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 Sound Outlook

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

Connecticut's Coastal Management Program Pioneers a New Federal Evaluation Process

Connecticut's coastal management program (CMP) has come a long way since it was established on January 1, 1980. While the fundamental tenets of the

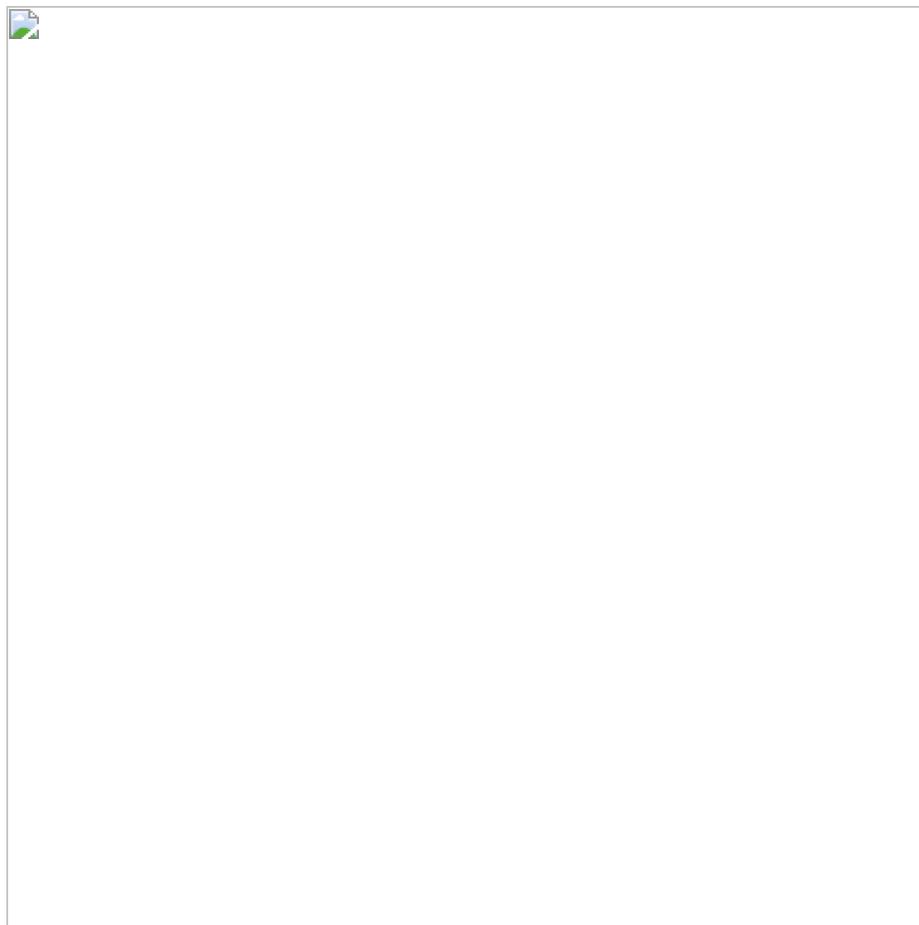
FEBRUARY 2014 | No. 45

Inside

Connecticut's Coastal
Management Program

program--protecting coastal resources and promoting water-dependent uses and public access--have remained constant, each new decade has seen emerging issues that result in an ever-evolving program. Emerging issues not envisioned in 1980, such as harbor management, stormwater management, low impact development and green infrastructure, and climate change resiliency and adaptation are now woven into the fabric of Connecticut's CMP.

The federal Coastal Zone Management Act of 1972 (CZMA) recognized the need to periodically review state coastal management programs to make sure that state programs don't evolve away from [core national goals and interests](#). [Section 312 of the CZMA \(16 U.S.C. § 1458\)](#) contains a requirement that federally approved state coastal management programs be evaluated on how well states are implementing their programs and meeting the conditions of their federal coastal management grants and loans.



One of the core goals of Connecticut's CMP is to protect and restore tidal wetlands and other coastal resources

In the past, these "312 Reviews" entailed a week-long visit to the state from an evaluation team consisting of federal agency staff and a manager from another coastal state who undertook a detailed analysis of all aspects of the state's program.

The Section 312 evaluation process has now been streamlined to decrease the number and duration of site visits and reduce review involvement time for state and federal staff. This means that state reviews will focus on three target topics rather than a detailed evaluation of all aspects of a state's program, and will involve electronic submittal of review materials and remote meetings of state and federal staff through teleconferencing.



Pioneers a New Federal Evaluation Process



CCMP and NPS Plan Updates Will Better Protect Connecticut's Coastal Resources



Spotlighted Coastal Resource I: Protecting Two of Southeastern Connecticut's Coves: Planning to Attack Bacteria in Baker Cove



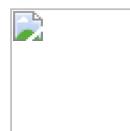
Spotlighted Coastal Resource II: Protecting Two of Southeastern Connecticut's Coves: A Conservation Action Plan Protects Poquetanuck Cove



Spotlighted Coastal Access: Sciongay Family Helps Protect 155 acres of Ecologically Significant Property in Clinton



Climate Change Update: CART Toolkit Now Available Online



Sound Tips:

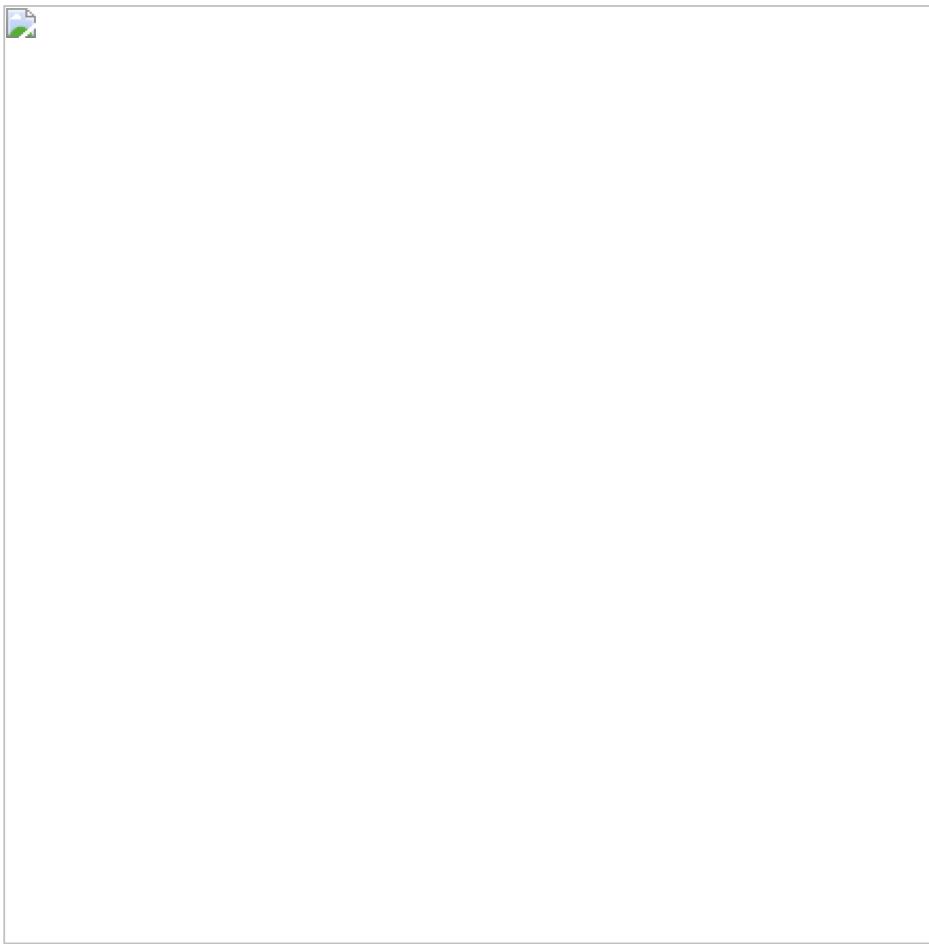
Tools Are Available to Help Manage Polluted Runoff

UConn's Nonpoint Education for Municipal Officials (NEMO) Program has developed the new [Impervious Cover Do It Yourself \(IC-DIY\) website](#) that provides step-by-step guidance on how towns can use impervious cover as a framework for protecting their water resources.

EPA's [National Stormwater Calculator](#) can be used by

Connecticut's coastal management program is currently undergoing a 312 Review for the timeframe spanning from October 2006 through September 2013, and is among the first coastal states in the nation to be evaluated under the streamlined process. The review began in December 2013 with Connecticut's detailed response to an Information Request that includes:

- identification of stakeholders and partners from other state agencies, federal agencies, executive and legislative government representatives and staff, local government elected officials and staff, regional planning organizations, non-governmental organizations, non-profit organizations, local businesses and industry, the permit-regulated community, and academia;
- summaries of major accomplishments, changes to, and issues or challenges faced by the Coastal Management Program pertaining to program administration, structure, operation, or management; and
- a description of how Connecticut's Program continues to address core program goals (e.g., protection of natural resources, coastal habitat, coastal water quality, management of coastal hazards, adverse effects of sea level rise, promotion of water-dependent uses and public access, coastal permitting streamlining, and inter-agency and public coordination)



Another core goal of the CMP is to promote public access to coastal waters. A prime example is this public walkway along the Poquonock River in Groton.

An evaluation team will not visit Connecticut to undertake the review, but will attend meetings and public events through teleconferencing. And, rather than review each of the components of Connecticut's program, the evaluation team

anyone interested in reducing runoff from their property or development site. The desktop application estimates the annual amount of rainwater and the frequency of runoff from a specific site anywhere in the United States!

DEEP has developed a [Municipal Outreach for Green Infrastructure and Low Impact Development webpage](#)

encourages the adoption of Green Infrastructure (GI) and Low Impact Development (LID) practices to control rainwater runoff to improve water quality and reduce flooding. The webpage also provides a link to the materials and presentations provided at the September 2013 [Connecticut Green Infrastructure Symposium](#) where municipal land use and public works professionals, researchers, and private sector engineers discussed the regulation, design, operation, and maintenance of GI/LID practices.

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Look Out For Upcoming Events!

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

Long Island Sound Citizens Summit
April 25, 2014
Iona College
New Rochelle, NY

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

Bald Eagle Viewing:
[Shepaug Dam](#)

[CT River Museum Eaglewatch Boat Tours](#)

will focus on three target areas that will be identified by Connecticut coastal management staff and federal evaluators.

One thing that has not changed under the new streamlined evaluation approach is the importance of public input in the evaluation process. Connecticut's 312 Review will include significant participation by state and local stakeholders and other interested parties, and will culminate with a public meeting to be held sometime in May 2014. If you are interested in being a part of Connecticut's 312 Review, or if you have questions about the review, please contact [David Blatt](#) at 860.424.3610.

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CCMP and NPS Plan Updates Will Better Protect Connecticut's Coastal Resources

Connecticut's coastal resources are also playing featured roles in two other plan reviews that are currently underway.

Long Island Sound Study Comprehensive Conservation and Management Plan

As we briefly reported in the [June 2013 issue of Sound Outlook](#), the Long Island Sound Study (LISS) [Comprehensive Conservation and Management Plan](#) (CCMP) is in the midst of a comprehensive update. Planning for the first CCMP started in 1988 in an effort to help the States of Connecticut and New York better protect and improve the health of Long Island Sound, and the CCMP was approved by both states and the EPA in 1994.

Many new issues and challenges facing Long Island Sound, such as climate change resiliency, green infrastructure practices, and marine spatial planning have emerged in the 20 years since the first CCMP was established, so the CCMP is in need of a wide-ranging revision.

The CCMP plays an important role in helping state agencies, local governments, and environmental advocacy groups work together to protect coastal resources. For example, the [Long Island Sound Futures Fund](#) was established to provide funding for projects to implement many of the goals and recommendations contained in the CCMP. The [Poquetanuck Cove Action Plan](#) spotlighted in this issue of *Sound Outlook* was made possible through a grant from the Futures Fund.

The CCMP revision process started in early 2012, and the LISS retained a consultant, WaterVision LLC, to help synthesize background documents, solicit initial stakeholder and public input, and develop a framework for the CCMP update, which will now focus on four comprehensive themes:

- Waters and Watersheds
- Habitats and Wildlife
- Sound Communities
- Science and Management

Public input will be crucial to the success of updating the CCMP and shaping the future vision of Long Island Sound. Please visit the [LISS CCMP update webpage](#) to find review

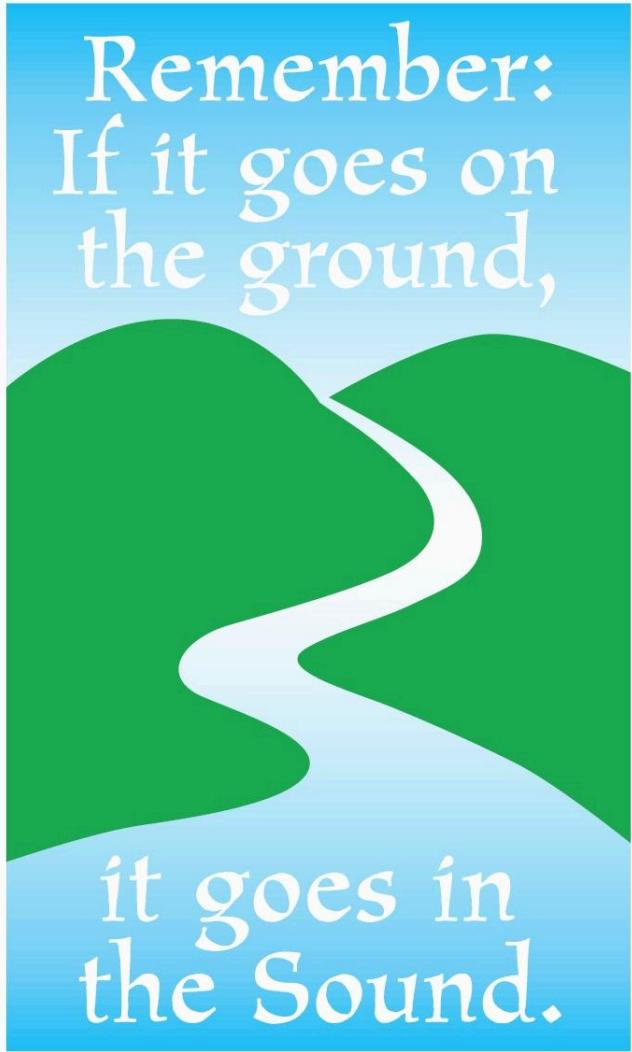
documents and additional information about the CCMP revision process. You may also contact [Mark Parker](#) at 860.424.3276 with any questions.

Green Infrastructure Practices such as this Rain Garden at UConn will be addressed in the CCMP Update

State of Connecticut Nonpoint Source Management Plan

Connecticut's statewide [Nonpoint Source Management Plan](#) (NPS Plan) is also undergoing a comprehensive review.

Nonpoint source pollution is water pollution that comes from many different sources and is not discharged from a "point," such as a pipe, or concentrated within a drainage system. Many activities associated with various land uses within Connecticut have the potential to contribute this type of nonpoint source pollution to ground and surface water resources. These activities can include agriculture, waste from domestic animals and wildlife, malfunctioning septic systems, runoff from impervious surfaces, soil erosion, and boating activity. Many types of nonpoint source pollution can also be made worse by weather conditions that cause stormwater runoff or snowmelt. If pollutant concentrations from these nonpoint sources are high enough, uses of those surface or groundwaters for public water supplies, recreation, or aquatic life may become [impaired](#).



The NPS Plan is the foundation of the state's [Nonpoint Source Management Program](#), which networks a variety of federal, state, and municipal government agencies and organizations to reduce nonpoint source water pollution throughout the state. The DEEP Bureau of Water Protection and Land Reuse is the state agency that has been designated by U.S. Environmental Protection Agency (EPA) to coordinate this network and administer the grant program established by [Section 319 of the Clean Water Act](#). The [Section 319 grant program](#) funds on-the-ground projects and watershed-based plans to implement the goals and recommendations contained in the statewide NPS plan, and is key in making measurable improvements in water quality throughout the state. In fact, a Section 319 grant allowed the Eastern Connecticut Conservation District to lead the effort to identify the sources of bacteria in [Baker Cove](#) as highlighted in this issue of *Sound Outlook*.

The current NPS Plan was adopted in 1999 and, like the CCMP, is in need of an update to address emerging issues and challenges. And, like the CCMP update, public participation will also be key to the success of the NPS plan update. An initial public presentation was conducted by DEEP in October 2013, and a [NPS Plan Update webpage](#) has been developed to house all documents for public review.

It is anticipated that a Draft NPS Plan will be posted on the webpage for public review and comment in mid-winter, and a Public Meeting will be scheduled soon thereafter to allow for further clarification of details in the Draft Plan.

Please contact [Christopher Malik](#) of the DEEP's Watershed Management Program at 860.424.3959 for more information on the NPS Plan update.

Connecticut's coastal resources have already benefited from the existing CCMP and NPS Plan, so updating these documents to address new challenges will further help to protect and restore Long Island Sound and its watersheds.

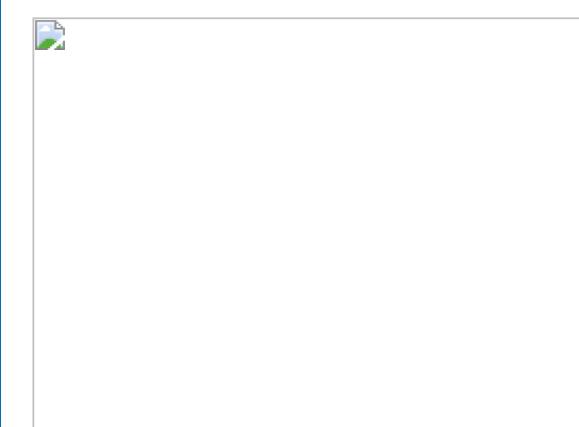
SPOTLIGHTED COASTAL RESOURCE I: Protecting Two of Southeastern Connecticut's Coves

Planning to Attack Bacteria in Baker Cove

Baker Cove is a small sub-estuary of Fishers Island Sound, located between the Thames and Poquonnock Rivers in Groton, Connecticut. It lies between Jupiter Point and the Groton-New London Airport, and forms a portion of the boundary between the City and Town of Groton. This picturesque little cove is well-known by local blue crab fishermen and at any given time, numerous birds, including osprey, great blue heron and snowy egrets can be seen hunting along its shores.

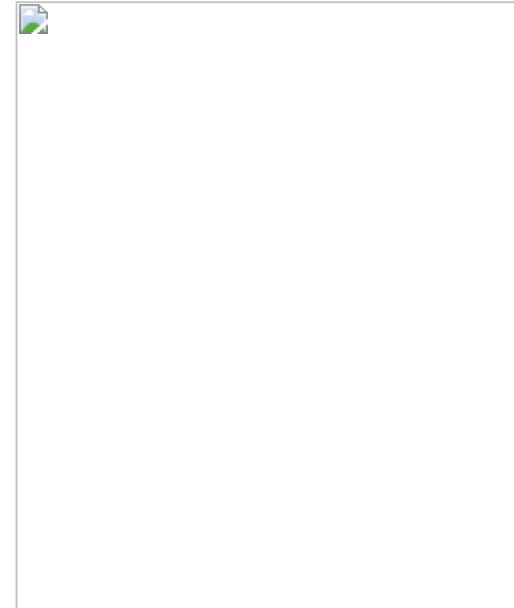
Baker Cove has been identified by the [State of Connecticut's Integrated Water Quality Report to Congress](#) as "impaired" for direct shellfish consumption (where permitted) due to elevated levels of fecal coliform bacteria. As a result of this impairment, Baker Cove shellfish beds are closed to recreational shellfishing, and shellfish from the Cove cannot be directly harvested for market or consumption. Rather, shellfish stock harvested from these beds are moved, or "relayed," to approved waters for natural cleansing prior to harvesting. Waterfowl, unspecified urban stormwater, marina/boating sanitary on-vessel discharges and residential districts have been identified by the State as possible sources of the bacteria.

In an effort to understand where this contamination is coming from, the [Eastern Connecticut Conservation District](#) (ECCD) undertook the [Baker Cove Track Down Survey and Abbreviated Watershed-Based Plan](#) in 2010 to identify potential sources of bacteria. The study was funded by the Connecticut Department of Energy and Environmental Protection through a grant under the U.S. Environmental Protection Agency's Clean Water Act Section 319 Nonpoint Source Pollution program.



Birch Plain Creek channeled
beneath the railroad
Photo Credit: ECCD

Town of Groton's Municipal Separate Storm Sewer System (MS-4) and Industrial Stormwater General Permit programs, and from the CT Department of Agriculture - Bureau of Aquaculture which monitors water quality for shellfishing purposes. ECCD staff interviewed local officials and area businesses, including marinas, golf courses, Groton Utilities and the Groton-New London Airport to identify other potential causes of water quality degradation to Baker Cove.

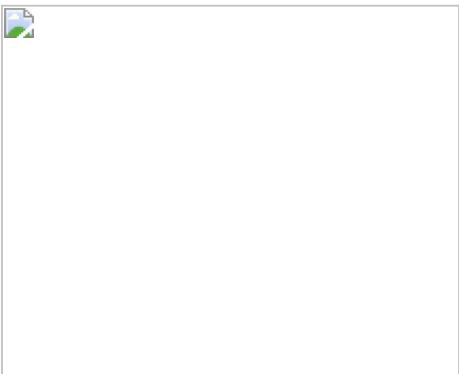


Baker Cove is located between the Thames and Poquonnock Rivers in Groton
Map Credit: ECCD

Birch Plain Creek, the primary stream that flows to Baker Cove, is an extremely fragmented urban stream. It originates north of Interstate 95 near the intersection with Route 12. It crosses under I-95 through a large pipe and flows briefly through a commercial/industrial area, before it is again piped under a road and hotel. Its channel has been relocated, armored with riprap, straightened, halted by a dam, and channeled under a railroad before it finally emerges at Baker Cove. A second stream that flows into Baker Cove from the east has similar issues. It also originates north of Interstate 95 and flows briefly through a wooded area before being channeled under a shopping area on Route 1. It flows alongside a railroad line north of Groton-New London Airport, collecting stormwater from nearby residential and commercial areas, before emptying into Baker Cove.

In order to identify where the bacterial pollution was originating, ECCD gathered and reviewed water quality data from the City and

ECCD also recruited and trained local volunteers to conduct streamwalk surveys to evaluate on-the-ground conditions, utilizing a protocol developed by the USDA Natural Resource Conservation Service. In the summer and fall of 2010, ECCD staff and volunteers conducted streamwalk surveys on 6.3 miles of stream, including Birch Plain Creek and three unnamed perennial tributaries. The streamwalks were used to identify and document stream corridor conditions (called Areas of Concern) such as impaired streamside buffers, eroded stream banks, and stormwater outfalls which might contribute to degraded water quality.



A green heron in Baker Cove.
Photo Credit: ECCD

To evaluate other potential pollutant sources, ECCD examined the most recent land cover data from the [University of Connecticut Center for Land Use Education and Research \(CLEAR\)](#) to assess land use types and levels of developed or impervious surfaces (buildings, parking lots, roads) throughout the Baker Cove watershed. This evaluation indicated that approximately 50% of the Baker Cove watershed contains impervious surfaces.

ECCD reviewed the streamwalk and water quality data to identify "hotspot" areas that exhibited consistently high levels of bacteria. Streamwalk and water quality data were compared to existing land cover, utilizing the UConn CLEAR 2006 land use/land cover data. This comparison indicated that Areas of Concern tended to cluster in developed areas, where impervious land cover is the highest, and that bacteria hotspots were associated with those clusters.

The Conservation District then used the information it gathered to prepare a watershed management plan for Baker Cove. The plan contains a variety of management recommendations that are intended to reduce the amount of nonpoint source pollution that enters Baker Cove, including:

- updating aging stormwater infrastructure;
- installing tree filters and rain gardens;
- removing invasive plants growing along stream corridors and re-vegetating stream banks with native plants;
- adopting behavioral changes to responsibly manage animal waste and test lawns before applying fertilizers and other lawn chemicals; and
- revising land use regulations to incorporate the most current stormwater management practices, including low impact development and other green infrastructure techniques.



Successful implementation of these management measures will require significant effort by watershed stakeholders and managers. But it will result in the reduction of bacterial and other pollution to Baker Cove which will improve water quality, ultimately allowing Baker Cove to be removed from Connecticut's list of impaired waterbodies and the recreational shellfish beds to re-open.

For more information on the Baker Cove Watershed Plan, please contact [Judy Rondeau](#), Natural Resource Specialist at the ECCD, at 860.887.4163 x401

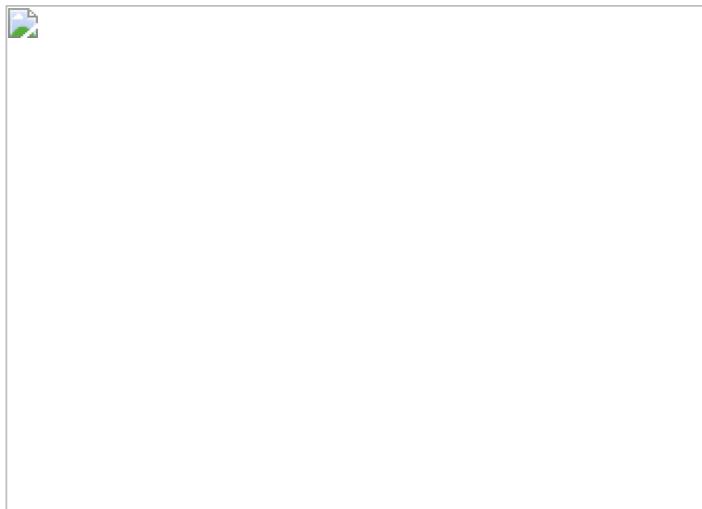
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SPOTLIGHTED COASTAL RESOURCE II: Protecting Two of Southeastern Connecticut's Coves

A Conservation Action Plan Protects Poquetanuck Cove

Poquetanuck Cove lies between the Towns of Ledyard and Preston. This brackish water tidal cove, a two-mile long extension of the Thames River estuary, contains a healthy mosaic of special habitats identified as important resources by the Long Island Sound Study. Poquetanuck Cove was designated a bird sanctuary in 1969, and for many years this cove has been a focus of conservation efforts. Undeveloped land has been preserved on both sides, and studies of the local

flora and fauna have identified rare species. Two car top boat access areas have been constructed in Ledyard, and walking trails have been developed on both sides for access to the area by foot. But is that enough to protect this special environment that is popular with fishermen, bird watchers and paddle sport enthusiasts? The answer was no.



Poquetanuck Cove
Photo Credit: ECCD

In 2011, the [Eastern Connecticut Conservation District](#) (ECCD) was awarded a grant through the [Long Island Sound Futures Fund](#) to work with area stakeholders, land use officials and conservation professionals to cooperatively classify the special resources of Poquetanuck Cove; identify the threats to those resources; and finally, to develop a Conservation Action Plan (CAP) to address those threats. A series of three intensive working meetings were held in June, August and November 2012. The outcomes of those meetings were integrated into a [Poquetanuck Cove Conservation Action Plan](#). A ceremony was held on the shore of the cove on September 27, 2013 - National Estuary Day - where the two towns entered into an [Intermunicipal Agreement](#) to adopt the strategies that will protect the cove.

The Conservation Action Plan was developed by ECCD in partnership with The Nature Conservancy, Ledyard and Preston Town Planners, representatives of both towns' Conservation Commissions, Preston Riverwalk Agency, Ledyard Planning Commission, Ledge Light Health District, US Fish and Wildlife Service, CT DEEP, CT DOT, USDA Natural Resources Conservation Service, CT Sea Grant, UConn Extension System, The Last Green Valley, professors from the Coast Guard Academy and Connecticut College, and landowners from both sides of Poquetanuck Cove. Next steps include incorporating the Poquetanuck Cove Conservation Action Plan into each town's update of their Plan of Conservation and Development, and to seek funding to support a part-time "Cove Keeper" position to facilitate implementation of parts of the plan that are outside of municipal control.

For more information about the Poquetanuck Cove Conservation Action Plan, please contact [Jean Pillo](#), ECCD Watershed Conservation Coordinator at 860.928.4948.

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SPOTLIGHTED COASTAL ACCESS: **Sciongay Family Works With DEEP to Protect 155 Acres of Property in Clinton**

In September 2013, the DEEP acquired 155 acres of some of the most ecologically significant, privately owned land on the lower Menunketesuck River in Town of Clinton. The property was purchased from Mrs. Harriet Sciongay of Westbrook for \$1.2 million through funding provided by the EPA's Long Island Sound Study. The Sciongay family persisted in making sure that the property would be managed for conservation, when it would have been easier and potentially more lucrative to sell to others. Because of the Sciongay family's commitment to hold the land until they found a qualified conservation buyer, the property is now in public ownership and will be managed for conservation, in perpetuity, for the benefit of future generations.



Located approximately 1.5 miles south of DEEP's Weber Woods unit of the Cockaponset State Forest, the acquisition includes 1.2 miles of high quality riparian land along the west side of the Menunketesuck River and Chapman Mill Pond. The purchase complements the Town of Westbrook's 2004 acquisition--also from the Sciongay family--of 83 acres on the east side of Chapman Mill Pond. Together, these acquisitions protect the majority of the undeveloped land along Chapman Mill Pond and have already served as a catalyst for other conservation projects within the lower Menunketesuck River corridor.

A Long and Winding Path to Conservation

DEEP's Office of Long Island Sound Programs (OLISP) had identified the Sciongay property as a high priority coastal land acquisition opportunity back in 2006 using a computer-automated geographic information system (GIS) support tool known as the Coastal Land Assessment Methodology, or "CLAM" (please see the "Landscape Stewardship" article in the [October 2005 issue of Sound Outlook](#) for a description of CLAM). However, it wasn't until summer of 2011 that OLISP began meeting with the Sciongays to discuss a conservation sale of their property to DEEP. It would take over two years of natural resource surveys, engineering studies, subdivision approvals, modifications to a dam, removal of a cottage, and

complex real estate negotiations between buyer and seller before DEEP would be able to acquire the property, just before federal funding for the acquisition was set to expire.

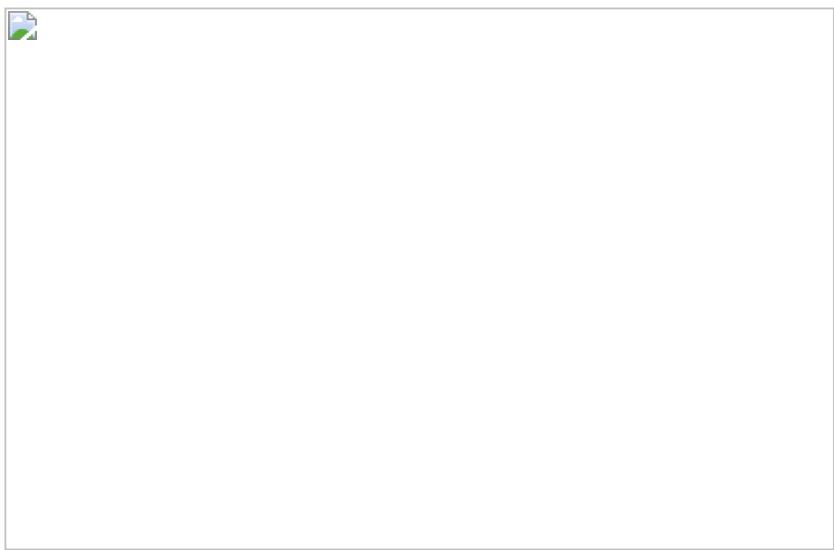
Interestingly, this was not the first time the property had been evaluated for acquisition. As far back as March 2000, the Sciongays offered to sell their land on Chapman Mill Pond to what was then CT DEP for \$3.1 million. Although a state property acquisition review committee recommended acquiring the property, limited funding and competing priorities resulted in DEP declining to proceed with the transaction. In 2007 the Sciongay family worked with the Connecticut office of the Trust for Public Land to sell the land to the Town of Clinton. However, negotiations broke down and the Sciongays ultimately reached an agreement with DEEP.

Wildlife and Habitats of the Menunketesuck Greenways

The Sciongay property is located within two State-designated greenways (see hatched area on map). The Menunketesuck-Cockaponset Regional Greenway that extends from Long Island Sound at Westbrook Harbor north through the Town of Haddam, and the companion Town of Westbrook "Menunketesuck Municipal Greenway" highlight an important regional/municipal conservation focus area anchored on the north by the Weber Woods unit of [Cockaponset State Forest](#) and the [Stewart B. McKinney National Wildlife Refuge](#) Salt Meadow Unit to the south. The area between these two anchor properties includes a nearly continuous corridor of existing and targeted protected open space with significant ecological and outdoor recreation value. The Sciongay property was targeted for acquisition because it meets both these objectives.

In terms of ecological resources, the Sciongay property stands out. It hosts 71 species of birds, 21 species of mammals including river otter, and 17 species of reptiles and amphibians that frequent the property. The acquisition includes a healthy stand of coastal forest that is a part of a larger block extending north into the Cockaponset State Forest. These large blocks of unfragmented forest are believed to provide critical "stop-over" habitat for birds migrating along the Atlantic Flyway. Interspersed throughout the site's woodlands are red maple swamps and at least two vernal pools, an increasingly rare and critical habitat for declining populations of amphibians such as toads, wood frogs, and salamanders. The property also supports reptiles including wood turtles and box turtles, both of which are State-listed Species of Special Concern. Snapping turtles have been observed crawling out of Chapman Mill Pond to lay their eggs in unusual sand deposits near the center of the property.

An 18th century masonry dam on the property marks the head-of-tide on the Menunketesuck River where aquatic life such as mussels, blue crab and migratory fish congregate. Below the dam are two State-listed Endangered and Species of Special Concern plants, as well as abundant runs of anadromous fish (fish that start their lives in freshwater, migrate to the sea to grow and mature, and then return to the stream of their origin to spawn). The most prominent of these for the Menunketesuck River are alewives and blueback herring, collectively referred to as river herring. Despite the dam, a remnant run of these fish have been able to hang on by spawning right below the dam, every spring, as if hopeful that someday there will be a way around that big stone wall. Fortunately, DEEP and its partners, including the [Connecticut River Coastal Conservation District](#), recently obtained funds to design and build a fish passage facility at the Chapman Mill Pond Dam to pass river herring, and other species of migratory fish, up-stream of the dam where they are expected to find more suitable breeding habitat.



A Catalyst for New Conservation and Recreation Opportunities

The Sciongay acquisition increases protected open space within the 5,000 acre Menunketesuck Greenway to nearly 1,800 acres and has already spurred other conservation acquisitions within the Menunketesuck Greenway. Most recently, the Town of Westbrook acquired or signed contracts to acquire 186 acres about 0.5 miles north of the Sciongay

property near the Menunketesuck River. This new acquisition will protect a corridor of unfragmented forest and critical wetlands and groundwater recharge land that supply clean water and maintain base flow to the Menunketesuck.

The Sciongay property is also expected to be available to the public for outdoor recreation opportunities consistent with the primary purpose of conserving the land's ecological functions and values. DEEP staff will evaluate the property and make recommendations for future public uses, which might include incorporating the acquisition area into the nearby Cockaponset State Forest or the Messerschmidt Wildlife Management Area.

Keep reading *Sound Outlook* for further news and opportunities associated with this remarkable land conservation acquisition. And while the Sciongay property is prepared for public use, please see the [Connecticut Coastal Access Guide](#) which describes approximately 300 places already open to the public on Connecticut's coastal waters.

For more information about the Sciongay property acquisition or the Connecticut Coastal Access Guide, please contact [David Kozak](#) in DEEP's Office of Long Island Sound Programs at 860.424.3608.

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Climate Change Update: CART Toolkit Now Available Online

The [Connecticut Adaptation Resource Toolkit](#) (CART), developed through a partnership between Department of Energy and Environmental Protection (DEEP) and [ICLEI-Local Governments for Sustainability USA](#) (ICLEI USA) with funding from the EPA's [Climate Ready Estuaries](#) through the [Long Island Sound Study](#), is now available for use on the DEEP website.

CART is a tool to help local government staff have instant access to climate change adaptation resources thereby enabling them to easily and meaningfully benefit their communities. Too often individuals or communities want to minimize future risks and costs, but they do not know where to start or how to continue. CART is a one-stop-shopping website for ideas and methods on local climate change adaptation planning and action.

The need for CART was identified through an EPA-funded DEEP and ICLEI collaborative project that involved working with the Town of Groton, CT on a model adaptation planning process (please see the [October 2010 issue of Sound Outlook](#)). The project focused on identifying the needs and policy types for each level of government as well as on helping the town conduct a preliminary vulnerability assessment. The administration in the Town of Groton has formally included adaptation criteria in the review and funding of capital improvements and has recently commenced development of a GIS/Microsoft Access database as the basis for its infrastructure vulnerability assessment efforts.

There are resources available for nearly every municipal department to address agriculture, public works, education, natural resources, planning, public health and safety, and adaptation planning. The site also provides a handy list of useful adaptation links for easy reference:

- Climate Adaptation Knowledge Exchange has an extensive library containing case studies, adaptation plans and strategies and reports relevant to climate change adaptation.
- Climate Ready Estuaries has a variety of information and tools most relevant to the natural resource and ecologic habitat disciplines.
- Climate Ready Utilities has a large selection of information and tools to help those in the drinking water, wastewater, and stormwater fields to adapt to climate change.
- ICLEI's Climate Resilient Communities Program has a guidebook called Preparing for Climate Change: A Guidebook for Local, Regional and State Governments as well as a tool called the Adaptation Database and Planning Tool (ADAPT) that will take you through the whole process.
- NOAA's Coastal Climate Adaptation website has many guidebooks available for download as well as outreach materials related to coastal climate change adaptation.

- StormSmart Coasts has tools and resources for coastal communities to address current and future storm and flooding threats.

For more information about CART, please contact [Jessica LeClair](#) in the DEEP's Bureau of Energy and Technology Policy at 860.827.2816

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