

# Long Island Sound Study Sustainable and Resilient Communities Program

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## 2020–2024 Long Island Sound Comprehensive Conservation and Management Plan Update

This update contains new and revised Implementation Actions (IAs)  
for the 2020-2024 planning cycle. The full CCMP with the original IAs is at:  
[longislandstudy.net/2015/09/2015-comprehensive-conservation-and-management-plan](https://longislandstudy.net/2015/09/2015-comprehensive-conservation-and-management-plan).



# Long Island Sound Study

## Comprehensive Conservation and Management Plan Themes

- Clean Waters and Healthy Watersheds
- Thriving Habitats and Abundant Wildlife
- Sustainable and Resilient Communities
- Sound Science and Inclusive Management

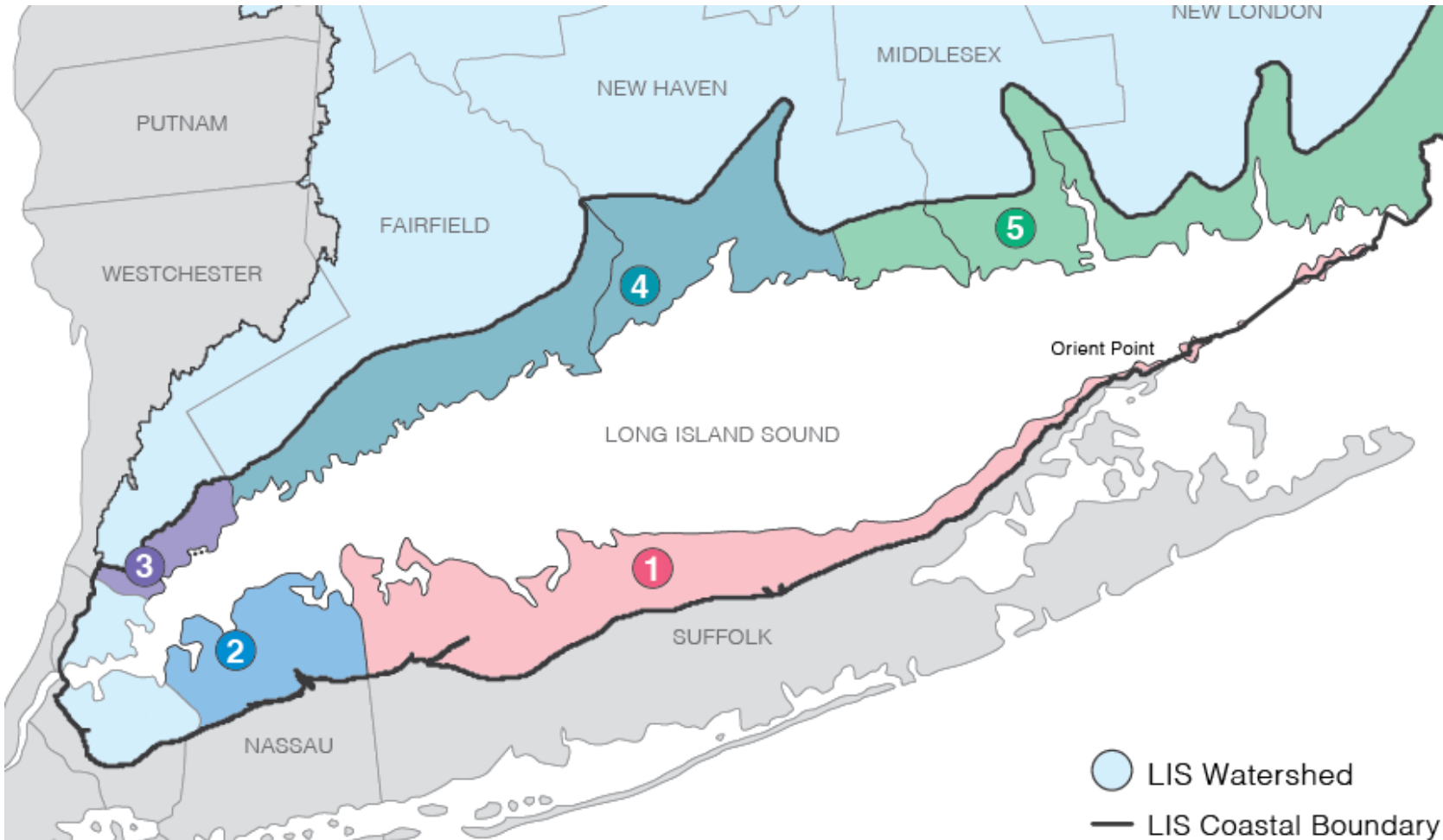


# Sustainable and Resilient Communities Vision

*Vibrant, informed, and engaged communities that use, appreciate, and help protect Long Island Sound.*

*Communities can anticipate, adapt, and recover from the effects of disturbances induced by a changing climate, including sea level rise and extreme events.*

# Place-Based Extension Professionals to support communities



**Suffolk County:**  
Elizabeth Hornstein

**Nassau County:**  
Sarah Schaefer-Brown

**Westchester County:**  
Sara Powell

**Western Connecticut:**  
Deb Visco Abibou

**Eastern Connecticut:**

# Sustainable and Resilient Communities Program Priorities

1. Better coordinated regional response

2. Trained community decision-makers

3. Plan infrastructure improvements

4. Viable government services

5. Facilitate implementation of sustainability and resilience projects

Social-Ecological Integration

Environmental Justice

# SRC Needs Assessment

Environmental threats

Community goals/actions around sustainability & resiliency

Barriers to implementing actions/projects

What support is needed

Resource Center

Training/education programs

Annual bi-state workshops

Support compound flood risk modelling project

Improve coordination

Create a project pipeline

Targeted investments to break down barriers



# Environmental Threats

- Stormwater
- Sea Level Rise
- Extreme Weather
- Increased flooding
- Water Quality & Quantity
- Coastal erosion
- Loss of coastal habitats
- Shifting seasons/species
- Invasive species
- Impacts from development



# Increased Storms and Precipitation



Photo by Christine Churchill





# New App: MyCoast NY

NY Sea Grant has launched MyCoast NY, an online portal for collecting and analyzing photos of flooding and storm damage. When a photo report is submitted, it is automatically linked to the closest weather, river, and tidal gauge data to help provide context to the photo.

- High Water: Tracking (any type of) flooding across the state. This includes riverine, coastal, and shallow flooding (pluvial), such as flooding due to stormwater overflows and poor urban drainage.
- Storm Reporter: Documenting storm damage across the state.

This two-year pilot project is funded by the National Sea Grant Office and the New York State Water Resources Institute at Cornell University.

You can visit the website [mycoast.org/ny](https://mycoast.org/ny) or download the app - both require registration

# Sea Level Rise

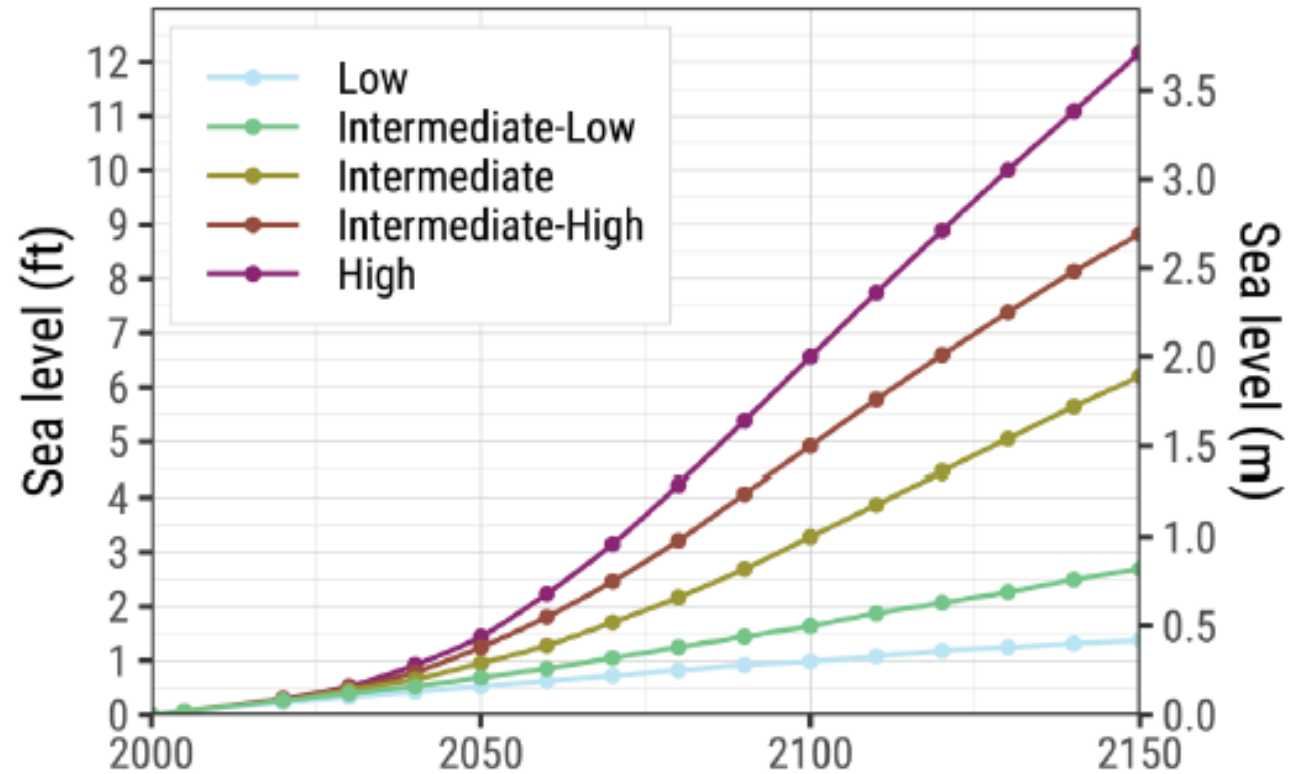
NYS Community Risk and Resiliency Act Adopted  
Sea Level Rise Projections Long Island Region.  
Inches of rise relative to 2000-2004 baseline.

\*Based on 2014 ClimAID Report



Photo by Vicky O'Neill

Decades	Low	Low-Medium	Medium	High-Medium	High
2020s	2	4	6	8	10
2050s	8	11	16	21	30
2080s	13	18	29	39	58
2100	15	21	34	47	72

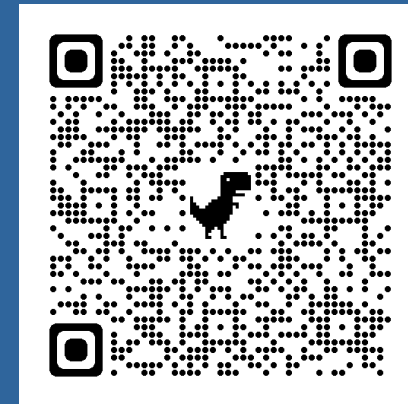


# Sea Level Projections

2022 Sea Level Rise Technical Report

# Orient Present-Day Flooding

Data Source: NYSERDA/Warren  
Pinnacle Sea Level Affecting Marshes  
Model (SLAMM), 2016.  
TNC Atlas Tool





# Orient: 18" SLR

Data Source: NYSERDA/Warren Pinnacle Sea Level Affecting Marshes Model (SLAMM), 2016.  
TNC Atlas Tool

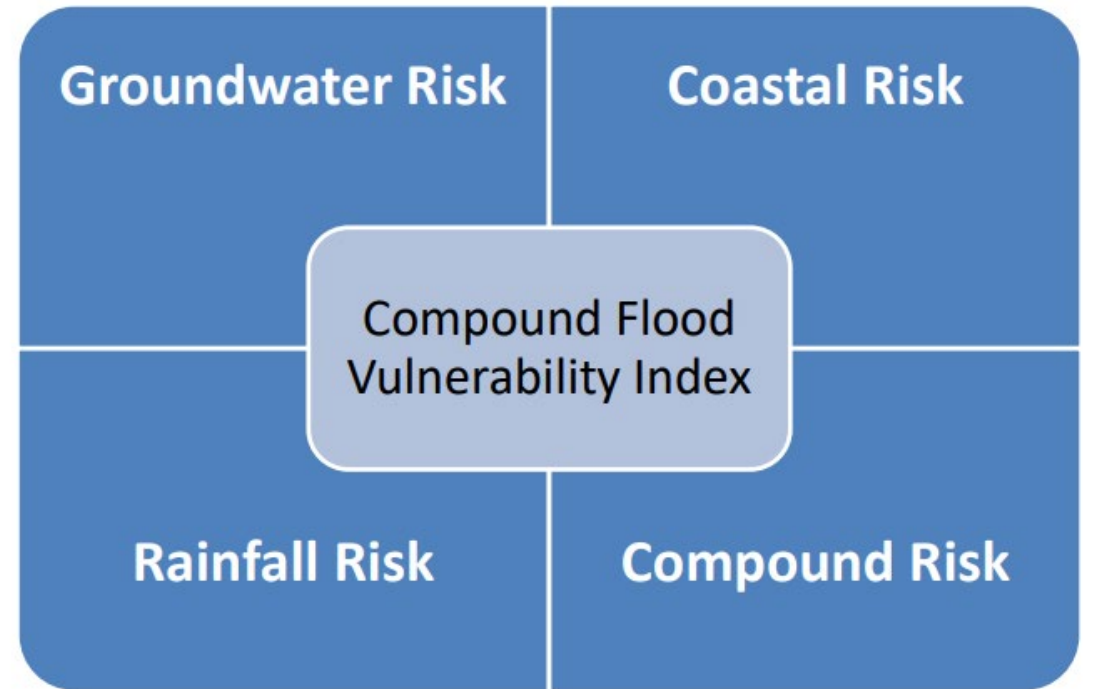
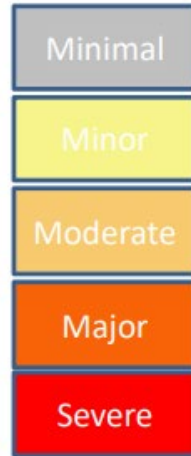


# Orient: 39" SLR

Data Source: NYSERDA/Warren Pinnacle Sea Level Affecting Marshes Model (SLAMM), 2016.  
TNC Atlas Tool

- open water
- inundated by the 10 years storm
- inundated at least once every 90 days
- inundated at least once every 60 days
- inundated at least once every 30 days
- below the 100 year storm but not connected; inundated by the 100 years storm
- above the 100 year storm

# Compound Flood Risk Assessment



# Coastal Erosion & Habitat Loss

Resource: Dynamic Shorelines  
Long Island Story Map Collection

<https://bit.ly/LICollection>





# Community Planning



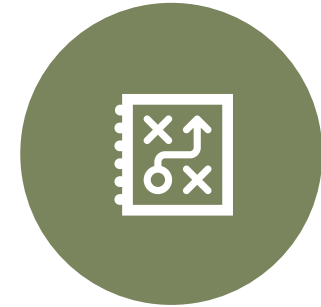
IDENTIFY  
VULNERABILITIES/RISKS



DEVELOP A COASTAL  
RESILIENCE PLAN OR  
STRATEGIES TO MITIGATE  
RISKS



SECURE FUNDING TO  
IMPLEMENT RESILIENCE  
STRATEGIES



EVALUATE AND ADAPT AS  
NEW INFORMATION  
BECOMES AVAILABLE



# Adaptation Tools/Strategies

- Site future public infrastructure outside vulnerable areas
  - Amend zoning regulations/codes
- Protect/restore natural defenses such as beaches, dunes, and wetlands
- Managed relocation
- Upgrade/elevate at risk infrastructure (roads, culverts, buildings)
- Use nature-based solutions
  - Green infrastructure
  - Living shorelines
- Become a NYS Climate Smart Community



# What you can do

- Upgrade your septic system
- Sustainable lawn care
- Install a rain garden
- Consider nature-based shoreline solutions
- Energy-efficient upgrades
- Get involved/be an advocate in your community!

<https://longislandsoundstudy.net>



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Questions & Feedback