UCONN UNIVERSITY OF CONNECTICUT

CONNECTICUT INSTITUTE FOR RESILIENCE & CLIMATE ADAPTATION (CIRCA)

Resilient Connecticut

NROC Coastal Hazards and Resilience Committee Update November 12, 2020









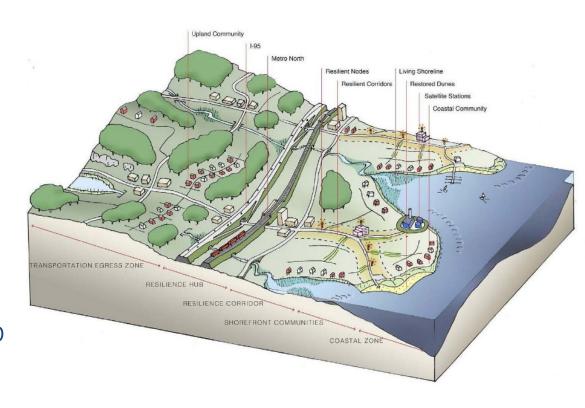


Resilient Connecticut:

Regional resilience and adaptation planning, policy, and actionable priorities using science-based risk assessments to inform pilot adaptation projects.

Three phases:

- 1. Develop a Resilience Planning Framework
- 2. Engage and collaborate with partners to develop resilience strategies, tools, and training
- 3. Prioritize and develop implementation plans for pilot projects





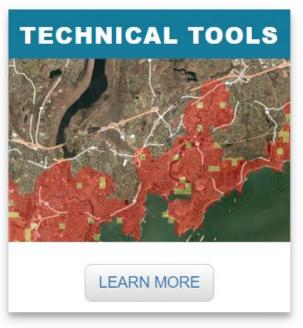




























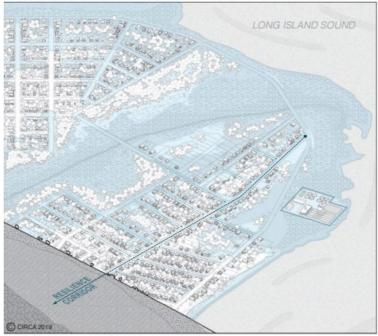








Resilient Connecticut



Planning Framework

Connecticut Institute for Resilience and Climate Adaptation

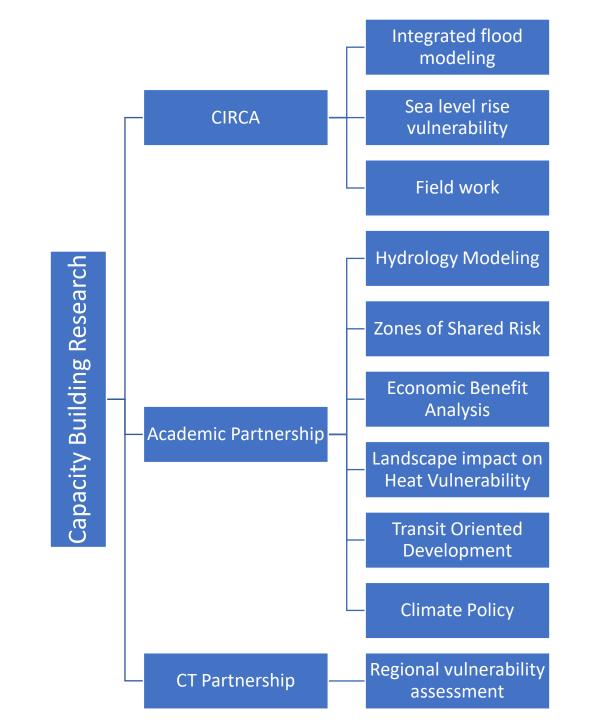








- Set the Stage Establish Project
 Partnerships, Goals and Regional Scope
 Informing Locations and Scales
- 2. Apply Robust Science and Technical Analysis to Planning
- 3. Develop Adaptation Scenarios Through Inclusive and Participatory Engagement and Effective Planning
- 4. Enact Equitable & Informed Prioritization of Site-scale Pilot Projects



Climate Vulnerability Assessment

Determines the exposure, sensitivity and adaptive capacity for climate indicators

- Understanding the contributors to vulnerability
- Overall picture for the areas of need













Heat

Crop field loss and human vulnerability

Biodiversity

Loss of habitat

Coastal

Sea level rise impacts on livelihoods

Health

Pollution and infectious diseases

Infrastructure

Flooding infrastructure impacts

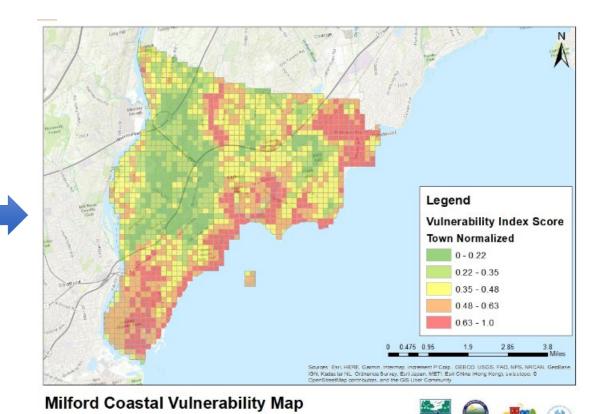
Water

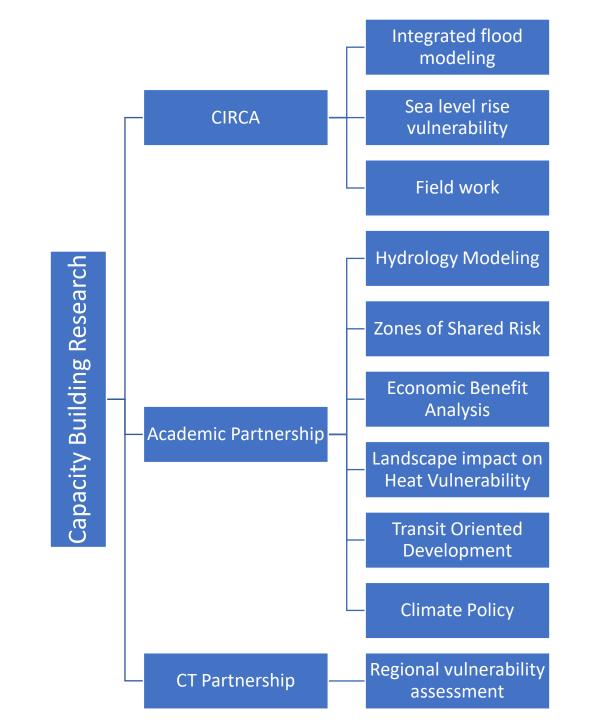
Decreased quality and quantity of water

Coastal Vulnerability Index

coastal vulnerability index

Variables Bio-physical and Socio-economic parameters Vulnerability Index Woderate Low

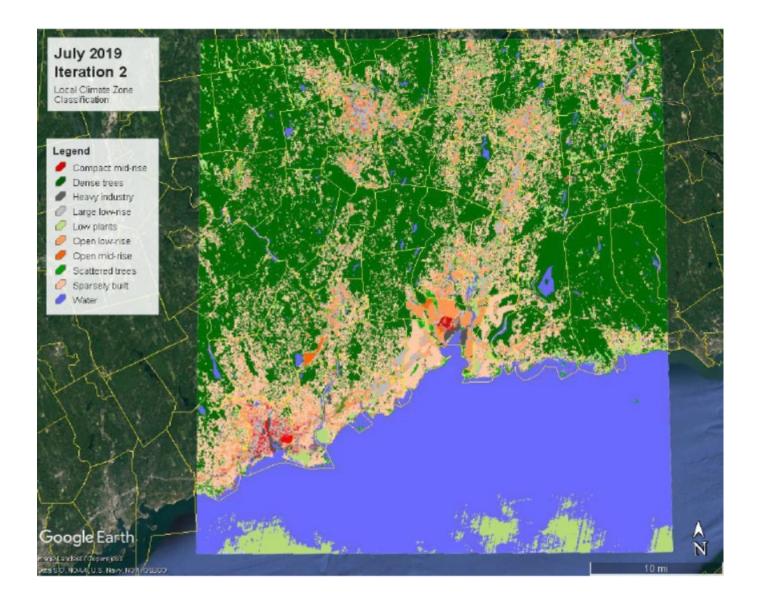


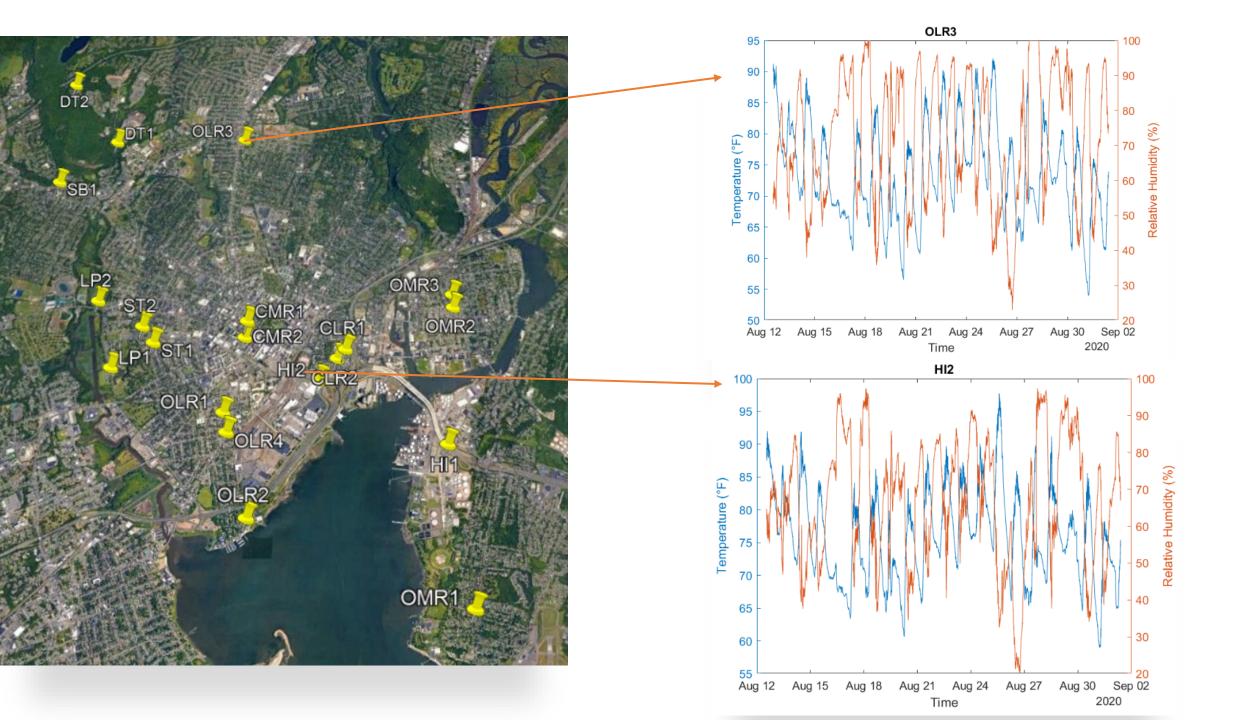


Identifying the Change in Heat Vulnerability and Land-use Influence

Uses land cover types and relationship to surface temperature variations

Heat vulnerability index considering exposure, sensitivity and adaptive capacity

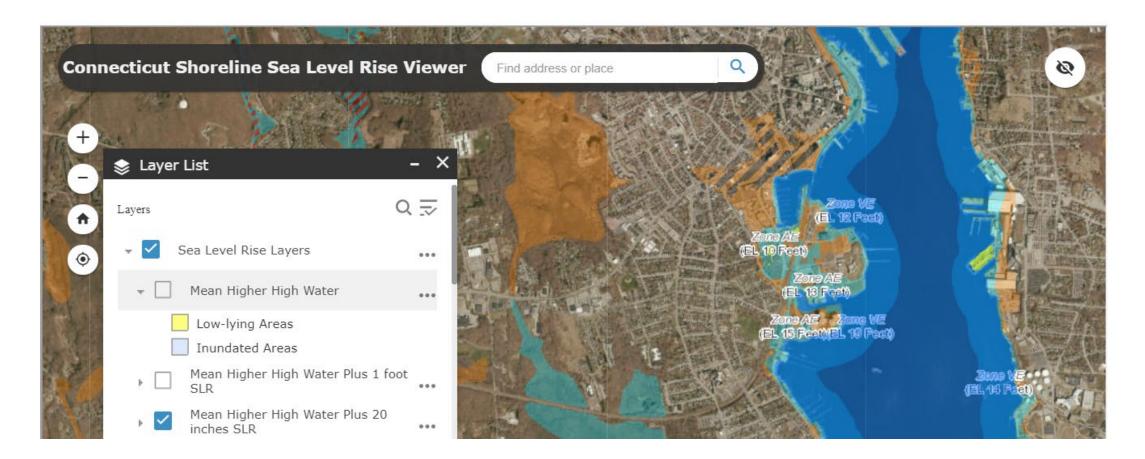




Connecticut Sea Level Rise and Storm Surge Map Viewer

This dataset shows two different sea level rise projections (1 foot and 20 inches), above a Mean Higher High Water (MHHW) along the Connecticut coastline and the adjacent inland. CIRCA research recommends that planning anticipates sea level will be 20 inches higher than the national tidal datum in Long Island Sound by 2050. CIRCA's report on <u>Connecticut sea level rise</u> provided the basis for projections in Bill S.B. 7, which was introduced into the 2018 legislative session and was enacted into law as Public Act 18-82.

To view the data, zoom in on the map to your area of interest. Use the Layers menu widget at the bottom of the map window to select data to display. Different projections of sea level rise/storm surge scenarios and FEMA flood hazard map layers will activate automatically at different scales.





circa.uconn.edu/nov2020summit-event/