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A Newsletter from the Connecticut Department of Energy & Environmental Protection
Exploring Long Island Sound - Issues and Opportunities

What's Your Vision for the Future of Long Island Sound?

Blue Plan Draft Policies Are Now Available for Public Review and Comment

As regular readers of *Sound Outlook* are well aware, the Connecticut Department of Energy and Environmental Protection (DEEP) is developing a Blue Plan for Long Island Sound in coordination with a 15-member Advisory Committee appointed by statute, Governor Malloy, and the legislative leadership. The Advisory Committee and DEEP's Blue Plan Development Team are constantly seeking widespread public and stakeholder participation in the planning process to help develop a collective vision for the future of Long Island Sound. It is critical that the Blue Plan protect the Sound's special, sensitive, or unique marine life and habitats while also fully recognizing the importance of Long Island Sound to the citizens of Connecticut and New York for their recreation or livelihood (or both!).

OCTOBER/NOVEMBER 2018
No. 59

Inside

View of Long Island Sound from Bluff Point in Groton

What is your vision for Long Island Sound? We want to hear from you!
Photo Credit: CT DEEP

We are now at a very exciting moment in the Blue Plan development process: the Advisory Committee and Plan Development Team have drafted a series of Blue Plan Policies that are meant to protect the natural resources and the traditional human uses of Long Island Sound, while allowing for sustainable and compatible future uses.

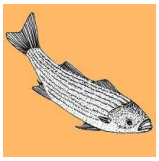
There are two types of policies proposed:

1) Sound-Wide Policies:
Sound-wide policies are the highest level policies contained in the Long Island Sound Blue Plan because they will apply everywhere within the Sound's policy area. This section's policies reflect the Vision and Goals established early-on in the planning process: Healthy Long Island Sound Ecosystems; Effective Decision-Making; and Compatibility among Past, Current, and Future Ocean Uses.

2) Special Area Policies:
The Blue Plan is required by statute to designate Ecologically Significant Areas (ESAs), and the Blue Plan Advisory Committee and Plan Development Team determined it was necessary to also take on a parallel process of designating Significant Human Use Areas (SHUAs). All of these unique and special ecological and human use areas have been designated through a set of criteria that was vetted by the Advisory Committee, ecological experts, and external stakeholders.

The ESAs and SHUAs will have specific policies that will apply to ESAs and SHUAs in addition to the Sound-wide policies. Some are general policies, e.g., "New activities in the Blue Plan policy area of Long Island Sound shall maintain and preserve the values of an ESA and/or SHUA."

Climate Change Update: Blue Plan Policy "Lens" Considers Climate Change



First Impressions

Sharing the "First Impressions" that Make an Environmental Difference

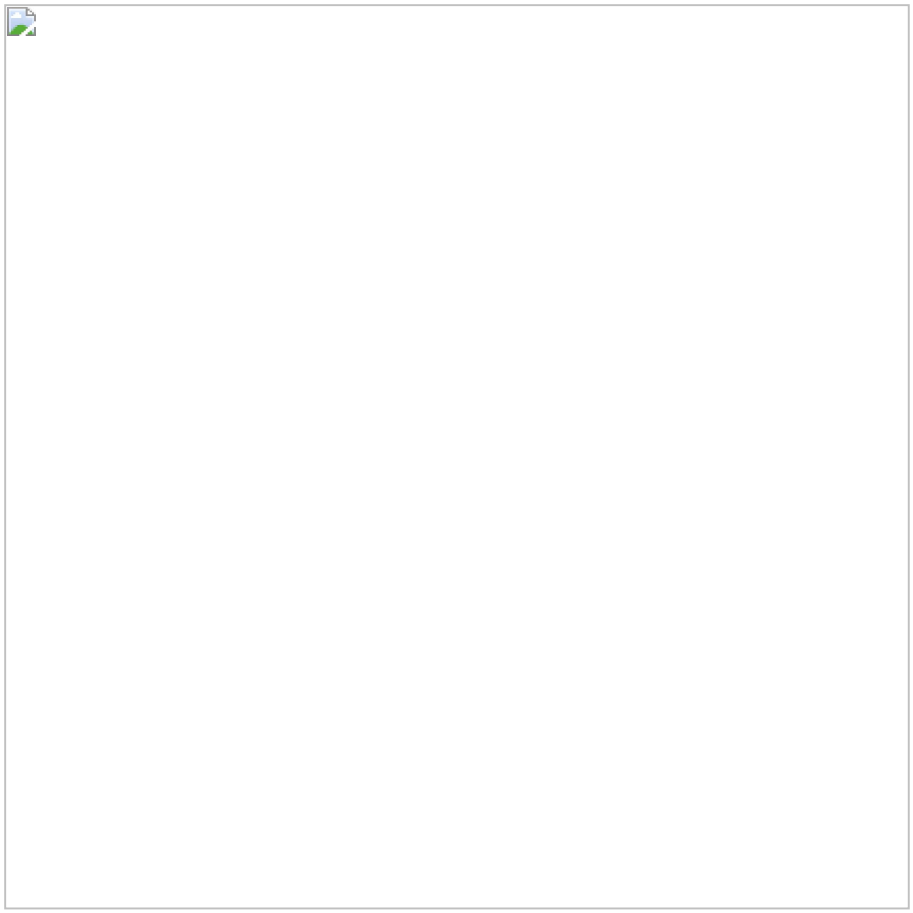
This column features the "First Impression" that set someone on his or her path to environmentalism. We hope *Sound Outlook* readers will relate to these "First Impressions" and recall their own experiences that led them to appreciate and care about Long Island Sound.

This month, we highlight the First Impression of Bill Lucey, the Long Island Soundkeeper through Connecticut Fund for the Environment/Save the Sound:

Although he currently makes his living spending countless hours working on the water, Bill Lucey grew up in Wilton, Connecticut where he spent countless hours playing in the woods.

There was an abandoned estate near Keeler's Ridge, off the dead-end road where his family lived, and he and his sisters would walk along an unimproved road to explore the farm pond on the property and catch tadpoles and frogs.

Other policies will contain more specific siting and performance standards for each ESA and SHUA, and any new use proposed to be located in an ESA or SHUA would have to comply with those specific policies. An example of a SHUA's siting and performance standards can be found below:



An example of draft policies that may apply to
Significant Human Uses of Long Island Sound

Similarly, policies that apply to Ecologically Significant Areas are currently being drafted, and will be made available for public review and comment as soon as they are completed.

The Advisory Committee and Blue Plan development team recognize that there may some instances where a proposal cannot meet the ESA and/or SHUA policies. In those cases, there is flexibility written into additional policies. For example:

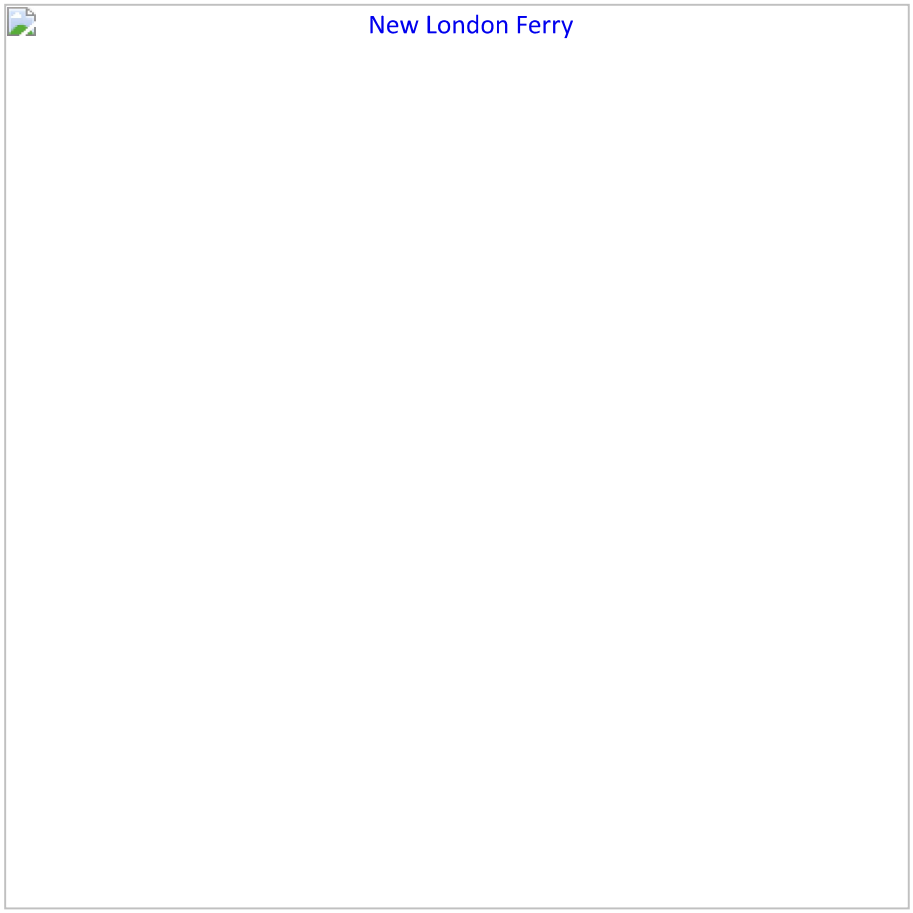
1. A proposed activity may be located within an ESA and/or SHUA provided that it has been demonstrated, through site-specific survey, scientific data, and analysis that:
a. The project will cause no adverse impacts to the ESA and/or SHUA, or
b. There is no feasible, less damaging alternative and all reasonable mitigation measures and techniques have been provided to minimize adverse impact, and the public benefits of the project outweigh the harm to the ESA and/or SHUA resource, use, or value.

On one such trek, they noticed an excavator on the road and, as is the case for many four-year-old boys, this encounter with construction equipment created one of Bill's earliest indelible memories. But not in the way that you'd think:

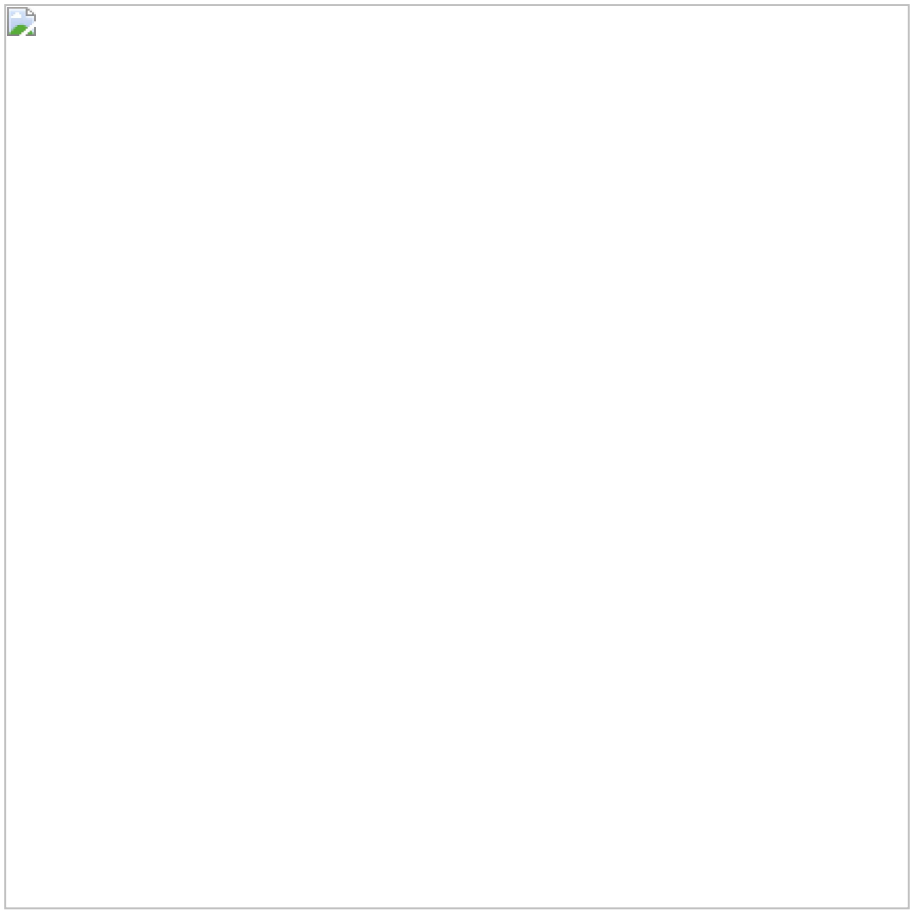
One day we were walking along the old broken-up road, and there was a big puddle full of insect larvae and small frogs. We played there awhile and then went on to the nearby farm pond. On the way back there was an excavator digging up the road. It just smashed the whole area, it dug up the frogs and everything else that was in that puddle. Even as a small child, I had a great sense of sadness.

The excavator was there because they were putting in a 20-unit housing development on the old farm property. They punched a road through the property and it just changed the entire character of the area. There used to be a big diversity of wildlife: black snakes, box turtles, wood turtles, and spotted turtles, and all kinds of life, and slowly, over time, it became much less diverse; all the little creatures, they disappeared. The excavator digging up that little frog habitat was probably the first time I really felt a sense of irreplaceable loss.

This "First Impression" and sense of loss did not discourage young Bill Lucey. Growing up in the 1970's when, he says, "everyone was an ecologist," Bill had babysitters who shared positive outdoor experiences, exploring the woods and identifying the different plants they came upon. In elementary school, Bill had several teachers who were very conscious about the ecology and the environment. In 7th grade, Bill took a dendrology class (the



The Blue Plan considers marine transportation to be a Significant Human Use of Long Island Sound
Photo Credit: CT DEEP



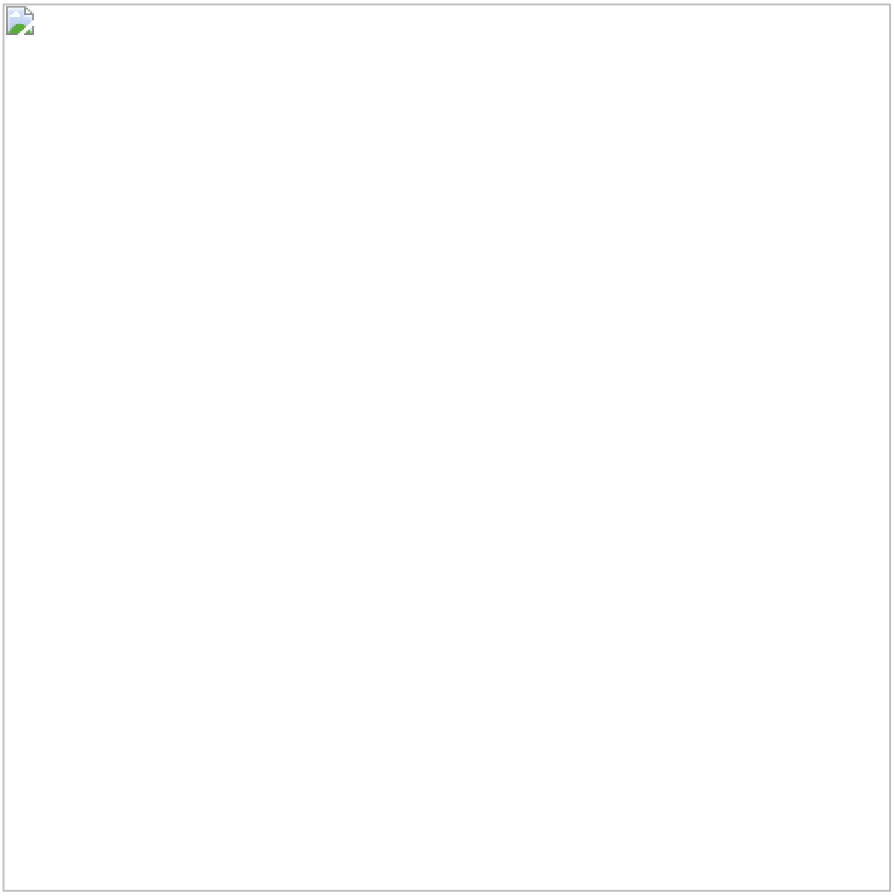
study of trees and woody plants) with Mr. Raymond, who used the woods as his classroom and armed the students with dichotomous keys to identify the trees. The following year, Bill's 8th grade earth science teacher used the topic as a backdrop to talk about different environmental issues:

Mr. Hoogenboom would come to school and relate his own observations such as, "I saw a turkey vulture today." Then he'd explain that he hadn't seen one of those in years and use it as a discussion point about the damage caused by DDT. Turkey vultures were just as much a victim of DDT as any of the more iconic species like bald eagles and osprey that everyone talks about today. So he used that experience to explain to us how long it took for that ban to actually to show positive results and start healing the landscape. A common sense lesson of cause and effect.

As Bill grew older, his love of the outdoors grew even stronger. By the time he hit high school, his penchant for catching tadpoles and frogs had morphed into a serious interest in fishing. When he wasn't playing soccer, he was fishing. For hours and hours. Upon obtaining their driver's licenses, Bill and his friends would set out in search of prime fishing spots, often traveling to Litchfield to fish in the Housatonic River:

There was a crew of us who were into hunting and fishing. Fishing in the Housatonic River introduced us to concept of PCB contamination and fish eating advisories, which made pollution personal. We also noticed that "No Trespassing" signs were popping up everywhere. We were losing area after area to development,

Click on the photos above and below to see videos of
Long Island Sound teeming with marine life!
Photo and Video Credits: Long Island Sound Resource Center



Blue Plan "Lenses"
The Blue Plan Development Team recognizes that the proposed policies might not be sufficient to help either project proponents plan their projects or regulatory agency staff to review them. So the Team and Advisory Committee developed Blue Plan "lenses" as additional considerations to be taken into account when applying the Plan's policies and standards.

These lenses are meant to assist the applicant and the regulatory agencies when determining the suitability, location, and timing of a proposed project, and whether or not additional information and data collection are necessary to make a decision on the project. For example, the duration or permanence of a human use, such as sailboat races (seasonal) or ferry trips (year-round), should be considered during the review of a proposed project that could affect those uses.

Public Input
Throughout the Blue Plan planning process, the Blue Plan Development Team and the Advisory Committee have remained committed to soliciting public and stakeholder feedback every step of the way. The draft policies are a significant milestone in development of the Blue Plan, and we need your help to make sure these policies ultimately represent Connecticut's vision for Long Island Sound.

The draft policy document can be found online at www.ct.gov/deep/lisblueplanpolicy.

As readers review the draft policy document, we ask that you please note that the document is a first draft which should be read it in its entirety, as many of the policies build upon and depend on others. Focusing solely on issues that may be of particular interest will not allow the reader to fully understand the overall context of the Blue Plan's policy approach.

and so our access to hunting and fishing areas was noticeably and rapidly reduced. Every year it got worse. So during that period is when we became conscious, and all of us went on to work in fisheries, either as guides or biologists.

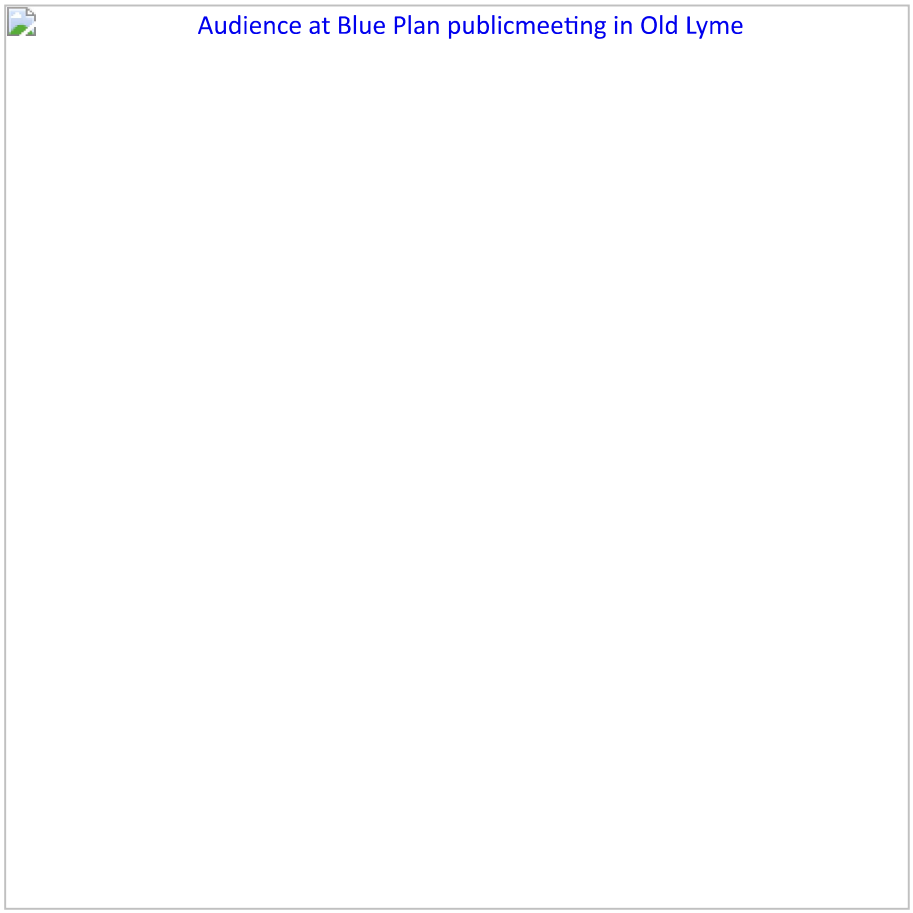
Bill didn't necessarily realize he was on a trajectory to ultimately work in the environmental field when he took his "First Environmental Step." He noticed that the University of Vermont (UVM) offered a degree in fish and wildlife biology with a fisheries option:

I loved to fish, and there was this major of "fisheries biologist" and I thought, "That sounds fun. I like fish, I'll go study fish." There were only 3 of us in the program. It wasn't a career decision at all. But once I got into school, I realized it was fun with lots of job opportunities and I just stuck with it.

Job opportunities, indeed. Bill's jobs during his college years alone included working as a natural resource instructor at Vermont Fish and Wildlife Department summer camps; conducting habitat restoration for the U.S. Forest Service in the Klamath River in northern California; and working with a UVM graduate student on Atlantic salmon restoration. Upon his graduation from college in 1991, Bill traveled through Central America as a "vagabond" working with sea turtles and studying tropical farming. He then spent two years in the Peace Corps in Guatemala as a fisheries extensionist, teaching communities how to become holistically sustainable:

We integrated small-scale vegetable gardens with fish ponds and small animal husbandry such as goats,

The Blue Plan Team has hosted several public events to solicit input from interested parties. For example, a public meeting was held in Old Lyme on October 30, 2018, and a public hearing was held in Stamford on November 8, 2018 to present about and gather feedback on the draft policies. Another public meeting about the draft policies was held on November 26, 2018 , this one at the Village Hall in Port Jefferson, New York.



A public meeting on the draft Blue Plan Policy Document was held on October 30, 2018 at DEEP Marine Headquarters in Old Lyme, CT
Photo Credit: Nathan Frohling, The Nature Conservancy

The Team also anticipates public outreach events over the next few months about the proposed Ecologically Sensitive Areas . Be sure to join the Long Island Sound Blue Plan listserv to receive updates when those events are scheduled.

If you aren't able to attend any of these public events, we welcome you to ask questions and provide comments via:

Email: DEEP.BluePlanLIS@ct.gov;
U.S. Mail: LIS Blue Plan, DEEP WPLR, Land and Water Resources Division - Planning, 79 Elm Street, Hartford, CT 06106;
Online: complete the comment form and email or mail the form to us.

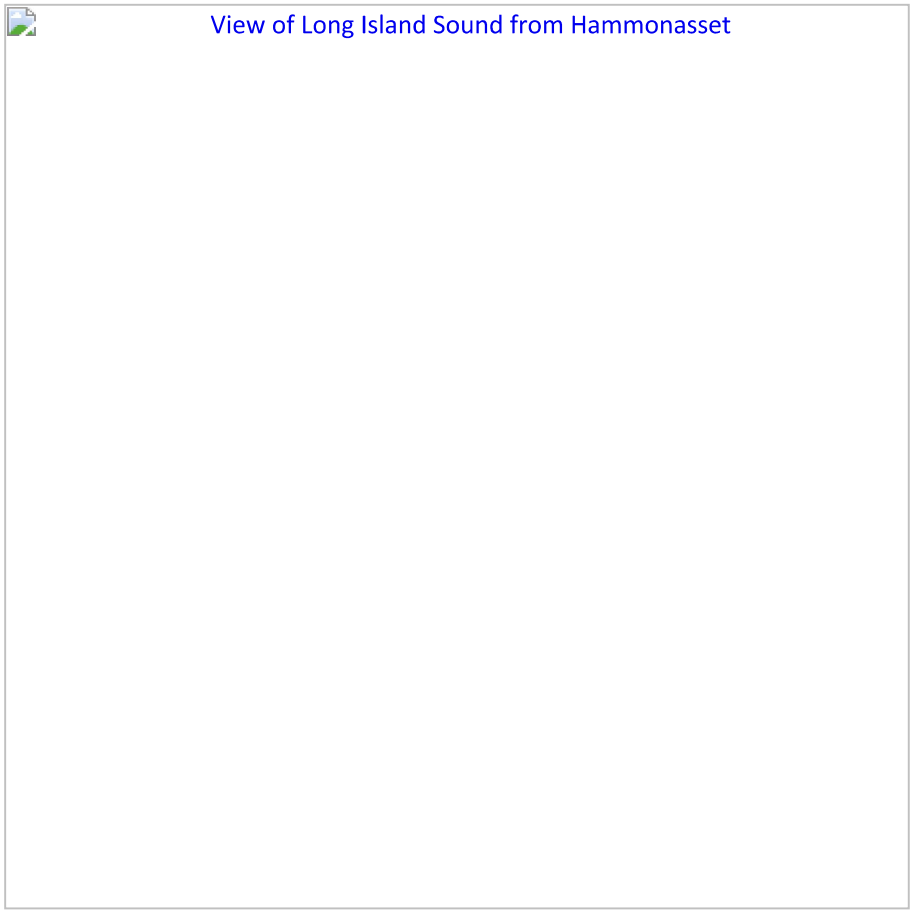
We look forward to hearing from you about this very important Blue Plan component.

chickens, and rabbits to get more protein into the diet. Food and other waste would go into the ponds and cause algae blooms, so we'd stock the ponds with tilapia and a local cichlid as a predator to keep the population under control, as well as freshwater shrimp and snails. All the water and sludge from the ponds was used to fertilize the vegetable gardens. We also experimented with solar ovens and composting toilets and other alternative technology.

After the Peace Corps, Bill worked briefly as a lobsterman in Port Jefferson, New York and an organic farmer in Vermont. No stranger to living in remote parts of the world, he then accepted a position with the U.S. Forest Service in Yakutat, Alaska in 1995:

I worked for the U.S. Forest Service running a salmon smolt trap in the Situk River Watershed to collect baseline data to see how our restoration work, channel restoration, several fish passage projects, and tree thinning would increase the production of that system. I did that for 7 days a week for $10 an hour for 2 ½ months each spring for 5 years. I also ran a lot of surveys: moose, mountain goats, trumpeter swans, sea lions, spawning salmon, blacktail deer, and several years of banding songbirds. I also started commercial fishing during this time and learned a great deal about fishermen's perspectives on conservation.

Bill's "Behavior Change" came about after working for the Forest Service for 7 years, when the Clinton-era Roadless Rules for national forests were overturned by the Bush Administration. This policy change had far-reaching negative ramifications for the Tongass National Forest which



Help shape the future of Long Island Sound--Comment on the Blue Plan!
Photo Credit: CT DEEP

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SPOTLIGHTED COASTAL RESOURCE: Eelgrass--The *Zostera* Kind

Submerged aquatic vegetation (SAV) is a term that describes a variety of rooted plants that grow on shallow bay bottoms below the spring low-tide mark. These grassy beds provide vital shelter and refuge for juvenile fish, bay scallops, crabs, and lobsters. They are a vital food source for many marine organisms. The plants also trap sediments and use nitrogen from the water column, thereby improving water quality.

Of all the SAV found in the waters of Long Island Sound, *Zostera marina*, affectionately called "eelgrass" by locals, may arguably be one of the most important habitat types that Long Island Sound resource managers are committed to preserving and restoring. In fact, the Connecticut Coastal Management Act contains a policy [Connecticut General Statutes Section 22a-92(2)(A)] that specifically mentions eelgrass and encourages the protection, enhancement, and natural restoration of eelgrass flats.

were enforced through the Forest Service, and Bill felt he could not be a part of that effort:

The Forest Service had authorized a 26-34 million board foot clear-cut timber sale along the Situk River in an area which, we knew from our research, was one of, if not the most productive salmon rivers in the entire Pacific basin on an area-by-area comparison. It contained all 5 species of salmon, and supported the biggest steelhead trout run in the State of Alaska, with several thousand 3-foot-long wild sea run trout. So you had this incredible river that had already been cut beyond the recommended level, and they were going to continue to log it against the U.S Forest Service's own Forest Plan guidelines.

The Roadless Rules basically said the public will no longer subsidize road building in national forests for the private timber industry until the corporations and federal government have cleaned up all the messes they've made, all the fish passage blockages and the roads running mud into salmon streams. They have to clean up their mess, and then we can talk about further road building. The Rules said you had to harvest timber within a quarter mile of the existing road network, which was massive anyway. So it was a very reasonable measure that just got flipped on its head with an executive order and no public comment. And they targeted our our isolated piece of the Tongass thinking no one would protest the Nation's first roadless sale in the tiny town of 800 residents.

By that point, I didn't feel right about being a lead in suing the Forest Service as a federal employee. So I quit and took a job as a watershed council

A bay scallop attaches to a blade of eelgrass
Photo Credit: LIS Resource Center

Historic and anecdotal records since colonial times tell us that eelgrass beds once grew in the subtidal waters along the entire length of the Connecticut coast and the north shore of Long Island. Beginning in the late 1800s to the late 1900s, records show that there were decadal periods of abundance and scarcity of eelgrass acreage that appeared to be primarily impacted by periods of stormy and calm winters. Certain individual embayments seemed to be more susceptible than others to declines in eelgrass abundance for reasons unknown. So studies and surveys began to track abundance of eelgrass and the potential causes for their decline.

Winter flounder in eelgrass off Fishers Island in Long Island Sound
Photo Credit:Long Island Sound Study

In 1996, the then-Connecticut DEP and the Long Island Sound Study (LISS) established a Habitat Restoration Initiative (HRI) to promote the restoration of degraded coastal habitats. The HRI's first goals included restoring 2000 acres of coastal habitat (eelgrass being only a small percentage) by 2008. To achieve

coordinator and worked with the Yakutat Tlingit Tribe and the City of Yakutat. We took them to federal court where we secured a permanent road building injunction. That was a long, painful battle that took one-and-a-half years to get a final resolution.

That was a very big pivot point for my career.

During this time, Bill became the coastal zone planner for the City of Yakutat, a position that was paid for by cobbling together funds from a local salmon tax and grants from NOAA, the U.S. Fish and Wildlife Service, the Natural Resource Conversation Service, and yes, the U.S. Forest Service who became allies after the fight. One of his more memorable projects during his 12-year tenure was an effort to protect seals from cruise ship collisions:

I got really involved with the National Marine Mammal Lab, working as the local marine mammal stranding coordinator studying a local population of beluga whales, and working on a project to address cruise ship disturbance of harbor seals. Adult seals and pups would haul-out on the ice and the cruise ships would plow through them. There's a crew still up there working on this, and they've tagged several seals over the past few years and they're now proposing new cruise ship regulations based on that data. It takes many years to bring about change, and that's when I realized I had to become politically active, because the cruise ship lobby is very powerful and well-funded, and they were able to stall a lot of measures that were needed to protect water quality and wildlife.

Another project dealt with the timber and mining industries:

these goals, the LISS partners needed to take a "baseline" inventory of existing eelgrass acreage and conduct studies to determine the reasons for increases and declines.

Juvenile winter flounder use eelgrass beds for shelter and to find prey
Photo Credit: LIS Resource Center

These inventories were also started because the Connecticut DEP was interested in learning the status of eelgrass beds and wanted the beds monitored periodically.

In 2007 the DEP and the Department of Agriculture published a technical assessment of the impacts to eelgrass in Connecticut waters utilizing pre-2007 existing data.

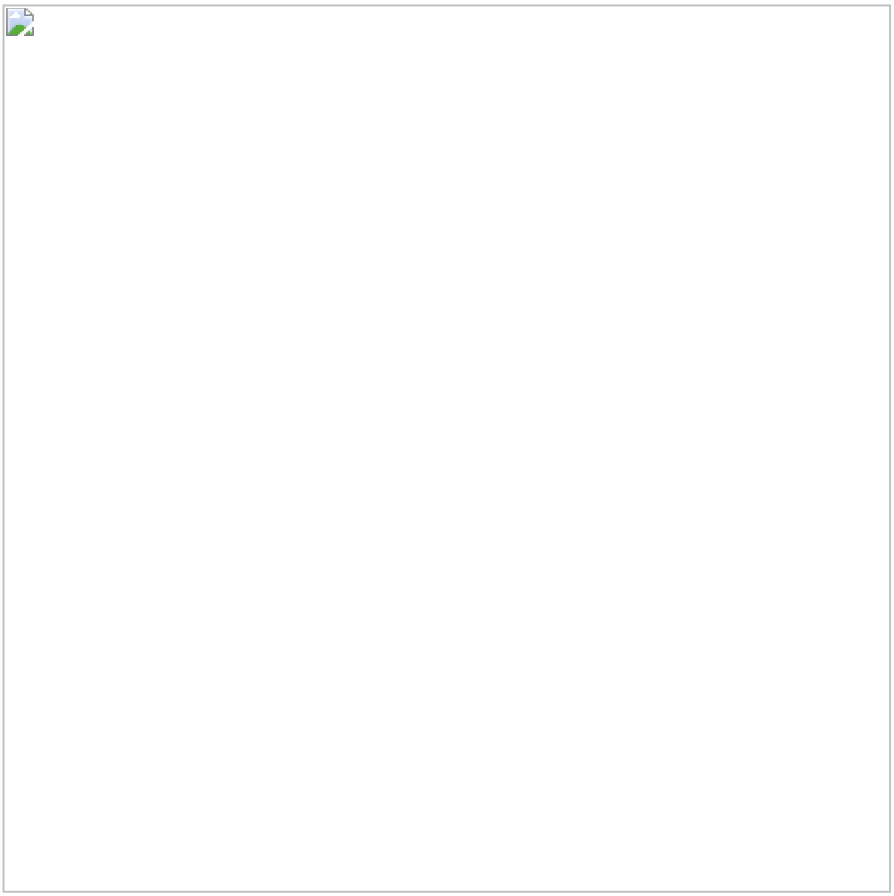
Aerial surveys for eelgrass were conducted in the eastern end of Long Island Sound during 2002, 2006, 2009, 2012, and 2017 by the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory Program (NWI):

During this time the State of Alaska dissolved the Habitat Division of the Department of Fish and Game, and they gave permitting authority to the Department of Natural Resources which was a timber and mining resource permitting operation, I think they did this so they could streamline development and not let fish and wildlife biologists get in their way. Soon after, the state also dissolved the coastal zone management program, removing local enforceable policies and really attacking the local small government control and the rights of indigenous communities. The state gave the money back to NOAA, so my position lost that funding. But we figured out a way to get around all that.

As a "Home Rule Borough" with 162 miles of isolated coastline, Yakutat wrote its own protection laws including an ordinance for an excise tax which said, if you come in to extract as a large timber operation or a large mining operation, we will get 4% of your gross proceeds. We left the mom and pop operations alone. The Alaska Miners Association was not pleased! When the last major timber outfit pulled out of nearby Icy Bay, we presented them with a $180,000 tax bill, which was grudgingly paid and put into the city coffers.

That was another big turning point for me: I had learned that the courts were one tool during the Tongass timber fight, but legislation is the strongest, most durable tool. That's when I started focusing on lobbying for laws.

By this time, Bill had married Nicole Miller who was also a transplant to Yakutat from Oregon, and started a family. Seeking a better education system for their son Henry, they



The LISS estuary program published HRI technical manuals and reports in 2000 and 2002 documenting eelgrass abundance. In 2015 the LISS and its partners implemented a revised Comprehensive Conservation and Management Plan which included setting new goals of restoring an additional 2,000 acres of eelgrass by 2035, based on a 2012 baseline survey that identified 240 eelgrass beds in eastern Long Island Sound totaling 2,061 acres.

Most recently, in 2018 the U.S. Environmental Protection Agency conducted a survey of Niantic Bay utilizing satellite remote sensing imagery.

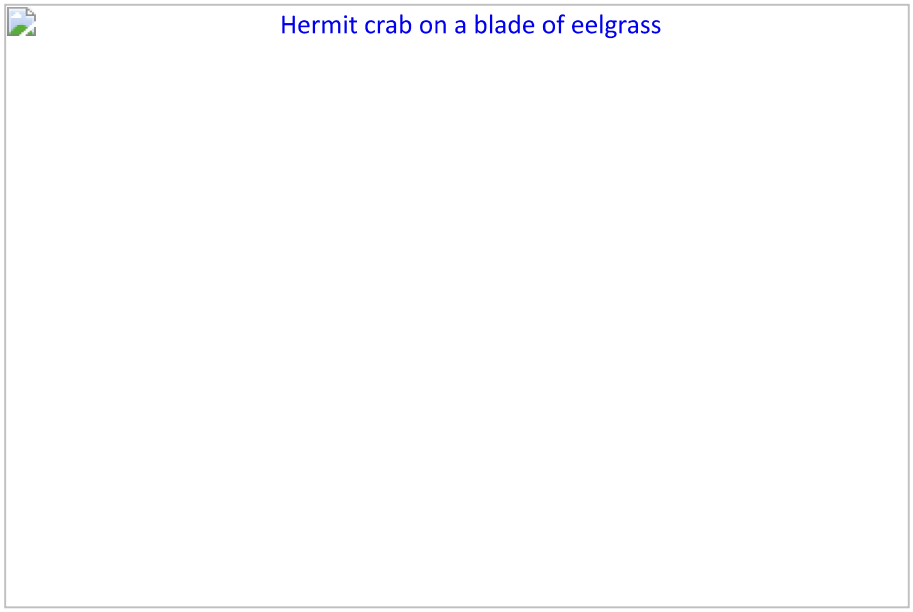
These surveys and research helped coastal resource managers determine that nutrient enrichment of the waters of estuary embayments caused pelagic algae and epiphytic algae to bloom and out-compete the rooted, benthic *Zostera* for the precious sunlight needed for photosynthesis in promoting abundant beds.

left the wilds of Alaska for the Island of Kauai, Hawaii. For three years he worked for the University of Hawaii's Research Corporation. As the head of Kauai's Invasive Species Committee, he managed invasive species such as parakeets and mongoose. But, as a member of the "Sandwich Generation," Bill soon decided it was time to come back to the northeast:

My folks are well into their 80s and my sisters are back east, so it was time, after a 30-year walk-about, to come home. I started looking for jobs in Maine, Vermont, and Connecticut, and the Soundkeeper position popped up. Since I was a scientist with almost 20 years of boat time as a seasonal commercial fisherman, and I grew up fishing on Long Island Sound, I figured I'd apply for the job. It's been great to be back in the area and see old friends from Maine to New Jersey.

Bill's journey has made him the perfect candidate for the Soundkeeper position with Connecticut Fund for the Environment/Save the Sound, since he has been a staunch protector of public lands and looks at things from a public perspective:

I am a committed advocate of public access, public hunting and fishing areas, public recreation areas, and the ability of people to go wherever they want on the landscape. If people have that access, then they appreciate the natural world and are that much more likely to defend it because they're going to lose something themselves. If they don't have any access, if they don't hunt or fish or bird-watch or hike or camp, then when the waters don't support fish anymore or a mall replaces lowland woodcock foraging areas,



A hermit crab climbs a blade of eelgrass
Photo Credit: LIS Resource Center

One of the strategies to address the problem of excessive algal blooms in embayments is to set goals (nutrient standards) to improve water quality conditions conducive for eelgrass abundance. Connecticut's Second Generation Nitrogen Strategy includes targeting priority embayments to improve water quality and for implementing nitrogen reduction strategies in their respective watersheds (see the October/November 2017 issue of *Sound Outlook* for more information on Connecticut's Second Generation Nitrogen Strategy). And improved water quality should spell success for eelgrass.

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SPOTLIGHTED COASTAL ACCESS: Glimpse Southeastern Coastal Connecticut's Past with a Visit to Mamacoke Island, Waterford

In addition to having a new Internet-based interactive map, the recently revised Connecticut Coastal Access Guide (described in the June/July 2017 issue of *Sound Outlook*) includes several new coastal access sites. One recent addition is the Mamacoke Conservation Area on the Thames River in Waterford. The Mamacoke Conservation Area, a unit of the larger 750-acre Connecticut College Arboretum, is a natural area refuge within the urbanized lower Thames River Valley, offering opportunities to explore a relatively intact remnant of this coastal area's geologic and botanical past.

Since the Laurentide ice sheet receded from coastal Southeastern Connecticut 20,000 years ago, the area has been disturbed very little beyond its 19th and early 20th century uses for a small shipyard, agriculture, quarrying, and more recently, residential development. Thanks to the foresight of Connecticut College which purchased Mamacoke in 1955 for conservation, and the railroad that isolates it from adjacent urbanized uplands to the west, the island is largely undisturbed and is managed for ecological conservation, education, and compatible passive recreational uses.

The Mamacoke "Island" tract within the larger Mamacoke Conservation Area shown outlined in yellow on the map below constitutes less than one-half of the larger 148-acre Conservation Area. Although referred to as an "island,"

people don't see the steady decline of the amazing world around us.

I also think many times the terms "environmentally sensitive" or "mitigation" are misused and just a phrase to allow industry to not own the fact that, when they pollute, they are privatizing whatever it is they're polluting or destroying, whether it's the water, soil, sediments, or fish. So when General Electric dumps a bunch of PCBs in the Hudson River, and I as a U.S. citizen can't go there fishing with my son and catch a fish and bring it home and eat it, that company has essentially taken those fish, so they own them, and they need to pay for them or give them back, somehow, to the Public Trust.

Bill became the Long Island Soundkeeper in July of 2017 and was able to familiarize himself with the important issues facing Long Island Sound in time for the 2018 legislative session, which he believes was extremely successful. But he attributes a lot of that success to the legacy of Terry Backer:

Legislators knew I had stepped into Terry's shoes after he passed away. He had done yeoman's work, both as an elected representative and as a vocal local and international environmental advocate. I've tried to pick-up the torch that had been lying on the ground for a couple of years and carry on where he left off.

I'm a registered lobbyist, so policy is a large chunk of what I do. Last session, overall, there was a lot of bipartisan success which I was happy to see, given the national climate. Seven bills I tracked for Long Island Sound were all passed during the 2018 legislative session, a few of which were:

Mamacoke is actually a peninsula in the Thames River; the land is connected to the mainland by an unditched salt marsh, a rarity in coastal Connecticut since, beginning in the 1930s, coastal marshes were ditched to drain stagnant water from the interior of the marsh to prevent mosquito breeding. A sign welcoming visitors to Mamacoke is located at the entrance to the a footpath crossing the saltmarsh to the "Island."

Mamacoke Conservation and Audubon Important Bird Area (yellow) showing parcels owned by Connecticut College Arboretum (white) and other neighboring residential and commercial parcels (blue). Source: Arboretum Bulletin No. 42: The Mamacoke Conservation Area

Connecticut College Arboretum Bulletin No. 42 describes Mamacoke's uplands as "a dome of rock rising 130 feet above the Thames River with outcrops, glacial erratics, ledges, and pockets of glacial till supporting large areas of woodland, as well as thickets and small, grassy ridge tops with scattered trees."

The National Audubon Society has recognized the shoreline of the Thames River between Harrison's Landing and Smith Cove in Quaker Hill (Waterford) as an Important Bird Area for Connecticut. The brackish water of the Thames River generally does not freeze completely and thus provides an open-water refuge for several waterfowl species. Other than trail maintenance, this area remains as undisturbed by human activity as possible.

- *The sewage "right to know" modification that requires prompt reporting of sewage pipe breaks or overflows (Public Act 18-97);*
- *Authority to clean up "ghost" fishing gear including lobster pots--there are a million, more or less, still out there in Long Island Sound (Public Act 18-54);*
- *And there's now a horseshoe crab sanctuary/no-take zone at Stratford Point to try and stop the decline in the population (Public Act 18-112).*

Bill looks forward to continuing to work on important projects and legislation to benefit Long Island Sound. His experience with seals and cruise ship conflicts in Alaska will come in handy in helping develop the Long Island Sound Blue Plan, and he hopes lobbying efforts will protect Connecticut's Clean Water Fund to continue to help communities with combined sewer overflows and old treatment systems. He's also supporting The Nature Conservancy's efforts to reduce fertilizer use and develop incentives to install nitrogen reducing septic systems, and the Connecticut Citizens Campaign for the Environment's work on single-use plastic bags.

He also believes that there can be a continuing expansion of shellfishing and finfishing, and applauds the supporting research from the Long Island Sound Study, federal agencies, and state entities such as DEEP and Connecticut Sea Grant.

While Bill's "First Impression" might not have been a positive one, it set the stage for a lifetime full of positive outcomes for the environment.

The rare, unditched salt marsh connecting the mainland portion of the Conservation Area to Mamacoke Island is a sight to behold
Photo Credit above: Connecticut College Arboretum
Photo Credit below: Victoria O'Neill, NY DEC

We're lucky to have Bill back in "our neck of the woods" advocating for Long Island Sound.

View past issues of *Sound Outlook*

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Look Out For These Other Upcoming Events!

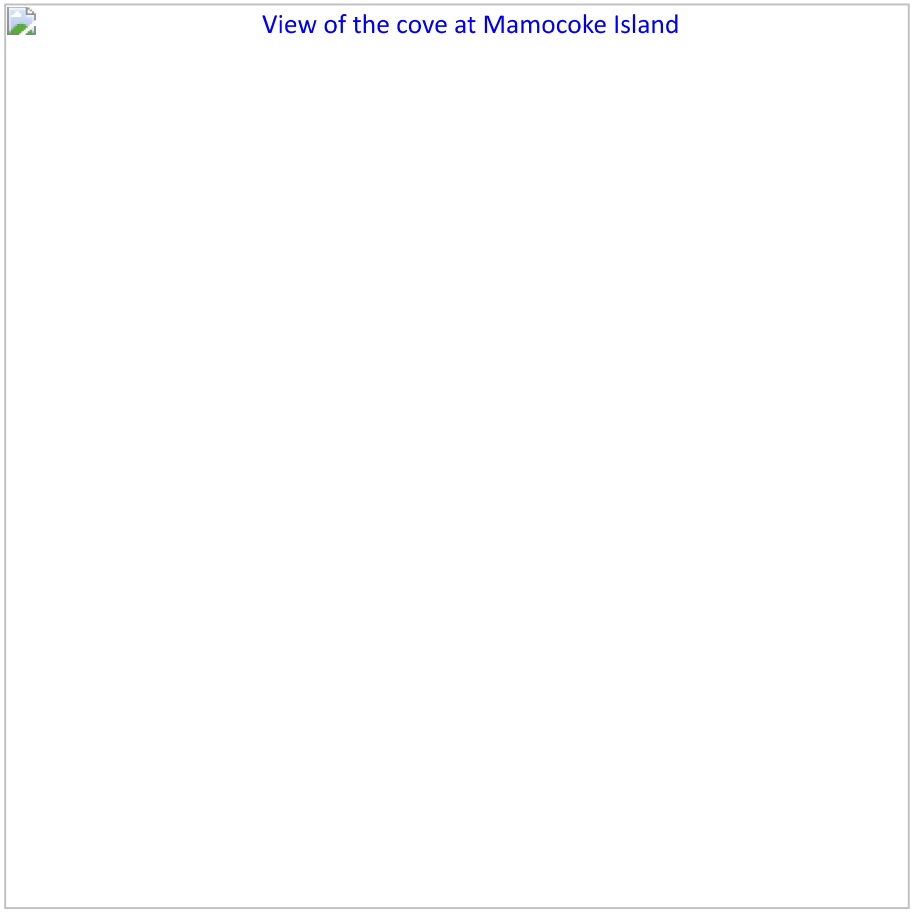
Long Island Sound Blue Plan Advisory Committee Meeting
December 4, 2018
10:00 am to 12:00 noon
Vicki G. Duffy Pavilion
155 College Street
Old Saybrook, CT

Long Island Sound Study (LISS)
Committee Meetings

Please be sure to check the Calendar of Events on DEEP's website


A group of visitors to Mamacoke Island salt marsh

To reach the entrance to Mamacoke, use the small gravel parking area on the north side of Benham Avenue off of Connecticut Route 32. Follow the marked trail to the left (north) before crossing the railroad tracks and salt marsh. The trail, shown in pink on the Arboretum's interactive and printable trail maps, forms a loop around the island. The Arboretum allows only those uses that ensure minimal disturbance to plants and wildlife. Therefore, no jogging, cycling, or hunting is allowed.



A view of the cove at Mamacoke Island
Photo Credit: Connecticut College Arboretum

Visit the Connecticut College Arboretum website to learn more about the Arboretum and the geology of Mamacoke Island.

As always, please refer to the Connecticut Coastal Access Guide for over 300 other sites that can help you enjoy exploring Connecticut's coast!

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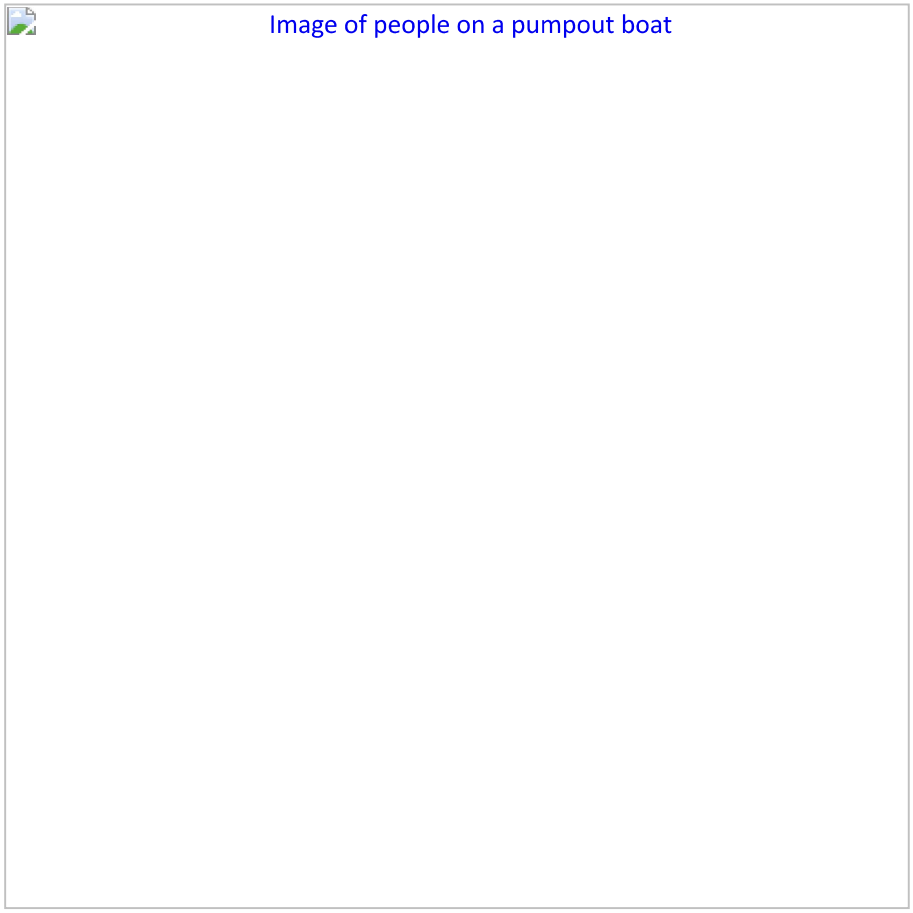
The World's First Solar-Powered Pumpout Boat Will Serve Long Island Sound

On October 15, 2018, the Connecticut Department of Energy and Environmental Protection, the U.S. Fish and Wildlife Service, and Congresswoman Rosa DeLauro, along with the Town of Branford and the East Shore District Health Department launched the world's first full-size solar/electric pumpout boat which will be used to remove recreational boat sewage from vessels in the Branford River and Branford Harbor starting in Spring of 2019.



CT DEEP Commissioner Rob Klee and others enjoy a ride
on the world's first solar-powered pumpout boat
Photo Credit: CT DEEP Boating Division

The vessel was constructed for the Town of Branford and the East Shore District Health Department by Safe Harbor Marinas/Pilot's Point Marina in Westbrook, creating local green jobs and utilizing state-of-the-art solar/electric technology to make the pumpout boat service efficient, quiet and green. The vessel is berthed at Safe Harbor Marinas/Bruce and Johnson's Marina in Branford, and will offer free pumpout service to boaters in the Branford River and Branford Harbor.

The U.S. Fish and Wildlife Service provides financial assistance to states through the Clean Vessel Act. This funding is used to build and maintain pumpout stations, pumpout boats, and dumping stations that enable recreational boaters to dispose of their sewage in a safe and responsible fashion, thus keeping it out of the nation's waterways.

This vessel was constructed with a 75% Federal Clean Vessel Act grant of $152,383.50 and a 25% matching amount raised by the East Shore District Health Department through local fundraising from generous donors and partners.

Branford boaters can now look forward to using this new, state-of-the-art pumpout boat to help them keep Long Island Sound clean.

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Tom ODell: A Life of Service to Connecticut's Conservation Community

Connecticut's Coastal Management Program and conservation community lost a friend and advisor this summer with the passing of Tom ODell at the age of 84. Among his many conservation volunteer efforts, Tom served for 48 years as chair of the Westbrook Conservation Commission and was a founding member and recent president of the Connecticut Association of Conservation and Inland Wetlands Commissions.

Tom retired in 1986 from the U.S. Forest Service where he investigated biological controls of forest pathogens. He championed a variety of environmental protection and conservation initiatives, particularly within his beloved lower Connecticut River valley and adopted hometown of Westbrook. Connecticut's conservation community relied upon Tom's leadership and cooperative approach to resolving environmental conservation issues, often resulting in conservation victories.

Some of these victories include the establishment of the Menunketesuck Greenway; the acquisition of thousands of acres of protected open space; promoting the next generation of environmental stewardship leaders through environmental youth scholarship and internship programs; restoring degraded wildlife habitats such the Salt Island Overlook, a property he helped the Town of Westbrook acquire; and improving public access to and protection of Connecticut's coastal waters.

Tom ODell was a conservation leader in Connecticut
Photo Credit: Carol ODell

Tom will be missed but not forgotten, due to his legacy of conserving some of Connecticut's most significant natural areas. It's a never-ending mission he'd want us all to continue.

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Climate Change Update:
Blue Plan Policy "Lens" Considers Climate Change

The statute that authorizes the establishment of the Long Island Sound Blue Plan requires that the Blue Plan adapt to evolving knowledge and understanding of the marine environment, including adaptation to climate change and rise in sea level. Regular readers of this column are no doubt aware that Long Island Sound is already experiencing the effects of climate change through rising air and water temperatures, sea level rise, and extreme storm events. But water acidification associated with climate change can bring about changes in water quality, species composition, and habitat utilization in the Sound as well. As carbon dioxide gets absorbed into the waters of the Sound, it alters the water chemistry by decreasing pH. This acidified water can actually dissolve shells, as well as reduce the availability of carbonate ions in the water which organisms like corals and oysters need to build their calcium carbonate skeletons and shells. As the Frame Works Institute describes it, water acidification is like "Osteoporosis of the Seas."

Carbon dioxide absorbed into the waters of Long Island Sound could spell trouble for the northern star coral
Photo Credit: Long Island Sound Resource Center

As described in this issue's lead article, the Blue Plan Development Team is proposing to adopt "lenses" as additional considerations to be taken into account when developing or reviewing proposals in Long Island Sound. One of those proposed lenses is a Climate Change lens, which will help ensure that future activities and projects within the Blue Plan policy area consider a changing climate in their design by enhancing the resiliency of the proposal, recognizing the ecological and human use changes that could occur during the duration of their project, and, where possible, mitigating any of their own contributions to climate change.

As our collective knowledge and understanding of the effects of climate change on Long Island Sound continue to evolve, the Blue Plan will be revised and updated to reflect new data and findings. That's because the Blue Plan statute requires that the Long Island Sound Blue Plan Advisory Committee continue to meet on a quarterly basis once the Blue Plan is approved by the Connecticut General Assembly, not only to review implementation of the plan, but to also identify emerging issues and recommend any necessary or desirable alterations or improvements to the Plan. W e anticipate that some of those Plan improvements will be related to climate change-related effects on natural resources (e.g., conditions that could make it easier for some diseases to spread) and human uses (e.g., deterioration of cultural resources like ship wrecks from acidification). By continuing to address the evolving issues associated with climate change, the Blue Plan Advisory Committee will ensure effective, science-based stewardship of the waters of Long Island Sound well into the future.

Visit the DEEP website at www.ct.gov/deep

Published by the Department of Energy and Environmental Protection, Bureau of Water Protection and Land Reuse.

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