LONG ISLAND SOUND PARTNERSHIP
STEWARDSHIP AREA

Long Island Sound Stewardship Strategy:

Supporting the Long Island Sound Stewardship Initiative

June 4, 2025

FINAL

Contents

Acknowledgements

The U.S. Environmental Protection Agency Long Island Sound Office and Long Island Sound Partnership would like to thank site managers who participated in discussions about their challenges, needs, and priorities, attendees of the meeting series, and those who provided comments and feedback during the public comment period. Additionally, a thank you to those who worked on the development of the Stewardship Initiative and the Long Island Sound Stewardship Act of 2006.

Summary

In 2006, after years of effort by the Long Island Sound Partnership Stewardship Work Group (now the Thriving Habitats and Abundant Wildlife Work Group) and its partners, the Long Island Sound Stewardship Initiative was formally established by Congress to help protect the diverse plants and animals that live in or near the estuary. The 33 inaugural Stewardship Areas, 17 in Connecticut and 16 in New York, each anchored by a specific site or multiple sites, are areas of land and water with outstanding or exemplary scientific, educational, or biological value for protection, management or acquisition. While the Long Island Sound Partnership recognizes the importance of these areas, there has not been extensive focus on leveraging the potential strength of this network of Stewardship Areas. By developing a network, the Long Island Sound Partnership and Stewardship Area managers and their partners can work together to strengthen partnerships and address site-specific challenges, needs, and priorities to better protect and restore the Sound. The development of the Stewardship Strategy lays the foundation for building this network by summarizing the site-specific challenges, needs, and priorities at each of the 33 Stewardship Areas, identifying approaches to enhance the collaboration and communication among the managers and partners, and establishing a framework for action to support key priorities and address existing challenges and needs.

Introduction

The first Comprehensive Conservation and Management Plan (CCMP), in 1994, highlighted six main priorities, including living resources and habitat management. To address this priority, the CCMP called for identifying areas of land and water of outstanding or exemplary scientific, educational, or biological value for protection, management or acquisition. In 2000, the Long Island Sound Partnership Stewardship Work Group (now the Thriving Habitats and Abundant Wildlife Work Group) was tasked to move this action forward.

The 2003 Long Island Sound Agreement formally kicked off a Stewardship Initiative to identify specific areas, defined as a "reserve system", in the Long Island Sound watershed having exemplary ecological or recreational values. The Stewardship Initiative outlined five specific goals: 1. Preserve native plant and animal communities and unique habitat types; 2. Improve recreation and public access opportunities; 3. Protect threatened and endangered species in their natural habitats; 4. Preserve sites that are important for long-term scientific research and education; and 5. Promote efforts to plan for multiple uses.

The work group implemented a two-step process, involving public feedback through listening sessions and input from state resource experts, to identify potential anchor sites (parcel-specific locations that represent the values or features for which that area is being highlighted) along the Long Island Sound. Through these discussions, criteria and attributes were categorized into the following: public access to the water, recreational and conservation need, water resources protection, and open space. To assist with designation, U.S. Fish and Wildlife Service (USFWS) and Regional Plan Association (RPA) further refined the criteria to help with the prioritization of sites based on ecological and recreational resources. For recreational resources, the following activities were identified:

- fishing access
- sandy beach swimming areas
- boating access
- outdoor education centers
- hunting, camping or wildlife viewing
- trails/greenways
- recreational shellfishing
- urban/cultural/historic resources

For ecological resources, the following site types were identified:

- Exemplary Sites: sites that are representative of a natural habitat type or ecosystem typical to the Long Island Sound area and that are in good condition (i.e., not degraded). These sites are to include high species productivity, concentration, and/or areas of unusually high biological diversity.
- Outstanding Sites: sites that contain examples of unique or rare habitats or ecosystems (e.g., unditched tidal marshes, secondary dunes). They may either be unique to the Sound or rare in a regional landscape context.
- Research/Educational Sites: sites where either baseline research has occurred that is worthy of continuing (e.g., Barn Island with over 50 years of continuous research) or sites that have intrinsic value (e.g. unditched tidal wetlands) for the conduct of long-term research.
- Rare Species Habitat Sites: sites that provide habitat for a Federal or State-listed threatened or endangered species. They may provide habitat for an assemblage of rare species or for an unusually high concentration of a single rare species.

With these criteria, sites were ranked based on the number of ecological or recreational categories that applied, and the number of patrons served. The work group identified 33 areas or boundaries, 17 in Connecticut and 16 in New York, each anchored by a specific site or multiple sites in public ownership identified by the work group (Figure 1, see the Stewardship Area Atlas for more information). On September 28, 2006, the Long Island Sound Partnership Policy Committee endorsed the Stewardship Initiative, designating 33 inaugural Stewardship Areas.

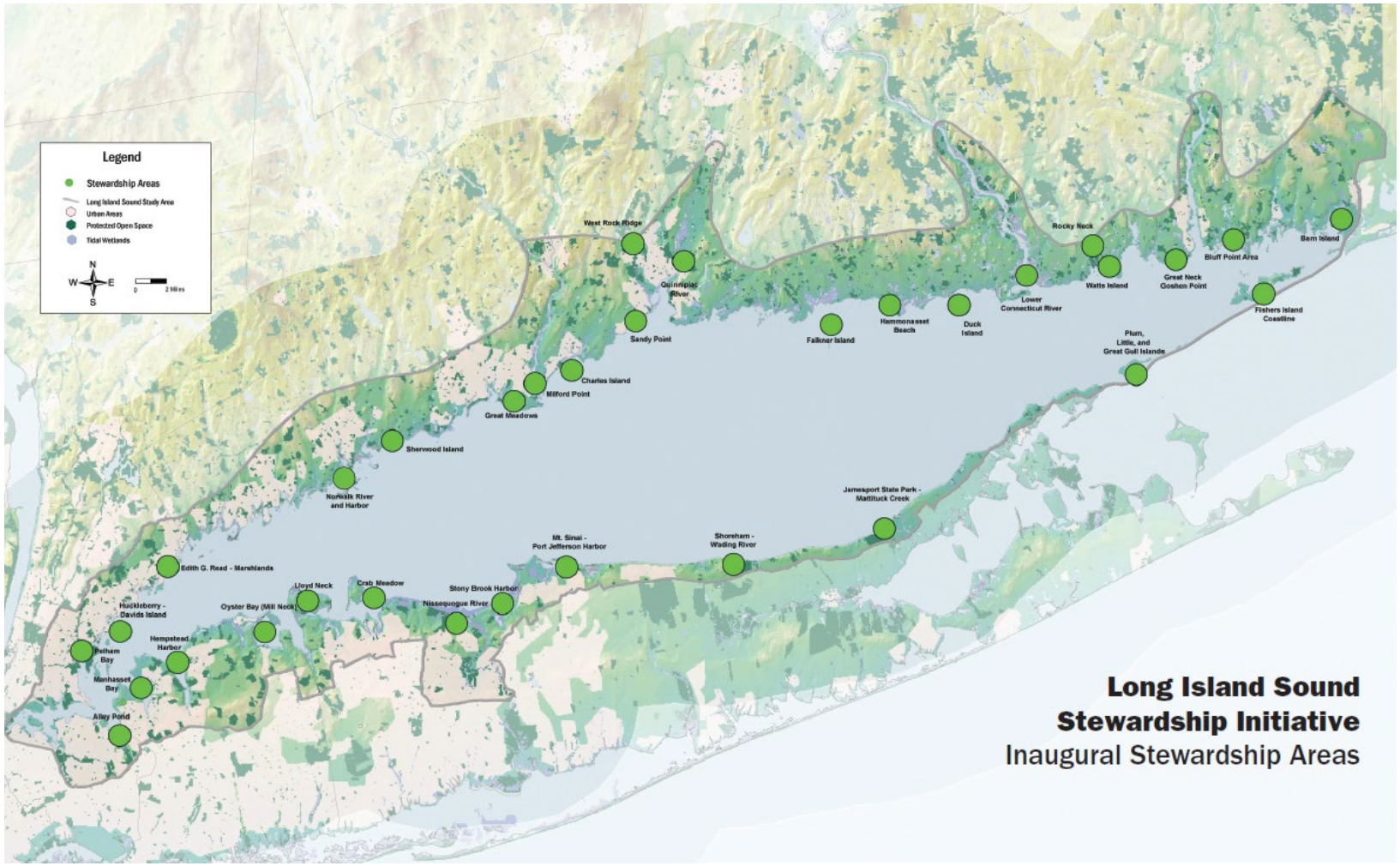
Later that year, Congress formalized the Stewardship Initiative through passage of the Long Island Sound Stewardship Act of 2006, authorizing up to $25 million dollars per year to "identify, protect, and enhance upland sites within the Long Island Sound ecosystem with significant ecological, educational, open space, public access, or recreational value through a bi-State network of sites best exemplifying these values." This act defined stewardship as land acquisition, land conservation agreements, site planning, plan implementation, land and habitat management, public access improvements, site monitoring, and other activities designed to enhance and preserve natural resource-based recreation and ecological functions of upland areas.

The Long Island Sound Partnership has made it a priority to provide support to implement the Stewardship Initiative. The Partnership has been active in assisting states and municipalities with acquiring lands near designated areas (as well as other Long Island Sound natural areas) to protect wildlife and habitats from encroaching development. Additionally, through the Long Island Sound Futures Fund, managed by National Fish and Wildlife Foundation and supported by Long Island Sound Partnership, site managers and their partners have developed conservation plans and implemented stewardship projects. Since the establishment of the grant program in 2005, the Long Island Sound Partnership has invested in 100 projects totaling $12 million within the Stewardship Areas. See Investments and Success Stories for more details.

Each of the Stewardship Areas are unique and incredibly important to Long Island Sound and its residents and visitors. Out of the 33 Stewardship Areas, 64 percent (21 areas) are publicly accessible, 21 percent (7 areas) are a mix of public and private property, and 18 percent (6 areas) are not publicly accessible (or can only be accessed by boat). Paired with this uniqueness are site-specific challenges, needs, and priorities. While the Long Island Sound Partnership recognizes the importance of these areas, there has not been extensive focus on leveraging the potential strength of this network of Stewardship Areas. The 2025 CCMP, under the Thriving Habitats and Abundant Wildlife's Conserved Open Space Objective, memorializes this need under Action THAW 4-2, i*ncrease access and enhance sustainable stewardship of conserved lands particularly for distressed communities*, where the partnership describes the intent to develop a Stewardship Strategy to better connect the network of Stewardship Areas. Developing this strategy will not only progress this objective and action, but also implement other objectives and actions (see Results).

By developing a network, the Long Island Sound Partnership and Stewardship Area managers and their partners can work together to strengthen partnerships and address site-specific challenges, needs, and priorities to better protect and restore the Sound. The development of the Stewardship Strategy lays the foundation for building this network by summarizing the site-specific challenges, needs, and priorities at each of the 33 Stewardship Areas, identifying approaches to enhance the collaboration and communication among the managers and partners, and establishing a framework for action to support key priorities and address existing challenges and needs.

Figure 1. Map showing the location of the 33 Stewardship Areas designated in 2006.



Methodology

To identify the site-specific challenges, needs, and priorities at each of the 33 Stewardship Areas, the Long Island Sound Partnership identified contacts, based on site ownership, for each area, which are the site managers of anchor sites. If an area included multiple site owners, each entity was contacted and asked if they would like to participate in the discussion. Staff discussed with each contact the challenges the sites faced in relation to resource protection and interacting with the public, priorities to address these issues, and any projects or progress made. Following discussions with the site managers, staff identified common themes from discussions and aligned these themes in relation to the 2025 CCMP goals: Clean Waters and Healthy Watersheds, Thriving Habitats and Abundant Wildlife, Sustainable and Resilient Communities, and Informed and Engaged Public. Each common theme also includes specific examples to emphasize the uniqueness of each area. In addition to discussions with managers, the U.S. Environmental Protection Agency Long Island Sound Office hosted a series of three public meetings to present the draft strategy, obtain feedback from site managers, partners, and the public, provide a platform for information sharing, and identify what the Stewardship Network will look like following the publication of the strategy. There was also a 60-day public comment period from March 10 to May 9, 2025.

Results

There were discussions with 25, out of the 33, Stewardship Area managers and partners. These sites include: Barn Island, Bluff Point, Charles Island, Duck Island, Falkner Island, Great Meadows, Great Neck, Lower Connecticut River, Milford Point and Wheeler Marsh, Norwalk Islands, Pattagansett Marshes and Watts Island, Quinnipiac River, Rocky Neck, Sandy Point, and Sherwood Island in Connecticut; and Edith G. Read and Marshlands, Fishers Island, Great Gull Island, Hallock State Park Preserve and Mattituck State Tidal Wetlands, Hempstead Harbor, Lloyd Neck, Manhasset Bay, Nissequogue River, Oyster Bay, and Stony Brook Harbor in New York (see Appendix B for Stewardship Areas not included in discussions). The following sections summarize the discussions had with the anchor site managers and partners: challenges and needs, priorities for future funding, and investments and success stories. Each discussion section is summarized by 2025 CCMP goal to establish clear connections as the Stewardship Strategy acts as a vehicle to help implement and achieve goals. Each goal has objectives which are aspirational outcomes to be achieved by 2035.

Challenges and Needs

During discussions with site managers, 11 out of the 15 objectives were identified to be relevant to the Stewardship Areas and their anchor sites (Table 1). Under each goal, these connections are summarized followed by specific areas of interests and site-specific examples identified (Figure 2). Additionally, for each challenge and need, potential funding mechanisms are identified that can be explored by site managers and partners.

Table 1. A list of the 2025 Comprehensive Conservation and Management Plan's Goals and Objectives and their connections to the Stewardship Areas (e.g., site managers who mentioned challenges and needs that overlap with the objectives).

Goal	Objective	Stewardship Area Connections
Clean Waters and Healthy Watersheds	Nutrients	3
	Pathogens	4
	Toxic Contaminants	4
	Marine Debris	3
Thriving Habitats and Abundant Wildlife	Coastal Habitat	12
	Habitat Connectivity	14
	Conserved Open Space	13
Sustainable and Resilient Communities	Resilience Initiative Implementation	9
Informed and Engaged Public	Public Access and Sense of Belonging	13
	Education and Environmental Literacy	5
	Fostering Sustainable Behaviors	17

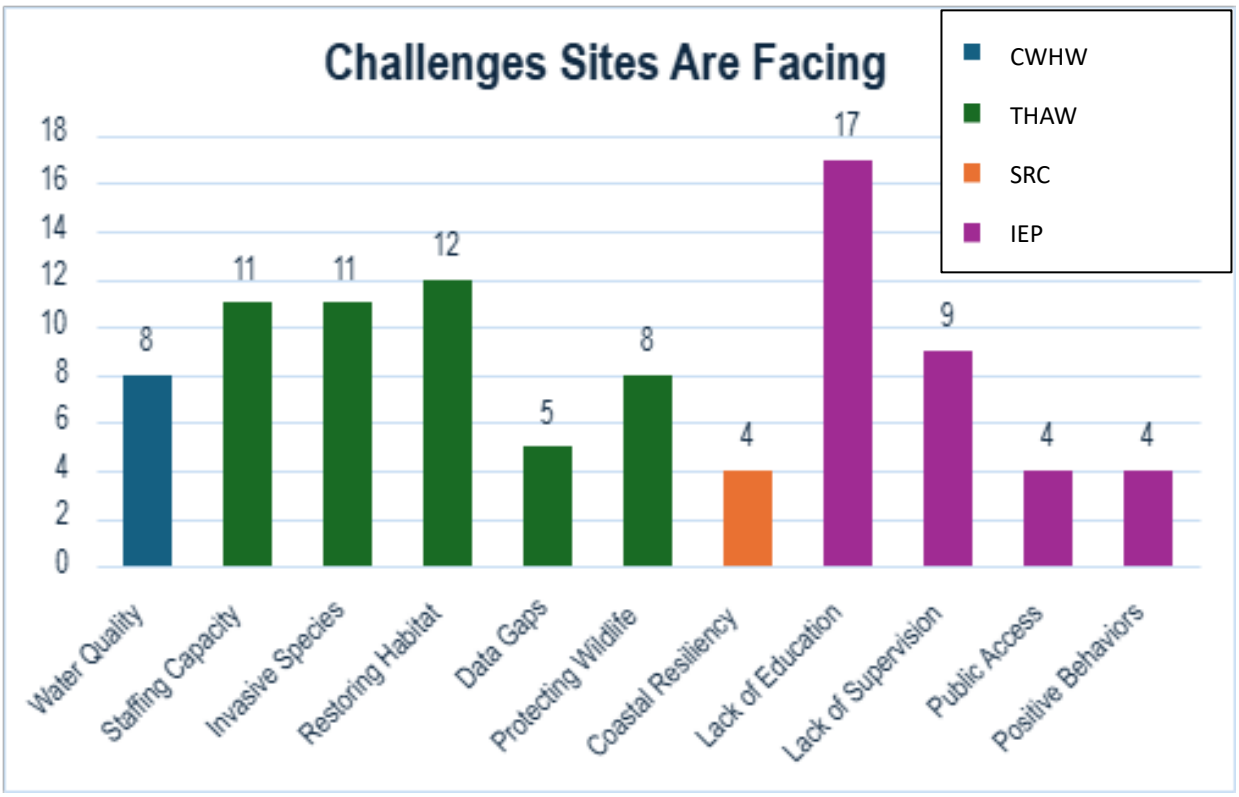


Figure 2. Number of site managers that highlighted common challenges at their Stewardship Area categorized by 2025 Comprehensive Conservation and Management Plan Goal: 1) Clean Waters and Healthy Watersheds (CWHW), Thriving Habitats and Abundant Wildlife (THAW), Sustainable and Resilient Communities (SRC), and Informed and Engaged Public (IEP).

Clean Waters and Healthy Watersheds

Under the Clean Waters and Healthy Watersheds goal there were four objectives identified: Pathogens, Nutrients, Marine Debris and Toxic Contaminants. The objectives in this goal aim to reduce pathogens, nutrients, marine debris and quantify reductions of toxic contaminants in sediment. Four managers identified Pathogens and Toxic Contaminants, while three identified Marine Debris and Nutrients. Many of these challenges impact not only water quality and habitat but public access, as seen at Rocky Neck State Park, in Connecticut, where there are beach closures due to ongoing pathogen issues. In addition to pathogens, nutrients were mentioned as an issue, mainly when discussing increased runoff due to the increase in heavy precipitation and flooding. For example, in New York, Oyster Bay's stormwater is managed through a municipal separate storm sewer system (MS4), as is common of many communities outside of New York City, and increased precipitation can impact the MS4 system's ability to handle and treat stormwater runoff which can lead to negative impacts to surface water quality. Marine debris was identified as an issue at several sites, which is also memorialized as a public concern in the 2024 Public Perception Survey.

The following areas of interest were identified by site managers:

Improving water quality. Eight managers mentioned concerns about water quality. Water quality issues can impact both resource protection (attributing to habitat degradation) and public use. For example, at Rocky Neck State Park in Connecticut, only a portion of the beach is open for swimming due to water quality impairments. This is a challenge as the managers do not have the resources to identify the causes of the impairment. Some managers attributed causes due to nutrient loading from local septic systems, sewage treatment plants, and runoff via increased impervious sources. More specifically, managers recognized that increased frequency and duration of weather events, like storms, amplifies runoff issues. Excess nutrient loading also contributes to acidification, the process of the water becoming more acidic and thereby impacting fauna (e.g., shellfish). Others identified habitat degradation (e.g., decaying plant matter) as a contributor as excess organic matter that can cause harmful algal blooms and/or hypoxic conditions (i.e., low dissolved oxygen). Additionally, marine debris was mentioned as a challenge as more frequent maintenance and restoration is needed to keep up with public usage. This need can be addressed through the following Long Island Sound Partnership-supported grant programs: Long Island Sound Futures Fund, New York State Department of Conservation's Septic System Replacement Program, and New York State Department of Conservation's Water Quality Improvement Projects.

Thriving Habitats and Abundant Wildlife

The Thriving Habitats and Abundant Wildlife goal had three objectives identified: Coastal Habitat, Habitat Connectivity, and Conserved Open Space. The objectives in this goal seek to increase the number of acres conserved, reconnect fragmented habitats, and overall improve the health of coastal habitats. The essence of the Coastal Habitat, mentioned by 12 managers, was mainly captured in discussions about invasive species management, which most of the sites are working to combat, specifically *Phragmites*. Habitat connectivity was the most identified, coming up in 14 discussions. Many managers acknowledge the degradation of habitats due to issues like sea level rise and erosion leading to fractured habitats for both plants and animals alike. Conserved Open Space, which was identified in 13 discussions, has elements of conservation and the public like public access and sense of belonging. This objective was captured through the ideas of land conservation plans and protecting land from being developed, mainly through acquisitions. Erosion and hardened shorelines were a concern at multiple

sites, such as Sunken Meadow State Park in New York and Sherwood Island State Park in Connecticut. Protecting and restoring resources is crucial to sustain a healthy ecosystem and Long Island Sound.

The following areas of interest were identified by site managers:

Ensuring adequate staffing capacity. Eleven managers highlighted that their ability to effectively protect resources is limited by staffing capacity. Staffing these sites adequately is important for site management as this task encompasses many different activities. For example, managers described the inability to effectively manage as they cannot simultaneously complete various tasks, such as: monitoring habitat and wildlife, maintaining habitat and facilities, and supervising and regulating public usage. More specifically, managers have emphasized that the lack of supervision has led to illegal hunting and fishing activities. Active management, supported by staffing, is essential to the longevity and productivity of these sites. As of right now, there is no existing Long Island Sound Partnership supported program that can support this need. Other sources may include, but are not limited to, state programs, private institutions, or donations.

Removing and managing invasive species. Eleven managers highlighted their challenges managing invasive species. The species mentioned in these discussions include, but are not limited to *Phragmites*, tree of heaven, swallow wart, porcelain berry, water chestnut, spotted lantern flies, and deer. The most common species mentioned was *Phragmites* or common reed – an invasive found in tidal wetlands. *Phragmites* growth outcompetes native marsh species, like *Spartina alterniflora* or smooth cordgrass, the dominant marsh species found in Long Island Sound, leading to degradation and decline of wetland habitat. Some managers highlighted that even after eradicating invasives, *Phragmites'* roots will persist allowing growth in subsequent years. Additionally, warmer summer temperatures facilitate the spread of invasives and diseases. Furthermore, historic uses may leave long-lasting impacts on these sites. For example, Nissequogue River State Park, formerly Kings Park Psychiatric Center in New York, struggles with controlling non-native invasive plants that were planted to make the area more attractive following the closing of the Center in 1996. Many managers are actively removing and managing invasive species and planting native species at these sites; however, there are significant challenges to maximizing success. One example of a site-specific challenge is seen at Fishers Island in New York, a community mostly resided by seasonal residents. Site managers have indicated that native plantings with the community is difficult as there is a short window (summer months) for implementation. This time barrier inhibits real success in increasing native species at the site. Moreover, other managers highlighted the need for proper management plans to control the invasives and therefore maximize effectiveness of restoration efforts. This need can be addressed through the following grant programs: Long Island Sound Futures Fund, and Long Island Sound Community Impact Fund.

Restoring and protecting important habitat. Twelve managers recognized the challenges associated with continuous habitat degradation and loss. When discussed, most managers identified the major mechanism attributing to habitat degradation and loss as erosion, caused and amplified by natural (e.g., major weather events, wave action, strong tides) and anthropogenic (e.g., hardened structures) impacts. Another factor amplifying the impacts of erosion is the improper use or overuse of these sites by the public. Some patrons do not understand the implications of their actions (e.g., walking on dunes, cutting through designated trails) on the protection of habitats. Another habitat degradation and loss mechanism identified is rising sea levels. Sea level rise inundates the marshes, attributing to loss and drives the habitat more inland forcing marsh migration. It is important to the site managers to protect

upland areas to allow for marsh migration as they are an essential habitat. Other mechanisms mentioned include, but are not limited to, increased frequency and duration of weather events (e.g., storms, fires) and flooding (which is influenced by storms and sea level rise). It is important to recognize that many of these mechanisms identified are occurring simultaneously at the sites. Multi-stressors, including sea level rise, erosion, nutrient runoff, shoreline infrastructure, boat activity, and public overuse, may lead to detrimental impacts on habitats and wildlife. This need can be addressed through the following grant programs: Long Island Sound Futures Fund, and Long Island Sound Community Impact Fund.

Filling in data gaps through monitoring and research. Five managers emphasized the need for active monitoring and research to address data gaps. By addressing data gaps, managers would be able to protect their sites more efficiently as more informed decision-making leads to cost-effective implementation. Some of these data gaps include, but are not limited to, monitoring related to invasive species, fish and wildlife (i.e., abundance and extent), coastal habitat (i.e., drivers of loss), and water quality (i.e., sediment contamination). More specifically, multiple sites would benefit from studies to better understand marsh losses as it is a complex issue. Drivers of marsh loss are important to understand so that more cost-effective and productive solutions (i.e., restoration) can be developed. For example, at Rocky Neck State Park in Connecticut, site managers and partners have made significant investments to understand the drivers of marsh degradation. These studies have led to their more recent work sampling sediment as pH levels may be the possible mechanism influencing marsh degradation. This example is highlighted as degradation is typically associated with erosion, sea level rise, and invasives, but in some cases, it is important to conduct in-depth analyses, including sediment and plant biomass samples, to identify key drivers of the system. Finally, there are many existing regional tools and information available to the managers and practitioners, however, understanding the uses and applicability of these tools at a site-specific level would be incredibly helpful. This need can be addressed through the following grant programs: Long Island Sound Research Grant Program.

Protecting important wildlife. Eight managers discussed the challenges associated with protecting wildlife. Some wildlife mentioned include, but are not limited to, shorebirds (e.g., piping plovers) and seabirds (e.g., roseate and least terns), long-legged waterbirds, ospreys, bald eagles, alewives, and monarch butterflies. These species are also known as Species of Greatest Conservation Need meaning species identified as needing conservation action by the federal, state, and/or local governments. Protecting these species is a challenge as some patrons do not understand the implications of their actions (e.g., walking dogs, fishing hotspots). For example, disruptive human activities may impact migrating, nesting, and breeding of these species. Some shorebird and seabird species only migrate to very few locations in Long Island Sound and therefore makes this issue even more prominent. Additionally, habitat and water quality degradation can lead to community shifts of the wildlife. For example, at Flax Pond State Tidal Wetlands and Laboratory in New York, there has been a change in dominance in the invertebrate community, from lobsters to crabs. This shift has had impacts on the marsh system as the crabs eat the marsh roots and rhizome, thereby adding to degradation of habitat (also see Filling in data gaps through monitoring and research). This need can be addressed through the following grant programs: Long Island Sound Futures Fund, and Long Island Sound Community Impact Fund.

Sustainable and Resilient Communities

The Sustainable and Resilient Communities goal, specifically the Resilience Initiative Implementation objective, was identified by nine sites. This goal is focused on implementing sustainable solutions to many of the challenges coastal areas are facing due to a changing climate, such as eroding shorelines, to protect not only these habitats but the communities that surround them as well. As some of these sites have begun to address these issues or have ideas and plans to, it was clear that the actions outlined under the Resilience Initiative Implementation objective can be seen in the solutions and projects that will help, such as living shorelines to address erosion issues, marsh restoration, and projects that address flooding concerns. For example, the Great Meadows Unit of the Stewart B. McKinney National Wildlife Refuge in Connecticut, a functional marsh is required to protect the community, but sea level rise threatens its existence.

Increasing coastal resiliency. Four managers highlighted the challenges associated with protecting infrastructure and implementing shoreline stabilization techniques. Managers are challenged by maintaining and updating infrastructure at their sites, including, but not limited to, boat docks, facilities, culverts, roads, and trails. Failing infrastructure can lead to the inability to properly protect and restore habitat. For example, at Sherwood Island State Park in Connecticut, due to major storm events, the groin constructed to protect the beach from erosion, a shoreline stabilization technique, was severely impacted forcing the managers to re-build. Impacts of failing infrastructure also create challenges for the nearby residential communities. For example, erosion and flooding in Oyster Bay, New York has caused serious issues related to accessibility. People have issues accessing not only the sites, but their homes, as roads are degraded or completely lost. This can also have implications related to emergency response and public safety. On the other hand, in some cases, developing new infrastructure also creates the inability to effectively protect resources. At Faulkner Island, managers conducted an erosion control project to protect the second oldest lighthouse in Connecticut. Consequently, the lack of the erosion to the lighthouse bluff led to the loss of beach island habitat important to shorebird and seabird colonies. It is important to recognize that new construction and associated shoreline stabilization techniques may negatively impact water quality and habitat restoration projects that managers and partners have invested in. As a result, there is a critical need to understand how repairment of older infrastructure, new construction, and shoreline stabilization techniques may impact the surrounding ecological value of the area. This need can be addressed through the following grant programs: Long Island Sound Futures Fund, and Long Island Sound Community Impact Fund.

Informed and Engaged Public

Objectives under the Informed and Engaged Public goal were identified the greatest number of times. The objectives mentioned were Public Access and Sense of Belonging, Fostering Sustainable Behaviors and Education and Environmental Literacy. These objectives focus on not only educating the public but including them in the stewardship of the Sound and making it known they are welcomed to enjoy it like everyone else. Fostering Sustainable Behaviors was identified the most, in 17 discussions, as many site managers referenced the need to get the public to understand the value and importance of taking care of these areas, through education, signage and the presence of park rangers or educators. Many of these areas have delicate habitats that are important to many species, for example at the William A. Niering Natural Area Preserve in Connecticut, nesting birds are often disturbed by the public, showing the importance of the Fostering Sustainable Behaviors objective. Along with fostering positive behaviors, Public Access and Sense of Belonging was mentioned nearly the same amount, with 13 managers

identifying it. Additionally, a sense of belonging and the desire to be in and around the water has been expressed by residents within the watershed, as noted in the 2024 Public Perception Survey. Many of these sites are struggling to maintain trails and other areas meant for the public to enjoy these areas and nature safely and sustainably. For example, areas in Bluff Point State Park in Connecticut are experiencing coastal flooding which is affecting the size of the trails created for the public, leading to reduced access and people creating their own trails in an unsustainable way. As highlighted throughout the resource protection section, interacting with the public is important to the overall conservation of the Stewardship Areas. In addition to ecological value, the recreational value of the Stewardship Areas was an important category in the designation of these sites. To sustain long-term recreation and ecological uses of the Stewardship Areas, it is critical to have ongoing public education and outreach opportunities.

The following areas of interest were identified by site managers

Improving education and outreach programs. Seventeen managers highlighted the need for improved education and outreach programs. Targeted programs focusing on habitat and wildlife protection and public actions and behaviors are important to support resource protection efforts. For example, some managers discussed their challenges associated with public usage as patrons do not understand how their actions and uses of the sites may have impacts to habitat and wildlife. A common example of this is respecting signage, fencing, and rules to protect shorebird and seabird colonies. Some sites do hire seasonal staff for education purposes, but this type of engagement needs to be year-round to really make an impact. While more in-person events and engagement opportunities would be beneficial for public education, managers face challenges related to staffing capacity to host these programs. In addition to targeting the public, managers emphasized the importance of tailoring programs to students. For example, Flax Pond State Tidal Wetlands and Laboratory in New York has a large facility to learn about the site and ongoing research, but there needs to be more support (e.g., funding, capacity) for education and outreach events. Creating these types of programs provides a pipeline for students to get involved in science, technology, engineering, and mathematics (STEM) activities and perhaps career paths. Related to student educational programs, managers also mentioned challenges related to staying up to date on curriculum and adapting their programs accordingly. While providing these programs is essential, nine managers specifically called out signage issues related to public interaction. Some examples include, but are not limited to, lack of signage, outdated signage, or inability to install signage due to land ownership (i.e., private). In addition to public education, further communication and outreach with other organizations and agencies is necessary to properly protect wildlife. For example, on Great Gull Island in New York, low-flying aircrafts and drones can negatively impact the bird colonies on the island and therefore affect future nesting and breeding activities. This need can be addressed through the following grant programs: Long Island Sound Futures Fund, and Long Island Sound Community Impact Fund.

Increasing supervision. While education programs and adequate signage may help promote positive behaviors, nine managers cited the need for increased enforcement, regulation, and supervision. Some patrons do not obey signage indicating prohibited public uses including, but not limited to, dog walking or off leash dogs, biking via electric bikes or “fat” tire bikes, boating and anchoring, poaching, hunting, and fishing. Therefore, a more physical presence is necessary to prevent these prohibited actions from occurring at the sites to sustain conservation and management of resources. As of right now, there is no

existing Long Island Sound Partnership supported program that can support this need. Other sources may include, but are not limited to, state programs, private institutions, or donations.

Supporting public access. Four managers highlighted the need to install and update infrastructure to provide more and improved opportunities for public access. For example, at some locations, providing a visitor facility center may alleviate the need to actively manage and be present on the site. Visitor facilities including bathrooms and ADA compliance features could attract and support more patrons. Additionally, facilities could also provide information on permits and regulations, educate about habitat and wildlife importance, and promote positive actions. Additionally, some anchor sites experience flooding of parking lots and roads impacting public access and use. This need can be addressed through the following grant programs: Long Island Sound Futures Fund, and Long Island Sound Community Impact Fund.

Promoting positive behaviors. Four managers identified the need for outreach programs to focus on behavior change. While public education and outreach is helpful to communicate the importance of the sites, it may not be sufficient to change behaviors. It is also important to consider the surrounding communities at these sites. For example, in New York, Fishers Island's community typically includes seasonal residents so messaging to target behavior change is challenging for managers. On the other hand, Fishers Island, a Stewardship Area encompassing private properties, has residents that do understand that their actions have implications, but do not have the tools or resources to start implementation. Managers recommended that behavior change outreach programs should provide specific solutions that are feasible for the general public to understand and implement. This need can be addressed through the following grant programs: Long Island Sound Futures Fund, and Long Island Sound Community Impact Fund.

Priorities for Future Funding

After discussing site-specific challenges and needs at each of the Stewardship Areas, managers identified their priorities if future funding were to become available. Again, priorities are categorized by 2025 CCMP Goals.

Clean Waters and Healthy Watersheds

Improving water quality. One manager highlighted the priority to reduce nutrient (e.g., nitrogen) loading to the Long Island Sound bays and harbors, and therefore negatively impacting the habitats and wildlife. For example, on the north shore of Long Island, nitrogen pollution from septic systems and wastewater treatment plants continues to be major concern. It is important to continue to support programs that encourage the conversion and/or upgrades of septic systems to more environmentally friendly practices. In addition, green water infrastructure and bioextraction projects are highlighted as important projects to support non-point source reductions. This need can be addressed through the following Long Island Sound Partnership-supported grant programs: Long Island Sound Futures Fund, New York State Department of Conservation's Septic System Replacement Program, and New York State Department of Conservation's Water Quality Improvement Projects.

Thriving Habitats and Abundant Wildlife

Filling in data gaps through monitoring and research. Eight managers prioritized addressing data gaps through active monitoring and research. More specifically, managers were interested in conducting monitoring and studies to inform restoration and management activities, for example, salt marsh surveys

and research, hydrodynamic modeling for oyster habitat, and subwatershed studies to understand water quality impacts on habitat and wildlife. In addition to monitoring habitat, managers prioritized monitoring the usership at these sites throughout the year to better inform education programs (e.g., social behavior changes). To conduct more monitoring, there also needs to be an increase in capacity and staffing. Other priorities mentioned were the development of a centralized database to capture high priority research needs and a providing a platform for collaborative partnerships and resource sharing between Stewardship Sites This priority can be addressed through the following grant programs: Long Island Sound Research Grant Program.

Restoring and protecting important habitat. Ten managers prioritized the restoration and protection of resources. In particular, managers highlighted the following habitats to restore, salt and freshwater marshes, dunes, beaches, and open space (forests). Specific approaches include, but are not limited to, increasing land acquisitions to better prepare for future threats (e.g., marsh migrating inland due to rising sea level), repairing and maintaining riparian buffers along rivers and coastlines to also support water quality restoration, developing long-term habitat management plans focusing on site-specific issues, and implementing innovative pilot studies (e.g., targeting understory to allow for natural succession). Furthermore, managers would benefit from receiving expert advice on the most cost-effective approaches to restore and combat site-specific issues (e.g., erosion). Additionally, four managers highlighted the priority to increase invasive species removal and develop long-term management plans as these activities are key to maintaining and enhancing habitat function and diversity. This priority can be addressed through the following grant programs: Long Island Sound Futures Fund, and Long Island Sound Community Impact Fund.

Sustainable and Resilient Communities

Increasing coastal resiliency. Six managers highlighted the immediate priority to upgrade existing infrastructure. More specifically, roads, parking lots, and sewage treatment plants are to be upgraded, and culverts are to be removed to enhance site resiliency. As highlighted in the challenges and needs section, current infrastructure is vulnerable to natural impacts (e.g., major storm events, flooding, sea level rise, erosion). Investing in proper infrastructure to combat these issues will enhance site longevity and productivity in the long-term. This need can be addressed through the following grant programs: Long Island Sound Futures Fund, and Long Island Sound Community Impact Fund.

Ensuring adequate staffing capacity. Three managers emphasized the need to build staff capacity for enforcement. Providing support for park rangers will increase presence and monitoring of the sites and therefore deter patrons from prohibited activities. Additionally, increase in staffing will help managers develop site-specific management plans to enhance long-term resiliency of the Stewardship Areas. This need can not be currently addressed through Long Island Sound Partnership-supported grant programs.

Informed and Engaged Public

Improving education and outreach programs. Twelve managers emphasized the immediate priority for increased public education and outreach. Some sites already have existing programs, however additional support would help increase programs and events in frequency as well as be expanded upon. Additional support to increase staffing capacity would also help address these challenges and needs. To increase public education and outreach, it is important to have staff present year-round to provide services to the anchor sites in the Stewardship Areas and their communities. Furthermore, expanding programs will allow education on more topics, including, but not limited to, promoting positive actions and behaviors

to enhance resource protection, improving water quality (i.e., rain garden installation workshop, septic system upgrades and installation), and engaging in community science. Investing in education and outreach activities, whether it be through increasing staff presence, signage, or facilities (visitors centers), will help prevent negative behaviors and thereby enhance resource protection. Managers also highlighted the need to specifically focus on youth and student education and outreach. Increasing staffing capacity will help site managers and staff adapt to changing curriculum quickly and effectively, and therefore identify opportunities for more education and outreach. Lastly, managers highlighted the need to also provide more opportunities for connecting with the local communities and residents to secure buy-in for broader initiatives (i.e., restoration, protection, resiliency). This need can be addressed through the following grant programs: Long Island Sound Futures Fund, and Long Island Sound Community Impact Fund.

Supporting public access. Related to public education and outreach, four managers specifically highlighted infrastructure improvements. Specifically, providing more opportunities for public access and facility improvements. By creating and enhancing public access at specific parts of the site will help encourage the use of those areas and preserve other lands of the site such as unauthorized trails. This need can be addressed through the following grant programs: Long Island Sound Futures Fund, and Long Island Sound Community Impact Fund.

Investments and Successes Stories

As mentioned previously, since the establishment of the Long Island Sound Futures Fund grant program in 2005, the Long Island Sound Partnership has invested in 100 projects totaling $12 million at the Stewardship Areas. Furthermore, Long Island Sound Partnership has contributed an additional $23 million to projects at the Stewardship Areas through annual appropriations. In Table 1, these investments are categorized by Stewardship Area.

Twenty-five Stewardship Areas have received funding from the Long Island Sound Partnership to support their site management and activities, as well as advance the Stewardship Initiative. While there have been many successful projects, there is a need to further support all 33 Stewardship Areas and their anchor sites to ensure their site-specific needs and priorities are met. This can be accomplished by staffing each site adequately and establishing strong partnerships to leverage efforts and investments. In the next subsections, a few success stories, highlighting the power of strong partnerships, are provided. These funded projects have supported and advanced site-specific initiatives including protection of the natural environment and meaningful engagement with the public. Please see Appendix A for a full list of projects funded at Stewardship Areas.

Table 2. The table below shows the total investments made, using Long Island Sound Partnership funding, to each Stewardship Area. This funding includes non-competitive, though annual work plan and budget development, and competitive programs, through Long Island Sound Futures Fund and Long Island Sound Research Grant Program.

Stewardship Area Name	Awarded Amount
Alley Pond, Queens, NY	$ 468,990.33
Barn Island, Stonington, CT	$ 1,866,301.42
Bluff Point Groton, CT	$ 1,247,383.90
Charles Island, Milford, CT	$ 47,569.93

Crab Meadow, Huntington, NY	$ 487,500.00
Duck Island, Westbrook CT	$ 59,493.40
Edith G. Read and Marshlands, Rye, NY	$ -
Falkner Island, Guilford, CT	$ -
Fishers Island, Fishers Island, NY	$ 206,964.99
Great Meadows, Stratford, CT	$5,010,909.70
Great Neck – Goshen Point, Waterford, CT	$ -
Hallock State Park Preserve and Mattituck State Tidal Wetlands	$ 57,042.31
Hammonasset Beach, Madison, CT	$ 249,037.00
Hempstead Harbor, Hempstead, NY	$ 1,268,944.00
Huckleberry & Davids Islands – Pelham Bay Park, Bronx and New Rochelle, NY/ Orchard Beach	$ 154,800.45
Lloyd Neck, Lloyd Harbor, NY	$ 39,466.00
Lower Connecticut River, Old Saybrook, Essex, Deep River, Lyme, Old Lyme, Chester, Haddam, East Haddam, CT (Anchor Site Conn. River Estuary)	$ 474,416.00
Manhasset Bay, Great Neck, Manhasset, and Port Washington, NY	$ 321,170.00
Milford Point and Wheeler Marsh, Milford, CT	$ 222,579.83
Mt. Sinai – Port Jefferson Harbors, Mt. Sinai and Port Jefferson, NY	$6,861,237.28
Nissequogue River, Kings Park, NY	$ 3,912,148.95
Norwalk Harbor, Norwalk, CT	$ 3,474,350.00
Norwalk Islands, Norwalk, CT	$ -
Oyster Bay, Oyster Bay, NY	$ 1,690,927.37
Pattagansett Marshes and Watts Island, East Lyme, CT	$ -
Plum and Gull Islands, Southold, NY	$ 656,895.54
Quinnipiac River, New Haven, CT	$ -
Rocky Neck, East Lyme, CT	$ 310,628.00
Sandy Point, West Haven, CT	$ 27,180.00
Sherwood Island, Westport, CT	$ 27,000.00
Shoreham – Wading River, Wading River, NY	$ 2,380,000.00
Stony Brook Harbor, Stony Brook, NY	$ 3,860,000.00
West Rock Ridge, Hamden, Bethany, Woodbridge, and New Haven, CT	$ -

In addition to Appendix A, here we provide examples of Long Island Sound Partnership supported projects at the Stewardship Areas. These projects demonstrate remarkable strides in water quality improvements, conservation and ecological restoration, resiliency enhancements, and public engagement. Through these initiatives, Stewardship Areas are making a lasting impact on both environmental conservation and public education, fostering a deeper connection between communities and their natural surroundings. The projects are categorized by 2025 CCMP Goals:

Clean Waters and Healthy Watersheds

- Lower Connecticut River, Old Saybrook, Essex, Deep River, Lyme, Old Lyme, Chester, Haddam, East Haddam, Connecticut- Connecticut Audubon Society's Rain and Pollinator Gardens for Schools promotes environmental education by incorporating rain gardens and pollinator-friendly habitats

into local schools. These gardens serve as living classrooms, teaching students about native plants, water conservation, and the importance of pollinators in the ecosystem.

Thriving Habitats and Abundant Wildlife

- Sunken Meadow State Park, Kings Park, New York – A major effort has been made to restore 132 acres of salt marshes. Through detailed assessments of tidal marshes and bird habitats, significant strides have been taken to rehabilitate this critical ecosystem.
- Barn Island, Stonington, Connecticut – Recognized as one of the state's premier wildlife management areas, Barn Island supports a diverse range of habitats for imperiled species. The Connecticut Department of Environmental Protection, in collaboration with the Bureau of Natural Resources Wildlife Division, has designed and installed a half-acre exhibit showcasing native plants. Educational signage was installed to further highlight the importance of using native species in coastal areas.
- Great Meadows Marsh, Stratford, Connecticut – The National Audubon Society is leading a major restoration project covering 40 acres of salt marsh and coastal habitat. This includes removing old dredge material, regrading marshland to restore natural elevation, clearing invasive vegetation, reintroducing native plants, and reconstructing marsh channels to support tidal flow. These efforts are creating essential habitats for rare bird species like the saltmarsh sparrow.

Sustainable and Resilient Communities

- Great Gull Island, Southold, New York – The University of Connecticut has developed a climate adaptation plan for Great Gull Island that aims to improve 18 acres of beach and dune habitat on the island. The project will specifically benefit roseate and common terns, two iconic species of Long Island Sound.

Informed and Engaged Public

- Norwalk Harbor, Norwalk, Connecticut – The City of Norwalk Harbor Management Commission has installed three educational signs in key locations around the harbor. These signs inform residents and visitors about the ecological connections between Norwalk Harbor, the Long Island Sound, and the greater Norwalk River watershed.
- Sherwood Island State Park, Westport, Connecticut – Connecticut Parks have developed and installed educational exhibits and materials for the newly established nature center at the park. With over 500,000 visitors annually, this project offers children and families hands-on learning experiences about Long Island Sound's waterfronts, marshes, native plant life, and wildlife.
- Nissequogue River, Kings Park, New York – The National Audubon Society's "Be a Good Egg" program aims to raise awareness and encourage the public to coexist with shorebirds along the North Shore of Long Island. This educational initiative includes the distribution of materials for public and school programs, hosting outreach events on the beach, implementing stewardship projects for shorebird conservation along the coastline, and obtaining pledges from individuals who commit to sharing the shore with these birds.

Recommendations

The 33 Stewardship Areas and their anchor sites are vital, ecologically significant lands that serve Long Island Sound communities and residents and the habitats and wildlife they rely upon. As noted in this Strategy, the Long Island Sound Partnership has made significant investments in the Stewardship Areas; however, as highlighted by site managers, more investments need to be made to improve the longevity

and productivity of these areas. Based on these discussions with site managers, the following actions should be implemented by the Long Island Sound Partnership to support the network of Stewardship Areas and advance the Long Island Sound Partnership Stewardship Initiative:

- Developing a Stewardship Network to provide a platform for the site managers and partners to collaborate and communicate on initiatives, projects, and lessons learned. Building a community of practice for the Long Island Sound Stewardship Areas is important to grow as a collective partnership. The Network will meet semi-annually, in the fall and spring, to enhance information sharing, collaboration opportunities, and networking.
- Building and supporting adequate staffing capacity to support resource protection, habitat restoration, site monitoring, supervision, maintenance, and public education and outreach.
- Supporting adequate maintenance of anchor sites at Stewardship Areas. This requires the site managers to purchase appropriate materials and equipment to maintain their resources and support public access. This includes, but is not limited to, invasive species removal and management, wildlife protection, and facility support and improvements (e.g., trash bins, bathrooms).
- Designating new Stewardship Areas and anchor sites. Eight of the 33 Stewardship Areas are in urban areas (70th percentile based on developed land cover by HUC-12 watershed). The criteria developed in 2005 prioritized ecological and recreational value of site selection, with priority given to areas encompassing more parcels of protected land. Since the development of the original criteria in 2005, Long Island Sound Partnership has identified new priorities. Going forward, new Stewardship Areas and anchor sites will continue to meet the criteria and additionally prioritize areas that have not benefited from being designated as Stewardship Areas (public access, recreational, and ecological resources), particularly in more urbanized areas where there is less land available. The process for identifying new Stewardship Areas and anchor sites will be identified by the Long Island Sound Management Conference, and include the evaluation by Tribes/Nations, and states and local governments. It is important to note that in addition to the new priorities, the Management Conference should consider the staffing and capacity limitations at anchor sites.
- Working with the Network, establish a framework, with environmental outcomes, to identify future projects that will address the challenges, needs, and priorities identified in the strategy to strengthen the implementation of the Long Island Sound Stewardship Act of 2006. Identifying priority projects can include protecting habitat and wildlife, promoting native plantings (following invasive removal) using appropriate eco-types, establishing wildlife corridors (e.g., fish passages, connected forest), enhancing coastal resilience, and increasing and enhancing public access opportunities. See Appendix B for priorities listed by Stewardship Areas.
- Conducting a cumulative impacts study to identify opportunities for land acquisition of adjacent parcels. In addition to creating new sites, there is a need to expand the acreage in selected areas to alleviate pressures from threats (e.g., sea level rise, flooding, erosion).
- Enhancing education and outreach about the Stewardship Initiative by creating a Stewardship Communications subgroup, updating the on-line Stewardship Atlas and media (e.g., videos), installing signage for all 33 areas, and launching a social media campaign.

The challenges, needs, priorities, and recommendations identified in this strategy support the Long Island Sound Stewardship Act of 2006, in which formally established the Long Island Sound Stewardship Initiative and the designation of the 33 areas. These recommendations aim to identify, protect, and enhance upland sites within the Long Island Sound ecosystem with significant ecological, educational,

open space, public access, or recreational value. The Long Island Sound Partnership will continue to support the managers and partners at the Stewardship Areas and their anchor sites, both technically and financially, as funding programs give priority consideration to these Stewardship Areas. The following funding mechanisms are available for site managers and partners to implement these recommendations: Long Island Sound Annual Work Plan and Budget, Long Island Sound Futures Fund, Long Island Sound Community Impact Fund, and Long Island Sound Research Grant Program.

Appendix A.

List of all LISS-funded projects and their funding mechanisms

Long Island Sound Futures Fund Projects

Site Name	Project Title	Project Lead	Year Funded	Award Amount
CT Stewardship Sites				
Barn Island, Stonington, CT	Barn Island Wildlife Management Area Marsh	CT DEEP, Bureau of Natural Resources Wildlife Division	2005	$27,597
Barn Island, Stonington, CT	Barn Island Wildlife Management Area	State of Connecticut	2012	$23,999
Barn Island, Stonington, CT	Crowley Parcel Acquisition at Barn Island	The Nature Conservancy - Connecticut	2008	$33,386
Bluff Point Groton, CT	Developing a Restoration Plan for Bluff Point State Park	UCONN	2024	$198,692
Bluff Point Groton, CT	Developing a Restoration Plan for Bluff Point State Park	UCONN	2024	$198,692
Charles Island, Milford, CT	Restoration and Stewardship of Coastal Forest and Dune at the Smith Hubbell Wildlife Sanctuary	Connecticut Audubon Society	2020	$44,469
Charles Island, Milford, CT	Signage at Silver Sands State Park for Habitat Conservation	State of Connecticut	2009	$3,101
Duck Island, Westbrook CT	Improving Water Quality Through Green Infrastructure in Quanaduck Cove and Long Island Sound	Eastern Connecticut Conservation District, Inc.	2021	$59,493
Great Meadows, Stratford, CT	Conservation Strategies in Great Meadows Area	National Audubon Society, Inc.	2007	$35,000
Great Meadows, Stratford, CT	Restoring Great Meadows Marsh on Long Island Sound	National Audubon Society, Inc.	2020	$501,000
Great Meadows, Stratford, CT	Urban Youth Stewardship of Great Meadows Marsh on Long Island Sound	National Audubon Society, Inc.	2021	$59,742
Lower Connecticut River, Old Saybrook, Essex, Deep River, Lyme, Old Lyme, Chester, Haddam, East Haddam, CT	Connecticut River Coastal Estuary Cleanup & Education	Connecticut River Watershed Council dba Connecticut River Conservancy	2012	$4,485

Site Name	Project Title	Project Lead	Year Funded	Award Amount
Lower Connecticut River, Old Saybrook, Essex, Deep River, Lyme, Old Lyme, Chester, Haddam, East Haddam, CT (Anchor Site Conn. River Estuary)	Rain and Pollinator Gardens for Schools in the Connecticut River Estuary	Connecticut Audubon Society	2018	$15,443
Milford Point and Wheeler Marsh, Milford, CT	Milford Point Tidal Wetland Restoration	Town of Stratford, Connecticut	2007	$67,530
Milford Point and Wheeler Marsh, Milford, CT	Share the Shore with Shore and Seabirds in Long Island Sound	National Audubon Society, Inc.	2024	$70,581
Milford Point and Wheeler Marsh, Milford, CT	Restoration and Stewardship of Coastal Forest and Dune at the Smith Hubbell Wildlife Sanctuary	Connecticut Audubon Society	2020	$44,469
Milford Point and Wheeler Marsh, Milford, CT	Integrated Management Plan for Milford Point	Sacred Heart University, Inc.	2008	$40,000
Norwalk Harbor, Norwalk, CT	Norwalk Harbor Interpretive Signage	City of Norwalk Harbor Management Commission	2011	$9,480
Norwalk Harbor, Norwalk, CT	Green Infrastructure at Webster Street Parking Lot to Improve Water Quality in Norwalk Harbor	City of Norwalk, Connecticut	2019	$250,000
Sandy Point, West Haven, CT	Audubon WildLife Guards: A Coastal Youth Conservation Program	National Audubon Society	2017	$27,180
Sherwood Island, Westport, CT	Environmental Display - Sherwood Island Park	State of Connecticut	2008	$27,000
NY Stewardship Sites				
Alley Pond, Queens, NY	Alley Pond Park Restoration and Stewardship	New York City Department of Parks and Recreation	2012	$100,000
Alley Pond, Queens, NY	Coastal Habitat Restoration Planning at Alley Pond Park	City Parks Foundation	2014	$60,000
Alley Pond, Queens, NY	National Estuary Day Celebration at Alley Pond Park - VI	Alley Pond Environmental Center, Inc.	2014	$9,052
Alley Pond, Queens, NY	Coastal Habitat Restoration at Alley Pond	City Parks Foundation	2014	$149,938

Site Name	Project Title	Project Lead	Year Funded	Award Amount
Alley Pond, Queens, NY	Alley Creek Shoreline and Coastal Forest Restoration	New York City Department of Parks and Recreation	2017	$150,000
Crab Meadow, Huntington, NY	Crab Meadow Watershed Hydrology Study and Stewardship Plan	Town of Huntington, New York	2011	$57,900
Crab Meadow, Huntington, NY	Enhancing Coastal Resiliency with Tidal Marsh Restoration at Crab Meadow Marsh	National Audubon Society, Inc.	2024	$429,600
Fishers Island, Fishers Island, NY	Stakeholder Engagement and Planning for Eelgrass Protection on Fishers Island	Henry L Ferguson Museum	2020	$89,600
Fishers Island, Fishers Island, NY	Community Engagement and Education for Eelgrass Protection on Fishers Island - II	Henry L Ferguson Museum	2023	$52,173
Fishers Island, Fishers Island, NY	Producing and implementing a community-supported Long Island Sound Blue Plan	The Nature Conservancy	2019	$14,992
Fishers Island, Fishers Island, NY	Final Design and Planning for Implementing Eco-moorings/Seagrass Area Buoys on Fishers Island	Henry L. Ferguson Museum	2024	$50,200
Hallock State Park Preserve and Mattituck State Tidal Wetlands	Habitat Restoration Planning and Environmental Stewardship at Hallock State Park Preserve	Group for the East End, Inc.	2018	$57,042
Mattituck State Park	Mattituck Inlet Stormwater Mitigation	Group for the East End, Inc.	2008	$40,000
Hempstead Harbor, Hempstead, NY	Hempstead Harbor Citizen Water-Monitoring	Town of North Hempstead	2005	$30,000
Hempstead Harbor, Hempstead, NY	Hempstead Harbor Citizen Water Monitoring - II	Incorporated Village of Sea Cliff, New York	2007	$30,500
Hempstead Harbor, Hempstead, NY	Hempstead Harbor Citizen Water Monitoring-III	Incorporated Village of Sea Cliff, New York	2008	$35,000
Hempstead Harbor, Hempstead, NY	Hempstead Harbor Citizen Water Monitoring - IV	Incorporated Village of Sea Cliff, New York	2009	$45,000
Hempstead Harbor, Hempstead, NY	Hempstead Harbor Citizen Water Monitoring - V	Incorporated Village of Sea Cliff, New York	2011	$40,000
Hempstead Harbor, Hempstead, NY	Hempstead Harbor 2012 Water Quality Monitoring Program - VI	Incorporated Village of Sea Cliff, New York	2012	$40,000

Site Name	Project Title	Project Lead	Year Funded	Award Amount
Hempstead Harbor, Hempstead, NY	Hempstead Harbor 2013 Water Quality Monitoring Program - VII	Incorporated Village of Sea Cliff, New York	2013	$55,000
Hempstead Harbor, Hempstead, NY	Hempstead Harbor 2014 Water Quality Monitoring Program - VIII	Incorporated Village of Sea Cliff, New York	2014	$55,000
Hempstead Harbor, Hempstead, NY	Hempstead Harbor 2015 Water Quality Monitoring Program - IX	Incorporated Village of Sea Cliff, New York	2015	$45,000
Hempstead Harbor, Hempstead, NY	Hempstead Harbor 2018 Water Quality Monitoring Program (NY) - X	Incorporated Village of Sea Cliff, New York	2017	$89,900
Hempstead Harbor, Hempstead, NY	Hempstead Harbor 2019 Water Quality Monitoring Program XI	Incorporated Village of Sea Cliff, New York	2018	$75,000
Hempstead Harbor, Hempstead, NY	Hempstead Harbor 2020 Water Quality Monitoring Program-XII	Incorporated Village of Sea Cliff, New York	2019	$75,000
Hempstead Harbor, Hempstead, NY	Hempstead Harbor 2021 Water Quality Monitoring Program-XIII	Incorporated Village of Sea Cliff, New York	2020	$75,000
Hempstead Harbor, Hempstead, NY	Hempstead Harbor Water Quality Monitoring Program-XIV	Incorporated Village of Sea Cliff, New York	2022	$100,000
Hempstead Harbor, Hempstead, NY	Hempstead Harbor Water Quality Monitoring Program-XV	Incorporated Village of Sea Cliff, New York	2023	$200,000
Hempstead Harbor, Hempstead, NY	Hempstead Harbor Cove Wetland Restoration	Town of North Hempstead	2005	$75,000
Hempstead Harbor, Hempstead, NY	Hempstead Harbor Cove Wetland Restoration- II	Town of North Hempstead	2006	$27,000
Hempstead Harbor, Hempstead, NY	Shellfish Seeding in Hempstead Harbor	Nassau County	2008	$72,000
Huckleberry & Davids Islands – Pelham Bay Park, Bronx and New Rochelle, NY	Tackling Mile-a-Minute Invasive Plant at Pelham Bay Park	New York City Department of Parks and Recreation	2014	$149,800
Huckleberry & Davids Islands – Pelham Bay Park, Bronx and New Rochelle, NY/ Orchard Beach	Beach and Sound Clean-up at Orchard and Davenport Beaches	Scuba Sports Club	2011	$5,000
Lloyd Neck, Lloyd Harbor, NY	Coastal Grasslands Restoration at Caumsett State Park	New York State Office of Parks, Recreation, and Historic Preservation	2011	$39,466

Site Name	Project Title	Project Lead	Year Funded	Award Amount
Manhasset Bay, Great Neck, Manhasset, and Port Washington, NY	Manhasset Bay Boater Pollution Prevention	Town of North Hempstead	2010	$15,350
Manhasset Bay, Great Neck, Manhasset, and Port Washington, NY	Green Infrastructure at the Leeds Pond Preserve and Science Museum to Improve Water Quality in Long Island Sound	Science Museum of Long Island	2020	$46,020
Manhasset Bay, Great Neck, Manhasset, and Port Washington, NY	Framework for Volunteer-Driven Oyster Restoration Projects on Long Island	Cornell Cooperative Extension of Nassau County	2024	$250,000
Mt. Sinai – Port Jefferson Harbors, Mt. Sinai and Port Jefferson, NY	Oyster Planting to Improve Water Quality in Long Island Sound	Town of Brookhaven	2021	$79,640
Mt. Sinai – Port Jefferson Harbors, Mt. Sinai and Port Jefferson, NY	Oyster Planting to Improve Water Quality in Long Island Sound	Town of Brookhaven	2019	$92,505
Mt. Sinai – Port Jefferson Harbors, Mt. Sinai and Port Jefferson, NY	Rain Gardens at Port Jefferson Harbor: Linking Water, Wildlife and Waterways	Maritime Explorium at Port Jeff Harbor	2019	$43,626
Nissequogue River, Kings Park, NY	Nissequogue River Stewardship Initiative	Regional Plan Association, Inc.	2006	$50,000
Nissequogue River, Kings Park, NY	Implementing the Nissequogue River Stewardship Action Plan	Regional Plan Association, Inc.	2009	$54,000
Nissequogue River, Kings Park, NY	Sunken Meadow Creek - Engineering Model	New York State Office of Parks, Recreation, and Historic Preservation	2008	$30,000
Nissequogue River, Kings Park, NY	Phillips Mill Fish Passage Project	Save the Sound	2017	$99,999
Nissequogue River, Kings Park, NY	Be a Good Egg - II	National Audubon Society	2018	$36,037
Nissequogue River, Kings Park, NY	Be a Good Egg III-Share the Shore with Shorebirds	National Audubon Society	2019	$41,009
Nissequogue River, Kings Park, NY	Be a Good Egg: Share the Shore with Shorebirds-IV	National Audubon Society	2021	$47,574
Nissequogue River, Kings Park, NY	Share the Shore with Shore and Seabirds in Long Island Sound	National Audubon Society, Inc.	2024	$70,581

Site Name	Project Title	Project Lead	Year Funded	Award Amount
Nissequogue River, Kings Park, NY	Planning to Enhance Coastal Resiliency with Tidal Marsh Restoration at Sunken Meadow Park	National Audubon Society, Inc.	2020	$175,409
Nissequogue River, Kings Park, NY	Planning to Enhance Coastal Resiliency with Tidal Marsh Restoration at Sunken Meadow Park - II	National Audubon Society, Inc.	2023	$752,040
Nissequogue River, Kings Park, NY	Strengthening Sunken Meadow State Park's Resiliency	Save the Sound	2014	$2,500,000
Oyster Bay, Oyster Bay, NY	Bird and Mammal Checklist for Oyster Bay National Wildlife Refuge	Friends of the Bay, Inc.	2011	$2,500
Oyster Bay, Oyster Bay, NY	Oyster Bay/Cold Spring Harbor Fish Passage	Trout Unlimited Long Island Chapter	2006	$30,873
Oyster Bay, Oyster Bay, NY	Oyster Bay/Cold Spring Harbor Water Quality	Friends of the Bay, Inc.	2006	$36,000
Oyster Bay, Oyster Bay, NY	Oyster Bay/Cold Spring Watershed Action Plan	Friends of the Bay, Inc.	2007	$53,570
Oyster Bay, Oyster Bay, NY	Oyster Bay/Cold Spring Watershed Action Plan	Friends of the Bay, Inc.	2008	$15,000
Oyster Bay, Oyster Bay, NY	Interactive Display for Oyster Bay	Friends of the Bay, Inc.	2009	$4,947
Oyster Bay, Oyster Bay, NY	Oyster Bay/Cold Spring Harbor Protection Committee Creation	Town of Oyster Bay	2010	$59,643
Oyster Bay, Oyster Bay, NY	Water Quality Report for Oyster Bay/Cold Spring Harbor Estuary	Friends of the Bay, Inc.	2011	$6,440
Oyster Bay, Oyster Bay, NY	Bioextraction of “Gold Coast” Kelp in the Oyster Bay Complex	Adelphi University	2019	$78,478
Oyster Bay, Oyster Bay, NY	Expanding Oyster Spawning Sanctuaries in Oyster Bay and Cold Spring Harbor	Friends of the Bay, Inc.	2022	$86,815
Oyster Bay, Oyster Bay, NY	Putting the Oyster back in Oyster Bay	The Research Foundation for the State University of New York	2024	$477,194
Oyster Bay, Oyster Bay, NY	Gardeners of the Sound	National Audubon Society	2015	$9,999
Plum and Gull Islands, Southold, NY	Great Gull Island Management and Invasives Control	UCONN	2012	$39,114
Plum and Gull Islands, Southold, NY	Developing a Conservation and Climate Adaptation Plan for Great Gull Island	UCONN	2022	$399,997
Plum and Gull Islands, Southold, NY	Removing Invasive Plants at Great Gull Island-II	UCONN	2024	$217,784

Site Name	Project Title	Project Lead	Year Funded	Award Amount
Shoreham – Wading River, Wading River, NY	Planning Fish Passage at the Baiting Hollow Boy Scout Camp	Suffolk County Council Inc. Boy Scouts of America	2023	$130,000
Stony Brook Harbor, Stony Brook, NY	Habitat Monitoring in Flax Pond	Friends of Flax Pond, Inc.	2005	$25,000
Stony Brook Harbor, Stony Brook, NY	Habitat Monitoring and Outreach in Flax Pond - II	Friends of Flax Pond, Inc.	2007	$35,000
Stony Brook Harbor, Stony Brook, NY	Habitat Monitoring in Flax Pond - III	Friends of Flax Pond, Inc.	2009	$25,000

Other Long Island Sound Partnership Supported Programs

Site Name	Project Title	Project Lead	Year Funded	Award Amount
CT Stewardship Sites				
Barn Island (Stonington CT)	Enhancement of Tidal Flow Restoration at the Barn Island Wildlife Management Area, Stonington, CT	CT DEEP	2021-2023	$1,200,000
Barn Island (Stonington CT)	Tidal Marsh Mediation of Long Island Sound Embayment Nutrient Dynamics	Craig Tobias, CT National Estuarine Research Reserve, University of Connecticut	2024	$498,074
Barn Island (Stonington CT)	Quantifying Patterns and Drivers of Marsh Elevation Change Across Long Island Sound: Using an Existing Data Network to Inform Restoration Planning and Implementation	Giovanna McClenachan, Stony Brook University	2024	$332,282
Bluff Point Groton, CT	Embayment Data Collection for Modeling FY24	CT DEEP	2024	$850,000
Great Meadows, Stratford, CT	Implementing Ecological Restoration and Resiliency at Connecticut's Largest Remaining Unditched Marsh	National Audubon Society	2021	$2,000,000
Great Meadows, Stratford, CT	Evaluating Thin Layer Placement in Long Island Sound Marshes Using a Multi-Scale Approach	Beth Lawrence, Ashley Helton, and Chris Elphick, University of Connecticut; Min Huang, CT DEEP	2020	$470,969
Great Meadows, Stratford, CT	Impact of Adaptive Management and Assisted Migration on Salt Marsh Restoration Health and Resilience	Sarah C. Crosby, The Maritime Aquarium at Norwalk	2024	$431,535
Great Meadows, Stratford, CT	Implementing Ecological Restoration and Resiliency at Connecticut's Largest Remaining Unditched Marsh	National Audubon Society	2022	$250,000
Great Meadows, Stratford, CT	Testing the Effects of Vegetation on Saltmarsh Ecology, Services and Restoration Success: from Microbial Ecology and Biogeochemistry to Wildlife Conservation	Christopher Elphick, Beth Lawrence and Ashley Helton, University of Connecticut; Blaire Steven, Connecticut Agricultural Experiment Station; and Min Huang,	2022	$909,748

		Connecticut Department of Energy and Environmental Protection		
Lower Connecticut River, Old Saybrook, Essex, Deep River, Lyme, Old Lyme, Chester, Haddam, East Haddam, CT	Alkalinity of Long Island Sound Embayments	Penny Vlahos and Michael Whitney, University of Connecticut; Peter Linderoth, Save the Sound; Katie O'Brien-Clayton, CT DEEP	2022	$131,088
Norwalk Harbor, Norwalk, CT	USGS Continuous Water Quality Monitoring in Norwalk River	USGS	2023	$125,000
Norwalk Harbor, Norwalk, CT	USGS Continuous Water Quality Monitoring in Norwalk River	USGS	2024	$141,570
Norwalk Harbor, Norwalk, CT	Embayment Data Collection for Modeling	CT DEEP	2021	$1,500,000
Norwalk Harbor, Norwalk, CT	Embayment Data Collection for Modeling	CT DEEP	2022	$630,000
Norwalk Harbor, Norwalk, CT	Embayment Data Collection for Modeling	CT DEEP	2023	$740,000
Norwalk Harbor, Norwalk, CT	Update the 2011 Norwalk River Watershed-Based Plan	Southwest Conservation District	2024	$78,300
Rocky Neck, East Lyme, CT	Tracking Pathogen Pathways and Fecal Bacteria Patterns for Public Beaches Suffering with Poor Water Quality Grades and Closures	Michael Whitney, University of Connecticut and Peter Linderoth, Save the Sound	2022	$310,628
NY Stewardship Sites				
Hempstead Harbor, Hempstead, NY	Hempstead Harbor 2024-2025	IEC	2024	$65,550
Manhasset Bay Great Neck, Manhasset, and Port Washington, NY	Using Geohistorical Baselines to Assess Responses of Benthic Macroinvertebrate Communities to the Nitrogen TMDL Management Intervention in Long Island Sound	Gregory Dietl, Paleontological Research Institution	2022	$38,994
Manhasset Bay Great Neck, Manhasset, and Port Washington, NY	Grant writing assistance for Cornell Cooperative Extension of Nassau County for the Long Island Sound Futures Fund. The project funded was: Building Volunteer-Driven Oyster Restoration on Long Island Sound: Implementation and development of a framework for a community Oyster Gardening Program.	Cornell Cooperative Extension of Nassau County	2024	$9,800

Mt. Sinai – Port Jefferson Harbors, Mt. Sinai and Port Jefferson, NY	Support for Stewardship Land Acquisition by the New York State Department of Environmental Conservation	NYSDEC	2024	$3,409,800
Mt. Sinai – Port Jefferson Harbors, Mt. Sinai and Port Jefferson, NY	Support for Stewardship Land Acquisition by the New York State Department of Environmental Conservation	NYSDEC	2022	$2,909,800
Mt. Sinai – Port Jefferson Harbors, Mt. Sinai and Port Jefferson, NY	Quantifying the Ability of Seaweed Aquaculture in Long Island Sound to Remove Nitrogen, Combat Ocean Acidification, Improve Water Quality and Benefit Bivalves	Christopher Gobler and Michael Doall, Stony Brook University: Kendall Barbery, GreenWave	2020	$238,933
Mt. Sinai – Port Jefferson Harbors, Mt. Sinai and Port Jefferson, NY	Long Island Sound Oyster Shell Recovery Expansion Project	Seatuck Environmental Association	2024	$86,933.66
Nissequogue River, Kings Park, NY	Streamflow and water-quality monitoring of the Nissequogue River in Suffolk County, New York	United States Geological Survey	2020	$27,750
Nissequogue River, Kings Park, NY	Streamflow and water-quality monitoring of the Nissequogue River in Suffolk County, New York	USGS	2020	$27,750
Oyster Bay, Oyster Bay, NY	USGS Water Quality Monitoring in Selected Near Coast Environments of Long Island Sound FY24	USGS	2024	$318,000
Oyster Bay, Oyster Bay, NY	USGS Water Quality Monitoring in Selected Near Coast Environments of Long Island Sound FY25	USGS	2023	$250,000
Oyster Bay, Oyster Bay, NY	USGS Oyster Bay Water Quality Monitoring	USGS	2022	$190,000
Oyster Bay, Oyster Bay, NY	Assess climate change impacts on Beaver Brook and Mill Neck Creek marsh complex and produce a conceptual design	Seatuck Environmental Association	2024	$71,468
Shoreham – Wading River, Wading River, NY	Pathogen monitoring program to mitigate shellfish harvesting water closures adjacent to Wading River and Baiting Hollow Creek, NY	IEC	2021	$300,000
Shoreham – Wading River, Wading River, NY	Support for Stewardship Land Acquisition and Habitat Restoration in NY State	NYSDEC	2020	$1,950,000
Stony Brook Harbor, Stony Brook, NY	USGS Flax Pond Water Quality Monitoring	USGS	2022	$105,000
Stony Brook Harbor, Stony Brook, NY	Habitat Restoration for Flax Pond	NYSDEC	2023	$1,300,000
Stony Brook Harbor, Stony Brook, NY	Support for Stewardship Land Acquisitions in Stony Brook, NY	NYSDEC	2018	$2,370,000

Appendix B.

Summary of discussions with site managers at Long Island Sound Stewardship Areas.

Stewardship Area Name	Anchor Site Name	City, State	Ownership	Challenges/Needs specific to Resource Protection	Extreme Weather Event Impacts	Challenges/Needs Specific to Public Interaction	List of Priorities	Connection to the CCMP 2025
Alley Pond	Alley Pond Park and Fort Totten	Queens, NY	City	No discussion	No discussion	No discussion	No discussion	No discussion
Barn Island	Barn Island Wildlife Management Area	Stonington, CT	State	Managing recreation, invasives, need database for all research occurring, public uses (unauthorized trail creation, off-leash dogs)	Dike erosion during storm events; forest fires; flooding of nests of marsh-nesting birds	Need signage, education programs and enforcement capacity to help protect wildlife	Database of research; marsh management to improve hydrology and vegetation; control invasives	IEP: Fostering Stewardship and Sustainable Behaviors; HW: Coastal Habitat, Habitat Connectivity, Conserve Open Space
Bluff Point	Bluff Point State Park and Coastal Reserve & Natural Area Preserve	Groton, CT	State	Coastal Flooding (related to access and marshes), managing recreation, disturbance to wildlife, habitats and rare plants as a result of unauthorized trails	Sea level rise & flooding	Flooding reducing public access and trails; Public education on protection (not obeying signage), behavior change, public uses (unauthorized trail creation, off-leash dogs)	Eliminate unauthorized trails; develop management plan; conduct natural resource inventory	IEP: Public Access and Sense of Belonging IEP: Fostering Stewardship and Sustainable Behaviors; HW: Coastal Habitat, Habitat Connectivity, Conserve Open Space
Charles Island	Charles Island Natural	Milford, CT	State	Marsh flow, erosion on beaches, educating the public	storms and erosion	Need signage and education programs to help protect wildlife	public outreach, restore tree canopy	IEP: Fostering Stewardship and Sustainable Behaviors

	Area Preserve							
Crab Meadow	Crab Meadow Wetlands and Beach and Eatons Neck Point	Huntington, NY	City	No discussion	No discussion	No discussion	No discussion	No discussion
Duck Island	Duck Island Natural Area Preserve	Westbrook, CT	Mix	Need a management plan, need more signage, manage public use	storms and erosion	Need signage and education programs to help protect wildlife	Predator control and closing knowledge gaps	IEP: Fostering Stewardship and Sustainable Behaviors
Edith G. Read and Marshlands	Marshlands Conservancy, Edith G Read Wildlife Sanctuary, Rye Playland Park	Rye, NY	County	Staffing and capacity, invasives	Marsh migration	Border a golf course which is not environmentally friendly	Funding for more staff and projects	WW: Marine Debris
Falkner Islands	Stewart B. McKinney National Wildlife Refuge (Falkner Island, Great Meadows, Milford Point/Wheeler Marsh, Norwalk Island)	Guilford, CT	Federal	Restoration/Mgt: Tern colony; salt marsh sparrow; invasives; staff capacity;	Erosion; SLR/marsh migration;	Cultural protection (lighthouse); infrastructure upgrades; recreational fishing (regulations)	Develop visitors center, increase education at local schools (adapt to curricula), signage/educational services	HW: Coastal Habitat, Habitat Connectivity, Conserved Open Space IEP: Public Access and Sense of Belonging, Fostering Stewardship and Sustainable Behaviors

Fishers Island	Fishers Island Submerged Aquatic Vegetation	Fishers Island, NY	Mix	data needs	data needs	Anchoring/boating, creating solutions (behavior change). Specific to native plantings - residents do not know where to start.	Behavior change workshops, education/engagement for rain garden installations, infrastructure for runoff	HW: Coastal Habitat SRC: Resilience Initiative Implementation IEP: Fostering Stewardship and Sustainable Behaviors
Great Meadows	Stewart B. McKinney National Wildlife Refuge (Falkner Island, Great Meadows, Milford Point/Wheeler Marsh, Norwalk Island)	Stratford, CT	Federal	Restoration/Mgt: Tern colony; salt marsh sparrow; invasives; staff capacity;	Erosion; SLR/marsh migration;	Cultural protection (lighthouse); infrastructure upgrades; recreational fishing (regulations)	Develop visitors center, increase education at local schools (adapt to curricula), signage/educational services	HW: Coastal Habitat, Habitat Connectivity, Conserved Open Space IEP: Public Access and Sense of Belonging, Fostering Stewardship and Sustainable Behaviors
Great Neck - Goshen Point	Harkness Memorial State Park and William A. Niering Natural Area Preserve	Waterford, CT	State	Need enforcement and easy simple signage for the public to protect the birds, fishing, etc; unauthorized access to closed area; bikes, dogs off leash in bird nesting area; erosion from storms	Increased/more powerful storms leading to more erosion	Need help with educating them, lots of signage is old and unreadable now; need enforcement	New signage	IEP: Fostering Stewardship and Sustainable Behaviors, Public Access and Sense of Belonging, Education and Environmental Literacy

Hallock State Park Preserve and Mattituck State Tidal Wetlands	Mattituck State Tidal Wetlands	Mattituck, NY	City	staffing and capacity (enforcement), runoff (fertilizer)	beach and marsh erosion, sea level rise, storms	N/A	restoration (specifically to combat erosion issues), data gaps, education and outreach	HW: Coastal Habitat, Habitat Connectivity SRC: Resilience Initiative Implementation IEP: Public Access and Sense of Belonging, Fostering Stewardship and Sustainable Behaviors
Hallock State Park Preserve and Mattituck State Tidal Wetlands	Hallock State Park Preserve	Jamesport, NY	State	No discussion	No discussion	No discussion	No discussion	No discussion
Hammonasset Beach	Hammonasset Beach State Park and Natural Area Preserve	Madison, CT	State	No discussion	No discussion	No discussion	No discussion	No discussion
Hempstead Harbor	Hempstead Harbor Park, Morgan Memorial Park, Tappen Beach, and Sands	Hempstead, Port Washington, NY	City	Use of harbor and development pressure - transmission lines; coastal erosion; need help research	Erosion	General communication about importance of area	Constructed wetlands by outflow in second worst subwatershed; need to first fix infrastructure under roads	WW: Toxic Contaminants HW: Conserved Open Space

	Point Preserve							
Huckleberry and Davids Islands-Pelham Bay Park	Pelham Bay Park , Davids Island, Huckleberry Island	Bronx, NY	City	No discussion	No discussion	No discussion	No discussion	No discussion
Lloyd Neck	Caumsett State Historic Park Preserve	Lloyd Harbor, NY	State	Staffing and capacity, runoff, invasives (numerous plants and deer), marsh degradation	sea level rise and flooding, erosion, warmer summers (invasives)	Public education on protection (not obeying signage), behavior change, public uses (e-bikes/fat tire bikes, dogs)	salt marsh restoration and research, invasive species removal and management, dune protection, enforcement/capacity (monitoring)	WW: Nutrients, Pathogens, Marine Debris HW: Coastal Habitat, Habitat Connectivity, Conserved Open Space SRC: Resilience Initiative Implementation IEP: Public Access and Sense of Belonging, Fostering Stewardship and Sustainable Behaviors
Lower Connecticut River	Connecticut River Estuary and Wetlands Complex	Old Saybrook, Essex, Deep River, Lyme, Old Lyme,	Mix	Invasives; coastal infrastructure & flooding concerns	Flooding and erosion	Flooding	invasives removal; fortifying infrastructure for resiliency	SRC: Resilience Initiative Implementation

		Chester, Haddam, East Haddam, CT						
Manhasset Bay	Manhasset Bay and Mitchell's Creek	Great Neck, Manhasset, Port Washington, NY	City	Bacteria contamination, nitrogen loading, sealevel rise, stormwater runoff	SLR and increased stormwater runoff	Reaching people who are not outwardly looking for the information	Stormwater help for surrounding parking lots, hydrodynamic modeling for oyster reefs	WW: Nutrients, Toxic Contaminants HW: Education and Environmental Literacy
Milford - Milford Point	Stewart B. McKinney NWR (Falkner Island, Great Meadows, Milford Point/Wheeler Marsh, Norwalk Island)	Milford, CT	Federal	Restoration/Mgt: Tern colony; salt marsh sparrow; invasives; staff capacity;	Erosion; SLR/marsh migration;	Cultural protection (lighthouse); infrastructure upgrades; recreational fishing (regulations)	Develop visitors center, increase education at local schools (adapt to curricula), signage/educational services	HW: Coastal Habitat, Habitat Connectivity, Conserved Open Space IEP: Public Access and Sense of Belonging, Fostering Stewardship and Sustainable Behaviors
Milford - Wheeler Marsh	Wheeler Marsh Wildlife Management Area	Milford, CT	State	Encroachment affecting wildlife	Erosion	Need signage and education programs to help protect wildlife	Invasives, fixing encroachment	HW: Conserved Open Space IEP: Education and Environmental Literacy
Mt. Sinai-Port Jefferson Harbors	Mt. Sinai Harbor, Port Jefferson Harbor, Cedar Beach,	Port Jefferson, NY	Mix	No discussion	No discussion	No discussion	No discussion	No discussion

	McAllister County Park							
Nissequogue River	Nissequogue River State Park, Caleb Smith State Park	Kings Park, NY	State	New marina construction inhibits conservation projects, no natives (Kings Park Psych Center)	N/A	No maps/education	Marsh surveys/data; enhance access	HW: Coastal Habitat, Habitat Connectivity, Conserved Open Space SRC: Resilience Initiative Implementation IEP: Fostering Stewardship and Sustainable Behaviors
Nissequogue River	Sunken Meadow State Park	Kings Park, NY	State	Phragmites/Invasives (salt marsh focused)	Erosion (hardened shorelines)	Piping Plover Education	Stewardship Saturdays, marsh restoration	HW: Coastal Habitat, Habitat Connectivity SRC: Resilience Initiative Implementation IEP: Fostering Stewardship and Sustainable Behaviors
Norwalk Harbor	Calf Pasture Beach and Veterans Memorial Park	Norwalk, CT	City	No discussion	No discussion	No discussion	No discussion	No discussion

Norwalk Islands	Stewart B. McKinney NWR (Falkner Island, Great Meadows, Milford Point/Wheeler Marsh, Norwalk Island)	Norwalk, CT	Federal	Restoration/Mgt: Tern colony; salt marsh sparrow; invasives; staff capacity;	Erosion; SLR/marsh migration;	Cultural protection (lighthouse); infrastructure upgrades; recreational fishing (regulations)	Develop visitors center, increase education at local schools (adapt to curricula), signage/educational services	HW: Coastal Habitat, Habitat Connectivity, Conserved Open Space IEP: Public Access and Sense of Belonging, Fostering Stewardship and Sustainable Behaviors
Oyster Bay	Mill Neck Preserve, Centre Island, Beekman Beach, the Waterfront Center, and Shu Swamp Nature Preserve	Oyster Bay, NY	Mix	Not sewered, beach erosion	Erosion, flooding	recreational access/infrastructure needs	Facility improvements, public education/engagement	WW: Nutrients, Pathogens HW: Coastal Habitat, Habitat Connectivity, Conserved Open Space SRC: Resilience Initiative Implementation IEP: Public Access and Sense of Belonging, Fostering Stewardship and Sustainable Behaviors

Oyster Bay	Oyster Bay National Wildlife Refuge	Oyster Bay, NY	Federal	Shellfish Ownership/Knowledge Gaps (data needs); invasives (data needs); SAV surveys (data needs); sediment contaminants (data needs); capacity issues for mgt	SLR impact on ownership (data needs); storms; erosion (hardened shorelines from private properties)	Lack of signage due to private property; lack of enforcement	data; more engagement and outreach that NWR exists	WW: Pathogens, Marine Debris, Toxic Contaminants HW: Coastal Habitat, Habitat Connectivity, Conserved Open Space SRC: Resilience Initiative Implementation IEP: Public Access and Sense of Belonging, Fostering Stewardship and Sustainable Behaviors
Pattagansett Marshes and Watts Island	Pattagansett Marshes Preserve	East Lyme, CT	Private	Staffing and capacity, educating/engaging the public on resiliency (cutting into dunes), marsh and dune loss, data gaps	sea level rise, storms, erosion	Finding the balance between public use and protection	stewardship capacity, monitoring marsh loss, dune restoration	HW: Coastal Habitat, Habitat Connectivity, Conserved Open Space SRC: Resilience Initiative Implementation IEP: Public Access and Sense of Belonging, Fostering Stewardship

								and Sustainable Behaviors
Plum and Gull Islands	Plum Island, Great Gull Island, Little Gull Island	Southold, NY	Mix	Shorebird protection, habitat restoration for wildlife, staffing capacity, facilities for research, invasives, oil spills, wind turbines	erosion, acidification, sea level rise	Low flying aircrafts, drones, limited outreach due to capacity	site maintenance, staffing capacity, facility upgrades	WW: Toxic Contaminants HW: Coastal Habitat IEP: Fostering Stewardship and Sustainable Behaviors
Quinnipiac River	Quinnipiac River Marsh Wildlife Management Area and State Park	New Haven, CT	State	Public access, invasive species	Flooding		Acquiring only land based access route currently privately owned	HW: Conserved Open Space IEP: Public Access and Sense of Belonging
Rocky Neck	Rocky Neck State Park	East Lyme, CT	State	sediment accretion in channels (preventing migratory corridors for alewife), beach closures (water quality)	marsh erosion	staffing and capacity for education/engagement	marsh restoration, education about septic tanks (water quality)	WW: Pathogens HW: Coastal Habitat, Habitat Connectivity IEP: Public Access and Sense of Belonging, Fostering Stewardship and Sustainable Behaviors

Sandy Point	Sandy Point and Painters Point	West Haven, CT	City	Stormwater (related to marshes)	Increased flooding/rainfall	Overburdened population + high population density	Replacing culvert with bridge to allow marsh to continue to expand	HW: Habitat Connectivity
Sherwood Island	Sherwood Island State Park	Westport, CT	State	Public overuse, maintenance/care, losing trees, tidal wetland loss	storms (eroding beach), flooding, marsh migration	Public education on protection	Do not have any at this time.	HW: Coastal Habitat, Habitat Connectivity, Conserved Open Space IEP: Fostering Stewardship and Sustainable Behaviors
Shoreham - Wading River	Wildwood State Park and Baiting Hollow Tidal Wetlands	Wading River, NY	State	No discussion	No discussion	No discussion	No discussion	No discussion
Stony Brook Harbor	Flax Pond State Tidal Wetlands and Laboratory	Stony Brook, NY	State	dredging, marsh community changes (invasives, lobster die-off), no supervision	Flooding, sea level rise, acidification (septic systems amplifying impacts)	Poaching/Hunting issues,	Education/engagement with the lab, schools, community science, more signage, enforcement/better control	HW: Coastal Habitat, Habitat Connectivity, Conserved Open Space IEP: Fostering Stewardship and Sustainable Behaviors
West Rock Ridge	West Rock Ridge State Park	Hamden, Bethany, Wood Bridge, CT	State	No discussion	No discussion	No discussion	No discussion	No discussion