

# **Raising Public Awareness and Participation Through Education and Outreach**

A significant factor toward long-term CCMP effectiveness is the ability to increase public awareness of and participation in day-to-day activities designed to protect LIS. Educating LIS watershed residents and increasing the number of people that take an active interest in protecting and restoring the Sound helps to nurture long-term stewardship ideals in local communities. As the Sound is restored to a healthier state, public support based on these ideals will help ensure continued progress.

## **OVERALL CCMP STRATEGY:**

The CCMP public awareness and outreach strategy identifies six major elements: 1) increasing community awareness and stewardship; 2) promoting understanding; 3) facilitating public participation; 4) increasing communication and cooperation; 5) enhancing education at all levels; and 6) securing funding for public involvement and education activities.

## **LIS 2003 AGREEMENT GOAL:**

## **ENVIRONMENTAL INDICATORS/RESULTS/TRENDS:**

In 2009, LISS staff continued to distribute copies of Sound Health 2008 (LISS's environmental indicators report) upon request to schools, municipalities, libraries, and community groups. The next issue of Sound Health will be developed and published in 2010. The LISS, in 2009, published 4,000 copies of Protection and Progress, Long Island Sound Study's 2007-2008 biennial report. The report summarizes the actions undertaken to improve environmental conditions and implement the Comprehensive Conservation and Management Plan and Long Island Sound Agreements. It also highlights the environmental projects developed by organizations that received grants from the Long Island Sound Futures Fund.

## **2015 HIGHLIGHTS:**

LISS produced and distributed its UPDATE newsletter to over 5,000 watershed residents, six issues of the online newsletter Sound Bytes, and three issues of the online newsletter Sound Outlook in 2009. LISS staff continued Sound Stewards program, which has engaged over 3,000 students to date in research projects in LISS stewardship sites. LISS staff coordinated five events for World Water Monitoring Day, engaging 85 students in the effort to monitor water quality in our coastal watershed. CT Sea Grant collaborated with the Connecticut College Arboretum to produce a booklet called Salt Marsh Plants of Long Island Sound. Over 900 families registered to participate in 2009 under the CTDEP No Child Left Inside program, with 170 families completing the visit to all 7 parks from Hammonasset Beach State Park on Long Island Sound to Peoples State Park in Barkhamsted.

## **SUMMARY OF CCMP MANAGEMENT ACTIONS:**

# RAISING PUBLIC AWARENESS AND PARTICIPATION THROUGH EDUCATION AND OUTREACH

## E-1. Building Community Awareness and Stewardship (CCMP Table 51, P.146)

**Key Elements:** The CCMP emphasizes existing and enhanced public involvement and education programs at the state level to build community awareness and stewardship of LIS. Support for conferences, including research and the Long Island Sound Watershed Alliance, is an important element of the program. The development and distribution of informational materials for specific audiences, including printed materials, public exhibits, educational curricula, and research programs was identified as a primary outreach and education mechanism.

2015 Description	2016 Planned Action
<p>1 The LISS Outreach Program: - assisted in producing and distributing three issues of the CTDEEP LIS newsletter Sound Outlook to a List Serve of 1669 subscribers in addition to making it available on the CTDEEP website. The Sound Outlook webpage averages 1000 hits per month. Responded to more than 150 requests for information through the outreach offices and through the feedback form at <a href="http://www.longislandsoundstudy.net">www.longislandsoundstudy.net</a>. Continued to distribute LISS publications such as Sound Health and Step by Step brochures and LIS-related publications, such as Living Treasures of LIS.</p>	<p>Sound Update, Sound Outlook, and Sound Bytes will continue to be produced and distributed. LISS staff will continue to respond to requests for information, provide presentations, staff displays at events, and publish newsletters and other pertinent materials. The Long Island Sound Study Facebook page will be maintained as well.</p>
<p>2 NYSG LISS staff provided outreach materials to a variety of audiences: festival organizers to distribute to general public, teachers, and students (reaching 3,000 people). CTSG LISS staff provided outreach materials to variety of audiences: general public, including EPA BOLD research vessel celebration, Stamford Sustainable Gardening Expo (100+/-) and National Estuaries Day booth at Mystic Aquarium (2,350 attendees), Master Gardeners, garden clubs, Land Trusts, and students totaling 500 (+/-).</p>	<p>Continue coordinated outreach efforts to attend events to educate the public about Long Island Sound, specifically targeting events in LIS watershed.</p>
<p>3 LISS staff (NY Sea Grant and NYSDEC) continued the Sound Stewards program to actively engage students in watershed-related research projects. To date, more than 3,500 students (430 students in 2015) from over 20 schools have collected data on the effects of invasive invertebrate and plant species, polluted runoff, and habitat disturbance in Long Island Sound.</p> <p>Also, in 2015, LISS staff (NY Sea Grant and NYSDEC) participated as "experts" for the "Day in the Life of the Nissequogue River" event on October 9th. Amy Mandelbaum assisted Sachem North High School's AP Environmental Science class and Envirothon Club with the monitoring of the salt marsh and creek at Sunken Meadow State Park. 30 students and 2 teachers participated. Victoria O'Neill and Cassandra Bauer assisted Smithtown High School East's AP Environmental Science class with the monitoring of Nissequogue River at Short Beach. The students collected water quality, macroinvertebrate, and fish data and learned about the Long Island Sound estuary.</p>	<p>Continue this program in 2016.</p>
<p>4 In 2015, Connecticut Sea Grant LISS staff gave 13 presentations / talks / workshops that reached an audience of 644 people; LIS publications were also shared with the audiences. LISS displays were manned or</p>	<p>Continue to share information about and raise awareness of Long Island Sound and LISS issues in public venues through invited talks,</p>

**2015 Description****2016 Planned Action**

	<p>literature handed out at the talks in addition to other events, including the Connecticut Conference on Natural Resources, CT River Coastal Conservation District native plant sale, Bartlett Arboretum native plant sale and workshop, LIS Foundation Marine Sciences Day, the Sustainability Palooza in Westbrook, and the LIS Citizen Summit. Connecticut Sea Grant continued to distribute a series of LIS-related and LISS supported resources via its website, mentor teacher workshops, public presentations and displays, trainings, and direct mailings in response to requests. These include CDs: Connecticut River Tidal Marshes and Long Island Sound Resources for Education; booklets: Plants and Animals of Long Island Sound (in Spanish and English), Salt Marsh Guide, Seaweeds of LIS; poster: Invasive Species of Long Island Sound; field cards: Visual Guide to LIS Marine Invasive Species; Sound Health; and the print version of the Long Island Sound Resources Guide.</p>
<p>5 Connecticut Sea Grant continued its long-term co-sponsorship of the University of Connecticut's Coastal Perspectives lecture series for the public in 2015. The format involves six evening lectures and a symposium on a broad range of coastal and marine-related topics. The 2015 presentations covered topics such as local oyster farming, ocean currents, the Arctic, the Atlantic coast, and marine spatial planning in LIS. Ten University-named marine scholars from local high schools attended the lectures as part of their year-long program, to increase their awareness of key coastal issues by interacting with the speakers and local scientists. In 2015, the lecture series attracted 587 attendees, two-thirds of whom were interested members of the public, while the balance were faculty and students.</p>	<p>Co-sponsorship of the series will continue in 2016.</p>
<p>6 One Connecticut Sea Grant staff member serves on the Eastern Long Island Sound Advisory Council. As co-chair of the Long Island Sound Assembly, she actively participates in researching, writing and editing the LIS Assembly Report to the Connecticut General Assembly (pursuant to Section 25-155 of CT Gen Stat) that is submitted each December.</p>	<p>Continued active participation on the Council.</p>
<p>7 The CTDEEP Clean Vessel Act (CVA) program administers the Clean Boater and Clean Marina programs. CTDEEP staff attended one boat show and other events to distribute information regarding clean boating practices, marine sanitation devices and pumpouts. CTDEP staff displayed outreach materials at the Connecticut Marine Trades Association Hartford Boating &amp; Fishing Show reaching over 2,500 people with information about protecting and restoring LIS. Two interactive kiosks have been developed for use at boat shows and other various locations throughout the state to educate the public about the CVA, pumpouts and other clean boating practices. An Action Guide for Boaters has been published and will continue to be distributed at events such as boat shows and other informational events.</p>	<p>Continue to promote the clean boating initiative by increasing media usage via radio. Incorporate clean boating practices into the DEP-Boating AquaSmart program, which teaches children about water and boat safety. Clean boating materials will also be distributed to boaters and marinas throughout the state.</p>

2015 Description	2016 Planned Action
<p>8 CTDEEP provided technical assistance in the form of coastal management and coastal nonpoint source program workshops to coastal nonpoint source management area municipalities. The Connecticut Coastal Management Manual is available on the CTDEEP website  <a href="http://www.ct.gov/dep/cwp/view.asp?a=2705&amp;q=323814&amp;depNav_GID=1622">http://www.ct.gov/dep/cwp/view.asp?a=2705&amp;q=323814&amp;depNav_GID=1622</a> and fact sheets from the manual are made available upon request. In addition, a Coastal Nonpoint Source Program website was developed by CTDEEP:  <a href="http://www.ct.gov/dep/cwp/view.asp?a=2705&amp;q=323554&amp;depNav_GID=1709">http://www.ct.gov/dep/cwp/view.asp?a=2705&amp;q=323554&amp;depNav_GID=1709</a></p>	<p>CTDEEP will continue to provide coastal management and coastal nonpoint source workshops to municipalities as necessary. Website updates will also be conducted as necessary.</p>
<p>9 CTDEEP continued its public involvement initiative "No Child Left Inside," to encourage the public - especially families and children from urban areas - to enjoy the outdoors by taking advantage of the recreational opportunities state parks have to offer. With several State Parks and Wildlife Management Areas along the coast of CT, this initiative supports the LIS 2003 Agreement Goal of offering a Long Island Sound field experience to 50% of school children in CT and NY. One component of the initiative is an annual series of events called "The Great Park Pursuit," initiated in May 2006 where families visit CT's state park and compete in outdoor activities. In the 2012 GPP, over 134 families ultimately participated in all 4 events. Participants, primarily families, have the opportunity to visit a number of state parks and forests over a seven-week period and compete in various challenges at those parks. The challenges will be linked to the general theme of each of the state parks and forests hosting events (e.g., historic sites, shoreline parks, forests, etc.). CT DEEP has a web page dedicated to the NCLI initiative.</p>	<p>The Great Park Pursuit adventure challenge will again be launched in 2013 Great Park Pursuit. Registration will open in April. Celebrating its 8th anniversary.</p>
<p>10 In 2014, NEIWPCC's Information Officer worked with an intern to produce 18 videos highlighting Long Island Sound Stewardship Areas. The videos are posted on LISS's YouTube channel - <a href="https://www.youtube.com/user/LISHealth">https://www.youtube.com/user/LISHealth</a>. and as an enhancement to LISS's online Stewardship Atlas at <a href="http://www.LISStewardshipAtlas.net">www.LISStewardshipAtlas.net</a>, which went online in 2013. The goal of these sites is to inform residents about the ecological and recreational significance of the 33 areas designated by the Long Island Sound Stewardship Initiative as Stewardship Areas. A secondary goal is for residents to learn about LISS's efforts to protect Stewardship Areas in their communities and throughout the Sound, and to encourage residents to visit Stewardship Areas.</p>	<p>The online Stewardship Atlas microsite will continue to be updated. Postcards with the web links, and possibly a quick response "QR" code will be printed and distributed at Stewardship Areas to promote the outreach effort.</p>
<p>11 Connecticut Sea Grant LISS staff continued to partner with the University of Connecticut Master Gardener Program to offer the Coastal Certificate program, Sound Gardening - Sustainable Landscaping for Clean Waters, that focuses on the environmental impacts of nutrient and chemical-intensive traditional residential landscaping, and</p>	<p>The full Coastal Certificate Program will be offered at the Connecticut College Arboretum in Spring 2016. The course will address CCMP subject goals, including stewardship, invasive species control, watershed BMPs for</p>

2015 Description	2016 Planned Action
<p>alternatives to it, using the "train the trainer" model. In 2015 Coastal Certificate Program participants conducted the outreach component of their 2014 training (each is required to complete two outreach projects, volunteering a minimum of 10 hours) to help disseminate information and ideas about solutions. Outreach activities based in New Haven and Middlesex counties ranged from tree, plant id and salt marsh walks to community presentations and interpretive signage. These outreach efforts reached 4,290 participants and reflect 137 volunteer hours. A one-day refresher / emerging issues workshop was held in fall 2015 for 10 former and 28 prospective Coastal Certificate Program participants, covering topics such as coastal restoration techniques, Living Shorelines as a green infrastructure technique, and the health of our coastal coves and bays.</p>	<p>for water and connections to the health of LIS coves and embayments.</p>
<p>12 In 2015, NEIWPCC managed the grant, and provided support for Save the Sound/Connecticut Fund for the Environment, to develop the annual Long Island Sound Citizens Summit. The conference is an opportunity for citizens around the Sound to hear experts discuss a major environmental concern affecting Long Island Sound. The 2015 Summit, "Coming Back to the Brink - Nitrogen and the Sound's Health and Economy" was held on April 10 at the Webster Bank Arena conference room in Bridgeport.</p>	<p>The 2016 Summit, LISS's 25th, will be held in June and will focus on the efforts of citizens who are making a difference in protecting the Sound through volunteer efforts such as citizen science water quality monitoring.</p>
<p>13 As of 2015, the Long Island Sound Futures Fund supported 10 projects totaling \$246,508 to raise public awareness and participation through education and outreach projects. The projects include NOFA CT's Organic Lawn Care Certificate Program, Rocking the Boat's Bronx River Eel Monitoring and General Fish Assessment, Citizens Campaign for the Environment's Don't Flush Your Drugs Educational Campaign, Connecticut Fund for the Environment's Coastal Cleanup Program, Norwalk Seaport Association's Sheffield Island Park Interpretative Signage, City of Norwich Harbor Management Commission's Norwich Harbor Canoe and Kayak Trail, Town of Oyster Bay's Onsite Septic Training and Certification Program, Hofstra University's Adopt-a-Trout, Alley Pond Environmental Center's National Estuary Day Celebration, and National Audubon Society's Conserving Coastal Birds through Stewardship and Outreach.</p>	<p>The Long Island Sound Futures Fund will continue to support projects in the category of raising public awareness and participation through education and outreach habitat restoration projects.</p>
<p>14 In 2015, NY Sea Grant produced the LISS UPDATE newsletter. The two issues covered the Tidals Wetlands Loss Workshop and Citizen Science. These issues were distributed more than 5,000 watershed residents via the mailing list and outreach events. Throughout 2015, staff continued to update the UPDATE mailing list. The newsletter was also posted on the LISS website.</p>	<p>Sound Update will continue to be produced and distributed.</p>

2015 Description	2016 Planned Action
15 In 2015, NY Sea Grant managed the Long Island Sound Study Facebook page. The page was developed in July 2010 to reach the LIS audience using social media. On January 1, 2015, there were 922 "likes," and on December 31, 2015, there were 1,215 "likes," an increase of 76 percent.	The Long Island Sound Study Facebook page will be maintained.
16 In 2015, NEIWPCC's Information Officer developed a stewardship signage proposal and vetted it with members of the Stewardship work group and Communications Team.	NEIWPCC's Information Officer is looking at working with the Public Involvement and Education Group to test Long Island Sound Stewardship signage at a couple of Stewardship Areas in New York and Connecticut.
17 In 2015, NEIWPCC's Information Officer produced two issues of its electronic newsletter, Sound Bytes. The newsletter presents brief articles about activities done by Long Island Sound Study and its partners as well as links to interesting websites about improving water quality. The newsletter is distributed to about 420 people.	NEIWPCC will continue to create and distribute Sound Bytes on a quarterly basis.
18 In 2015, NY Sea Grant produced a special publication using the LISS UPDATE newsletter budget. The publication included a Public Summary of the Comprehensive Conservation and Management Plan (CCMP). This document was distributed to 1,500 watershed residents via outreach events. This publication was also posted on the LISS website.	
19 The LISS New York Outreach Coordinator developed the volunteer Stewardship Day program in 2012 to promote stewardship among volunteers through the involvement in hands-on volunteer activities at LISS Stewardship Areas. New York Sea Grant worked closely with partners, including New York State Office of Parks, Recreation & Historic Preservation (NYSOPRHP), New York State Department of Environmental Conservation (NYSDEC), and others, to identify and arrange volunteer days that would allow volunteers to learn about the problems facing Long Island Sound, while making a difference by starting to tackle these problems. To date, 161 volunteers have been involved in the volunteer Stewardship Day program. In 2015, 2 volunteer Stewardship Days were conducted in New York. On May 30, 2015, 18 volunteers counted over 3,000 common tern nests at Great Gull Island, in the Plum and Gull Islands Stewardship Area, in partnership with the American Museum of Natural History, USFWS, and NYSDEC. On June 27, 2015, a total of 60 volunteers planted <i>Spartina alterniflora</i> at Sunken Meadow Park, in the Nissequogue River Stewardship Area, in partnership with NYSOPRHP, NYSDEC, Save the Sound, and USFWS.	The Stewardship Day program will continue in 2016.
20 LISS staff (NY Sea Grant and NYSDEC) continued the alewife	The alewife monitoring program will continue

**2015 Description****2016 Planned Action**

<p>monitoring citizen science program to actively engage volunteers in the monitoring of alewives/river herring along the north shore of Long Island. In 2015, two Long Island Sound alewife monitoring workshops were held at the Cold Spring Harbor Whaling Museum (March 2) and via webinar (March 31). To date, more than 50 volunteers have collected alewife monitoring data along the coast of Long Island Sound in NY.</p>	<p>in 2016 and will try to expand its reach to more communities along the north shore of Long Island.</p>
<p>21 Connecticut Sea Grant produced two issues of its magazine, Wrack Lines, in 2015. The magazine content covered topics such as seaweed bioextraction services in LIS, efforts to clean up water quality in Stonington, bird conservation on Great Gull Island, living shorelines, how healthy coastal forests and shorelines are linked to sustainable landscaping, assessing lawn care practices of CT residents, communicating coastal storm risk, the Connecticut Climate Adaptation Academy, urban habitat restoration, and ecosystem services in LIS.</p>	<p>Two additional issues will be produced in 2016, including one focused on Connecticut / Long Island Sound shellfish resources.</p>
<p>22 In 2015, the LISS New York Outreach Coordinator developed the Volunteer for the Sound e-newsletter. This monthly e-newsletter provides a listing of upcoming volunteer events in New York and Connecticut and also features a volunteer spotlight. There are approximately 600 subscribers. Current and previous issues of Volunteer for the Sound are available at: <a href="http://longislandsoundstudy.net/get-involved/lis-volunteer-opportunities/">http://longislandsoundstudy.net/get-involved/lis-volunteer-opportunities/</a>.</p>	<p>Continue e-newsletter distribution into 2016.</p>

**E-2. Promoting Understanding (CCMP Table 52, P.147)**

**Key Elements:** An important component of the public involvement and education priority of the CCMP is keeping the partner agencies and municipalities informed and abreast of LIS issues. It was the intent of the CCMP to have the states of Connecticut and New York incorporate LIS information into all related programs wherever possible. All coastal municipalities are to be provided with information on CCMP implementation and how it would affect their cities and towns. Additionally, the partners are to provide briefings to user groups and assess and support opportunities for training and educating the environmental decision making community and regulated community on LISS CCMP actions.

**2015 Description****2016 Planned Action**

<p>1 In 2015, LISS and its partners distributed the following press releases concerning LISS-related projects: - News Releases Nov. 25 - \$1.3 Million Awarded for Community-Based Projects To Improve Health and Ecosystem of Long Island Sound; Oct. 22 - EPA and Partners Release New Blueprint to Protect and Restore Long Island Sound; April 1 - Long Island Sound Study Award \$843,424 for Long Island Sound Research.</p>	<p>Continue to issue press releases as needed.</p>
<p>2 In 2015, NEIWPCC's Information Officer worked with Taylor Design, a Stamford-based graphic design firm, to produce LISS's website- <a href="http://www.longislandsoundstudy.net">www.longislandsoundstudy.net</a>. The website includes an archive of</p>	<p>Pages will continue to be redesigned, content will be revised, and new pages will be added, as needed.</p>

**2015 Description****2016 Planned Action**

<p>LISS's reports to the public, and sections on LISS's indicators, LISS's research grant program, the Futures Fund program, an atlas of LISS Stewardship Areas, information on how the public can engage in practices to reduce water quality pollutions as well as get involved in Long Island Sound volunteer activities. The information officer also worked with a multi-agency work group to develop an information section on the new Long Island Sound Sea Levels Affection Marshes Model (SLAMM), including developing three on-line user manuals. The website received several design awards when it was launched in 2010. In 2015, it was seen by 42,210 users who looked at 147,884 page views in 57,713.</p>	
<p>3 Connecticut Sea Grant continued its longtime co-sponsorship with the UCONN Department of Marine Science and Project Oceanology for the graduate student-led Taste, Touch and Smell of Science (TTSS) program for middle school age students. The program is designed to convey the graduate students' enthusiasm for science while introducing middle school students to the exciting world of marine science. TTSS gives children an affordable opportunity to explore and learn about the coastal processes that contribute to coastal ecosystems. At the same time, it has always been a goal of TTSS to expose graduate students to methods of educating the general public. Nineteen K-12 students participated in 2015, and 17 graduate students and two faculty members volunteered their time.</p>	<p>Connecticut Sea Grant will continue to consider requests for program support in 2016 and beyond.</p>
<p>4 In 2015, Connecticut Sea Grant and Project Oceanology served as co-regional coordinators for the Quahog Bowl, the southern New England regional bowl of the National Ocean Sciences Bowl. Sixteen teams of high school students from Connecticut and Rhode Island competed for the honor of representing their region at the national finals by answering questions related to a broad diversity of ocean and marine science related topics over the course of a day. The Quahog Bowl was held on the first Saturday in February 2015. The winning team, Coginchaug High School in Durham, CT, also won in 2014. The students then moved on to compete in the overall national competition.</p>	<p>The next Bowl is scheduled for Feb 2016.</p>
<p>5 NYSDEC Bureau of Marine Resources staff that are most heavily involved in LISS activities and coordination, distributed copies of the "Protection + Progress" and "Sound Health" publications to other NYSDEC staff including the commissioner and assistant commissioners with a memo describing LISS activities and NYSDEC's involvement. Additionally, copies were also made available to NYSDEC staff on Long Island.</p>	<p>Continue distributing publications to NYSDEC staff as they become available.</p>
<p>6 The New York Sea Grant Nonpoint Education for Municipal Officials Program (NYSG NEMO) continued to provide direct stormwater</p>	<p>Continue to deliver outreach and support designed to ensure integration of municipal</p>



2015 Description	2016 Planned Action
<p>management support to municipalities throughout Long Island. Of note, consultations, presentations, and/or workshops were provided to Long Island Sound communities, including the Nassau County Stormwater Coalition, the Towns of Oyster Bay and Southold, the Suffolk County Highway Superintendents Association, the Hempstead Harbor and Manhasset Bay Protection Committees, and to the Villages of Plandome Heights, Port Jefferson, and Russell Gardens. Further, NYSG NEMO continued to administer the "Phase II LI" listserve. Now reaching over 200 L.I. officials, "Phase II LI" has proven to be an effective means of leveraging expertise, technical resources, and information among municipalities.</p>	<p>PH II storm water management with advancement of LIS CMP objectives.</p>
<p>7 In 2015, NEIWPCC's Information Officer worked with the NOAA liaison to the Long Island Sound Study, and the LIS coordinators for NY and CT to updating LISS status and trends website, <a href="http://longislandsoundstudy.net/research-monitoring/long-island-sound-environmental-indicators/">http://longislandsoundstudy.net/research-monitoring/long-island-sound-environmental-indicators/</a>. The team holds monthly conference calls to update about 50 indicators.</p>	<p>Indicators will continue to be updated. The NOAA liaison will be replaced by Long Island Sound Study's new Science Coordinator.</p>
<p>8 In 2015, NEIWPCC's Information Officer produced two issues of the electronic newsletter, Sound Bytes. The newsletter presents brief articles about activities done by Long Island Sound Study and its partners as well as links to interesting websites about improving water quality. The newsletter is distributed to about 420 people.</p>	<p>NEIWPCC will continue to produce and distribute Sound Bytes on a quarterly basis.</p>
<p>9 In 2015, NEIWPCC's Information Officer worked with the habitat restoration coordinators of NY and CT and Taylor Design and its software contractor to redesign of the habitat restoration database. The redesign was supposed to be completed in 2014, but has been delayed after the coordinators found errors during the testing phase. The purpose of the upgrade is to improve reporting of habitat restoration sites and improve the design so it could become a useful public education resource on the Study's website. Database functionality was completed in October. The coordinators continued the task of adding completed restoration projects to the database.</p>	<p>The database was added to the LISS website in January. All New York projects are in the dataabase. The work to add Connecticut projects still needs to be completed.</p>
<p>10 In 2015, NEIWPCC's Information Officer responded to more than 100 emails from citizens posting questions and comments on LISS's feedback form on the LISS website.</p>	<p>Continue to respond to website emails.</p>
<p>11 In 2015, NEIWPCC's Information Officer worked with the LISS art director to design and produce the revised Comprehensive Conservation and Management Plan. LISS printed 500 copies of the report, of which 300 were distributed to LISS stakeholders. NEIWPCC's information officer developed web pages for the CCMP as well and</p>	<p>The Information Officer will continue to distribute copies of the report, and to enhance the CCMP website pages.</p>

**2015 Description****2016 Planned Action**

<p>worked with an interagency work group on a social media campaign in October and November to publicize the release of the rept.</p>	
<p>12 In June 2003, the Long Island Sound Study sponsored a workshop, developed by the New York State Department of Environmental Conservation (NYSDEC), for researchers to discuss and share information regarding the possible causes of tidal marsh loss in Long Island Sound. The goal of the workshop was to develop research, monitoring, and management recommendations. The participants highlighted the need to gather baseline information on the health and spatial distribution of the Sound's marshes and identified priority research topics. The Long Island Sound Study (LISS) is helping to address these recommendations by supporting projects to examine coastal wetland trends in the Sound and to investigate potential causes of the observed subsidence.</p> <p>On October 22-23, 2014, over 60 people attended a follow-up Long Island Sound Tidal Wetlands Loss Workshop at Danfords Hotel and Marina in Port Jefferson, NY. The goal of the 2014 workshop was to have an engaging learning experience and discussion amongst leading edge marsh managers, researchers, practitioners, and regulators regarding tidal wetland loss and change in Long Island Sound and the region. The workshop intended to provide the attendees with an update on post-2003 funded research. It also intended to expand the discussion to consider other wetland losses and changes, how to manage and monitor loss, and identify the role of climate change. Finally, the workshop was intended to serve as a forum to inform scientists and managers about what research and monitoring tells us about tidal marsh health. A webpage from this workshop was developed by New York Sea Grant and is located on the LISS website: <a href="http://longislandsoundstudy.net/issues-actions/habitat-quality/2014-lis-twl-wksp/">http://longislandsoundstudy.net/issues-actions/habitat-quality/2014-lis-twl-wksp/</a></p> <p>A Sound Update newsletter on the presentations from the workshop was published and distributed in 2015.</p>	
<p>13 In 2015, NEIWPCC's Information Officer worked with an interagency work group to created a climate change website to help Long Island Sound residents, educators, and municipal officials learn more about climate change issues that can impact Long Island Sound. Climate Change in Long Island Sound: A Long Island Sound Resource Guide, at <a href="http://www.lissclimatechange.net">www.lissclimatechange.net</a>, is divided into four sections: What You Should Know – a primer on key concepts about climate change as well as access to web resources, including indicators of climate change in Long Island Sound; Town and City Resources – a portal providing links to what communities are doing to adapt to climate change and reduce greenhouse emissions, including cases studies from five Long Island Sound communities; Science and Monitoring – examples of research and monitoring being conducted in Long Island Sound; Educators' Toolbox – Resources for teaching about Earth's climate system and the changing climate, including "Science Spotlights" of local scientists conducting climate change research, and highlights of a teachers'</p>	<p>The information officer will maintain the site and consult with the work group on a semi-annual basis to review and update the site as needed.</p>

**2015 Description****2016 Planned Action**

workshop on climate change (note: we hope to work with scientists as well as other resource managers to include more "spotlights" and other features in the future).

- 14 In 2015, LISS (NY Sea Grant and NYSDEC) held a workshop for 45 biologists and engineers on fish passage design, installation, and maintenance. The workshop was held on July 9-10, 2015 at Hofstra University in Hempstead, NY. The workshop was organized by LISS, the Peconic Estuary Program, and the USFWS. The success of this workshop was featured on EPA's Greening the Apple blog (<https://blog.epa.gov/blog/2015/08/2015-long-island-fish-passage-workshop/>) and NEIWPCC's Interstate Water Report September 2015 newsletter (<https://www.neiwpcc.org/iwr/iwr-docs/current-iwr.pdf>).

### **E-3. Facilitating Public Participation (CCMP Table 53, P.148)**

Key Elements: The intent of the CCMP in terms of public participation is that "the public must be involved in setting policy for the sound ... As well as participating in the cleanup of the sound through hands-on activities." the LISS partners are to provide financial and technical support for such activities as beach cleanups, habitat restoration projects, and storm drain stenciling. The EPA and states of Connecticut and New York are to promote citizen involvement in educational and volunteer monitoring activities in and around the sound and providing technical assistance as needed.

**2015 Description****2016 Planned Action**

- |   |   |
|---|---|
| <p>1 As of 2015, the Long Island Sound Futures Fund supported 5 small grants projects totaling \$46,707 to raise public awareness and participation through education and outreach projects. These projects include Citizens Campaign for the Environment's Don't Flush Your Drugs Educational Campaign, Connecticut Fund for the Environment's Coastal Cleanup Program, Norwalk Seaport Association's Sheffield Island Park Interpretative Signage, City of Norwich Harbor Management Commission's Norwich Harbor Canoe and Kayak Trail, and Alley Pond Environmental Center's National Estuary Day Celebration.</p> | <p>The LISS Small Grants program will continue in 2016.</p>   |
| <p>2 LISS staff updated its "Get Involved" webpage <a href="http://www.longislandsoundstudy.net/volunteer.htm">http://www.longislandsoundstudy.net/volunteer.htm</a> that lists the contact information for and links to the websites of 43 NY-based, 32 CT-based, and five upper-basin state organizations that are in need of volunteers.</p>   | <p>NEIWPCC requested funding for website maintenance that will include improving the Get Involved webpage to make it easier to enter information and to improve the design.</p> |
| <p>3 The Citizens Advisory Committee met four times in 2015, including one joint meeting with the LISS Science and Technical Advisory Committee. Key issues included discussions and work on the Comprehensive Conservation and Management Plan (CCMP) for Long Island Sound, completed in 2015, discussion on the LIS Blue Plan, National Estuary Bill, and the LIS Report Card. The CAC Policy Committee continues to</p>   | <p>Meetings will be held in March, June, September and December 2016 to identify and address issues concerning LIS and CCMP implementation.</p>                                 |

**2015 Description****2016 Planned Action**

advocate for federal appropriations on behalf of LIS, and in April members visited Washington D.C. where they discussed clean water funding, MS4s, green infrastructure, microbeads, the LIS Blue Plan and Economic study, and protection for Plum Island with legislators. Presentations throughout the year to the CAC included multiple topics: Sewer Infrastructure, Microbeads Scientific Research and Advocacy efforts, the Draft Dredge Material Management Plan, Summer Water Quality Monitoring Season Recap, and the Correlation of Hypoxia and Ocean Acidification and Impacts to Marine Life.

- 4 The CT LISS Outreach Coordinator organized two public meetings on the draft revised Comprehensive Conservation and Management Plan in 2015, which drew 40 people.

### **E-4. Increase Communication and Cooperation (CCMP Table 54, P.150)**

**Key Elements:** The CCMP commissioned the states of Connecticut and New York and EPA, in combination with a management conference public outreach workgroup, to help coordinate ongoing governmental and non-governmental public outreach efforts. During the CCMP implementation phase, and thereafter, the partners are to encourage private and non-profit groups to continue to develop and implement LIS educational and outreach programs.

**2015 Description****2016 Planned Action**

- 1 LISS outreach staff continued to provide technical information and resources (about LIS and LISS CCMP actions) to state and local agency staff and to other state and federal agency partners to facilitate cooperation and outreach with each other and the public at large. For example: CTDEP/LISS staff participated in and staffed a Long Island Sound display at the third annual Connecticut Conference of Natural Resources and to CTDEP Water Bureau staff in Hartford.

Staff will continue to make LIS information available to all state, local and federal partners and work with CT Sea Grant LISS Outreach staff.

- 2 LISS Staff (NY Sea Grant and NYSDEC) are participating in EPA Region 2's Trash-Free Waters Partnership. Amy Mandelbaum is participating in the microplastics work group, while Cassandra Bauer is participating in the boxes work group. Partnership meetings were held at EPA Region 2 Headquarters in NYC. Work group conference calls were also held.

Attend partnership and work group meetings in 2016 and participate in projects when appropriate.

### **E-5. Enhance Education at All Levels (CCMP Table 55, P.151)**

**Key Elements:** A key objective for the LISS involvement and education program is to develop, among the citizens of CT and NY, a long-term sense of environmental appreciation for and understanding of the sound by enhancing educational opportunities at all age levels. The states of Connecticut and New York are to work with appropriate school districts in their respective states to develop Long Island Sound educational materials to integrate into existing primary and secondary school curricula. The partners are to encourage natural history museums and nature

centers to promote LIS issues within their programs and provide support for teacher training and workshops integrating LIS issues.

2015 Description	2016 Planned Action
<p>1 Connecticut continued to facilitate the LIS Mentor Teacher Program with LISS funding in 2015. Two LISMT workshops were held:            Integrate Long Island Sound into Your Curriculum. (Ken Fusco and Leanne Nolan; Hammonasset Beach State Park, Madison, CT) September 19, 2015 (Grades 7-12) 5 teachers from 4 school districts – 544 students reached            Seine the Sound with Next Generation Science Standards. (Donna Rand and Donna DuBaldo; Hammonasset Beach State Park, Madison, CT) September 21, 2015 (K-8) 11 teachers from 7 school districts – 589 students reached</p>	<p>Conduct additional LISMT workshops in Connecticut in 2016.</p>
<p>2 NY Sea Grant, as a member of the Executive board of the NYS Marine Education Association (NYSMEA), distributed new LISS materials to members and kept them informed of LISS activities. Staff attended numerous meetings and maintained the NYSMEA Web site. NYSG staff also helped to compile a newsletter that is distributed to NYSMEA members.</p>	<p>Staff will continue on the Board and distribute information. The NYSMEA website (<a href="http://www.nysmea.org/">http://www.nysmea.org/</a>) will continue to be maintained by New York Sea Grant.</p>
<p>3 The NY Sea Grant program continued the LIS Mentor Teacher Program with LISS funding. In 2015, two LISMT workshops were held at Stewardship Areas in New York: October 3 - Long Island Sound Past, Present, and Future at Edith G. Read Wildlife Sanctuary, Rye, and The Maritime Aquarium at Norwalk, Norwalk, CT, and October 17 - Geosciences Outdoor Research Program at Wildwood State Park, Wading River. A total of 31 formal and informal educators participated in the workshops, reaching over 7,749 students.</p>	<p>Received funding to continue LIS Mentor Teacher program in NY for 2016-2017. As such, two workshops will be held in 2016-2017.</p>
<p>4 The Communications Coordinator worked with Jason Krumholz, NOAA liaison to the Long Island Sound Study, to develop a science blog called "Ask. Dr. K"</p>	
<p>5 NY Sea Grant conducted a "Climate Change and the Long Island Sound Estuary" teacher professional development workshop on October 2, 2014 at Alley Pond Environmental Center in Douglaston, Queens, NY. At this workshop, sponsored by NY Sea Grant, Long Island Sound Study, and New York State Marine Education Association, the attendees learned about the salt marsh at Alley Pond Park and how it plays an important role in reducing climate change, by sequestering and storing carbon. Speakers included educators at Alley Pond Environmental Center as well as Jason Krumholz, the NOAA Liaison to the Long Island Sound Study. The attendees learned how to incorporate the carbon cycle and other climate science concepts into their curricula and were tasked to complete a climate change activity with their students within three months of the workshop. The teacher workshop</p>	

**2015 Description****2016 Planned Action**

engaged 12 New York City Department of Education (NYCDOE) teachers in the teaching of climate change and how it can be incorporated into the classroom, reaching over 1,600 students. As a result of attending the teacher workshop, three NYCDOE teachers reported that they incorporated the teaching of climate change into their classrooms. These teachers reached approximately 450 students. According to one of the teachers, "my students really enjoyed learning about climate change and the impact that they have on it. They were engaged in the activity and all put thought and effort into their [carbon footprint reduction] pledges. I plan on re-visiting the pledges in the spring time and evaluating how their commitments are going." In 2015, this workshop was featured on the LISS climate change website: <http://lissclimatechange.net/climate-change-and-the-long-island-sound-estuary-teacher-workshop/>

### **E-6. Secure Funding for Public Involvement and Education Activities (CCMP Table 56, P.152)**

Key Elements: Connecticut, New York and the EPA are to publicize grant opportunities whenever possible and to encourage all organizations associated with the public involvement and education effort, both governmental and non-governmental, to take advantage of the various grant programs available that provide funding for educational activities and products. Private sector funding should also be sought when and wherever possible and identify other grant programs for which LIS projects would be eligible.

**2015 Description****2016 Planned Action**

- 1 The LISS posts announcements on its website homepage and grants section, and in its newsletters on funding opportunities within the larger Long Island Sound community. Links to Requests for Proposals are provided at <http://www.longislandsoundstudy.net>.

Continue to post notices of funding opportunities as appropriate.

- 2 NYS Environmental Facilities Corporation posts information about grants they administer, in particular the Clean Vessel Assistance Program, on its website: <http://www.nysefc.org/home/index.asp>

Continue posting CVAP opportunities.

- 3 NYSDEC posts grant opportunities through the department on a public website: <http://www.dec.ny.gov/pubs/grants.html> This site lists the various grants and gives application instructions.