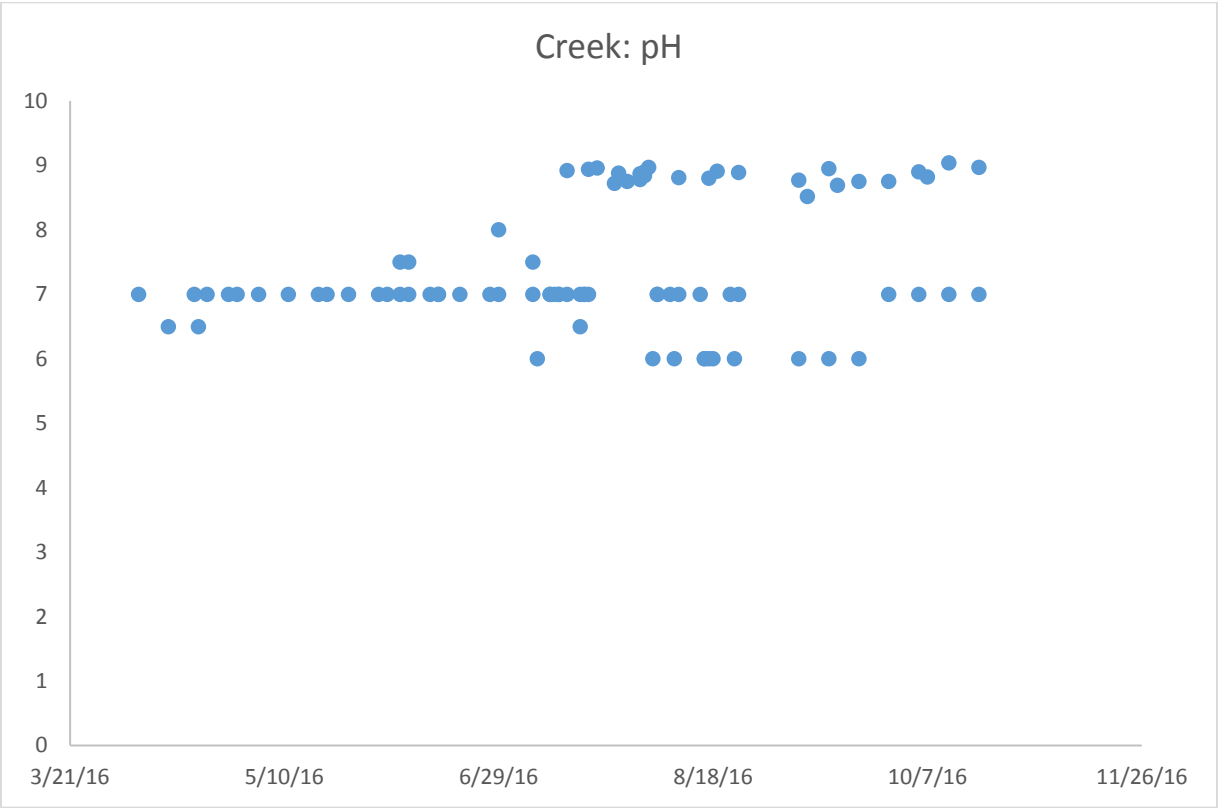
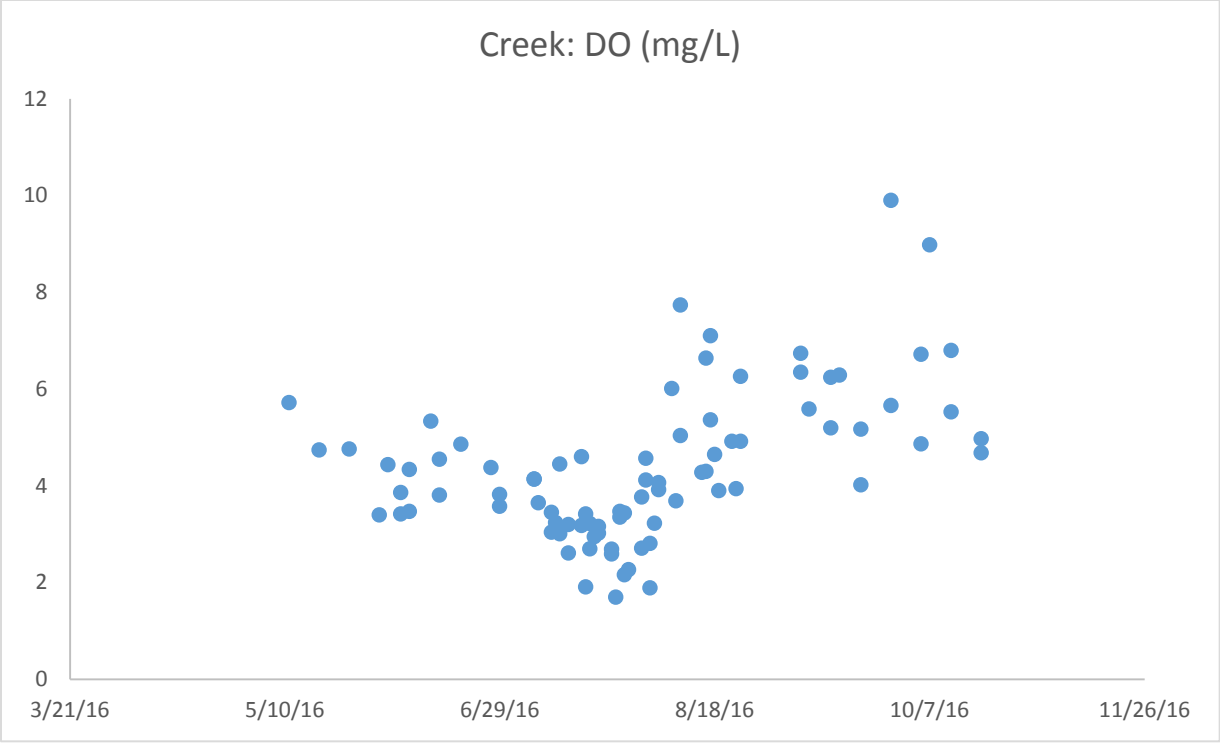
- Contributed to the overall health of the Peconic Estuary.
- Provided an economically valuable resource to our community.
- Collected vital environmental data to benefit all users of our local waters.
- Analyzed the conditions in the bay to help further understand the dynamics of this habitat.
- Developed your skills as citizen scientists to educate others on the importance of our marine environment.

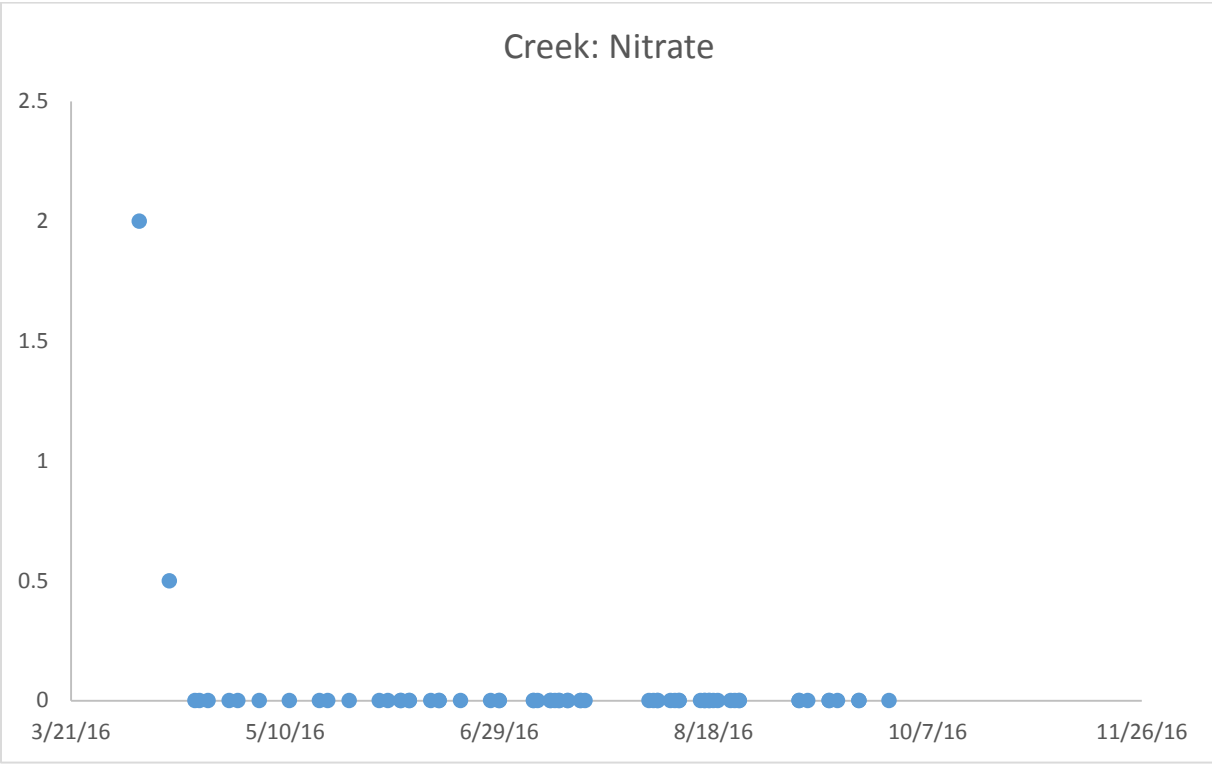
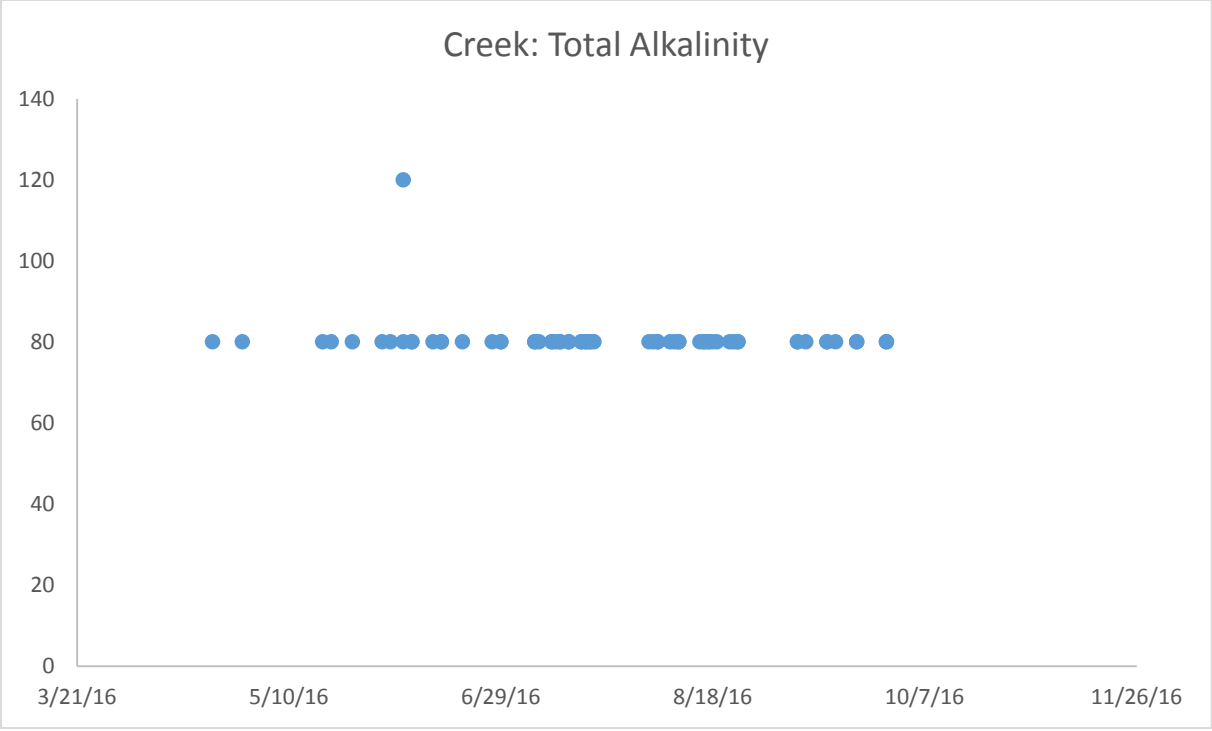
In the coming months, we hope to:

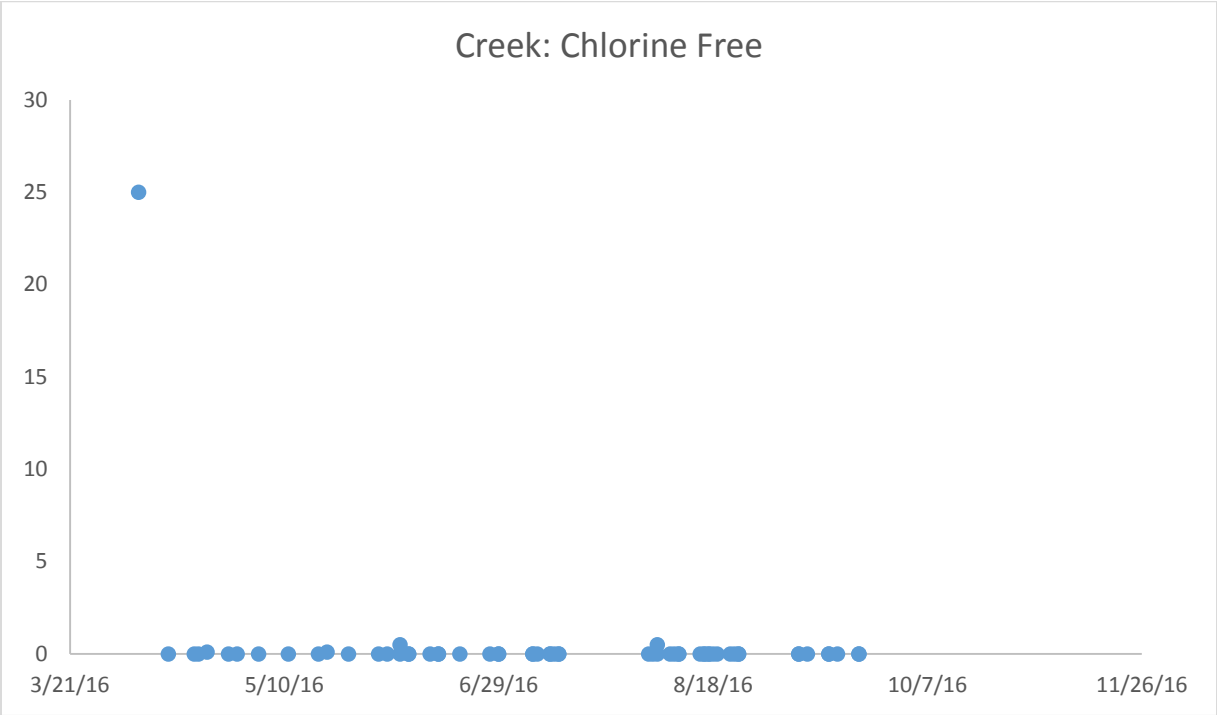
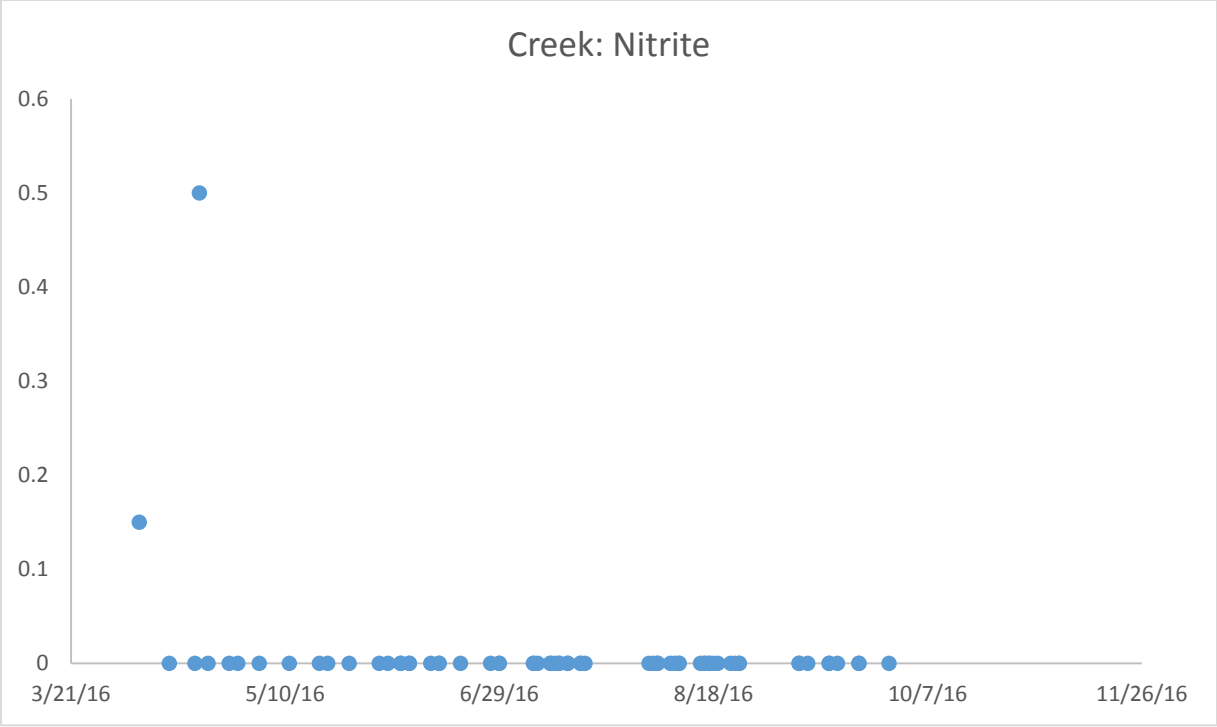
- Expand the program to surrounding communities.
- Use laboratory methods to test for Chlorophyll levels in the water.
- Use microscope to analyze the types of algal cells in the water.

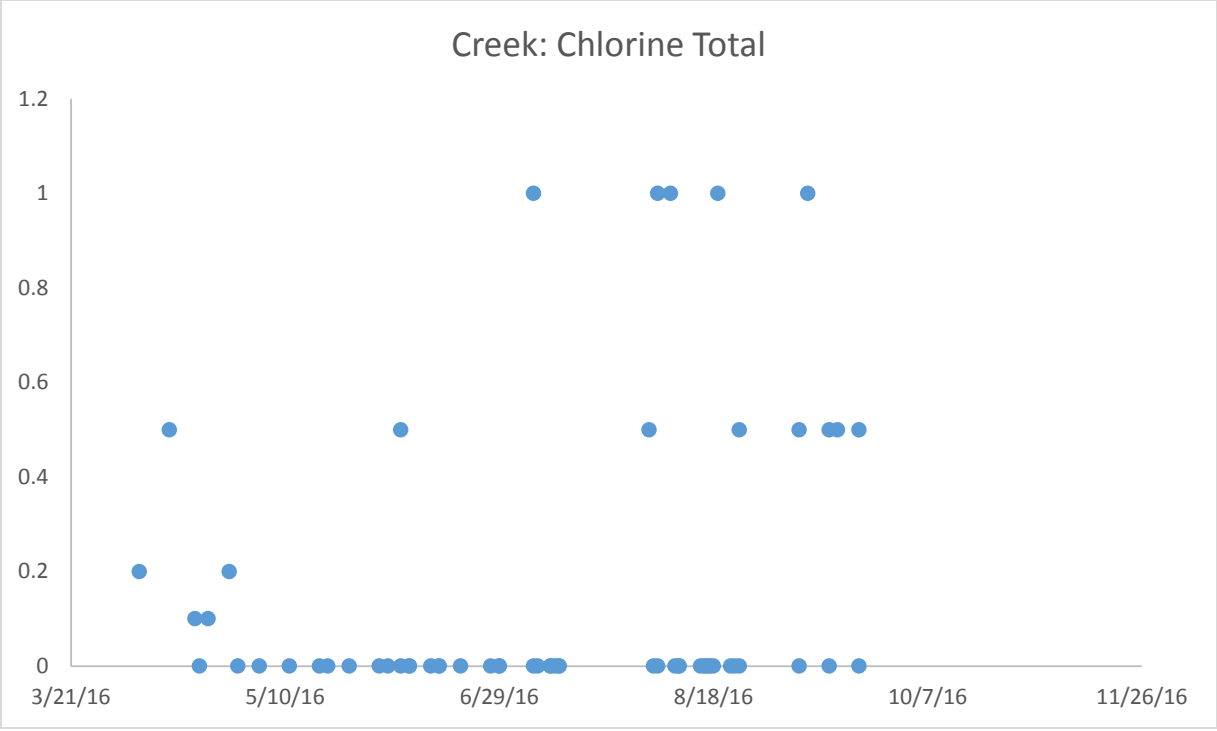


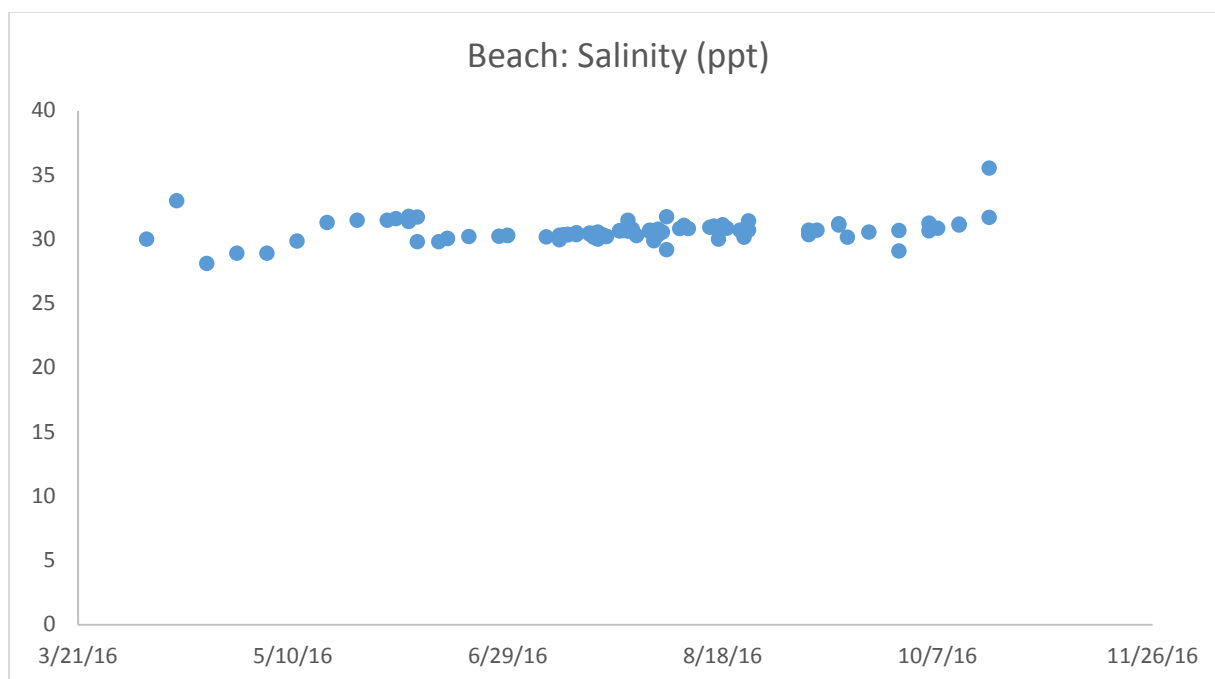
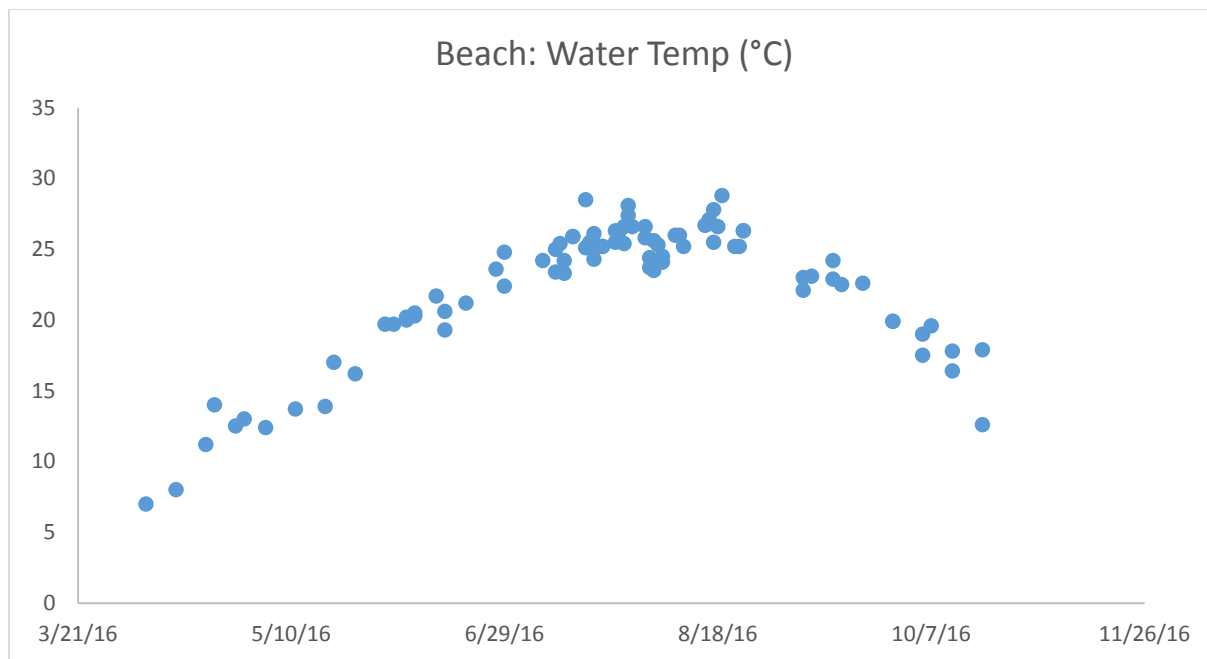


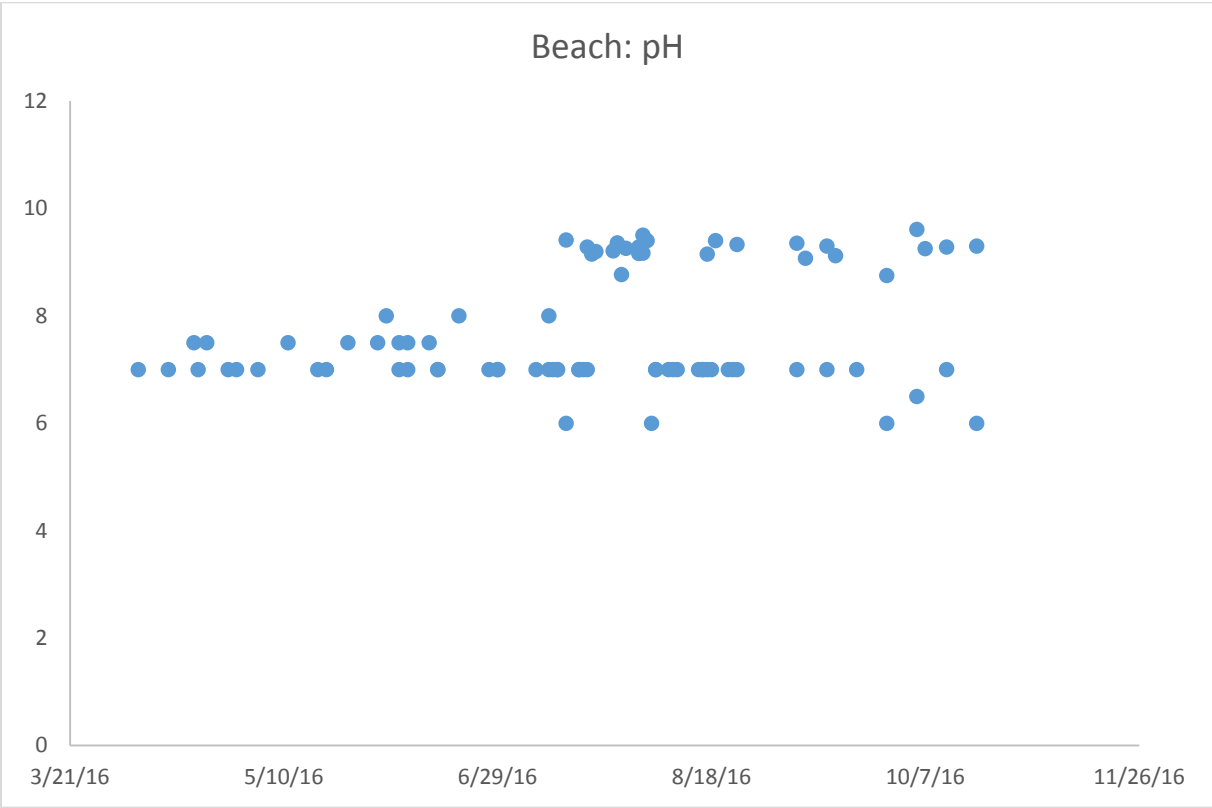
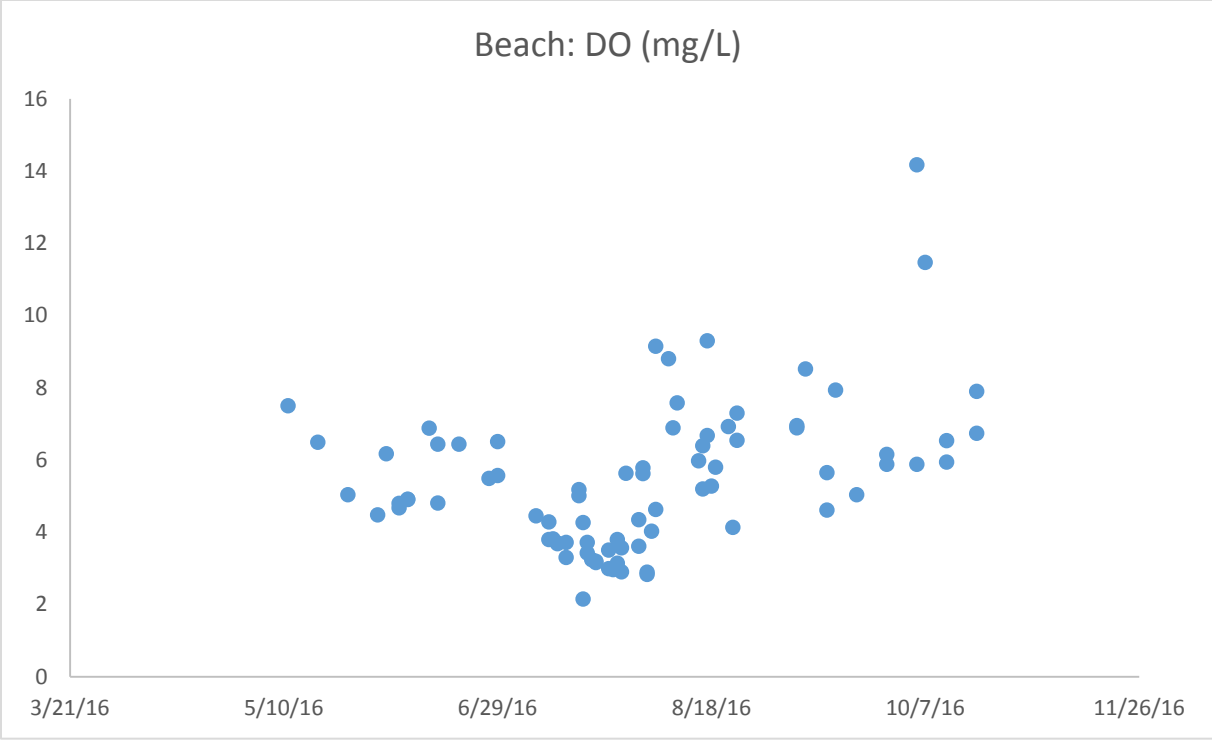


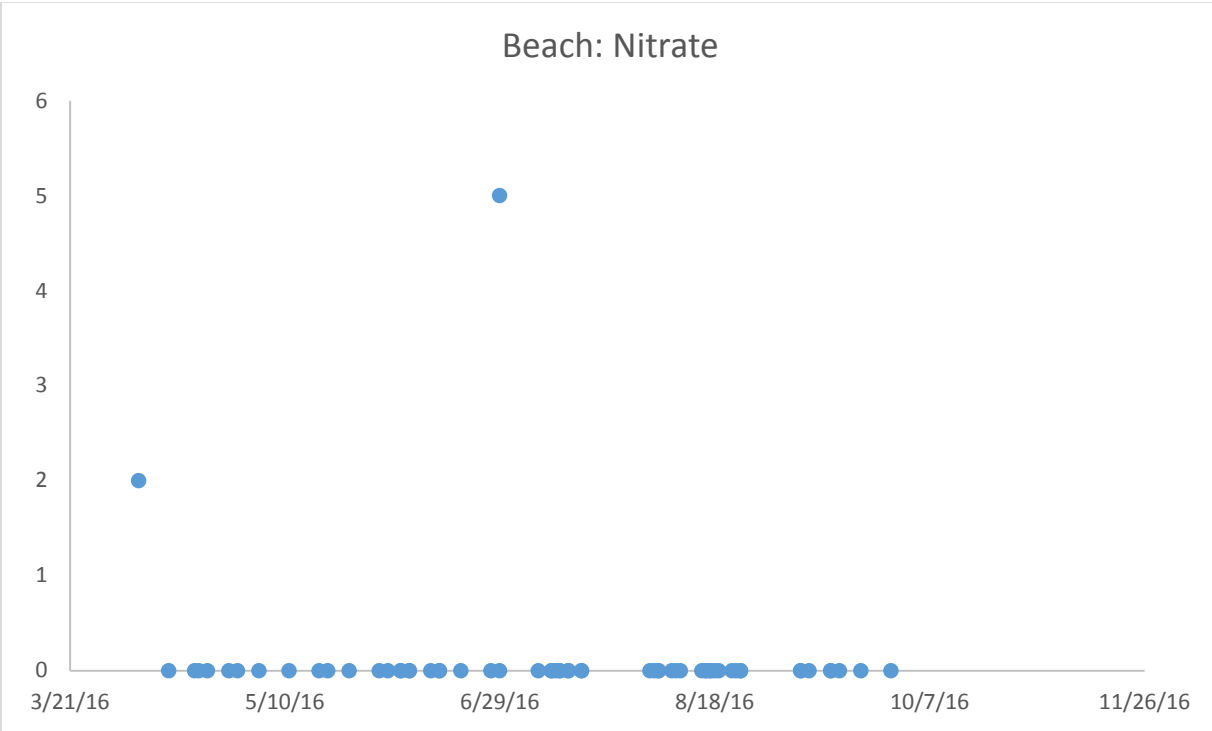
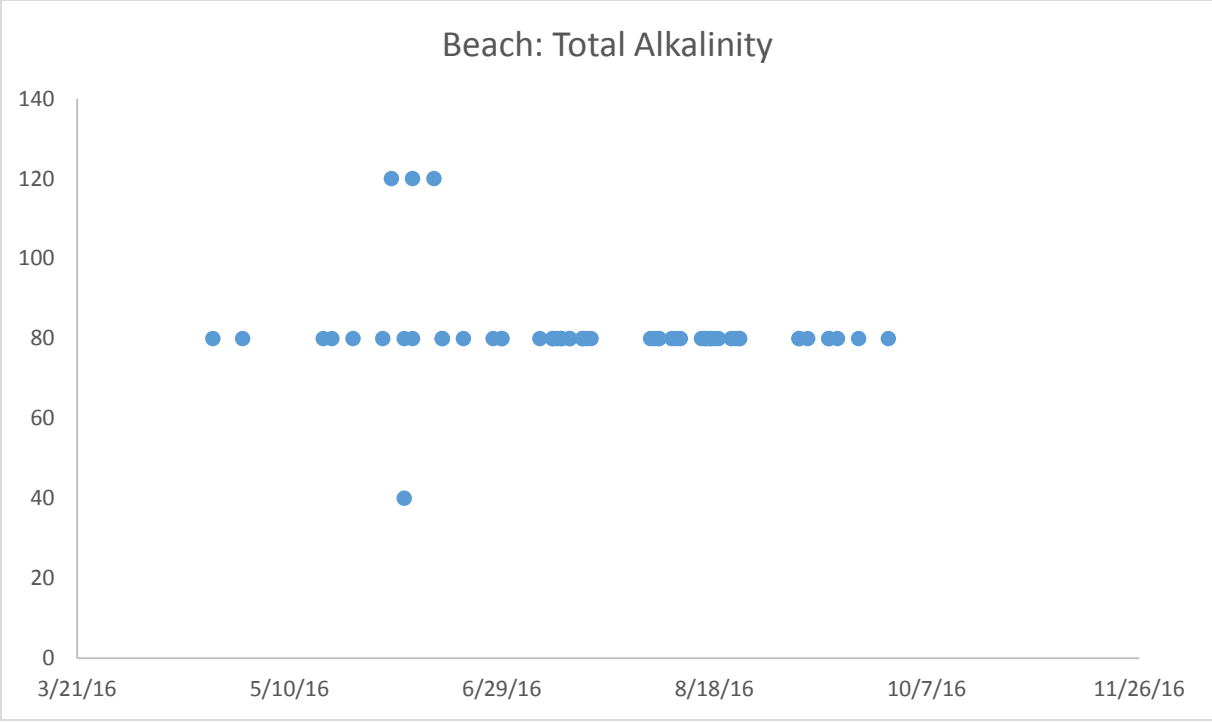


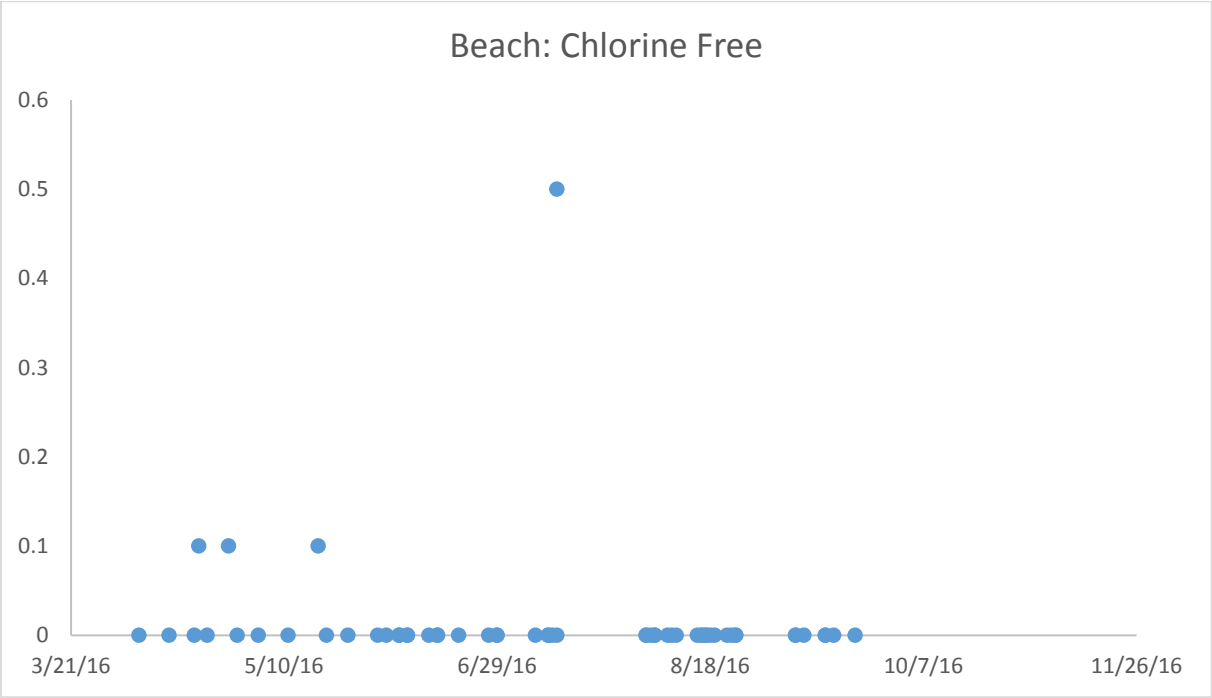
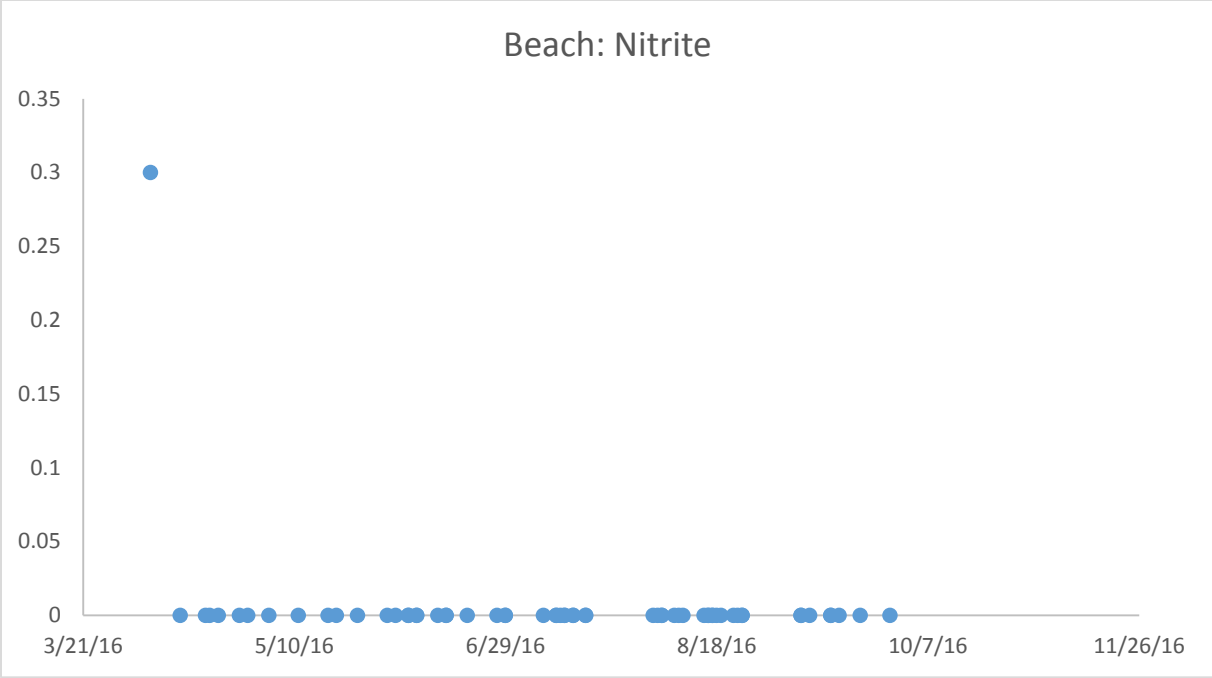












APPENDIX OF DELIVERABLES

SECTION 5: COMPREHENSIVE CONSERVATION MANAGEMENT PLAN REVISION

A. PUBLIC INPUT SURVEY

B. SUMMARY OF PUBLIC SURVEY INPUT



Public Input Survey

The following questions ask you about your opinions on the Peconic Estuary for the purposes of the revision to the Comprehensive Conservation Management Plan. Please provide feedback and comment on topics relating to the management plan found below.

*Please fill out and return to the head of your organization or mail to 423 Griffing Ave Riverhead NY 11901 ATT: Sherryll Jones. E-mail scans can be sent to sj497@cornell.edu
www.PeconicEstuary.org*

-
- 1) Please use one or two sentences to describe your vision of what describes a “healthy estuary”.

- 2) List 3-5 ways the Peconic Estuary can be improved.

- 3) Use three adjectives to describe the estuary you want to see.

- 4) Why is protecting the Peconic Estuary important to you. Please feel free to add comments or a narrative below (use the back of this page for more space).

- | | |
|---|---|
| <input type="checkbox"/> My business is here | <input type="checkbox"/> Clean water |
| <input type="checkbox"/> Because it is in my neighborhood | <input type="checkbox"/> It's where I grew up |
| <input type="checkbox"/> Boating, paddle sports, sailing | <input type="checkbox"/> The future of my children |
| <input type="checkbox"/> Relaxation and recreation
beaches | <input type="checkbox"/> The beaches and access to safe/clean |
| <input type="checkbox"/> Historical and cultural reasons | <input type="checkbox"/> For fresh and local seafood |

___ Fishing opportunities
___ Other

5) In your opinion, how important are the following topics to the Peconic Estuary.

**Survey Scale: 1=Not Important 2=Somewhat important 3=Neutral 4=Important
5=Very Important**

___ **Nitrogen Management:** Excess nitrogen loading from human activities is causing widespread disruptions in Long Island’s coastal ecosystems, including in the Peconic Estuary. From harmful and toxic algal blooms to low dissolved oxygen and degraded aquatic habitats, coastal waters are showing serious symptoms of nitrogen pollution.

___ **Climate Change Adaptation:** Projections for the Long Island region include air and water temperature increases, weather pattern changes, and sea level rise. Climate change and associated human responses to the changes have the potential to impact habitat and living resources in the Peconic Estuary.

___ **Harmful Algal Blooms:** Although Brown Tide is no longer dominant, the Peconic Estuary experiences numerous other Harmful Algal Blooms (HABs), such as Rust Tide and Toxic Blue-Green Algae, that occur annually. The negative impacts of algal blooms are broad; ranging from causing severe illness or death in humans, fish and wildlife, and domestic animals to changes in water quality parameters such as reduced dissolved oxygen and water clarity, to aesthetic impacts and reduced recreational values resulting from discolored water or foul odors.

___ **Habitat Restoration:** Habitat loss, fragmentation and degradation are frequently the result of the alteration of the natural landscape from factors such as development, pollution and climate change. Priority areas to protect and restore and in the Peconic Estuary include critical areas that support submerged aquatic vegetation, tidal wetlands and fish habitat.

___ **Pathogen Management:** Stormwater runoff, wildlife, waterfowl and nearshore onsite waste water treatment can be the source of contamination by bacteria and other pathogenic organisms which may result in closure of shellfish beds and bathing beaches in the Peconic Estuary which impacts economic and recreational activities on the East End.

___ **Education and Outreach:** Citizen involvement has been critical to PEP’s foundation and success. It is PEP’s goal to bring together the stakeholders in the watershed, encourage participation in decision-making affecting the estuary, encourage participation in programs to

____ **Critical Lands Protection:** Increasing development pressure is leading to the loss of open spaces and natural habitats, threatening ground and surface water quality and stressing remaining natural communities. The region’s growing population and rate of development, as well as threats from sea level rise, have underscored the need for action to protect the remaining developable acreage in the Peconic Estuary.

**Survey Scale: 1=Not Important
2=Somewhat important 3=Neutral
4=Important 5=Very Important**

#	Question	4=Important	5=Very Important
Harmful algal blooms			
1	How disruptive have brown tides, rust tides, red tides been to you or your business in the last 20 years?	<input type="checkbox"/> 1	<input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
2	How important do you think it is to continue to monitor brown tides?	<input type="checkbox"/> 1	<input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
3	Do you think fertilizers are the main cause of harmful algal blooms?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Habitat Restoration			
4	How important are eelgrass and wetlands/saltmarshes to you?	<input type="checkbox"/> 1	<input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
5	How important are shellfish and finfish to you?	<input type="checkbox"/> 1	<input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5
6	Do you think PEP should continue to restore habitats such as eelgrass and wetlands?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Critical Lands Protection			

7 How much of a threat is overdevelopment to the east end? ☐1 ☐2 ☐3 ☐4 ☐5

8 Should more area be designated as preserves? ☐Yes ☐No

Pathogens

9 How much of an impact will beach closures (due to high bacteria) have on your recreational activities or business? ☐1 ☐2 ☐3 ☐4 ☐5

10 Do you think it is important to include pathogens as a priority topic in the new CCMP? ☐Yes ☐No

Public Education and Outreach

Where do you learn about local issues? (Please place a check next to all that apply)

11 ☐ Facebook ☐ Twitter ☐ Instagram ☐ Vimeo ☐ TV ☐ Radio (station)

Other: _____

12 Are you aware of the Suffolk County Fertilizer Law which bans all fertilizer application from November 1st to April 1st? ☐ Yes ☐ No

13 Would you take advantage of a septic system financial incentive given the opportunity? ☐ Yes ☐ No

14 Would you consider alternative wastewater treatment systems on your residential or commercial property? ☐ Yes ☐ No

15 How concerning is mosquito control within your community? ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

16 How concerning is light pollution to the Peconic Estuary? ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

17 How concerning is noise pollution to the Peconic Estuary? ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

18 How concerning is climate change and coastal resiliency to the Peconic Estuary? ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

19 How concerning are red and rust tides to the Peconic Estuary? ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Please tell us what you think are the major contributors to Nitrogen pollution in the Estuary

Survey Scale: 1=Not Important 2=Somewhat important 3=Neutral 4=Important 5=Very Important

20 Septic Tanks ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

21 Sewage Treatment Plants ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

22	Atmospheric Deposition	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
23	Agricultural Fertilizers	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
24	Residential Fertilizers	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
25	Industries	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
<p>What have we missed? Please write down any additional topics you find important that were not listed on this survey.</p>						

Online responses for public input: 13, paper copies: 12, plus 3 stakeholders												
Ratings of Important Topics to Peconic Estuary	1	2	3	4	5	6	7	8	9	Total Answers	Total Score	Average Score
Nitrogen Management	2	1	0	1	0	1	2	3	3	13	73	5.62
Climate Change Adaptation	3	5	1	1	0	1	1	0	1	13	42	3.23
HABs	1	2	0	2	1	3	2	0	2	13	68	5.23
Habitat Restoration	1	3	0	2	3	0	2	2	0	13	60	4.62
Pathogen Management	0	0	4	1	1	2	1	3	1	13	73	5.62
Education and Outreach	2	1	3	1	3	1	0	0	2	13	56	4.31
Monitoring	2	0	2	3	0	4	0	2	0	13	36	2.77
Living Resources	2	1	2	2	1	0	2	2	1	13	57	4.38
Critical Lands Protection	0	0	1	0	4	1	3	1	3	13	85	6.54

Paper copies - Ratings of Important Topics to Peconic Estuary	1	2	3	4	5					Total Answers	Total Score	Average Score
Nitrogen Management				1	9					10	49	4.90
Climate Change Adaptation	2	2	1		5					10	34	3.40
HABs				3	7					10	47	4.70
Habitat Restoration		1		1	8					10	46	4.60
Pathogen Management					10					10	50	5.00
Education and Outreach				3	7					10	47	4.70
Monitoring			2	3	5					10	43	4.30
Living Resources				2	8					10	48	4.80
Critical Lands Protection					9					9	45	5.00

All Copies -	1	2	3	4	5					Total Answers	Total Score	Average Score
HABs to business	3	3	8	6	8					28	97	3.46
Monitoring HABs	0	3	0	8	17					28	123	4.39
Eelgrass, wetlands/marshes	0	2	1	6	18					27	121	4.48
Shellfish and finfish	0	1	1	3	23					28	132	4.71
Threat of overdevelopment	2	2	1	6	17					28	118	4.21
Beach closures on recreation or business	2	5	3	5	12					27	101	3.74
Mosquito control	3	5	4	5	4					21	65	3.10
Noise and light pollution	1	3	3	3	3					13	43	3.31
Climate change and coastal resiliency	2	8	2	4	10					26	90	3.46

(Paper copies) Major contributors to Nitrogen pollution	1	2	3	4	5					Total Answers	Total Score	Average Score
Septic Tanks	1	0	2	1	10					14	61	4.36
Sewage Treatment Plants	0	0	0	3	10					13	62	4.77
Atmospheric Deposition	1	3	6	0	2					12	35	2.92
Agricultural Fertilizers	0	0	1	2	10					13	61	4.69
Residential Fertilizers	0	0	3	3	7					13	56	4.31
Industries	0	3	2	2	6					13	50	3.85

True or False (Survey Scale 1 = Yes, 2 = No)	1	2
Fertilizers main cause of HABs	18	10
Should PEP restore habitats	27	0
Should more area be designated preserves	26	1
Should bacteria/pathogens be priority topic	24	2
Are you aware of Fertilizer Law	17	10
Would you take advantage of septic incentive	24	0
Would you consider alternative wastewater	21	2

Why is protecting the Peconic Estuary important? (check all that apply)	
Clean water	22
Relaxation and recreation	19
The beaches and access to safe/clean beaches	17
Boating, sailing, paddle sports	15
Fishing opportunities	14
Because it is my neighborhood	14
Historical and cultural reasons	12
The future of my children	12
For fresh and local seafood	10
It's where I grew up	8
My business is here	3
To escape the suburbs/cities	3
Other	1

Where do you learn about local issues? (Check all that apply)	
Facebook	6
Twitter	3
Instagram	1
Vimeo	0
TV	11
Radio	12
Newspaper	11

Online blog or website	9
Other	15

Adjectives to describe healthy estuary	
Clean/Pristine/Unpolluted	18
Natural	1
Sustainable/Everlasting	2
Healthy	6
Alive/Thriving/Abundant/Productive/Bountiful	8
Restored	3
Diverse	1
Safe/Accessible/Swimmable	8
Grassy/Green	2
Preserved/Respected	2
Beautiful	1
Fresh	1
Clear	3
Spectacular	1
Friendly	1