Why a National Estuarine Research Reserve for Connecticut?

CT Department of Energy & Environmental Protection
Office of Long Island Sound Programs,
NOAA Office for Coastal Management,
CT Sea Grant, &
University of Connecticut Marine Sciences Program

April 12, 2016
Dr. Jim Edson & Dr. Sylvain De Guise
University of Connecticut

Connecticut Department of
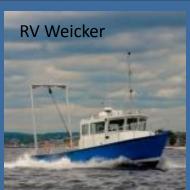ENERGY &
ENVIRONMENTAL
PROTECTION

UCONN
UNIVERSITY OF CONNECTICUT

Sea Grant
Connecticut

noaa OFFICE FOR COASTAL MANAGEMENT
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

UConn Avery Point

CT Sea Grant

NURTEC

Dive Program

Rankin Lab

ROV

RV Weicker

RV CT

Connecticut Department of
ENERGY &
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OFFICE FOR COASTAL MANAGEMENT
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Basic Estuarine Research

Tobias & Edson

Carbon Budgets in Marshes

Elphick

Ecology and conservation of birds in tidal marshes

Vaudrey

Assessing embayment water quality

Whitney

May 31,2013
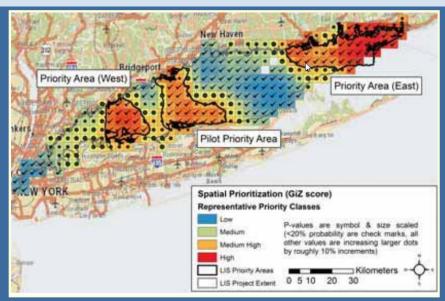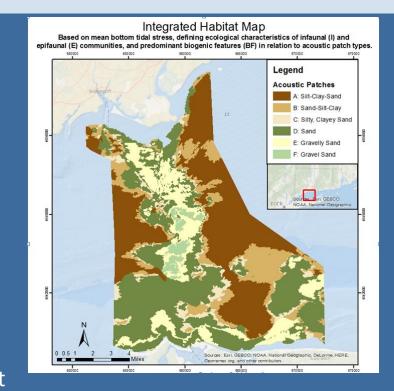
Housatonic River

Modeling an estuary of estuaries

Applied Estuarine Research: LIS mapping

Identified priority areas for habitat mapping
Federal, state and academic partnerships
Developing data products to aid resource management

Applied Estuarine Research: CIRCA

Connecticut Institute for Resilience and Climate Adaptation

SEA LEVEL RISE

CRITICAL INFRASTRUCTURE

INLAND FLOODING

POLICY & PLANNING

Education – K through Gray

- **Hands-on** K-12, Undergraduate and Graduate Education
- Teacher Professional Development
- Public outreach
- Citizen Science

Touch, Taste & Smell of Science

Louis Stokes Alliance for Minority Participation

Citizen Science & MARN 4001

Monitoring: LISICOS (w/ NDBC & NERACOOS)

Long Island Sound Integrated Coastal Observing System

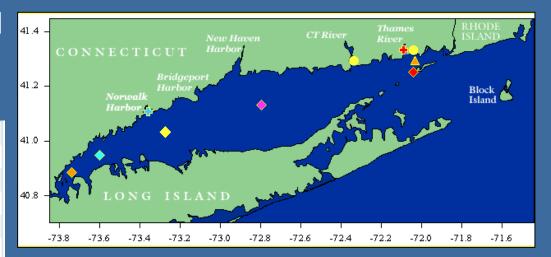|	
Wind Speed:	13.2 knots
Wind Gust:	17.7 knots
Wind Direction:	218 degT
Air Temperature:	45.0 degF
Dew Point:	36.1 degF
Air Pressure:	30.12 inches Hg
Humidity:	71%
Significant Wave Ht:	1.8 feet
Maximum Wave Ht:	3.2 feet
Significant Wave Period:	2.7 secs
Average Wave Period:	2.6 secs
Wave Direction:	258.6 degT
Wave Spread:	41.1 deg
Surface Water Temperature:	43.0 degF
Surface Salinity:	27.2
Surface DO Concentration:	0.6 mg/L
Surface DO Saturation:	100.5 %
Chlorophyll Concentration:	10.4 RFU

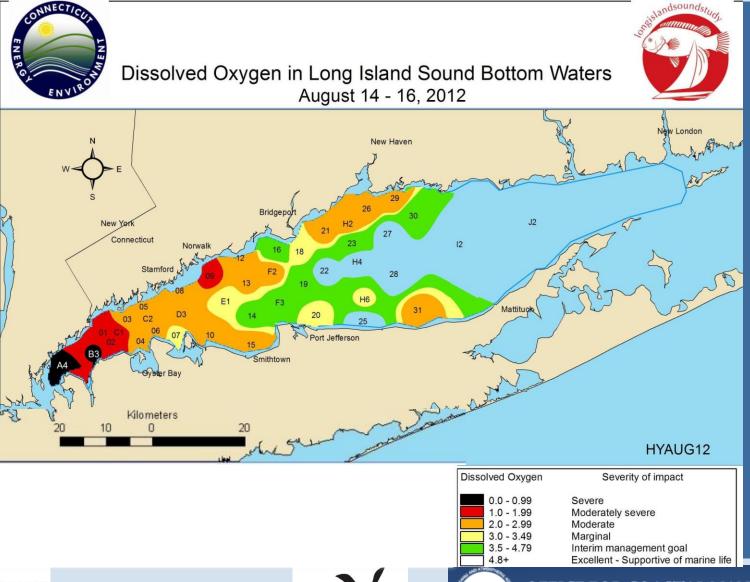Coastal Laboratory for Atmospheric and Marine Sciences (CLAMS)

Connecticut Department of ENERGY & ENVIRONMENTAL PROTECTION

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Monitoring: LISS Water Quality Monitoring

Dissolved Oxygen in Long Island Sound Bottom Waters
August 14 - 16, 2012

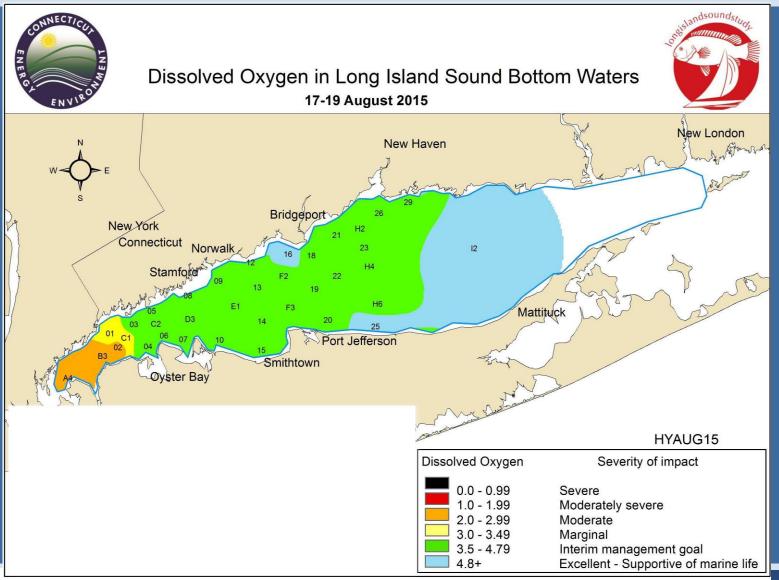| Dissolved Oxygen	Severity of impact
0.0 - 0.99	Severe
1.0 - 1.99	Moderately severe
2.0 - 2.99	Moderate
3.0 - 3.49	Marginal
3.5 - 4.79	Interim management goal
4.8+	Excellent - Supportive of marine life

Monitoring: LISS Water Quality Monitoring

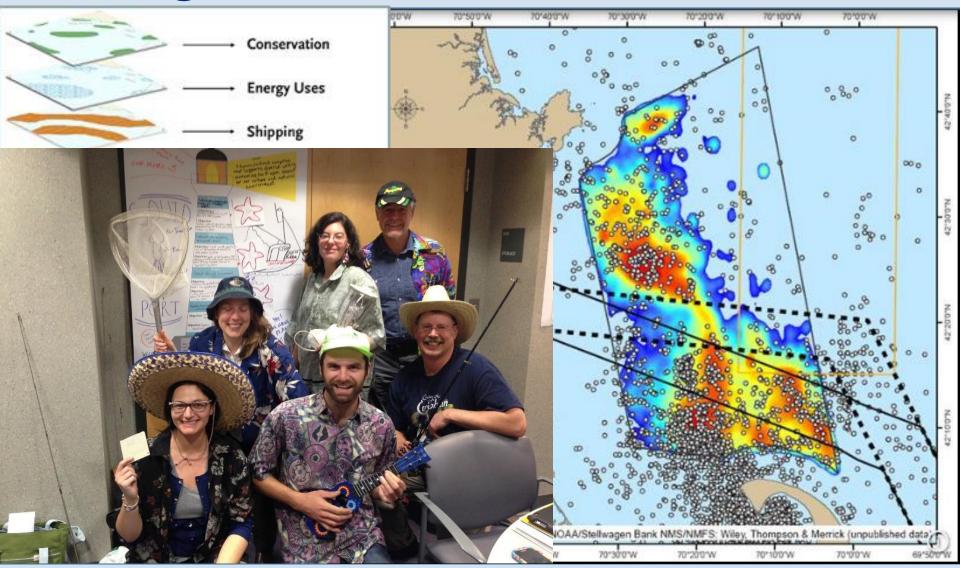# Monitoring: LIS Sentinel Monitoring for Climate Change

Training: Coastal and Marine Spatial Planning

Training: Climate Adaptation Academy

The Climate Adaptation Academy provides information on current adaptation research, policy and practice, and serves to promote an exchange of information between municipal officials, researchers, and other professionals.
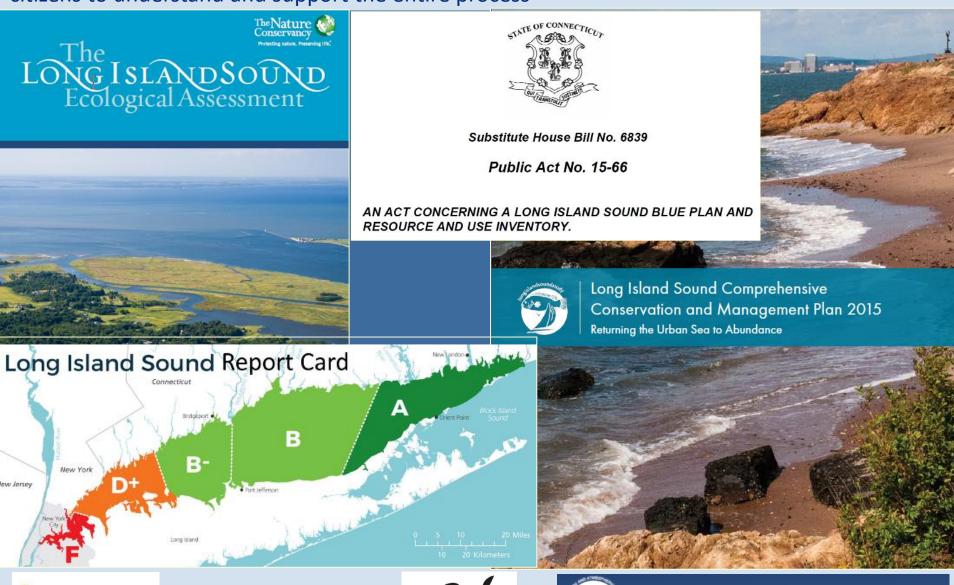
Read more >>

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Stewardship – Enables wise management decisions based on sound science that engages citizens to understand and support the entire process

NERR – A Great Fit for Connecticut

Research · Monitoring · Training · Education · Stewardship · CT NERR

A place-based opportunity to continue, enhance, coordinate an display ongoing hands on activities