

# Final Evaluation Findings

Connecticut Coastal Management Program

September 2006 to May 2014

Published January 2015



Office for Coastal Management  
National Ocean Service  
National Oceanic and Atmospheric Administration  
United States Department of Commerce

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## Executive Summary

The Coastal Zone Management Act requires the National Oceanic and Atmospheric Administration's Office for Coastal Management to conduct periodic evaluations of the performance of states and territories with federally approved coastal management programs. This evaluation examined the operation and management of the Connecticut Coastal Management Program (CT CMP) by the Connecticut Department of Energy and Environmental Protection (DEEP), the designated lead agency, for the period from September 2006 to May 2014. The evaluation focused on three target areas: ocean planning, coastal resilience, and permitting.

The findings in this evaluation document will be considered by the National Oceanic and Atmospheric Administration (NOAA) in making future financial award decisions concerning the coastal management program. The evaluation came to these conclusions:

**Accomplishment:** The CT CMP developed and completed phase one of a plan to conduct benthic mapping of priority areas for Long Island Sound.

**Accomplishment:** The CT CMP has successfully supported innovative local government efforts to increase climate resilience through technical assistance and funding and through leveraging regional and national resources.

**Accomplishment:** The CT CMP has successfully worked with partners to restore coastal habitats and protect coastal lands to increase coastal resilience.

**Accomplishment:** The CT CMP has a culture of continuous improvement and has undertaken multiple successful efforts to streamline its permitting process, which have resulted in dramatic drops in permit processing times and the backlog of permits.

**Recommendation:** The NOAA Office for Coastal Management encourages CT DEEP and CT CMP to continue to work with state legislators to support the state's efforts to develop an ocean plan for Long Island Sound.

**Recommendation:** The NOAA Office for Coastal Management encourages CT DEEP to fill the hazards specialist position to continue to provide a high level of support to local governments and regional efforts to build resilience.

**Recommendation:** The NOAA Office for Coastal Management encourages the CT CMP to continue to support building coastal resilience at the regional, state, and municipal levels and, in particular, incorporating climate resilience into existing planning and permitting processes such as municipal coastal programs.

This evaluation concludes that the CT DEEP is satisfactorily implementing and enforcing its federally approved coastal management program, adhering to the terms of the federal financial assistance awards, and addressing coastal management needs identified in section 303(2)(A) through (K) of the CZMA.

## Program Review Procedures

The National Oceanic and Atmospheric Administration (NOAA) Office for Coastal Management evaluated the Connecticut Coastal Management Program (CT CMP) in fiscal year 2014. The evaluation team consisted of Carrie Hall, evaluation team lead; Sacheen Tavares, evaluator; Betsy Nicholson, Northeast lead; Allison Castellan, site liaison; and Barbara Neale, senior program analyst, South Carolina Office of Ocean and Coastal Resource Management. The support of the coastal management program staff was crucial in conducting the evaluation and is most gratefully acknowledged.

The NOAA Office for Coastal Management sent a notification of the scheduled evaluation to the commissioner of the Department of Energy and Environmental Protection, published a notice of "Intent to Evaluate" in the *Federal Register* on March 31, 2014, and notified members of Connecticut's congressional delegation. The coastal management program posted a notice of the public meeting and opportunity to comment in the *New London Day*, *New Haven Register*, *Connecticut Post*, and *Hartford Courant* on March 21, 2014.

The evaluation process included a review of relevant documents, a survey of stakeholders, the selection of three target areas, discussions with staff members about the target areas, and focus group discussions with stakeholders about the target areas. In addition, a public meeting was held on Tuesday, May 13, 2014, at 6:30 p.m. at South Central Connecticut Regional Water Authority, Welch Room, 90 Sargent Drive, New Haven, Connecticut 06511 to provide an opportunity for members of the public to express their opinions about the implementation of the program. Stakeholders and members of the public were also given the opportunity to provide written comments. A summary of the written comments received and the NOAA Office for Coastal Management's responses are included in Appendix A. NOAA then developed draft evaluation findings, which were provided to the coastal management program for review, and the program's comments were considered in drafting the final evaluation findings.

Final evaluation findings for all coastal management programs highlight the program's accomplishments in the target areas and include recommendations, which are of two types.

**Necessary Actions** address programmatic requirements of implementing regulations of the Coastal Zone Management Act (CZMA) and of the state coastal management program approved by NOAA. These must be carried out by the date specified. Failure to address necessary actions may result in a future finding of non-adherence and the invoking of interim sanctions, as specified in CZMA §312(c).

**Recommendations** are actions that the office believes would improve the program, but are not mandatory. The state is expected to have considered the recommendations by the time of the next evaluation or dates specified.

## Evaluation Findings

The Office of Long Island Sound Programs (OLISP), within the Department of Energy and Environmental Protection, continues to successfully implement the federally approved Connecticut Coastal Management Program (CT CMP). During this evaluation time frame, CT CMP has streamlined and continued to implement the state's coastal permitting program, initiated a major ocean planning effort, and worked to strengthen state and local community resilience. In 2012, the lead agency, the Department of Environmental Protection, was restructured to include energy regulation and policy and became the Department of Energy and Environmental Protection (CT DEEP). Major events affecting the Connecticut coast included the Great Recession of 2008-2009 and two major storms, Hurricane Irene in 2011 and Superstorm Sandy in 2012. The CT CMP was also severely impacted by budget cuts and lost eight positions (25 percent of its staff) between October 2005 and September 2013.

During the evaluation period, the legislature worked to pass laws relevant to the CT CMP's efforts to build resilience and decrease the adverse effects of coastal hazards. In 2012, Public Act 12-101 became the state's first to address living shorelines. This act encourages the use of living shorelines to address coastal erosion and excludes them from the definition of "shoreline flood and erosion control structure," allowing streamlined procedures for resource-oriented shore stabilization. The act also provides for the replacement of the high tide line with the coastal jurisdiction line, which allows for a clearer understanding of where the state's regulatory authority lies, requires that denials of flood erosion and control structures suggest alternatives or mitigation measures that might be pursued, and laid the groundwork for the creation of the Institute for Community Resilience and Climate Adaptation at the University of Connecticut.

Public Act 13-179 of 2013 extends the date of grandfathered approval for structures from 1980 to 1995, allows any property owner to erect temporary fortifications, such as sand bags, landward of the coastal jurisdiction line in the event of a hurricane or tropical storm warning, and expands where shoreline flood and erosion control structures can be used to protect structures, including "inhabited structures," but also including commercial and residential structures and appurtenances that are attached or integral to a structure.

### Ocean Planning

The CT CMP serves in a leadership role in developing ocean planning and management for the state, Long Island Sound, and the Northeast region. The program has built strong relationships over the evaluation period and laid the foundation for future success in coordinated and improved coastal management. During meetings with stakeholders, the evaluation team heard that the program's partners greatly valued its contributions to ocean planning, and its role was "a key role that only (the program) could play."

### ***Long Island Sound***

A major accomplishment is the development and initiation of a comprehensive Long Island Sound seafloor mapping project that will identify areas of special resource concern, where impacts should be minimized, and areas that may be suitable for other activities, such as the placement of infrastructure for energy and other uses. Once completed, the maps will provide government agencies, researchers, businesses, and others with a better understanding of Long Island Sound bathymetry and habitat, allowing them to make more informed and better decisions.

In the early 2000's, a task force established by the state legislature and the Governor's Office identified the need for "more detailed and timely resource information" in Long Island Sound. Funding for the project was made available with the creation of the Long Island Cross Sound Settlement Fund in 2004. A steering committee was created to administer the funds, and CT DEEP, including the CT CMP, is a member along with New York Department of Environmental Conservation, New York Department of State, New York and Connecticut Sea Grant Programs, and the U.S. Environmental Protection Agency. The CT CMP staff served as the administrative and technical lead for the seafloor mapping project, including administration of the settlement funds. Stakeholders that the evaluation team met with stated they appreciated that the CT CMP was able to effectively and efficiently administer the funds on behalf of the steering committee. In addition, at the time of stakeholder and public meetings, CT CMP staff members served as the technical and administrative lead for the seafloor mapping project.

The steering committee conducted workshops to establish mapping needs and priorities, developed a habitat classification scheme, and developed strategic and work plans. In 2012, a collaborative pilot project was initiated with data collected and compiled by NOAA, the University of Connecticut, and Columbia University's Lamont-Doherty Earth Observatory. The evaluation team heard from stakeholders that the CT CMP was instrumental in reaching out to NOAA and universities and bringing them into the project to capitalize on their expertise and resources.

The pilot project was completed in 2014 and additional areas of Long Island Sound will be mapped over the next four years. The data from this mapping effort will be instrumental both in choosing where large-scale projects should be sited and in managing conflicting uses. In addition, new uses for the information will likely emerge, and the NOAA Office for Coastal Management encourages the CT CMP to consider new potential users and to reach out broadly to advertise the availability of the data.

The CT CMP identified three goals and five-year targets in 2012 to provide quantitative measurements on progress for evaluations. One of its three evaluation metric goals is to "provide adequately detailed and relevant benthic data/derived analysis for high priority areas of Long Island Sound (LIS)," and the associated five-year target is "100% of benthic mapping data for Long Island Sound high priority areas completed and made available publicly." The program has made good progress and is on track to meet its five-year target for this goal. More information can be found in the Evaluation Metrics section.

The CT CMP is also collaborating with the Connecticut and New York Sea Grant Programs, The Nature Conservancy, New York state agencies, and other interested stakeholders in an informal working group investigating the opportunity for development of a coastal and marine spatial plan for Long Island Sound. The work group has enabled partners to meet regularly to identify and work toward solutions to ocean management challenges, enhance communication between partners, and allow for the building of trust between participants. Partners stated that CT CMP has been a critical partner in this working group and is always working to move the work group forward.

CT DEEP and the CT CMP also worked with the state legislature in 2014 to provide information in support of Senate Bill 312, "An Act Concerning a Long Island Sound Resource and Use Inventory and a Long Island Sound Blue Plan." The bill establishes a process to complete an inventory of Long Island Sound uses and natural resources and develop a plan to preserve and protect the sound. The bill was passed by the state senate and was before the house, but the session ended before the house voted on the bill. The creation of a formal Long Island Sound work group would improve the CT CMP's ability to further its mission to manage and balance the impact of human activities with the protection of coastal and marine resources through planning, public involvement, research, mapping, and education. The NOAA Office for Coastal Management encourages the CT CMP to continue to support ocean planning and mapping efforts.

### ***Northeast Region***

The CT CMP is an active member of the Northeast Regional Ocean Council (NROC), founded in 2005 by the Northeast governors. NROC provides a forum for New England states and federal partners to coordinate and collaborate on regional approaches to support balanced uses and conservation of the Northeast region's ocean and coastal resources. The CT CMP manager currently serves on the NROC Executive Committee and has served as the NROC state co-chair on a rotating basis. The program manager also currently serves as the state co-chair for NROC's Ocean and Coastal Ecosystem Health Committee. Other CT CMP staff members have roles in the Coastal Hazards Committee (as state co-chair) and the Ocean Planning Committee. Through the Ocean Planning Committee, NROC is gathering data and developing maps of human activities to support regional ocean planning efforts led by the Northeast Regional Planning Body (RPB). In this evaluation period, NROC worked with the boating industry, U.S. Coast Guard, and others to conduct a survey of more than 12,000 boaters to gain important information on where boaters go, what they do, and what they spend. The survey also looked at the economic impact of recreational boating, both by state and by region, which was found to be \$3.5 billion in 2012 for New England. NROC continues to work with partners to conduct additional surveys and analysis on commercial and recreational ocean uses to enable states like Connecticut to make informed decisions in their state waters that minimize use conflict and explore compatibility among ocean uses.

The Northeast RPB was created in response to the National Ocean Policy, established by presidential executive order in 2010, which called for the formation of nine regionally focused planning bodies to better manage the nation's oceans and coasts. CT CMP staff members have

served as one of two Connecticut representatives to the Northeast RPB. Since 2012, the Northeast RPB has solicited input from numerous stakeholder groups and the public, which has been used to draft *The Framework for Ocean Planning in the Northeastern United States*. The RPB is continuing to focus on soliciting input on how to move forward and developing and completing projects to further the framework. By serving as leaders on both NROC and the RPB, CT CMP staff members help ensure that these regional ocean planning efforts serve Connecticut data and management needs.

The CT CMP is also a critical partner in other regional working groups that involve ocean data, resources, and uses:

- The Long Island Sound Study National Estuary Program – CT CMP has been a partner for more than 25 years and staff members have played lead roles in the executive steering committee, management committee, habitat restoration workshop, stewardship work group, and sentinel monitoring work group.
- Northeast Regional Association of Coastal and Ocean Observing Systems (NERACOOS) – CT CMP staff members actively participate, including serving for a term on the board of directors.
- Dredged Material Management Planning for Long Island Sound – CT CMP staff members participate with the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, and New York State agencies in the development of a Dredged Material Management Plan for Long Island Sound, as well as in the Regional Dredging Team that reviews certain dredged material disposal projects.

**Accomplishment:** The CT CMP developed and completed phase one of a plan to conduct benthic mapping of priority areas for Long Island Sound.

**Recommendation:** The NOAA Office for Coastal Management encourages CT DEEP and CT CMP to continue to work with state legislators to support the state’s efforts to develop an ocean plan for Long Island Sound.

## Coastal Resilience

During the evaluation period, residents and elected officials have become increasingly concerned about the impacts of coastal hazards and climate resilience as they have experienced severe storms and chronic and acute flooding of low-lying areas. The Connecticut shoreline is highly developed, and 69 percent is in private ownership, mostly high-value residential real estate. In addition, the coast has a complex geomorphology that ranges from promontories of hard rock to marshes and sandy beaches, all of which make comprehensive and long-term sustainable solutions to building coastal resilience challenging. The CT CMP works to improve coastal resilience through its core program activities of coastal planning, permitting, and technical assistance and in partnership with other local, state, regional, and federal agencies.

### **Resilience Tools**

The CT CMP provides needed information and data to local government staff members, officials, businesses, and others to build coastal resilience. In partnership with ICLEI Local Governments for Sustainability USA, the CT CMP created the Connecticut Adaptation Resource Toolkit (CART). CART is an online resource that provides access to climate change adaptation information and is a central repository for tools, resources, information, organizations, and funding for Connecticut municipalities. The site is searchable by profession and by task, such as planning or financing resilience activities.

To assist coastal communities with preparing for long-term changes and short-term weather events, the CT CMP obtained a NOAA Coastal Management Fellow (2007-2009) who helped develop the Coastal Hazards Analysis Management Program (CHAMP). The first phase of the project was the synthesis of existing information into a comprehensive report, *Coastal Hazards in Connecticut: The State of Knowledge, Policy, and Planning* (2009). The second phase of the project was an online mapping tool that allows users to see estimates of inundation from sea level rise across coastal Connecticut. The tool provides users with access to data representing sea level rise, high-resolution coastal elevation, hurricane storm surge, coastal erosion, and environmental observation such as tides, water quality, waves, and currents. The third phase consisted of outreach to coastal planners, municipal officials, and the public to assist them with using CHAMP and raise their awareness of potential and existing hazards in their communities. The NOAA Office for Coastal Management encourages the CT CMP to continue to assess the information needs of communities and the relevance and usability of tools provided.

The immediate threats along the Connecticut coast have led to an increased interest in hard shoreline stabilization structures such as seawalls, revetments, and tide gates, but their installation may adversely affect beaches, wetlands, and adjacent properties, and even inadvertently increase risks to the property they were installed to protect. Amendments to the Connecticut Coastal Management Act in 2012, gave the CT CMP the legal foundation for a program of mitigation through compensation which could provide a foundation for a no-net-increase in hardened shoreline policy. A new policy could potentially ensure new hardening is balanced by re-naturalization, and preserve existing opportunities for tidal wetlands to migrate inland and provide intertidal public access corridors as sea level rises. In 2014, the CT CMP was selected to host another NOAA Coastal Management Fellow to research and develop a program of compensation to mitigate the loss of natural shoreline caused by new shoreline armoring. The NOAA Office for Coastal Management commends the CT CMP for developing this innovative project that will also inform other state coastal management programs addressing similar issues.

The CT CMP is also continuing to work with Connecticut Sea Grant and the University of Connecticut to identify and quantify shoreline change since the 1880s. The shoreline change information can be used by communities to identify problem areas and long-term trends. In addition, the information can be used by permitting staff members to better understand the dynamics in the area.

### ***Coastal Planning***

In Connecticut, the coastal management program is implemented in partnership with local municipalities. Local municipalities are responsible for land use planning, and under the Connecticut Coastal Management Act they conduct coastal site plan reviews for projects in the first tier of the coastal zone, which is generally the first 1,000 feet from the shore, ensuring that development meets the state's coastal policies. Local governments may also develop municipal coastal programs. CT CMP has municipal liaisons that work with the state's 36 coastal towns, provide extensive technical assistance, and build local capacity. The municipal liaisons provide comments on coastal site plan review applications and assess revisions to key guidance mechanisms such as town plans of conservation and development, municipal coastal programs, harbor management plans, and zoning and subdivision regulations.

The CT CMP also had a hazard specialist throughout most of the evaluation period, although this position was open at the time of the evaluation. The hazard specialist position provides much-needed technical expertise to local communities and other state agencies and serves as a liaison to regional efforts, bringing regional and federal resources to local communities to support building coastal resilience.

The Northeast region has been a leader in building climate resilience, and the CT CMP has been a key player in furthering this regional effort and bringing regional and national resources to local communities in Connecticut. The Northeast Region Ocean Council (NROC) and Gulf of Maine Council on the Marine Environment (GOMC) in 2010 conducted a climate change needs assessment. The results of the assessment led to the identification of stimulating innovation and increasing the pace of municipal responses to a changing climate as a top priority.

The CT CMP has partnered with NROC, GOMC, Rhode Island Sea Grant Legal Program, and others to successfully apply for NOAA funding through the New England Municipal Resilience Initiative. The CT CMP has also provided ongoing technical assistance to the selected municipalities as they implement their projects. This effort has allowed communities such as the Town of Guilford to pursue multi-year efforts to improve their resilience. The Town of Guilford first completed a risk and vulnerability assessment report and then a report of options to increase coastal resilience, which led to the preparation of a community coastal resilience plan in 2014. Other communities have also benefited from this successful partnership, and the Town of Greenwich and the City of Milford have also received adaptation planning grants. The CT CMP has also partnered with the University of Connecticut Center for Land Use Education and Research (CLEAR) and Sea Grant to work with communities to develop effective adaptation strategies and to conduct workshops in communities, including Madison, Waterford, Westbrook, Greenwich, and Groton.

#### **EXAMPLE: TOWN OF GROTON**

*The Town of Groton has been a leader in the state, and the CT CMP partnered with the town, providing both financial support and extensive technical assistance to conduct a model adaptation planning process with ICLEI and CT DEEP. The process engaged more than one hundred state, federal, and local government representatives, academics, nongovernmental organization*

*representatives, and other stakeholders in a series of climate adaptation planning workshops. The project resulted in a preliminary vulnerability assessment of major asset sectors and suggested action planning tasks. As a result of the project, the town administration has formally included adaptation criteria in the review and funding of capital improvements and into current drafts of the “Municipal Coastal Plan” (February 2014) and “Plan of Conservation and Development” (June 2014). The adaptation planning process is described in the document, “Preparing for Climate Change in Groton, CT, A Model Process for Communities in the Northeast” (2011). The document contains insights and resources for other coastal communities so that they can begin or continue their adaptation planning process. The Groton adaptation workshops served as a model for coastal climate adaptation workshops in the northeast.*

Although a number of communities in Connecticut are national leaders in planning for climate change and reducing their risks to coastal hazards, other communities are only just beginning, or have not yet started, to think about planning for climate change. The NOAA Office for Coastal Management encourages the CT CMP to continue to support building local capacity to address resilience in all communities and ensure that all state requirements are met. Coastal citizens of Connecticut have seen the impacts of Irene (2011) and Sandy (2012), and therefore are more likely to be interested in planning for future storms. Going forward, the CT CMP will also be able to capitalize on its partnership with the new Institute for Community Resilience and Climate Adaptation, in addition to existing partners, to assist local communities.

The CT CMP has also supported state and regional resilience efforts. CT CMP staff members actively participated in two Connecticut climate change adaptation work groups, one focused on infrastructure issues and the other focused on natural resources issues, under the auspices of the Governor’s Climate Change Steering Committee. The work groups were charged with producing assessments of climate change adaptation issues and potential impacts. CT CMP staff members have also supported the U.S. Army Corps of Engineer’s Sandy Long-Term Recovery Committee and North Atlantic Comprehensive Study. The results of this study will be published early in 2015 and will provide risk reduction strategies and ways to promote coastal-resilient communities.

### ***Land Acquisition and Habitat Restoration***

The CT CMP works closely with partners to protect the state’s green infrastructure through land acquisition and habitat restoration. Providing for the protection of coastal habitats and a path for habitats to migrate is an important tool for building resilience. The CT CMP works closely with other DEEP offices, Long Island Sound Study, local land trusts, and interested property owners to identify and prioritize sites, seek funding, and execute acquisitions. Over 1,300 acres of coastal properties have been protected through land conservation since 2006.

The CT CMP also supports habitat restoration through a number of mechanisms. The CT CMP manages funding from the Long Island Sound License Plate Program, which is funded through sales of license plates as well as other contributions. Funding was last competitively awarded in 2010, and over \$3 million was awarded to 15 habitat restoration projects. The CT CMP has also managed other funds for the state, such as Housatonic River natural resources restoration funds,

which are funds from penalty money for release of contaminants into the Housatonic River. The program provided \$7.1 million for 27 habitat restoration and public access projects in 2009. Types of habitat restoration projects funded include dam removal, installation of fish ladders, land acquisition, and restoration of both fish passages and tidal and nontidal marsh.

CT CMP staff members participate in pre-application meetings and site inspections and help with reviews of engineered plans for habitat restoration projects. Staff members also address protection and restoration of coastal habitat through permitting by mitigating unavoidable impacts to coastal resources and requiring compensation for unavoidable but authorized impacts.

The Long Island Sound Study funds a CT CMP staff position to support the bi-state habitat restoration initiative for Long Island Sound. During the evaluation period, 438 acres of coastal habitat, 355 acres of which are tidal wetlands, have been restored, and 195 stream miles have been reconnected to Long Island Sound. The Office for Coastal Management encourages the CT CMP to continue to support habitat restoration and acquisition to improve climate resilience.

**Accomplishment:** The CT CMP has successfully supported innovative local government efforts to increase climate resilience through technical and financial assistance and through leveraging regional and national resources.

**Accomplishment:** The CT CMP has successfully worked with partners to restore coastal habitats and protect coastal lands to increase coastal resilience.

**Recommendation:** The NOAA Office for Coastal Management encourages CT DEEP to fill the hazards specialist position to continue to provide a high level of support to local governments and regional efforts to build resilience.

**Recommendation:** The NOAA Office for Coastal Management encourages the CT CMP to continue to support building coastal resilience at the regional, state, and municipal levels and, in particular, incorporating climate resilience into existing planning and permitting processes such as municipal coastal programs.

## **Permitting**

### ***Permit Streamlining***

During the evaluation period, the CT CMP has undertaken several Lean initiatives to improve and streamline different parts of its permitting program. In 2008, the program undertook its first Lean initiative focused on the process for reviewing individual permits for structures, dredging and fill, and tidal wetlands. The CT CMP invited members of stakeholder groups (i.e., consultants, town commissions, lawyers, and other state agencies) to participate and help identify opportunities for improving the process. The CT CMP implemented many of the changes in late 2008 and early 2009. The revised process led to dramatic improvements in staff review times. For example, the initial sufficiency review of a permit application was reduced from an average of 205 days before the Lean process to less than 30 days as of November 2010. Also, the average processing time for

a permit application from receipt to permit issuance was 566 days before the changes and 167 days after, a 70 percent reduction. However, these numbers have risen slightly since 2010, mainly due to Irene (2011) and Sandy (2012), as staff members were addressing storm response issues and a surge in certificate of permission (COP) applications for the authorization of post-storm work. In addition, the CT CMP permit backlog was reduced dramatically. Before November 1, 2008, the CT CMP had 269 permit applications pending. As of December 1, 2013, only 72 permit applications were pending.

The CT CMP conducted a second Lean event in May 2012 to evaluate the COP process. CT CMP staff members and stakeholders identified opportunities to improve the process, which should result in greatly reduced staff time spent on processing COPs and reduced processing times for applicants. The improvements identified through the Lean event were to be implemented over several years and include the need for clearly defined standards for certain categories of eligibility; shifting certain types of activities from the COP process to shorter-process general permits; creating a robust pre-application process that would result in more complete application submissions; and increasing staff availability for other high-priority work such as more complex permit reviews, enforcement actions, compliance assistance, and outreach.

The CT CMP is also working on additional improvements to the general permit program. The 14 existing general permit categories and six new activities will be combined into two broad general permits: minor coastal structures and coastal maintenance. The new activities covered include scientific monitoring devices, Department of Transportation maintenance, placement of oyster cultch, and restoration activities by CT DEEP. The CT CMP is also looking to expand the existing dock reconstruction general permit to include all previously permitted coastal structures.

Stakeholders consistently praised CT CMP for their efforts to streamline the permitting process, with one stating CT “DEEP has made extraordinary steps in reducing permit application processing times” and another stating that Lean “very obviously helped with dealing with storms.” Stakeholders also cited as improvements the development of general permits for minor projects and commitment to streamlining the regulatory process and the benefits of conducting outreach programs and public information sessions related to the permit streamlining process. The evaluation team was impressed with CT CMPs ongoing commitment to continuous improvement of the permitting program even with challenges caused by storm response and reduced staffing.

The permit streamlining process has resulted in an increased use of the COP and general permit process. One commenter raised a concern that the COP approval process was not currently providing for appropriate consideration of harbor management commission recommendations. Another commenter raised a concern that required pre-consultations meant the permit process had not been shortened much from the applicant’s perspective. Stakeholders also identified potential improvements, including pre-designating areas for allowable uses based on criteria such as water quality and local assets and resources and developing more specific regulations for coastal structures. The NOAA Office for Coastal Management encourages the CT CMP to continue

to engage with stakeholders and to evaluate potential opportunities for improving the permitting program.

### ***Response to Storms***

The Connecticut coast was extensively impacted by the storms Irene (2011) and Sandy (2012). The CT CMP undertook a number of actions to help property owners prepare for the storms and to address the storms impacts without severely undermining existing statutory standards.

After Irene (2011), the CT CMP quickly issued statewide temporary and emergency authorizations to address repair and rebuilding of structures and debris removal. In addition, a general permit was issued for the repair of previously authorized storm-damaged docks. During the evaluation period, the CT CMP led a work group to enhance its permitting by developing a policy document and guidelines for the issuance of emergency authorizations to address specific post-hurricane issues that could not be covered by a general permit. Based on the work group's efforts, before Sandy (2012) the CT CMP was able to implement new state general permit categories allowing pre-storm fortification and post-storm rebuilding of structures without CT DEEP review. The work group also created a new emergency authorization application form. Stakeholders commended the CT CMP for its response to Irene (2011), learning from that event, and providing for an even smoother response with Sandy (2012).

Since the storms, the CT CMP's permitting and shoreline policies have come under increased pressure, as residents and members of the state legislature wish to allow more hardening of the shoreline. The CT CMP is exploring options for addressing this issue, which is discussed below in the Resilience Tools section. The NOAA Office for Coastal Management encourages the CT CMP to continue to work to minimize shoreline hardening and preserve state policies that limit shoreline hardening.

### ***Staff***

Over the evaluation period, the CT CMP staff was reduced by 25 percent. The program has been unable to fill positions because of flat or reduced federal funding and state-level restrictions on hiring. In a survey, evaluation stakeholders identified lack of staff members as the program's biggest weakness. The evaluation team heard from stakeholders who stated that it would be very valuable to have more permitting staff members in the field ("boots on the ground") so that staff members could see and understand their projects and provide relevant input early in a project. They stated this could reduce costs and weeks of up-front time for developers and builders. One stakeholder described a project where the onsite staff input was very helpful in coming up with a new way to address the problem that they hadn't thought of and "saved (them) months of work." Stakeholders from the private sector and another state agency also noted that it was very helpful and saved them time to have CT CMP staff members explain the pros and cons to homeowners and engineers, since they were perceived as the experts.

During the evaluation period, the CT CMP also lost its federal consistency coordinator to retirement. A new federal consistency coordinator was designated and reviews are being conducted using existing resources. If the CT CMP sees a rise in major federal actions, particularly energy related, the loss of a full-time federal consistency specialist may be more strongly felt. In addition, staff changes have caused some recent confusion with some of the federal consistency reporting to NOAA. The NOAA Office for Coastal Management encourages CT DEEP to monitor workloads and consider whether additional permit staff members or a federal consistency specialist would be beneficial. In addition, the NOAA Office for Coastal Management encourages the CT CMP to provide continued training and discussions of federal consistency issues for permitting staff and to reach out to the NOAA Office for Coastal Management for assistance with training, as appropriate, outside of NOAA's scheduled federal consistency training workshops. This will ensure that applicable CT CMP staff members have a strong understanding of federal consistency and will be able to apply it effectively when needed.

Additionally, a recent change in legislation now allows for a public hearing to be requested on any proposed project requiring an individual permit, when historically a hearing could only be requested on a project that impacted tidal wetlands. A public hearing can be a lengthy and involved process consuming a significant amount of staff time and resources. Stakeholders who the evaluation team met with also noted that this new process could take a significant amount of time and resources for applicants who would need to hire various experts to present their case. The NOAA Office for Coastal Management encourages the CT CMP to track the amount of time spent on the public hearing process and ensure that resources are adequate to cover this new responsibility. If the process is found to be excessively resource- and time-intensive for staff members or applicants, CT DEEP may wish to consider working with the Connecticut legislature to identify opportunities to streamline the process.

The CT CMP staff and managers were praised by stakeholders who the evaluation team met with and surveyed. The program received numerous compliments for its staff members, who were described as informed and knowledgeable, dedicated, smart, hardworking, highly responsive, having an extraordinary level of availability, and having good relationships with businesses, environmental organizations, municipal communities, federal agencies, and other parts of CT DEEP.

Although there were many positive comments on the permitting staff, stakeholders also noted some issues and potential solutions. Several stakeholders stated that there were gaps in knowledge for some permitting staff members. It was noted that sometimes a staff member might give one answer in the field and another after going back to the office and consulting with others. A few stakeholders also expressed that decisions were not always consistent. Both additional training and additional authority to make decisions without being overridden by a supervisor were discussed as potential solutions. In addition, a process used by the South Carolina Coastal Management Program was discussed, whereby staff members regularly schedule meetings where a staff member leads a discussion on a challenging project and obtains input from peers and managers. The meetings are a training opportunity that allow staff members to see how others are approaching situations, help ensure consistency in decision-making, and

promote self-reliance. The CT CMP has employed a similar approach, and permitting staff frequently discuss policy considerations of proposals with management during the pre-application phase. Other conflicting statements by stakeholders include a concern about not having enough flexibility, praise for having consistency in decision-making, and concern about inconsistency in decision-making. Different stakeholders often have different perspectives and concerns, and the evaluation team found that the CT CMP was successfully implementing its approved program and balancing different concerns and perspectives.

### ***Living Shorelines***

In 2012, Public Act 12-101 passed, which references the concept of “living shorelines” for the first time and provides a detailed explanation of alternatives to structural solutions and mitigation measures. The act also authorized the creation of a pilot program to encourage innovative and low-impact approaches to shoreline protection; a shoreline management study to enhance the resilience of coastal communities; and the development by the University of Connecticut and the Connecticut State University System of the science and engineering capacity to support coastal resilience. The CT CMP has been very supportive of the development of a new institute. The program manager serves on the executive committee and worked with partners to help establish the Connecticut Institute for Resilience and Climate Adaptation (CIRCA).

Living shoreline projects use a variety of structural and organic materials. They can be used to stabilize the shoreline while still protecting the surrounding riparian and intertidal environment, improving water quality via filtration of upland run-off, and creating habitat for aquatic and terrestrial species. After Irene and Sandy, many areas with natural shoreline protection were found to fare better than those with armored shorelines. Although in many instances natural or living shorelines can provide shoreline stabilization as effective as, or better than, a seawall, hard structures are usually the first type of fortification a homeowner thinks of. The use of living shorelines is relatively new and what works under one set of conditions may need to be modified for other conditions. The evaluation team discussed a number of potential resources and partners, including the Hudson River National Estuarine Research Reserve, NOAA Restoration Center, the U.S. Environmental Protection Agency Watershed Academy, and Southeast Regional Partnership for Planning and Sustainability. In addition, CIRCA and a potential future Connecticut national estuarine research reserve will be excellent resources for research and training on climate resilience and living shorelines. The NOAA Office for Coastal Management encourages the CT CMP to continue to pursue opportunities to encourage living shorelines where appropriate, consider revisions to the permitting process as needed, and provide or assist other partners with training property owners and contractors on the value of living shorelines, applicability of specific techniques, and installation methods.

**Accomplishment:** The CT CMP has a culture of continuous improvement and has undertaken multiple successful efforts to streamline its permitting process, which have resulted in dramatic drops in permit processing times and the backlog of permits.

## Evaluation Metrics

Beginning in 2012, state coastal management programs began tracking their success in addressing three evaluation metrics specific to their programs. The evaluation metrics include a five-year target and provide a quantitative reference for each program about how well it is meeting the goals and objectives it has identified as important to the program.

### METRIC 1

**Goal:** To protect productive and sensitive tidal wetlands of the state.

**Objective:** By 2017, authorize no more than 25,000 square feet of tidal wetlands losses from state permitted activities.

**Strategy:** The state places a high priority on protecting tidal wetlands because they are areas of high biological productivity and provide flood mitigation, aesthetic value, and water quality benefits. Protection includes limiting the loss of wetlands through permitted activities.

**Performance Measure:** Square feet of tidal wetlands lost annually as authorized by permitted activities.

**Target:** No more than 5,000 square feet of tidal wetlands lost annually as authorized by permitted activities.

#### First Year Results:

- 53,143 square feet of tidal wetlands lost.

#### Second Year Results:

- 44,697 square feet of tidal wetlands lost.

**Discussion:** The first year results were heavily influenced by one project, the remediation of an 80-acre site in North Haven. The project is the result of an Environmental Protection Agency order to remediate the site, requiring that a significant area of tidal wetlands be removed to allow for the construction of a hydraulic containment barrier. To help compensate for this loss, mitigation was required, which is reflected in the results for performance measure 2.

In the second reporting year, the results were greatly influenced by two projects, expanding the runway safety zone at Sikorsky Airport and elevating a town road in Guilford that bisects a tidal marsh. The projects will result in wetland loss that will be mitigated as captured in metric 2, and tidal flow will be enhanced for 56 acres of tidal wetlands to help offset this loss.

The CT CMP anticipates that in the coming year several other roads through marshes will also be raised for safety reasons. Because of these proposed larger projects, it is likely that the CT CMP may have difficulties meeting its target in future years. The program does require restoration or creation of tidal wetlands to offset these losses.

## **METRIC 2**

**Goal:** To protect productive and sensitive tidal wetlands of the state.

**Objective 2:** By 2017, require or permit the creation of 200,000 square feet of tidal wetlands through permitting and enforcement activities.

**Strategy:** The state places a high priority on protecting tidal wetlands because they are areas of high biological productivity and provide flood mitigation, aesthetic value, and water quality benefits. Protection includes creating wetlands to offset permitted losses and, as required, to compensate for losses resulting from unauthorized activities. In conjunction with objective 1, creation of tidal wetlands should be at a rate of at least eight times greater than the area of permitted tidal wetlands lost.

**Performance Measure:** Square feet of tidal wetlands created annually through permitted and enforcement activities.

**Target:** 40,000 square feet of tidal wetlands created annually through permitted and enforcement activities.

### **First Year Results:**

- 51,679 square feet of tidal wetlands created through permitted and enforcement activities.

### **Second Year Results:**

- 15,676 square feet of tidal wetlands created.

**Discussion:** The CT CMP surpassed its target for tidal wetlands created in year one but did not meet its target in year two. In year two, several projects resulted in large wetland losses that could not be fully mitigated through the creation of tidal wetlands, but were significantly mitigated by restoring large areas of severely degraded tidal wetland. Although the target for year two was not met, the CT CMP through restoration of degraded areas has helped ensure that overall wetland function is maintained. Wetland restoration efforts tend to be opportunistic, thus highly variable in size over time, and often occur in large increments. Thus, while targets may not be achieved on a year-to-year basis, there is greater chance of success meeting targets over a longer time horizon.

### **METRIC 3**

**Goal:** To provide adequately detailed and relevant benthic data and derived analysis for high-priority areas of Long Island Sound.

**Objective:** By 2017, for high priority areas of Long Island Sound, provide the following geospatial products and documentation for use by government planning and regulatory bodies, academia, and the private sector:

- Seafloor topography
- Sediment texture
- Sediment environment (erosional, depositional, sorting)
- Benthic habitat diversity

**Strategy:** Critical resource information on the physical, geological, and ecological nature of the benthic environment is lacking for significant areas of Long Island Sound. As a result, regulatory decisions are prone to be reactionary and lack appropriate scope or context, and planning activities are limited. Making this information available to all, including the public, via an Internet portal, will help foster rational and effective decision-making. High-priority areas where detailed and relevant benthic mapping data are required were developed from stakeholder input and cover approximately 33 percent of Connecticut state waters.

**Performance Measure:** By 2017, percentage of benthic mapping data for Long Island Sound high-priority areas completed and made available publicly.

**Target:** By 2017, 100 percent of benthic mapping data for Long Island Sound high-priority areas completed and made available publicly.

#### **First Year Results:**

- 21 percent of the project completed in the first year.

#### **Second Year Results:**

- 30 percent of the project completed by the end of the second year.

**Discussion:** The program was on schedule for year one but fell behind schedule in year two as the pilot project period was extended by about six months to allow for data compilation and evaluation. The project is still anticipated to be completed on or near the five-year schedule. The CT CMP is making good progress toward meeting its five-year target for benthic mapping.

## Conclusion

For the reasons stated herein, I find that the State of Connecticut is adhering to the programmatic requirements of the Coastal Zone Management Act and its implementing regulations in the operation of its approved Connecticut Coastal Management Program.

These evaluation findings contain six recommendations in the form of recommendations that must be considered before the next regularly scheduled program evaluation, but which are not mandatory at this time. Recommendations that must be repeated in subsequent evaluations may be elevated to necessary actions.

This is a programmatic evaluation of the Connecticut Coastal Management Program that may have implications regarding the state's financial assistance awards. However, it does not make any judgment about or replace any financial audits.



Jeffery Payne, PhD  
Acting Director  
Office for Coastal Management



Date

## Appendix A: Response to Written Comments

### Mr. Timothy Fennell Connecticut

**Comments:** Mr. Fennell submitted several sets of comments related to public access. His concerns are summarized below.

1. Mr. Fennell noted several issues of concern with regard to access to City of Bridgeport-owned boat ramps. He stated that at Brewster Street and Newfield Avenue there are no markings for the designated parking that is included in the 2014 State of Connecticut's Boaters Guide, and non-boat-ramp users park in the allocated spots. Mr. Fennell also noted that at the Brewster Street boat ramp the yacht club next door had installed a razor fence that encroached on public property, that a steel hoist had also been installed in the path of the boat ramp impeding navigation, a public dock had been removed several years ago and never replaced, and the limited parking available in the 1980s no longer existed. Mr. Fennell stated that the ramp at Seaside Park had been inaccessible for some time due to sand blocking access.
2. Mr. Fennell expressed concern over the placement of a no swimming and no trespassing sign below the mean high tide at Seaside Park in Bridgeport Connecticut along the southwest side of the harbor near the Sailors and Soldiers memorial statue.
3. Mr. Fennell also expressed concerns about parking at the boat ramp at Bonds Dock in Stratford, which has a grassy area park (not including the dock) that is used by commercial oyster boat employees so that parking is unavailable for other boaters.
4. Mr. Fennell also expressed concern with regard to shellfish licensing and "discriminatory practices" that he stated were in violation of Connecticut's Coastal Management Act and the Public Trust Doctrine. In particular, municipalities charge varying fees for shellfishing and nonresidents pay higher fees or are prohibited from shellfishing. Mr. Fennell also noted that municipalities seed clams and sometimes oysters and use this to justify fees. Mr. Fennell noted that the Town of Guilford receives several forms of state and federal funding including research funding from NOAA.
5. Mr. Fennell asked about the status of the Al Bennett Memorial Fishing Pier at Seaside Park in Bridgeport that was damaged by Hurricane Irene in 2011 and further damaged by Superstorm Sandy in 2012, specifically if any federal aid had been received and if any information was available on reconstruction plans for the pier.

**NOAA Office for Coastal Management Response:** The NOAA Office for Coastal Management thanks Mr. Fennell for his comments and appreciates his interest in preserving public access along the coast. Mr. Fennell's comments were forwarded to the CT CMP so that it could work with local government authorities and assist with addressing issues of parking, encroachment, and signage. It is the NOAA Office for Coastal Management's understanding that CT CMP staff have coordinated with the City of Bridgeport staff in response to Mr. Fennell's comments regarding impediments to access to boat ramps and signage at Seaside Park and that the City

investigated the boating access concerns to ensure unimpeded access. In addition, City staff also contacted Mr. Fennell and explained that the signage he commented on is intended to limit access to a breakwater across an intertidal area of beach that is dry only at low tide for public safety.

With regard to commercial employees using public parking spots, the CT CMP does not have the jurisdiction to limit who parks in public parking spots. The NOAA Office for Coastal Management does not interpret the Connecticut Coastal Management Act and Public Trust Doctrine as limiting the ability of towns to charge fees or differential fees for shellfishing. The status of funding for the Al Bennett Memorial Fishing Pier at Seaside Park in Bridgeport is beyond the scope of this evaluation, and the evaluation team does not have information on the funding status.

**Mr. Geoffrey B. Steadman,  
Consulting Services for Land and Water Resources Planning and Coastal Area Management  
Westport, Connecticut**

Mr. Steadman described the mission of the Connecticut Harbor Management Association, described the relationship between municipal harbor management and the CT CMP, and provided four recommendations included below.

1. The OLISP [Office of Long Island Sound Programs] should clarify, for coastal permitting purposes, a procedure and standard for “showing cause” pursuant to Sec. 22a-113n(b) of the General Statutes which calls for a recommendation pursuant to a duly adopted municipal harbor management plan to be binding on any state official making a regulatory decision affecting the plan’s jurisdiction unless that official shows cause why a different actions should be taken.
2. When reviewing applications for coastal permits and COPs, OLISP analysts should recognize that the “show cause” requirement of Sec. 22a-113n(b) of the General Statutes applies to all regulatory decisions, including decisions regarding COP applications. The OLISP should adjust its COP approval process to ensure that appropriate consideration is given—within the legally required time frames for action on a COP application—to harbor management commission recommendations.
3. The OLISP should clarify any changes in coastal program implementation that may have been instituted to integrate the state’s current economic development priorities into the DEEP’s core mission. Through implementation of the Coastal Management Program, the OLISP should ensure public confidence that: a) any new approach to environmental protection intended to encourage rapid and responsible economic growth will not result in changes that would diminish other coastal management objectives and will not be instituted without prior public input and review; b) all applicants for OLISP approvals are treated equally in the coastal permitting process; and c) applicants whose proposed activities are supported with state economic development funds do not receive undue preferential treatment in that process.

4. The OLISP should continue to monitor and improve the coastal permitting program in response to changing conditions and circumstances, and with appropriate input from the Connecticut Harbor Management Association and other stakeholders.

**NOAA Office for Coastal Management Response:** The NOAA Office for Coastal Management thanks Mr. Steadman for his comments and recommendations. The first two recommendations are addressed in the findings in the Permit Streamlining section, and the NOAA Office for Coastal Management encourages the CT CMP to continue to work with stakeholders to understand and address concerns with the permitting program.

The state of Connecticut has faced significant economic challenges during the evaluation period and has prioritized economic development. The NOAA Office for Coastal Management found that the CT CMP continued to consistently implement the federally approved coastal management program during this time period.

The NOAA Office for Coastal Management agrees with Mr. Steadman that coastal management programs should continue to monitor and improve their coastal permitting programs and, where appropriate, obtain input from stakeholders. The office found that during the evaluation period, the CT CMP monitored and improved its coastal permitting programs and engaged stakeholders in identifying improvements, and this is discussed further in the Permit Streamlining section.