NATIONAL ESTUARY PROGRAM SUMMARY WORK PLAN

FOR

FEDERAL FISCAL YEAR 2024 FUNDING

FOR

COMPREHENSIVE CONSERVATION AND MANAGEMENT PLAN

IMPLEMENTATION ACTIVITIES

DURING THE PERIOD

October 1, 2024-September 30, 2025 or beyond
[FY2025]

WITH PRIOR YEAR GOALS/ACCOMPLISHMENTS/HIGHLIGHTS
FOR THE PERIOD

October 1, 2023- September 30, 2024
[FY2024]

June 2024

Prepared by:

EPA Long Island Sound National Program Office

in consultation with and on behalf of

the Long Island Sound Study funded Management Conference partners

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A. General Information Reporting Requirements

1. CCMP 2024 Goal Focus

The Long Island Sound Study (LISS) Comprehensive Conservation and Management Plan (CCMP) was first approved in 1994 by the States of New York (NY) and Connecticut (CT) and by the U.S. Environmental Protection Agency (EPA). From 2011 through 2015 the LISS partners and EPA met and revised the CCMP. The new CCMP, approved in 2015, identifies four primary themes:

1) Clean Waters & Healthy Watersheds,
2) Thriving Habitats & Abundant Wildlife,
3) Sustainable & Resilient Communities, and
4) Sound Science & Inclusive Management.

The need to continue the Management Conference was identified as an important, unifying component to support implementation. With the enactment of the Long Island Sound Improvement Act of 1990 (P.L. 101-596), the LISS Management Conference was made permanent – "The Administrator *shall* continue the Management Conference of the Long Island Sound Study…" In October 2018, the Congress passed, and the President signed into law, the *America's Water Infrastructure Act of 2018*. Among the many provisions of this far-ranging bill, Sec. 4104. *Amendments to Long Island Sound* revised the legislative underpinnings of the Long Island Sound Study and reauthorized funding through 2023. The bill's passage is important for several reasons. It codifies Congress's intent to authorize continued funding, it strengthens requirements for assessing program progress and financial integrity, and it lowers the non-federal share of grants from 50 percent to 40 percent. It also signals Congress's general support for the Long Island Sound restoration program.

Under the Management Conference structure, the CCMP established a broad-based and integrated approach to addressing the primary environmental and management problem areas identified. This approach required significant and sustained Management Conference coordination, involvement, and funding – at all levels. Further, the CCMP identified many existing and ongoing environmental management programs of the Management Conference partners that would serve as the foundation for addressing the Sound's priority problems. New or separate programs or efforts to implement the CCMP were only to be created to fill gaps or better integrate efforts, such as the LIS Futures Fund (LISFF), LIS Research Grant Program, and CCMP supplemental program (previously called the enhancement program). This FY2024 Work Plan, prepared under EPA's National Estuary Program (NEP) guidance, directly supports these goal areas with NEP and LISS funding as described herein.

Ongoing core environmental programs that contribute to or support CCMP implementation include other federal programs and funds directed to land use and watershed management, water quality, living resource conservation, management, and regulation, as well as state and local programs aimed at regulating human and environmental impacts on the Sound. Many of these programs are delegated to the states, which have the responsibility, authority, and accountability for implementing them.

The CCMP anticipates many funding streams and a variety of funding sources for successful implementation of its recommendations, over time, by the LISS partners. The CCMP also envisions an educated public and informed constituency for the sustained effort to restore, enhance, and preserve the Sound as a national treasure and a 'green' engine of economic activity. Designated as an Estuary of National Significance in 1987, Long Island Sound is an inherent part of EPA's NEP and is a key geographic program of the national water program that includes Chesapeake Bay, Puget Sound, the Great Lakes, and the Gulf of Mexico. Because of its economic, social, and environmental importance to the Northeast region, Long Island Sound is included as a separate line item and has received funding under EPA's President's Budget request since FY1999.

Below is a list of items that were completed in FY2023 or are to be completed in FY2024 that relate to the CCMP:

a. **CCMP Revision.** LISS has formally undergone the CCMP revision process beginning in October 2023. Throughout this fiscal year the study and its partners will revise the full document using Writing Teams for each of the four goals, formerly called themes, to revise the objectives, formerly ecosystem targets, and actions. In addition to the goals and objectives there will be 4 strategies in the following categories: financial, monitoring, habitat, and outreach. Throughout this process LISS will engage its partners, its various committees and the public alike through writing teams, committee meetings and public engagement sessions. The current timeline has the new CCMP to be adopted for the FY25 grant proposal cycle.

2. FY2024 LISS Budget Breakdown

This work plan summarizes tasks and deliverables/outputs contained in EPA FY2023 assistance awards to Management Conference partners that account for the FY2024-25 EPA Environmental Programs and Management (EPM) appropriation for the LISS NEP, and for EPM funding provided by EPA for the Long Island Sound Geographic Program. These funds include $850,000 in NEP allocations under Clean Water Act (CWA) §320, and $40,002,000 under CWA §119 as enacted. Grants are awarded by EPA Region 1 and 2 as delegated under EPA Delegations of Authority 2-42 and 2-94 under the authority of §119 per NEP funding guidance. The required aggregate match for this funding cycle is $19,692,587 as shown in Attachment 2.

On November 6, 2021, Congress passed the Infrastructure Investment and Jobs Act of 2021 (P.L. 117-58) (also known as the Bipartisan Infrastructure Law or BIL), to enhance the nation's infrastructure and resilience. The BIL funds, for the first year of a five-year period, include $909,800 in NEP allocations under Clean Water Act (CWA) §320, and $21,000,000 under CWA §119 ($106,000,000 over five years). LISS developed an Equity Strategy that was approved by the Office of Water, which allows for the continuation of match waivers for the entire five years of BIL funds.

The work activities and the budget amounts contained in this NEP Summary Work Plan were approved by EPA and the LISS Management Committee at its April 20,2024 meeting. The record of the Management Committee meeting is documented in the April 20,2024 Long Island Sound Study Management Committee Meeting Notes.

The LISS budget is organized into the nine Program Activities and three BIL Activities outlined below; the FY2024 LISS budget breakdown by Program Activity is:

Program Activities	Amount
Coordination	*$1,305,746*
Water Quality Planning and Implementation	*$2,202,002*
Modeling	*$1,114,012*
Monitoring	*$6,953,397*
Research	*$3,191,245*
Habitat Restoration and Protection	*$6,508,410*
Public Education and Outreach	*$2,172,087*
Stewardship and Resiliency	*$2,782,087*
Implementation Assistance	*$12,650,000*

BIL Activities	Amount
Environmental Justice	*$8,634,262*
Climate Resiliency	*$3,409,800*
Water Infrastructure	*$8,500,000*

To implement this summary Work Plan, as of this writing, EPA will issue 10 new assistance awards and amend 2 current assistance awards to include the FY2024 funding. Under BIL funding, EPA will incrementally fund 5 current assistance awards. In addition, EPA will enter into 6 interagency agreements and establish 2 contracts to support work tasks. The project tables, in the appendix, are a detailed breakdown of the FY2024 approved budget by LISS Program Activity, Products and/or Services, Implementing Agency, and Environmental Outcome(s). The Environmental Outcomes are derived from the individual partner grant work plans based on EPA Order 5120.

3. LISS Staff and Their Official Responsibilities

The LISS provides funding to certain partners to support staff resources to carry out key elements of implementing the CCMP. **Attachment 1** lists the FY2024 LISS-funded staff by name, title and description of their major roles and responsibilities. Each LISS partner's federal assistance award work plan provides details on the deliverables, outputs and expected environmental outcomes for LISS-funded staff functions as required by EPA Order 5120. In addition to the staff listed in Attachment 1, the CT DEEP employs seasonal staff to assist with conducting the Long Island Sound summer water quality monitoring program as necessary; these, and overtime costs for water quality monitoring staff, are included in that award, but are not shown in Attachment 1 because of the seasonal nature of the positions that may be filled by different incumbents during the period of employment. Each EPA grantee is responsible for managing its personnel under its own organization's human resource management policies and procedures.

As listed in Attachment 1, the EPA provides four full-time equivalent (FTEs) federal employees that staff the EPA Long Island Sound National Program Office (LISNPO). A director, appointed by the Administrator under §119, and five program coordinators to plan, organize, coordinate, and manage program operations to assist the Management Conference partners in CCMP implementation. EPA Region 1 provides a Team Leader and four program coordinators (one at approximately 50 percent of an FTE) to support EPA efforts for Long Island Sound.

Since May 2021, LISS funds will be used to cover the stipend costs associated with an Oak Ridge Institute for Science and Education (ORISE) Fellow. Additional staff in Region 1 and Region 2 are assisting with project officer duties relating to LIS awards. Region 1 also supports a US Government vehicle for LISNPO use via the General Services Administration (GSA). EPA supports, from its Working Capital Fund appropriation, leasing office space for the LISNPO through the GSA. EPA Region 2 provides technical and management support to the program through the Water Division and EPA Region 1 provides staff and technical support through the Water Division. By agreement between the Regions, Region 2 provides other administrative support for official business, such as procurements, funds control and management, information technology and telecommunications support, grants management, travel, training and other policy and program management requirements. Region 1 provides grants management, contract oversight and funds control for the awards processed. This support is essential to operating and maintaining the EPA LISNPO, the national program office for the Long Island Sound Geographic Program. Both Region 1 and 2 provide Quality Assurance support for assistance and interagency agreements that require Quality Assurance Project Plans.

4. Grant awards

Attachment 2 lists the FY2024 LISS budget by recipient organization; the total funding for each recipient may consist of one or more EPA grant awards or amendments to existing grants, **Attachment 4** lists the FY2023 budget by individual EPA assistance award number by grantee. The actual EPA assistance award number is provided for reference where known now. However, the award process is dynamic and final grant award numbers and dollar amounts awarded by EPA may differ from Attachment 4 since this NEP summary Work Plan is completed in advance of the grant award process, which must be completed by September 30, 2024. Details of the award purpose, project deliverables, and project completion dates are provided in Section B of this Work Plan below. Attachments 2 and 3 also show the required non-federal matching funds and the overall actual aggregate match requirement for the LISS for FY2024.

For FY2024 Federal assistance awards, the Connecticut Department of Energy and Environmental Protection (CT DEEP) and the New York State Department of Environmental Conservation (NYSDEC) are providing an annual 'overmatch' in its EPA assistance awards to enable the LISS to meet the overall aggregate match for the NEP as required under CWA §320 [see Attachment 2]. The CT DEEP overmatch is from a conveyance and storage tunnel in Hartford, CT to control combined sewer overflow discharges. The NYSDEC overmatch is from stewardship acquisition project. This state overmatch allows other recipients and sub-awardees that are not able to meet matching funds requirements to apply for LISS grant programs, ensuring broader participation in the work of the LISS Management Conference from academic researchers and institutions, local environmental organizations, interest groups and associations, as well as other qualified regional or watershed organizations. **[NB: Final assistance award amounts and number designations are issued by EPA pending final EPA action on individual awards, and each award is subject to the special terms and conditions contained therein.]**

Using FY2023 funding for work that will take place in FY2024, the EPA is providing funding to thirteen LISS partners through new or amended awards: CT DEEP; the Connecticut Sea Grant (CTSEA); the Interstate Environmental Commission (IEC); the National Fish and Wildlife Foundation (NFWF), the New England Interstate Water Pollution Control Commission (NEIWPCC); Save the Sound; NYSDEC; the New York Sea Grant College Program (NYSEA); the State University of New

York Research Foundation (SUNY); the University of Connecticut Marine Sciences Department (UCONN); National Audubon Society; and Massachusetts Department of Environmental Protection (Mass DEP) and Restore America's Estuaries (RAE). EPA established interagency agreements with four federal agencies: the United States Geological Survey (USGS), National Oceanic and Atmospheric Administration (NOAA), United States Fish and Wildlife Services (USFWS), United States Department of Agriculture – Natural Resources Conservation Service (NRCS). These partners assist in implementing the CCMP and conduct activities to support the LISS program. These awards are managed by staff of the EPA LISNPO, EPA Region 1, and EPA Region 2, who are trained and assigned as EPA Project Officers. Because of multi-year awards and varying federal appropriation levels, not all partners receive LISS funding in every annual budget/work plan cycle. The EPA Project Officers work with their grantees to ensure that any unliquidated obligation (ULO) balances are considered in awarding new year funding, and as necessary, award amounts are adjusted to compensate for ULO balances. It should also be noted that these partners also bring their own non-matching resources to restore and protect the Sound, which are not accounted for in this work plan.

B. Proposed New and Ongoing (FY2024) Regular Appropriation Projects

This work plan provides information as required under EPA's *FY2021-2024 Clean Water Act §320 National Estuary Program Funding Guidance*. The format for Section B is the same as used by the LISS since FY2008, when the LISS adopted a combination of the FY2008 NEP Work Plan Guidance and the September 2008 NEP Program Evaluation Guidance Logic Model format (until updated). To adjust to this reporting format, to the extent feasible, the LISS Program Element activities have been 'broken up' under the following categories contained in the NEP Program Evaluation Guidance (LISS has added the fourth category to better align with our CCMP):

1. Clean Waters
2. Healthy Ecosystems
3. Strong Communities
4. Sound Science and Inclusive Management

The categories will include highlights from FY2023 work implemented to introduce the planned FY2024 activities. Our funded FY24 project tables can be found in the appendix.

1. **Clean Waters.** Clean Waters is addressed under the Clean Waters and Healthy Watersheds Theme of the CCMP as LISS sets out the mission to improve water quality by reducing contaminant and nutrient loads from the land and the waters impact Long Island Sound. The following program activities are used as subsections to highlight our FY2023 accomplishments and introduce planned FY2023 activities, including project details: Water Quality Planning and Implementation, Modeling, and Monitoring.

    a. **Water Quality Planning and Implementation.** The LISS partnership has worked intensely on water quality planning and implementation activities to improve the Sound's conditions – specifically by reducing nitrogen. The following highlight our FY2023 accomplishments:
        - Nitrogen Reduction Strategy**:** EPA is implementing a strategy to aggressively continue progress on nitrogen reductions, in parallel with the States' continued implementation of the 2000 Total Maximum Daily Load (TMDL) and achieve water quality standards throughout Long Island Sound and its embayments and near shore coastal waters. The

strategy recognizes that more work must be done to reduce nitrogen levels, further improve dissolved oxygen (DO) conditions, and address other nutrient-related impacts in Long Island Sound. The nitrogen reduction strategy complements the 2000 TMDL in important ways. Foremost, while the 2000 TMDL is premised on achieving water quality standards for DO in the open waters of the Sound, the EPA strategy expands the focus to include other nutrient-related adverse impacts to water quality, such as loss of eelgrass, that affect many of Sound's embayments and near shore coastal waters.

- Connecticut Second Generation Nitrogen Strategy: This effort combines existing efforts with new initiatives under one plan. It engages nitrogen reduction efforts in three main focus areas: wastewater treatment plants, nonpoint source and stormwater, and embayments. Near term actions that can be taken at the state level to enhance nutrient reduction efforts are proposed for each of the three focus areas.
- Long Island Nitrogen Action Plan: The Long Island Nitrogen Action Plan (LINAP) is a multiyear initiative with a similar goal of reducing nitrogen in Long Island's surface, coastal, and ground waters. NYSDEC, in cooperation with Suffolk and Nassau Counties, the Long Island Regional Planning Council, local municipalities, environmental and business groups, and many other stakeholders, has been engaged in the development of the comprehensive LINAP. As part this program, the LINAP collaborative is developing county-wide watershed plans: The Suffolk County Subwatershed Wastewater Management Plan was completed in 2020 and evaluated 200 subwatersheds which developed initial nitrogen load reduction goals, established ecological sensitivity priority ranks for each surface waterbody, and provided implementation recommendation for a phased county-wide wastewater upgrade program. The Nassau County Subwatershed Plan was completed in 2022 and estimated nitrogen entering groundwater from various sources (e.g., wastewater, fertilizer, stormwater, atmospheric deposition). Beginning in 2021, NYSDEC has organized monthly meetings with the three Estuary Programs on Long Island (LISS, Peconic Estuary Partnership, and South Shore Estuary Reserve) to better align communication and messaging relating to LINAP implementation. As a result, the programs are working on several initiatives to improve nitrogen management Long Island wide including a residential fertilizer community based social marketing project to encourage responsible use of fertilizer which was funded in FY23 and will continue work in FY24.
- Bioextraction: Through a partnership with NEIWPCC and the NYSDEC, an initiative has been developed that aims to improve water quality in NY and CT coastal waters and the Long Island Sound by removing excess nitrogen through the cultivation and harvest of seaweed and shellfish. The Bioextraction Initiative is engaged in assessing the efficacy and potential challenges of bioextraction, and seeks to define and address the technical, regulatory, and economic considerations needed for the development of a bioextraction industry. This is achieved through research, facilitating conversations, and providing science-backed information to decision makers as part of the suite of Long Island Sound Study's comprehensive nitrogen reduction programs. Additionally, the Initiative is working with industry professionals to develop markets for and assess cultivation costs of potential bioextraction species and evaluate overall economic viability of seaweed and shellfish bioextraction operations. Resources produced by the Initiative include a Geographic Information System (GIS)-based siting tool, "New York and Connecticut Shellfish and Seaweed Aquaculture Viewer," and its associated story map and instructions, which is publicly available on the Long Island Sound Study

website; and "A Guide to Marine Shellfish Aquaculture Permitting in New York," available through the NEIWPCC Resources Library. Other ongoing efforts include 1) commercial testing of locally-sourced sugar kelp (Saccharina latissima) fertilizer amendments in Long Island, NY, 2) refinement of Atlantic ribbed mussel (Geukensia demissa) aquaculture methods and bioextraction through ribbed mussel cultivation, and 3) an economic feasibility market study for nutrient bioextraction within Long Island Sound. Upcoming efforts include: 1) Assessment of wild harvest of seaweeds as a tool to bioextract nutrients from coastal waters, 2) investigating the long-term storage of viable sugar kelp spores and use of cultivated sugar kelp for seaweed turfgrass fertilizer amendments, 3 Long-term Quantification of nitrogen bioextraction and carbon capture by seaweed and bivalve aquaculture). A new bioextraction assistant was funded for FY24 to assist the bioextraction coordinator in these efforts.

b. **Modeling.** LISS has invested in a multitude of modeling efforts to improve the technical tools used to understand and manage the sources and impacts of nutrients on Long Island Sound.
   - CT DEEP is currently developing several models:
     - A watershed model to analyze the movement of water, sediment, and pollutants over the landscape to the waterbody. The model will be able to predict sediment supply to tidal marshes, point and nonpoint source loads, and streamflow and pollutant loads under current and possible future precipitation and land use scenarios.
     - A groundwater model to incorporate groundwater budgets, travel time distributions, and loadings to receiving waters. The model will provide an estimated time context for management scenarios that have an impact on nitrogen into the Sound.
     - Embayment models to analyze the movement of water and impacts of nutrients from surface and groundwater sources on surface water quality. The results will be used to validate upland watershed models and develop a process-based water quality model specific to each embayment. In coordination with the watershed and groundwater models, the embayment modeling project will help develop embayment specific nutrient targets to manage water quality.
   - Solute Transport Model: USGS, in collaboration with NYSDEC and Peconic Estuary Partnership, is developing this model for Long Island. The modeling looks at water table fluctuation over time, water use, and nitrogen loading—as a function of changing land use and atmospheric deposition rates—from predevelopment (e.g., 1900) through the present. Using FY2020 and FY2021 funds, LISS is supporting the completion of the central and western portions. Once complete, LISS will be able to use the model to predict how nitrogen reduction strategies will impact the Sound. Furthermore, this modeling effort, combined with the companion groundwater modeling effort in CT will provide complete coverage of the groundwater contributing area to the entire Long Island Sound watershed. Coordination between these modeling efforts will eventually allow for a comprehensive analysis of time-varying nitrogen loading and the simulation of the effects of various nitrogen-management scenarios at the regional watershed scale for the Sound.
   - Systemwide Eutrophication Model: LISS and NYC Department of Environmental Protection are developing a new systemwide model to simulate water quality in LIS and system response to changes such as warming temperatures and increased development that threaten water quality. The newly updated model will allow researchers to better understand how the Sound may respond to changes in human (e.g., pollution) and natural (e.g., weather) drivers that impact the system. The model will also enable managers to evaluate potential impacts of point source nutrient inputs on water quality. From a Request for Proposals (RFP) released in 2019, NYCDEP entered into a contract with HDR, Inc., in 2020, to conduct the modeling effort. A Management Advisory Group meets regularly to coordinate work with agency needs and a Model Evaluation Group provides independent technical review. ROMS-RCA was selected as the hydrodynamic-biogeochemical model, and model calibration and validation is currently underway. This multi-year project will guide investments in pollution control for the next decade by NYCDEP, NYSDEC, CT DEEP, New Jersey

Department of Environmental Protection, and EPA.

- Compound Flood Risk Model: As part of the first year of the implementation of the Sustainable and Resilient Communities Work Plan, USGS was funded in FY2021 to quantify coastal flood risk and the impacts of sea-level rise on stormwater infrastructure and management. The project will improve understanding of compound flood risk on event, seasonal, and long-term scales. The resulting risk assessment may be used by public and private entities seeking to identify future capital-improvement and operational management needs that address increased flooding caused by sea-level rise and groundwater table rise. This underlying framework can help agencies develop cost and benefit data associated with financing projects under future climate scenarios, including consideration for environmental justice. This model is expected to launch in the fall of 2024. LISS has funded outreach and education regarding the model in FY24 to reach a broad audience and help municipality staff and others understand how to use the model.
- Hypoxia Forecast Tool: In collaboration with EPA's Office of Research and Development (ORD), LISO is developing a Long Island Sound Hypoxia Forecast Tool to predict the hypoxia extent and duration in Long Island Sound and its embayments for each summer and to enhance the communication and awareness of hypoxia and its impacts – from water quality to habitat quality. The tool will include both a natural science element that will inventory, synthesize, and review existing models that predict hypoxia in the Sound based on early-season environmental observations, and develop new models using existing data that emphasize quantifying variability and uncertainty; and a social science element that identify effective communication methods and use them to produce a web-based communication platform to share and contextualize the forecast for stakeholders. To guide the development of the forecast tool and identify best engagement approaches to use hypoxia forecasting, an in-person workshop was held to gather input from people at the interface of science and practice in LIS. As a result of the workshop, EPA is developed workshop proceedings to guide the development of the tool and its associated communication products. In FY24, EPA ORD, LISO, and NEIWPCC continued to develop the model and complementary communications products to be progressed in 2025. This work emphasizes understanding community needs and values to improve targeted communications and motivate community behavioral change to mitigate environmental challenges.

The following modeling projects were approved to be funded in FY2024 to further our progress:

c. **Monitoring.** LISS has continually invested in several water quality monitoring programs, including in 2023. These programs include:

- CT DEEP's Long Island Sound Water Quality and Hypoxia Monitoring Program: Since 1991, the program has monitored surface and bottom waters at 17 stations throughout the Sound. The following water quality parameters are measured: temperature, salinity, dissolved nitrogen, particulate nitrogen, water clarity, and dissolved oxygen. The program provides the basis for the determination of hypoxic, and other ambient conditions in LIS and to determine state compliance with water quality standards for DO. This information is reported by CT DEEP and is used by the LISS to report annual progress in meeting CCMP goals.

- IEC Long Island Sound Monitoring: Since 1991, IEC has monitored the far western Sound (the Narrows) and its embayments and the Upper East River. The following water quality parameters are measured: temperature, salinity, DO, pH, and secchi disk depths. Additionally, IEC also measures chlorophyll-a, total suspended solids, biological oxygen demand, and nutrients in surface samples.
- UConn's Long Island Sound Integrated Coastal Observing System (LISICOS) Buoys: Implemented in 2003, LISICOS was conceptualized as part of a water quality monitoring program that combined the traditional ship-based point sampling surveys with continuous, real-time sampling stations. LISICOS continuously monitors in situ water quality parameters and meteorological parameters, every 15 minutes, at up to 8 stations across the Sound.
- USGS's River Monitoring Stations: Since 2017, USGS has performed enhanced monitoring of the Connecticut River to establish a long-term record of observations of temperature, salinity and sea level that will allow the assessment of the effect of global-scale changes in climate on the ecosystem of the Sound and Connecticut River. In 2019, the LISS supported a three-year USGS pilot project to expand water quality sampling in the three major tributaries to Long Island Sound (Thames, Connecticut, and Housatonic Rivers). The goal of the project is to continue to characterize the tributaries to develop a longer-term monitoring plan for each of the three tributaries.
- Save the Sound's Unified Waters Study (UWS): Since 2018, the UWS monitors 40 embayments conducted by 25 monitoring groups which include various communities, organizations and citizen scientists. The following parameters are collected: water depth, temperature, salinity, DO, alkalinity, pH, Secchi disk, light intensity, chlorophyll-a, turbidity or TSS, nitrogen, phosphorus, bacteria, dinoflagellates and their toxic products, nonindigenous plants/animals, presence of sewage, biological monitoring.
- EPA's National Coastal Condition Assessment (NCCA): Initiated in 2020 and continued in 2021, EPA HQ contractors conducted NCCA probabilistic sampling each year at 60 sites in Long Island Sound embayments. This project utilized the power of random statistical design and standard collection and analytical techniques of the NCCA Program to characterize the nutrients, sediments, and benthic macroinvertebrate community in embayments. LISS has executed another contract for FY24 to conduct the survey again in 2025.
- Long Island Sound Coastal Acidification Monitoring: In 2022, the LISS initiated coastal acidification monitoring within the Sound and its embayments. Connecticut Department of Energy and Environmental Protection (CT DEEP), Interstate Environmental Commission (IEC), U.S. Geological Survey (USGS), and University of Connecticut are monitoring a suite of acidification parameters within their existing monitoring programs. This monitoring program will initiate a baseline to better understand the overall trends of coastal acidification, its interaction with other stressors, and impacts on important services on three different spatial levels – 1) the Open Sound, 2) Embayments, and 3) Watershed. The first initial years of this program will focus on better understanding the variability of trends in the open Sound and the embayments. Once that variability is determined, LISS will focus to tease apart multi-stressors interactions, and their impacts on foundation species (i.e., shellfish beds).

2. **Healthy Ecosystems.** Healthy Ecosystems is addressed under the Thriving Habitat and Abundant Wildlife Theme of the CCMP as LISS sets out the mission to restore and protect the Sound's ecological balance in a healthy, productive, and resilient state to benefit both people

and the natural environment. The Habitat Restoration and Protection is the only program activity that applies to this section. Because of the complexity of planning, organizing and carrying out restoration projects in both states, the LISS funds two habitat coordinators, one each in NYSDEC (via NEIWPCC) and CT DEEP, who develop priority Long Island Sound projects, including fish passage projects, in their state. These staff positions are included in the description of LISS-funded staff in this Work Plan in Attachment 1. It should be noted that the acres restored/protected and river miles reopened were not all funded by the LISS; the CCMP called for many and varied funding sources to implement its actions. LISFF projects do help contribute to the total acres restored/protected, to the extent that eligible projects are qualified, apply, and are approved for funding.

a. **Habitat Restoration and Stewardship**. As reported in EPA's NEPORT reporting system, LISS partners completed six projects in which coastal habitats were restored, totaling 26.6 acres. The program achieved its goal to restore 350 acres of coastal habitat in 2018, two years ahead of the 2020 target and LISS is 59.3 percent of the way to the goal of restoring 1,000 acres of habitat by 2035 from the 2014 baseline. The study partners protected 184.10 acres of open space through acquisitions or easements at 16 sites. By the end of the calendar year 2023, the program has now achieved 77.5 percent of the goal to protect 7,000 acres of land by 2035 from the 2014 baseline.

   In 2023, 4.20 new stream miles were reported opened, due to the Post Office Dam Removal, Whitford Pond Dam Fish Passage, and Strong Pond Dam Removal, CT. The program is at 64.7 percent of the goal to reconnect 200 river miles to Long Island Sound for fish passage by 2035 from the 2014 baseline. The LISS-funded CT DEEP and NYSDEC habitat restoration coordinators develop projects to reopen fish passage in each state. Because CT's river and stream network along the Long Island Sound shoreline is much more extensive than NY's, the bulk of the fish passage projects are in CT rivers and streams. Historically there were approximately 1,858.5 miles of river in CT that supported diadromous fish runs; currently there are approximately 432.9 miles of river reaches open to fish passage. This is not meant as a management target for restoration. It should be noted that the river miles reopened were not all funded by the LISS; the CCMP called for many and varied funding sources to implement its actions.

   LISS has been conducting the following activities in pursuit of our goals for FY2024:

   - Long Island Sound Stewardship Initiative: Additionally, the LISS website contains an updated online Stewardship Atlas. The LISFF supported several Stewardship Initiative projects and public involvement efforts centered around trails days at stewardship sites.
   - Long Island Sound Eelgrass Management and Restoration Strategy: In December 2022, LISS developed the Long Island Sound Eelgrass Restoration and Management Strategy. In FY23, LISS funded several projects to start implementation the strategy such as advancing mapping, monitoring, and modeling efforts, enhancing collaboration and communication, and better understanding barriers to restoration. In FY24, LISS partners will continue to progress these ongoing projects and incorporate results into the newly funded long-term and large-scale seed-based restoration program (see project table for specifics). To communicate the importance of the strategy, LISO also published a StoryMap highlighting the history, threats, and importance of Long Island Sound eelgrass meadows.

3. **Strong Communities.** Strong Communities is addressed under the Sustainable and Resilient Communities Theme of the CCMP as LISS sets out the mission to support vibrant, informed, and engaged communities that use, appreciate, and help protect Long Island Sound. The following program activities are used as subsections to highlight our FY2023 accomplishments and introduce planned FY2024 activities, including project details: Public Education and Outreach, and Stewardship and Resiliency.
   a. **Public Education and Outreach.** The LISS provides grants to several of its partners to support their public outreach, information, and education (PI&E) program activities, a key Program Element of the LISS. NEIWPCC, NYSEA and CTSEA are primarily responsible under their LISS grant awards for public outreach assistance. The LISS communications team consists of staff of these partners and other interested parties, including members of the LISS Citizens Advisory Committee (CAC). The communications team meets periodically to develop and carry out work as reflected in each grant award. The LISNPO and LISS partners provide significant support to the CAC, which is co-chaired by an elected member each from NY and CT. Coordinated by the NY/CTSEAs, the CAC meets quarterly at alternating locations in CT and NY in the LIS watershed (however, this past year was all virtual due to COVID-19) and provides advice to the Management Conference partners in implementation of the CCMP. The CAC operates under its Bylaws and is composed of up to 60 members who represent organizations with a demonstrated interest in Long Island Sound. Financial support for CAC meetings is provided through NEIWPCC's PI&E line item in its LISS assistance award. CAC members are reimbursed for their travel expenses directly related to attending CAC meetings. However, this past year there was minimal travel due to the COVID-19 pandemic, in which all CAC meetings were held virtually **[see Attachment 5].** In addition, the CAC meets as needed with the STAC to jointly review program priorities from a scientific perspective and to update each other on issues of scientific and public concern. The CAC co-chairs are members of the Management Committee and provide a public perspective at Management Committee meetings. The CAC also appoints two liaisons to the STAC, one each from New York and Connecticut to represent the CAC at STAC meetings. CAC members participate on LISS teams and work groups and attend those meetings as appropriate.

      The LISS will continue to fund the CT and NY Sea Grant LIS Mentor Teacher program, which trains a cadre of K-12 educators to train-the-trainers in the use of LIS as a teaching tool and resource for NY and CT teachers. The Long Island Sound Mentor Teacher (LISMT) program has consistently recruited high quality, creative, and respected teachers to assist their peers in incorporating LIS content into curricula within the scope of the CT Science Frameworks. In addition to the Mentor Teach Program a new partnership, which will create a network of Long Island Sound schools to increase participation in helping to protect the sound, was funded in FY24.
      - LISS Communications: The LISS partners produce their own materials and press releases to communicate their accomplishments and plans to their public or special audiences. The LISS, via a grant to NEIWPCC, maintains its website for public information and access, and produces *SoundBytes*, an electronic email product to keep constituents informed in topical and timely areas. *Sound Update and Outlook* are also produced several times a year, but paper copy distribution has been phased down to conserve resources and be more 'green.' LISS-produced materials emphasize the bi-state nature of public information on the Sound, its ecology or status, while individual partners' public information programs may focus on single state or communities of

interests' priorities or needs. Examples of these publications are on the LISS website. Furthermore, LISS has set out to develop a new five-year strategic communication plan to increase the knowledge of and engagement in the Sound's restoration efforts by key stakeholders. Within this plan was the request for new staff to help further engagement, which was fulfilled this January when a new science communicator was hired.

- Communications, Outreach, and Engagement Plan: In FY2021, LISS funded NEIWPCC, in collaboration with CTSEA, NYSEA, and The Nature Conservancy, to develop a new coordinated Sound-wide Strategic Communications, Outreach, and Engagement Plan ("COE Plan") with measurable objectives, including the additional resources sufficient to implement the new COE Plan, that will maximize the impact of communications, outreach, and engagement efforts and ensure the effective use of resources by and among the LISS Communications Team and partners. Marstel-Day, LLC ("MD Team") was contracted to develop the new COE Plan that will provide guidance for LISS staff and partners to implement effective COE efforts that inform, educate, and engage stakeholders and residents living in Long Island Sound. The COE Plan was approved by the Management Committee in FY2022.
- Communications, Outreach, and Engagement Work Group (COE): The Public Involvement and Education Work Group (PIE) was revived, transformed and renamed to the Communications, Outreach, and Engagement Work Group (COE) in March 2023. This new work group aims to encourage deeper and wider collaboration across the full diversity of Sound communities in support of the Long Island Sound Study's mission to conserve, restore, and sustain the Sound and its magnificent aquatic and shoreline resources. The work group is made up of LISS members, non-formal educators, outreach professionals, and communications specialists from organizations and community groups whose work aligns with that of LISS: to connect the people living in the Long Island Sound watershed to the Long Island Sound estuary through communications, outreach, and engagement to improve environmental awareness, knowledge, stewardship, and equal access to the local environment.
- CCMP Outreach: LISS has been working on outreach for the CCMP revision throughout the year and has planned several ways the public can contribute. With the help of ERG there is an email address for the public to send comments throughout the process as well as find updates on the website. In May 2024 LISS hosted 9 engagement sessions for feedback on the draft mission, vision, and values as well as the 4 goals and their objectives. These engagement sessions were help both online and in person in both the New York and Connecticut portions of the watershed. In addition to these sessions a storymap is being curated to take people on a journey through the revision.

The following Public Education and Outreach projects were approved to be funded in FY2024 to further our progress:

b. Stewardship and Resiliency. In FY2021, LISS developed two new working groups to progress this Stewardship and Resiliency, in which LISS has set out the following goals: Adopt and support the five-year action plan, created by the new Sustainable and Resilient Communities Work Group, to help communities plan for climate change impacts while strengthening ecological health and protecting local economies; foster and support public engagement and knowledge with added emphasis on environmental justice initiatives; and increase environmental justice considerations in implementation and decision-making

through the new Long Island Sound Study Environmental Justice Work Group.

- Sustainable and Resilient Communities Work Group: In FY2020, the LISS funded CT and NY SEA to support a year-long process to develop a focused and strategic five-year work plan for the Sustainable and Resilient Working Group. The work group was charged with improving implementation of CCMP goals related to the Sustainable and Resilient Communities theme. Through a transparent and inclusive process, the work plan identifies five priorities: 1) better coordinated regional response, 2) better trained community decision makers, 3) infrastructure improvements planning, 4) viability of government services, and 5) facilitated implementation. The first year of the work plan was approved for funding in FY2021. In FY2021, CT and NY SEA published the completed five-year work plan on the LISS website and hired five Sustainable and Resilient Communities Extension Professionals to support local communities. The Extension Professionals finished conducting a Needs Assessment in November 2022 to improve understanding of Long Island Sound coastal communities needs to increase resiliency. In November 2023, CT and NY Sea Grant launched a resiliency planning assistance program, an expansion of the existing Breaking Down Barriers program, that assists entities in writing grant applications. This new program will help municipalities scope out the best path forward to resiliency by helping them identify important and feasible projects to address their issues. Announcement of the funded candidates is expected to be announced in June 2024.
- Environmental Justice (EJ) Work Group: In October 2020, the Management Committee formally approved the EJ Work Group, which brings together people in the watershed to help LISS advance EJ implementation work and better serve the needs of marginalized and underrepresented communities who are disproportionately affected by environmental hazards. In January 2022, the EJ Work Group presented a five-year work plan to its members. The work plan outlines the activities the work group will implement to achieve the EJ goals of the program. The EJ Work Group has updated the five-year work plan to reflect progress made and iterative learning over the summer of 2023. The EJ workgroup also led 3 DEIJ trainings for LISS throughout 2023 that were met with high regard. In addition to these trainings, LISS conducted an environmental justice needs assessment. This process included conversations with community leaders, community dinners, and community discussions to better connect with local communities and understand their environmental challenges. The findings from these sessions will be used to inform the CCMP revision and implementation of the CCMP.
- LIS Sentinel Monitoring Program: Initiated in 2017, the LISS Sentinel Monitoring strategy included three pilot projects to informed the Sentinel Monitoring work team to update the strategy. The report, *Sentinel Monitoring for Climate Change in the Long Island Sound Estuarine and Coastal Ecosystems of New York and Connecticut (Vol 2)*, was completed and posted on the LISS website in 2018. The work team also reviewed drafts of the LIS Climate Vulnerability Assessment conducted by Dr. Juliana Barrett of Connecticut Sea Grant. Dr. Juliana Barrett presented the completed LIS Climate Vulnerability Assessment at the July 18, 2019, Management Committee Meeting. Using FY2020 funds, NEIWPCC held a workshop in June 2022 to engage Long Island Sound stakeholders to help identify monitoring gaps and develop a LISS sentinel monitoring network. As a result of the workshop, the Climate Change and Sentinel Monitoring Work Group is working with LISS partners to address data gaps (i.e., tidal marshes indicators) and a new project revolving around saltmarsh monitoring was funded for FY24.
- Climate Ready Estuaries: Under an agreement, UCONN acquired, deployed, and tested

the pH and total CO2 sensors for monitoring acidification in Long Island Sound. These systems require additional development to reduce operations and maintenance effort and to improve data quality. In addition, remote sensing reflectance and derived products from several sensors and methodologies were tested. Algorithms to retrieve chlorophyll concentrations were tested. The evaluation of data suggests that data from new sensors, such as Sentinel, may allow the distribution of near real-time Chl products for LIS in the future. This work allowed for a more thorough application of a local algorithm relating optical patterns and environmental forcing that may drive their variability over time and space. LISS assisted in the development of EPA's *Measuring Coastal Acidification Using In Situ Sensors in the National Estuary Program* report, which discusses LISS' experiences, and nine other NEPs, in conducting coastal acidification monitoring using these sensors. LISS has initiated their own extensive coastal acidification monitoring program (see Monitoring for more details).

4. **Sound Science & Inclusive Management** sets out the mission to manage Long Island Sound using sound science and cross-jurisdictional governance that is inclusive, adaptive, innovative, and accountable. The following program activities are used as subsections to highlight our FY2023 accomplishments:
   a. **Coordination.** As mentioned throughout the workplan, LISS has funded staff positions to carry out the program, in addition to the EPA staff. Please refer to Attachment 1 for a full list of staff positions that better our coordination.
      - Federal Partners Coordination Group: In FY2022-3, EPA coordinated and lead the Federal Partners Coordination Group to advance collaboration among participating agencies, and expand involvement to other agencies as needed. Efforts to develop consistent Federal policies, priorities, strategies, and projects for addressing the CCMP and assisting in the appropriate management of the related federal resources by capitalizing and focusing on utilizing existing federal resources. The group works to ensure that our collective efforts will energize ongoing programs, bridge cross-agency partnerships, engage new federal partners, and leverage existing resources. Currently LISS has agreements collaborating on specific projects with USGS, NOAA, USFWS, and Department of Agriculture.
      - Tracking and Reporting: As the only Federally led NEP, EPA's authority to require and collect information is limited to that contained in enabling statutes and regulations. CWA §320 and §119 indicate specific reporting requirements and EPA regulations, under 40 CFR Parts 30 and 31, provide further reporting requirements for grantees. Finally, EPA grant regulations provide several reporting requirements (e.g., quarterly or semi-annual reporting on grant progress). EPA LISNPO is responsible for the overall LISS tracking and reporting systems for the NEP. In 2011 the LISS Management Conference partners agreed to a process to revise and update the 1994 CCMP, which was completed and issued in Spring 2015. The 2015 CCMP also sets 20 ambitious, but achievable, long-term targets for the ecosystem. These ecosystem targets are intended to drive progress toward attaining CCMP goals. Measuring, tracking, and reporting environmental indicators of each ecosystem target will provide information to assess progress and refine and adapt management as needed. Some of the targets include intermediate goals. For example, the ecosystem target to reduce effective impervious cover by ten percent in twenty years would assume a pace of 0.5 percent per year. Progress at any point in time would be assessed against the rate needed to attain the long-term target. In July 2018, the Government Accountability Office (GAO) completed a review of the LISS, Long Island Sound Restoration: Improved Reporting and Cost Estimates Could Help Guide Future Efforts (GAO-18-410). The GAO recommended that the EPA work with the LISS to ensure that it fully incorporates leading practices into performance reporting efforts. The LISS supported contractor work to enhance performance tracking and reporting of implementation actions and progress, most likely through web-based platforms. This new system will replace the annual e-Sound CCMP Implementation Tracking Report, which was organized around the 1994 CCMP.

        To better coordination efforts, the EPA LISNPO developed a LISS SharePoint Tracking and Reporting Tool to better track the progress of the 2020-2024 CCMP Implementation Actions. This tool fulfills the GAO recommendation to ensure that as the Study finalizes its reporting format, it fully incorporates leading practices of performance reporting by mid-year 2021. As we developed this tool, we recognized that there are many overlaps between all of our tracking and reporting efforts, and therefore collecting all information

into a centralized location and creating linkages will streamlines our efforts. The tool consists of three interconnected data tables: 1) Implementation Actions Table, 2) Projects Table, and 3) Progress Reporting Table.

By linking these three tables, we are able to use grant progress reporting to fulfill our Implementation Action reporting requirement since the progress of Implementation Actions directly relies upon the progress of LISS funded projects. The tool helps guide our annual cycle including providing financial assistance to partners to complete projects that address the CCMP, in which semi-annual Progress Reports, linked to the CCMP, are used to populate the Tool. We then utilize SharePoint and associated apps like Power Business Intelligence (BI) to build reports to drive future informed decision making and investments which is then communicated with LISS partners and the public. Additionally, LISS has developed a Program Progress and Implementation webpage which includes selected fields from the tool. This will enable the program to communicate in a transparent way how investments of public funds are achieving desired outcomes in the condition of the Long Island Sound ecosystem. The Tool holds the program accountable by linking our investments back to the CCMP and effectively measuring program implementation and progress.

b. Research. The LISS STAC met three times in FY2022, with primary investigators of funded projects and others making presentations to report on progress. The three meetings focused on shellfish, eelgrass, and macroalgae restoration, wind energy, hypoxia and climate change, modeling efforts, invertebrate monitoring, and open science, respectively. STAC meeting minutes are posted on the LISS website.

- Long Island Sound Research Program: Scientific research provides a key to better understanding and more effectively managing Long Island Sound. Recognizing the important role that research plays in decision-making, the EPA, CTSEA, and NYSEA developed a cooperative program to fund research in support of the LISS. Initiated in 1999, the Long Island Sound Research Grant Program awards funds to researchers whose work helps meet the needs of decision-makers to improve the management of Long Island Sound. Generally, the LISS has held competitions biennially, combining funds from two fiscal years. Research projects funded from prior cycles of the Research Program are ongoing. In FY2022, CT and NYSEA released an RFP for preliminary proposals to select research projects. Nine projects were selected for funding and will take place from 2023-2025.
- Ecosystem Status and Trends: The LISS federal, state, local and academia partners monitor ecosystem status and trends for a suite of environmental indicators. The indicators are linked back to CCMP ecosystem targets and provide information on the abundance, diversity, distribution, viability, and/or quality and trends of the resource being monitored. As noted previously, the 2015 CCMP sets 20 ecosystem targets. Measuring, tracking, and reporting the ecosystem targets and indicators provides information to assess progress and refine and adapt management as needed. Reporting on targets and indicators on a periodic basis is a complex process, because the LISS does not directly pay for or support the data collection efforts for many of them. These are the province of other entities that are either directly responsible for that data collection by law, statute, regulation or by history or organizational preference. Instead, LISS works to use existing data when available, and collect new

data as needed. In October 2021, the Indicators Review Team developed an EPA-approved Quality Assurance Project Plan to management the Ecosystem Target and Supporting Indicators Microsite.

The following Research projects were approved to be funded in FY2023 to further our progress:

c. **Implementation Assistance.** The LISFF Grant program is the primary LISS vehicle for funding implementation projects to address CCMP and other program priorities at a local scale. The LISFF is administered by NFWF who provide technical Assistance to communities of practice in developing project proposals for their communities, including environmental justice, urban waters, youth and underserved communities and areas designated as distressed communities in Connecticut.

In FY2023, the LIS Futures Fund was funded at $12,000,000. The LISFF announced 39 grants totaling $12 million to local government and community groups to improve the health and ecosystem of Long Island Sound. The LISFF 2023 projects will reach more than 25,000 residents through environmental and conservation education programs. Water quality improvement projects will treat over 2.7 million gallons of stormwater, install over 100,000-square-feet of green infrastructure and engage people in environmental education from all over the Long Island Sound watershed. The projects will also restore over 40 acres of coastal habitat for fish and wildlife through invasive plant removal and management. The funds will be matched by $8 million from the recipients, resulting in over $20 million in funding for on-the-ground conservation projects.

The LISS initiated the Long Island Sound Futures Fund in 2005 through the U.S. EPA's Long Island Sound Office and NFWF. Since then, the LISFF invested over $56 million in 641 projects. The program has generated an additional $65 million in grantee match, for a total conservation impact of $121 million for regional and local projects. The projects have added 121 river miles for fish passage, restored 842 acres of critical fish and wildlife habitat, treated 208 million gallons of pollution, and educated and engaged 5 million people in protection and restoration of the Sound. These projects are responsive to the new Long Island Sound CCMP and other LISS priorities.

For FY2022, the funding categories have changed to Implementation Project ($50,000-$1,500,000), Design/Planning Projects ($50,000-$500,000), Community Science/Water Quality Monitoring ($50,000-$100,000), and Education and Public Participation Grants ($50,000-$250,000). When the projects are selected and awards are administered, they will be categorized into one of the following program activities for tracking and reporting purposes: 1) Coordination, 2) Water Quality Planning and Implementation, 3) Modeling, 4) Monitoring, 5) Research, 6) Habitat Restoration and Protection, 7) Public Education and Outreach, or 8) Stewardship and Resiliency. These categories were again used for FY2024.

C. FY2024 BIL Projects

The Biden-Harris Administration has memorialized the priority to ensure that the benefits of the BIL reach all communities through the provision of technical and financial assistance. The BIL identifies EPA's Geographic Programs and NEPs as key partners to enhance implementation projects and assistance to communities.

The LISS's goal for BIL funding is to significantly improve Long Island Sound's environmental health, climate resilience, and economic vitality in an equitable manner in communities across the Sound's watershed. Stated in the F*Y2022-2026 Bipartisan Infrastructure Law National Estuary Program Interim Funding Guidance*, BIL funding is to implement the CCMP that significantly

support environmental justice and climate resilience. Furthermore, BIL funding should meet the following elements: 1) accelerate and more extensively implement the CCMP, 2) prioritize projects in, and benefits to, underserved and disadvantaged communities, 3) build the adaptive capacity of ecosystems and communities, and 4) leverage and support additional resources. The Study will abide to all guidance as it is developed. Match for all BIL funds has been waived for LISS via the approval of the LISS equity strategy, which was received in 2023. Within this strategy LISS outlines ways it is investing in projects that meet our Justice 40 goal in which 40 percent of BIL investments' benefits will accrue to disadvantaged communities.

LISS has taken the opportunity of guaranteed funding and waived match to fund multi-year projects through FY24, such as NYSDEC WQIP and MassDEP wastewater treatment plant upgrades, that began in FY22. Decisions for FY25-FY26 appropriations will be made this July.

Similar to Section B, this section outlines the BIL projects in which are 'broken up' by the following categories:

1. Clean Waters
2. Healthy Ecosystems
3. Strong Communities
4. Sound Science and Inclusive Management

The following describes the multi-year projects that have been funded thus far:

1. **Clean Waters.**
   The first year and future years of BIL funding will focus on infrastructure improvement projects in Connecticut, New York, and the upper watershed state of Massachusetts to enhance water quality. This will include funding toward green infrastructure, transition to innovative septic systems, and nitrogen reduction upgrades to wastewater treatment plants. Additionally, to better understand the embayment conditions and implement site-specific infrastructure improvement projects, the LISS will invest in a new vessel to be used for CT DEEP's Long Island Sound Water Quality Monitoring program and associated research projects.

   a. **Water Infrastructure**
      - Water Quality Improvement Projects: NYSDEC has released the first RFA for the LISS WQIP program in June 2023. Projects were announced in February 2024 with LISS BIL funding going towards a project that will support improvements of the Port Washington Water Pollution Control District's treatment plant in Nassau County. The project will rehabilitate approximately 16,000 linear feet of gravity sewer main to reduce sanitary sewer overflows. These improvements will boost efforts to improve Manhasset Bay's water quality and support ongoing work to restore the Long Island Sound. A second RFA was released in May to close in July with FY24 BIL funds available to be awarded.
      - Wastewater Treatment Plant Upgrades: Since the start of its BIL-funded incremental award, Massachusetts Department of Environmental Protection (MassDEP) provided subawards for nitrogen reduction upgrades

to facilities in Chicopee, Gardner and Pittsfield, MA. These are all considered disadvantaged communities. Work has begun for the facilities' planned projects: Chicopee is at ~60% design, Gardner is at ~30% design and work in Pittsfield was initiated in FY24.

2. **Healthy Ecosystems**.
In addition to water quality, the LISS will focus on enhancing habitat quality through water infrastructure improvements. Specifically, the Study will work to restore existing or implement new fishways and remove dams. Additionally, LISS is restoring, protecting, and monitoring habitat to enhance climate resilience and sustainability. This will include living shorelines, wetland restoration, and flood mitigation.

   a. **Climate Resiliency**
      - Strong Pond Dam Removal: Complete deconstruction of Strong Pond Dam was completed by CT DEEP and partners in September 2023. This dam and river restoration opened 10 miles of river for fish passage. In 2020, LISS awarded CT DEEP $2.2 million for the dam's removal and demolition began in 2021. The final phase of construction, completed in September 2023, focused on removing the dam and restoring the river section. To support the final demolition phase, LISS contributed an additional $250,000 to the project using BIL funds. As of April 2024, 1.5 acres of vegetation have been planted to restore the riverbank to benefit birds, mammals, amphibians, and other wildlife.

3. **Strong Communities.**
As highlighted in Section B, the integration of environmental justice goals with all Long Island Sound watershed protection and restoration activities is being met through implementation of the LISS 5-year Environmental Justice Work Plan. The plan includes public involvement, coastal public access, and human and ecosystem health goals. A key component was EPA's release of a RFA to select an organization to support and build community capacity to address EJ within communities; Restore America's Estuaries (RAE) was selected in December 2022. Additionally, the Study is also working to better understand barriers – more specifically, language barriers with Connecticut's coastal anglers to better communicate and educate about environmental health issues associated with fishing.

   a. Environmental Justice
      - **Long Island Sound Community Impact Fund (LISCIF):** Since being selected to administer LISCIF, RAE stood up this program that links grant making and capacity development to enhance the health and resilience of organizations and communities in CT & NY. RAE released an RFA for LISCIF subaward funding (up to $1,500,000 available) that was released in October 2023. The RFA process was adapted to meet needs of smaller, lower capacity organizations; to do this, RAE implemented a two-step application process that makes LISCIF more accessible and allowed applicants sufficient time to participate. RAE received 35 letters of intent (LOI) for a total funding ask of $2,583,323. After narrowing the LOIs, RAE received 24 proposals for a total funding ask of $1,938,559. 18 of these proposals were selected for funding and projects represent a range of CCMP themes and Implementation Actions. Subawards were announced at press events in May 2024. Additionally, RAE planned, organized, promoted and

hosted a series of technical assistance trainings geared towards potential LISCIF applicants. Training topics were planned in parallel with the RFA process – and now are moving to complement the project implementation process. Eight trainings have been held – topics included: Project Design & Building Partnerships, Grant Writing: Writing a Strong Narrative, Budgeting & Staffing, Fundraising, Procurements & Recordkeeping, Hiring & Retention. These virtual trainings were held as live webinars and recordings are available on the RAE LISCIF website (all at no cost). An in-person event – the LISCIF Annual Learning Exchange is being held in NY on June 27. This is meant to be a networking and learning forum for subawardees and local community organizations.

- **CTDEEP Annual Angler Survey:** In order to eliminate language barriers to improve data accuracy from annual recreational fishing surveys, CT DEEP utilized LISS BIL funding to release seasonal position opportunities for translational support in Spring 2023. Additional recruitment materials and flyers in multiple languages were released and circulated in Summer 2023 to aid in engaging the public. New technical assistance partnerships with CTs Labor are helping to train potential applicants on the State's application process which is showing early signs of success.

D. Previous Year's (FY2022) Projects/Activities Highlights

1. **GOALS AND ACCOMPLISHMENTS.** ***Describe goals that the program met and highlight programmatic accomplishments as well as project/activity short-term and intermediate outcomes. Highlight long-term environmental results achieved wherever possible. Include outcome and/or environmental results information about projects that required substantial NEP staff time, but which were sponsored/funded by others, e.g., foundations, Federal or state partners.***

The following goals and accomplishments focus on the areas of special interested mentioned in the NEP Program Evaluation Guidance: a) Reduction in Nutrient Pollution, b) Water Reuse and Conservation, c) Marine Litter Reduction, and d) Green Infrastructure and Resiliency. In Section B, we highlight FY2023 activities and accomplishments related to 1. Clean Waters, 2. Healthy Ecosystems, 3. Strong Communities, and 4. Sound Science and Inclusive Management. The LISS is willing to discuss any of its ongoing programs and activities with NEP staff that were felt to be worthy of technology transfer to other NEPs; this can be done in conjunction with this Work Plan. The LISS website, the nitrogen TMDL, the bioextraction projects funded in prior years, the LISS environmental indicators, *Sound Health* and *Protection & Progress* are all examples of successful and transferable products and activities from which the other NEPs may benefit.

a. Reduction in Nutrient Pollution

Point Source Load Reduction. The LISS partners continued the point source nitrogen reduction program in Long Island Sound in 2021. The total Trade-Equalized (TE) point source nitrogen load for 2021 was 18,338 TE lbs/day. This is below the wasteload allocation set in the 2000 Nitrogen TMDL. In total, the 100 NY and CT wastewater treatment plants (WWTPs) discharging to Long Island Sound have reduced nitrogen by 49 million pounds

annually compared to baseline levels established in the 2000 TMDL. In 2021, discharges decreased by 4.8% compared to 2020, and remained below the final TMDL targets. In both 2018 and 2019, the annual total nitrogen discharged from wastewater treatment plants (WWTP) in CT and NY increased for the first time since 2011 but remained below the Total Maximum Daily Load (TMDL) allocation and permit limits. The observed increase was likely caused by a greater than normal amount of precipitation in both years. Rainfall entering a wastewater treatment plant, either through the sewage pipe system or by depositing directly onto sewage storage tanks, can reduce the efficiency of the plant's ability to treat and remove nitrogen before discharging into Long Island Sound. However, the annual total nitrogen discharged from WWTPs has been the lowest on record for CT and NY. While the LISS does not directly fund this goal area and important CCMP activity, funds for STP nitrogen upgrades result from a combination of EPA State Revolving Funds, Connecticut's state Clean Water Fund and Bond Acts, and New York State's Clean Water/Clean Air Bond Act funds and other sources, including NYC bonds and funding for NYC STP upgrades. Attachment 6 depicts the reductions in Trade-equalized point source loadings from 1995-2023.

Area/Duration of Hypoxia. The maximum area of hypoxia (less than 3 milliliters (ml) of DO per liter of bottom water) in 2023 was 127 square miles. The 2023 5-year rolling average for the maximum summertime area of low dissolved oxygen (hypoxia) in Long Island Sound was estimated at 102 square miles. This represents a 51 percent decrease in the five-year rolling average compared to the pre-2000 average of 205 square miles (i.e., before the Total Maximum Daily Load was put in place by EPA and the states). The five-year average hypoxic area increased by 15 square miles from last year's five-year average of 87 square miles (for 2017-2022). Dry summer conditions during summer 2022 likely reduced nutrient loading to the Sound from the watershed, likely contributing to the observed reduction in hypoxic area for that year. The LISS provides funding to CT DEEP to conduct the LIS WQ monitoring program year-round, with additional monitoring runs during the summer months. Other ambient factors affect the formation of the hypoxic zone in the Sound, including water and air temperature, rainfall, solar radiation, wind direction and velocity, currents, storm events and any resulting biological effects such as algae formation. Attachment 7 depicts the area/duration of the maximum hypoxia event in Long Island Sound since 1987 as measured by CT DEEP.

NPS Load Reductions/On-Site Treatment. The CCMP calls for actions to address NPS (NPS) pollution to the Sound, including actions to address on-site waste treatment systems (OWTS), or septic systems. The LIS TMDL addresses NPS pollution, requiring a 10 percent reduction through direct projects or best management practices and other methodologies. CT DEEP also is engaged in the Second-Generation Nitrogen Strategy, which endeavors to complement the sound wide TMDL by assessing local impairments and local nitrogen sources contributing to them.

b. Water Reuse and Conservation

The LISS does not particularly fund projects focused on this special interest as it is not a prominent issue in our region.

c. Marine Litter Reduction

Typically, LISS partners have addressed marine litter reduction primarily through the LISFF program where projects focus on marine litter reduction, prevention, and education.; however, there were no projects closed in FY2021. However, LISS partners, under the guidance of the NOAA Marine Debris Program and leadership of the CT and NY SEA programs, worked to develop a bi-state action plan for Long Island Sound. The Long Island Sound Marine Debris Action Plan, published in May 2022, represents a comprehensive framework of strategic actions to mitigate the impacts of marine debris in Long Island Sound over the next five years (2022-2027). The plan is organized under three main goals: 1) Understand, Prevent and Mitigate the Impacts of Single-Use Plastic and Other Water/Land-based Consumer Debris; 2) Understand, Prevent and Mitigate the Impacts of Abandoned and Lost Fishing/Aquaculture Gear; and 3) Understand, Prevent and Mitigate the Impacts of Microplastics and Microfibers. Over the next five years, tracking and monitoring of identified actions will help assess collective progress in achieving the goals for Long Island Sound. Using data from The Ocean Conservancy's Trash Information and Data for Education and Solutions (TIDES) database, from 2013 to 2023, LISS reports a decrease in marine debris collected per mile during coastal clean-ups in the following categories: plastic grocery bags (NY-98%; CT-98%), other (non-grocery) plastic bags (NY-80%; CT-30%), balloons (NY-93%; CT-88%), cigarettes (NY-96%; CT-90%), Styrofoam (NY-94%; CT-76%), foam cups and plates (NY-92%; CT-80%), plastic bottles (NY-97%; CT-76%), and straws/stirrers (NY-83%; CT-75%). These declines may coincide with various bans implemented in New York and Connecticut municipalities. For example, New York and Connecticut, starting March 1, 2020 and June 30, 2021 respectively, have implemented state-wide plastic bag bans and fees to reduce the use of single-use plastic bags. These declines have continued in 2023 for most of the categories mentioned other than straws/stirrers and balloons which saw a slight increase from 2022.

d. Green Infrastructure and Resiliency

The LISS partners have addressed green infrastructure primarily through the LISFF program. The following projects finished in FY2023 which estimated over 11,475 square feet of green infrastructure installed and 500,000 gallons of stormwater prevented annually:

- University of Connecticut - Rapid Action Plans to Deliver Green Infrastructure in Coastal Connecticut Communities-II (CT): Developed and implemented five green infrastructure projects and provide guidance to local government about overcoming barriers to deployment of green infrastructure in communities of the South Central Basin of Connecticut.
- The Trust for Public Lands - Planning for Greening the Yellow Mill Channel to Improve Water Quality in the Long Island Sound (CT): Developed a collaborative community-driven analysis to select the preferred types of green infrastructure to be used at a waterfront site, Bridgeport Connecticut. Project set the stage for improving water quality and enhancing community resilience to storms and floods in an urban coastal community of Long Island Sound.
- The Nature Conservancy - Community-driven Stormwater Green Infrastructure Design in Bridgeport (CT): Developed a Green Stormwater Infrastructure Action Plan with community-driven design in Bridgeport, Connecticut. Project will identify a portfolio of projects in collaboration with Bridgeport youth and local community members to

improve the water quality of Long Island Sound.

2. COMPLETED PROJECTS. ***For completed projects that were funded by a CWA §320 sub-award, indicate: project purpose; entity that led project implementation; final grant amount – if project came in under budget, describe how remaining funds will be reallocated to ensure expenditure during the project period; project deliverable(s) and project completion date.***

The LISS is an ongoing partnership of Federal, state and local organizations implementing the cleanup and restoration plan for Long Island Sound. The LISS is not organized by 'project' and its program functions are distributed across its partners. Therefore, unless there are specific and discrete sub-grant projects that have been completed, this reporting category does not adequately represent the LISS organizational and reporting structure. However, in FY2022, one partner's assistance award funded in prior fiscal years have been completed and their EPA awards closed out:

- LI-00A00990, $98,670, Connecticut embayment tributary nitrogen removal: calibrating rates to geomorphology to improve parameterization of watershed loading models, University of Connecticut

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ATTACHMENT 1

LONG ISLAND SOUND STUDY
NATIONAL ESTUARY PROGRAM WORK PLAN
LIST OF FY2023 LISS-FUNDED STAFF

ORGANIZATION/NAME	LISS TITLE	DESCRIPTION OF RESPONSIBILITIES/ACTIVITIES
EPA		
Mark Tedesco	Director, LIS Office	Direction of office and program
Leah O'Neill	EPA R1 Deputy Director	Overall Budget Lead
Nikki Tachiki	EPA R2 Strategic Planning Coordinator	CCMP 2025, EJ Lead, SRC integration with EJ
Cayla Sullivan	EPA R2 Habitat & Reporting Coordinator	Lead eelgrass efforts throughout LIS
Bessie Wright (0.5 FTE)	EPA R1 Community & Tribal Coordinator	Community & Tribal Coordinator
Esther Nelson	EPA R2 Federal Partnerships Coordinator	Coordinate collaboration with other federal agencies
Elizabeth Tanzi	EPA R2 Communication & Outreach Coordinator and Water Quality Monitoring	Ocean Acidification
Melissa Duvall	EPA R2 Research & Modeling Lead	Water quality modeling and research
Kristen Laccetti	EPA R2 BIL Coordinator	NY State projects with NYSDEC, Wetlands & Climate resiliency
Ashley Desrosiers	EPA R1 BIL Coordinator	BIL Coordinator & Justice40 lead
Evelyn Spencer	EPA R1 Monitoring & Reporting Coordinator	CT state projects with CTDEEP
TBD	EPA R1 LIS Coordinator	Interagency Agreements (Working on replacement for Casey Abel)
Youngmi Shin	ORISE Research Fellow	Biogeochemical Modeling
CT DEEP		
Tim Hunter	Environmental Analyst 3	Coordinates overall LIS program in CT
Kelly Streich	Environmental Analyst 3	TMDL and technical support lead
Kathleen Knight	Environmental Analyst 2	Modeling lead
Katie Clayton-O'Brien	Environmental Analyst 2	Water quality sampling/analysis
Matthew Lyman	Environmental Analyst 3	Water quality sampling/analysis
Tommy Seda	Boat Captain	RV John Dempsey CT DEEP WQ Monitoring.
Christine Olsen	Environmental Analyst 3	Water quality sampling/analysis
Harry Yamalis	Environmental Analyst 2	Coordinates habitat restoration plans/projects in CT
NYSDEC		
Samarra Scantlebury (state funded)	LIS Coordinator	Coordinates overall LIS program in New York
Christopher Eagler	DW Coordinator	Coordinates Division of Water programs
NY Sea Grant		

Jimena Beatriz-Perez Viscasillas	NY Outreach Coordinator	Develops and implements communications plans and public information/education program in NY
Karen Palmeri	Administrative Support	Supports Extension Specialist. (33%)
Sara Powell	NY Sustainable and Resilient Community Extension Professional	Support local communities in implementing the Sustainable and Resilient Communities work plan.
Sarah Schaefer-Brown	NY Sustainable and Resilient Community Extension Professional	Support local communities in implementing the Sustainable and Resilient Communities work plan.
Elizabeth Hornstein	NY Sustainable and Resilient Community Extension Professional	Support local communities in implementing the Sustainable and Resilient Communities work plan.
Lillit Genovesi	NY WLIS Outreach Coordinator	Develops and implements communications plans and public information/education program in NYC and Westchester, NY.
NEIWPCC		
Robert Burg	LISS Outreach Coordinator	Coordinates the overall LISS communications program
James Ammerman	Science Coordinator	Coordinates LISS science and research program
Alex Dumont (0.5 FTE)	Environmental Analyst I	Overall LIS coordination and support
Anya Grondalski	Science Communicator	Coordinate science communication throughout LISS
Vacant	NYSDEC Habitat Restoration Coordinator	Coordinates habitat restoration plans/projects in the NY
Vacant	Bioextraction Coordinator	Coordinate shellfish and kelp bioextraction planning and projects
CTSEA		
Maggie Cozens	CT Outreach Coordinator	Provides PI&E support and coordination in CT
Sarah Schechter	CT Sustainable and Resilient Community Extension Professional	Support local communities in implementing the Sustainable and Resilient Communities work plan
Deborah Abibou	CT Sustainable and Resilient Community Extension Professional	Support local communities in implementing the Sustainable and Resilient Communities work plan

Attachment 2

LIS BUDGET SUMMARY BY ORGANIZATION

2024 Organization & Program Activity by Award	Requested Budget	Required Statutory Match	Actual Award Match
1. EPA Long Island Sound Office (Internal no match)	**$1,496,000**	**$0**	**$0**
2. CT Dept. of Energy & Environmental Protection	**$4,507,394**	**$3,288,263**	**$5,700,000**
Implementation activities funded with 502B67 (CWA 119) 40% match	$3,657,394	$2,438,263	
Implementation activities funded with 502B89 (CWA 320) 50% match	$850,000	$850,000	
State Overmatch			$5,700,000
3. NY State Dept. of Environmental Conservation (DMR)	**$414,385**	**$227,134**	**$1,000,000**
Implementation activities funded with 502B67 (CWA 119) 40% match	$334,385	$222,923	
Citizen involvement & education activities funded with 502B67 (CWA 119) 5% match	$80,000	$4,211	
State Overmatch			$1,000,000
4. NY State Dept. of Environmental Conservation (DOW)	**$698,003**	**$429,412**	**$1,800,000**
Implementation activities funded with 502B67 (CWA 119) 40% match	$639,500	$426,333	
Citizen involvement & education activities funded with 502B67 (CWA 119) 5% match	$58,503	$3,079	
State Overmatch			$1,800,000
5. NY State Dept. of Environmental Conservation (DOW)	**$250,000**	**$13,158**	**$0**
Citizen involvement & education activities funded with 502B67 (CWA 119) 5% match	$250,000	$13,158	$0
6. Univ. of Connecticut/ CT Sea Grant Public Outreach	**$1,490,458**	**$410,024**	**$79,253**
Implementation activities funded with 502B67 (CWA 119) 40% match	$540,000	$360,000	$27,343
Citizen involvement & education activities funded with 502B67 (CWA 119) 5% match	$950,458	$50,024	$51,910
7. NY Sea Grant Cornell U. Public Outreach	**$2,402,661**	**$529,570**	**$119,826**
Implementation activities funded with 502B67 (CWA 119) 40% match	$656,500	$437,667	$0
Citizen involvement & education activities funded with 502B67 (CWA 119) 5% match	$1,746,161	$91,903	$119,826
8. NE Interstate Water Pollution Control Commission	**$3,770,281**	**$2,095,329**	**$0**
Implementation activities funded with 502B67 (CWA 119) 40% match	$3,089,226	$2,059,484	$0
Citizen involvement & education activities funded with 502B67 (CWA 119) 5% match	$681,055	$35,845	$0
9. Interstate Environmental Commission	**$714,135**	**$476,090**	**$542,335**
Implementation activities funded with 502B67 (CWA 119) 40% match	$714,135	$476,090	$542,335
10. Univ. of Connecticut Water Quality monitoring	**$565,513**	**$377,009**	**$159,494**
Implementation activities funded with 502B67 (CWA 119) 40% match	$565,513	$377,009	$159,494
11. National Fish & Wildlife Foundation	**$12,650,000**	**$8,433,333**	**$8,433,333**
Implementation activities funded with 502B67 (CWA 119) 40% match	$12,650,000	$8,433,333	$8,433,333
12. Save the Sound- Unified Water Study	**$1,285,871**	**$857,247**	**$857,712**
Implementation activities funded with 502B67 (CWA 119) 40% match	$1,285,871	$857,247	$857,712
13. UConn/ CT Sea Grant Research Program	**$1,500,000**	**$1,000,000**	**$650,000**
Implementation activities funded with 502B67 (CWA 119) 40% match	$1,500,000	$1,000,000	$650,000
14. Research Foundation SUNY/NY SeaGrant Program	**$1,500,000**	**$1,000,000**	**$650,000**
Implementation activities funded with 502B67 (CWA 119) 40% match	$1,500,000	$1,000,000	$650,000
15. USGS Interagency Agreement - Severable (no match)	**$2,522,641**	**$0**	**$0**
16. USGS Interagency Agreement - NonSeverable (no match)	**$361,846**	**$0**	**$0**
17. NRCS Interagency Agreement - Severable (no match)	**$342,037**	**$0**	**$0**
18. USFWS Interagency Agreement - Severable (no match)	**$483,400**	**$0**	**$0**

19. USFWS Interagency Agreement - NonSeverable (no match)	**$1,172,800**	**$0**	**$0**
20. NOAA Interagency Agreement - NonSeverable (no match)	**$1,894,560**	**$0**	**$0**
21. National Coastal Condition Assessment - Internal contract no match	**$555,000**	**$0**	**$0**
22. Future Award Distribution (with match requirement covered)	**$700,000**	**$460,000**	**0**
Implementation activities funded with 502B67 (CWA 119) 40% match	$700,000	$460,000	0
Final Totals:	**$41,276,985**	**$19,596,569**	**$19,991,953**
Fiduciary Reserve (EPA held)	$77,074		

Planning target includes FY23 & FY24 (non-BIL) at $41,354,059

$40,002,000 for LIS Section 119 funds and $850,000 for NEP Section 320 funds and $502,059 FY23 carryover

Statutory Aggregate Match Requirement Exceed by: **$395,384**

Long Island Sound Study BIL Funding	Attachment 3					As of May 24, 2024
	2022	2023	2024	2025	2026	Projected Award
Organization & Program Activity	CWA 119 & 320 Budget	CWA 119 & 320 Budget	CWA 119 & 320 Budget	Combined Projection	Combined Projection	Total Funds Requested
1. EPA Long Island Sound Office	**$409,294**	**$471,600**	**$525,000**	**$525,000**	**$525,000**	**$2,455,894**
a. R1 Program Support & travel	$266,300	$263,600	$275,000	$275,000	$275,000	$1,354,900
b. R2 Program Support	$88,000	$140,000	$150,000	$150,000	$150,000	$678,000
c. EPA HQ Administration	$54,994	$68,000	$100,000	$100,000	$100,000	$422,994
2. Connecticut Dept. of Energy & Environmental Protection	**$6,545,916**	**$6,500,000**	**$6,500,000**	**$6,500,000**	**$6,500,000**	**$32,545,916**
BIL FY22 Award (Habitat, EJ, Vessel, monitoring)	$6,545,916	$0	$0	$0	$0	$6,545,916
Habitat restoration, river connectivity, living shorelines	$0	$2,750,000	$3,525,000	$3,275,000	$3,025,000	$12,575,000
Coastal access improvements	$0	$3,600,000	$2,475,000	$2,225,000	$2,225,000	$10,525,000
Seafloor environmental characterization	$0	$0	$0	$500,000	$750,000	$1,250,000
Green infrastructure	$0	$150,000	$500,000	$500,000	$50,000	$1,650,000
3. NY State Dept. of Environmental Conservation (Land)	**$2,909,800**	**$2,909,800**	**$3,409,800**	**$3,409,800**	**$3,409,800**	**$16,049,000**
a. Land Acquisition (FY22 & FY23)	$2,909,800	$2,909,800	$3,409,800	$3,409,800	$3,409,800	$16,049,000

Unallocated Funds:	$680,263	$2,028,400	$1,475,000	$3,475,000	$3,475,000	$11,133,663

4. NY State Dept. of Environmental Conservation (Water)	**$4,500,000**	**$6,000,000**	**$6,000,000**	**$6,000,000**	**$6,000,000**	**$28,500,000**
a. NYS Water Quality Improvement Projects (WQIP)	$2,250,000	$3,000,000	$3,000,000	$3,000,000	$3,000,000	$14,250,000
b. NYS Long Island Sound Watershed Septic System Replacement	$2,250,000	$3,000,000	$3,000,000	$3,000,000	$3,000,000	$14,250,000
5. MA Dept of Environmental Protection	**$4,500,000**	**$4,000,000**	**$2,000,000**			**$10,500,000**
a. Nitrogen reduction upgrades to WWTPs (FY22 & FY23)	$4,500,000	$4,000,000	$2,000,000			$10,500,000
6. LIS Community Impact Fund - Restore America's Estuaries	**$2,364,527**	**$0**	**$2,000,000**	**$2,000,000**	**$2,000,000**	**$8,364,527**
a. Outreach & Implementation RFP	$2,364,527	$0	$2,000,000	$2,000,000	$2,000,000	$8,364,527
Total:	**$21,229,537**	**$19,881,400**	**$20,434,800**	**$18,434,800**	**$18,434,800**	$98,415,337
Planning Target	**$21,909,800**	**$21,909,800**	**$21,909,800**	**$21,909,800**	**$21,909,800**	**$109,549,000**

Program Code/Grant #	Lead Project Officer	Awarding Region	Grants Specialist	Recipient	Description	EPA hold Fed Award Amount (000B67) CWA 119	R1 Fed Award Amount (000B67) CWA 119	R2 Fed Award Amount (000B67) CWA 119	Fed Award Amount (000B89) CWA 320	HQ BIL CWA 119	R1 BIL CWA 119	R2 BIL CWA 119	BIL CWA 320
LI-96267824-0	Kristen Laccetti	2	Janeime Castro	NYSDEC/DOW	N smart, N testing for LIS growers, fertilizer campaign			$698,003					
LI-96216723	Kristen Laccetti	2	Janeime Castro	NYSDEC/DOW	Residential Fertilizer Community Based Social Marketing,			$250,000					
LI-New	Kristen Laccetti	2	Janeime Castro	NYSDEC/DMR	Acoustic monitoring & EJ outreach for recreational fishing			$414,385					
4S-New	Kristen Laccetti	2	Janeime Castro	NYSDEC/DOW	Support for WQIP and Septic System Improvement programs in NY State.							$4,500,000	
4S-New	Kristen Laccetti	2	Nicholas Porsborg	NYSDEC/DMR	Land acquisition under the LISS Stewardship Initiative,							$2,000,000	$909,800
LI-New	Nikki Tachiki	2	Nicholas Porsborg	Cornell University Office of Sponsored Programs	This cooperative agreement has two elements: 1) Conduct the planning, organization and implementation of public environmental education and involvement			$2,402,661	$0				

					programs, including those from environmental justice communities, for the Long Island Sound in the State of New York. 2) Provide technical assistance to support Sustainable and Resilient Communities, consistent with the Long Island Sound Comprehensive Conservation and Management Plan.								
LI-96244421-2	Melissa Duvall	2	Janeime Castro	SUNY Research Foundation (Sea Grant)	This agreement provides assistance to the State University of New York - Research Foundation (SUNY Research Foundation) to administer the Long Island Sound Research Grant program to identify scientific research needs and priorities, solicit and manage scientific peer review of proposals, and manage the selection and completion of the highest priority proposals.			$1,500,000	$0				

LI-New	Liz Tanzi	2	Nicholas Porsborg	Interstate Environmental Commission	1) conduct water quality monitoring of summer hypoxic conditions in western Long Island Sound and its embayments; 2) continue coordinated monthly, weekly and bi-weekly long-term monitoring of a suite of in-situ parameters at a network of 22 historical monitoring stations; and 3) coordinate with the Connecticut Department of Energy and Environmental Protection and other Long Island Sound Study partners.			$714,135	$0				
LI-New	Liz Tanzi	2	?	Save The Sound	This agreement provides assistance to Save the Sound to coordinate and implement the Unified Water Study, which establishes a comparable bay-to-bay dataset describing the eutrophic conditions and environmental health of bays and harbors around the Long Island Sound. Additionally, this agreement will			$1,285,871	$0				

					design a living shoreline resiliency project at Chittenden Park, CT.								
LI-00A00954-2	Melissa Duvall R2	2	Robert Smith	CT Sea Grant Research	This agreement provides assistance to the University of Connecticut to administer the Long Island Sound Research Grant program to identify scientific research needs and priorities, solicit and manage scientific peer review of proposals, and manage the selection and completion of the highest priority proposals. The project will result in at least one sub-award for research to improve understanding of Long Island Sound critical to improving water and habitat quality.		$1,500,000		$0				
LI-00A01412-1	Nikki Tachiki R2	2	Robert Smith	CT Sea Grant PI &E	This project will 1) plan, organize, coordinate and implement public environmental education programs, including the K-12 Mentor Teacher Program, for the		$1,490,458		$0				

					LIS program in the State of Connecticut by working with the LISS Management Conference partners in assessing needs and developing priorities, and 2) promote citizen involvement and citizen education to protect coastal resources in the LISS watershed. Additionally, this agreement will work to implement the Sustainable and Resilient Communities Work Plan.								
4S-00A00885	Ashley Desrosiers	1	Katonya Parker	MassDEP	This agreement is to fund upgrades to the Chicopee WPCF (which discharges to the CT River and LIS), to help the city meet its final permit that includes a mass-based annual average total nitrogen limit of 647 lbs/day.						$2,000,000		
4S-00A00937	Ashley Desrosiers	1	Monique Lloyd	RAE	Long Island Sound Community Impact fund.						$2,634,262		
LI-00A001603-0	Bessie Wright	1	Katonya Parker	National Fish & Wildlife Foundation	NFWF LIS Futures Fund 2021----As directed by Sections 119(d) and 320 of the Clean Water Act,		$12,650,000		$0				

					this project implements recommendations of the CCMP. The grant supports activities to support community-based efforts to restore Long Island Sound by providing sub-grants, through the NFWF, on a competitive basis through the Long Island Sound Futures Fund. Funded projects will educate and involve the public, protect and restore habitat, and reduce polluted runoff.								
LI-New?	Evelyn Spencer	1	Robert Smith	Univ. of Connecticut-WQ Monitoring	Supplemental Amendment for ongoing water quality monitoring.		$565,513						
LI-New	Evelyn Spencer	1	Robert Smith	CTDEEP	This agreement provides assistance to the Connecticut Department of Energy and Environmental Protection to implement its project to support the CCMP to protect and restore the chemical, physical and biological integrity of LIS.		$3,657,394		$850,000				

4S-00A01431	Evelyn Spencer	1	Robert Smith	CTDEEP	CTDEEP BIL Funding		$0				$6,500,000		
LI-00A01523	Ashley Desrosiers	1	Monique Lloyd	NEIWPCC	LISS management conference support		$3,770,281						
Interagency Agreement DW-014-92584301	Cayla Sullivan	2	Leon Smith	USGS CT NE	Severable. a. Major Tributaries to LIS Monitoring; b. Lower CT River Monitoring; c. CT River at Middle Haddam; d. Upper Connecticut River Monitoring (Yr 1 of 4) e. USGS Coastal Acidification Monitoring; f. Nitrogen concentrations and loads and seasonal nitrogen loads in tributaries			$2,522,641					
Interagency Agreement	Cayla Sullivan	2	Leon Smith	USGS CT NE	Non-severable, Embayment summary report, N changes in groundwater, compound flood risk online mapper			$361,846					
Interagency Agreement	Cayla Sullivan	2	Leon Smith	NOAA	Non-severable, LIS Oyster health assessment			$1,894,560					
Interagency Agreement DW-086-92567501	Esther Nelson	2	Elizabeth Mcquay	NRCS	Severable. Nutrient Management Outreach and Planning for Animal Operations in Connecticut. Outreach and Planning for			$342,037					

					Agricultural Operations in CT								
Interagency Agreement DW-014-92566701	Esther Nelson	2	Crystal Grayson	USFWS	Severable. Long Island Sound Collaborative Coastal Habitat Assessment, Restoration and Monitoring (formerly Tidal Marsh Restoration Implementation at Priority Sites Through Increased Capacity)			$483,400					
Interagency Agreement	Esther Nelson	2	Crystal Grayson	USFWS	Non-severable. Salt marsh data colelction to support coastal resilience in LIS			$1,172,800					
Contract	Evelyn Spencer	1	TBD	EPA HQ	NCCA		$555,000						
EPA R1	Leah O'Neill	1		R1	FTE assistance for R1 Staff Support (PC&B)		$381,600				$284,000		
EPA R1	Leah O'Neill	1		R1	WCF		$80,000				$18,000		
EPA R1	Leah O'Neill	1		R1	Travel		$5,000						
EPA R2	Mark Tedesco	2		R2	FTE assistance for R2 Staff Support (PC&B)			$707,400				$122,000	
EPA R2	Mark Tedesco	2		R2	General Expenses			$8,000				$0	
EPA R2	Mark Tedesco	2		R2	Travel			$3,000				$0	
EPA R2	Mark Tedesco	2		R2	WCF			$7,000				$6,000	
EPA R2	Mark Tedesco	2		R2	BOC = Contracts (This for ORISE, LISO & QAPP Support)			$300,000				$154,000	

EPA HQ		HQ		HQ	EPA HQ Administration	$4,000							
EPA HQ		HQ		HQ	EPA HQ Administration BIL					$117,000			
					Budget Total:	$4,000	$24,655,246	$15,067,769	$850,000	$117,000	$11,436,262	$6,782,000	$909,800
				Award distribution TOTAL			$24,188,646	$13,344,336					
					Final Budget total:			**$40,577,015**			**CWA 119 BIL TOTAL:**		$18,218,262
					Unallocated:			**$777,044**					

R2 funds	BIL funded
R1 funds	BIL funded
contract	
IA	
HQ	

Currently Available in BOC Grants	$31,377,690	$7,938,561	$850,000	383000	20550000	909800
amount to transfer	$7,189,044	($5,405,775)	$0	**($11,053,262)**	$13,768,000	0
				Unallocated	$2,714,738	

Program Code/Grant #	Lead Project Officer	Awarding Region	Grants Specialist	Recipient	Description	EPA hold Fed Award Amount (000B67) CWA 119	R1 Fed Award Amount (000B67) CWA 119	R2 Fed Award Amount (000B67) CWA 119	Fed Award Amount (000B89) CWA 320	HQ BIL CWA 119	R1 BIL CWA 119
LI-New	Kristen Laccetti	2	Janeime Castro	NYSDEC/DOW	Residential Fertilizer Community Based Social Marketing Project (Bioextraction match)			$250,000			
LI-96248820-1	Kristen Laccetti	2	Janeime Castro	NYSDEC/DMR	Will need to modify this award to add match & overmatch			$1,425,000			
4S-96237522-1	Kristen Laccetti	2	Janeime Castro	NYSDEC/DOW	Support for WQIP and Septic System Improvement programs in NY State.						
4S-96237922-1	Kristen Laccetti	2	Janeime Castro	NYSDEC/DMR	Land acquisition under the LISS Stewardship Initiative,						
LI-96244521-1	Nikki Tachiki	2	Nicholas Porsborg	Cornell University Office of Sponsored Programs	This cooperative agreement has two elements: 1) Conduct the planning, organization and implementation of public environmental education and involvement programs, including those from environmental justice communities, for the Long Island Sound in the State of New York. 2) Provide technical assistance to support Sustainable and Resilient Communities, consistent with the Long Island Sound Comprehensive Conservation and Management Plan.			$1,861,390	$0		

LI-96244421-2	Melissa Duvall	2	Janeime Castro	SUNY Research Foundation (Sea Grant)	This agreement provides assistance to the State University of New York - Research Foundation (SUNY Research Foundation) to administer the Long Island Sound Research Grant program to identify scientific research needs and priorities, solicit and manage scientific peer review of proposals, and manage the selection and completion of the highest priority proposals.			$1,500,000	$0		
LI-96244221-1	Aimee Boucher	2	Nicholas Porsborg	Interstate Environmental Commission	1) conduct water quality monitoring of summer hypoxic conditions in western Long Island Sound and its embayments; 2) continue coordinated monthly, weekly and bi-weekly long-term monitoring of a suite of in-situ parameters at a network of 22 historical monitoring stations; and 3) coordinate with the Connecticut Department of Energy and Environmental Protection and other Long Island Sound Study partners.			$1,695,249	$0		
LI-96244321-1	Liz Tanzi	2	?	Save The Sound	No Cost Time Extension						
LI-New	Liz Tanzi	2	?	Save The Sound	This agreement provides assistance to Save the Sound to coordinate and implement the Unified Water Study, which establishes a comparable bay-to-bay dataset describing the eutrophic conditions and environmental health of bays and harbors around the Long Island Sound. Additionally, this agreement will design a living shoreline resiliency project at Chittenden Park, CT.			$1,250,829	$0		
LI-00A00954-2	Melissa Duvall R2	2	Robert Smith	CT Sea Grant Research	This agreement provides assistance to the University of Connecticut to administer the Long Island Sound Research Grant program to identify scientific research needs and priorities, solicit and manage scientific peer review of proposals, and manage the selection and completion of the highest priority proposals. The project will result in at least one sub-award for research to improve understanding of Long Island Sound critical to improving water and habitat quality.		$1,500,000		$0		

LI-New	Cayla Sullivan	2	Robert Smith	UConn	Eelgrass collaborative		$235,046				
LI-New	Nikki Tachiki	2	Robert Smith	CT Sea Grant PI &E	This project will 1) plan, organize, coordinate and implement public environmental education programs, including the K-12 Mentor Teacher Program, for the LIS program in the State of Connecticut by working with the LISS Management Conference partners in assessing needs and developing priorities, and 2) promote citizen involvement and citizen education to protect coastal resources in the LISS watershed. Additionally, this agreement will work to implement the Sustainable and Resilient Communities Work Plan.		$1,406,113		$0		
4S-00A00885-1	Ashley Desrosiers	1	Katonya Parker	MassDEP	This agreement is to fund upgrades to the Chicopee WPCF (which discharges to the CT River and LIS), to help the city meet its final permit that includes a mass-based annual average total nitrogen limit of 647 lbs/day.						$4,500,000
LI-00A01223	Bessie Wright	1	Katonya Parker	National Fish & Wildlife Foundation	NFWF LIS Futures Fund 2021----As directed by Sections 119(d) and 320 of the Clean Water Act, this project implements recommendations of the CCMP. The grant supports activities to support community-based efforts to restore Long Island Sound by providing sub-grants, through the NFWF, on a competitive basis through the Long Island Sound Futures Fund. Funded projects will educate and involve the public, protect and restore habitat, and reduce polluted runoff.		$12,650,000		$0		
LI-00A00953-1	Evelyn Spencer	1	Robert Smith	Univ. of Connecticut-WQ Monitoring	Supplemental Amendment for ongoing water quality monitoring.		$645,024				
LI-00A01413-0	Evelyn Spencer	1	Robert Smith	CTDEEP	This agreement provides assistance to the Connecticut Department of Energy and Environmental Protection to implement its project to support the CCMP to protect and restore the chemical, physical and biological integrity of LIS.		$8,073,817		$850,000		

4S-00A01431	Evelyn Spencer	1	Robert Smith	CTDEEP	CTDEEP BIL Funding		$0				$6,500,000
LI-00A0159-2	Casey Abel	1	Monique Lloyd	NEIWPCC	This agreement provides assistance to the New England Interstate Water Pollution Control Commission to implement its project to support the CCMP to protect and restore the chemical, physical and biological integrity of LIS and to assist the states of CT and NY, and other public or nonprofit entities in conducting research, experiments, investigations, training, demonstration, surveys, or studies related to reducing pollution and improving the quality of the environment to sustain living resources in LIS.		$2,793,739				
Interagency Agreement	Casey Abel	1	Leon Smith	USGS CT NE	Severable. a. Major Tributaries to LIS Monitoring; b. Lower CT River Monitoring; c. CT River at Middle Haddam; d. Upper Connecticut River Monitoring (Yr 1 of 4) e. USGS Coastal Acidification Monitoring; f. Nitrogen concentrations and loads and seasonal nitrogen loads in tributaries		$2,211,596				
Interagency Agreement	Casey Abel	1	Leon Smith	USGS CT NE	Non-severable		$262,243				
Interagency Agreement	Casey Abel	1	Leon Smith	USGS CT NE	Non-severable, G-Invoicing inflight order (no new funding)		$0				
Interagency Agreement DW-086-92567501	Esther Nelson	2	Walker ONeil	NRCS	Severable. Nutrient Management Outreach and Planning for Animal Operations in Connecticut. Outreach and Planning for Agricultural Operations in CT			$313,739			
Interagency Agreement DW-014-92566701	Esther Nelson	2	Leon Smith	USFWS	Severable. Long Island Sound Collaborative Coastal Habitat Assessment, Restoration and Monitoring (formerly Tidal Marsh Restoration Implementation at Priority Sites Through Increased Capacity)			$441,951			
Contract	Bessie Wright	1	Casey Abel	EPA	EPA EJ Contract		$82,932				
Contract	Nikki Tachiki	1	Ray Cody	BPA	CCMP Revision Support & Facilitation		$83,447				

Contract	Mark Tedesco	2		EPA ORD	RBEROST ORD contract Detenbeck			$104,249			
EPA R1	Leah O'Neill	1		EPA	FTE assistance for R1 Staff Support (PC&B)	$298,000					$243,000
EPA R1	Leah O'Neill	1		EPA	WCF	$7,000					$18,000
EPA R1	Leah O'Neill	1		EPA	Travel	$0					
EPA R2	Mark Tedesco	2		EPA	FTE assistance for R2 Staff Support (PC&B)	$568,000					
EPA R2	Mark Tedesco	2		EPA	General Expenses	$8,000					
EPA R2	Mark Tedesco	2		EPA	Travel	$3,000					
EPA R2	Mark Tedesco	2		EPA	WCF	$7,000					
EPA R2	Mark Tedesco	2		EPA	BOC = Contracts (Is this for ORISE, LISO & QAPP Support?)	$300,000					
EPA HQ		HQ		EPA	EPA HQ Administration	$ 4,000					
EPA HQ		HQ		EPA	EPA HQ Administration BIL					$ 68,000	
					Budget Total:	$1,195,000	$29,943,957	$8,842,407	$850,000	$68,000	$11,261,000
					Final Budget total:			**$40,831,364**			**CWA 1**
					Unallocated:			**$20,636**			

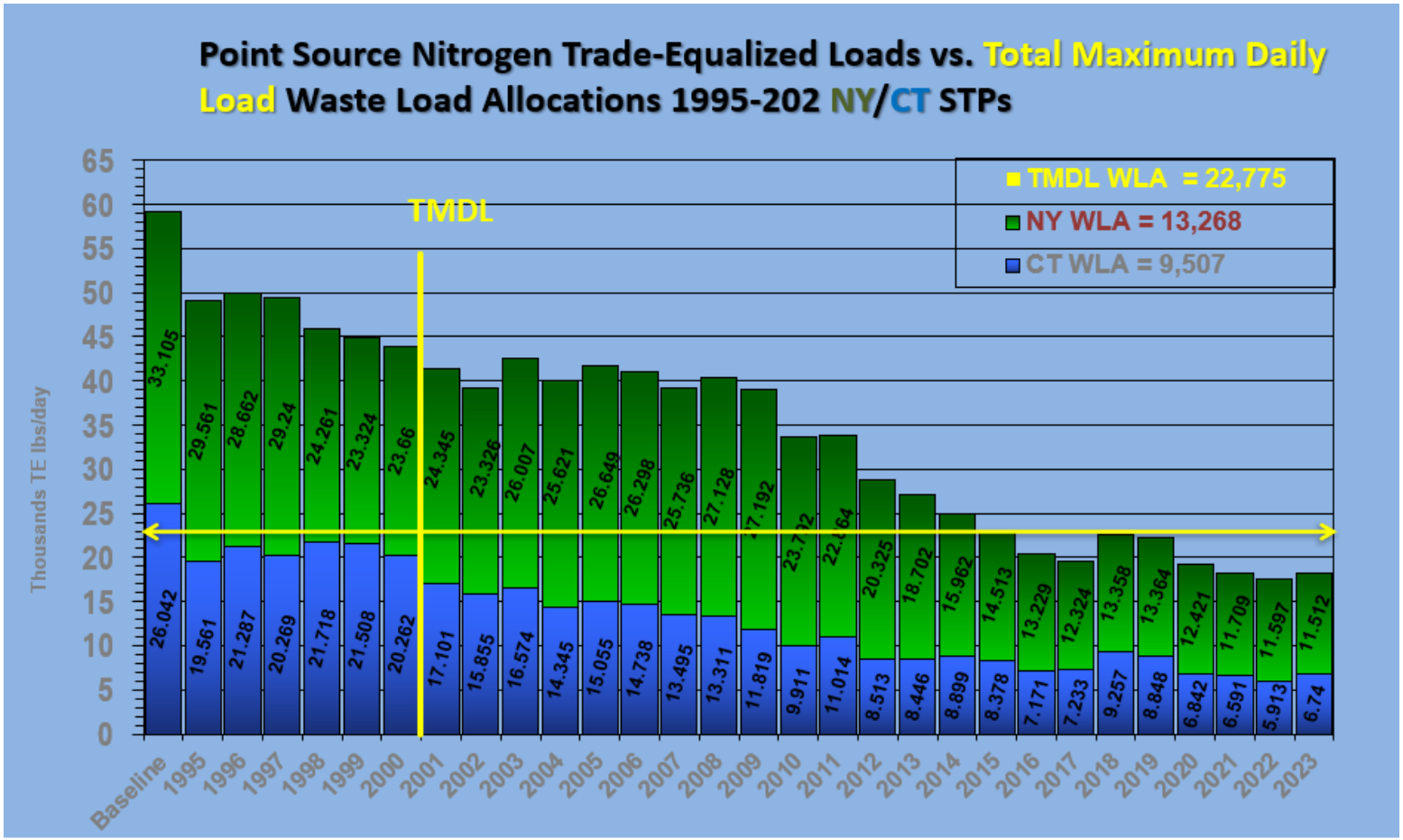
Attachment 5

Long Island Sound Study

Travel Documentation for LIS NEP Work Plan

July 1, 2023 - June 30, 2024

LISS Staff & Partner Travel									
Meeting Date(s)	**Travel Dates (if different)**	**Meeting Title**	**Starting Location**	**Meeting Location (Destination)**	**Agency/Committee Affiliation**	**Partner/Staff**	**Expense ($)**	**Grant Number**	**Line Item**
FY23; Q4 (July 1, 2023-September 30, 2023)									
6/8/2023		CAC Meeting	White Plains, NY	Mamaroneck, NY	NEIWPCC	Staff	$ 7.07	LI00A01059	6130
6/20/2023		COE Outreach Event	Stamford, CT	Stratford, CT	NEIWPCC	Staff	$ 36.29	LI00A01059	6130
		July Mileage reimbursement	Bay Shore	Kings Park, NY	NEIWPCC	Staff	$ 23.45	LI00A01059	6130
6/12/2023		Sampling Dates (3) June Dates	Huntington, NY	Stony Brook, NY	NEIWPCC	Staff	$ 31.44	LI00A01059	6130
7/12/2023		Tour pf the proposed Restoration work at Chittenden Park	Berlin, CT	Guilford, CT	CTDEEP	Partner	$ 36.03	LI00A01059	8730
7/27/2023		RT Sampling trip & Parking	Queens, NY	Stony Brook, NY	NEIWPCC	Staff		LI00A01059	6130
7/27/2023		COE Meeting	White Plains, NY	New York, New York	NEIWPCC	Staff	$ 33.50	LI00A01059	6130
8/3/2023		Futures Fund Review Meeting	Brroklyn, NY	Bridgeport, CT	NYSEDEC	Partner	$ 103.84	LI00A01059	8730
8/14/2023		Ribbed Mussel QAPP audit & Samples	Stony Brook, NY	Huntington, NY & Northport, NY & East Set	NEIWPCC	Staff	$ 35.17	LI00A01059	6130
8/2/2023		Visit to Bridgeport Regional Business Council	White Plains, NY	Bridgeport, CT	NEIWPCC	Staff	$ 71.75	LI00A01059	6130
8/3/2023		LISS Futures Fund Review Meeting	Bridgeport, CT	Berlin, CT	CTDEEP	Partner	$ 20.00	LI00A01059	8730
9/14/2023		LISS Joint CAC/STACC Meeting	Rosedale, NY	Stamford, CT	Citizens Campaign fo	Partner	$ 30.73	LI00A01059	8730
9/14/2023		LISS Joint CAC/STACC Meeting	East Hampton, NY	Stamford, CT	FootPrints in the Sand	Partner	$ 56.99	LI00A01059	8730
6/623		LISS CAC Meeting	East Hampton, NY	Mamaroneck, NY	FootPrints in the Sand	Partner	$ 68.12	LI00A01059	8730
9/14/2023		LISS Joint CAC/STACC Meeting	Manhasset, NY	Stamford, CT	Adelphi University	Partner	$ 19.50	LI00A01059	8730
9/14/2023		LISS Joint CAC/STACC Meeting	Patchogue, NY	Stamford, CT	Citizen Campaign for	Partner	$ 106.24	LI00A01059	8730
9/14/2023		LISS Joint CAC/STACC Meeting	Mystic, CT	Stamford, CT	Project Oceanology	Partner	$ 66.71	LI00A01059	8730
9/14/2023		LISS Joint CAC/STACC Meeting	White Plains, NY	Stamford, CT	NEIWPCC	Staff	$ 22.53	LI00A01059	6130
9/13/2023		Mailing of Living Treasures Guides to teacher				Staff	$ 9.50	LI00A01059	7210
						FY23 Q4 Total	**$ 778.86**		
FY24; Q1 (October 1, 2023-December 31, 2023)									
10/17-10/19		LISS MC Meeting	New Haven,CT	Port Jefferson, NY	CTDEEP	Partner	$ 580.54	LI00A01059	8730
10/17-10/19		LISS MC Meeting	Hartford, CT	Port Jefferson, NY	CTDEEP	Partner	$ 552.23	LI00A01059	8730
10/17-10/19		LISS MC Meeting	Hartford, CT	Port Jefferson, NY	CTDEEP	Partner	$ 165.21	LI00A01059	8730
10/17-10/19		LISS MC Meeting	Hartford, CT	Port Jefferson, NY	CTDEEP	Partner	$ 512.92	LI00A01059	8730
10/17-10/19		LISS MC Meeting	Glastonbury	Port Jefferson, NY	CTDEEP	Partner	$ 639.21	LI00A01059	8730
10/17-10/19		LISS MC Meeting	Niantic, CT	Port Jefferson, NY	CTDEEP	Partner	$ 604.40	LI00A01059	8730
10/17-10/19		LISS MC Meeting	Berlin, CT	Port Jefferson & Stony Brook, NY	CTDEEP	Partner	$ 471.08	LI00A01059	8730
10/17-10/19		LISS MC Meeting	Larchmont, NY	Port Jefferson, NY	LISS CAC	Partner	$ 377.84	LI00A01059	8730
10/17-10/19		LISS MC Meeting	New Haven,CT	Port Jefferson, NY	LISS CAC	Partner	$ 375.61	LI00A01059	8730
10/23/2025		Restore America's Esturary Meeting (RAE)	Berlin, CT	Galveston, TX	CTDEEP	Partner	$ 1,536.92	LI00A01059	8730
		LIS Futures Fund Application Review Team Meeting	Berlin, CT	New London, CT	CTDEEP	Partner	$ 27.25	LI00A01059	8730
		LISS MC Meeting & LIS NYSDEC Reg Coord interviews-Per die	NA	NA	NEIWPCC	Staff	$ 362.18	LI00A01059	6130
		October reimbursements (MC, CAC, CO meeting+ PD & tolls)	White Plains, NY	Stamford, CT	NEIWPCC	Staff	$ 395.79	LI00A01059	6130
		Ribbed Mussel Sampling Site Visits & Office move to DMR (St	Huntington & Northport, NY	New London, CT	NEIWPCC	Staff	$ 32.17	LI00A01059	6130
		Mailing of ribbed mussels			NEIWPCC	Staff	$ 244.74	LI00A01059	7200
11/13/2023		WEWG meeting	Brooklyn, NY	Larchmont, NY	NYSDEC	Partner	$ 49.90	LI00A01059	8730
						FY24 Q1 Total	**$ 6,927.99**		
FY24; Q2 (January 1, 2024-March 31, 2024)									
02/14-02/16		Northeast Aquatic Biologists	Windsor, CT	Fairlee, VT	CTDEEP	Partner	$ 504.17	LI00A01059	8730
NA		February Reimbursements (Travel, Style Guide)	Hamden, CT	Bridgeport, CT	NEIWPCC	Staff	$ 79.51	LI00A01059	6130
02/13-02/16		Northeast Aquatic Biologists	Avon, CT	Fairlee, VT	CTDEEP	Partner	$ 868.42	LI00A01059	8730
02/14-02/16		Northeast Aquatic Biologists	West Hartford, CT	Fairlee, VT	CTDEEP	Partner	$ 697.78	LI00A01059	8730
3/6/2024		Site Inspection of Lieu Fee Program in CT & Site Visit	Berlin, CT	Branford, CT	CTDEEP	Partner	$ 50.11	LI00A01059	8730
3/21/2024		Site visits for a LISFF grant	Berlin, CT	West Haven & Stratford, CT	CTDEEP	Partner	$ 64.85	LI00A01059	8730
03/28-03/29	03/27-03/29	NEIWPCC All-Staff	Stamford, CT	Nashua, NH	NEIWPCC	Staff	$ 352.98	LI00A01059	6130
03/28-03/29	03/27-03/29	NEIWPCC All-Staff	Stamford, CT	Nashua, NH	NEIWPCC	Staff	$ 495.29	LI00A01059	6130
03/28-03/29	03/27-03/29	NEIWPCC All-Staff	Stamford, CT	Nashua, NH	NEIWPCC	Staff	$ 329.09	LI00A01059	6130
03/28-03/29	03/27-03/29	NEIWPCC All-Staff	Stamford, CT	Nashua, NH	NEIWPCC	Staff	$ 354.26	LI00A01059	6130
						FY24 Q2 Total	**$ 3,796.46**		
FY24; Q3 (April 1, 2024-June 30, 2024)									
4/8/2024		LISS Bioextraction Coordinator Interviews	Lowell, MA	Kings Park, NY	NEIWPCC	Staff	$ 712.23	LI00A01059	6130
4/12/2024		Long Island Natural History Conference	Kings Park, NY	Upton, NY	NYSDEC	Partner	$ 95.16	LI00A01059	8730
4/12/2024		CCMP Outreach Event	Hamden, CT	West Haven, CT	NEIWPCC	Staff	$ 21.04	LI00A01059	6130
4/17/2024		CCMP Outreach Event	Stamford, CT	Norwalk, CT	NEIWPCC	Staff	$ 11.26	LI00A01059	6130
04/18-04/20		NEERS Conference	Berlin, CT	Eastford, CT then Freeport, ME	CTDEEP	Partner	$ 783.25	LI00A01059	8730
5/6/2024		LISS HRS Coordinator and LISS RP Coordinator Interviews & L	Lowell, MA	Kings Park, NY	NEIWPCC	Staff	$ 759.00	LI00A01059	6130
5/15/2024		LIS Research Conference	Avon, CT	Port Jefferson, NY	CTDEEP	Partner	$ 79.00	LI00A01059	8730
5/15/2024		LIS Research Conference	Kings Park, NY	Port Jefferson, NY	NYSDEC	Partner	$ 40.00	LI00A01059	8730
5/15/2024		LIS Research Conference	Harftord, CT	Port Jefferson, NY	CTDEEP	Partner	$ 79.00	LI00A01059	8730
5/15/2024		LIS Research Conference	Woodstock, CT	Port Jefferson, NY	CTDEEP	Partner	$ 83.00	LI00A01059	8730
5/15/2024		LIS Research Conference	Wallingford, CT	Port Jefferson, NY	CTDEEP	Partner	$ 34.00	LI00A01059	8730
5/8/2024		CCMP Outreach Event & Access Sign Delivery	Berlin, CT	Branford & New Haven, CT	CTDEEP	Partner	$ 49.51	LI00A01059	8730
5/15/2024		LIS Research Conference	Berlin, CT	Port Jefferson, NY	CTDEEP	Partner	$ 79.00	LI00A01059	8730
5/23/2024		Leetes Marsh Island Site Assessment	Berlin, CT	Guilford, CT	CTDEEP	Partner	$ 53.20	LI00A01059	8730
5/15/2024		LIS Research Conference	Niantic, CT	Port Jefferson, NY	CTDEEP	Partner	$ 163.52	LI00A01059	8730
5/9/2024		Meeting on Flooding	White Plains, NY	Bronx, NY	NEIWPCC	Staff	$ 20.23	LI00A01059	6130
5/15/2024		LIS Research Conference	White Plains, NY	Mount Vernon, NY (Carpool Location)	NEIWPCC	Staff	$ 11.93	LI00A01059	6130
5/16/2024		LISCIF Event	White Plains, NY	Bridgeport, CT	NEIWPCC	Staff	$ 53.06	LI00A01059	6130
5/17/2024		LISCIF Event	White Plains, NY	Bronx, NY	NEIWPCC	Staff	$ 23.99	LI00A01059	6130
5/28/2024		CCMP Outreach and Engagement Meeting	White Plains, NY	Queens, NY	NEIWPCC	Staff	$ 45.23	LI00A01059	6130


Point Source Nitrogen Trade-Equalized Loads vs. Total Maximum Daily Load Waste Load Allocations 1995-202 NY/CT STPs
Thousands TE lbs/day
TMDL
TMDL WLA = 22,775
NY WLA = 13,268
CT WLA = 9,507
65
60
55
50
45
40
35
30
25
20
15
10
5
0
Baseline
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
33.105
29.561
28.662
29.24
24.261
23.324
23.66
24.345
23.326
26.007
25.621
26.649
26.298
25.736
27.128
23.712
20.325
18.702
15.962
14.513
13.229
12.324
13.358
13.364
12.421
11.709
11.597
11.512
26.042
19.561
21.287
20.269
21.718
21.508
20.262
17.101
15.855
16.574
14.345
15.055
14.738
13.495
13.311
11.819
9.911
11.014
8.513
8.446
8.899
8.378
7.171
7.233
9.257
8.848
6.842
6.591
5.913
6.74

Maximum Area of Hypoxia
1987-2023 (June-September)