

LONG ISLAND SOUND MARINE DEBRIS ACTION PLAN - Mid-Plan Revision

August 2025

Acknowledgments

The Long Island Sound Marine Debris Action Plan (2022-2027) was developed through a collaborative effort by stakeholders from Connecticut and New York. Funding was provided by the National Oceanic and Atmospheric Administration (NOAA) Marine Debris Program to the Connecticut and New York Sea Grant programs through NOAA award NA18OAR4170081 to facilitate the original plan development in 2019. Many thanks to the following individuals who contributed to the mid-plan review process in 2025:

Citizens Campaign for the Environment: Jordan Christensen, Francine Gordon Connecticut Dept. of Energy & Environmental Protection: Harry Yamalis

Connecticut Sea Grant: Nancy Balcom, Juliana Barrett, Judy Benson, Margaret Cozens, Syma

Ebbin, Diana Payne

Cornell Cooperative Extension of Suffolk County: Scott Curatolo-Wagemann

New York City Parks: Kevin Murtagh, Katie Stromme

New York Sea Grant: Kathy Bunting-Howarth, Catherine Prunella, Kathleen Fallon

New York State Dept. of Environmental Conservation: Casey Personius

NOAA Marine Debris Program: Demi Fox

Project Oceanology: Callie Scheetz **Remote Ecologist:** David Hudson

Save the Sound: Bill Lucey

The American Littoral Society: Alex Kanonik
The Maritime Aquarium: Justin Susarchik

The Nature Conservancy- Connecticut: Melissa DeFrancesco University of Connecticut, Marine Sciences: Sandra Shumway

Long Island Sound Marine Debris Planning Team (original)

Connecticut Sea Grant: Nancy Balcom, Juliana Barrett, Judy Benson, Sylvain De Guise, Syma Ebbin, Diana Payne

New York Sea Grant: Kathy Bunting-Howarth, Kathleen Fallon, Paul Focazio, Jimena Beatriz Perez-Viscasillas, Rebecca Shuford

NOAA Marine Debris Program: Demi Fox, Northeast Regional Coordinator; Katie Morgan, NOAA Marine Debris Program (contracted through Lynker)

Working Groups (original)

Single-Use Plastic and Other Land/Water-based Consumer Debris

Kathleen Fallon, New York Sea Grant, co-chair

Victoria O'Neill, (formerly) New York State Dept. Environmental Conservation, co-chair

Juliana Barrett, Connecticut Sea Grant

Judy Benson, Connecticut Sea Grant

Holly Drinkuth, The Nature Conservancy

Demi Fox, NOAA Marine Debris Program

Michele Klimczak, Fishers Island Conservancy

MaryEllen Mateleska, Mystic Aquarium

Christie Mazzeo-Pfoertner, New York State Dept. of State

Katie Morgan, NOAA Marine Debris Program (contracted through Lynker)

Kat Owens, University of Hartford

Jimena Beatriz Perez-Viscasillas, New York Sea Grant

Rachel Precious, Surfrider CT

Leigh Shemitz, SoundWaters

Caleb Spiegel, U.S. Fish & Wildlife Service

Harry Yamalis, Connecticut Dept. Energy & Environmental Protection

Abandoned and Lost Fishing/Aquaculture Gear

Demi Fox, NOAA Marine Debris Program, co-chair

David Hudson, Remote Ecologist, Inc., co-chair

Nancy Balcom, Connecticut Sea Grant

David Carey, Connecticut Dept. Agriculture, Bureau of Aquaculture

Scott Curatolo-Wagemann, Cornell Cooperative Extension of Suffolk County

Justin Davis, Connecticut Dept. Energy & Environmental Protection

Catherine Fede, New York State Dept. Environmental Conservation

Bill Lucey, Soundkeeper, Save the Sound

Katie Morgan, NOAA Marine Debris Program (contracted through Lynker)

Ian Morrison, Project Oceanology

Rachel Precious, Surfrider CT

Callie Scheetz, Project Oceanology

Lisa Scheppke, American Littoral Society

Caleb Spiegel, U.S. Fish & Wildlife Service

Microplastics & Microfibers

Syma Ebbin, Connecticut Sea Grant/University of Connecticut-Avery Point, co-chair

Nancy Balcom, Connecticut Sea Grant, co-chair

Gaboury Benoit, Yale University

Kathy Bunting-Howarth, New York Sea Grant

Sylvain De Guise, Connecticut Sea Grant

Alissa Dragan, Connecticut Dept. Agriculture, Bureau of Aquaculture

Laura Enzor, University of Hartford

Demi Fox, NOAA Marine Debris Program

Thomas Metzner, Connecticut Dept. Energy & Environmental Protection

Kayla Mladinich, University of Connecticut

Alexandra Morrison, Yale University

Diana Payne, Connecticut Sea Grant

Sandra Shumway, University of Connecticut

Caleb Spiegel, U.S. Fish & Wildlife Service

Cayla Sullivan, U.S. Environmental Protection Agency/Long Island Sound Partnership

Evan Ward, University of Connecticut

Kelsey Wentling, Connecticut River Conservancy

For citation purposes, please use:

Long Island Sound Marine Debris Action Plan - Mid-Plan Revision August 2025.

Connecticut and New York Sea Grant College Programs. CTSG -25-04

For more information, please contact:



Connecticut Sea Grant/University of Connecticut

Lowell P. Weicker Jr. Marine Sciences Building, 1080 Shennecossett Road, Groton, CT 06340

Web: https://seagrant.uconn.edu/marine-debris-action-plan-lis/

Email: judy.benson@uconn.edu

<u>Connecticut Sea Grant</u> (CTSG) is a cooperative program of the National Oceanic and Atmospheric Administration (NOAA) and The University of Connecticut.



New York Sea Grant

379B Roberts Hall, Cornell University, Ithaca, NY 14853125

Web: www.nyseagrant.org/marinedebris

Email: sgstonyb@cornell.edu

New York Sea Grant (NYSG) is a cooperative program of the National Oceanic and Atmospheric Administration (NOAA), State University of New York (SUNY) and Cornell University.



NOAA Marine Debris Program Office of Response and Restoration National Ocean Service

Web: https://MarineDebris.noaa.gov/

Email: marine.debris.NE@noaa.gov, marine.debris.midatlantic@noaa.gov

This publication does not constitute an endorsement of any commercial product or intend to be an opinion beyond scientific or other results obtained by Connecticut Sea Grant, New York Sea Grant or the National Oceanic and Atmospheric Administration (NOAA). No reference shall be made to Connecticut Sea Grant, New York Sea Grant or NOAA, or this publication furnished by Connecticut Sea Grant, New York Sea Grant or NOAA, to any advertising or sales promotion which would indicate or imply that Connecticut Sea Grant, New York Sea Grant or NOAA recommends or endorses any proprietary product mentioned herein, or which has as its purpose an interest to cause the advertised product to be used or purchased because of this publication.

Several actions contained herein reference potential legislative changes. These actions will be carried out by interested partner organizations that are not affiliated with Connecticut Sea Grant/University of Connecticut, New York Sea Grant/Cornell University/Stony Brook University, NOAA or the NOAA Marine Debris Program.

Sea Grant is a national network comprised of 34 university-based and consortium programs, based mainly at flagship universities in U.S. coastal and Great Lakes states and territories. The <u>National Sea Grant College Program</u> encourages the wise stewardship of our marine resources through research, education, outreach and technology transfer.

Table of Contents

Introduction to Mid-Plan Revisions	6
Goal 1: Understand, Prevent and Mitigate the Impacts of Single-Use Plastic and Other Water/ Land-based Consumer Debris	7
Goal 2: Understand, Prevent and Mitigate the Impacts of Abandoned and Lost Fishing/ Aquaculture Gear	
Goal 3: Understand, Prevent and Mitigate the Impacts of Microplastics and Microfibers	. 26
Great Actions but No Partners Identified	30



Introduction to Mid-Plan Revisions

Adopted in 2022, the five-year Long Island Sound Marine Debris Action Plan was put under a mid-point review in 2025, as recommended by the NOAA Marine Debris Program. This document reflects those revisions and serves as an addendum to the original plan. Members of the three working groups met virtually in February 2025 to review three years of reported progress by goal, strategy and action and discuss which actions should be retained and which should be revised, combined or deleted altogether. Particular attention was paid to those actions which had no lead partner identified and had no progress to date. Most of these actions have been moved to the end of this document under the heading, "Great Actions but No Partners Identified."

Summary of Revisions:

Goal 1:

Some action language and metrics were revised.

Original Actions 1.1.2, 1.1.3, 1.1.4 and 1.1.5 were combined into one Action.

Original Action 1.3.5 was moved to Goal 2, Action 2.3.11.

Original Actions 1.1.14, 1.1.18, 1.1.21, 1.1.23 and 1.2.4 were moved to the new section, "Great Actions but No Partners Identified."

Goal 2:

Some action language and metrics were revised.

Goal 1, Original Action 1.3.5 was moved to Goal 2, Action 2.3.11.

Original Actions 2.2.3, 2.4.3 and 2.4.6 were deleted.

Original Action 2.1.5 was moved to the new section, "Great Actions but No Partners Identified."

Goal 3:

Some action language and metrics were revised.

Original Actions 3.1.2, 3.1.4, 3.1.6, 3.3.2, 3.3.3, 3.3.4, 3.4.2, 3.4.3, 3.4.4, 3.4.6, and 3.4.7 were deleted.

Original Action 3.17 was moved to the new section, "Great Actions but No Partners Identified."



Goal 1: Understand, Prevent and Mitigate the Impacts of Single-Use Plastic and Other Water/ Land-based Consumer Debris

Strategy 1.1: Prevention, Education and Outreach

Actions

1.1.1 Research and review existing communication/outreach materials, educational programs, activities and intervention products that are relevant to and could be replicated across the Long Island Sound region and make links to them available to partners through listserv messages and website postings.

Partners:

Connecticut Sea Grant New York Marine Rescue Center New York Sea Grant

Metrics:

links to resources shared or posted annually

1.1.2 Adapt existing or create new communication/outreach products including social media campaigns on consumer debris and single-use plastic and disseminate to urban, inland and coastal communities.

Partners:

Coalition to Save Hempstead Harbor
Columbia University
Connecticut Dept. Energy & Environmental Protection (Land & Water Resource Division)
Connecticut River Conservancy
Fishers Island Conservancy

Hudson River Foundation

Long Island Sound Partnership and Citizens Advisory Committee

Manhasset Bay Protection Committee

Mystic Aquarium

New York City Dept. Environmental Protection (Public Affairs and Education Offices)

New York State Dept. Environmental Conservation

Metrics:

outreach products adapted/created

products distributed

people engaged

adapted or new social media campaigns implemented

social media posts shared

1.1.3 Engage Long Island Sound watershed residents in meaningful interactions through outreach activities to promote source reduction of common consumer debris items, including single-use plastic and encourage increased use of sustainable alternatives such as reusable items.

Partners:

Coalition to Save Hempstead Harbor

Columbia University

Fishers Island Conservancy

Fisheries Island School

Long Island Sound Partnership

Mystic Aquarium

University of Hartford

Metrics:

people engaged in meaningful interactions

outreach activities

1.1.4 Launch a pilot project employing the principles of Community Based Social Marketing that leads to the reduction of consumer debris through behavior change. (Crosscuts with 1.2.2)

Partners:

Columbia University

Manhasset Bay Protection Committee

Mystic Aquarium

Metrics:

pilot projects launched

evaluations completed

1.1.5 Host events that promote source reduction of common consumer debris items, including single-use plastic, and encourage increased use of sustainable alternatives such as reusable items.

Partners:

Columbia University

Mystic Aquarium

Metrics:

events hosted

people engaged

1.1.6 Adapt/create and implement outreach campaigns to share alternatives to the intentional release of balloons using strategies developed with local or regional partners. (Crosscuts with 1.2.2). Note that Connecticut currently prohibits the intentional release of 10 or more balloons while New York has both state and local bans on individual releases.

Partners:

American Littoral Society
Citizens Campaign for the Environment

Columbia University

Manhasset Bay Protection Committee

New York Sea Grant

Save the Sound

U.S. Fish & Wildlife Service

Metrics:

campaigns implemented

1.1.7 Adapt/create and disseminate educational resources about sustainable and waste-reducing initiatives that can be utilized by partner organizations to reduce consumer debris and single-use plastic in everyday operations and hosted events.

Partners:

Columbia University

Connecticut Sea Grant

Mystic Aquarium

New York Sea Grant

Metrics:

resources created/adapted & disseminated

partners employing initiatives

1.1.8 Inventory/analyze existing consumer debris education resources to determine what is available and appropriate for P-12 students.

Partners:

Brookhaven National Lab's Day in the Life Program

Columbia University

Connecticut Dept. Energy & Environmental Protection

Connecticut Sea Grant

Long Island Sound Partnership

Mystic Aquarium

New England Science & Sailing

New York Marine Rescue Center

New York Sea Grant

North American Marine Environment Protection Association

Project Oceanology

Southeastern New England Marine Educators

Metrics:

existing resources inventoried/analyzed & appropriate for P-12 students

1.1.9 Review/share existing or develop new resources to inform policy related to consumer debris and disseminate to local municipalities and policymakers.

Partners:

Citizens Campaign for the Environment Natural Resources Defense Council NY League of Conservation Voters Recycling Partnership Sierra Club

Metrics:

policymakers engaged# resources developed/shared

1.1.10 Adapt/create and disseminate educational materials focused on source reduction/prevention of consumer debris and single use plastic for P-12 students that align with Next Generation Science Standards where applicable, and that have been successfully demonstrated through online platforms, in-person events, educator workshops, after-school programs and visits, summer camps, campaigns and field trips to P-12 educators and Long Island Sound watershed students. (Crosscuts with 3.1.2)

Partners:

Brookhaven National Lab's Day in the Life Program

Columbia University

Connecticut Dept. Energy & Environmental Protection

Connecticut Sea Grant

Long Island Sound Partnership

Mystic Aquarium

New England Science & Sailing

New York Marine Rescue Center

New York Sea Grant

North American Marine Environment Protection Association

Project Oceanology

Southeastern New England Marine Educators

University of Hartford

Metrics:

education materials created / adapted

P-12 educators engaged

P-12 students engaged

1.1.11 Share and promote, through established or new listservs and websites, professional development opportunities for or by educators focused on single-use plastic and consumer marine debris reduction and education with high schools and universities across the Long Island Sound watershed region.

Partners:

Columbia University

Connecticut Sea Grant

NY State Dept. of Environmental Conservation

University of Hartford

Metrics:

high schools reached

universities reached

professional development opportunities shared

1.1.12 Create/adapt and disseminate outreach materials to support campaigns promoting reduction of single-use plastic use by the food service, travel and tourism industries. (Crosscuts with 1.2.2)

Partners:

Columbia University

Surfriders

UConn-Avery Point Eco-Husky Club

Metrics:

outreach materials created/adapted & disseminated

campaigns supported

1.1.13 Engage private sector partners in the food service, travel and tourism industries in conversations to implement single-use plastic reduction practices, understand barriers to implementation and share lessons learned with Long Island Sound watershed partners and the public.

Partners: Connecticut Sea Grant

Metrics:

private sector partners engaged

1.1.14 Identify tools that prevent or reduce single-use plastic from entering the watershed, research existing/create new inventory of intervention products and highlight these resources on websites and in brochures.

Partners:

Connecticut Sea Grant

Manhasset Bay Protection Committee

Mill River Watershed Association

Metrics:

tools identified

inventories created/shared and updated annually

brochures distributed

website visits

1.1.15 Review marine debris data reported to the Ocean Conservancy International Coastal Cleanup database and the University of Georgia Marine Debris Tracker annually to inform the Long Island Sound Partnership's Marine Debris Ecosystem Target and highlight results.

Partners:

American Littoral Society

Save the Sound

Connecticut Sea Grant

Long Island Sound Partnership

New York Sea Grant

Metrics:

annual report submitted for LISP ecosystem target for marine debris

new indicators developed using data

1.1.16 Highlight and share links to NOAA Marine Debris Program resources on marine debris emergency preparedness for storm events and other natural disasters.

Partners:

Connecticut Sea Grant

New York Sea Grant NOAA Marine Debris Program

Metrics:

links shared # links updated

Strategy 1.2: Research Assessment, Wildlife Impacts and Monitoring

Actions

1.2.1 Compile existing consumer debris information and wildlife impacts annually and make them available to facilitate analysis of information gaps, best practices and available resources.

Partners:

Atlantic Marine Conservation Society
Mystic Aquarium
New York Marine Rescue Center
NOAA Greater Atlantic Regional Fisheries Office, Protected Resources Division
NOAA Marine Debris Program
Save the Sound
U.S. Fish & Wildlife Service - Migratory Birds

Metrics:

links to resources posted

1.2.2 Analyze annually the effectiveness of community-based social marketing techniques and behavior change consumer debris campaigns that encompass Long Island Sound watershed communities and undertaken through Actions 1.1.4, 1.1.6 and 1.1.11.

Partners:

Connecticut Sea Grant New York Sea Grant

Metrics:

campaign effectiveness evaluations completed

- **1.2.3** Seek/share grant opportunities to address Action Plan research priorities, including research:
 - that identifies and addresses knowledge gaps so that new consumer debris efforts can be launched that successfully support Actions 1.1.2 and 1.1.3.
 - that improves understanding of the impacts of consumer debris on wildlife to inform public outreach campaigns and policymakers
 - that identifies more sustainable alternatives to recycling
 - that identifies and/or informs interception technology effectiveness or alternatives that focus on consumer debris to better inform decision-makers and raise public awareness.

Partners:

Connecticut Sea Grant
Hudson River Foundation
Long Island Sound Partnership
National Geographic Explorers – New England hub
New York Sea Grant
NOAA Marine Debris Program

Yale University

Metrics:

funding opportunities shared

proposals submitted

proposals funded

partners engaged

1.2.4 Promote community science programs that collect data on marine debris to better inform decision-makers and raise public awareness.

Partners:

Atlantic Marine Conservation Society

Coalition to Save Hempstead Harbor

Columbia University

Long Island Sound Community Impact Fund

Manhasset Bay Protection Committee

Mystic Aquarium

New York Sea Grant

NOAA Marine Debris Program

Metrics:

community science programs promoted

people engaged

1.2.5 Survey local and state policies and management plans aimed at source reduction, prevention and interception practices using available data and information. This will inform Action 1.5.2.

Partners:

CT Conference of Municipalities

Save the Sound

Metrics:

new policies related to marine debris

Strategy 1.3 Proper Disposal and Infrastructure

Actions

1.3.1 Support the development and installation of interception technologies, tools, receptacle bins and capture devices that support data collection and monitoring across the Long Island Sound watershed.

Partners:

Hudson River Foundation

Manhasset Bay Protection Committee

Save the Sound

Metrics:

developed

installed

1.3.2 Support the installation, maintenance and proper use of cigarette disposal receptacles in communities, parks and beaches (in collaboration with smoke-free beach resolutions as appropriate) to limit butts entering the environment.

Partners:

Coalition to Save Hempstead Harbor

Connecticut Sea Grant

NOAA Greater Atlantic Regional Fisheries Office, Protected Resources Division

Metrics:

parks, beaches, towns or communities with new receptables

new receptacles installed

1.3.3 Facilitate/support other removal actions (e.g., signage, recycling bins) at the local level that divert debris from entering Long Island Sound and its watershed.

Partners:

Coalition to Save Hempstead Harbor Hudson River Foundation Mystic Aquarium

local removal actions diverting debris from LIS

Relic Sustainability

Metrics:

1.3.4 Identify and engage with boating organizations and marinas to support the installation, maintenance and proper use of disposal bins for boaters.

Partners:

Coalition to Save Hempstead Harbor

Connecticut Marine Trades Association

Manhasset Bay Protection Committee

Metrics:

boating organizations/marinas engaged

disposal bins installed

1.3.5 Engage managers of state and municipal public parks and beaches with concession stands in pilot programs to reduce use of single- use plastic products and promote as 'eco-friendly' or 'don't trash the beach' locations.

Partners:

Coalition to Save Hempstead Harbor

Connecticut Sea Grant

Metrics:

pilot programs at beaches/parks

1.3.6 Identify and share opportunities for vessel shrink wrap recycling with Long Island Sound residents.

Partners:

Connecticut Marine Trades Association Mystic Aquarium New York Sea Grant

Metrics:

shrink wrap recycling opportunities shared

pounds of shrink wrap recycled

Strategy 1.4 Removal

Actions

1.4.1 Collectively support and coordinate annual cleanup events around land-based litter.

Partners:

American Littoral Society

Atlantic Marine Conservation Society

Coalition to Save Hempstead Harbor

Connecticut Sea Grant

Fishers Island Conservancy

Friends of Hammonassett Beach State Park

Manhasset Bay Protection Committee

Mystic Aquarium

New York Sea Grant

Save the Sound

UConn-Avery Point EcoHusky Club

University of Hartford

Metrics:

cleanup events

cleanup participants

miles beach cleaned

pounds of trash removed

pieces/items picked up

Strategy 1.5 Policy and Management

Actions

1.5.1 Engage local, county, state, and/ or federal elected officials and policymakers to improve awareness of consumer debris policies and advocacy campaigns.

Partners:

Brandeis University - ENACT

Citizens Campaign for the Environment

Coalition to Save Hempstead Harbor

Long Island Sound Congressional Caucus

Long Island Sound Partnership Citizens Advisory Committee

University of Hartford

Metrics:

officials engaged

1.5.2 Inform, advocate and/or implement new local, municipal and state policies, management plans and/or campaigns aimed at source reduction (e.g., balloons, single-use plastic and utensils, nip bottles), prevention and/or interception practices, informed by available marine debris collection data. (Crosscuts with 1.1.10)

Partners:

Citizens Campaign for the Environment

Connecticut Dept. Energy & Environmental Protection – Land & Water Resource Division Long Island Sound Partnership Citizens Advisory Committee

Save the Sound Seatuck Environmental Association Setauket Harbor Protection Committee Surfrider

Metrics:

new policies implemented# new management plans developed# new campaigns undertaken

1.5.3 Develop a listserv for organizations that are interested in legislative opportunities that could benefit from additional information on consumer debris.

Partners:

Citizens Campaign for the Environment Long Island Sound Partnership Citizens Advisory Committee

Metrics:

listservs developed & maintained



Goal 2: Understand, Prevent and Mitigate the Impacts of Abandoned and Lost Fishing/ Aquaculture Gear

Strategy 2.1 Prevention, Education and Outreach

Actions

2.1.1 Inventory existing best management practices to prevent or reduce abandoned and lost fishing/aquaculture gear and consider modifications for Long Island Sound with fishing and aquaculture industries, such as including biodegradable release requirements to lessen the impact of lost pots.

Partners:

Remote Ecologist, Inc.

Metrics:

- # Best Management Practices suitable for LIS
- # Modifications undertaken
- **2.1.2** Identify and share methods to properly dispose of end-of-life fishing/aquaculture gear.

Partners:

Cornell Cooperative Extension NOAA Marine Debris Program Project Oceanology Save the Sound Remote Ecologist Inc. The Maritime Aquarium

Metrics:

Methods/Best Management Practices shared

2.1.3 Develop a campaign to identify and engage new partners in abandoned and lost fishing/aquaculture gear prevention programs.

Partners:

Connecticut Dept. Agriculture-Bureau of Aquaculture

Connecticut Dept. Energy & Environmental Protection - Marine Fisheries

Cornell Cooperative Extension

Project Oceanology

Remote Ecologist Inc.

Save the Sound

The Maritime Aquarium

Metrics:

campaigns developed and implemented

2.1.4 Engage with fishing and aquaculture businesses across the Sound to better understand debris issues, storm preparedness and information gaps.

Partners:

Connecticut Dept. Agriculture-Bureau of Aquaculture
Connecticut Dept. Energy & Environmental Protection – Marine Fisheries

Connecticut Sea Grant

New York Sea Grant

Metrics:

fishing and aquaculture businesses engaged

2.1.5 Share gear innovation funding opportunities broadly with relevant stakeholders (e.g., recreational and commercial fishing and aquaculture industries, academic and non-profit researchers and any interested party).

Partners:

Connecticut Dept. Energy & Environmental Protection – Marine Fisheries

Connecticut Sea Grant

New York Sea Grant

New York State Dept. Environmental Conservation

NOAA Marine Debris Program

Metrics:

funding opportunities shared as available

2.1.6 Share the advancement of gear innovations broadly with relevant stakeholders (e.g., recreational and commercial fishing and aquaculture industries and any interested party).

Partners:

Connecticut Sea Grant New York Sea Grant

Metrics:

successful gear innovations shared

unsuccessful gear innovations shared

innovations adopted

2.1.7 Integrate marine debris issues into recreational fisheries action plans.

Partners:

American Littoral Society

Connecticut Dept. Energy & Environmental Protection – Marine Fisheries, Wildlife Division NOAA Greater Atlantic Regional Fisheries Office, Protected Resources Division

Metrics:

recreational fisheries action plans incorporating marine debris issues

2.1.8 Promote/share outreach products at targeted events (boat shows, trade shows, fishing expos, fishing shops) to engage the public, commercial and recreational fishing and boating communities in abandoned and lost fishing gear prevention.

Partners:

Connecticut Dept. Energy & Environmental Protection

New York Sea Grant

New York State Dept. Environmental Conservation

NOAA Marine Debris Program

Metrics:

outreach events where outreach products promoted and shared

2.1.9 Support translation of outreach products, signage and/or digital campaigns to non-English languages identified by the community.

Partners:

Connecticut Dept. Energy & Environmental Protection – Marine Fisheries New York State Dept. Environmental Conservation

Metrics:

outreach products translated

2.1.10 Create a one-pager for the recreational boating/diving community regarding the presence of gear in Long Island Sound and how to safely avoid it.

Partners:

Coalition to Save Hempstead Harbor

Metrics:

one-pagers developed

distributed

2.1.11 Create and maintain an online data portal containing information on available research regarding derelict fishing gear to be updated annually.

Partners:

Remote Ecologist, Inc.

Metrics:

databases created and updated annually

Strategy 2.2 Research Assessment, Wildlife Impacts and Monitoring

Actions

2.2.1 Compile a report to document local knowledge regarding ghost fishing and species impacted by lost and abandoned fishing/ aquaculture gear.

Partners:

American Littoral Society

Connecticut Dept. Energy & Environmental Protection – Marine Fisheries

Cornell Cooperative Extension

Project Oceanology

Remote Ecologist, Inc.

Save the Sound

The Maritime Aquarium

U.S. Fish & Wildlife Service

Metrics:

reports compiled and updated

2.2.2 Engage with stranding networks, wildlife rehabilitation centers and the public to better understand and collect marine debris interaction data available for analysis.

Partners:

Mystic Aquarium

New York Marine Rescue Center

NOAA Marine Debris Program

Remote Ecologist, Inc.

Save the Sound

U.S. Fish & Wildlife Service

Metrics:

stranding networks and wildlife rehab centers contacted

wildlife entanglements reported by networks and centers

public/community science engagements on wildlife strandings

wildlife entanglements reported through public/community science efforts

Summary of available data from relevant organizations/public reviewed and shared

2.2.3 Engage with coastal land managers/refuges, community science programs to monitor and document the extent/types of abandoned gear on public/managed lands and cleanup costs.

Partners:

U.S. Fish & Wildlife Service

Metrics:

coastal land managers/refuges engaged

community science programs engaged

Extent and types of abandoned gear on public/managed lands

Average cost per cleanup

Strategy 2.3 Proper Disposal and Infrastructure

Actions

2.3.1 Research successful abandoned and lost fishing/aquaculture gear prevention, recycling and disposal programs and evaluate for adaptation in Long Island Sound.

Partners:

Connecticut Dept. Energy & Environmental Protection – Marine Fisheries

Cornell Cooperative Extension

Project Oceanology

Remote Ecologist, Inc.

Save the Sound

The Maritime Aquarium

Metrics:

suitable programs adopted for LIS (fully implemented; now collaborating across additional states)

2.3.2 With proper state permissions, coordinate directed fishing/ aquaculture gear disposal events in Long Island Sound communities.

Partners:

Connecticut Dept. Energy & Environmental Protection - Marine Fisheries

Cornell Cooperative Extension

New York Sea Grant

Project Oceanology

Remote Ecologist, Inc.

Save the Sound

The Maritime Aquarium

Metrics:

state/local authorities engaged

partners engaged

disposal events facilitated

pounds of gear collected

traps collected

pounds recycled or disposed of sustainably

traps recycled or disposed of sustainably

2.3.3 Coordinate with state and local authorities, metal recyclers, waste-to-energy companies and haulers to host annual collection events to return or dispose of end-of-life fishing / aquaculture gear.

Partners:

Connecticut Dept. Energy & Environmental Protection – Marine Fisheries

Cornell Cooperative Extension

New York Sea Grant

Project Oceanology

Remote Ecologist, Inc.

Save the Sound

The Maritime Aquarium

Metrics:

- # state/local authorities engaged
- # partners engaged
- # collection events hosted
- # pounds of gear collected
- # traps collected
- # pounds recycled or disposed of sustainably
- # traps recycled or disposed of sustainably
- **2.3.4** Modify existing or develop new outreach products on proper disposal and recycling of monofilament lines and share with fishers, boaters and the public.

Partners:

Atlantic Marine Conservation Society

Connecticut Dept. Energy & Environmental Protection-Wildlife Division

New York City-Parks

New York Sea Grant

New York State Dept. Environmental Conservation

Metrics:

outreach products shared

2.3.5 Support the installation, maintenance and proper use of monofilament disposal receptacles at priority locations in parks, fishing piers and marinas, including signage in English and non-English languages.

Partners:

Atlantic Marine Conservation Society

Coalition to Save Hempstead Harbor

Connecticut Dept. Energy & Environmental Protection – Wildlife Division

New York State Dept. Environmental Conservation

NOAA Marine Debris Program

The Maritime Aquarium

Metrics:

new monofilament disposal receptacles installed

new installation locations

Locations of new installations

2.3.6 Inventory existing monofilament bins and bin-monitoring partners and update regularly.

Partners:

Connecticut Dept. Energy & Environmental Protection – Wildlife Division

Cornell Cooperative Extension

NOAA Marine Debris Program

Metrics:

inventories and maps completed and updated annually

2.3.7 Seek/share grant opportunities to support the prevention of abandoned and lost fishing/aquaculture gear and its removal annually.

Partners:

Connecticut Sea Grant

New York Sea Grant NOAA Marine Debris Program

Metrics:

funding opportunities shared as available

2.3.8 Coordinate a protocol in which partners can share ideas for grant applications and ask for collaborators, help with matching funds, recommendation letters or other relevant resources.

Partners:

Connecticut Sea Grant Long Island Sound Partnership New York Sea Grant NOAA Marine Debris Program

Metrics:

Platform identified, shared and used by partners

2.3.9 Inventory and map abandoned and derelict vessels in Long Island Sound.

Partners:

New York City Parks Dept. Save the Sound

Metrics:

inventories and maps completed and updated annually

2.3.10 Expand fiberglass/vessel recycling in Connecticut and New York.

Partners:

Connecticut River Conservancy

Metrics:

fiberglass recycling locations # new recycling programs initiated

2.3.11 Acquire and distribute reusable trash bags for commercial and charter fishing vessels.

Partners:

Remote Ecologist Inc.

Metrics:

reusable trash bags distributed

Strategy 2.4 Removal

Actions

2.4.1 Maintain or acquire the necessary permits to remove abandoned and lost fishing gear.

Partners:

Connecticut Dept. Energy and Environmental Protection – Marine Fisheries Cornell Cooperative Extension New York State Dept. Environmental Conservation Project Oceanology Remote Ecologist, Inc.

Save the Sound

The Maritime Aquarium

Metrics:

state permits maintained and utilized

2.4.2 Coordinate and support removal of ALDFG (active dragging) regions working alongside commercial fishing and aquaculture industries with one data repository.

Partners:

Connecticut Dept. Energy & Environmental Protection – Marine Fisheries

Cornell Cooperative Extension

Project Oceanology

Remote Ecologist, Inc.

Save the Sound

The Maritime Aquarium

Metrics:

pounds gear collected

pounds recovered gear recycled or sustainably disposed of

traps collected

traps recycled

industry partners involved

species captured

individuals captured

2.4.3 Establish partnerships to remove and recycle traps and return usable, identifiable gear to its owners.

Partners:

Cornell Cooperative Extension

Project Oceanology

Remote Ecologist, Inc.

Save the Sound

The Maritime Aquarium

Metrics:

new partnerships established

traps returned to owners

2.4.4 Investigate available technologies for detecting gear accumulations (completed)

Partners:

Cornell Cooperative Extension

Project Oceanology

Remote Ecologist, Inc.

Save the Sound

The Maritime Aquarium

Metrics:

Inventory of detection technologies completed

new detection technologies used

2.4.5 Establish protocols for access to equipment, haulers, storage sites, disposal/recycling sites for the removal of large quantities of fishing gear, docks and derelict vessels.

Partners:

Cornell Cooperative Extension

Metrics:

protocols established and shared

2.4.6 Identify and disseminate the processes involved and organizations and agencies responsible for removing abandoned and derelict vessels in Long Island Sound

Partners:

Save The Sound New York City Parks Dept.

Metrics:

Report of processes compiled # derelict/abandoned vessels removed

Strategy 2.5 Policy and Management

Actions

2.5.1 Synthesize and convey results of lost and abandoned commercial/ aquaculture gear recovery programs to state fisheries and aquaculture managers to highlight the role of commercial and recreational fishing (lobster, rod-and-reel, blue crab) and aquaculture in generating and retrieving derelict gear.

Partners:

Cornell Cooperative Extension Project Oceanology Remote Ecologist, Inc. Save the Sound The Maritime Aquarium

Metrics:

fisheries managers/industry members contacted
reports submitted on type, quantity and location of gear recovered



Goal 3: Understand, Prevent and Mitigate the Impacts of Microplastics and Microfibers

Strategy 3.1 Prevention, Education and Outreach

Actions

3.1.1 Create, maintain and share digital tools for sharing information and data products on microplastics and microfibers (M&M)

Partners:

Connecticut Sea Grant New York Sea Grant NOAA Marine Debris Program

Metrics:

portals / digital tools created/maintained # portal / digital tools shared

3.1.2 Adapt existing/create new outreach products containing relevant microplastics and microfiber information, data, research, best practices, literature and/or funding resources and disseminate to the Long Island Sound marine debris community.

Partners:

Connecticut Sea Grant Hudson River Foundation Mystic Aquarium New York Sea Grant NOAA Marine Debris Program University of Connecticut

Metrics:

outreach products and materials created # outreach products and materials shared

- **3.1.3** Create, adapt, use and/or share existing or new microplastics and microfibers lesson plans that align with Next Generation Science Standards where applicable, and/or Long Island Sound materials that have been successfully demonstrated to raise awareness of relevant microplastic and microfiber issues among P-12 students and P-12 grade educators through:
 - online platforms
 - in-person events
 - · educator workshops
 - · after-school programs and visits
 - summer camps
 - campaigns
 - field trips

(Crosscuts with 1.1.9)

Partners:

Atlantic Marine Conservation Society
Connecticut Sea Grant
New England Science & Sailing
New York Sea Grant
New York State Dept. Environmental Conservation
Project Oceanology
Southeastern New England Marine Educators

Metrics:

new lesson plans and educational materials created # lesson plans and educational materials shared # P-12 students engaged # P-12 educators engaged

Strategy 3.2 Research Assessment, Wildlife Impacts & Monitoring

Actions

3.2.1 Conduct and compile reviews of scientifically sound, peer-reviewed research literature on microplastic and microfiber research relevant to Long Island Sound.

Partners:

Remote Ecologist, Inc. University of Connecticut University of New Haven Yale University

Metrics:

new literature reviews completed # new papers published **3.2.2** Seek/share grant opportunities to address Action Plan research priorities, including research, to study microplastics and microfibers in Long Island Sound.

Partners:

Connecticut Sea Grant
Long Island Sound Partnership
New York Sea Grant
Remote Ecologist, Inc.
University of Connecticut
University of New Haven
U.S. Geological Survey
Yale University

Metrics:

new funding opportunities shared # new grants received

3.2.3 Promote opportunities and engage with interested organizations to develop microplastics and microfiber monitoring programs in Long Island Sound and make the resulting information available to the public.

Partners:

Mystic Aquarium New York Sea Grant U.S. Geological Survey

Metrics:

M&M monitoring programs developed for LIS # M&M monitoring programs implemented for LIS

3.2.4 Conduct microplastic and/or microfiber focused webinar(s) or workshop(s) to share the latest research findings relevant to Long Island Sound and make them available to the public.

Partners:

U.S. Fish & Wildlife Service U.S. Geological Survey

Metrics:

new webinars

presentation attendees

Strategy 3.3 Source Reduction

Actions

3.3.1 Develop research initiatives focused on microplastic and microfiber intercept technologies with relevance to Long Island Sound; specific actions include: data gaps, data collection, develop industry partnerships, dissemination of results, etc.

Partners:

University of Connecticut University of New Haven Yale University

Metrics:

- # grants awarded for interception technologies for LIS
- # new publications on intercept technologies
- # outreach products/presentations on intercept technologies

Strategy 3.4 Policy and Management

Actions

3.4.1 Engage with local and state decisionmakers regarding microplastics and microfibers in Long Island Sound waterways to: disseminate, create and advocate for new policies and regulations.

Partners:

Coalition to Save Hempstead Harbor

Metrics:

- # local and state decision-makers engaged
- # new policies or regulations related to M&M
- **3.4.2** Support Extended Producer Responsibility legislation to hold manufacturers responsible for recover of plastic waste.

Partners:

Citizens Campaign for the Environment

Metrics:

- # local and state decision-makers engaged
- # presentations delivered
- # community members engaged



Great Actions but No Partners Identified (and no progress reported to date)

Formerly 1.1.14

Engage with restaurants and food service industries to educate about certification programs and highlight those that participate.

Metrics:

restaurants & food service industries engaged in learning about programs # restaurants & food service industries participating in programs

Formerly 1.1.18

Create a guide of actions, including associated cost/benefit analyses, for organizations within the Long Island Sound watershed related to the reduction of consumer debris.

Metrics:

businesses engaged

Formerly 1.1.21

Partner with wholesalers to offer restaurants, hotels, shops, tourist attractions, schools, colleges, houses of worship and nature centers cost-effective rates for bulk reusable, recyclable, or compostable items.

Metrics:

wholesalers engaged

Formerly 1.1.23

Conduct gap analysis of marine debris tracking data using state reports from International Coastal Cleanup database and other sources to document trends in marine debris collected throughout the Long Island Sound watershed. Identify at-risk areas most affected by marine debris and pollution, develop new partnerships and provide tools and resources to support and increase the number of clean ups held annually.

Metrics:

gap analyses conducted

new partners engaged

at-risk areas identified

tools & resources distributed in support of additional cleanups

Formerly 1.2.4

Promote support for surveys using standard metrics to identify sources and types of consumer debris collected in water.

Metrics:

standardized metrics for surveys developed and implemented

Formerly 2.1.5

Assist fishing and aquaculture businesses in finding cost-effective alternatives for plastic or disposable materials.

Metrics:

fishing & aquaculture businesses engaged

cost-effective alternatives identified and shared

Formerly 3.1.7

Engage with stakeholders such as construction and building companies, artificial turf, and tire manufacturers to share information regarding microplastic and microfibers.

Metrics:

stakeholders engaged

