Project Info

Title:	**NEIWPCC LISS Program Implementation Support FY24: Task 2 - Program Management & Travel Coordination Support**		
Activity Type:	Coordination	Project Type:	Ongoing
Implementing Agency:	NEIWPCC	Total Estimate Budget	$262,041.00
Responsible Partners:		Federal Amount:	$262,041.00
		Match Amount:	$0.00
Objectives:	To support logistic coordination for in-person meetings and process participant support requests.		
Description:	NEIWPCC will complete the following sub-tasks: Meeting Support, ANEP Support, Participant Support, Program Management		
Estimated Milestones:	October 1, 2024 - September 30, 2026		
CWA Program Elements	Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/ Implementation		

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
LISS Meeting Coordination - Coordinate logistical support for quarterly in-person MC and CAC Meetings.	4-2.	SM-13
Participant Support - Provide participant support (financial assistance) for LISS CAC & MC members, state, and other LISS partners to participate in LISS or NEP meetings/workshops/trainings in order to engage stakeholders in LISS activities.	4-2.	SM-13
Program Management & LISS Participation - Supervise NEIWPCC staff located at LIS and NYS offices; Provide program management for NEIWPCC partnership with LISS; Provide NEP support as requested by EPA or LISO; Staff participates in workgroup and meetings.	4-2.	SM-13
Reporting - Develop and report progress on NEIWPCC's sections of the annual Long Island Sound Study work plans to consider progress made and recommendations for improving implementation to achieve desired outcomes.	4-3.	SM-35

Title: **Connecticut State Coordination FY24**

Activity Type:	Coordination	Project Type:	Ongoing
Implementing Agency:	CT DEEP	Total Estimate Budget	$1,414,508.33
Responsible Partners:	N/A	Federal Amount:	$848,705.00
		Match Amount:	$565,803.33

Objectives: To provide support for CT DEEP's LISS Reporting Coordinator (LISSRC), Technical Coordinator (LISSTC), and 3 Project Coordinators (LISSPC) to plan, implement, coordinate, manage, and progress projects that support the CCMP.

Description: These positions are wholly devoted to the LISS; by bringing devoted CT DEEP resources to the table we assure that both Connecticut and the greater LISS will achieve the full benefits of the partnership.

Estimated Milestones: October 1, 2024 - September 30, 2026

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
LISSTC - Coordinate CT DEEP review of grant proposals for LISS	4-2.	WW-2; WW-8; SM-19
LISSTC - Participation in LISS workgroups and tasks	4-2.	SM-11; SM-35
LISSTC - Dissemination of LIS Information and Outreach	3-2; 3-3	WW-2; SC-11; SC-21
LISSTC - Implement the LIS Nitrogen TMDL and CT DEEP's Second Generation Nitrogen Strategy (nutrient reduction programs)	1-1; 4-2; 4-3	WW-2; WW-4; WW-7
LISSPC 3 - Support work groups	4-3.	SM-14; SM-35
LISSPC 3 - Manage CT State water quality projects funded with LISS funds	4-2.	SM-13
LISSPC 3 - Work with other CT DEEP divisions sponsoring LISS funded projects	4-2.	SM-13
LISSRC - Participation in LISS workgroups and tasks	4-2.	SM-13
LISSRC - Coordinate and support diverse participation of state agency staff in activities relevant to the LISS partnership and implementation of the CCMP that meet state commitments to LISS	4-2.	SM-18; SM-29
LISSPC 2 - Manage CT State water quality projects funded with LISS funds	4-2.	SM-13

LISSPC 2 - Work with other CT DEEP divisions sponsoring LISS funded projects	4-2.	SM-13
LISSTC - Technical coordination of science and management for nitrogen reduction efforts.	1-1.	WW-1; WW-27; WW-28
LISSTC - Watershed planning and stormwater/nonpoint source implementation; Participate in EPA's LIS Nitrogen Reduction Strategy	1-1; 1-3	WW-7; WW-14; WW-27
LISSPC 1 - Coordinate and manage Connecticut watershed model update	1-1; 1-3	WW-14; WW-27; WW-28
LISSPC 1 - Committee and workgroup support	1-1; 4-3	SM-35; WW-3; SM-34
LISSRC - Implementing the LIS 2015 CCMP	4-2.	SM-15; SM-36
LISSPC 1 - Coordinate and manage partner and workgroup tasks	1-1; 2-3; 3-1	WW-1; WW-2; SC-4
LISSPC 1 - Coordinate and planning for CT DEEP LISS needs and with a special focus in environmental justice.	2-3; 3-1; 4-2	SC-4; SM-14
LISSPC 2 - Support work groups	4-2; 4-3	SM-14; SM-35
LISSRC - Tracking and Reporting	4-2.	SM-32; SM-33; SM-34

Title: **USGS Staff Support for the Long Island Sound Study FY24**

Activity Type:	Coordination	Project Type:	Ongoing
Implementing Agency:	USGS	Total Estimate Budget	$250,000.00
Responsible Partners:		Federal Amount:	$250,000.00
		Match Amount:	$0.00

Objectives: To 1) Designate a lead point-of-contact (POC) to better integrate USGS into LISS planning activities; (2) Continue to provide technical and staff support for the systemwide model of LIS; and (3) Participate in the LISS "Open Science" initiative to provide USGS assistance with the management and display of environmental data collected in LIS and its watershed.

Description: USGS began providing technical and staff support for development and application of the systemwide model, including data inputs to the model, model oversight and peer review, model applications, and model maintenance, in 2020. This revised scope of work for FY24 focuses the staff support role for USGS to better integrate USGS into LISS planning activities for the program overall.

Estimated Milestones: October 1, 2024 - September 30, 2025

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
USGS coordination (Point of Contact)	4-2.	SM-13
Technical Support, Systemwide model	4-2.	SM-13
Open Science Planning	4-2.	SM-13

Title:	**Long Island Sound Collaborative Coastal Habitat Assessment, Restoration and Monitoring FY24**		
Activity Type:	Habitat Restoration and Protection	Project Type:	Ongoing
Implementing Agency:	USFWS	Total Estimate Budget	$357,024.00
Responsible Partners:	N/A	Federal Amount:	$357,024.00
		Match Amount:	$0.00

Objectives: To 1) work collaboratively within the tidal marsh working groups to identify priority projects, 2) provide technical expertise and financial resources to advance one or more of these projects through design and permitting, 3) provide technical support for projects that are permitted for implementation and 4) collect pre- and post-restoration monitoring data across sites to inform development of best practices for subsequent projects within the Long Island Sound watershed.

Description: This project will provide support through both capacity building within USFWS, hiring staff focused on working in the LISS boundary and leveraging additional Service technical expertise.

Estimated Milestones: October 1, 2024 - September 30, 2025

CWA Program Elements: Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Build efficiencies across agencies and organization. Leverage resources.	2-1.	HW-2; HW-22
Initiate planning for one or more projects. Baseline data collection compiled into design plans and permitting applications	2-1.	HW-1; HW-3; HW-5
Initiate and complete marsh restoration activities for one or more project sites.	2-3; 3-1; 3-2	HW-11; HW-14; HW-22
Initiate monitoring on using standard monitoring protocols. Build understanding of effective techniques for restoration	2-1; 2-2	HW-2; HW-16, HW-17
Additional restoration actions initiated on sites as needed to ensure project goals achieved. Sustainability of each individual project will be increased.	2-1; 2-2; 3-1; 3-2	HW-1; HW-13; HW-17
Project outcomes shared with LISS, and broader scientific community, progress reports submitted. Lessons learned used to support planning and initiation of additional projects.	2-1; 2-2	HW-1; HW-27

Title: **Supplemental Costs of the drone and accessories for eelgrass study**

Activity Type:	Habitat Restoration and Protection	Project Type:	New
Implementing Agency:	USFWS	Total Estimate Budget	$31,426.00
Responsible Partners:	URI, CTDEEP, NYSDEC, EPA	Federal Amount:	$31,426.00
		Match Amount:	$0.00

Objectives: To purchase a blue-listed drone for the drone imagery collection and analysis of the eelgrass intercomparison study.

Description: As part of the eelgrass intercomparison study, this funding will support the purchase of a "blue-listed"drone to meet the US Department of Interior Operational Procedures Memorandum requirements.

Estimated Milestones: October 1, 2024 - September 30, 2026

CWA Program Elements: Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Intercomparison: SAV Orthoimagery interpretation, delineation, and ground-truthing field work	2-1; 2-4	HW-7; HW-23; HW-25
Intercomparison: GIS database development, analysis, report writing, misc.	2-1; 2-4	HW-7; HW-23; HW-25
Intercomparison: LIS Eelgrass Collaborative to provide input on the study's approach.	2-1; 2-4	HW-7; HW-23; HW-25

Title:	**NEIWPCC LISS Program Implementation Support FY24: Task 3 - Habitat Restoration Coordination**		
Activity Type:	Habitat Restoration and Protection	Project Type:	Ongoing
Implementing Agency:	NEIWPCC	Total Estimate Budget	$364,865.00
Responsible Partners:		Federal Amount:	$364,865.00
		Match Amount:	$0.00

Objectives: To support activities to be carried out by the LISS NYS Habitat Restoration and Stewardship Coordinator.

Description: NEIWPCC's NYS Habitat Restoration and Stewardship Coordinator will facilitate and conduct activities associated with the LISS Habitat Restoration Initiative including: Preparing, assisting, and evaluating project applications for habitat restoration, assessment, monitoring, and research funding; Developing partnerships to restore LIS habitats and promote stewardship (public access, land acquisition, land management); Working with regional staff to help partners prepare project workplans that are compatible with state regulations; and Assisting NYSDEC with activities associated with the LISS Habitat Restoration & Stewardship Workgroup.

Estimated Milestones: October 1, 2024 - September 30, 2026

CWA Program Elements: Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Coordinate LISS Habitat Restoration & Stewardship Workgroup	2-1; 2-3	HW-1; HW-22
Coordinate NYS habitat, wildlife, and stewardship activities in the LIS watershed	2-1.	HW-1; HW-9; HW-10
Promote habitat quality assessments for tidal wetlands.	2-1; 2-4	HW-6; HW-23; HW-27
Track habitat restoration and land protection activities in NYS	2-1; 2-4	HW-1; HW-9; HW-24
SET monitoring data	2-1; 2-4	HW-5; HW-23; HW-27
Public Communication and Outreach	2-2; 2-3	HW-13; HW-22; SC-12
Reporting	4-3.	SM-35

Title: **Acoustic Monitoring in the Western LIS**

Activity Type:	Habitat Restoration and Protection	Project Type:	New
Implementing Agency:	NYSDEC DMR	Total Estimate Budget	$557,308.00
Responsible Partners:		Federal Amount:	$334,385.00
		Match Amount:	$222,923.00

Objectives: To deploy ten acoustic receivers in the western Long Island Sound between Lattingtown, New York and Harrison, Connecticut. A technician will be hired to oversee the management of the acoustic receiver array, associated fish tagging information, and receiver metadata and detection. Technical reports and summaries will be written and shared with relevant parties.

Description: The NYSDEC, in collaboration with Stony Brook University, is proposing to collect information on the numbers, locations, movements, and behavior of Atlantic sturgeon, finfish and elasmobranchs via acoustic receivers in the western Long Island Sound to aid in the protection of species of greatest conservation needs.

Estimated Milestones: October 1, 2024 - September 30, 2027

CWA Program Elements: Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Receiver tasks	2-4.	HW-16
Technician Support	2-4.	HW-16; HW-10
Technical Reports	2-4.	HW-16; HW-10
Quality Assurance Project Plan	2-4.	HW-16

Title:	**Building a Salt Marsh Monitoring and Analysis Network to Support Restoration and Climate Change Sentinel Monitoring in Long Island Sound**		
Activity Type:	Habitat Restoration and Protection	Project Type:	New
Implementing Agency:	USFWS	Total Estimate Budget	$1,172,761.00
Responsible Partners:	Maritime Aquarium, Connecticut Estuarine Research Reserve, University of Connecticut	Federal Amount:	$1,172,761.00
		Match Amount:	$0.00

Objectives: To facilitate this decision-making conceptual model we are proposing to conduct the following during Phase 1 / Year 1 (this project): establish a collaborative group with expertise in salt marsh health, assess existing salt marsh resources, needs, and gaps, determine the necessary suite of parameters to evaluate salt marsh system health under climatic pressures, determine a shared set of standard practices and quality assurance plans, establish a coordinated project directory, recommend at risk and baseline reference locations ideal for monitoring climate change impacts to salt marshes of CT and NY. Phase II will be informed by, expand on, and implement the results of Phase 1 / Year 1. Among other activities, project partners are expected to coordinate and implement new monitoring activities to fill the identified gaps, establish consensus on thresholds for critical impacts for each parameter, recommend a suite of actions / recommendations should thresholds be crossed.

Description: Through this proposal, we are seeking to form a new collaboration of scientists and managers that will provide the data streams needed for impactful management decisions of these critical habitats under climatic pressures.

Estimated Milestones: October 1, 2024 - September 30, 2027

CWA Program Elements: Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Technical Workgroup	2-4.	HW-23; HW-27;WW-3
Project Repository - Centralized project and data repository/ directory (e.g., who is doing what, where, where do the data live, photos, lessons learned). Facilitate input into USGS meta-data database	2-4.	HW-23; HW-27;WW-3
Technical Memo: Parameter Selection	2-1.	HW-6; HW-27; WW-3
SOPs and QAPP - Agreed-upon Standard Operating Procedures for new and existing parameters, shared Quality Assurance Project Plan (QAPP) and/or QAPP template.	2-1.	HW-6; HW-27; WW-3
Technical Memo: Site Selection/Priorities	2-1.	HW-6; HW-7
Semi-Annual and Annual Reporting	2-4.	HW-6; HW-27; WW-3

Title: **Connecticut Stewardship & Habitat Restoration Coordination FY24**

Activity Type:	Habitat Restoration and Protection	Project Type:	Ongoing
Implementing Agency:	CT DEEP	Total Estimate Budget	$429,783.33
Responsible Partners:		Federal Amount:	$257,870.00
		Match Amount:	$171,913.33

Objectives: To support the coordinator to provide technical support and leadership to the HRSWG, serving as co-chair with NYSDEC. Much of the work supporting the LISS HRSWG will be through two habitat restoration sub-work groups Connecticut has developed for tidal wetlands and riverine migratory corridors. These groups meet at least once per year to formulate new work plans and coordinate implementation activities. The coordinator organizes these meetings and based upon work group priorities will assist the teams in securing funding, project engineering/design, securing permits and managing contracts where consulting firms are hired to develop restoration plans and designs. DEEP will enter into contracts to acquire and preserve habitat acreage.

Description: Connecticut's habitat restoration coordinator will continue to promote coastal habitat restoration and stewardship to maximize acres and miles restored annually. Specifically, the emphasis is upon project implementation (e.g., design, permitting, and securing funding) but will include support for habitat restoration planning (e.g., database management, outreach).

Estimated Milestones: October 1, 2024 - September 30, 2026

CWA Program Elements: Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Shoreline Public Access Preservation	2-1.	HW-9
Site Stewardship/Restoration	2-2; 2-4	HW-13; HW-27
Coordination of annual NEPORT reporting	2-4.	HW-23
Updating the Habitat Restoration website and database	2-3.	HW-20
Co-chair LISS Habitat Restoration and Stewardship work group (HRSWG)	2-3.	HW-22
Coordination of LIS Futures Fund proposal reviews	2-1, 2-3	HW-1; HW-22
Climate Change Adaptation and Sentinel Monitoring	2-1.	HW-11

Implementation of LISS Habitat Restoration CCMP implementation actions including riverine migratory and tidal wetland restoration project coordination and assistance	2-1.	HW-1; HW-3

Title: **Accessibility of LIDAR and multi-spectral imaging of CT saltmarshes**

Activity Type:	Habitat Restoration and Protection	Project Type:	New
Implementing Agency:	CT DEEP	Total Estimate Budget	$559,283.00
Responsible Partners:		Federal Amount:	$335,570.00
		Match Amount:	$223,713.00

Objectives: To support the future accessibility and use by CT DEEP staff, our varied conservation partners, and researchers across the Country, of this large baseline dataset that consists of high resolution LiDAR, ortho-imagery, and vegetation classification of the entire CT coastline and associated 100' upland buffer.

Description: This Project will facilitate and enable the long-term storage and public accessibility of all of the data and products from the previously funded and completed Project 'LIDAR and multi-spectral imaging for baseline saltmarsh monitoring. That Project created high resolution LiDAR, vegetation maps, and ortho-imagery of Connecticut's coastal saltmarshes and the 100' upland buffer associated with those wetlands. These data comprise over 45TB and ultimately require long-term storage capacity.

Estimated Milestones: October 1, 2024 - September 30, 2026

CWA Program Elements: Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Developing long term accessibility of aerial photos, LiDAR and saltmarsh community mapping	2-1; 2-4	HW-2; HW-7; HW-23
Accessibility of baseline data for modelling	2-1; 2-4	HW-5; HW-6; HW-27
One year baseline monitoring data to compare to future years	2-4.	HW-27

Title:	**Request for Proposals: Initiate and Develop a Long-Term Targeted and Large-Scale Eelgrass Seed Dispersal Restoration Initiative**		
Activity Type:	Habitat Restoration and Protection	Project Type:	New
Implementing Agency:	NEIWPCC	Total Estimate Budget	
Responsible Partners:		Federal Amount:	$1,500,000.00
		Match Amount:	
Objectives:	The objective of this proposal is to develop and release a Request for Proposals (RFP) to initiate a long-term targeted and large-scale eelgrass seed dispersal restoration initiative.		
Description:	This large-scale approach is recommended to introduce seagrass into stressful environments as plantings in large numbers overcomes natural variability, where high variability within eelgrass meadows is seen within Long Island Sound, and enhances self-sustaining feedback meaning the population can support itself in the long-term. To promote the ability for self-sustaining populations to expand naturally, the continuous dispersal of seeds annually will ensure this outcome		
Estimated Milestones:	October 1, 2024-September 30, 2028		
CWA Program Elements	Wetlands Program Support/Implementation		

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Develop and release the RFP	2-1.	HW-1; HW-6; HW-7; HW-23
Review and select proposals	2-1.	HW-1; HW-6; HW-7; HW-23
Execute subaward	2-1.	HW-1; HW-6; HW-7; HW-23
Subaward implementation	2-1.	HW-1; HW-6; HW-7; HW-23

Title: **Ecosystem evaluation of fish communities - embayment assessment**

Activity Type:	Habitat Restoration and Protection	Project Type:	New
Implementing Agency:	CT DEEP	Total Estimate Budget	$275,000.00
Responsible Partners:		Federal Amount:	$165,000.00
		Match Amount:	$110,000.00

Objectives: To initiate collaboration and data compilation of the available fish community data in LIS emabyments, provide an evaluation of sampling techniques that are appropriate in embayments, and provide a recommended sampling plan for fish communities in embayments, and investigate fish community indices development to support better Climate Change and Sentinel Monitoring recommendations and LISS Management Committee decisions, and better inform the States in stock assessment and designated use determinations under the Federal Clean Water Act.

Description: This project will evaluate the impact of climate change on fish communities of LIS embayments. While there have been observed changes in the fish communities of the open sound there is little information regarding the impact of climate change on the fish communities of the embayments of the LIS.

Estimated Milestones: October 1, 2024 - September 30, 2026

CWA Program Elements: Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Recommended Sampling Plan Memo	1-3.	WW-27
Recommended Indices and Thresholds Memo	2-1.	HW-6

Title:	**Long Island Sound oyster health assessment: Effects of climate change on population dynamics, disease proliferation, and reproduction on natural and restored oyster beds**		
Activity Type:	Habitat Restoration and Protection	Project Type:	New
Implementing Agency:	NOAA	Total Estimate Budget	$1,894,560.00
Responsible Partners:		Federal Amount:	$1,894,560.00
		Match Amount:	$0.00

Objectives: To characterize population health and stability of natural and restored Eastern oyster populations, identify key water quality indicators and oyster health status, and supplement continuous pH measurements with alkalinity and dissolved inorganic carbon.

Description: To enable the success of restoration and aquaculture initiatives and maximize the ecosystemservices provided by these and natural populations, it is critical to understand the biotic andabiotic risk factors and protective traits affecting oyster population health, survival, andreproductive capacity. The proposed work seeks to build upon the foundational knowledgeacquired in the current sampling time frame (April 2023–September 2024), in which we aim todevelop risk-based guidance for mitigating disease in restored populations by acquiring a greaterunderstanding of the presence and progression of disease in thriving, unmanaged oysterpopulations. In this initial season we have observed significant differences in themicroenvironments of each of four study sites, as well as population structure, health, andreproductive patterns (preliminary results).

Estimated Milestones: October 1, 2024-September 30, 2027

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Coordination with local partners for site visits to oyster beds in CT and NY	1-2; 1-3; 4-1	WW-39
Update QAPP	1-2; 1-3; 4-1	WW-39
Monitor carbonate chemistry	1-3.	WW-32
Monitor disease surveillance	2-2; 4-1; 4-3	HW-18; SM-26
Monitor reproductive condition	2-2; 4-1; 4-3	HW-18; SM-26
Monitor oyster recruitment	2-2; 4-1; 4-3	HW-18; SM-26

Monitor physical oyster bed assessment	2-2; 4-1; 4-3	HW-18; SM-26
Synthesis and statistical analysis of data collected	2-2.	HW-18
Conduct risk matrix for disease transmission and climate change related environmental outcomes	2-2; 4-1; 4-3	HW-18; SM-26
Present and share findings with stakeholders at state and local conferences	2-2; 1-3; 4-2	HW-18; WW-32; SM-26
Engage with public and local communities	3-1.	SC-7; SC-10
Execute One Health fellowship	3-2.	SC-19
Reporting	2-2; 4-1	HW-18
Publications	2-2; 4-1; 4-3	HW-18; SM-26
Monitor water quality	1-3.	WW-32

Title: **USFWS Eelgrass Intercomparison Study and Seasonality Assessment FY24**

Activity Type:	Habitat Restoration and Protection	Project Type:	Continuing
Implementing Agency:	USFWS	Total Estimate Budget	$94,949.00
Responsible Partners:	URI, CTDEEP, NYSDEC, EPA	Federal Amount:	$94,949.00
		Match Amount:	$0.00

Objectives: To conduct an intercomparison study to assess the comparability and usability between these methodologies (drones, aerial, and satellite) during the season (USFWS); and quantify seasonal variability in eelgrass bed density using drone imagery and underwater camera transect data at three sites during two survey windows (early and late season) (USFWS).

Description: This project is to extend the study for two years as in FY23 this was originally funded for only one year (2024). However, because the 2023 aerial survey (led by NYSDEC) was postponed to 2024, the USGS portion of this project (conducting the aerial survey) had to be also postponed to 2025 to avoid duplications. Therefore, it would be best to extend the study for two years (2024 & 2025) to better understand interannual variability. This interagency agreement to USFWS will contract University of Rhode Island to process the imagery from the aerial survey and conduct an intercomparison study between remote-sensing technologies.

Estimated Milestones: October 1, 2024 - September 30, 2025

CWA Program Elements: Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Intercomparison: LIS Eelgrass Collaborative to provide input on the study's approach.	2-1; 2-4	HW-7; HW-23; HW-25
Intercomparison: SAV Orthoimagery interpretation, delineation, and ground-truthing field work	2-1; 2-4	HW-7; HW-23; HW-25
Intercomparison: GIS database development, analysis, report writing, misc.	2-1; 2-4	HW-7; HW-23; HW-25

Title:

Long Island Sound Futures Fund 2024

Activity Type:	Implementation	Project Type:	Ongoing
Implementing Agency:	NFWF	Total Estimate Budget	$21,083,333.00
Responsible Partners:		Federal Amount:	$12,650,000.00
		Match Amount:	$8,433,333.00

Objectives: To help accelerate the restoration and protection of Long Island Sound through support of implementation activities that address the specific commitments and recommendations of the 2020-2024 CCMP.

Description: This project will 1) provide support for management of the Long Island Sound Futures Fund (LISFF) grant program NFWF, the direct recipient of the EPA Co-op funds; 2) provide individual grants to subrecipients with EPA Co-op monies towards projects that contribute to the protection and restoration of the health and living resources of Long Island Sound; and 3) make investments in on-the-ground actions in communities to improve water quality, protect habitat and living resources, educate and involve the public, improve the long-term understanding of how to manage the Sound, monitor progress, and redirect management efforts as described in the 2020 CCMP.

Estimated Milestones: October 1, 2024 - September 30, 2027

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Deliver technical networking and grant announcement event	4-2.	SM-13
Deliver multiple forms of education about LISFF investments and impact	4-2.	SM-13
Conduct proposal evaluations	4-2.	SM-13
Adapt the LISFF to strategically address the CCMP Update, increased funding and changing scope of work	4-2.	SM-13
Develop LISFF RFP and associated application materials	4-2.	SM-13
Disseminate RFP through partners and multiple formats	4-2.	SM-13
Deliver multiple forms of applicant and subrecipient technical assistance	4-2.	SM-13
Engage federal and nonfederal partnerships and networks	4-2.	SM-13

Administer subrecipient grants and recipient cooperative agreements	4-2.	SM-13
Finalize investment business planning	4-2.	SM-13

Title:	**Coastal resiliency assessment: near-term coastal change along the shorelines of Long Island Sound FY24**

Activity Type:	Modeling	Project Type:	Continuing
Implementing Agency:	USGS	Total Estimate Budget	$294,012.00
Responsible Partners:		Federal Amount:	$294,012.00
		Match Amount:	$0.00

Objectives: To perform an assessment of shoreline change trends from historical data for both long-term (80+ years of positional data) and short-term (~30 years); Incorporate shoreline change data into a coastal change likelihood assessment that uses location-specific coastal hazards to estimate the potential for landscape change over the next decade; Aggregate the shoreline change metrics and coastal change likelihood assessment outputs with coastal classification schemes available in NOAA's Continuously Updated Shoreline Position and/or NOAA's Environmental Sensitivity Index data layers (for example, classify change for "natural" and "hardened" shorelines); Publish all geospatial data layers generated in this analysis and make available in the web accessible USGS Coastal Change Hazards data portal; Publish a peer-reviewed interpretative report on the model outputs and data aggregation; Connect USGS Research Social Scientist(s) with Sea Grant Extension Sustainable and Resilient Communities (SRC) professionals in the Long Island Sound Work Group to support product dissemination and solicit feedback on product use and applications.

Description: Continuation of a three-year project to evaluate how shoreline and coastal landscape change impact coastal resources. This project is designed to build out data and interpretative capabilities in three years where year-end product deliverables have independent value and can stand-alone. The project will first quantify rates of shoreline change, then use the rates to update a coastal landscape change assessment that incorporates multiple hazards datasets with geomorphic and ecologic characteristics via machine learning (ML) outcomes, to identify areas with the highest propensity for experiencing change. Combining the updated shoreline change rates into the coastal landscape change assessment can be used to identify coastal vulnerability hot spots, determine areas with more potential for resiliency, and can be used to help detect optimal areas for investing in protective measures, such as living shorelines. More broadly, these products can be used to inform decision makers about the increased likelihood of near-term (10 years) coastal change hazards in the coastal zone including impacts to landforms such as tidal wetlands, dunes, and human infrastructure.

Estimated Milestones: October 1, 2024 - September 30, 2025

CWA Program Elements: Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Evaluate how current shoreline change trends influence the likelihood of a coast to respond dynamically	3-3; 4-3	SC-21; SM-26
Explore shoreline change outputs (rates and vulnerability) and aggregate with coastal classification schemes in CUSP/ESI data	3-5.	SC-31

Compile historical data and extract mew shoreline data for LIS	3-3; 4-1	SC-21; SM-1
Assess historical shorelines - Final draft form of GIS files for publication in USGS ScienceBase data release: baselines, transects (short- term/long-term), intersects (ST/LT) shorelines and FGDC metadata for all files.	3-3; 4-1	SC-21; SM-1

Title: **Embayment Data Collection for Modeling FY24**

Activity Type:	Modeling	Project Type:	Continuing
Implementing Agency:	CT DEEP	Total Estimate Budget	$1,416,666.67
Responsible Partners:		Federal Amount:	$850,000.00
		Match Amount:	$566,666.67

Objectives: To collect embayment water quality and hydrodynamic data for modeling purposes in the Poquonock River embayment.

Description: Funding is requested to continue the initial embayment monitoring and modeling, started in FY19. With FY24 funds, CT DEEP will initiate data collection in the Poquonock River located in Groton, CT because 1) the river includes environmental justice area and is easily accessible via Bluff Point State Park and a public boat launch; 2) the river is located within Connecticut's National Estuary Research Reserve which will result in a partnership with leveraging of resources; and 3) the infrastructure to collect embayment data for modeling purposes has been developed and can support continuation of data collection.

Estimated Milestones: October 1, 2024 - September 30, 2026

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Evaluate a collaboration with the CT NERR for the purposes of data collection, education, and stewardship	1-3.	WW-28; WW-35; WW-39
Semi-annual progress report and final grant closeout	1-3.	WW-14; WW-28
Collection of water quality, hydrodynamic, benthic, and macrophyte data in one embayment with associated stream gage continuous and discrete measurements) at the watershed pour point	1-3.	WW-27; WW-28; WW-35

Title: **Connecticut State Water Quality Monitoring for Long Island Sound FY24**

Activity Type:	Monitoring	Project Type:	Ongoing
Implementing Agency:	CT DEEP	Total Estimate Budget	$2,880,016.67
Responsible Partners:	N/A	Federal Amount:	$1,728,010.00
		Match Amount:	$1,152,006.67

Objectives: To monitor water quality parameters year round on a monthly schedule at stations throughout Long Island Sound; To monitor the temporal and spatial extent of summertime hypoxia through Sound-wide sampling every other week from late June through mid-September; To maintain a long-term database of information collected; To review data periodically, in combination with available historic data, for trends; To assess the long-term results of management actions (e.g., no-net increase nutrient (nitrogen) policy, nitrogen strategy, 2nd generation nitrogen strategy); To provide state and federal managers and policy-makers with information on existing conditions and trends that can be used in the development, implementation, and assessment of strategies to control and improve water quality in the Sound; To make data available for related efforts such as research and water quality model development and calibration; To make data available to other interested individuals/groups

Description: Monthly nutrient water quality surveys are conducted throughout the year to document processes relevant to hypoxia and nutrient dynamics. Additional hypoxia cruises are conducted each month from June to September period, for a total of eight surveys conducted during the summer season, to document the areal extent and concentrations of dissolved oxygen during the peak period for hypoxia. CT DEEP, as weather permits, conducts supplementary Winter/Spring chlorophyll a surveys in Western Long Island Sound during February and March to document chlorophyll concentrations more accurately through this period. CT DEEP continues biological/ecosystem sampling as part of the ongoing monitoring program. LISS funding includes a plankton community sampling and analyses component, allowing the continuation of work that was started with funding from EPA's NCA program in 2002.

Estimated Milestones: October 1, 2024 - September 30, 2026

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Plankton Community Assessment - Continue to collect plankton community data to evaluate biological condition and response to changing water quality; incorporate this data into the LISS WQ Indicators Reporting; Monthly zooplankton & phytoplankton community	4-3.	SM-28
Monthly Nutrient Surveys - Nutrient and ancillary data to evaluate benefits of nutrient management programs and health of LIS; Conduct monthly surface/bottom water quality data collection from 17 (year round) stations in LIS	1-3.	WW-24; WW-25

Hypoxia Surveys - Dissolved oxygen data and maps of areal extent and duration of hypoxia in LIS; Monthly oxygen profiles at 17 stations; Supplemental profiles at up to 30 stations during June – Sept period on bi-weekly basis, posted on CT DEEP website.	4-1.	SM-4; SM-5
Reporting - Field and laboratory data in Access format with goal of permanent incorporation into WQX, the web accessible system replacing STORET; Contribute data to LIS Report Card; Produce an annual joint "Hypoxia Season" Monitoring Report with IEC	1-3; 4-1	SM-6; SM-7
Ocean Acidification Monitoring - Conduct monitoring in the open Sound for coastal acidification monitoring; To continue pH monitoring and add alkalinity and DIC to calculate at buffering capacity and omega (at 2-3 selected stations); Conduct monthly surface	1-3; 4-1	WW-32; SM-26
Participate in LISS workgroups and tasks - Make recommendations regarding scope & effectiveness of LIS monitoring programs; take an active role in the water quality monitoring, watersheds and embayments, climate change and sentinel monitoring workgroups;	1-3.	SM-13

Title: **In-Stream Nitrogen Monitoring in the Upper Connecticut River Watershed FY24**

Activity Type:	Monitoring	Project Type:	Continuing
Implementing Agency:	USGS	Total Estimate Budget	$691,970.00
Responsible Partners:		Federal Amount:	$691,970.00
		Match Amount:	$0.00

Objectives: To: a) leverage existing and historical N data collection efforts in the upper Connecticut River watershed, and b) meet ongoing N, P, and DOC loading, fate and transport modeling data needs

Description: To optimize efforts to reduce loading of nitrogen to Long Island Sound, managers need a better understanding of relative magnitude and timing of nitrogen transported to LIS from tributaries to the Connecticut River in the northern portion of the Connecticut River watershed. The primary goal of the proposed study is to develop and implement a water quality monitoring strategy for nitrogen (N) phosphorus (P) and dissolved organic carbon (DOC) in the upper basin states of Massachusetts, Vermont, and New Hampshire

Estimated Milestones: October 1, 2024 - September 30, 2025

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Project QAPP	1-3.	WW-23; WW-24; WW-25
Water quality monitoring - approved continuous data for important parameter used to characterize water quality including spectrolyzer	1-3.	WW-23; WW-24; WW-25
Discrete water quality sampling - approved discrete water quality data for a range of forms of nitrogen and carbon	1-3.	WW-23; WW-24; WW-25
Estimates of loads of nutrients	1-3.	WW-23; WW-24; WW-25
Semi-annual reporting - routine updates characterizing project progress	1-1; 1-3	WW-7; WW-27; WW-28

Title: **Hempstead Harbor**

Activity Type:	Monitoring	Project Type:	New
Implementing Agency:	IEC	Total Estimate Budget	$107,885.00
Responsible Partners:		Federal Amount:	$65,550.00
		Match Amount:	$42,335.00

Objectives: To support monitoring in Hempstead Harbor by the Coalition to save Hempstead Harbor.

Description: The IEC will manage a subaward to the Coalition to Save Hempstead Harbor to conduct 2024-2025 monitoring surveys of Hempstead Habor.

Estimated Milestones: October 1, 2024 - December 31, 2025

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Water Quality Monitoring - Weekly sampling of up to 21 stations for selected water quality parameters	4-1.	SM-8

Title: **Major Long Island Sound Tributary Sampling FY24**

Activity Type:	Monitoring	Project Type:	Ongoing
Implementing Agency:	USGS	Total Estimate Budget	$346,000.00
Responsible Partners:		Federal Amount:	$346,000.00
		Match Amount:	$0.00

Objectives: To maintain a water-quality monitoring network in the estuarine reaches of the Thames, Connecticut, and Housatonic Rivers.

Description: The project would be the sixth year of a long-term monitoring project to collect water quality data on the three major tributaries to Long Island Sound (Thames, Connecticut, and Housatonic Rivers). The goal of the project is to characterize water quality in the three major tributary's estuaries and to further develop a nitrogen loading station in the lower tidally effected Housatonic River estuary.

Estimated Milestones: October 1, 2024 - September 30, 2025

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/ Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Continuous streamflow gaging station - Approved continuous streamflow data on tidally influence reach of the Housatonic River	1-1; 1-3	WW-7; WW-27; WW-28
Semi-annual reporting - routine updates characterizing project progress	1-1; 1-3	WW-7; WW-27; WW-28
QAPP	1-1; 1-3	WW-7; WW-27; WW-28
Continuous water quality monitoring - approved continuous data for important parameter used to characterize water quality	1-1; 1-3	WW-7; WW-27; WW-28
Discrete water quality sampling - approved discrete water quality data nutrients and chlorophyll-a	1-1; 1-3	WW-7; WW-27; WW-28

Title:	**Water quality monitoring observations to support the hypoxia management in Long Island Sound FY24**		
Activity Type:	Monitoring	Project Type:	Ongoing
Implementing Agency:	University of Connecticut	Total Estimate Budget	$725,007.00
Responsible Partners:		Federal Amount:	$565,513.00
		Match Amount:	$159,494.00

Objectives: Sustaining the distribution and analyses of the CTDEEP ship survey data that are used to determine the area of the bottom of LIS subject to hypoxia, and sustaining the operation of the on-line calculator for hypoxic volume and area; Continuation of the monitoring of the near bottom dissolved oxygen concentration and duration of hypoxia in the region that is likely to experience improvement first with the ARTG buoy, together with the other water-qualityand environmental parameters required to understand the variability in DO; Evaluate the effectiveness of the use of an autonomous glider to map the location of the 3 and 5 mg/l dissolved oxygen concentration contour on two 10-15 day surveys; The interannual and spatial variability in the rates of respiration and productivity in Long Island Sound has for several decades been thought to be highly variable. Recently, the deployment of in-situ respiration sensors has revealed the character of the variations quantitatively for the first time.

Description: Since 2013 the LISS has supported the deployment and operation of a buoy (ARTG) as an element of the LISICOS array, a component of the NERACOOS. LISS has also been providing partial support for the data system that allows access to the observations, and those of the ship survey program of the Connecticut Department of Environmental Protection. In the last year, the data system was augmented to allow calculation of the hypoxic area and volume from the ship survey data archive and this will be sustained for 2023- 2024. Sampling using autonomous gliders was added to the program in 2021 to complement the ship and buoy data through a cost-sharing arrangement with MARACOOS. Finally, we propose to add Automated Respiration Chambers (ARCs) to the sustained buoy program.

Estimated Milestones: October 1, 2024 - September 30, 2025

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Mapping and Data Products - Data systemincluding hypoxia maps, trends and statistics	1-3; 4-1	WW-39; SM-6
Operate ARTG buoy with surface and bottom DO sensors - Measurements of salinity, temperature, dissolved oxygen near the bottom and surface near CT DEEP station E1; Measurements of nitrate concentration, fluorescence, and light (PAR) at three buoys in LIS;	1-3.	WW-27; WW-32
Glider Surveys - Observations of the variability on the location of the 3 and 5 mgL near bottom DO contour	1-3; 4-1	WW-27; WW-32; SM-6

Automated Respiration Chambers - High frequency estimates of the rate of oxygen utilization	1-1.	WW-8
pH monitoring - time series of pH and pCO2	1-3.	WW-32
Data Archive Restoration - Operational access to all LISICOS buoy data, QAQC metrics, and a summary report	1-1; 1-3	WW-8; WW-32; WW-39
Reporting - Interim Reports and Final Report	1-1; 1-3	WW-8; WW-32

Title: **IEC 2024-2025 Water Quality Monitoring Program in Far Western Long Island Sound**

Activity Type:	Monitoring	Project Type:	Ongoing
Implementing Agency:	IEC	Total Estimate Budget	$1,148,585.00
Responsible Partners:		Federal Amount:	$648,585.00
		Match Amount:	$500,000.00

Objectives: To conduct the IEC water quality monitoring program to address the LIS updated CCMP 2020 goal of reducing the area of hypoxia by identifying the most problematic areas in western Long Island Sound that are most in need of improved management actions.

Description: The IEC's 2024-2025 monitoring surveys of western Long Island Sound will consist of continuing eight monthly "winter" surveys throughout the WLIS and the upper East River from October 2024 through May 2025 and 12 weekly "summer" surveys (June 2025 through September 2025).

Estimated Milestones: October 1, 2024 - December 31, 2025

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Water Quality Monitoring Surveys - Twelve weekly (June 2025-September 2025) surveys to assess the onset, extent and duration of hypoxia and hypoxia-related parameters. Bi-weekly surveys will include nutrients and BOD at 11 stations and TSS at all 22 stations	1-3; 4-1	WW-28; WW-32; SM-6; WW-8
Water Quality Monthly Surveys - Monthly surface data (October 2024-May 2025) for chlorophyll and TSS from all 22 historical stations and surface data for BOD and nutrients from 11 stations.	1-3; 4-1	WW-28; WW-32; SM-6; WW-8
Reporting - Staff will work with the LIS Water Quality Workgroup and CTDEEP to deliver a coordinated Soundwide water quality report after the monitoring season. Improved assessment of WLIS of environmental factors affecting dynamics of hypoxia in LIS.	1-3; 4-1	WW-28; WW-32; SM-6; WW-8
Coordination - Assessment of need for additional or modified monitoring in WLIS and/or embayment's. Cooperation with LISS workgroups, stakeholders and community groups, as appropriate.	1-3; 4-1	WW-28; WW-32; SM-6; WW-8

Title: **Acoustic Telemetry Array for Tagged Migratory Fish in Long Island Sound: Phase 2**

Activity Type:	Monitoring	Project Type:	Continuing
Implementing Agency:	CT DEEP	Total Estimate Budget	$120,398.33
Responsible Partners:		Federal Amount:	$72,239.00
		Match Amount:	$48,159.33

Objectives: To enhance the understanding and protection of the endangered Atlantic Sturgeon in Long Island Sound through deployment of Innovasea receivers and the introduction of additional acoustically-tagged fish.

Description: We are proposing to enhance our current acoustic telemetry technology to provide crucial spatial data for various species, including the endangered Atlantic Sturgeon. Our plan involves two key activities: implanting tags into Atlantic Sturgeon and deploying an array of Innovasea receivers throughout the Sound.

Estimated Milestones: October 1, 2024 - September 30, 2026

CWA Program Elements: Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Retrieve and download receivers	2-2.	HW-16
Data processing, analysis, and mapping	2-2; 3-1; 3-4; 4-2	SC-7; SM-3; HW-19; SM-20
Prepare QAPP	1-3.	WW-37
Supply Purchase	2-2.	HW-16
Final Receiver Location Mapping	2-2.	HW-16
Receiver and mooring preparation	2-2.	HW-16
Receiver deployment	2-2.	HW-16; HW-17
Receiver check	2-2.	HW-16

Title: **USGS Water Quality Monitoring in Selected Near Coast Environments of Long Island Sound FY24**

Activity Type:	Monitoring	Project Type:	Ongoing
Implementing Agency:	USGS	Total Estimate Budget	$318,000.00
Responsible Partners:		Federal Amount:	$318,000.00
		Match Amount:	$0.00

Objectives: To maintain a long-term record of observations of water quality parameters and sea level that will allow the assessment of the effect of global scale changes in climate on the near coastal ecosystems of the Long Island Sound. A secondary objective is to document seasonal variations of salinity and temperature gradients in the Connecticut River estuary that can be expected at different times of the year in spite of human activities in the watershed.

Description: Long-term continuous data at four wetland locations (Connecticut River at Old Lyme, Connecticut River at Essex, Oyster Bay, and Flax Pond) to assist in understanding the range of salinity conditions that currently exist and will help understand some of the possible changes that may occur under different hydrologic conditions that may occur as a result of global climate change

Estimated Milestones: October 1, 2024 - September 30, 2025

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Semi-annual reporting - routine updates characterizing project progress	1-1; 1-3	WW-7; WW-27; WW-28
Ocean elevation - approved stage data	1-1; 1-3	WW-7; WW-27; WW-28
Project QAPP	1-1; 1-3	WW-7; WW-27; WW-28
Water quality monitoring - approved continuous data for water temperature and specific conductance	1-1; 1-3	WW-7; WW-27; WW-28

Title: **Unified Water Study: Long Island Sound Embayment Research - 2025 Season**

Activity Type:	Monitoring	Project Type:	Ongoing
Implementing Agency:	Save the Sound	Total Estimate Budget	$2,143,118.00
Responsible Partners:		Federal Amount:	$1,285,871.00
		Match Amount:	$857,247.00

Objectives: To continue to monitor and assess the ambient conditions of water quality nearshore harbors and embayments throughout LIS, and therefore identify and control local pollution sources through community-based watershed monitoring (including community science) and protection programs.

Description: Save the Sound seeks funding to coordinate and implement the Unified Waters Study establishing a comparable bay-to-bay dataset describing the eutrophic conditions and environmental health of bays and harbors around the LIS with 26 subrecipients conducting the water-quality testing.

Estimated Milestones: October 1, 2024 - December 31, 2026

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Train 29 groups in the SOPs for monitoring Tier 1 parameters in the UWS	2-3; 3-1; 4-1	HW-22; SC-11; SM-8
Train 7 groups in the SOPs for monitoring Tier 2 parameters in the UWS	2-3; 3-1; 4-1	HW-22; SC-11; SM-8
Conduct in-the-field quality control audits	2-3; 3-1; 4-1	HW-22; SC-11; SM-8
Collect sampling data from 49 embayment's for dissolved oxygen, water clarity, temperature, salinity, chlorophyll a and qualitative macrophytes (Tier 1)	1-3.	WW-27; WW-28; WW-35
Collect sampling data for nitrogen, phosphorous, continuous DO, and Quantitative macrophytes from 12 embayment's (Tier 2)	1-3.	WW-27; WW-28; WW-35
Provide 4 email links to data to all project stakeholders; Use standardized UWS data spreadsheets; Publish data on Save the Sound website and enter into EPA WQX	3-1.	SC-7

Title: **Connecticut River at Middle Haddam Nutrient Loading FY24**

Activity Type:	Monitoring	Project Type:	Ongoing
Implementing Agency:	USGS	Total Estimate Budget	$88,880.00
Responsible Partners:		Federal Amount:	$88,880.00
		Match Amount:	$0.00

Objectives: To continue collecting data for the computation of loads of nitrogen to LIS from the Connecticut River watershed at Middle Haddam, CT.

Description: Before 2009, the USGS calculated nitrogen loads at the Connecticut River at Thompsonville, CT because it is the only stream gage on the Connecticut River without tidal influence. In 2009, recognizing that a large portion of the urbanized land use in the watershed and many wastewater-treatment facilities are downstream from this site, the USGS established a station on the Connecticut River at Middle Haddam, CT. Unlike other stations where periodic data are collected, this station can provide continuous time-series data for nitrate, streamflow, turbidity, colored dissolved organic matter (CDOM), and specific conductance. In addition, discrete samples of nitrate, ammonia, total organic nitrogen, and total nitrogen are collected approximately 18 times per year to validate the total nitrogen concentration model that allows for the computation of instantaneous total nitrogen loads .

Estimated Milestones: October 1, 2024 - September 30, 2025

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Project QAPP	1-1; 1-3	WW-27; WW-28
Water quality monitoring - approved continuous data for five parameters important in characterizing water quality	1-1; 1-3	WW-27; WW-28
Discrete water quality sampling - approved discrete water quality data for a range of forms of nitrogen	1-1; 1-3	WW-27; WW-28
Estimates of loads of nutrients	1-1; 1-3	WW-7; WW-27; WW-28
Semi-annual reporting - routine updates characterizing project progress	1-1; 1-3	WW-7; WW-27; WW-28

Title: **Long Island Sound Tributary Streamflow Monitoring FY24**

Activity Type:	Monitoring	Project Type:	New
Implementing Agency:	CT DEEP	Total Estimate Budget	$134,400.00
Responsible Partners:	USGS	Federal Amount:	$67,200.00
		Match Amount:	$67,200.00

Objectives: To support continued monitoring four important stream gages in Connecticut with long periods of record that are in danger of being discontinued.

Description: Streamflow monitoring by the United States Geological Survey at significant tributaries is critical to providing pollutant load estimates delivered to Long Island Sound. A recent gap analysis of the Connecticut stream gaging network has identified four important stream gages with long periods of record that are in danger of being discontinued due to lack of continued funding -Housatonic River at Ashley Falls, MA, Shetucket River at Taftville, CT, Rooster River at Fairfield, CT and Saugatuck River near Westport, CT.

Estimated Milestones: October 1, 2024 - September 30, 2026

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Collect continuous streamflow data	1-3.	WW-27; WW-28

Title: **National Coastal Condition Assessment 2025 LIS Embayment Intensification**

Activity Type:	Monitoring	Project Type:	Continuing
Implementing Agency:	EPA	Total Estimate Budget	$555,000.00
Responsible Partners:	CT DEEP	Federal Amount:	$555,000.00
		Match Amount:	$0.00

Objectives: To collect quality-assured water quality, sediment quality, benthic macroinvertebrate community data at 60 sites utilizing standardized collection and analytical methods of the National Coastal Condition Assessment, provide additional data for Phase 2 of the Index Development Project to be used as needed for calibration and validation of selected metrics, support Clean Water Act 305b reporting and 303d listing for both New York and Connecticut, provide benchmarking/baseline data to allow for future change detection or trends analyses considering management actions and climate change, and assist in clarifying ecosystem targets for shellfish growing areas, sediment quality improvement, and eelgrass extent

Description: This project will utilize the power of random statistical design and standard collection and analytical techniques of the National Coastal Condition Assessment (NCCA) Program to characterize the nutrients, sediments, and benthic macroinvertebrate community in Long Island Sound embayments. This project would be conducted in addition to, not a replacement of, the normal NCCA sampling conducted by CT DEEP in the open waters of

Long Island Sound.

Estimated Milestones: October 1, 2024 - September 30, 2026

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
2025 NCCA Sampling of 60 embayments	1-3.	WW-31

Title: **USGS Continuous Water Quality Monitoring in Norwalk River**

Activity Type:	Monitoring	Project Type:	Continuing
Implementing Agency:	USGS	Total Estimate Budget	$141,570.00
Responsible Partners:		Federal Amount:	$141,570.00
		Match Amount:	$0.00

Objectives: To continue continuous water quality and estuary elevation data collection in the Norwalk River Estuary at the dock near the Maritime Aquarium at Norwalk.

Description: USGS has been operating a continuous water quality monitor station on the Norwalk River Estuary at the Maritime Aquarium at Norwalk since the Spring of 2021. This monitoring station was equipped with both near surface and near bottom water quality monitors that collected water temperature, specific conductance, salinity, dissolved oxygen, turbidity and chlorophyll a. During the summers of 2021 and 2022 the dissolved oxygen concentrations often went below 3 mg/ L in both the near surface and near bottom water. This seasonal hypoxia is the result of excess nutrients entering the harbor and fueling algal blooms in portions of the upper Norwalk harbor. USGS has engaged with many different aspects of the Norwalk community to communicate the water quality issues that are being observed in the Norwalk River estuary. This location would be able to demonstrate the effective partnerships between the many local, state, and federal partners working together for a healthier LIS.

Estimated Milestones: October 1, 2024 - September 30, 2025

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Project QAPP	1-1; 1-3	WW-7; WW-27; WW-28
Water quality monitoring - approved continuous data for water temperature and specific conductance	1-1; 1-3	WW-7; WW-27; WW-28
Ocean elevation - approved stage data	1-1; 1-3	WW-7; WW-27; WW-28
Semi-annual reporting - routine updates characterizing project progress	1-1; 1-3	WW-7; WW-27; WW-28
Develop and conduct outreach with the Aquarium at Norwalk	2-3; 3-1	SC-6

Title: **USGS Coastal Acidification Monitoring FY24**

Activity Type:	Monitoring	Project Type:	Ongoing
Implementing Agency:	USGS	Total Estimate Budget	$325,009.00
Responsible Partners:		Federal Amount:	$325,009.00
		Match Amount:	$0.00

Objectives: To provide data from which aragonite saturation can be calculated from estuarine embayments and major tributaries across Long Island sound through operation of long-term monitoring networks and discrete sampling

Description: USGS will continue to contribute to this long-term coastal acidification monitoring, increasing spatial and temporal coverage of the Long Island Sound and its embayments. Data from this project will include parameters needed to assess the aragonite saturate state in the lower reaches of the major tributaries and embayments to the LIS. These data will enable water resource managers to provide baseline information on the current status of aragonite saturation and evaluate changes over time.

Estimated Milestones: October 1, 2024 - September 30, 2025

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Semi-annual reporting - routine updates characterizing project progress	1-3; 4-1	WW-28; WW-32; HW-23; SM-8
Develop QAPP	1-3; 4-1	WW-28; WW-32; HW-23; SM-8
Continuous water quality monitoring - approved continuous data for six water quality parameters important for characterizing water quality	1-3; 4-1	WW-28; WW-32; HW-23; SM-8
Discrete water quality sampling - approved discrete water quality data including total alkalinity, dissolved inorganic and organic carbon, and pH	1-3; 4-1	WW-28; WW-32; HW-23; SM-8
Computed aragonite saturation estimate	1-3; 4-1	WW-28; WW-32; HW-23; SM-8

Title: **Dashboard and microsite for Public Perception Survey**

Activity Type:	Public Education and Outreach	Project Type:	New
Implementing Agency:	NEIWPCC	Total Estimate Budget	
Responsible Partners:		Federal Amount:	$96,000.00
		Match Amount:	

Objectives: To communicate results of the public perception survey on the Long Island Sound Study website, and draw comparisons, when applicable, to the 2006 baseline survey and create a microsite and interactive dashboard that will enhance the readability of the data and provide users with the ability to customize data

Description: In late 2024 or early 2025, the LISS Communications and Outreach Team will be receiving from its contractor the results of a Public Perception Survey of Long Island Sound. NEIWPCC proposes an improved communications format – a standalone section in the website (a microsite) with an interactive dashboard that will guide user to charts and trends based on the survey findings. The dashboard will include a filter to customize data for users.

Estimated Milestones: October 1, 2024 - September 30, 2025

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Microsite and dashboard development	3-1; 4-3	SC-6; SC-7; SC-22; SM-30
Communications plan to raise awareness of dashboard	3-1; 4-3	SC-6; SC-7; SC-22; SM-30

Title: **LIS Mentor Teacher Program: Promoting LIS as a Teaching Tool for K-12 Formal and Informal Educators**

Activity Type:	Public Education and Outreach	Project Type:	Ongoing
Implementing Agency:	CT SG	Total Estimate Budget	$38,505.00
Responsible Partners:		Federal Amount:	$36,346.00
		Match Amount:	$2,159.00

Objectives: To facilitate the continued development of the LIS Mentor Teacher program with two grade level cohort workshops, incorporating evaluation results from years; work with the NYSG LISS Outreach Coordinators to ensure the LISMT program works well on both sides of the Sound; continue to develop and/or distribute LIS-focused curricular resources through LISMT workshops, meetings, and conferences; continue to gather information regarding the influence of the LISMT and summer institute programs and use of LIS resources, particularly in regard to the NGSS.

Description: Continue the Long Island Sound Mentor Teacher program in CT to recruit high quality, creative and respected teachers to assist their peers in incorporating LIS content into curricula within the scope of the newly adopted Next Generative Science Standards.

Estimated Milestones: October 1, 2024 - September 30, 2025

CWA Program Elements: Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Continue to develop and/or distribute LIS-focused curricular resources	3-1.	SC-1
Hold 2 LISMT professional development workshops for 40 K-12 formal & nonformal educators in spring/summer 2025	3-2.	SC-17; SC-18; SC-19

Title: **Messaging and Forecasting Hypoxia In Long Island Sound: Building a Communications ToolKit**

Activity Type:	Public Education and Outreach	Project Type:	New
Implementing Agency:	NEIWPCC	Total Estimate Budget	
Responsible Partners:	EPA, CT SG, NY SG	Federal Amount:	$60,000.00
		Match Amount:	

Objectives: To develop an animated video that communicates the issues and impacts of hypoxia in Long Island Sound with emphasis on land-use and anthropogenic influence, pilot targeted communications, engagement, and connection with 1-2 communities in the western Long Island Sound and install signage at selected communities, and with design and language translation support, create a communications kit of brochures, memes, graphics, etc. in different languages to help tell the story that conditions are improving and how it benefits communities.

Description: To enhance the future development and launch of the hypoxia forecasting tool, this proposal is to develop supplemental communications products: 1) an animated video, 2) 1-2 sites with signage, and 3) a communications kit.

Estimated Milestones: October 1, 2024 - September 30, 2026

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Video Development	1-3; 3-1	WW-7; SC-4; SC-7; SC-9; SC-10; SC-12
Communications kit development	1-3; 3-1	WW-7; SC-4; SC-7; SC-9; SC-10; SC-12
partner with community groups at Phase 1 sites	1-3; 3-1	WW-7; SC-4; SC-7; SC-9; SC-10; SC-12
Development and installation of signage at phase 1 sites	1-3; 3-1	WW-7; SC-4; SC-7; SC-9; SC-10; SC-12
Scope out communications game	1-3; 3-1	WW-7; SC-4; SC-7; SC-9; SC-10; SC-12

Title: **NEIWPCC LISS Program Implementation Support FY24: Task 1 - Outreach & Education Support**

Activity Type:	Public Education and Outreach	Project Type:	Ongoing
Implementing Agency:	NEIWPCC	Total Estimate Budget	$459,668.00
Responsible Partners:		Federal Amount:	$459,668.00
		Match Amount:	$0.00

Objectives: To support activities to be carried out by the LISS Communications Coordinator and Science Writer.

Description: NEIWPCC will assist with the development, coordination, and implementation of bi-state public involvement, education, outreach, and communication activities for LIS.

Estimated Milestones: October 1, 2024 - September 30, 2026

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Communications Coordination -Participate in 3-4 virtual meetings with the Communications and Outreach Team; Inform and engage the public by producing, reprinting or developing and distributing brochures and other materials; Updating the step by step: curb	3-1; 3-5	SC-6; SC-7; SC-9
LISS Ecosystem Target and Indicators - Updated Indicators Website QAPP; compile, interpret, and update LISS's 20 ecosystem targets (ET) and over 35 supporting indicators and continue to update the website; use 2020 Census to update the population indicator	3-1; 4-3	SM-30; SM-34; SC-9
LISS Website Management - Maintain and regularly update LISS website pages and its component databases and micro-sites to communicate LISS program & partner efforts to restore and protect the Sound; update and maintain the lissclimatechange.net website; a	3-1.	SC-7; SC-9; SC-10
LISS Website Management - Maintain CCMP tracking/reporting on the LISS website to communicate progress in restoring and protecting the Sound; inform Congress of the CCMP progress with a biennial report produced for the web and for print	4-3.	SM-32; SM-34
LISS Website Management - Produce story map with videos for new CCMP update and/or congressional report	4-3.	SM-32; SM-34
Sound Matters and Social Media Content - Produce e-news and social media content to communicate efforts to restore and protect the Sound; Publish at least 3 issues of Sound Matters e-newsletter on LISS related news; post 8 social media items per month, o	3-1.	SC-9; SC-10; SC-16

Reporting - Develop and report progress on NEIWPCC's sections of the annual Long Island Sound Study work plans to consider progress made and recommendations for improving implementation to achieve desired outcomes.	4-3.	SM-35
Habitat Restoration Database - Complete a major update of the habitat restoration database, which provides data supporting LISS's habitat and stewardship indicators; Ensure that all completed projects are entered into the database and new projects are add	2-4; 3-1; 4-3	HW-23; SC-7; SM-34

Title: **Long Island Sound Study (LISS) New York Public Outreach Program - Public Outreach Coordinator FY24**

Activity Type:	Public Education and Outreach	Project Type:	Ongoing
Implementing Agency:	NY SG	Total Estimate Budget	$348,015.00
Responsible Partners:		Federal Amount:	$330,345.00
		Match Amount:	$17,670.00

Objectives: To continue to develop programs to educate NY residents about LIS and encourage environmental stewardship; to fill requests for information from the public and extent publications.

Description: Continue the NY Public Outreach Program through 2024, which will fund a full-time public outreach coordinator to oversee the dissemination of accurate, up-to-date, research-based information about the LIS, LISS, and implementation activities of the partnership; and some of the funds will be allocated for a administrative assistant to help carry out the program.

Estimated Milestones: October 1, 2024 - September 30, 2026

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Professional Development - Identify and attend professional development activities to improve programs	4-2.	SM-15
Sound Stewards Program - Continue Sound Stewards Program to involve students and teachers in research projects in LISS stewardship and habitat restoration sites.	3-2.	SC-19
LIS Mentor Teacher Program - at least 2 workshops for teachers centered around LIS topics and led by educators	3-2.	SC-17
Citizens Advisory Committee (CAC) - CAC meetings coordination and planning, meeting minutes produced and distributed, maintaining contact lists and attendance tracking	3-1; 4-2	SC-13; SM-15; SM-17
Coordinated NEPs - Assist and coordinate activities with the NY-NJ Harbor Estuary Program, the Peconic Estuary Program Outreach Coordinator, and the SSER Science and Outreach Coordinator. Organize NY outreach staff meetings.	3-1.	SC-1
Future programming: Provide assistance to the Outreach Coordinator as new programs are developed and implemented.	3-1.	SC-2; SC-7
Sound Update Newsletter: Manage the mailing list database, manage contractor invoices, assist with other aspects as needed.	3-1.	SC-7

Teacher Workshops and Resources - To coordinate, host, and promote NY workshops as needed. Continue to promote and distribute LIS educational resources to teachers and informal educators. Adapt resources, programing, workshops, and webinars as needed.	3-2.	SC-17, SC-18, SC-19
Habitat Restoration and Stewardship Work Group - provide advice and technical assistance to work group meetings and identify outreach products, assist with public participation with NY projects	2-3; 4-2	HW-22; SM-15
Mailings: Handle all mail (incoming and outgoing) for program. Responsible for updating mailing lists and producing mailing labels. Track mailings and responses to inquiries.	3-1.	SC-2; SC-7
Travel: Manage all aspects of the fleet vehicle (reports mileage, registration, and proper maintenance).	3-1.	SC-2; SC-7
Public Involvement and Education Work Group: group currently inactive; adapt if/as necessary according to results of Strategic Communications Plan	3-1.	SC-6
Sound Update Newsletter - One issue of Sound Update is produced each year.	3-1.	SC-7
Research and Enhancement - Review LISS Enhancement grant proposals and NYSG Research Grant proposals when appropriate, including collecting input from the EJWG members when necessary. Contribute ideas and resources for grant proposals.	3-1.	SC-8
National Fish and Wildlife Foundation's LIS Futures Fund - Provide support and technical assistance to LISFF applicants during application process and if funded. Identify possible outreach opportunities within proposals and to promote funded projects.	3-1; 4-2	SC-8; SM-25; SC-15
General Outreach - Respond to requests for information, including dissemination of written materials, handling requests for information, making public presentations about the LISS to community and business groups, and staffing LISS displays	3-1.	SC-2; SC-7
Basic Outreach: Respond to requests for information when the Outreach Coordinator is out of office. Respond to media inquiries or direct calls to appropriate staff member.	3-1.	SC-2; SC-7
Watersheds and Embayment Work Group - provide advice and technical assistance to work group meetings and identify outreach products, assist with public participation with NY projects as appropriate (e.g. LIS futures Fund projects), provide the public with	3-1; 4-2	SC-14; SM-15

Communications, Outreach, and Engagement: Coordinate with the Communications, Outreach, and Engagement team and create social media posts, campaigns, website updates, news releases, communications products, etc.	3-1.	SC-1; SC-6; SC-7
Environmental Justice Work Group - Hold quarterly EJWG meetings; facilitate development and implementation of EJWG work plan; facilitate creation of new programming and tools in response to results of EJ Needs Assessment	3-1; 4-2	SC-4; SC-5; SM-17
Other Meetings - May include attending Sustainable and Resilient Communities Meetings; STAC Meetings, I-Team Meetings, Management Committee Meetings, etc.	4-2; 4-3	SM-15; SM-37
Volunteer and Stewardship Opportunities - Involve community members in hands-on activities to increase understanding, appreciation, and stewardship.	3-1.	SC-11

Title: **LISS New York City/Western Basin Public Outreach Program FY24**

Activity Type:	Public Education and Outreach	Project Type:	Ongoing
Implementing Agency:	NY SG	Total Estimate Budget	$270,820.00
Responsible Partners:		Federal Amount:	$257,780.00
		Match Amount:	$13,040.00

Objectives: To continue to develop programs to educate NYC and other western basin residents about Long Island Sound and encourage environmental stewardship focusing on environmental justice communities.

Description: The LISS NYC-Western Basin Outreach Coordinator will be based in NYC and focus on providing outreach support and programming materials, primarily in environmental justice communities, as well as in other areas of the western Basin in NY. The goals and activities will combine community needs with LISS outcomes, objectives and measures in a manner that demonstrates the relevance of the Sound to these communities.

Estimated Milestones: October 1, 2024 - September 30, 2026

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Lead the Communications, Outreach, and Engagement Workgroup	3-1.	SC-1; SC-6; SC-7
Citizens Advisory Committee (CAC) - CAC meetings coordination and planning, EJ work group update, meeting minutes produced and made available online	3-1; 4-2	SC-13; SM-15; SM-17
Habitat Restoration and Stewardship Work Group - Participation and coordination with work group will help to inform COE work group and identify opportunities for collaboration, outreach products, and assist with public participation with NY projects	2-3; 4-2	HW-22; SM-15
Environmental Justice Work Group - Join quarterly EJWG meetings to inform COE workgroup; Enhancement Grant Proposals to support EJ in LISS: EJ Needs Assessment, and EJ Small Grants Program.	3-1; 4-2	SC-4; SC-5; SM-17
Stewardship Days - This project is centered around providing volunteer opportunities in LIS's Stewardship Sites.	3-1.	SC-12
LISS Web Page- Work with the Communications Team and the Web Page Contractor to update the LISS web site.	3-1.	SC-7; SC-11

Volunteer Opportunities - Involve community members in hands-on activities to increase understanding, appreciation, and stewardship. Tasks include updating the "Volunteer Opportunities" webpage on the LISS website and organizing volunteer opportunities	3-1.	SC-11; HW-13; HW-21
LISS Social Media - Social media posts on Facebook, Twitter, and Instagram	3-1.	SC-1; SC-2; SC-8; SC-7
Research and Enhancement - Review LISS Enhancement grant proposals, including collecting input from the new EJ Work Group members. Review for NYSG Research grant pre-proposals	3-1.	SC-8
National Fish and Wildlife Foundation's LIS Futures Fund - Provide support and technical assistance to LISFF applicants during application process and if funded. Identify possible outreach opportunities within proposals and to promote funded projects.	3-1; 4-2	SC-8; SM-25; SC-15
General Outreach - Respond to requests for information, including dissemination of written materials, handling requests for information, making public presentations about the LISS to community and business groups, and staffing LISS displays	3-1.	SC-2; SC-7
Sound Stewards Program - Continue Sound Stewards Program to involve students and teachers in research projects in LISS stewardship and habitat restoration sites.	3-2.	SC-3; SC-5; SC-19
Professional Development - Identify and attend professional development activities to improve programs	4-2.	SM-15

Title: **Long Island Sound FY24 Connecticut Communications, Outreach and Engagement Program**

Activity Type:	Public Education and Outreach	Project Type:	Ongoing
Implementing Agency:	CT SG	Total Estimate Budget	$181,584.00
Responsible Partners:		Federal Amount:	$170,791.00
		Match Amount:	$10,793.00

Objectives: To support the Coordinator to increase appreciation, stewardship, awareness and understanding of Long Island Sound and efforts to restore and protect it; Emphasize educational programs for diverse communities and stakeholders that lead to the protection and restoration of Long Island Sound's natural resources; Work with teams to enhance public relations, develop innovative programs and materials to enhance environmental/ocean literacy and respond to requests for information about LIS/LISS; Enhance the stewardship of Long Island Sound, using the Long Island Sound Study Stewardship Sites to share an appreciation for the impacts of investments on the restoration of Long Island Sound; Assist the LISS in meeting NEP requirements, particularly related to public involvement, education and outreach and regularly reporting relevant outputs, outcomes and impacts; Work under the general supervision from CTSG leadership and receive program guidance from other partner agencies involved with LISS, including COE Team; Serve as co-chair of the LISS Communications, Outreach and Engagement Plan for LISS; Provide support to the CAC for LISS; Coordinate and collaborate with LISS Outreach Coordinators in NYS and NYC, other LISS Work Groups, CT NERR, and CT SG colleagues to advance the goals of the CCMP and incorporate relevant research and educational resources into LISS

Description: Continue the support for the Connecticut Communications, Outreach and Engagement Program which includes the coordinator working to increase appreciation, stewardship, awareness, and understanding of LIS and efforts to restore and protect it.

Estimated Milestones: October 1, 2024 - September 30, 2025

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Outreach support for LISS work groups and teams	3-1.	SC-7; SC-10
Outreach support for funding opportunities (LISFF, etc.)	3-1.	SC-8; SC-15
General outreach as primary contact in CT for info on LIS/LISS	3-1.	SC-7
Expand opportunities for individuals to engage as LIS/watershed environmental stewards or citizen scientists	3-1; 3-2	SC-2; SC-3; SC-11
Outreach support for CT NERR	3-1; 3-2; 4-2	SC-8; SC-19; SM-25

Professional development and Sea Grant responsibilities	4-2.	SM-15
Outreach support for LISS CAC	3-1; 4-2	SC-13; SM-15; SM-17
Participation in LISS committee and workgroup meetings	3-1.	SM-15
LISS Communications, Outreach, and Engagement Work Group	3-1.	SC-1; SC-6; SC-7
Outreach programs, education and tools for traditional and multicultural audiences	3-1; 4-2	SC-1; SC-4; SC-7

Title: **Watershed Model - Outreach, Creation & Capacity Building FY24**

Activity Type:	Public Education and Outreach	Project Type:	Continuing
Implementing Agency:	CT DEEP	Total Estimate Budget	$416,666.67
Responsible Partners:		Federal Amount:	$250,000.00
		Match Amount:	$166,666.67

Objectives: To engage and support local partners to utilize CTWM and enable implementation of nutrient reduction strategies.

Description: CT DEEP proposes a dual track for FY24 to ensure the investment into the Connecticut Watershed Model (CTWM) remains relevant and there is a continued expansion in capacity, and thereby continued link to real water quality benefits. This phase will incorporate learnings from the EJ Needs Assessment and USGS's Enhanced Statewide Monitoring Summary (both funded in FY23), and continue the bridge between modeling water quality benefits to implementation of strategies that realize water quality benefits.

Estimated Milestones: October 1, 2024 - September 30, 2026

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Establish shared prioritization of minimal monitoring for ensuring longevity of CTWM	1-3.	WW-2; SC-5; SC-1
Two workshops Co-Creation	4-2; 4-3	WW-2; WW-1; SM-17
Monitoring Data	1-3.	WW-2; SM-1

Title:	**Anniversary FY24 LISS Supplemental Proposal Guidance: Support LISS 40th Anniversary conference**

Activity Type:	Public Education and Outreach	Project Type:	New
Implementing Agency:	NEIWPCC	Total Estimate Budget	
Responsible Partners:		Federal Amount:	$65,387.00
		Match Amount:	

Objectives: To communicate the progress made and the challenges ahead for the Long Island Sound Study's efforts to restore the Sound with in person events and communications materials, celebrate the 40th anniversary of the Sound with a day long event and other events throughout the year, announce the completion of the revised CCMP with a signing ceremony of the Policy Committee at the day long event, publicize the launch of LISS's new name and new mission statement.

Description: In 2025, LISS will be completing the revised Comprehensive Communications and Management Plan, a blueprint for managing the Sound's ecological challenges over the next 10 years. At the same time, LISS will be celebrating its 40th anniversary, a time to look back at the accomplishments the partnership has made over four decades. NEIWPCC, with support from the COE workgroup and the New York and Connecticut Sea Grant outreach coordinators, is proposing that we mark these two milestones with events and communications and outreach materials throughout 2025 to communicate the role the partnership program has played in the Sound's restoration.

Estimated Milestones: October 1, 2024 - September 30, 2025

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Design 40th anniversary logo and communications materials	3-1; 4-2	SC-1; SC-7; SC-9; SC-13; SM-15; SM-18
Host 40th Anniversary event	3-1; 4-2	SC-1; SC-7; SC-9; SC-13; SM-15; SM-18

Title:	**Providing Outreach to local municipalities on the Compound Flood Risk Model**

Activity Type:	Public Education and Outreach	Project Type:	New
Implementing Agency:	NY SG	Total Estimate Budget	$64,900.00
Responsible Partners:	CT SG	Federal Amount:	$61,552.00
		Match Amount:	$3,348.00

Objectives: To provide outreach to relevant stakeholders on the new Compound Flood Risk Model, assess stakeholder knowledge gaps, and effectively communicate the model with stakeholders to enhance the use of the online mapper in decision-making management.

Description: Following the development of the Compound Flood Risk model, continued support to assess and provide relevant outreach and materials about the model to stakeholders is needed. The new model's goal is to accurately predict coastal flood extents and the impacts of sea level rise on stormwater management, in order to better understand compound flood risks. The resulting coupled model can be used by public and private entities seeking to identify future capital-improvement and operational management needs to address increased flooding.

Estimated Milestones: October 1, 2024-September 30, 2025

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
5 Compound Flood Risk Model interactive mapper workshops	3-3.	SC-20; SC-23; SC-27
Compound Flood Risk Model assessment tool	3-3.	SC-20; SC-23; SC-27
Compound Flood Risk Model assessment report	3-3.	SC-20; SC-23; SC-27
Final CFRM Toolkit	3-3.	SC-20; SC-23; SC-27
Final Workshop and showcase	3-3.	SC-20; SC-23; SC-27

Title: **A Network of Long Island Sound Schools FY24: Protecting the Sound One School at a Time**

Activity Type:	Public Education and Outreach	Project Type:	Continuing
Implementing Agency:	CT SG	Total Estimate Budget	$268,611.00
Responsible Partners:		Federal Amount:	$255,659.00
		Match Amount:	$12,952.00

Objectives: To provide opportunities for schools to learn about LIS, LIS research, and promote best environmental practices; develop skills to foster the next generation of LIS leaders and stewards; provide opportunities for students, teachers, parents, and friends to participate in a range of environmental activities to take care of LIS; continue to support veteran LIS schools; create a network of LIS schools to share resources and best practices

Description: Modeled on NOAA's Ocean Guardian Schools and the internation Blue Schools network, a LIS Schools network compels schools to make a commitment to the protection and conservation of local watersheds, LIS, and our one global ocean.

Estimated Milestones: October 1, 2024 - September 30, 2025

CWA Program Elements: Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Revise criteria and rubric for LIS school designation; Update LIS Schools Flier	3-1; 4-1-; 4-2, 1-3	SC-8; SC-17; SC-19
Select veteran school advisors; recruit and select schools	3-1; 4-1-; 4-2, 1-4	SC-8; SC-17; SC-19
Review, finalize, and implement projects for new and veteran schools	3-1; 4-1-; 4-2, 1-3	SC-1; SC-17; SC-19
Disseminate results	3-1; 4-1-; 4-2, 1-4	SC-1; SC-17; SC-19

Title:	**Connecticut Outreach Support Coordinator FY24**

Activity Type:	Public Education and Outreach	Project Type:	New
Implementing Agency:	CT SG	Total Estimate Budget	$135,035.00
Responsible Partners:		Federal Amount:	$128,559.00
		Match Amount:	$6,476.00

Objectives: To support for a new Outreach Support Coordinator through September 2025.

Description: Working with the LISS COE team and LISS agency staff, the support coordinator will enhance collaboration and communication between LISS partners, work groups, and the general public. The coordinator will support existing outreach efforts through the management of LIS-related educational resources, online communications, and partner engagement. The coordinator will support new outreach initiatives by expanding existing partnerships, identifying innovative communication strategies, and providing general assistance with program development and implementation with the overall goal of increasing awareness and stewardship of Long Island Sound

Estimated Milestones: October 1, 2024 - September 30, 2025

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Develop and implement opportunities for enhanced collaboration, communication, and outreach tools developed for new and existing partners	3-1; 4-2	SC-1; SC-4; SC-7
Outreach and support for LIS work groups, teams, general communities and audiences	3-1; 4-2	SC-1; SC-2; SC-6; SC-7; SC-12; SC-13; SC-15;
Professional development and Sea Grant general responsibilities	4-2.	SM-15

Title: **NEIWPCC LISS Program Implementation Support FY24: Task 5 Science Coordination**

Activity Type:	Research	Project Type:	Ongoing
Implementing Agency:	NEIWPCC	Total Estimate Budget	$191,245.00
Responsible Partners:		Federal Amount:	$191,245.00
		Match Amount:	$0.00

Objectives: To support activities to be carried out by the LISS Science Coordinator.

Description: The NEIWPCC LISS Science Coordinator will develop and maintain professional scientific and technical contacts among the LISS partners, as well as among local/regional/national/international scientific communities, as the issues or topics warrant. NEIWPCC's Science Coordinator will manage the scientific resources of the LISS, including collecting and organizing relevant references; and organizing and conducting conferences, meetings, symposia, or other web-based discussions on topics of relevance or concern to the science of the LIS ecosystem.

Estimated Milestones: October 1, 2024 - September 30, 2026

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Coordinate scientific research activities - Coordinate and integrate science and research activities with state and federal partners and other scientists/scientific bodies via staff participation in LISS MC and I-Team meetings; Report to LISS MC at least	1-3; 4-3	WW-28; SM-25; WW-39
Science liaison to partner groups and agencies - Represent LISS at one regional or national event annually; Assist Sea Grant programs with competitive research grant programs and biennial LIS research conference; Participate in development and assessment	4-1; 1-1	SM-5; SM-11; WW-8
Coordination of the STAC and Water Quality Monitoring Workgroup - Hold regular meetings (3 times annually) of the STAC and Water Quality Monitoring workgroups. Distribute meeting agendas and minutes; Compile & document scientific research needs assessment	4-1; 1-3	SM-1; WW-28
Reporting - Develop and report progress on NEIWPCC's sections of the annual Long Island Sound Study work plans to consider progress made and recommendations for improving implementation to achieve desired outcomes.	4-3.	SM-35

Title: **Long Island Sound Research Grant Program FY24**

Activity Type:	Research	Project Type:	Ongoing
Implementing Agency:	CT SG and NY SG	Total Estimate Budget	$4,300,000.00
Responsible Partners:		Federal Amount:	$3,000,000.00
		Match Amount:	$1,300,000.00

Objectives: The first objective is to identify and fund high priority, high quality research needed to best achieve the vision, goals, and targets of LISS CCMP. The second objective is to promptly share the results of the research and assessment work, providing critical, new, science-based information that can inform decision-making and actions towards reaching the vision and goals for the Long Island Sound laid out in the CCMP.

Description: The NY and CT Sea Grant programs propose to jointly administer a competitive research program to address the needs of the LISS. These needs are derived from the LISS CCMP and prioritized for developing a request for proposals (RFP) with input from the LISS Science & Technical Advisory Committee and the Science Coordinator.

Estimated Milestones: October 1, 2024 - September 30, 2025

CWA Program Elements: N/A

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Select research projects through an open, competitive, peer review process.	4-1.	SM-1
Fund and administer the selected projects	4-1.	SM-1
Share results at the LISS Research Conference	4-1.	SM-1

Title: **DEIJ in the LISS Partnership: Response to the Internal Assessment**

Activity Type:	Stewardship and Resiliency	Project Type:	New
Implementing Agency:	NY SG	Total Estimate Budget	$56,500.00
Responsible Partners:		Federal Amount:	$56,500.00
		Match Amount:	$0.00

Objectives: Provide opportunity for members of the LISS partnership to gain a better understanding of diversity, equity, inclusion, and justice terminology, history, and practices.

Description: Basic Trainings on Diversity, Equity, Inclusion, and Justice for the Long Island Sound Study Partnership, including sessions for the Citizens Advisory Committee and the Management Committee.

Estimated Milestones:

CWA Program Elements: N/A

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Virtual and 2 in-person trainings	4-2.	SM-17

Title: **Sustainable and Resilient Communities Work Plan FY24**

Activity Type:	Stewardship and Resiliency	Project Type:	Ongoing
Implementing Agency:	CT SG and NY SG	Total Estimate Budget	$1,560,886.00
Responsible Partners:		Federal Amount:	$1,455,587.00
		Match Amount:	$105,299.00

Objectives: To implement the fourth year of the work plan developed by the Sustainable and Resilient Communities Working Group to advance the Sustainable and Resilient Communities theme of the CCMP.

Description: The LISS Sustainable and Resilient Work Group developed a 5-year work plan, in which this proposal will implement year 4. The work plan has the following desired outcomes: coordinated regional response; trained decision-makers; planned infrastructure improvement; viable government services; and facilitated implementation of Long Island Sound sustainability and resilience projects.

Estimated Milestones: October 1, 2024 - September 30, 2025

CWA Program Elements: Supporting Sustainable Wastewater Infrastructure

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Hold annual bi-state workshop	3-3; 3-4	SC-20; SC-23; SC-24
Maintain a clearinghouse of tools and resources	3-3; 3-4	SC-20; SC-23
Support Sustainable and Resilient Communities work group and other administrative tasks, such as the LISS CCMP Revision	3-3; 3-4	SC-20; SC-23
Develop training programs based on needs assessment findings	3-4.	SC-23
Improve coordination among levels of government	3-3; 3-4	SC-20; SC-23; SC-24
Continue Breaking Down Barriers to Implementation Program	3-3; 3-4	SC-20; SC-24; SC-27
Develop next 5-year Work Plan	3-3; 3-4	SC-20; SC-24; SC-27

Title: **Support for Expansion in EJ for Recreational Fishing**

Activity Type:	Stewardship and Resiliency	Project Type:	New
Implementing Agency:	NYSDEC DMR	Total Estimate Budget	$84,211.00
Responsible Partners:		Federal Amount:	$80,000.00
		Match Amount:	$4,211.00

Objectives: To support an initiative aimed at enhancing environmental justice in recreational marine fishing. The goal of the project is to address language barriers that often disadvantage certain communities in understanding fishing regulations, consumption advisories, and best practices.

Description: The NYSDEC, is seeking support to address language barriers regarding fishing regulations, consumptions, and best practices by developing focus groups composed of community outreach leaders who represent the twelve languages the materials will be translated to.

Estimated Milestones: October 1, 2024 - September 30, 2027

CWA Program Elements: Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Formation of Focus Groups	3-3.	SC-4; SC-5
Needs Documents	3-3.	SC-4; SC-5
Design of Guide and Stickers	3-3.	SC-5; SC-7
Translations of Guide and Stickers	3-3.	SC-7
Print and Distribution of Materials	3-3.	SC-3; SC-7
Development of Online Tracking Form and Database	3-3.	SC-3; SC-5

Title: **Facilitating Use and Understanding of the Compound Flood Risk Study Interactive Online Mapper**

Activity Type:	Stewardship and Resiliency	Project Type:	New
Implementing Agency:	USGS	Total Estimate Budget	
Responsible Partners:	NYSG	Federal Amount:	$50,000.00
		Match Amount:	

Objectives: To provide assistance to workshops that will be designed to train stakeholders on the use of the CFR Mapper for understanding flood risks in areas of interest.

Description: The USGS New York Water Science Center is a partner in the Long Island Sound Study, and with the Sustainable and Resilient Communities (SRC) Working Group (a team of Connecticut and New York Sea Grant Extension Professionals) is conducting an assessment of compound flood risk from the combined effects of sea level rise on storm surge, tidal and groundwater flooding, and stormwater (https://www.usgs.gov/centers/new-york-water-science-center/science/assessment-compound-flood-risk-combined-effects-sea). USGS is developing a public-facing online interactive Compound Flood Risk mapper (CFR Mapper) that will allow stakeholders to view study results. In a separate FY24 LISS supplemental funding request, New York (NY) Sea Grant has proposed coordinating a series of workshops to educate stakeholders on use of the CFR Mapper for review of potential flood risks in areas of interest.

Estimated Milestones: October 1, 2024 - May 30, 2026

CWA Program Elements: Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Develop workshop materials	3-3; 3-4	SC-20; SC-23
Attend workshops	3-3; 3-4	SC-20; SC-23
Implement minor modifications to the online mapper	3-3; 3-4	SC-20; SC-23
Publish updated interactive online mapper, and attending a final workshop	3-3; 3-4	SC-20; SC-23

Title: **FY24 LISS Sustainable and Resilient Communities Break Down Barriers Program**

Activity Type:	Stewardship and Resiliency	Project Type:	Continuing
Implementing Agency:	CT SG and NY SG	Total Estimate Budget	$1,167,343.00
Responsible Partners:		Federal Amount:	$1,140,000.00
		Match Amount:	$27,343.00

Objectives: To implement the third year of the SRC Break Down Barriers Program and address the most pressing needs in the LIS region, while advancing the goals of the LISS CCMP.

Description: The Break Down Barriers grant writing assistance Program facilitates the hiring of grant preparation and writing support to help communities develop successful sustainability and resilience focused project grant applications.

Estimated Milestones: October 1, 2024 - September 30, 2025

CWA Program Elements

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Continue Break Down Barriers to Implementation Program	3-3; 3-4	SC-20; SC-24; SC-27

Title:	**Summary Report of water-quality data collected at Mystic, Norwalk, Southport, and Saugatuck Embayments 2021 to 2024**		
Activity Type:	Water Quality Planning and Implementation	Project Type:	New
Implementing Agency:	USGS	Total Estimate Budget	
Responsible Partners:	CT DEEP	Federal Amount:	$140,000.00
		Match Amount:	

Objectives: To evaluate and summarize the discrete and continuous water-quality data along with the hydrologic data during the 2 years of data collection in each embayment: 1) Top and bottom discrete data are being collected for 2 years in each embayment with intensive sampling in the first 6 months. Statistical summaries of nitrogen, phosphorus, dissolves organic carbon, silica, total suspended solids, and carbonaceous biological oxygen demand will be included in the report.; 2) Depth integrated profiles are performed with the discrete sampling and will be summarized to help characterize the water quality spatially and vertically in each embayment; 3) Continuous water-quality monitors are deployed at 2 or more fixed locations in the upper and lower embayments and provide spatial and vertical data at a finer scale to improve the accuracy and precision of data used for each embayment model.

Description: Produce a USGS Scientific Interpretive Report (SIR) to summarize the water quality and hydrologic data collected in the Norwalk, Mystic, Southport, and Saugatuck embayment from May 2021 to March 2024 (figures 1-4). Nutrient models for each embayment will be created based on the collected data which will augment the current long-term-ambient-water-quality monitoring network currently operated by CT DEEP and USGS. The water quality and hydrologic data collected could be used to characterize nutrient loading from coastal embayments into the Long Island Sound (LIS). The robust data set of water-quality and hydrologic data collected can be evaluated and summarized to provide water resource managers with a detailed understanding as to how, and to what extent, excessive amounts of nutrients affect coastal bays in LIS.

Estimated Milestones: October 1, 2024 - May 30, 2026

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Project QAPP	1-3.	WW-23; WW-24
Summary of Methods and Data Collection - Describe methods for water-quality and hydrologic data collection and summarize results	1-3.	WW-23; WW-24
Statistical Analysis - Compilation of tables of summary statistics, graphs of correlated, and regressed data variables.	1-3.	WW-23; WW-24
Draft Report in Publication review process	1-3.	WW-23; WW-24
Final report	1-3.	WW-23; WW-24

Title:	**Long Island Sound Study – Agriculture and Nutrient Management: Outreach**

Activity Type:	Water Quality Planning and Implementation	Project Type:	Ongoing
Implementing Agency:	NRCS	Total Estimate Budget	$170,989.00
Responsible Partners:		Federal Amount:	$170,989.00
		Match Amount:	$0.00

Objectives:	To connect agricultural producers and landowners with NRCS technical and financial assistance programs that benefit Long Island Sound
Description:	An Outreach Specialist position on the Connecticut NRCS staff and funded by the LISS will ensure NRCS programs and services in the Connecticut-portion of the Long Island Sound area are made equally accessible to all customers, focused on the underserved. The incumbent will collaborate and work with a variety of federal, state, and community-based organizations to ensure that a consistent outreach approach will be used and will provide advice and make recommendations to the NRCS State Conservationist on outreach priorities. A focus will be on urban agriculture, riparian buffers, and wetland easements.
Estimated Milestones:	October 1, 2024 - September 30, 2025
CWA Program Elements	Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
General Outreach	3-1.	SC-7; SC-14
Public Education and Outreach	3-1; 3-3	SC-7; SC-21
Coordinate Meetings, Workshops, and Resources	3-1; 3-4	SC-4; SC-11; SC-28
Dissemination of LIS Agricultural Information and Outreach	3-1.	SC-2; SC-7; SC-14

Title:	**Long Island Sound Study – Agriculture and Nutrient Management: Planning and Implementation**

Activity Type:	Water Quality Planning and Implementation	Project Type:	Ongoing
Implementing Agency:	NRCS	Total Estimate Budget	$171,048.00
Responsible Partners:		Federal Amount:	$171,048.00
		Match Amount:	$0.00

Objectives: Connect agricultural producers and landowners with NRCS technical and financial assistance programs that benefit Long Island Sound

Description: Two Nutrient Management Specialist positions on the Connecticut NRCS staff and funded by the LISS will allow NRCS to drive LISS progress toward attaining their Clean Waters/Healthy Watersheds goals to measurably reduce the area of hypoxia in Long Island Sound. The planning done by the Nutrient Management Specialists will assist farmers with proper nutrient applications which will decrease contaminated runoff from entering Long Island Sound.

Estimated Milestones: October 1, 2024 - September 30, 2025

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Collaborate with municipalities, local partners and stakeholders to strategically plan for and implement capital improvements, Best Management Practices (BMPs), and improved operation and maintenance to mitigate point and nonpoint source pollution loading	1-2.	WW-2
Improve best management practices for agriculture and urban turf.	1-2.	WW-9
Assess sources of pathogens and nutrients and work with agricultural communities to abate or alleviate those sources.	1-3.	WW-35

Title: **NEIWPCC LISS Program Implementation Support FY24: Task 7 LIS Nitrogen Reduction Coordination**

Activity Type:	Water Quality Planning and Implementation	Project Type:	Ongoing
Implementing Agency:	NEIWPCC	Total Estimate Budget	$86,475.00
Responsible Partners:		Federal Amount:	$86,475.00
		Match Amount:	$0.00

Objectives: NEIWPCC will organize and support the LIS Nitrogen Reduction Coordination efforts, to involve the tributary states, in Management Committee activities.

Description: LIS Nitrogen Reduction Coordination efforts will support the need to continue coordination efforts between al the states within the watershed in support of the CCMP 2020-2024. To accomplish this, efforts will include the dissemination of information to interested parties on a regular basis.

Estimated Milestones: October 1, 2024 - September 30, 2026

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
LIS Nitrogen Reduction Coordination - Host regular (at least two) meetings or conference calls each year, especially to coordinate bi-state actions/approaches; develop and distribute written agendas and summaries of nitrogen-related activities, actions, a	4-2; 1-1	SM-19; WW-7
Reporting - Develop and report progress on NEIWPCC's sections of the annual Long Island Sound Study work plans to consider progress made and recommendations for improving implementation to achieve desired outcomes	4-3.	SM-35

Title: **Residential Fertilizer Community Based Social Marketing Project**

Activity Type:	Water Quality Planning and Implementation	Project Type:	Continuing
Implementing Agency:	NYSDEC DOW	Total Estimate Budget	$263,158.00
Responsible Partners:		Federal Amount:	$250,000.00
		Match Amount:	$13,158.00

Objectives: This project seeks to develop a CBSM campaign in a municipality/community in the Long Island Sound watershed in New York that address undesirable fertilizer behaviors by homeowners. The goal of the campaign will be to break down barriers associated with nitrogen fertilizer on residential lawns by homeowners

Description: This project seeks to develop a community based social marketing (CBSM) project aimed at homeowners that apply fertilizer themselves. The project is a continuation of a Long Island Nitrogen Action Plan (LINAP) initiative to better understand the barriers to proper fertilizer use of Long Island residents through a survey on fertilizer behaviors that is being deployed in the spring of 2023. The CBSM project will aim to address the undesirable behaviors that are found during the survey to be detrimental to the Long Island Sound, such as misapplication

Estimated Milestones: October 1, 2024 - September 30, 2027

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
CBSM Campaign Deployment	3-1.	WW-9; SC-14; SC-15
Analysis CBSM campaign success	3-1.	WW-9; SC-14; SC-15
CBSM Campaign Development	3-1.	WW-9; SC-14; SC-15

Title: **NEIWPCC LISS Program Implementation Support FY24: Task 8 Bioextraction Coordinator**

Activity Type:	Water Quality Planning and Implementation	Project Type:	Ongoing
Implementing Agency:	NEIWPCC	Total Estimate Budget	
Responsible Partners:	NYSDEC DOW	Federal Amount:	$178,804.00
		Match Amount:	

Objectives: To support activities to be carried out by the LISS Bioextraction Coordinator

Description: The LISS Bioextraction Coordinator position will support the Bioextraction Initiative within Long Island Sound. Bioextraction Coordinator that serves as the collaborative lead in projects involving partners across state, municipal, academic, non-governmental, and federal partners

Estimated Milestones: October 1, 2024 - September 30, 2026

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Committees and information Exchange - Coordinate the ad-hoc Bioextraction Advisory Committee; Attend seminars and meet with experts and the public to advance bioextraction/aquaculture industries in NY and CT	1-2.	WW-25
Reporting -Pertinent staff activity and progress towards outputs and outcomes will be reported as required by EPA under this grant award. Reporting is expected to include a narrative summary of successes, challenges, and lessons learned	4-3.	SM-35, SM-40
CCMP Revision Support - Facilitate the revision of the LISS CCMP through staff-led discussions and working group participation to consider successes of the latest iteration of the CCMP and to then make recommendations for improving implementation	4-3.	SM-35

Title: **Changes in Nitrogen Concentrations in Groundwater Following the Installation of Sewers**

Activity Type:	Water Quality Planning and Implementation	Project Type:	New
Implementing Agency:	USGS	Total Estimate Budget	
Responsible Partners:	CT DEEP	Federal Amount:	$171,846.00
		Match Amount:	

Objectives: To evaluate changes to total dissolved nitrogen concentrations in groundwater on the Pine Grove peninsula in Niantic Connecticut, relative to the pre- and post-sewering conditions reported in Mullaney (2015); and estimate the current load of nitrogen from groundwater in Pine Grove to the Niantic River

Description: This study proposes to resample 18 of the wells at Pine Grove four times during FY25 to evaluate current nitrogen concentrations in groundwater. Samples would also be analyzed for major ions, boron, and bromide, as done in the original sampling at the Pine Grove site in 2005. The major ion, boron and bromide analyses will be used to identify nitrogen sources as in Mullaney (2013).

Estimated Milestones: October 1, 2024 - May 30, 2026

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Prepare QAPP	1-3.	WW-23
Groundwater sample collection	1-3.	WW-23
Semi-annual reporting to EPA	1-3.	WW-23
Report results	1-3.	WW-23

Title: **In Season Nitrogen Testing for Long Island Growers**

Activity Type:	Water Quality Planning and Implementation	Project Type:	New
Implementing Agency:	NYSDEC DOW	Total Estimate Budget	$65,833.00
Responsible Partners:	Cornell Cooperative Extension of Suffolk County	Federal Amount:	$39,500.00
		Match Amount:	$26,333.00

Objectives: To assist Long Island growers in better understanding their soil nitrogen so in-season fertilizer application is data driven and tailored to their specific soil and crop needs. This project is expected to help reduce excess nitrogen from entering the Sound by increasing farmer's fertilizer application accuracy based on the soil sample result. This project will also enhance long-term sustainability by teaching participating farmers how to sample and test soil themselves and by providing other farmers with publicly available educational programs.

Description: This project will focus on the second, or in-season, fertilizer application and provide soil testing for farmers to better understand nitrogen levels in their soil during the growing season and therefore to better inform their in-season application rate. This will be a three-year program with Cornell Cooperative Extension of Suffolk County (CCE SC). In years one and two, CCE SC staff will collect and analyze soil samples at up to ten farms in the LIS watershed. They will then disseminate the sample results and recommended application rates to the farmers. They will also teach farmers how to do the testing themselves. In year three, farmers will understand how and when to sample their soil and be able to do so without assistance. By year three, CCE SC will have developed educational materials including factsheets with information on how to collect the soil sample, labs to send the samples to, and how to interpret the test results.

Estimated Milestones: October 1, 2024 - September 30, 2027

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
In-Season Nitrogen Soil Testing, years 1-2	1-1; 3-3	WW-9; SC-21
Education and outreach, year 3	1-1; 3-4	WW-9; SC-21

Title: **NEIWPCC LISS Program Implementation Support FY24: Task 4 - LIS Regional Coordinator**

Activity Type:	Water Quality Planning and Implementation	Project Type:	Ongoing
Implementing Agency:	NEIWPCC	Total Estimate Budget	$191,558.00
Responsible Partners:		Federal Amount:	$191,558.00
		Match Amount:	$0.00

Objectives: To support activities to be carried out by the LISS NYS DOW Regional Coordinator.

Description: The LISS NYS DOW Regional Coordinator (LISRC) position will supplement and increase NYSDEC DOW participation and involvement in all aspects of the LISS to advance the CCMP goals & objectives

Estimated Milestones: October 1, 2024 - September 30, 2026

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Outreach - Prepare informational materials and conduct outreach and education activities (e.g., meetings, presentations, web content, etc.), with municipalities to help them learn about the LISS program, the LISFF, and restoring and protecting the Sound.	1-1; 4-1; 4-2	WW-2; SM-8; SM-17
Project Management - Build, strengthen, and maintain effective partnerships and working relations with key stakeholders, especially local municipalities; Assist NYSDEC staff with TMDL implementation, evaluations, revisions, and implementation of additional	1-1; 4-1; 4-2	WW-2; SM-8; SM-17
Funding Coordination - Serve as coordinator and project manager for LISS EPA grants to DOW, keeping project timelines intact and working closely with the EPA Project Officer. Prepare and provide timely reporting on grant and contract deliverables.	1-1; 4-1	WW-2; SM-8
Reporting - Pertinent staff activity and progress towards outputs and outcomes will be reported as required by EPA under this grant award. Reporting is expected to include a narrative summary of successes, challenges, and lessons learned	4-3.	SM-35
Workgroups and Committees - Provide technical support and participation on the stakeholder group for EPA's LIS Nitrogen Reduction Strategy.	1-1; 4-1	WW-2; SM-8
Homeowners Rewards Program - Reimbursements for Homeowners Rewards Program & Engagement with Homeowners Applicants	3-1.	SC-14

CCMP Revision Support - Facilitate the revision of the LISS CCMP through staff-led discussions and working group participation to consider successes of the latest iteration of the CCMP and to then make recommendations for improving implementation	4-3.	SM-35

Title: **Nitrogen Smart Communities Phase II**

Activity Type:	Water Quality Planning and Implementation	Project Type:	New
Implementing Agency:	NYSDEC DOW	Total Estimate Budget	$1,000,000.00
Responsible Partners:		Federal Amount:	$600,000.00
		Match Amount:	$400,000.00

Objectives: To complete four additional NSC plans through the services provided by the technical service provider retained by this project. This will lead to capacity building within Long Island. Communities that fit within the disadvantaged or environmental justice sector will be considered first for this assistance.

Description: This phase of the project would secure additional technical assistance to work with four additional municipalities over two funding cycles to fully test the NSC Program Guide. We then A total of six communities would then have completed NSC plans and have started on implementation. Having a higher inventory of completed plans to view can give other municipalities better insight as to how they can tackle their own plans.

Estimated Milestones: October 1, 2024 - September 30, 2028

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Pilot of two NSC programs	1-1.	WW-2; WW-14
Pilot of two NSC programs	1-1.	WW-2; WW-14
NSC Technical Assistance Products	1-1.	WW-2; WW-14

Title: **Agricultural Fertilizer BMPs Educational Campaign**

Activity Type:	Water Quality Planning and Implementation	Project Type:	New
Implementing Agency:	NYSDEC DOW	Total Estimate Budget	$61,582.00
Responsible Partners:	Cornell Cooperative Extension of Suffolk County	Federal Amount:	$58,503.00
		Match Amount:	$3,079.00

Objectives: To compile fertilizer research into accessible educational materials and create a centralized webpage containing easy to follow factsheets, brochures, and other communication tools for Long Island growers. Easily accessible and user-friendly educational materials will facilitate long-term sustainability by providing growers and other stakeholders the information needed to implement best management practices for fertilizer application going forward.

Description: This project will provide funding for CCE SC staff time to compile research into accessible educational materials as well as creating a centralized CCE SC webpage to house this information. This will be a three-year project with years one and two focusing on gathering research data, study findings, and report write-ups, and consolidating the information into factsheets, brochures, and other communication tools. During year two, project staff will work with the in-house web designer to develop the webpage. By year three, the website will be launched and promoted through announcements, newsletters, and distributing educational material at in person events.

Estimated Milestones: October 1, 2024 - September 30, 2027

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Supporting Sustainable Wastewater Infrastructure, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Educational Material Development	3-1.	SC-7; SC-14
Webpage Development	3-1.	SC-7; SC-14
Webpage Launch and Outreach	3-1.	SC-7; SC-14

Title:	**1FTE Bioextraction Assistant (to assist LISS funded Bioextraction Coordinator)**

Activity Type:	Water Quality Planning and Implementation	Project Type:	New
Implementing Agency:	NEIWPCC	Total Estimate Budget	
Responsible Partners:	NYSDEC DOW	Federal Amount:	$314,238.00
		Match Amount:	

Objectives: To support the activities of the LISS Bioextraction Coordinator.

Description: The Bioextraction Assistant position has been funded for the past two years via the Long Island Regional Planning Council (LIRPC) and has been invaluable to the success of LISS and the Bioextraction Initiative. Stable funding from LISS is essential to the program's continued success. This funding will support the Assistant for two years.

Estimated Milestones: October 1, 2024 - September 30, 2027

CWA Program Elements: Strengthening WQ Standards, Improving WQ Monitoring, Developing TMDLs, Controlling NPS Pollution on a Watershed Basis, Strengthening NPDES Permits, Wetlands Program Support/Implementation

Anticipated Outputs or Deliverables	Anticipated Long-term Outcomes	IA #
Reporting - Develop and report progress on NEIWPCC's section of the annual Long Island Sound Study workplans to consider progress made and recommendations for improving implementation to achieve desired outcomes.	4-3.	SM-35, SM-40
Planning, development, and project management - Develop and manage projects in New York, CT and LIS coastal waters with participation by researchers and growers from one or more project locations in Long Island, New York City, Westchester, and Connecticut	1-2.	WW-25
Committees and information Exchange - Attend seminars and meet with experts and the public to advance bioextraction/aquaculture industries and policy in New York and Connecticut; Advance development of commercial seaweed regulation and policy via consult	1-2.	WW-26
Committees and information Exchange - Coordinate the ad-hoc Bioextraction Advisory Committee. The Committee will make recommendations and offer guidance based on sound science that will ultimately be used to inform management decisions but is not a decision	1-2.	WW-25