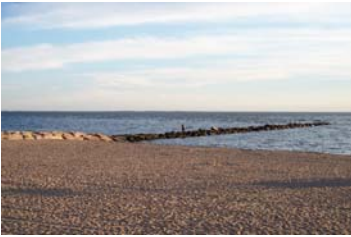


Final Evaluation Findings
Connecticut Coastal Management Program
April 2003 through August 2006



Office of Ocean and Coastal Resource Management
National Ocean Service
National Oceanic and Atmospheric Administration
U.S. Department of Commerce

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I. EXECUTIVE SUMMARY

Section 312 of the Coastal Zone Management Act (CZMA) requires NOAA's Office of Ocean and Coastal Resource Management (OCRM) to conduct periodic evaluations of the performance of states and territories with federally-approved coastal management programs. This review examined the operation and management of the Connecticut Coastal Management Program (CTCMP) by the Connecticut Department of Environmental Protection (DEP), the program's designated lead agency, for the period of April 2003 through August 2006.

This document describes the evaluation findings of the Director of NOAA's OCRM with respect to CTCMP during the review period. These evaluation findings include discussions of major accomplishments as well as recommendations for program improvement. The evaluation concludes that DEP is successfully implementing and enforcing its federally-approved coastal management program, adhering to the terms of its federal financial assistance awards, and addressing the coastal management needs identified in §303(2)(A) through (K) of the CZMA.

The evaluation team documented a number of CTCMP's accomplishments during the review period. CTCMP made progress in staffing and in completing specific program changes. The program has been a clear leader and critical partner in DEP's efforts to develop innovative data management and information technology tools that have resulted in greater efficiencies for program management. CTCMP improved public access to Connecticut's shoreline through the coastal site plan review process during the review period. The program developed a proactive and strategic approach to coastal land acquisition. CTCMP has implemented a very active tidal wetland restoration program that emphasizes partnerships and science-based decision making. Connecticut received full federal approval of its Coastal Nonpoint Program. CTCMP has strong relationships with local municipalities and regularly engages in many diverse partnerships. The program also developed an approved interstate consistency list and worked extensively with its partners to address disposal of dredged material in Long Island Sound.

The evaluation team also identified areas where CTCMP could be strengthened. OCRM's recommendations are in the form of three Program Suggestions. No Necessary Actions were identified. Recommendations address enforcement and ocean management.

II. PROGRAM REVIEW PROCEDURES

A. OVERVIEW

NOAA's Office of Ocean and Coastal Resource Management (OCRM) began its review of the Connecticut Coastal Management Program (CTCMP) in June 2006. The evaluation process involves four distinct components:

- An initial document review and identification of specific issues of particular concern;
- A site visit to Connecticut including interviews and a public meeting;
- Development of draft evaluation findings; and
- Preparation of the final evaluation findings, partly based on comments from the state regarding the content and timetables of recommendations specified in the draft document.

The recommendations made by this evaluation appear in boxes and bold type and follow the findings section where facts relevant to the recommendation are discussed. The recommendations may be of two types:

Necessary Actions address programmatic requirements of the Coastal Zone Management Act's (CZMA) implementing regulations and of the federally-approved CTCMP. Each Necessary Action must be implemented by the specified date.

Program Suggestions describe actions that OCRM believes would improve the program, but they are not currently mandatory. If no dates are indicated, the Connecticut Department of Environmental Protection (DEP) is expected to address the recommendations by the time of the next regularly-scheduled evaluation.

A complete summary of accomplishments and recommendations is outlined in Appendix A.

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). Program Suggestions that are reiterated in consecutive evaluations to address continuing problems may be elevated to Necessary Actions. OCRM will consider the findings in this evaluation document when making future financial award decisions relative to CTCMP.

B. DOCUMENT REVIEW AND ISSUE DEVELOPMENT

The evaluation team reviewed a wide variety of documents prior to the site visit, including: (1) the federally-approved Environmental Impact Statement and program

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documents; (2) financial assistance awards and work products; (3) semi-annual performance reports; (4) official correspondence; and (5) relevant publications on natural resource management issues in Connecticut.

Based on this review and on discussions with OCRM staff, the evaluation team identified the following priority issues:

- CTCMP's major accomplishments during the review period;
- Effectiveness of DEP in permitting, monitoring and enforcing the core authorities that form the legal basis of CTCMP;
- Implementation of state and federal consistency authority;
- Extent to which CTCMP is monitoring, reporting and submitting program changes to OCRM;
- Status of CTCMP's grant tasks and reporting;
- CTCMP's coordination with other federal, state and local agencies and programs;
- Effectiveness of local technical assistance programs in assisting coastal communities;
- Status of public access opportunities in the coastal zone;
- CTCMP's approach to emerging local and regional coastal management issues;
- CTCMP's advancement of the CZMA goals set out in §303(2); and
- The manner in which the state has addressed the recommendations contained in the previous §312 evaluation findings released in 2003. An assessment of how CTCMP has responded to each of the recommendations in the 2003 evaluation findings is located in Appendix B.

C. SITE VISIT TO CONNECTICUT

Notification of the scheduled evaluation was sent to CTCMP, DEP, relevant state and federal environmental agencies, members of Connecticut's congressional delegation and regional newspapers. CTCMP published notification of the evaluation and of the scheduled public meeting. In addition, a notice of OCRM's "intent to evaluate" was published in the *Federal Register* on June 29, 2006.

The site visit to Connecticut was conducted on September 11-15, 2006. Ms. Rosemarie McKeeby, Evaluation Team Leader, OCRM National Policy and Evaluation Division; Ms. Allison Castellan, CTCMP Specialist, OCRM Coastal Programs Division; and Mr. Steven McAdam, Deputy Director, San Francisco Bay Conservation and Development Commission, formed the evaluation team.

During the course of the site visit, the evaluation team interviewed CTCMP staff, representatives of federal, state and local government agencies, and members of academic institutions and interest groups involved with or affected by CTCMP. Appendix C lists individuals contacted during this review.

As required by the CZMA, OCRM held an advertised public meeting on September 12, 2006, at 7:00 p.m., at the DEP's Marine Headquarters, Conference Room (Building 3),

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333 Ferry Road, Old Lyme, Connecticut. The meeting gave members of the general public the opportunity to express their opinions about the overall operation and management of CTCMP. Appendix D lists individuals who registered at the meeting. OCRM's response to written comments submitted during the review is summarized in Appendix E.

The evaluation team gratefully acknowledges the support of CTCMP staff with site visit planning and logistics.

III. COASTAL MANAGEMENT PROGRAM DESCRIPTION

Connecticut's 98-mile long coastline¹ lies along the northern edge of Long Island Sound, often characterized as an "urban sea." Connecticut's coastal area historically has been the center of intense industrial, commercial and residential activity. Residential use of much of Connecticut's shoreline began with seasonal dwellings. However, changes in land use patterns following World War II and the corresponding residential and corporate exodus from the New York metropolitan area changed the residential mix from seasonal to permanent. The majority of Connecticut's coastal population is located in the area bordering New York City. Vacant shorefront land and open space in Connecticut's heavily-developed coastal area is at a premium.

NOAA's Office of Ocean and Coastal Resource Management approved the Connecticut Coastal Management Program (CTCMP) in 1980. The program is based primarily on three laws and their implementing regulations:

- *Connecticut Coastal Management Act (CCMA)* – establishes a comprehensive coastal resource management program.
- *Structures and Dredging Act* – provides for general state regulation of activities in tidal, coastal and navigable waters.
- *Tidal Wetlands Act* – regulates development in tidal wetlands.

The Inland Wetland and Watercourses Law, stream encroachment laws, and air and water pollution control laws, among others, provide additional authorities to manage land and water uses within the state's coastal zone.

The Connecticut coastal zone is established by statute and consists of a two-tiered management boundary. The first tier extends seaward to the limit of the state's jurisdiction in Long Island Sound. Inland, it extends to 1,000 feet from mean high water, 1,000 feet from the inland boundary of state regulated tidal wetlands, or the continuous interior contour elevation of the 100-year frequency coastal flood zone, whichever is farthest inland. The second tier includes the area inland of the first tier landward to the boundary of the first coastal municipality.

The Connecticut Department of Environmental Protection (DEP) is the state's principal permitting agency for public and private development activities in the coastal zone, and it is the state's lead coastal management agency. DEP is responsible for collaborating with other state agencies to ensure the CCMA's consistent administration. The department's Office of Long Island Sound Programs coordinates all of DEP's Long Island Sound activities, including implementation of CTCMP.

¹ Connecticut's total shoreline frontage, including tidal rivers and embayments, is 618 miles.

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Local governments execute portions of CTCMP by conducting coastal site plan reviews, which the CCMA requires for development activities located within the first tier of the coastal zone. The coastal site plan review is performed in conjunction with zoning, subdivision or other local government permit reviews. Local governments must find that all proposed developments are consistent with the state's coastal policies. DEP also encourages coastal municipalities to develop voluntary municipal coastal programs and provides financial support to municipalities to review and revise town plans as well as zoning and subdivision regulations.

IV. REVIEW FINDINGS, ACCOMPLISHMENTS AND RECOMMENDATIONS

A. OPERATIONS AND MANAGEMENT

1. Staff

The Office of Long Island Sound Programs' (OLISP) staff are responsible for the Connecticut Coastal Management Program's (CTCMP) daily operations and management. The evaluation team was very impressed by OLISP's staff and their achievements during the review period. OLISP staff are dedicated, knowledgeable, accessible and responsive. They maintain a high level of performance while managing heavy workloads. The staff's commitment to and enthusiasm for their work have gained respect for CTCMP among its many partners. A clear understanding of current threats to the state's coastal resources as well as a strong focus on priority coastal issues is evident in OLISP's results-oriented approach to coastal management.

At the time of the 2003 evaluation site visit, OLISP had recently lost two members of its permitting staff and also had to rescind job offers for two additional permitting positions due to statewide budget and staffing cuts. The Office of Ocean and Coastal Resource Management (OCRM) expressed concern with the decline in permitting staff, particularly since all four positions were federally funded through the Coastal Zone Management Program. OCRM recommended that OLISP and the Department of Environmental Protection (DEP) refill the vacant permit analyst positions as soon as possible. During the current review period, OLISP increased its permitting staff. At the time of the evaluation site visit, the office had added a second supervisor to its Permitting and Enforcement Section and was in the process of hiring two new permitting and enforcement staff. Upon completion of the hiring process, the Permitting and Enforcement Section will be composed of two supervisors and ten staff members, an optimum staffing level according to OLISP.² The Permitting and Enforcement Section anticipates that its new staffing level will result in a further reduction of permit processing times, regardless of the complexity of proposed projects.

During the review period, one of OLISP's planning staff was chosen to serve as the coordinator for the DEP Commissioner's new initiative on landscape stewardship. The staff person's position moved with her to the Commissioner's Office, but OLISP secured a replacement position. Thus, the office's Planning Section maintained its staffing level. OCRM commends OLISP for: (1) achieving an optimal staffing level in its Permitting and Enforcement Section; and (2) maintaining an optimal staffing level in its Planning Section. As currently staffed, OLISP is well-equipped to implement CTCMP.

² As of February 2007, OLISP's Permitting and Enforcement Section was fully staffed with two supervisors and ten permit analysts.

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Accomplishment: OLISP staff maintained a high level of performance as well as a reputation for technical expertise, accessibility and responsiveness. The office added a second supervisor and two new staff to its Permitting and Enforcement Section. OLISP also secured a replacement position for a staff member who left the Planning Section. The office has achieved a good balance between permitting and enforcement and planning staff.

2. Department and Program Structure

At the time of the 2003 evaluation site visit, DEP's structure included a Deputy Commissioner of Environmental Quality and a Deputy Commissioner of Environmental Conservation. OLISP reported directly to the Deputy Commissioner of Environmental Quality and was not part of a larger bureau. During the previous review period, Connecticut's legislature convened a special session to consider methods of reducing the state's \$0.5 billion budget shortfall. Resulting layoffs affected nearly 3,000 state employees, and the legislature passed a stopgap budget bill that included an early retirement package. More than 200 DEP employees were eligible for early retirement, and many high-level Bureau Chiefs and Directors opted to take the package. Subsequently, DEP's Commissioner planned to analyze the structure of the Department and to propose a reorganization. At that time, the evaluation team noted that OLISP's structure clearly facilitated its high level of effectiveness and registered some concern about a potential reorganization.

The Commissioner did reorganize DEP during the current review period. The new structure now includes a Deputy Commissioner for Air, Waste and Water Programs and a Deputy Commissioner for Outdoor Recreation and Natural Resources. The Deputy Commissioner for Air, Water and Waste Programs oversees three bureaus: (1) Material Management and Compliance Assurance; (2) Air Management; and (3) Water Protection and Land Reuse. Under the reorganization, OLISP was moved in its entirety into the Bureau of Water Protection and Land Reuse.³ The new bureau also contains the former Bureau of Water, which has jurisdiction over inland waters. OLISP and the former Bureau of Water have similar missions and have coordinated effectively with each other in the past; thus, OLISP appears to fit well within the new Bureau of Water Protection and Land Reuse. The evaluation team did not see any evidence of negative effects resulting from OLISP's move. The transition was relatively smooth, and OLISP has maintained its structure, identity, visibility, and ability to coordinate among other programs throughout the department.

3. Program Changes

When a coastal management program makes changes to its enforceable policies, it is required to submit the changes to OCRM for review and approval. This requirement ensures that changes are consistent with the federally-approved coastal management program. It also facilitates accurate application of federal consistency authority. Section

³ The current Director of the Bureau of Water Protection and Land Reuse is the former Assistant Director of OLISP.

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312 evaluations examine: (1) whether the coastal management program made changes to its program document during the review period; (2) whether the changes affect program approvability; and (3) whether the program submitted the changes to OCRM for processing as program amendments or routine program changes (RPCs). OCRM's regulations define amendments as substantial changes in one or more of the following coastal management program areas:

- Uses subject to management;
- Special management areas;
- Boundaries;
- Authorities and organization; and
- Coordination, public involvement and the national interest.

An RPC is a further detailing of a coastal management program that does not result in substantial changes to the program.

CTCMP's 2003 evaluation found that most of the program's core authorities had not been officially updated. Therefore, the 2003 final evaluation findings included a necessary action requiring OLISP to work with OCRM's CTCMP Specialist to develop a schedule for submitting program changes on a regular basis. OCRM recommended that OLISP first focus on the Connecticut Coastal Management Act and subsequently proceed to other core statutes.

During the current review period, OLISP made significant progress toward updating its coastal management program as called for in the 2003 final evaluation findings. At the time of the 2006 evaluation site visit, OLISP had largely completed processing and submitting all overdue program changes. OCRM recognizes OLISP for its efforts to resolve overdue program changes and strongly encourages the office to continue updating, as necessary, CTCMP in a timely fashion.

Accomplishment: OLISP made significant progress in updating CTCMP by processing and submitting overdue program changes to OCRM.

4. Grants Management

OCRM awards grants to federally-approved coastal management programs for operations and other activities. Each program submits an annual grant application, or work proposal, to OCRM for review and approval. The proposals provide project descriptions and deliverables for each task that the program intends to complete. During the review period, OLISP satisfactorily managed its federal funding and achieved desired results from funded tasks.

OCRM also requires coastal management programs to submit semi-annual performance reports for each grant. Performance reports are important because they present consolidated information about accomplishments related to a program's financial

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assistance awards. OLISP submitted excellent, comprehensive performance reports containing detailed information on schedule during the review period.

5. Information Technology

Accurate information about the distribution of coastal resources along the coast or on a particular development site is a critical prerequisite for sound management decisions. Recognizing this, OLISP worked to improve coastal decision making through the innovative use of information technology. Historically, coastal resources were depicted on static mylar and paper maps. OLISP has been systematically recreating and updating map data electronically for use with Geographic Information System (GIS) software. Several examples of OLISP's information technology developments are highlighted below.

Coastal Resources GIS Enhancements

The Coastal Resources GIS Project provides OLISP staff with access to valuable coastal resources data. Since more powerful desktop computers have become common, the ability to access varied types of imagery, such as oblique photos, orthophotos and scanned maps, has improved dramatically. As a result, OLISP is now able to perform site analyses in greater detail and over longer time periods. Notable enhancements to the Coastal Resources GIS Project during the review period include:

- Addition of new and updated GIS data layers;
- Access to scanned permits;
- Links to OLISP's coastal public access data; and
- Addition of new imagery.

Site Information Management System

The Site Information Management System is a department-wide structure that has a standardized site identification system, document retrieval and GIS components. At the time of the previous evaluation, OLISP had scanned all coastal permits issued between 1939 and 2003 and made them available electronically. During the current review period, OLISP refined the effort to provide permit retrieval through the Coastal Resources GIS. OLISP also worked cooperatively with DEP's information technology staff in order to ensure that any tools developed would be standardized and provided throughout the department.

Long Island Sound Resource Center Web Data Portal

The Long Island Sound Resource Center, a collaborative effort between the University of Connecticut and OLISP, developed a website⁴ that serves as a central access point to a comprehensive collection of information about Long Island Sound. During the review period, five website components were developed:

⁴ <http://www.lisrc.uconn.edu/lisrc/index.asp>

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- (1) Geology Module: A detailed summary of the geology of Long Island Sound and web pages summarizing 40 major geological cruises;
- (2) Literature Search: An interactive search feature that presents a literature review on Long Island Sound issues;
- (3) Long Island Sound Research Fund: A comprehensive list that supplies information about grant awards to researchers;
- (4) Classic Research: Directs the user to historic research about Long Island Sound; and
- (5) Interactive GIS Mapping: Supports two web-based GIS mapping applications that provide access to information including bathymetry, data sampling locations, research cruise tracks and side-scan sonar imagery.

Accomplishment: OLISP has been a clear leader and critical partner in DEP's efforts to develop innovative data management and information technology tools that increase program efficiency.

B. PUBLIC ACCESS

CTCMP requires that water-dependent uses receive highest priority when evaluating proposed uses at waterfront sites. In general, the program calls for the provision of coastal public access at waterfront sites, either: (1) as a stand-alone water-dependent use; or (2) as an accessory use on a site developed for a non water-dependent use. Public access facilities furnished as part of a non water-dependent use must substantially mitigate the proposed development's potential adverse impacts on future water-dependent development opportunities.

By including coastal public access as a water-dependent use, OLISP has worked with coastal municipalities and state agencies to gain a significant number of coastal public access sites through the development review process. For example, approximately 50 of the 300 sites included in the Connecticut Coastal Access Guide were acquired through the application of CTCMP's water-dependent use and public access policies. Examples of OLISP's public access work during the review period are described below.

Southfield Harbor and Avalon Bay Condominium Project

The Southfield Harbor and Avalon Bay Condominium Project redeveloped a fuel storage facility on a 12-acre waterfront site that encompassed a large area of tidal wetlands and substantial areas of intertidal flats. The redevelopment includes an apartment complex, a 60-slip marina and public access. OLISP permitting and planning staff worked with the applicant during the coastal site plan review process to ensure that the public access and marina facilities were developed in a manner that: (1) protected the site's fragile coastal resources; and (2) mitigated any potential reduction of future water-dependent use opportunities. OLISP permitting staff assisted the applicant with slip arrangement in order to preserve tidal wetlands and intertidal flats while maximizing the number of slips. OLISP also worked with the applicant to design a fishing pier accessible to those with disabilities.

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During the preliminary coastal site plan review process, OLISP staff recommended to the city that the project incorporate significant and separate designated parking along with appropriate signage. The developer, however, was reluctant to provide designated parking for the public. In its approval of the development, the city required the parking and signage recommended by OLISP. Features of the site's successful public access component include: (1) designated parking spaces separate from those reserved for apartments; (2) a wide boardwalk that is visible from the parking area; (3) fencing and landscape features that help separate the public and private uses of the property; (4) amenities such as a gazebo and a decorative lighthouse; and (5) a fishing pier.

Stonington Commons

Stonington Commons, a waterfront residential community, incorporated public access facilities during the re-use of a former contaminated industrial area. The site, located in historic Stonington Borough on Stonington Harbor, includes 34 condominiums, six single-family detached homes, the Stonington Yacht Club, a separate 30-slip public-private boating facility, and a dinghy dock for transient boaters mooring in the harbor. After nearly a year of negotiations among the Borough of Stonington, the developer and OLISP, the site's final design included a harbor-side public access footpath lined with native plantings and a gazebo. The project also included public access to a nearby breakwater popular with anglers. The waterfront, which had been dominated by industrial infrastructure and flood control walls for more than 150 years, is now available to the public.

Accomplishment: OLISP improved public access to Connecticut's shoreline through the coastal site plan review process. OLISP worked with coastal municipalities to provide public access facilities for activities such as boating, fishing and observing wildlife.

C. COASTAL HABITAT

1. Land Acquisition

Coastal Land Assessment Methodology

During the review period, OLISP developed the Coastal Land Assessment Methodology (CLAM), a computer-assisted coastal land conservation planning tool. CLAM's primary objective is to identify large, undeveloped parcels⁵ of significant conservation value within 1,000 feet of coastal waters. The first phase of the CLAM Project employed GIS and nine evaluation criteria to evaluate more than 28,000 tax parcels. OLISP also analyzed aerial photography and interviewed DEP ecologists to identify parcels with the highest coastal resource conservation value. Using the parcels' potential conservation value, OLISP preliminarily classified each parcel into one of three conservation priority tiers. Following the parcels' preliminary classification, OLISP began consulting with municipal conservation commissions, open space committees and land trusts with service areas containing a significant number of highly-ranked, CLAM-identified parcels. These

⁵ Parcels greater than 25 acres with less than 25 percent developed land cover.

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meetings allow OLISP to share the study's results and to obtain additional information about the parcels' conservation value, ownership and any unique circumstances. OLISP plans to engage its partners in using the CLAM data to develop conservation acquisition strategies for the most critical remaining unprotected areas along Connecticut's coast.

Coastal and Estuarine Land Conservation Program

The Department of Commerce, Justice and State Appropriations Act of 2002⁶ directed the Secretary of Commerce to establish a Coastal and Estuarine Land Conservation Program (CELCP) "for the purpose of protecting important coastal and estuarine areas that have significant conservation, recreation, ecological, historical or aesthetic values, or that are threatened by conversion from their natural or recreational state to other uses." CELCP gives priority to lands that can be effectively managed and protected and that have significant ecological value. Each coastal state that submits grant applications under CELCP must develop a NOAA-approved CELCP Plan.

During the review period, OLISP prepared and submitted Connecticut's draft CELCP Plan⁷ to OCRM. The draft plan: (1) identifies Connecticut's priority coastal land conservation needs; and (2) establishes a cooperative process with stakeholder involvement to distinguish relevant acquisition opportunities. Connecticut's draft CELCP Plan prioritizes the conservation of exemplary Long Island Sound ecosystem types. Examples of such environments include rare species habitat, shorebird and waterfowl foraging and nesting habitat, and critical buffer areas adjacent to tidal wetlands, intertidal flats and estuarine waters. Lands that can provide car-top and trailered boat access, shore-based fishing, trails, and park facilities are also acquisition priorities. Connecticut's nominations to the national CELCP competitive project review process will be based upon acquisition project opportunities identified through OLISP's CLAM Project.

<p>Accomplishment: OLISP has a proactive and strategic approach to coastal land acquisition. The office developed CLAM, a computer-assisted coastal land conservation planning tool. OLISP also prepared and submitted Connecticut's draft CELCP Plan to OCRM.</p>

2. Habitat Restoration

OLISP implements a strong tidal wetland restoration program. The program emphasizes coordination with partners such as Connecticut College and the U.S. Fish and Wildlife Service (USFWS) to bring together the skills and expertise necessary to conduct scientifically-based restoration. For example, OLISP enlists scientists, managers and permitting staff to review restoration designs. Several examples of OLISP's restoration efforts are described below.

⁶ Public Law 107-77.

⁷ At the time of the site visit, OCRM had informally reviewed Connecticut's CELCP Plan and had recommended minor modifications to the plan prior to OLISP resubmitting it for formal approval.

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Restoration Research

During the review period, OLISP began work on “Restoration Ecology of the Lower Connecticut River Tidelands: Impacts of Restoration Methodologies on Vegetation, Macroinvertebrates and Fish,” a major restoration research effort funded by the Long Island Sound License Plate Program.⁸ The purpose of the research is to evaluate the results of various hydrologic manipulations, such as ditch filling and creek creation, that were used to restore lower Connecticut River tidelands. Additionally, OLISP secured funding from the Long Island Sound Study to further investigate new restoration strategies for brackish tidal marshes.

OLISP has collaborated with its partners on the installation of sediment elevation tables (SETs), another of the program’s key research and monitoring projects. SETs allow for the long-term monitoring of marsh elevation response to sea-level rise. With funding from the Long Island Sound Study, researchers at Yale installed SETs at tidal marshes in Branford, Guilford and Westport in order to understand the role of nitrogen enrichment in wetland loss. OLISP and Yale are partnering to install SETs at three locations in a brackish tidal marsh complex that is experiencing extensive submergence along the Quinnipiac River. OLISP also plans to use SETs to establish a sound-wide monitoring network that will become part of the Long Island Sound Integrated Coastal and Ocean Observing System. The majority of the selected sites will be adopted by local universities that will conduct long-term monitoring and will use the SETs as an educational tool.

Lynde Point Tidal Wetland Restoration

The Lynde Point Marsh Restoration Project is a good example of OLISP’s ongoing efforts to restore coastal habitat. In the 1940s, the Lynde Point Marsh was used as a disposal site for hundreds of thousands of cubic yards of sediment dredged from the Connecticut River. Eventually, the site was recolonized with plant species that provided poor quality habitat for local wildlife and migratory birds. By the 1980s, the degraded and filled wetland was dominated by the common reed⁹ in the wetter areas, while several other species of invasive, non-native plants established themselves at slightly higher elevations.

Before beginning tidal flow restoration, OLISP and its partners used a combination of applying herbicide and cutting to clear the invasive plants. Common reed-dominated areas were mowed, and woody weeds were mulched. Subsequently, tidal flow was reestablished by removing fill. The creation of tidal creeks improved flow into and out of the marsh, and three tidal ponds were also constructed.

The following partners contributed funding to the Lynde Point Tidal Marsh Restoration Project:

- DEP provided planning and permit application assistance valued at \$15,000;

⁸ The Long Island Sound License Plate Program is discussed in Section IV-F-2.

⁹ *Phragmites australis*.

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- Lynde Point Land Trust contributed \$24,000 for project design and an additional \$20,770 for project construction;
- USFWS National Coastal Wetlands Conservation Grant Program awarded \$80,000 to DEP for construction;
- A partnership between Ducks Unlimited and NOAA's Restoration Center provided \$30,000 for construction;
- The Borough of Fenwick contributed \$21,300 in cash and services valued at \$1,000 towards construction;
- Connecticut Corporate Wetlands Restoration Partnership provided \$17,930 for construction;
- USFWS Partners for Fish and Wildlife Program contributed \$6,000 towards construction; and
- U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) provided monitoring services valued at \$1,000.

Long Island Sound Stewardship Initiative

OLISP participates in the Long Island Sound Stewardship Initiative, a partnership created by the Long Island Sound Study. The partnership's purposes are: (1) to identify places with significant ecological or recreational value throughout Long Island Sound; and (2) to develop a strategy to protect and enhance these areas. The initiative's goals are:

- Preserve representative examples of native plant and animal communities;
- Protect rare, threatened and endangered plants and animals in their natural habitats;
- Preserve Long Island Sound's unique habitat types;
- Preserve sites that are important for long-term scientific research and education;
- Improve recreation and public access opportunities around Long Island Sound;
- Enhance public awareness, visibility and support for Long Island Sound; and
- Strengthen citizens' personal connections to and identification with Long Island Sound.

Improvements to the Barn Island Wildlife Management Area (WMA) serve as an example of work resulting from the Stewardship Initiative. Through the Long Island Sound Futures Fund, a Stewardship Initiative funding tool, an upland area at the WMA that had been degraded by dredged material disposal was restored to support public use and education. The project included: (1) planting approximately half an acre of unvegetated soils with native upland plants; (2) constructing a garden pathway and group seating area; and (3) building a marsh overlook area with interpretive signs.

<p>Accomplishment: OLISP implemented a strong tidal wetland restoration program emphasizing partnerships and science-based decision making.</p>
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D. WATER QUALITY

In 1990, Congress established the Coastal Nonpoint Pollution Control Program (CNPCP), which works within the framework of existing Coastal Zone Management Programs developed under the Coastal Zone Management Act and Nonpoint Source Pollution Management Programs developed under the Clean Water Act. Two of the CNPCP's key purposes are to strengthen the links between federal and state coastal zone management and water quality programs and to enhance state and local efforts to manage land use activities that degrade coastal waters. NOAA and the U.S. Environmental Protection Agency (USEPA) must approve each state's coastal nonpoint program (CNP).

DEP leads implementation of Connecticut's CNP. The department houses the state's water pollution control authority as well as the coastal management program, and both of these programs have a history of close coordination. Connecticut's water pollution control authority and OLISP: (1) participate extensively in the Long Island Sound Study and regional research; (2) collaborate on execution of the federal consistency provision of the Coastal Zone Management Act as well as §319 of the Clean Water Act; and (3) administer the Clean Vessel Act Program. One of DEP's primary functions is coordinating the actions of other state and municipal agencies involved in the CNP. For example, DEP coordinates with the Connecticut Department of Public Health as well as with local and regional sanitarians and water pollution control authorities to oversee residential septic system installations, inspections and repairs. The department also supervises the municipal execution of inland wetlands and coastal management authorities to ensure that land-use management measures are realized. DEP has primary responsibility for CNP enforcement, monitoring, education and outreach efforts. Additionally, the Commissioner initiated a Landscape Stewardship Initiative to coordinate and focus departmental programs that influence development.

Connecticut's CNP received conditional approval in June 1998. During the review period, OLISP and its partners collaborated extensively to satisfy program conditions, and Connecticut's CNP received full federal approval in November 2003. In addition to helping achieve full CNP approval, OLISP played a significant role in program implementation during the review period. Examples of OLISP's CNP efforts are described below.

Connecticut Stormwater Quality Manual

In 2004, OLISP published the Connecticut Stormwater Quality Manual, which provides guidance on measures required to protect state waters from adverse impacts of post-construction stormwater runoff. The manual focuses on site planning, source control and stormwater treatment practices. It is intended for use as a planning tool and design guidance document by both the regulatory and regulated communities. Additionally, NRCS developed "Soil Based Recommendations for Stormwater Management Practices" as a companion to the Connecticut Stormwater Quality Manual. The document includes soil survey interpretations that evaluate the suitability of Connecticut soils for four frequently employed post-construction stormwater runoff management systems described in the manual.

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Westbrook Onsite Wastewater Management Plan

During the review period, OLISP worked with the Town of Westbrook's Sanitarian and Water Pollution Control Authority to develop a comprehensive Onsite Wastewater Management Plan.¹⁰ Members of the project's advisory committee included representatives from OLISP, DEP, the Connecticut Department of Public Health, the chief sanitarians from the towns of Essex and Westbrook, a member of the Westbrook Water Pollution Control Commission, a local realtor, and a septic system installation company owner and operator. In addition to creating a planning document, the partners also developed supporting documentation such as implementation ordinances, inspection reporting forms and outreach materials. OLISP plans to use these documents as guidance for other local and regional sanitarians and health directors. The guidance will describe establishing an inspection and pump-out program, addressing system failures, repairs and replacements, and providing outreach to residents and property owners regarding septic system maintenance.

Niantic River Watershed Plan

Upon obtaining full approval of Connecticut's CNP, OLISP received a grant from OCRM specifically to develop a watershed protection plan for a small coastal watershed. OLISP, in cooperation with DEP, selected the Niantic River Watershed in southeastern Connecticut because:

- The basin is a manageable size;
- The watershed contains a mix of land uses;
- The watershed is not fully developed;
- The municipalities located within the basin appear to be interested in proactive land-use planning;
- A cooperative watershed group exists within the basin;
- The Niantic River contains sensitive coastal resources such as submerged aquatic vegetation that are particularly susceptible to nonpoint source pollution;
- At least one waterbody within the basin is experiencing impairment due to nonpoint source pollution; and
- There are several complementary studies or investigations being conducted within the watershed.

Released in September 2006, the Niantic River Watershed Plan identifies, investigates and addresses relevant and emerging issues in the watershed. It also includes USEPA's key elements for developing watershed management plans. The watershed protection plan development process was chronicled to serve as a potential model for other small coastal watersheds.

Outreach

OLISP collaborates with the Connecticut Nonpoint Education for Municipal Officials Program to develop and conduct a variety of CNP workshops for municipal land-use

¹⁰ The plan was funded in part by OLISP's Municipal Grants Initiative.

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officials. During the review period, OLISP developed a comprehensive website¹¹ that provides an overview of the CNP as well as links to networked agencies and related information. Additionally, OLISP is creating a series of pamphlets to provide an overview of the CNP.

No Discharge Areas

During the review period, DEP applied to USEPA for approval of state designation of certain portions of Connecticut's coastal waters as a no discharge area (NDA). In 2003, USEPA approved DEP's designation of a NDA extending from the Rhode Island border in the Pawcatuck River to Wamphassuc Point on the west side of Stonington Harbor and extending to the state border with New York in Fishers Island Sound. Subsequently, DEP applied for approval of a NDA extending from the previously approved area west to Eastern Point in Groton and extending to the state border with New York in Fishers Island Sound. USEPA approved this designation in 2004. DEP then established a two-phase project to request USEPA approval of state designation of Connecticut's remaining coastal waters as NDAs. In 2006, USEPA approved an application for designation of a NDA from Eastern Point in Groton to Hoadley Point in Guilford and extending to the state border with New York in Long Island Sound. An application for designation of a NDA for the remaining Connecticut coastal waters from Hoadley Point in Guilford to the New York state border in the Byram River at Greenwich and extending to the state border with New York in Long Island Sound was submitted in May 2006. At the time of the site visit, OLISP staff anticipated USEPA approval of the final NDA application by the beginning of the 2007 boating season,¹² which would complete the designation of all Connecticut's coastal waters as NDAs.

Accomplishment: OLISP collaborated with its partners to receive full federal approval of the Connecticut Coastal Nonpoint Program. OLISP also significantly contributed to execution of the program through participation in efforts such as: (1) development of a CNP website, stormwater quality manual, soil-based recommendations for stormwater management practices and the Niantic River Watershed Plan; and (2) applications for NDA designations.

E. COASTAL HAZARDS

Long Island Sound's two principal hazards are inundation and erosion. In its 2006 Program Enhancement Assessment and Strategy, OLISP identified coastal hazards as a medium-level priority for CTCMP. During the review period, the office funded a shoreline change project to create digitized shoreline data from 1880 T-sheets. The digitized data will be used to calculate historic shoreline changes.

To improve its hazards program, CTCMP proposed development of a coastal hazards plan that will address anticipated inundation of existing buildings and infrastructure and will guide proper siting of future development. The plan will include adaptation

¹¹ <http://dep.state.ct.us/olisp/coastalnonpoint/index.htm>

¹² Late May 2007.

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strategies for structures and facilities that will be inundated over time; it will also assess whether any statutory changes will be required. The coastal hazards planning process will be conducted in concert with other state agencies such as the Office of Emergency Management, Department of Transportation and the legislature.

F. COASTAL DEPENDENT USES AND COMMUNITY DEVELOPMENT

1. Municipal Liaisons

OLISP's Coastal Planning Section conducts coastal planning and policy analysis. The section is responsible for municipal, state and federal coastal management consistency for all activities landward of the high-tide line, and it also closely coordinates with coastal permit staff during review of activities that are wholly or partly below the high-tide line. The Coastal Planning Section also comments on coastal site plan review applications, coordinates special projects, conducts public outreach, and provides legislative, regulatory and administrative assistance to staff.

The Coastal Planning Section includes municipal liaisons, who work with the state's 36 coastal towns to assess their revisions of essential development guidance mechanisms such as the Town Plans of Conservation and Development, Municipal Coastal Programs, Harbor Management Plans, and zoning and subdivision regulations. Because Connecticut does not have direct regulatory control over land use decisions in the coastal zone, OLISP's strong technical assistance to municipalities is critically important. Through cooperative partnerships, OLISP has educated municipal staff and created linkages through which staff can both build local capacity and provide state level support on technically complex or politically sensitive issues. During the review period, the Coastal Planning Section reinvigorated its municipal relationships by: (1) providing workshops based on the new Coastal Management Manual; (2) employing check-off forms and e-mail to provide timely comments; and (3) emphasizing stormwater management issues as the CNP developed. Examples of OLISP's assistance to municipalities are provided below.

Municipal Grants

During the review period, OLISP passed through more than \$430,000 of OCRM funds to support 16 coastal municipalities and coastal regional planning organizations. Projects included the Westbrook Wastewater Management Plan,¹³ Greenwich public access planning, Connecticut River Estuary Regional Planning Agency dock management planning, and the Town of Chester's draft Harbor Management Plan revision. OLISP worked closely with municipal grant recipients to provide technical assistance and regular project oversight. OLISP's municipal pass-through grants have strengthened its partnerships with local municipalities and have advanced coastal management efforts at the local level.

¹³ The Westbrook Wastewater Management Plan is discussed in Section IV-D of these findings.

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East Lyme

During the review period, OLISP provided extensive technical assistance to the Town of East Lyme regarding several versions of an affordable housing development proposal for the Oswegatchie Hills. The first two proposals were denied by the town and subsequently appealed by the applicant. The third iteration received partial approval for an area outside the coastal boundary. The most recent version nearly doubled the project's density. At the time of the site visit, the current proposal included plans for 1,720 units on 230 acres located within the coastal boundary; the project would require extensive blasting, filling and grading with likely impacts on water quality, fisheries and submerged aquatic vegetation. OLISP supplied comprehensive testimony recommending denial of the proposed affordable housing zone change and Coastal Site Plan Review application. As Connecticut's affordable housing legislation places the burden on the town to prove that the proposed development is inappropriate, OLISP's testimony was an integral part of the municipal review process.

Old Saybrook

OLISP supported the Town of Old Saybrook in its efforts to open and to improve town-owned road endings as a means of enhancing public access to the Connecticut River and Long Island Sound. Staff assisted the Planning Commission by attending town workshops and detailing specific types of appropriate public access. OLISP also provided a grant from the Long Island Sound License Plate Fund to survey the Bayside Road ending to verify legal boundaries and existing physical features prior to site plan preparation. Additionally, staff successfully nominated the town's street endings program for the 2004 Connecticut Chapter of the American Planning Association's Public Program and Policy Award.

Harbor Management

Harbor management planning allows towns to manage in-water uses in harbors and to influence state permitting decisions that must be consistent with an approved harbor management plan. Recently, OLISP highlighted harbor management planning as a means for municipalities to address growing concern over a perceived proliferation of long docks and piers. During the review period, the Old Saybrook, Middletown and Fenwick Harbor Management Plans were approved after many years of effort. OLISP continued to work with municipalities to adopt initial harbor management plans in localities such as Pawcatuck. Staff also assisted Harbor Management Commissions in Chester, Norwalk and Old Saybrook with refining their plans to address dock management and similar issues.

Coastal Management Fellowship

OLISP continues to provide challenging projects for NOAA Coastal Management Fellows. The goals of OLISP's 2005-2007 fellowship project are to: (1) evaluate visual impact assessment techniques; and (2) develop a methodology for applying appropriate visual impact assessment techniques to OLISP permitting and local coastal site plan reviews. At the time of the site visit, OLISP's coastal management fellow had conducted a literature review of existing visual impact assessment methodology, historic New England and Long Island Sound settlement patterns, and coastal geology. She had also

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investigated three-dimensional GIS modeling capabilities and their possible integration with visual impact assessments.

Accomplishment: OLISP has strong relationships with local municipalities. OLISP uses the site plan review process and a variety of educational and training opportunities for local planning commissions to: (1) facilitate sound coastal management decisions; (2) emphasize water-dependent uses; and (3) increase public access to Connecticut's coastal waters.

2. Long Island Sound Fund

The Long Island Sound Fund receives proceeds from the sale of “Preserve the Sound” license plates, which are administered by the Connecticut Department of Motor Vehicles. The fund provides small grants to municipalities, schools, nonprofit organizations, state agencies and private entities. The Long Island Sound Fund supports:

- Creation of public outreach and education programs to increase awareness of the need to preserve and protect Long Island Sound;
- Enhancement of public access to Long Island Sound through the development of boardwalks, walkways, benches, fishing piers and signage as well as through acquisition;
- Protection and restoration of essential habitat, including tidal wetlands, mudflats, beaches, dunes, coves and embayments; and
- Support of scientific research that enhances understanding and management of Long Island Sound.

OLISP manages the Long Island Sound Fund by releasing an annual Availability of Funds announcement. Once applications are submitted, OLISP’s Long Island Sound Fund Coordinator organizes an internal department-wide review of each proposal and prepares written recommendations for the Long Island Sound Fund Advisory Committee. Coastal and municipal planners, marine trades professionals, land use attorneys, nonprofit organizations, industries and academic institutions are represented on the Committee. Once the Committee selects the winning proposals, OLISP notifies the recipients and administers the contracts and disbursement of funds.

As of May 31, 2006, approximately 132,000 “Preserve the Sound” license plates had been sold. Additionally, private donations and a percentage of purchases from the “Preserve the Sound” credit card raised more than \$4.7 million for Long Island Sound projects. At the time of the site visit, the Long Island Sound Fund Advisory Committee had allocated over \$4.4 million to fund more than 280 projects. Examples of projects funded by the Long Island Sound fund are described below.

Statewide Storm Drain Marker Program

During the review period, OLISP created a Storm Drain Marker Program to assist municipalities with the requirements of stormwater general permits. The program also educates the public about storm drains and associated nonpoint source pollution impacts.

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OLISP purchased 100,000 storm drain markers in English and Spanish and developed a companion educational brochure for residents of neighborhoods that participated in the program. Staff distributed customized storm drain marker kits to nearly 70 communities. Recipients included schools, eagle scout candidates, municipalities, environmental organizations, small businesses and marinas.

Outer Island Endowment

The Long Island Sound Fund provided a challenge grant for an endowment to sustain public education and outreach programs on Outer Island, the southernmost of the Thimble Islands in Long Island Sound. The project involved collaboration with the Stewart B. McKinney National Wildlife Refuge, the Community Foundation for Greater New Haven and the Connecticut State University System. The McKinney Refuge manages the wildlife habitat portions of the island, and the Community Foundation raises funds for the endowment. The University System operates education, research and access programs for University students and faculty, public and private school students, environmental organizations and the public.

OLISP participates in the Outer Island Advisory Council and works closely with the McKinney Refuge and the Community Foundation to ensure appropriate management and use of the endowment funds. During the review period, the Outer Island partners matched the original \$250,000 challenge grant. Additional fund raising has brought the endowment's balance to more than \$1 million. Recently, a group called "Friends of Outer Island" began assisting the McKinney Refuge with physical improvements to the site.

G. GOVERNMENT COORDINATION AND DECISION-MAKING

1. Permitting and Enforcement

OLISP's Permitting and Enforcement Section reviews and processes permit applications for all work in tidal wetlands and in tidal, coastal and navigable state waters. The Section is also responsible for enforcement. The goal of permit review is to avoid or to lessen impacts to coastal resources and navigation and to minimize encroachment into public trust waters.

Permitting

OLISP issues three types of permits: (1) individual permits, (2) certificates of permission, and (3) general permits. Individual permits are typically required for new construction and other work necessitating a detailed review of potential environmental impacts. The process includes public notice and the opportunity for public comment. In cases with potential tidal wetlands impacts, the individual permit process also allows for a public hearing. Certificates of permission are available for minor activities such as upkeep of existing structures and maintenance dredging of areas previously dredged under permit. General permits authorize minor regulated activities and cover activities including: (1) construction of small residential docks posing no environmental impacts; (2) installation of moorings, buoys and markers, osprey platforms, swim floats, and pump-out facilities;

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and (3) coastal remediation activities required by DEP administrative order. As a result of the general permits' success and utility, OLISP is developing new general permits for beach regrading, marina reconfiguration, use of scientific measuring devices, removal of derelict structures, and minor seawall repairs.

Applicants for U.S. Army Corps of Engineers' (USACE) permits for work requiring excavation or resulting in discharge of dredged or fill material into waters of the United States, including wetlands, may also need to obtain a state water quality certificate from OLISP pursuant to §401 of the Clean Water Act. Such work or discharge must be consistent with the provisions of the Clean Water Act and the Connecticut Water Quality Standards. Generally, OLISP provides certification in conjunction with the issuance of a state permit under the structures, dredging and fill statutes. In some cases, work may qualify for authorization under the USACE Programmatic General Permit (PGP).

When reviewing permit applications, OLISP coordinates extensively with DEP Resource Analysts, including Fisheries Division and Wildlife Division staff; other state agencies such as the Department of Agriculture's Bureau of Aquaculture; and federal agencies, including NOAA's National Marine Fisheries Service (NMFS), USFWS and USEPA. For example, during the review period, OLISP worked closely with the Bureau of Aquaculture to improve the aquaculture permitting process. OLISP and the Bureau of Aquaculture, in conjunction with USACE, NMFS and Sea Grant, developed aquaculture permitting guidelines that improve permitting transparency and predictability. During the evaluation site visit, a Bureau of Aquaculture representative noted that the process of developing aquaculture permitting guidelines has improved the way the bureau interacts with commercial interests. OLISP's participation in monthly joint permit processing meetings with the USACE New England District, NMFS, USFWS and USEPA further facilitates coordination. Additionally, staff attend monthly permit status meetings with Connecticut's Department of Transportation to coordinate and review progress on the department's infrastructure projects.

During the review period, the Permitting and Enforcement Section focused on reviewing permit applications in a timely manner and consistently processed a large number of applications. For example, staff rendered 338 decisions in 2005. As previously noted in this document, OLISP increased the number of staff available to process applications during the review period.

Connecticut's Programmatic General Permit

During the review period, OLISP coordinated extensively with USACE to revise and reissue Connecticut's PGP and §401 water quality certification. The PGP is an expedited federal review process for activities within USACE jurisdiction under §404 of the Clean Water Act and §10 of the Rivers and Harbors Act. OLISP staff attend monthly joint processing meetings with USACE and federal resource agencies. The PGP enables USACE to authorize projects with minimal impacts administratively through monthly screening meetings. Projects with the potential to result in more significant impacts require individual permit reviews and do not qualify for the PGP process.

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Enforcement

While effective and transparent permitting is critical to the success of each coastal management program, sufficient enforcement is equally important. It is critical that appropriate staff monitor development and other projects to ensure that the responsible parties: (1) have obtained all requisite permits; and (2) are adhering to all permit conditions. During the review period, OLISP sufficiently implemented its enforcement program. Enforcement staff are responsive and timely, despite heavy workloads. During the site visit, the evaluation team and OLISP discussed ways that the enforcement program might be further improved. At the time of the site visit, OLISP had already begun to investigate mechanisms such as changes to fee structures and additional outreach that could enhance the enforcement program.¹⁴

1. Program Suggestion: OCRM encourages OLISP to continue investigating mechanisms that could further improve its enforcement program. OLISP should consider: (1) recording notices to landowners about needs for permits; (2) additional fees for applications arising from enforcement actions; (3) increasing enforcement outreach; (4) changes to fee structures; and (5) issuing civil penalties administratively.

2. Federal Consistency

OLISP is responsible for determining the consistency of federal activities and licenses with the federally-approved CTCMP. Coastal permitting staff take the lead for activities occurring waterward of the high tide line in tidal, coastal and navigable state waters. Coastal planning staff serve as the point of contact for most of the federal consistency issues that do not require review of specific in-water projects. While staff regularly collaborate with a wide variety of federal agencies on routine consistency matters such as fisheries management, they also address highly complex projects, several of which are described below.

Amtrak

During the review period, OLISP continued to monitor Amtrak's electrification of the Northeast Corridor within Connecticut for compliance with appropriate coastal management policies. Since Amtrak's completion of major right-of-way construction, OLISP's monitoring has primarily focused on ensuring improved navigational access through the five movable bridges that cross waterways in Connecticut. OLISP participates in quarterly Movable Bridge Advisory Board meetings and in Amtrak's annual public informational meetings for recreational boaters. In 2004, Amtrak increased the number of trains crossing the bridges without authorization. Under penalty, Amtrak restored the authorized number of train crossings and subsequently requested formal approval to modify its service level. In each instance, DEP required Amtrak to submit detailed analyses of bridge operating schedules to the department for review and approval. At the time of the site visit, OLISP was engaged in a federal consistency

¹⁴ Following the site visit, OLISP began a process to evaluate and improve its enforcement program. The process includes regular staff meetings to discuss new enforcement strategies.

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review of Amtrak's replacement of the Thames River movable bridge and the proposed replacement of the Niantic River movable bridge.

Energy Projects

Federal consistency has played a major role in OLISP's review of energy structures, particularly natural gas facilities, in Long Island Sound. In 2002, the Islander East Pipeline Company submitted applications for: (1) a water quality certificate; (2) structures, dredging and fill permits; (3) tidal wetlands permits; and (4) a federal consistency determination regarding applications to the Federal Energy Regulatory Commission (FERC) and USACE. The proposed project included maintenance work and upgrades to the existing Algonquin pipeline from Cheshire to North Haven as well as the installation of 21 miles of new pipeline from North Haven to Branford. OLISP determined that the proposed pipeline installation would create impacts associated with dredging, plowing, backfilling, equipment anchoring and anchor cable sweeping. OLISP also determined that portions of extensive shellfish grants, leased shellfish grounds and public shellfish lands in the path of the proposed pipeline would be permanently degraded and most areas would be rendered unsuitable for any future shellfish harvesting. In 2003, as a result of these determinations, OLISP objected to the proposed Islander East liquefied natural gas pipeline. Connecticut's objection was overturned by the Secretary of Commerce in 2004. At the time of the evaluation site visit, various appeals were pending in both federal and state courts.

In 2006, Broadwater Energy, LLC formally filed an application with FERC for an in-water liquefied natural gas (LNG) terminal and pipeline. While the project is proposed to be located in New York waters, OLISP has investigated the possibility of applying federal consistency to the project to protect Connecticut's interest in its coastal resources and uses. The Broadwater application was filed before Connecticut's interstate consistency list was approved; thus, the project is exempt from a complete interstate review. However, aspects of the project may take place in Connecticut waters. OLISP plans to continue monitoring FERC's and the Coast Guard's reviews of the project in order to determine whether CTCMP has a legitimate and constructive role to play in the process.

Interstate Consistency and Federal Activities Lists

During the review period, OLISP created a list of interstate consistency activities and submitted it to OCRM for incorporation into the program as an RPC. OLISP worked closely with staff from New York's coastal management program to develop consistent geographic descriptions of the states' respective areas of concern in Long Island Sound. As a result, federal agencies will respond to the same description regardless of whether an activity is proposed in the waters of New York or Connecticut. OCRM approved Connecticut's interstate activities list in June 2006. Additionally, OLISP completed a comprehensive review and revision of CTCMP's existing list of federal activities, permits and licenses, outer continental shelf actions, and federal assistance programs subject to federal consistency review.¹⁵

¹⁵ OCRM approved OLISP's revised federal activities list in October 2006, following the evaluation site visit.

Accomplishment: CTCMP is the second coastal management program to develop an approved interstate consistency list.

3. Dredging and Sediment Management

The Structures and Dredging Act and the Connecticut Coastal Management Act regulate dredging and disposal in Connecticut's tidal waters. Open water disposal at one of four disposal sites is the predominant method of sediment management in Long Island Sound. In 1980, adoption of the bi-state "Interim Plan for the Disposal of Dredged Material in Long Island Sound" reduced the number of disposal sites to three. A western Long Island Sound site was added in 1982 in response to demand, bringing the total available disposal sites to four. USACE's New England District developed the Disposal Area Monitoring System (DAMOS) to monitor disposal activities at New England open water disposal sites. DAMOS established a site recolonization model that has been an effective indicator of disposal site health.

Amendments to the federal Marine Protection, Research and Sanctuaries Act (MPRSA) passed in 1980 and 1990 require application of the Act to Long Island Sound, greatly increasing the regulatory complexity of dredging and sediment disposal. All federal projects, regardless of volume, as well as any non-federal project larger than 25,000 cubic yards, are subject to the MPRSA in addition to §404 of the Clean Water Act. Long Island Sound is the only estuary subject to the MPRSA. Dredging and sediment disposal in Long Island Sound is further complicated by the fact that the Sound is shared by Connecticut and New York. Additionally, two different USACE districts and two different USEPA regions oversee dredging activities within Long Island Sound.

In response to concerns about open water disposal, in 1998, USACE and USEPA committed to undertake an environmental impact assessment with the goal of designating one or more open water disposal sites in Long Island Sound pursuant to the MPRSA. OLISP provided ongoing technical support and resource data to both agencies and reviewed interim work products throughout the process. Work began in 1999. In 2002, focus shifted to the western and central portions of Long Island Sound as the highest priorities due to pending closure of the central site to MPRSA projects in February 2004. The Final Environmental Impact Statement (FEIS) was released in 2004. The New York State Coastal Management Program (NYSCMP) objected to USEPA's consistency determination on the FEIS. After extensive negotiations¹⁶ among NYSCMP, OLISP, USEPA and USACE, the final rule designating the sites was published in 2005, subject to fourteen specific restrictions.

The most significant restriction requires development of a Long Island Sound Dredged Material Management Plan (DMMP) by USACE within eight years of final rule publication. The goal of the restriction is to reduce or eliminate open water disposal. If a DMMP is not adopted, MPRSA projects will no longer have access to the disposal sites.

¹⁶ Initiated by OCRM.

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During the review period, OLISP, NYSCMP, USEPA and USACE actively discussed the proposed scope of the plan and estimated a cost of \$16 million for completion of the plan by 2013. Efforts to secure federal funding in fiscal year 2006 were unsuccessful, but the President's budget for fiscal year 2007 includes \$1.7 million for the DMMP. As an interim measure during the development of the DMMP, the Long Island Sound Regional Dredging Team plans to evaluate all proposed open water disposal projects for practicable alternatives and to make recommendations regarding feasible options to the regulatory agencies. OLISP has been an active participant in the Regional Dredging Team process.

Accomplishment: OLISP worked extensively with its partners to move forward on dredged material management planning for Long Island Sound.

4. Ocean Management

Submerged Lands Leasing and Ocean Zoning

CTCMP provides essential management oversight for Connecticut's coastal and estuarine lands and resources. However, Connecticut does not have a submerged lands leasing program for public trust bottom resources, nor does it have an ocean zoning program. The recent Cross-Sound Cable Project resulted in a series of moratoria and the establishment of a Joint Governors Task Force and a Legislative Task Force regarding energy facilities in Long Island Sound. The Joint Task Force produced a variety of recommendations, including enhanced bottomlands mapping and consideration of submerged lands leasing. Subsequently, the proposed Broadwater LNG Project raised the issues of extensive security zones around the main platform and moving security zones around supply vessels, which have the potential to impact marine commerce, recreational boating, and recreational and commercial fishing. The highly-controversial Broadwater LNG Project also prompted the formation of a Governor's LNG Task Force during the review period. Several of the task force members were interested in other states' ability to manage such uses through leasing their public trust submerged lands and asked the DEP Commissioner¹⁷ to investigate a submerged lands leasing legislative proposal. The Commissioner asked OLISP to prepare a briefing memorandum on the topic. The memorandum was shared with the Joint Task Force, but no official legislative initiative resulted.

Recent energy proposals have heightened the need for a strong submerged lands management program for Long Island Sound. A submerged lands leasing program would give Connecticut more control over its public trust resources. Additionally, a proactive ocean management program would enable the state to identify the best locations for different uses in Long Island Sound. Therefore, in its recent Program Enhancement Assessment and Strategy, OLISP has proposed undertaking a broad strategy to develop and implement an Ocean Resources and Submerged Lands Management Plan. OLISP anticipates that the strategy will include:

¹⁷ The DEP Commissioner is a task force member.

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- Establishment of regional ocean resources institutions, such as a southern New England and New York Ocean Council;
- Articulation of a plan to complete seafloor mapping and to assess Long Island Sound's use areas; and
- Development of a submerged lands leasing or management program based on the state's proprietary interest in public trust waters and submerged lands.

OLISP has indicated that, as a first step, it can review other states' submerged lands leasing programs and develop marine zoning proposals. However, OLISP also has noted that the progress of such an initiative in Connecticut will require the active participation and advocacy of Administration officials, legislative leaders and stakeholder groups. Thus, it will be necessary to proceed by first establishing a task force or advisory board to examine the issues and to develop recommendations on potential submerged lands management mechanisms and approaches. OCRM acknowledges that the development of an Ocean Resources and Submerged Lands Management Plan will not be a simple task; nor will such a plan's successful implementation depend solely upon OLISP's efforts. Nevertheless, OCRM commends OLISP for recognizing the necessity of an Ocean Resources and Submerged Lands Management Plan and strongly encourages OLISP to develop those aspects of the plan that fall under its jurisdiction. OCRM also encourages OLISP to assist its state and regional partners to recognize the value of such a plan, thus improving the probability that its partners will actively participate in the process.

2. Program Suggestion: OCRM encourages OLISP, in collaboration with its partners, to explore a submerged lands leasing program and an ocean zoning program for Long Island Sound. Any subsequent development of an ocean zoning program for Long Island Sound should include coordination with both New York and Rhode Island.

Regional Governance

As the result of an initiative by the Governor of Rhode Island, the New England Governors and Eastern Canadian Premiers signed a resolution to create a Northeast Regional Ocean Council (NROC) in August 2005. The Council's purpose is to: (1) facilitate the development of more coordinated and collaborative regional goals and priorities and to improve responses to regional issues; and (2) work directly with the President's Council of Advisors on Ocean Policy to communicate regional needs at the national level and better address issues of national importance in the Northeast on the implementation of the U.S. Ocean Action Plan. NROC could be a key mechanism for Connecticut to coordinate with New York and Rhode Island on Long Island Sound issues. One aspect of regional ocean management is the Integrated Ocean Observing System (IOOS). At the time of the evaluation site visit, OLISP was planning to participate in an IOOS conference for Mid-Atlantic coastal managers. OLISP also began meeting with the University of Connecticut, a member of the Mid-Atlantic Coastal and Ocean Observing Regional Association (MACOORA) and developer of the Long Island Sound IOOS. OLISP intends to work closely with the University in formulating a plan for Long Island Sound under MACOORA.

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3. Program Suggestion: OCRM encourages OLISP to continue participating in NROC as development of a regional ocean governance framework advances. As NROC undertakes ocean observation efforts, OLISP should communicate the coastal management community's needs to the Council to ensure that resulting ocean observation networks are useful to coastal managers.

5. Partnerships

The evaluation team was very impressed with OLISP's successful coordination with other programs both within DEP as well as with external state, local, academic, industrial and private agencies and organizations. Evaluation participants often praised the program's expertise and collaborative approach as well as the work achieved as a result of OLISP's assistance. Development of innovative data management and information technology tools, provision of increased public access, implementation of the tidal wetland restoration program, efforts of municipal liaisons, and execution of Connecticut's Coastal Nonpoint Program are just some of the many examples that highlight OLISP's coordination with its partners. Through partnerships with other agencies and organizations, OLISP strengthens CTCMP by pooling the resources and expertise of many different groups. The office's proactive approach to coordination by involving partners early in processes and projects improves efficiency and allows potential problems to be addressed before they escalate. The emphasis that OLISP places on collaboration with its partners is clearly one of the strengths of CTCMP.

Accomplishment: OLISP regularly engages in many diverse partnerships. The program successfully coordinates with other programs both within DEP as well as with external state, local, academic, industrial and private agencies and organizations.

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V. CONCLUSION

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

CTCMP has made notable progress in the following areas: staffing, program changes, information technology, public access, land acquisition, restoration, water quality, municipal liaisons, federal consistency, dredging and sediment management and partnerships.

These evaluation findings also contain three recommendations. The recommendations are in the form of Program Suggestions. The evaluation team did not identify any Necessary Actions. The Program Suggestions should be addressed before the next regularly-scheduled program evaluation, but they are not mandatory at this time. Program Suggestions that must be repeated in subsequent evaluations may be elevated to Necessary Actions. Summary tables of program accomplishments and recommendations are provided in Appendix A.

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

/s/ David M. Kennedy
David M. Kennedy
Director, Office of Ocean and
Coastal Resource Management

March 5, 2007
Date

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VI. APPENDICES

Appendix A. Summary of Accomplishments and Recommendations

The evaluation team documented a number of CTCMP’s accomplishments during the review period. These include:

Issue Area	Accomplishment
Staff	OLISP staff maintained a high level of performance as well as a reputation for technical expertise, accessibility and responsiveness. The office added a second supervisor and two new staff to its Permitting and Enforcement Section. OLISP also secured a replacement position for a staff member who left the Planning Section. The office has achieved a good balance between permitting and enforcement and planning staff.
Program Changes	OLISP made significant progress in updating CTCMP by processing and submitting overdue program changes to OCRM.
Information Technology	OLISP has been a clear leader and critical partner in DEP’s efforts to develop innovative data management and information technology tools that increase program efficiency.
Public Access	OLISP improved public access to Connecticut’s shoreline through the coastal site plan review process. OLISP worked with coastal municipalities to provide public access facilities for activities such as boating, fishing and observing wildlife.
Land Acquisition	OLISP has a proactive and strategic approach to coastal land acquisition. The office developed CLAM, a computer-assisted coastal land conservation planning tool. OLISP also prepared and submitted Connecticut’s draft CELCP Plan to OCRM.
Restoration	OLISP implemented a strong tidal wetland restoration program emphasizing partnerships and science-based decision making.
Water Quality	OLISP collaborated with its partners to receive full federal approval of the Connecticut Coastal Nonpoint Program. OLISP also significantly contributed to execution of the program through participation in efforts such as: (1) development of a CNP website, stormwater quality manual, soil-based recommendations for stormwater management practices and the Niantic River Watershed Plan; and (2) applications for NDA designations.
Municipal Liaisons	OLISP has strong relationships with local municipalities. OLISP uses the site plan review process and a variety of educational and training opportunities for local planning commissions to: (1) facilitate sound coastal management decisions; (2) emphasize water-dependent uses; and (3) increase public access to Connecticut’s coastal waters.
Federal Consistency	CTCMP is the second coastal management program to develop an approved interstate consistency list.

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Dredging and Sediment Management	OLISP worked extensively with its partners to move forward on dredged material management planning for Long Island Sound.
Partnerships	OLISP regularly engages in many diverse partnerships. The program successfully coordinates with other programs both within DEP as well as with external state, local, academic, industrial and private agencies and organizations.

In addition to the accomplishments listed above, the evaluation team identified several areas where CTCMP could be strengthened. Recommendations are in the form of Program Suggestions. The evaluation team did not identify any Necessary Actions. Areas for improvement include:

Issue Area	Program Suggestion
Permitting and Enforcement	1. OCRM encourages OLISP to continue investigating mechanisms that could further improve its enforcement program. OLISP should consider: (1) recording notices to landowners about needs for permits; (2) additional fees for applications arising from enforcement actions; (3) increasing enforcement outreach; (4) changes to fee structures; and (5) issuing civil penalties administratively.
Ocean Management	2. OCRM encourages OLISP, in collaboration with its partners, to explore a submerged lands leasing program and an ocean zoning program for Long Island Sound. Any subsequent development of an ocean zoning program for Long Island Sound should include coordination with both New York and Rhode Island.
Ocean Management	3. OCRM encourages OLISP to continue participating in NROC as development of a regional ocean governance framework advances. As NROC undertakes ocean observation efforts, OLISP should communicate the coastal management community's needs to the Council to ensure that resulting ocean observation networks are useful to coastal managers.

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Appendix B. CTCMP's Response to 2003 Evaluation Findings

#1. Program Suggestion: As it is currently organized, OLISP is a well-integrated, efficient and effective program that links planning, permitting and scientific staff in the same office. A reorganization of OLISP could disrupt the office's operations and create barriers to effective communication and coordination. Therefore, OCRM strongly recommends that OLISP's current structure be maintained and used as a potential model for other programs.

The current structures of DEP and OLISP are discussed in Section IV-A-2.

#2. Necessary Action: OLISP should continue to work with OCRM's CTCMP Specialist to develop a schedule for submitting program changes on a regular basis within one month of receipt of the Final Evaluation Findings. OLISP should continue to focus on the Connecticut Coastal Management Act and then proceed to other core statutes. Finally, OLISP should address tertiary supporting regulations and statutes containing policies identified in the program document.

OLISP's progress in submitting program changes is discussed in Section IV-A-3.

#3. Program Suggestion: OCRM encourages OLISP and DEP to refill the vacant permit analyst positions as soon as possible as it is crucial for OLISP to have a full complement of permit analysts to process the increased number of applications efficiently. It would not only be unfortunate but also unnecessary for permit processing times to increase because OLISP lost federally-funded permit analyst positions in an effort to correct the state budget shortfall.

OLISP's progress in staffing is discussed in Section IV-A-1.

#4. Program Suggestion: OCRM recommends that in the near term, OLISP continues to look for opportunities to craft elements of a framework for a dredged material management plan. Once the Environmental Impact Statements for the western/central and eastern portions of Long Island Sound are complete, OCRM encourages OLISP to continue to work proactively with other relevant parties, including the Connecticut Department of Transportation's Marina Policy Subcommittee, to develop an appropriate dredged material disposal plan for Long Island Sound.

OLISP's work in dredging and sediment management is discussed in Section IV-G-3.

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Appendix C. People and Institutions Contacted

State of Connecticut Representatives

Name	Title	Affiliation
Marcy Balint	Municipal Liaison	OLISP
Kristen Bellantuono	Permit Analyst	OLISP
David Blatt	Coastal Planning Supervisor	OLISP
Kate Brown	Long Island Sound Fund Coordinator	OLISP
Cheryl Chase	Permitting and Enforcement Supervisor	OLISP
Peter Francis	Permitting and Enforcement Supervisor	OLISP
John Gaucher	Municipal Liaison	OLISP
Ethan Grimes		OLISP
Michael Grzywinski	Permit Analyst	OLISP
Mary-beth Hart	Coastal Nonpoint Source Pollution Coordinator	OLISP
Rick Huntley	Clean Vessel Act Program Supervisor	OLISP
Sue Jacobson	Permit Analyst	OLISP
Krystal Kallenberg	Municipal Liaison	OLISP
David Kozak	Municipal Liaison	OLISP
Kevin O'Brien	GIS Specialist	OLISP
Tom Ouellette	Federal Consistency Specialist	OLISP
Ron Rozsa	Technical Services Supervisor	OLISP
Brian Thompson	Director	OLISP
George Wisker	Dredging Management and Planning Specialist	OLISP
Terry Yasuko Ogawa	NOAA Coastal Management Fellow	OLISP
Bernie Evans		DEP Office of Information Management
Nancy Lent		DEP Finance and Support Services
Amey Marella	Deputy Commissioner	DEP Air, Water and Waste Programs
Gina McCarthy	Commissioner	DEP
Paul Stacey		DEP Bureau of Water Protection and Land Reuse
Margaret Welch	Landscape Stewardship Coordinator	DEP
Betsey Wingfield	Bureau Chief	DEP Bureau of Water Protection and Land Reuse
David Carey		Department of Agriculture Bureau of Aquaculture

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Local Government Representatives

Name	Title	Affiliation
Margot Burns		Connecticut River Estuary Regional Planning Authority
J.H. Torrance Downes		Connecticut River Estuary Regional Planning Authority
Linda Krause		Connecticut River Estuary Regional Planning Authority
Joel Severance		Connecticut River Estuary Regional Planning Authority
Aimee Eberly		Town of Westbrook
Marilyn Ozols		Town of Westbrook
Christine Nelson	Town Planner	Town of Old Saybrook
Maureen Fitzgerald		Town of Waterford
Meg Parulis		Town of East Lyme
Diane Fox		Town of Greenwich

Federal Agency Representatives

Name	Title	Affiliation
Lisa Cavallaro		National Marine Fisheries Service
Michael Ludwig		National Marine Fisheries Service
Barbara Newman		U.S. Army Corps of Engineers
Diane Ray		U.S. Army Corps of Engineers
Lisa Krall		Natural Resources Conservation Service
Walter Smith		Natural Resources Conservation Service
Tom Halavick		U.S. Fish and Wildlife Service
Michael Marsh		U.S. Environmental Protection Agency

Academic Representatives

Name	Title	Affiliation
Chet Arnold		University of Connecticut
John Rozum		University of Connecticut
Scott Warren		Connecticut College

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Nongovernmental Organization Representatives

Name	Title	Affiliation
C. Fred Grimsey	President	Save the River – Save the Hills

Industry Representatives

Name	Title	Affiliation
Edward Sailer	President	Connecticut Marine Trades Association
Grant Westerson	Executive Director	Connecticut Marine Trades Association

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Appendix D. People Attending the Public Meeting

Name	Affiliation
Jack Zettergren	Private Citizen

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Appendix E. OCRM's Response to Written Comments

OCRM did not receive any written comments regarding the Connecticut Coastal Management Program during the course of the evaluation.