Long Island Sound Futures Fund (LISFF) Project Examples

The following are examples of projects funded under the Long Island Sound Futures Fund. These examples are organized under each CCMP Goal. This list is meant to assist applicants in developing proposals for projects and should not be considered an exhaustive list of every type of project allowable. For a detailed list of all actions supportive to the CCMP, please visit CCMP Appendix B: Objective and Action Technical Explanations.

CCMP Goal: Clean Waters and Healthy Watersheds *Restore and maintain water quality in Long Island Sound and its watershed.*

Example Project Types and Actions:

- Nature-based stormwater infrastructure /Low Impact Development (LID) including:
  - Projects that filter and infiltrate stormwater pollution at a large scale such as in a neighborhood, on a waterfront or across a downtown and/or that are part of Municipal Separate Storm Sewer System (MS4) management
  - Projects that filter and infiltrate stormwater at a small scale and close to the source such as raingardens, bioswales and pervious surfaces
  - Technical assistance to help communities build capacity to plan for or to implement nature-based stormwater infrastructure/LID to reduce stormwater runoff
- Installation of decentralized on-site and/or low-cost retrofits of wastewater treatment systems with a direct benefit to Long Island Sound in terms of reducing subsurface and surface nitrogen/nutrient loading
- Alternatives to chemical and nitrogen-intensive turf, landscaping fertilizer and pesticide use.
- Reducing marine debris (Long Island Sound Marine Debris Action Plan): applicants must provide projected pounds of marine debris prevented or removed by project in the metrics section of the proposal.
  - Removal of large marine debris such as abandoned and derelict vessels, abandoned or derelict fishing gear and other debris that is unable to be collected by hand
  - Reduction or prevention of water/land-based consumer debris
- Watershed planning projects addressing water quality problems such as nitrogen, sediments and trash and their impact on the watershed and Long Island Sound
  - Plans should include EPA's nine elements (EPA Handbook for Developing Watershed Plans).
  - Watershed plans in New York should follow the New York State Department of Environmental Conservation guidance for nine-element plans.
- Nutrient bioextraction (Long Island Sound Nutrient Bioextraction Initiative)
- In-stream restoration to increase nutrient processing benefitting Long Island Sound
- Replacing or right-sizing culverts or otherwise improving road and stream crossings to reduce erosion of nitrogen/nutrients into waterways that flow into Long Island Sound

- Agricultural conservation practices to improve farm economics and reduce nitrogen/nutrient runoff downstream to Long Island Sound such as:
    - Technical assistance or technical service to engage rural landowners and farmers in design and delivery of nitrogen/nutrient prevention projects
    - Delivery of nitrogen/nutrient prevention projects on farms
    - Regenerative agriculture or soil management systems and practices (including improved tillage and/or pasture management, cover crops, crop/livestock rotation) that reduce runoff and increase nutrient uptake
    - Precision nutrient management systems that fine-tune the rate, source, method and timing of nutrient applications to maintain or increase crop yields, minimize nutrient input costs and nutrient losses to surface and groundwater
    - Waste management planning or implementation of whole-farm non-structural or combined non-structural and structural management practices resulting in reduction of nitrogen/nutrient loading into waterways flowing to Long Island Sound

Projects in the Upper Basin states (MA, NH, VT) of the Long Island Sound Watershed must quantify nitrogen/nutrient reduction/prevention in metrics and have a specific outcome related to reduction in Long Island Sound by:

- Implementing "shovel-ready" projects that result in quantifiable nitrogen/nutrient pollutant prevention with a benefit to Long Island Sound
- Planning for activities that set-the-stage for implementation of quantifiable nitrogen/nutrient pollutant prevention with a benefit to Long Island Sound including: 1) community engagement, planning and prioritization, 2) feasibility, suitability or alternatives analyses, 3) site assessment and conceptual design, and 4) final design and permits

All projects must document the downstream benefit to Long Island Sound by indicating how the project addresses a source of nitrogen/nutrient pollution, project location and how project design and implementation will reduce downstream nutrient loading.

Examples of project types and actions:

- Nature-based stormwater infrastructure /Low Impact Development (LID) including:
    - Projects filtering and infiltrating stormwater pollution at a large scale such as in a neighborhood, on a waterfront or across a downtown and/or that are part of Municipal Separate Storm Sewer System (MS4) management including implementing stormwater management practices with the aim of improving water quality in local waterways that flow downstream to the Sound

        - Proposals must document the benefit to Long Island Sound in terms of reducing downstream nitrogen/nutrient loading and describe resources for long-term maintenance.
    - Projects that filter and infiltrate stormwater at a small scale and close to the source of that runoff such as raingardens, bioswales and/or pervious surfaces
        - These projects must provide education about the water quality benefits and describe resources for long-term maintenance of the site.
    - Technical assistance to help communities build capacity to plan for or to implement nature-based infrastructure/LID with a benefit to Long Island Sound in terms of reducing downstream nitrogen/nutrient loading
- Riparian buffer and wetland restoration
- In-stream restoration to increase nutrient processing including restoration projects demonstrating nutrient/nitrogen reduction benefits coupled with benefits to brook trout will also be competitive
- Installation of decentralized on-site wastewater treatment systems that reduce subsurface and surface nitrogen/nutrient loading.
- Low-cost retrofits at wastewater treatment facilities such as optimization and process improvements
- Alternatives to chemical and nitrogen-intensive turf, landscaping fertilizer and pesticide use
- Agricultural conservation practices such as:
    - Technical assistance or technical service in design and delivery of nitrogen/nutrient prevention projects on farms
    - Regenerative agriculture or management systems and practices to reduce runoff and increase nutrient uptake, precision nutrient management systems, farm waste management planning or implementation of whole-farm practices
- Watershed planning addressing water quality problems including nitrogen/nutrient loading
    - Plans should include EPA's nine elements, see the EPA Handbook for Developing Watershed Plans.
- Replacing or right-sizing culverts or otherwise improving road and stream crossings to reduce erosion of nitrogen/nutrients into waterways
- Culvert retrofitting coupled with benefits to brook trout, see the Eastern Brook Trout Conservation Portfolio.

CCMP Goal: Thriving Habitats and Abundant Wildlife *Restore and protect the health and resilience of habitats and wildlife in Long Island Sound and its ecosystems.*

Examples of project types and actions:

- Habitat enhancement or restoration of Important Coastal Habitat Types targeted by the LIS Partnership with a particular focus on beach and dune, tidal marsh, shellfish reef and coastal forest

- Habitat enhancement or restoration of Important Coastal Habitat Types targeted by the LIS Partnership of benefit to Species of Greatest Conservation Need associated with that habitat, particularly forage species, shorebirds, seabirds and river herring
- Eelgrass restoration, protection and management to maintain and increase current extent in Long Island Sound including these activities:
    - Piloting or further advancing new and innovative restoration techniques to combat localized threats
    - Educating and engaging the public via community-based social marketing, community science or other outreach materials
    - Develop plans on a local level such as a subwatershed, municipality or embayment to protect eelgrass
    - Explore approaches and best management practices to address conflicting use issues including aquaculture and recreation activities
    - Implement embayment-specific water quality improvement projects to reduce nonpoint source nutrient loads and improve conditions for eelgrass meadows
        - Contact Cayla Sullivan for more information about these activities and reference that you are considering submitting a LISFF proposal.
- Nature-based or hybrid resilience and restoration projects such as living shorelines, thin-layer deposition, oyster castles/reef balls etc. focused on restoring Important Coastal Habitat Types like beach and dune, tidal marsh, shellfish reefs and coastal forest
- Shellfish and reef restoration to establish self-sustaining populations and/or to create or enhance benthic and reef structure for marine species.
- Invasive terrestrial species control coupled with development of or supporting an existing formal management plan, including:
    - First-time intensive efforts to treat invasive plants with subsequent re-treatment of secondary invasion and encroachment by invasive plants.
    - Treatment of invasive plants that follows prior primary and secondary intensive treatment
    - Proposals for stand-alone control of large meadows of monoculture common reed (*Phragmites australis*) are not eligible for funding. Please consult with Harry Yamalis about projects proposing control of common reed.
- Projects that reduce barriers (e.g., under-sized or perched culverts and small derelict or under-utilized dams) to fish passage for Long Island Sound fish such as river herring and American eel. The most competitive projects will be those with the greatest direct benefit to the Sound, open the most miles to fish passage, provide key habitats and promote species dispersal.
- Habitat enhancement or restoration that create or protect public access and/or stewardship opportunities
- Strategies to engage human communities to share the shore and reduce disturbance along shorelines also used by seabirds and beach nesting species such as American oystercatcher and piping plover
    - See the Shorebird Disturbance Reduction Toolkit.
- Restoring or enhancing habitat to improve community resilience including proposals that provide natural and nature-based solutions to protect coastal and inland communities

from the impact of storms, floods and other natural hazards and to enable them to quickly recover
- Nature-based infrastructure/LID proposals that combine gray infrastructure with nature-based solutions to improve habitat and community resilience by increasing stormwater storage, reducing flooding and enhancing public space
- New or updated municipal, watershed or regional resilience/sustainability/natural hazard mitigation plans that evaluate critical community infrastructure and natural areas and develop strategies for making these areas resilient to hazardous events

CCMP Goal: Sustainable and Resilient Communities *Empower Long Island Sound communities to plan for and respond to environmental challenges in ways that prioritize well-being for all.*

Examples of project types and actions:

- Encourage and facilitate the development of regional, state, and local sustainability, mitigation, and resiliency plans and integrate them into community comprehensive plans.
- Develop and implement sustainability and resiliency plans for new and existing development, housing, transportation, emissions control, energy efficiency, and job creation programs for all municipalities.
- Encourage communities to identify priority waterfront economic development activities
- Implement economic development strategies and infrastructure planning that result in vibrant, resilient, and environmentally sustainable communities.
- Programs that foster, support or develop community support for local environmental management projects including behavior-change campaigns such as Community-Based Social Marketing
- Native plant landscaping guidance and training that encourages alternatives to chemical and nutrient intensive landscapes
- Long Island Sound environmental and conservation-related classroom or informal instruction
    - Note: **LISFF does not support the development of new curriculum.** See LIS Partnership Educational Resources for examples of available information and existing curriculum.

CCMP Goal: Informed and Engaged Public *Inspire and empower the public to appreciate, value, and protect the Long Island Sound*

Examples of project types and actions:

- Create or enhance public access or stewardship opportunities along the Long Island Sound shoreline and rivers in the coastal boundary
- Public engagement in stewardship of local natural resources.

- Programs that foster, support or develop community support for local environmental management projects
- Educational programs or campaigns or cleanups to build public awareness and direct engagement to reduce the use and impact of water/land-based consumer debris.
    - See the Long Island Sound Marine Debris Action Plan
    - Proposals must provide projected pounds of marine debris prevented in metrics