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 Sound Outlook

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

It's Here! The Completed Draft of the Long Island Sound Blue Plan is Available for Public Review and Comment

After more than three years in the making, the completed draft of the Long Island Sound Blue Plan has finally arrived!

DEEP Commissioner Katie Dykes announced the release of the Plan for public review and the start of a 90-day public review period at a press conference held on March 20, 2019 at Hammonasset Beach State Park, set against the backdrop of Long Island Sound.

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Inside

[It's Here! The Completed Draft of the Long Island Sound Blue Plan is Available for Public Review and Comment](#)

Development of the Blue Plan was authorized by Public Act 15-66 (codified in [Connecticut General Statutes §25-157t](#)). The Plan is the culmination of years of data collection and analysis, based on the best data available regarding the natural resources and human uses of Long Island Sound, as well as countless hours of outreach and coordination with ecological experts and human use sector representatives.

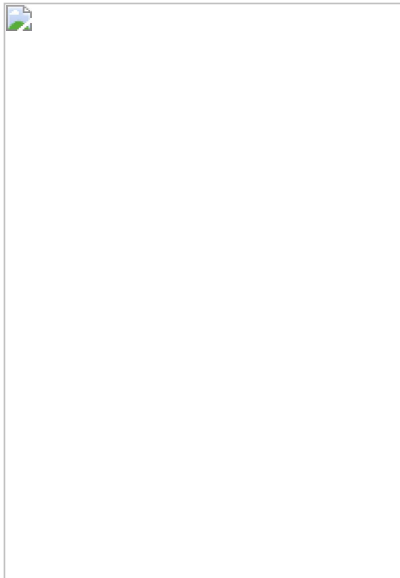
More background information about the Blue Plan and its development process can be found in these past issues of *Sound Outlook*: [February 2012](#), [February 2015](#), [June/July 2015](#), [October 2016](#), [February 2017](#), [June/July 2017](#), [February/March 2018](#), [June/July 2018](#), and [October/November 2018](#).

The completed draft of the Long Island Sound Blue Plan is available on the Blue Plan website at www.ct.gov/deep/lisblueplan, or you can send a request for a paper copy of the Plan via U.S. mail to LIS Blue Plan, DEEP WPLR, Land and Water Resources Division - Planning, 79 Elm Street, Hartford, CT 06106.

The 90-day public comment period closes on June 21, 2019. We strongly encourage *Sound Outlook* readers to review the draft Plan and provide us with your insights, questions, and other input. Please send any comments:

- via email to DEEP.BluePlanLIS@ct.gov, or
- via U.S. mail to LIS Blue Plan, DEEP WPLR, Land and Water Resources Division - Planning, 79 Elm Street, Hartford, CT 06106.

The Blue Plan development team has also scheduled several regional public meetings to present on the Plan and solicit public comments. Please join us at one of these regional meetings to learn more about the Blue Plan and give us your feedback!



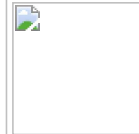
Spotlighted Coastal Resource:
Ecologically Significant Areas

Spotlighted Coastal Access: The Blue Plan Identifies Public Access Areas as Significant Human Use Areas

The Blue Plan Map Viewer will Help Make Sense of all that Data

Pop Some Popcorn and Binge-watch the Blue Plan Video Series

Sharing our Ocean: Harmony Between the Natural Environment, Traditional Human Uses, and New Human Ventures

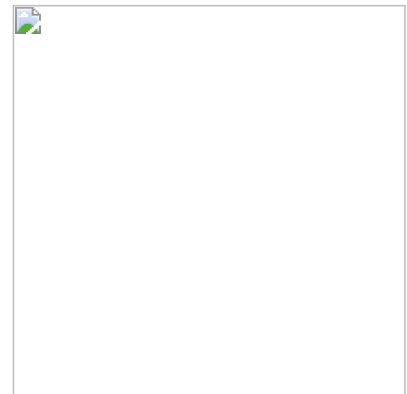


First Impressions

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 profile Emily Hall, the NOAA Coastal Management Fellow who played a key role in developing the Long Island Sound Blue Plan:



This issue of *Sound Outlook* focuses on the Long Island Sound Blue Plan.

Which means this issue of *Sound Outlook* would not have been possible without Emily



Hall.

Emily is the [NOAA Coastal Management Fellow](#) who accepted the challenge of helping develop the Blue Plan. She selected Connecticut's Fellowship proposal in April 2017 and [joined the team](#) in August of that year. Since then, she has been instrumental in developing the Blue Plan and its policies.

Emily's journey to the environmental field in general, and coastal management in particular, was pretty clear from the beginning:

I've always wanted to be in the environmental field, it was just a matter of finding that right path. When I was younger I always loved science, whether it was being outside or going to science museums. I grew up on Long Island and spent a lot of time at the beach, seeing horseshoe crabs and shark eggs, and I always really enjoyed it.

Emily's love of science was so strong, her "First Impression" came about during a science field trip in the third grade:

Our class was watching a telecast of a group in California looking at seaweed forests, and it really clicked with me. Seeing people working in these kelp forests and watching the researchers, it opened my eyes to the marine and coastal realm. They had a touch tank up front where I got to feel the kelp and sea urchins. From that moment on I always had that in the back of my mind as something that I really enjoyed.

Emily's "First Environmental Step" was really just a continuation of her love of science. Perhaps it was due to Science/Technology/Engineering/Mathematics (STEM) classes that were encouraged and more readily available, especially for young women, and perhaps it was due to her love of the subject matter, but Emily pursued a science curriculum throughout high school. Little did she know it was guiding her toward an environmental path:

Science, particularly biology, was a top subject area for me. I took Advanced Placement Biology in my junior year of high school and that really clicked with me, I just got it. The STEM path was an important part of my education. And now there's even more exposure than I had, with 3-D printers and research-based classes being offered at my high school. But I did take advantage of it, and through my various experiences it directed me to path of environmental biology. Some of my teachers thought perhaps I'd go into the medical field. Although it's an honorable profession, I connected more with the idea of the living environment, and I developed a

And if you haven't joined already, please consider joining the [Blue Plan listserv](#) to receive email updates about Advisory Committee meetings, outreach events, and ongoing revisions to the Blue Plan.

It can't be said enough: The success of the Blue Plan depends on the involvement of the general public and all stakeholders to make sure the Plan reflects the knowledge, perspectives, and needs of everyone whose lives are touched by Long Island Sound. Your participation in this process will help make the Blue Plan a reSOUNDing success!

[Return to Table of Contents](#)

SPOTLIGHTED COASTAL RESOURCE: Ecologically Significant Areas in Long Island Sound

The completed draft of the Long Island Sound Blue Plan contains many components, including draft policies that will apply to new projects proposed in the Sound. But no component of the Plan is more innovative than the identification of Ecologically Significant Areas (ESAs) in Long Island Sound.

The process of identifying ESAs was not an easy task, because natural resources occur throughout Long Island Sound, and no single resource is more valuable than all others.

However, to quote Syndrome from the Disney animated film *The Incredibles*, "When everyone's super, no one will be." Which in this situation means that if all resources are equally valuable, then no one resource deserves special consideration in the Blue Plan because they're all "super." And you can't prioritize areas of particular natural resource significance if they're all equally important.

That's where the Ecological Experts Group came in, a select team made up of scientists with various areas of expertise to establish a scientifically based way to recognize those particular species, special places, and distinctive areas in the Sound that have features that set them apart from other areas and, therefore, deserve to receive special recognition and protections in the Blue Plan. These priority areas were designated as

the ESAs, and many Blue Plan policies are based on their unique environmental conditions or species concentrations. Data from the [Long Island Sound Resource and Use Inventory](#) was interpreted and analyzed by the Ecological Experts Group to help select the most important natural resource areas.



Image of the northern star coral in LIS

The northern star coral in Long Island Sound
Areas with rare, sensitive or vulnerable species, communities, or habitats
such as cold water corals are identified in the
Blue Plan as Ecologically Significant Areas
Photo Credit: Long Island Sound Resource Center

biological environmental perspective more than a medical one.

And, while many high schoolers get a summer job in pursuit of making a few dollars, Emily spent her summer vacation seeking more of an academic payout. Having been bitten by the STEM-bug, she enrolled in a two-month summer program at Stony Brook University and learned about their science programs, from genetic engineering to other biotechnical practices, and learned the basics of lab-based biology techniques. The students were separated into groups and each group had to design an experiment:

My group designed a mechanism for infusing carbon dioxide into a fish tank. We tried to grow plants to make a better environment for the fish, and see if that mechanism could be up-scaled to larger tanks and growing spaces. But even then, I was working with living things, trying to improve their environment.

When it came time to go to college, Emily decided to follow an environmental track. She attended the State University of New York College of Environmental Science and Forestry which was decidedly land-based and didn't really offer coastal or marine studies options. While the curriculum was environmentally focused, with almost every class having some kind of environmental spin, Emily also realized there was another critical piece to the environmental puzzle:

I infused myself with environmentalism over my four years in college--even one of my English classes was a course on literature and nature! But what was also interesting to me, and something I didn't want to forget, was that the other piece of environmentalism is people. And because of that, I chose to pursue a major in conservation biology, with the idea of the interaction of animals and lands and people. I also chose to pursue a minor in marketing at Syracuse University. I was able to learn how people communicate, and learn the basics of entrepreneurship and finance and sales and marketing. It was a good way to understand how businesses approach different branding opportunities and make that connection back to the environmental and conservation realm.

But Emily continued to hear the siren song of the marine environment, and another summer experience brought her closer to the coast. She interned one summer at [The Riverhead Foundation for Marine Research and Preservation](#) on Long Island, working with injured or stranded marine mammals and conducting outreach and administrative tasks:

It was a huge tie-in for me, having these marine experiences but also still connecting to



Image of a harbor seal resting on a rock in LIS

A seal rests on rock in Long Island Sound
Areas of high natural productivity, biological persistence, diversity, and abundance for certain important animal species such as pinnipeds (seals) are identified in the Blue Plan as Ecologically Significant Areas
Photo Credit: Paul J. Fusco, CT DEEP

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The following Ecologically Significant Areas have been established for the Blue Plan:

Criterion Pillar 1: Areas with rare, sensitive, or vulnerable species, communities, or habitats including:

- Hard bottom and complex sea floor
- Areas of submerged aquatic vegetation
- Endangered, threatened, species of concern or candidate species listed under state or federal Endangered Species Acts, and their habitats
- Areas of cold water corals
- Coastal wetlands

Criterion Pillar 2: Areas of high natural productivity, biological persistence, diversity, and abundance, including areas important for supporting or exhibiting such features relative to the following characteristics or species:

- Cetaceans (marine mammals)
- Pinnipeds (seals)
- Sea turtles and other reptiles
- Birds
- Fish
- Mobile invertebrates (e.g., American lobster)
- Sessile-mollusk-dominated communities (e.g., blue mussels)
- Managed shellfish beds
- Soft-bottom benthic communities

Although the establishment of these ESAs is specifically required by the Blue Plan legislation, the process is unique for Long Island Sound and has set a scientific foundation for assessing potential impacts to and conflicts with really important resources in the Sound. It also set the stage for a companion process to identify

a "people perspective," how we manage issues like humans being too close to marine wildlife. And we experienced an unusual mortality event in dolphins that summer, related to a respiratory virus, and that got me interested in the policy approach.

From there, Emily applied the next summer for a [Research Experience for Undergraduates](#) (REU) project in Charleston, SC where she did intensive research on sea urchin larvae-- bringing her third grade sea urchin experience full circle--to see how the larvae responded to different ocean acidification conditions:

My advisor for the REU program said one of the reasons he selected me was the experiment I conducted while in high school at the summer program at Stony Brook infusing carbon dioxide into fish tanks. Ocean acidification is connected to excess carbon, and we were dealing with carbon dioxide in the jars for the sea urchin larvae. I never thought a high school project would apply, but it all connects!

That REU program was transformative for me. It showed me that, as valuable as intensive research is, it wasn't the path I wanted to take. The research was rewarding, but I was missing the "people" connection. I wanted to take the next step, from research to management and policy, and to make actual changes based on the research. I knew that would be the better fit for me. Researchers are answering very important questions, but you need good people on the other side to make change.

With her undergraduate degree in hand, Emily took her "Big Environmental Step" and finally followed the strong pull to the marine realm. During her REU program in South Carolina, she learned about graduate school opportunities at Duke University's Nicholas School of the Environment. They offered a well-renowned two-year environmental management degree that provided the coastal management focus she needed. While pursuing her coastal environmental management degree, Emily worked on several coastal projects that highlighted the interplay between humans and the environment:

Some of my coursework provided exposure to real-world situations. We interviewed coastal residents about whether or not they wanted a groin to be built on an island in North Carolina, how it would impact them and the environment. We also conducted research on various coastal regulations, with one project dealing with setback lines in South Carolina that raised conflicts between developers, environmental organizations, and policy makers on where to set those lines.

Significant Human Use Areas for the Blue Plan, another pioneering step in making sure uses and resources can happily co-exist in Long Island Sound.

[Return to Table of Contents](#)

SPOTLIGHTED COASTAL ACCESS: The Blue Plan Identifies Public Access Areas as Significant Human Use Areas

As a corollary to the statutorily mandated designation of Ecologically Significant Areas, the Blue Plan Development Team decided to identify Significant Human Use Areas (SHUA) for policy considerations.



Image of a kayaker on LIS

The first step in identifying SHUAs was to determine what activities or locations needed to be recognized as such. While the majority of SHUAs are in-water activities (e.g., fishing and SCUBA diving), the team felt it was necessary to include some land-side features such as working waterfront infrastructure, historic artifact discovery locations, and parks.

Coastal public use areas are included as a SHUA because they constitute areas of substantial recreation value. Although these upland access points are not within the Blue Plan policy area (generally seaward of 10'-deep waters), they are a critical gateway for most people's interactions with the Sound, whether physically or visually. New in-water projects may impact upland sites like these, either directly (e.g., horizontal drilling and linking to the grid associated with an energy cable) or by simple proximity (e.g., degrading a scenic view from

The Blue Plan identifies kayak trails as Significant Human Use Areas
Photo Credit: CT DEEP

the upland), so project proponents should be aware of all of the uses they might impact.

Through the [Resource and Use Inventory](#) data vetting process, the development team connected with user communities in the Sound and determined what types of activities and areas were of particular concern to each constituency. Initially, the team identified over 50 specific use criteria (e.g., Connecticut State Managed aquaculture beds, boat launches, and recreational fishing areas) across 12 broadly defined activity types (e.g., aquaculture, boating, fishing), and conducted an assessment process to identify and organize the most appropriate representations of human use data and develop descriptions for them.

After that process, four main areas of significance were identified for human uses:

1. Areas with features of historical, cultural, education and research significance;
2. Areas of substantial recreation and/or "quality of life" value;
3. Areas important for navigation, transportation, infrastructure, and economic activity; and
4. Areas important to fishing and aquaculture

The coastal public use area SHUA includes the coastal public access sites available on the [Connecticut coastal access guide](#), as well as water trails and other open space and public lands. These areas were selected as a SHUA because of their "quality of life value"; they are important for public access and the use of Long Island Sound for recreational activities such as swimming, paddling, and wildlife watching.

Again, while land-side public access sites and shallow-water kayak trails are not specifically located within the Blue Plan policy area, the Blue Plan policies will ensure that new uses of Long Island Sound will reduce conflicts with this public access SHUA, protecting public views of the Sound from these sites and minimizing conflicts from any

During the summer after her first year at grad school, Emily became an intern with the [Coastal Conservation League](#) in South Carolina. She worked on land conservation and sustainable agriculture projects to understand how a changing coastal environment and flooding were affecting land conservation. This work reinforced the connection of the land and the coastal/marine environment:

The Coastal Conservation League was another transformative experience that confirmed that the area of work I was doing was a great fit, that mix of environmental advocacy and social science and research, to understand how people react to environmental changes, what problems they're having, and how we can suggest new policy mechanisms to help those people and the environment.

Emily also received an assistanceship position with the Duke Executive Education Program which provides courses to people already working in the field to advance their knowledge or expose them to emerging topics. She was the assistant to the marine spatial planning online education course:

Marine spatial planning was a topic I was really excited about, and actually, based on my interests, someone recommended me to the program. And I found that planning in the marine realm and understanding the concepts were valuable, but I was missing that on-the-ground experience.

As graduation approached, Emily explored different post-graduate opportunities. The [NOAA Coastal Management Fellowship](#) caught her eye:

The NOAA Coastal Management Fellowship offered professional development for two years in a state coastal management program, and I thought it would be perfect as my next step. In the fall of my second year at Duke, I reviewed the state projects to decide whether or not to pursue the fellowship. I saw Connecticut's project was development of the Blue Plan for Long Island Sound, and I thought it would be perfect: it fit my skill set and personal goals, and was located in my home region!

Emily's family still lives on Long Island. In fact, some of her family members attended a Blue Plan outreach event held in Port Jefferson. Emily is the only one in the immediate family to pursue an environmental career; her parents and two sisters are all involved in the education and history fields. Perhaps that's why educating the public about environmental issues is very important to her:

uses that might have to connect to the land from the deeper areas of the Sound.



Multiple users of LIS at Rocky Neck Beach State Park

The Long Island Sound Blue Plan will help protect the view of the Sound from Rocky Neck and other public places along the coast
Photo Credit: CT DEEP

[Return to Table of Contents](#)

The Blue Plan Map Viewer will Help Make Sense of all that Data

The Long Island Sound Blue Plan is based on spatial data. Lots and lots of spatial data. Which means lots and lots of maps.

But it's hard to make sense of where all of those Significant Human Use Areas (SHUAs) are and compare their locations to the Ecologically Significant Areas (ESAs). And you can't overlay paper maps on top of each other to see where all of those areas overlap.

So, through the magic of modern Geographic Information System (GIS) mapping technology, our partners at the [University of Connecticut's Center for Land Use Education and Research \(UConn CLEAR\)](#) developed the interactive [Blue Plan Map Viewer](#) to help us view those maps in a manageable and meaningful way.

One of my career goals is to inform people so they can make better decisions, and ultimately, my future will have something to do with people and the environment. I want to be in a place where I can help synchronize people in a sustainable life with a sustainable environment, having the two working in harmony. That's where I want to be, whether that's policy outreach or communicating behavior change, I want to be in that space.

And what about Emily's "Behavior Change"? Turns out, Emily's environmental mindset has been ingrained for so long, there isn't one particular behavior she needed to change:

We've always recycled at home, and over time I've certainly tried to be more conscious myself. But I have definitely influenced my family! Even before the tax on plastic bags was passed in Suffolk County where I grew up, my mom would have reusable bags in her car, and I would always say, "Oh we don't need to take a bag" for smaller purchases. My family understands that "Emily's this way," and they've been conscious of what I was feeling. I hope it's the same when I'm not there!

Emily's family has grown to include her dog Penny, who adopted her during Emily's second year of grad school. The move to Connecticut with Penny has provided ample opportunity for public access adventures along Connecticut's coast in their spare time:

Having Penny has encouraged me to explore several beaches. She loves running face-first into dunes...

The completed draft of the Long Island Sound Blue Plan was required by statute to be available by March 1, 2019, and Emily's management of the process actually delivered the Plan a day early! In addition to her deep-seated knowledge of marine spatial planning techniques and concepts, Emily's marketing skills, creativity, and social media know-how have helped reach the broad spectrum of Blue Plan interests, including human use sector representatives, ecological experts, and the general public.

Emily acknowledges that she stands on the shoulders of those who came before her in the environmental field:

A lot of the people who are well-established in the field, like some of the people featured in previous First Impressions columns, maybe had to take more steps or search for that environmental career that really fit them. I feel people like myself who are newer to the career field, we've really benefited from those people who paved the way for environmental careers to be something really exciting and

 Image of landing page for the Blue Plan Map Viewer

desirable as well as prosperous and rewarding.

We hope that Emily's Blue Plan fellowship with the Connecticut DEEP has been all of those things for her. We wish her continued success and happiness, wherever her career path and Penny may lead her.

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[Sound Outlook](#)**

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or any other DEEP newsletter**

Look Out For Upcoming Events

Long Island Sound Day:
Friday May 26, 2017

Long Island Sound Study (LISS)
[Committee Meetings](#)

Please be sure to check the
[Calendar of Events](#) on DEEP's website

The Blue Plan Map Viewer contains all data layers for the Blue Plan in a format perfect for exploration. Visitors to the viewer can click on the particular ESA and/or SHUA that interests them for project planning or information gathering purposes, and create individual maps with multiple data layers that will help identify the ESAs and SHUAs in their area of interest, and whether or not those areas overlap.



Map of known cold water coral locations in LIS



A map showing known locations of ship wrecks in LIS

A map generated from the Blue Plan Map Viewer showing the
Sound-wide Cold Water Coral ESA
[Select map for larger image](#)

A map generated from the Blue Plan Map Viewer showing the
Sound-wide Ship Wreck SHUA
[Select map for larger image](#)



[Map showing the known locations of cold water corals and ship wrecks in LIS](#)

A map showing the Sound-wide Cold Water Coral ESA map
overlaid upon the Sound-wide Ship Wreck SHUA map
[Select map for larger image](#)

You can also zoom-in on a specific area of the Sound to get a close-up view of your
ESA/SHUA of interest:



A map of the locations of cold water coral and ship wrecks in eastern LIS

A close-up view of the Coral ESA and Ship Wreck SHUA in eastern Long Island Sound
[Select map for larger image](#)

The hope is that the Blue Plan Map Viewer will help project proponents, regulatory agencies, and anyone else who is interested in the Ecologically Significant Areas and Significant Human Use Areas of Long Island Sound to develop projects to reduce or minimize conflicts, and to increase their knowledge of what the Sound holds beneath its waters. We encourage *Sound Outlook* readers to explore Long Island Sound through this awesome tool.

To quote *The Incredibles'* Syndrome yet again, "Come on, you gotta admit, this is cool!"

[Return to Table of Contents](#)

Pop Some Popcorn and Binge-watch the Blue Plan Video Series

If a picture is worth 1,000 words, then a video is worth at least 10,000! And that's where the Long Island Sound Blue Plan Video Series comes into play.

The series is a collection of six videos about the Blue Plan, featuring interviews with Blue Plan Advisory Committee members, members of the Ecological Experts Group, and other sector representatives on several topics related to the Blue Plan. Video viewers can listen to interviews with these experts and sector representatives as they describe the importance of the Blue Plan and how it is designed to benefit the Sound's natural resources and existing human uses.

The series was produced by [Dan Nocera](#) and his students at [Middlesex Community College's \(MxCC\) Corporate Media Center](#). Dan is the Center's coordinator and an adjunct faculty member at MxCC, and he has produced, directed, and edited countless corporate, documentary, and marketing videos, many of them award-winning productions. We think he might have another award-winning project on his hands with the Blue Plan video series. But then again, his subject matter--Long Island Sound--is pretty incredible to begin with.

So pop some popcorn and settle in for a binge-watching session. You'll be amazed by the breadth and depth of Long Island Sound's resources and uses, and impressed with Dan and his team's vision for the videos.

- [What is the Blue Plan?](#) (Length: 3 1/2 minutes): This video gives an overview of and introduction to the Long Island Sound Blue Plan, its focus and goals and the process behind developing the Plan.
- [Ecologically Significant Areas](#) (Length 7 minutes): The importance of Long Island Sound as a unique estuary and ecosystem is discussed, including interviews with some of the ecological experts involved in the process of identifying Ecologically Significant Areas (ESAs). The ESAs allow the Blue Plan to provide a science-based decision-making process to help protect the places that matter the most.
- [Commercial Fishing and Aquaculture](#) (Length: 5 1/2 minutes): Commercial fishing, shellfishing, and aquaculture are significant contributors to Connecticut's economy, and their vital role is highlighted in this video. Blue Plan Advisory Committee members and several Connecticut fishermen explore how the Blue Plan can be used to protect traditional human uses like commercial fishing by reducing negative interactions between different sectors and the Sound's natural resources.
- [Cultural and Historic Features](#) (Length: 5 minutes): This video focuses on how the waters of Long Island Sound have long been important to the people of Connecticut and have shaped how we live. Interviews with tribal leaders, state historic preservation and archeology representatives, and Advisory Committee members affirm how the Sound defines Connecticut, from archeological finds to historic districts to our long-standing maritime heritage, and how the Blue Plan can be used to preserve these special areas.
- [Recreation](#) (Length: 5 1/2 minutes): "There's fun out there!" This video explores the many recreational uses of Long Island Sound, including nature watching, swimming, and SCUBA diving. Interviews of Blue Plan Advisory Committee members and representatives of the recreational boating, recreational fishing, charter boat, and SCUBA diving sectors highlight how the Blue Plan can be used to help properly site new uses in the Sound to minimize conflicts with recreational uses.
- [Transportation and Infrastructure](#) (Length 5 minutes): Long Island Sound plays a critical role in transporting people, goods, and energy in the region, helping reduce both highway congestion and greenhouse gas emissions. Likewise, Connecticut's ports are vital contributors to the economy by sending and receiving goods such as petroleum, steel, salt, and lumber. This video includes interviews with Advisory Committee members tied to these transportation and energy sectors and focuses on how the Blue Plan can be used to provide the best siting for projects to reduce conflicts with existing uses.

[Return to Table of Contents](#)



Sharing our Ocean: Harmony Between the Natural Environment, Traditional Human Uses, and New Human Ventures

By Emily Hall, NOAA Coastal Management Fellow

Building a Picture of our Ocean Space

Imagine a clear ocean space.

Start to add different marine life: oysters growing along the seabed, a sea turtle munching on seagrass, or a school of fish swimming in quick circles. Next, add people to your image: a family fishing on their boat, a diver carefully watching a sea turtle, or an aquaculturist (marine farmer) harvesting the local shellfish.

Then add even more people and more marine life to the picture: perhaps a cargo ship brings goods to shore, a ferry transports people across the water, a seal sunbathes on a rock outcropping, or a flock of birds migrates over the water.

If you continually build this picture you eventually reach what the ocean space looks like in today's world, until your image looks something like the one on the left.

The ocean image that you've created has multiple different human uses, a variety of plants and animals, and several types of habitats. All these elements are using the same space, sometimes at the same time, and there are bound to be groups that work in harmony with one another and groups that clash.

For instance, SCUBA divers can be very harmonious with the marine environment if they view marine life from a safe distance. But on the other hand, installing an electric cable through a shellfish bed could cause severe detriment to the environment and lead to disagreements with aquaculturists.

When you add new human ventures to the ocean space, like offshore wind energy, oil exploration and drilling, and transportation (bridges and tunnels), there is even more potential that groups may clash.

 [Multiple resources and uses of the ocean space](#)

But there is also an opportunity to find harmony and cooperation.

Image adapted from The Maritime Spatial
Planning Directive, European Commission



New and existing resources and uses in the ocean space
Image credits: Peter Auster, Deepwater Wind, American Genius

So, what can we do to better share our ocean? How can we increase harmony between nature, existing traditional human uses, and new human uses?

Countries and regions around the globe have started using a process called **Marine Spatial Planning** (MSP) to envision what the "picture" of their ocean space should look like. Marine spatial planning is a process that brings multiple users of the ocean together to make informed and coordinated decisions about how to manage marine resources and distribute human uses.

MSP uses the best available scientific data, combined with the input of scientific experts and stakeholder groups, to identify what resources and uses exist and where they occur. Then all users come together to write policy stating what uses should go where, how new uses should be built to avoid conflict, or what areas should be preserved for their ecological or human use value.

The essential backbone of any MSP effort is the people that use the ocean space. Whether you're the ferry operator or someone sunbathing on the beach in your own ocean space picture, you have a voice in what the future of your ocean space looks like.

Marine Spatial Planning in Long Island Sound

You don't have to go far to have that voice, you can look right in your backyard of Long Island Sound. The Sound is a region that could greatly benefit from marine spatial planning. According to the [Long Island Sound Study](#), the Sound is an ocean space that supports 23 million people

within 50 miles of its coast and an abundance of marine life within its waters, including over 120 species of finfish.

As with the ocean space picture you imagined at the beginning of this piece, Long Island Sound is depended upon by many groups, and sometimes they work in harmony or sometimes they clash.

With this in mind, the Connecticut Department of Energy and Environmental Protection has conducted a marine spatial planning effort called the Long Island Sound Blue Plan (www.ct.gov/deep/lisblueplan). The Blue Plan's goal is to protect traditional human uses and natural resources, while allowing for appropriate new uses of the Sound. Ultimately, the Blue Plan will reflect the knowledge, perspectives, and needs of all stakeholders whose lives are touched by Long Island Sound. So, if there is a new use or conflict that arises in the Sound, the Plan will give voice to users of the Sound while supporting its natural resources.

The Blue Plan process has two primary outputs:

1. A comprehensive Resource and Use Inventory (www.ct.gov/deep/lisblueplaninventory) that characterizes the Sound's human uses and natural resources. The Inventory is based on the best available data and information, including stakeholder input, and serves as the foundation of the Blue Plan.
2. [The Blue Plan](#) which identifies the locations, performance standards, and siting measures for proposed activities, uses, and facilities in the Sound. The Blue Plan does NOT create new regulations; rather, it will be included as a part of the State's decision-making processes within existing regulatory programs. The Plan will reflect the resources and uses in all of Long Island Sound, but policies will only apply to Connecticut waters, and in New York waters through the Federal Consistency Review process.

The Blue Plan development team, including staff from CT DEEP, Connecticut Sea Grant, and The Nature Conservancy, have been immersed in building these two documents with the help of a range of scientific experts and human use stakeholders. The draft Blue Plan was completed on March 1, 2019, and a [90-day public comment period for the draft Plan will close on June 21, 2019](#). At that point, the Blue Plan development team and [Blue Plan Advisory Committee](#) will have another 90 days to address the comments received during the public comment period, and a revised Plan will be submitted to the Connecticut Legislature during the 2020 legislative session. But the Blue Plan will continually need input from a wide array of Long Island Sound users to accurately create an "image" of the Sound's future.

You can help create that "image" of what Long Island Sound should look like in the future, or simply learn more about the Blue Plan and MSP in general, by checking out the Blue Plan website at www.ct.gov/deep/lisblueplan and emailing us at deep.blueplanlis@ct.gov.

[Return to Table of Contents](#)

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



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Editor: Mary-beth Hart; Contributing Editor: Mark Parker
Layout: Caryn Furbush; Illustrations: Tom Ouellette
Contributor: Emily Hall

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