SPECIAL ISSUE THEME: Sound Planning

This special issue of Sound Outlook showcases many of the comprehensive planning efforts currently underway to protect and enhance not only Long Island Sound and its resources, but the lives of the people who live, work, and/or recreate within its watersheds and coastal hazard areas as well. To that end, we hope this issue will help make the term “coastal and marine spatial planning” a household name. We'll examine the land acquisition legacy at Barn Island Wildlife Management Area in Stonington which proves that good planning achieves good results. Land acquisition victories don't occur in a local vacuum, however, and this issue of Sound Outlook will also describe the importance of garnering stewardship support from the hallowed halls of Congress to help protect resources here at home. This special issue will also highlight resource-based land-use planning in Connecticut's coastal area (and beyond), including municipal coastal programs and watershed protection plans, that help state and local officials make thoughtful, reasoned, and well-informed decisions. Finally, we will update readers on several planning opportunities that can assist coastal municipalities with planning for coastal hazards and climate change adaptation and resiliency.

Who's Afraid of CMSP?
Coastal and Marine Spatial Planning for Long Island Sound

If you are unfortunate enough to be a follower of the partisan skirmishing in Washington, DC, you may have noticed a recent flap over something called Coastal and Marine Spatial Planning, or CMSP. CMSP has become controversial within the Beltway because it is a centerpiece of the Obama Administration's National Ocean Policy, but the concept has already caught on at the regional and state levels as well. In contrast with Washington, significant progress has been made in the New England region and in our neighboring states to cooperatively plan for and manage ocean and offshore resources and areas through CMSP. But what exactly is CMSP and why should we care about it here in Connecticut and New England?

Officially, the federal Interagency Ocean Policy Task Force defines coastal and
marine spatial planning in their final report as:

a comprehensive, adaptive, integrated, ecosystem-based, and transparent spatial planning process, based on sound science, for analyzing current and anticipated uses of ocean, coastal, and Great Lakes areas. Coastal and marine spatial planning identifies areas most suitable for various types or classes of activities in order to reduce conflicts among uses, reduce environmental impacts, facilitate compatible uses, and preserve critical ecosystem services to meet economic, environmental, security, and social objectives.

Translated from bureaucratese, CMSP is nothing more than place-based planning for offshore resources and uses. Often mischaracterized as "ocean zoning," CMSP does not necessarily entail no-boat, no-fish zones, nor require pages of new rules and regulations restricting the public’s activities. Instead, it arose as a response to numerous offshore energy proposals, particularly wind farms, when it became apparent that there was no real opportunity to weigh the overall implications of siting new energy facilities or to resolve use conflicts.

A consensus developed that states and their citizens should have a better way to determine in advance how offshore waters should be used, rather than simply responding on a case-by-case basis to each new facility application.

In our own backyard, Massachusetts has become a national leader with its Ocean Plan, and Rhode Island has followed suit with its Ocean Special Area Management Plan (Ocean SAMP). The hallmark of both efforts is broad political support, science-based decision-making, stakeholder involvement, and participatory planning. As a result, both states have used their CMSP processes to identify areas where uses such as navigation or habitat protection are prioritized, and areas where energy facilities such as wind farms should be located or excluded.

Massachusetts and Rhode Island are also partners with Connecticut, New Hampshire and Maine in a region-wide state/federal initiative called the Northeast Regional Ocean Council, or NROC. Established in 2005 by the New England Governors Conference, NROC has set regional ocean planning as one of

Sound Tips:
Long Island Sound Needs You!
Plan on Getting Involved

Sound Planning opportunities abound throughout coastal Connecticut. Here are a few ideas to help get you started:

Familiarize yourself with your town’s planning and other land use documents, including the Plan of Conservation and Development (POCD) and the Municipal Coastal Program (MCP). Note: East Haven, Greenwich, Hamden, Lyme, Madison, and North Haven have not developed MCPs.

Sign-up for your town’s public notice registry so you will be notified of any proposed changes initiated by your town’s planning and/or zoning boards to the POCD, zoning boundaries, zoning regulations, or subdivision regulations.

Check with your town or city hall to determine if they have an automated e-mail subscriber service that allows residents to sign-up for e-mail notifications of town news, budget information, land use board meeting agendas, school news, library notifications, etc. If your town provides this service, sign-up to receive land use meeting agendas so you’ll always be aware of upcoming land use happenings in your town.

Check the DEEP website for the various watershed management plans and documents that have been developed throughout the state. If your town is a partner in a watershed-based plan,
its priorities. Recognizing that a number of ocean issues cross state lines, NROC provides a means to address ocean issues at a New England-wide scale. In October 2011, NROC obtained $2.5 million in grants from NOAA and the Gordonand Betty Moore Foundation, to begin implementation of its two-year CMSP work plan, including development of a stakeholder involvement process to help develop goals and objectives for regional ocean planning and to provide a mechanism for ongoing input for the process, and the development of a baseline characterization of the region's ocean resources and uses based on the best available science, including the development of additional data as necessary. Some of the baseline data can already be accessed through NROC's data portal. For additional information, please see NROC's draft ocean planning framework and the proceedings of the November 2010 NROC workshop - Advancing Regional Coastal and Marine Spatial Planning.

What does all this mean for Long Island Sound? If you remember the proposed Broadwater floating liquified natural gas (LNG) facility and other controversial cross-Sound energy projects, you may recollect that these issues highlighted a number of deficiencies in Connecticut’s ability to manage the Sound. We did not have sufficient natural resource and human use data for submerged and offshore areas, particularly seafloor cable and pipeline routes, and no mechanism for comprehensive area-based planning based on such data. Most importantly, we did not and do not have the institutional mechanism or authority to allocate or manage uses based on a spatial plan. Without CMSP, Connecticut will remain vulnerable to use conflicts, habitat loss, and inappropriate energy development.

While Long Island Sound is not believed to have great potential for offshore wind development, it is likely that we'll soon confront other potential energy or industrial facilities, including the cables and pipelines bringing offshore energy from elsewhere through the Sound. CMSP would allow us to act proactively to protect areas currently used for fishing, boating, habitat, and dredged material management against future threats from a changing economic, cultural, and natural environment. Since the Sound is relatively small, and comprised entirely of state-owned submerged lands and waters held in public trust by the States of Connecticut and New York, there is a real opportunity for the states to take a leadership role in implementing CMSP in Long Island Sound. Already, both States, in coordination with EPA Regions 1 and 2, are partnering with NOAA and two academic consortia to undertake seafloor mapping of Long Island Sound to develop data associated with benthic habitat and siting of energy infrastructure. Using funds from the Cross Sound Cable Settlement Fund, a Steering Committee of the partners is developing a seafloor mapping work plan with a goal of starting seafloor mapping project work in 2012 (please see following article on Seafloor Mapping for Long Island Sound).

While seafloor mapping is a critical element of CMSP and a necessary precondition to undertaking the plan development process, no official steps have yet been taken to create a CMSP institution or mechanism to create an equivalent of the Massachusetts Ocean Plan in Long Island Sound. However, considerable preliminary thought and discussions have been taking place among state and federal agencies, academic researchers, and advocacy groups, so stay tuned for future developments. Regardless of whether you are a fisherman, marina owner, boater, or birdwatcher, we all cherish Long Island Sound and want to protect and improve its historic uses and environmental attributes. CMSP is a tool that we can all use together to help us accomplish this goal. For contact the plan coordinator or your town’s chief elected official and offer to help with plan implementation.

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Look Out For Upcoming Events!

Conference: Legal Solutions to Coastal Climate Change Adaptation in Connecticut
Friday February 10, 2012
University of Connecticut School of Law
Hartford, Connecticut

Long Island Sound Study (LISS) Committee Meetings

Please be sure to check the Calendar of Events on DEEP’s website
In recent years, Connecticut and New York have received several proposals for large-scale infrastructure projects in Long Island Sound such as telecom and electric cables, gas pipelines, liquid natural gas platforms, etc. The proposals were reviewed on a case-by-case basis by each state's coastal management staff to ensure they are consistent with their state's coastal policies and that use conflicts were minimized, water-dependent uses were protected, and important natural resources were preserved. However, the Sound encompasses a wide range of habitats, geologic components, and ecological services, and the current level of data needed for evaluating these and other projects can be sparse or insufficient in scope and scale.

In order to fill those data gaps, both states are jointly developing a strategy to acquire benthic data and develop mapping products for Long Island Sound. This information will provide an improved framework to guide infrastructure development while protecting and helping better understand sensitive areas. It will also prove invaluable as Connecticut and New York advance their coastal and marine spatial planning efforts and the need for good benthic data for the Sound becomes even more important.

The sea floor mapping process will be funded from a 2004 settlement to resolve permit violations for two electric cable crossings in Long Island Sound. It is intended to support projects that enhance the Sound and promote improved scientific understanding of potential energy infrastructure effects and impacts, and a key component is to emphasize benthic mapping as a priority for improved management decisions.

The steering committee has held several workshops to bring together state, federal, and nongovernmental stakeholders to identify needs facing Long Island Sound and how a mapping program might address those needs. Based on the workshop results and responses to a Request for Qualifications and Interest, the committee assembled a project partnership team that combines the expertise of the NOAA Center for Coastal and Ocean Science Biogeography Branch and two regional academic consortiums led by the University of Connecticut and Columbia University's Lamont Doherty Earth Observatory.

The committee, in coordination with the project team and other regional experts, recently conducted a spatial prioritization analysis to...
help identify key focus areas within Long Island Sound that are important to a broad spectrum of stakeholder interests and needs. The partnership team is now using this information to develop a work plan to initiate and guide data collection, analysis, and dissemination.

For more information, including links to workshop reports and other reference materials, visit the Long Island Sound Study's seafloor mapping website or contact Kevin O'Brien at 860-424-3432.

Underwater Camera ROV (Remotely Operated Vehicle)

SPOTLIGHTED COASTAL ACCESS:
Barn Island Area Conservation Complex--Expanding Boundaries, Expanding Opportunities

The Barn Island Wildlife Management Area (WMA) in Stonington is Connecticut's largest, most diverse and most ecologically significant coastal wildlife management area. Like other state wildlife management areas, it is managed to provide healthy, undisturbed habitat for fish, birds, mammals, and other resident and migratory wildlife, and to offer a variety of natural resource-based outdoor recreational opportunities that are consistent with the area's habitat management goals.

The area that was to become the Barn Island WMA was acquired by the State of Connecticut in 1944-1945, and started off as approximately 450 acres. Over the next 65 years, Barn Island grew to 1,024 acres. When considered together with 292 acres of abutting protected open space and the nearby Sandy Point Island Conservation Refuge held by the Avalonia Land Conservancy, this larger Barn Island Area Conservation Complex provides over 1,300 acres of the finest coastal conservation land in Connecticut. Adjacent to the shallow waters of Little Narragansett Bay, this landscape-scale coastal refuge provides habitat for 25 federal or state-listed endangered, threatened, or special-concern species. The area's habitat complex, including sandy beach, coastal forest, freshwater fen, grassland, saltmarsh, and shallow estuarine wetland habitat, is recognized in a comprehensive study of fish and wildlife habitat of the Northeastern United States by the U.S. Fish and Wildlife Service as providing regionally significant coastal habitat.

As part of a comprehensive effort to continue the legacy of expanding the boundaries of the Barn Island coastal conservation area, CT DEEP identified the larger remaining undeveloped parcels with conservation value in the area as possible additions to the existing conservation landscape. This effort, aided by a computer-automated tax parcel evaluation process known as CLAM (Coastal Land Assessment Methodology) identified the most significant remaining conservation opportunities within the greater Barn Island landscape. Through the CLAM, each parcel's potential conservation value was evaluated by comparing its attributes to key conservation evaluation criteria such as whether the parcel contained or was adjacent to ecologically significant features like tidal wetlands, large blocks of unfragmented forest, habitat hosting species of conservation concern, or whether it shared a boundary with existing protected lands enabling the parcel's efficient management as part of an existing land conservation management unit.

After completing this automated evaluation process, resource experts and conservation property managers were consulted to determine if the property's acquisition should be further investigated, and, if so, what funding sources might be available to assist in the property's acquisition. This comprehensive conservation initiative from 2005-2011 has resulted in four acquisitions that have added 215 acres to the Barn Island area protected landscape.

Most recently, in December 2011, a 6-acre parcel abutting the Barn Island WMA (property #4 in the accompanying map), originally marketed for sale at over $900,000, was acquired by CT DEEP for $250,000 as an addition to the WMA using funds provided by the U.S. Environmental Protection Agency's Long Sound Outlook - February 2012

Recent acquisitions at Barn Island WMA:
Property #1 - Manousos, 144 acres, 2005
Property #2 - Crowley 1, 49 acres, 2007

1/25/2017
Island Sound Study Program. This property, with an existing residence and outbuildings marketed for residential development could have compromised the ecological and recreational values of the WMA. Instead, the existing blighted structures will be removed from the site and likely managed as grassland or early succession scrub-shrub habitat and will allow for the eventual upland migration of an adjacent saltmarsh.

With continued support from the federal, municipal, and non-governmental organization partners that made this acquisition possible, CT DEEP hopes to continue the legacy of expanding the boundaries of coastal Connecticut’s most significant conservation area to provide new opportunities to sustain the plants, animals, and people that benefit from proactive, informed, and well-planned conservation investment decisions.

To plan a visit to Barn Island Wildlife Management Area, see the Connecticut Coastal Access Guide which describes this and approximately 300 other places open to the public on Connecticut’s coastal waters.

Planning for Long Island Sound Stewardship: Barn Island and Beyond

What is "stewardship," and what does it have to do with Long Island Sound? For that matter, what is the job of a steward, and what does it mean to be a good steward?

Webster’s Online Dictionary includes the following definitions of stewardship:

- Caring for land and associated resources and maintaining healthy ecosystems for future generations.
- Administrative and/or custodial actions taken to preserve and protect the Natural Resources, particularly the plant (Flora) and animal (Fauna) life, of an area or Ecosystem.
- The concept of responsible care-taking; based on the premise that we do not own the resource, but are managers of the resources and are responsible to future generations for their condition.

Perhaps the best definition of stewardship can be boiled down to this well-known Native American Proverb:

Treat the earth well: it was not given to you by your parents, it was loaned to you by your children. We do not inherit the Earth from our ancestors, we borrow it from our children.

The partners of the Long Island Sound Study (LISS) are working to be good stewards and realize this noble concept by restoring and preserving the Sound and its resources for future generations. In fact, the Long Island Sound Study Comprehensive Conservation and Management Plan (CCMP), adopted by the States of Connecticut and New York and the US Environmental Protection Agency in 1994, planted the seed for today’s stewardship initiative for Long Island Sound; two of the six “priority areas of concern” identified by the CCMP share the common goal of land acquisition and stewardship. The Land Use and Development chapter states:

It is desirable to identify areas of land and water of outstanding or exemplary scientific, education, or biological value to reflect the regional differentiation and variety of ecosystems and address all the significant natural habitats found in Long Island Sound. Many of these sites are already in public ownership or held for conservation purposes. Therefore, acquisition priorities should emphasize sites not currently held for conservation purposes. The purpose of developing such a reserve system is to ensure that as much outstanding or exemplary coastal habitat as possible is left undeveloped for the benefit of living resources that depend on them.
Likewise, the Management and Conservation of Living Resources and Their Habitats section states:

Regulatory protection for environmentally significant areas alone will not ensure long term preservation of these sites. Land acquisition, or purchase or transfer of development rights may be necessary to maintain the remaining natural areas and their important water quality and habitat values.

In 2003, nearly ten years after the adoption of the CCMP, the Long Island Sound Stewardship Initiative was formed by the LISS to identify places with significant ecological or recreational value throughout the Long Island Sound region and to develop a strategy to protect and enhance these special places, calling them "Stewardship Sites." Public meetings were held to engage public support in identifying and nominating areas for priority protection and preservation.

As a result, the Long Island Sound Stewardship Act of 2006 (LISSA), introduced by members of the Long Island Sound Caucus, was passed by Congress and signed into law by President Bush. The Act defines stewardship as:

land acquisition, land conservation agreements, site planning, plan implementation, land and habitat management, public access improvements, site monitoring, and other activities designed to enhance and preserve natural resource-based recreation and ecological function of upland areas.

LISSA selected 33 sites as inaugural stewardship areas, and described the major ecological and recreational values of each area. Since the establishment of this stewardship effort, LISS partners have facilitated land acquisitions and conservation easements adding to existing Stewardship areas. For example, the Barn Island Wildlife Management Area, one of the sites identified in Connecticut by LISSA, has been expanded by an additional 215 acres, for a total of 1,024 acres of protected coastal forest and tidal marsh.

The LISSA expired in September of 2011 and reauthorization is now stalled before Congress in the form of the Long Island Sound Restoration and Stewardship Act. If passed into law the new Act will authorize up to $125 million over five years toward open space preservation. Sustained funding will go a long way in helping the Long Island Sound Stewardship Initiative protect Long Island Sound for future generations.

Planning for a Watershed Moment

A wise man once said, "If you fail to plan, you plan to fail." This quote is attributed to both Benjamin Franklin and Winston Churchill, and just about every high school football coach in the country. But its origin is less important than the message it conveys: without a plan in place, failure is almost always an option. It's true in combat, it's true in sports, and it's especially true in land use and resource protection.

Protecting Long Island Sound and its resources calls for Sound Planning, and there are several planning tools available to municipalities that ultimately enable them to make better land use decisions, both locally and regionally.

For example, coastal municipalities may adopt plans called Municipal Coastal Programs (MCPs) for the area located within the coastal boundary of their town. The MCP planning process was established in the Connecticut Coastal Management Act and provides an opportunity for coastal towns to identify, describe, and address the issues and problems, both immediate and long-term, which are unique to their coast. Some of the coastal-related issues include tidal wetland and other coastal resource protection, erosion, flooding, and public access. MCPs take the form of...
revisions to municipal zoning regulations, plans of conservation and development, and ordinances, all focused on an individual town's specific coastal resources and issues. The detailed information contained in an MCP can then help land use commissions make better-informed decisions when reviewing coastal site plan applications. Municipal Plans of Conservation and Development (POCD) must be consistent with MCPs, and many towns have actually incorporated the MCP directly into their POCD.

Speaking of POCDs, a law was passed in 1991 that requires the POCDs for towns contiguous to Long Island Sound to reasonably consider the restoration and protection of the ecosystem and habitat of Long Island Sound. The law also requires that POCDs be designed to reduce hypoxia (low oxygen), pathogens, toxic contaminants, and floatable debris in the Sound. A similar law was passed requiring that the zoning regulations in towns contiguous to Long Island Sound be developed in the same manner.

Therefore, thanks to MCPs and coastal POCDs, land use planners in coastal towns have ample means to ensure that Long Island Sound and its resources are strongly considered in the land use planning process.

But what about the towns that are not contiguous to Long Island Sound? We know that land use in those towns can also affect the Sound and its resources because they are located within the Sound's watershed. A watershed is an area of land that drains, or sheds, all of its water (e.g., rain runoff, melted snow, water used to hose-down a sidewalk, etc.) to the same receiving waterbody. As that waters runs down through the watershed, it can pick-up sediment, oil, and other polluted materials from the ground and deposit them into the receiving waterbody. Since the watershed that drains into Long Island Sound isn't limited to towns immediately adjacent to the Sound, non-coastal towns can also contribute pollution.

Luckily, there are also opportunities for non-coastal municipalities to consider Long Island Sound in their planning efforts. First, any actions recommended in a town's POCD that will protect a localized waterbody such as a river or lake will also help protect Long Island Sound.

Further, many towns have partnered together to develop Watershed Management Plans that identify problems pollution within the watershed and recommend the implementation of land use and other management practices that will protect and improve the quality of waterbodies and other natural resources in the watershed. Because watershed boundaries extend over town boundaries, watershed planning gives towns an opportunity to work together to comprehensively plan for successful watershed management.
For example, the four towns that share the Niantic River watershed have worked together to develop the Niantic River Watershed Protection Plan. Two towns, Waterford and East Lyme, are contiguous to the river, while Montville and Salem merely contain the brooks and streams that feed into the river, yet all four towns have come together to implement land use and other management practices that will protect and enhance the Niantic River.

With the wealth of tools available in Connecticut for Sound Planning, there's little opportunity to fail. Ben Franklin would be proud.

Climate Change Update:
2012 is the Year for Community Planning and Action

If you’re a long-time reader of Sound Outlook, you know that Groton, Connecticut is a leading example of a community that has started to incorporate climate change in their municipal planning process. In addition to having a Task Force on Climate Change and Sustainable Community, they were a willing model for a cutting edge Coastal Climate Change Adaptation Project with CT DEEP and ICLEI in 2010. This project engaged more than one hundred state, federal, and local government representatives, academicians, non-governmental organizations, and other stakeholders in a series of climate adaptation planning workshops (please see the October 2010 issue of Sound Outlook for more information). You can also view meeting notes and presentations from the adaptation workshops.

Groton's adaptation planning workshops had four primary objectives:

- to help prioritize vulnerabilities and establish a framework from which to select projects that compete for limited financial resources;
- to determine if existing regulations need to consider future rates of sea level rise and erosion to protect vulnerable areas that sustain economies;
- to identify synergies and begin fostering collaboration between all levels of government to increase local resilience toward climate-related vulnerabilities; and
- to share the lessons learned through Groton's adaptation planning process with other communities.
The Groton Coastal Climate Change Final Report is now available and contains insight and resources so other communities, especially coastal communities, can begin or continue their adaptation planning process.

As a result of the adaptation planning project, Groton reformed their climate change task force, initially established to promote public awareness of climate change and identify strategies to avoid and reduce its impacts, into an overarching energy conservation committee tasked with climate mitigation and adaptation. Climate-related considerations are now present in Groton's Capital Improvement Plan and will be incorporated into the Plan of Conservation and Development once their town-wide vulnerability assessment is completed using GIS and other resources.

To build on the planning momentum started in Groton, DEEP is now moving forward into 2012 with additional climate workshops in several Connecticut communities. OLISP will be partnering with the UConn Center for Land Use Education and Research (CLEAR) and Connecticut Sea Grant to conduct training, workshops, and other technical support for the Towns of Waterford and Greenwich and other interested communities. The Georgetown Climate Center will be lending support to these workshops by examining federal, state, and local laws and how they interact with adaptation needs. The goal of this project is to develop effective adaptation strategies that communities can employ, as well as assist with funding to make planning and adapting a reality.

In addition, the National Oceanic and Atmospheric Administration (NOAA) has provided funding to the Northeast Regional Ocean Council (NROC) and the Gulf of Maine Council for their New England Municipal Coastal Resilience Initiative. The project strives to advance local efforts to adapt land use, infrastructure, policies, and programs to reduce the vulnerability of the built and natural environment to changing environmental conditions. Over one dozen New England communities applied for funding for climate adaptation projects, and every New England state had one project selected. Two Connecticut municipalities received funding: Guilford and Greenwich, and OLISP will work with these towns as they participate in the resilience initiative and plan for climate change.

For more information on climate change planning activities and opportunities in Connecticut, contact Jennifer Pagach at 860-424-3295.

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