Connecticut National Estuarine Research Reserve (NERR) Selection Process:

2017 Public Status Update

CT Department of Energy & Environmental Protection Land & Water Resource Division
NOAA Office for Coastal Management,
CT Sea Grant, &
University of Connecticut Marine Sciences Program

Tuesday May 16, 2017
6 – 8 PM
University of Connecticut Avery Point Campus, Groton, CT

Connecticut Department of ENERGY & ENVIRONMENTAL PROTECTION

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NERR Overview

Mission: To practice and promote the stewardship of coasts and estuaries through innovative research, education, and training using a place-based system of protected areas

People **Science** **Protected Places**

Locally Relevant, Nationally Significant

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NERR Overview

Critically Important Distinction:

National Estuarine Research Reserve ≠ Marine Reserve

Marine Reserve ("no take area"): area designed for high level of resource protection; typically prohibit hunting, fishing, collecting.

NERR: ongoing State/Federal partnership to establish an area where natural resources can be conserved but also provide the public a perpetual place to learn, use, and enjoy.

NERR Overview

Establishing a NERR does not bring any new or additional Federal regulations.

A NERR manages its land, access, uses, and activities by coordinating existing state/federal rules and frameworks.

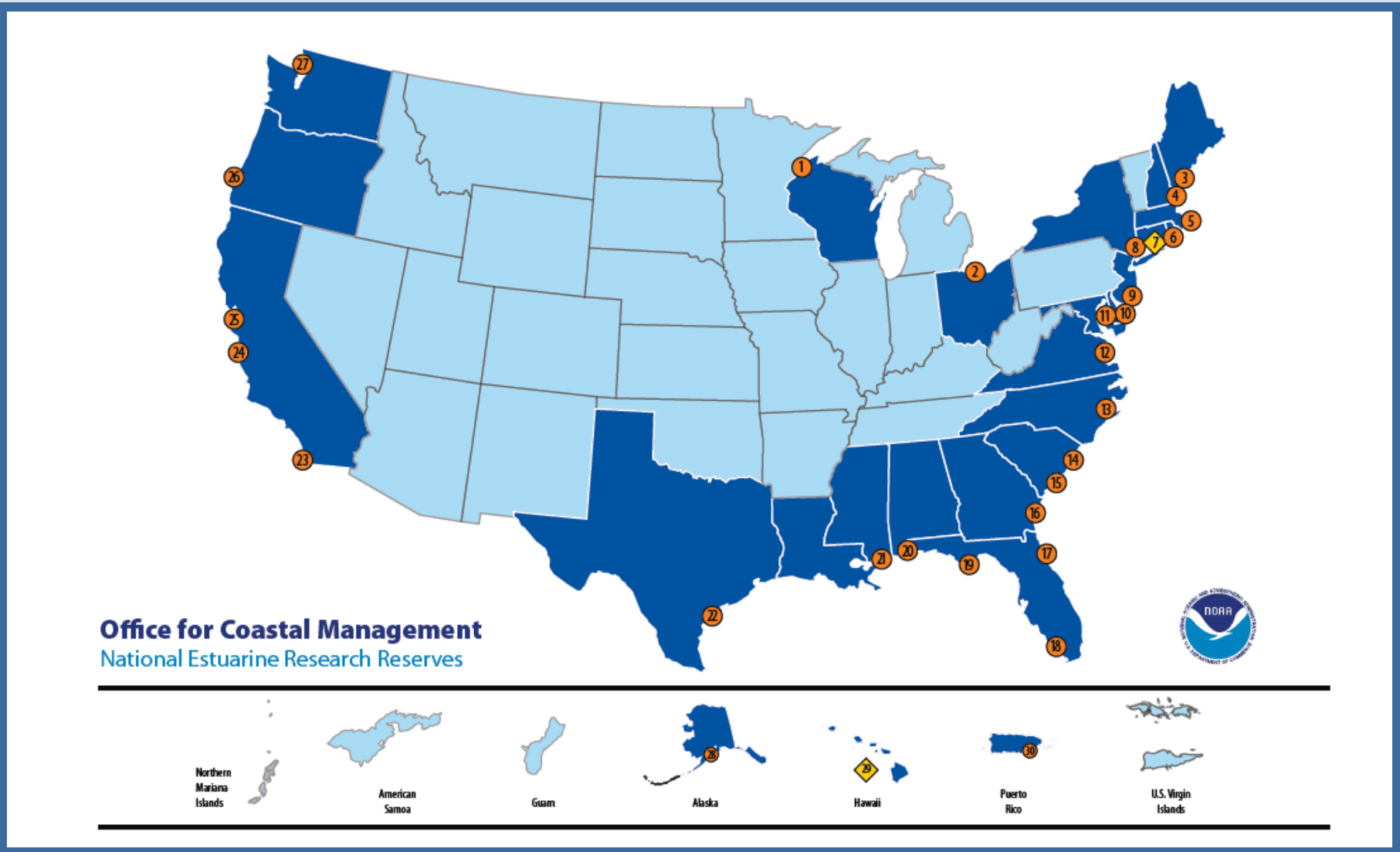
Narragansett Bay, RI: Site Use Examples (not exhaustive):	***Waquoit Bay, MA: Site Use Examples (not exhaustive):***
Prohibited - camping, fires, off-road vehicles, alcohol, litter, marked trials, collecting plants/animals/artifacts Seasonal Restrictions - public access to resources during breeding seasons, Allowed - passive clamming, fishing, hiking, boating (travel & mooring), birding	State Park: Allowed – swimming, sunbathing, fishing, hiking, birdwatching, seasonal hunting, Prohibited - motorized boating access, off-road vehicles Other Areas: Allowed - assorted passive recreation, boating, fishing, camping, commercial/recreational shellfishing, Prohibited/Restricted - access to endangered species management areas, dumping, off-road vehicles, fire-pits

NERR Overview

Currently 29 established Reserves.

Oldest: South Slough in OR (1974)

Newest: He'eia Bay, Hawaii (2017)



NERR Overview

System-Wide Monitoring & Research:

- Abiotic/Ecological monitoring, develop programs to address local/regional/national research needs

Coastal Training:

- Brings local/regional/national science to help decision making & fosters networking and collaboration (Adult/Professional focus)

K-12 Estuarine Education:

- Teacher programs, Technology/web-based learning, field studies – “living laboratories,” classroom outreach

Science Collaborative:

- System wide approach to enhance research & help transfer knowledge

NERR Overview: Why the need?

Science:

A NERR can provide complementary support / resources, & the addition of national expertise for existing CT efforts, many of which align with NERR Strategic Goals

Places:

CT has areas deserving the benefits a NERR affords, while at the same time bringing our State's unique contributions to the national NERR system.

People:

Every year programs offered at reserves attract more than a half a million visitors, and educate approximately 85,000 students and 3,200 teachers. Decision makers from over 2,500 communities and 570 businesses benefit by reserve-based science and technical expertise nationwide each year.

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NERR Overview – Partnership Roles

A State-Federal Partnership

State role:

- Land ownership and management
- Reserve staff members
- Program implementation
- Funding (30 percent match)

Federal role:

- National policy and program guidance
- Technical assistance
- Program coordination
- Funding (70 percent)

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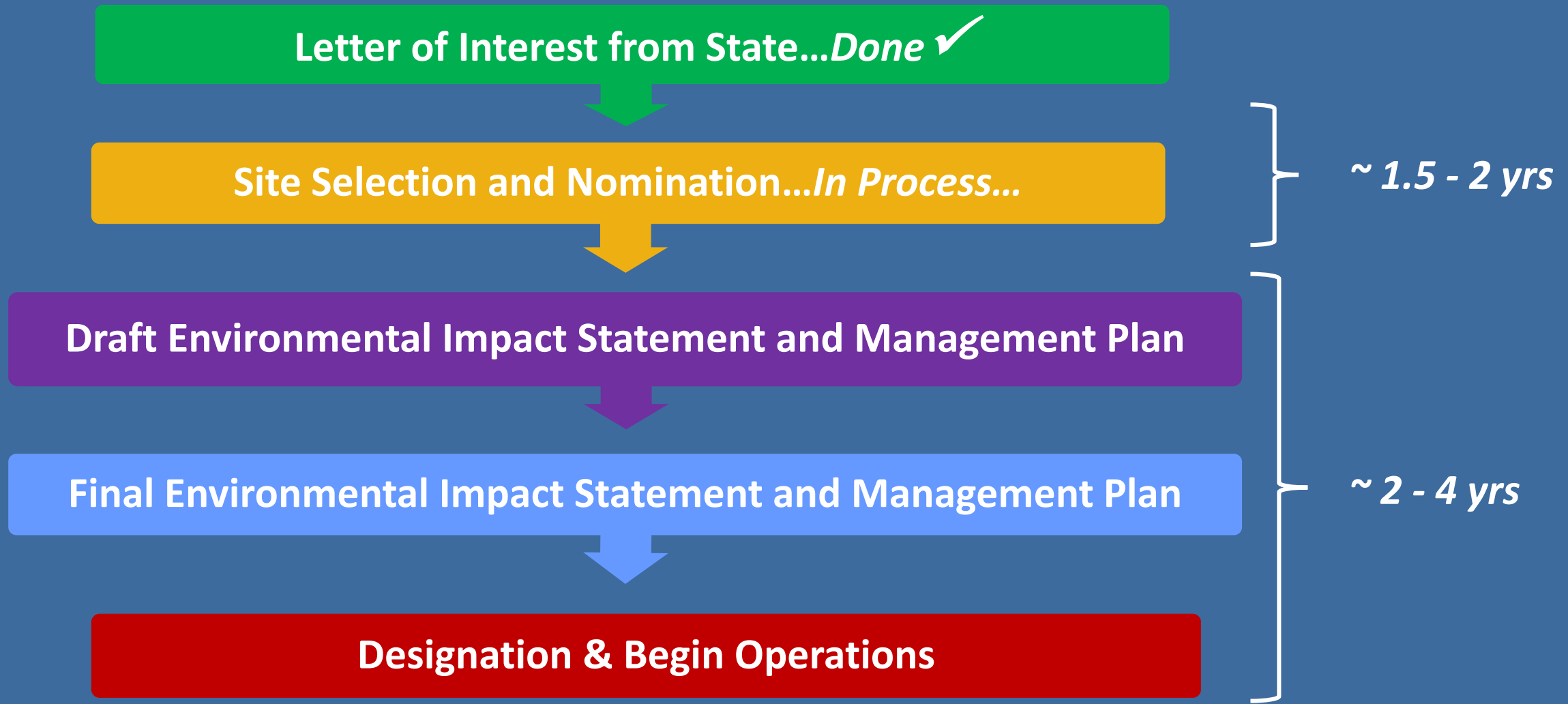
NERR Overview – Process to Establish



CT NERR Overview – Site Selection

What	By When
NERR Project Kickoff Meeting	*April 2016 …* ✓
Preliminary Site Screening	*November 2016…* ✓
Preliminary Site Screening Public Meeting	*May 2017…* ✓
Detailed Site Selection	Late Summer 2017
Detailed Site Selection Public Meeting	Fall 2017
Public Comment Period	Fall 2017
Formal Nomination Announcement	December 2017

CT NERR Overview – Site Selection

1. CT NERR Steering Committee: DEEP, UCONN, SeaGrant

Primary Functions: Process Management / Coordination, Communication/Outreach. DEEP is lead agency to manage Selection & Nomination Process.

2. Federal NERR Team: NOAA OCM-NERR

Primary Functions: Advisory / Guidance (from National System level)

3. Site Selection Team (SST): Various topical experts/volunteers

Primary Functions: Evaluation of site locations / Recommendation for CT NERR

4. Regional NERR Team: New England NERR staff (volunteers)

Primary Functions: Advisory / Guidance (from Reserve level)

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CT NERR Overview – Site Selection

What do we mean by "site?"

- Within a "project area" defined by the CT Coastal Area and the CT River to Cromwell/Portland
- An area with a representative mix of land and water (coastal, LIS or riverine)
- Could be a single property, or could consist of multiple parts
- Exists in some form of protection/preservation (i.e., not as private property to purchase)
  - *Cannot be more than 50% Federal property.*

CT NERR Overview – Selection Process

Site Evaluation Review: 2 tiers

- Preliminary is a general, broad look across project area to find 3-5 finalists
- Detailed is a more complete vetting of finalists

Preliminary Screening:

1. SST develops inventory of locations to research & summarize in a high-level format.
2. SST uses the findings to determine qualities as they relate to key NERR functions;
3. Conduct review, report out.

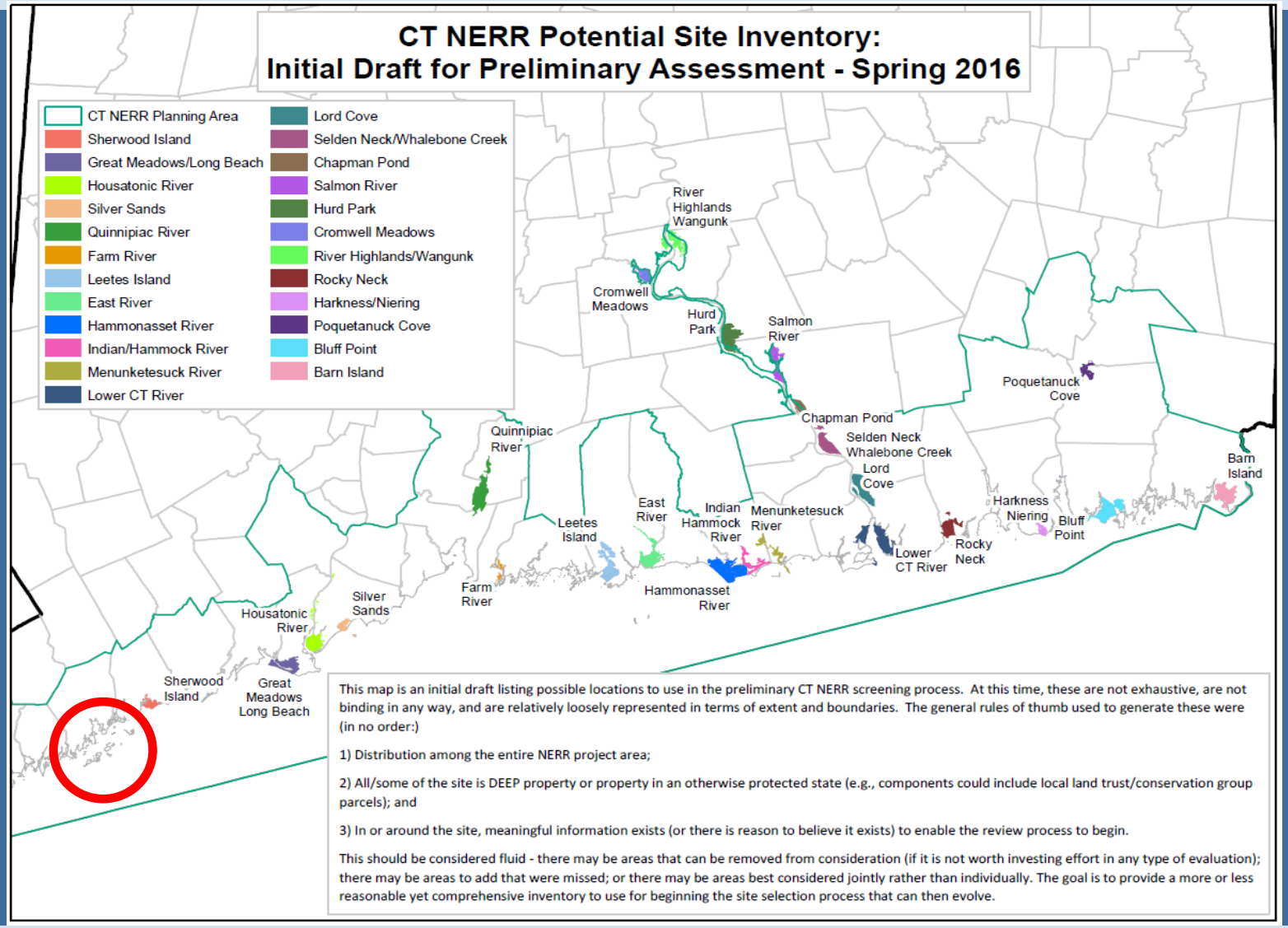
CT NERR Overview – Preliminary Site Selection

1. Preliminary Inventory:

Initial List Goals:

- Well distributed
- Focus on existing protected property (i.e., no new acquisition)
- Reason to believe they can support NERR goals.

Also expanded to include Norwalk islands area



CT NERR Overview – Selection Process

Preliminary Assessment:

SST investigated the following aspects of the initial inventory sites:

- General Site Description (size, habitat, notable features, etc.)
- Ownership Status
- Possible Boundaries (mainly waterward)
- Make sense as part of a Multi-Site complex?
- Educational opportunities
- Research/monitoring opportunities
- Stewardship/Conservation considerations
- Accessibility
- NERR Typology Distinction

CT NERR Overview – Preliminary Selection Process

NERR System has 2 Classes of 3 Groups to describe/classify Reserve characteristics:

- Class 1 – Ecosystem Types: Predominantly habitat based - “Shorelands” {coastal grasslands, forests, etc.}, “Transition Areas” {tidal/non-tidal salt and freshwater marshes} & “Submerged Bottoms” {subtidal areas}
- Class 2 – Physical Characteristics: Describe habitat - Geologic, Hydrographic, Chemical

Potential new Reserves are required by NOAA to “bring something new to the table.”

CT must provide some level of distinction between Waquoit Bay, Narragansett Bay, Hudson River.

CT NERR Overview – Preliminary Selection Process

Summer and early Fall 2016:

- SST broke into sub-teams to tackle the inventory review
- Held a series of calls and meetings to move through the process
- Convened a 1 day meeting in October to present findings and discuss.
  - Typology requirements
  - Size – appropriate for needs
  - Component pieces – how to configure?
  - Trade offs?

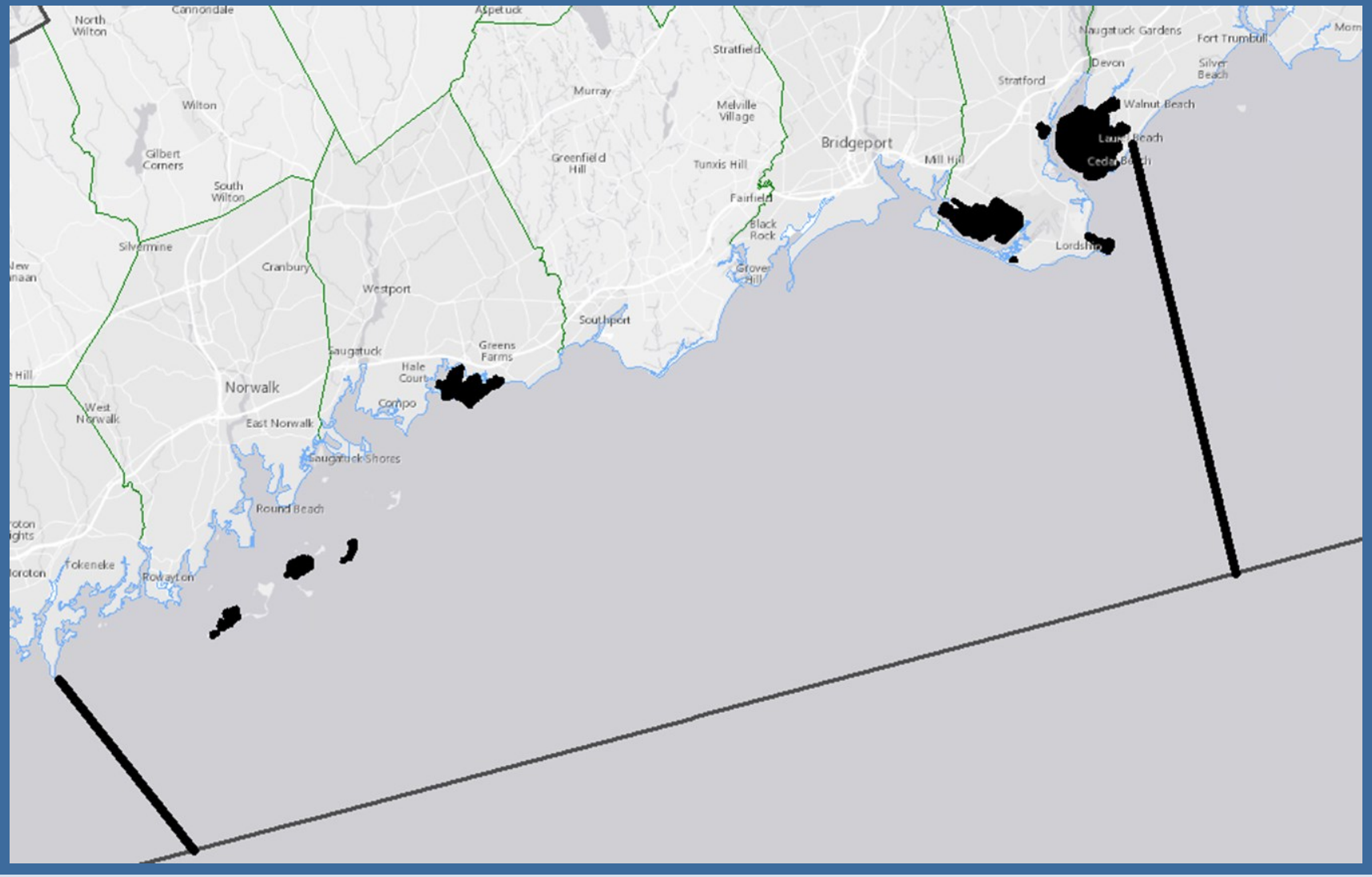
Balance the place with NERR Goals and Operational Considerations

CT NERR Overview – Preliminary Selection Process

General Results:

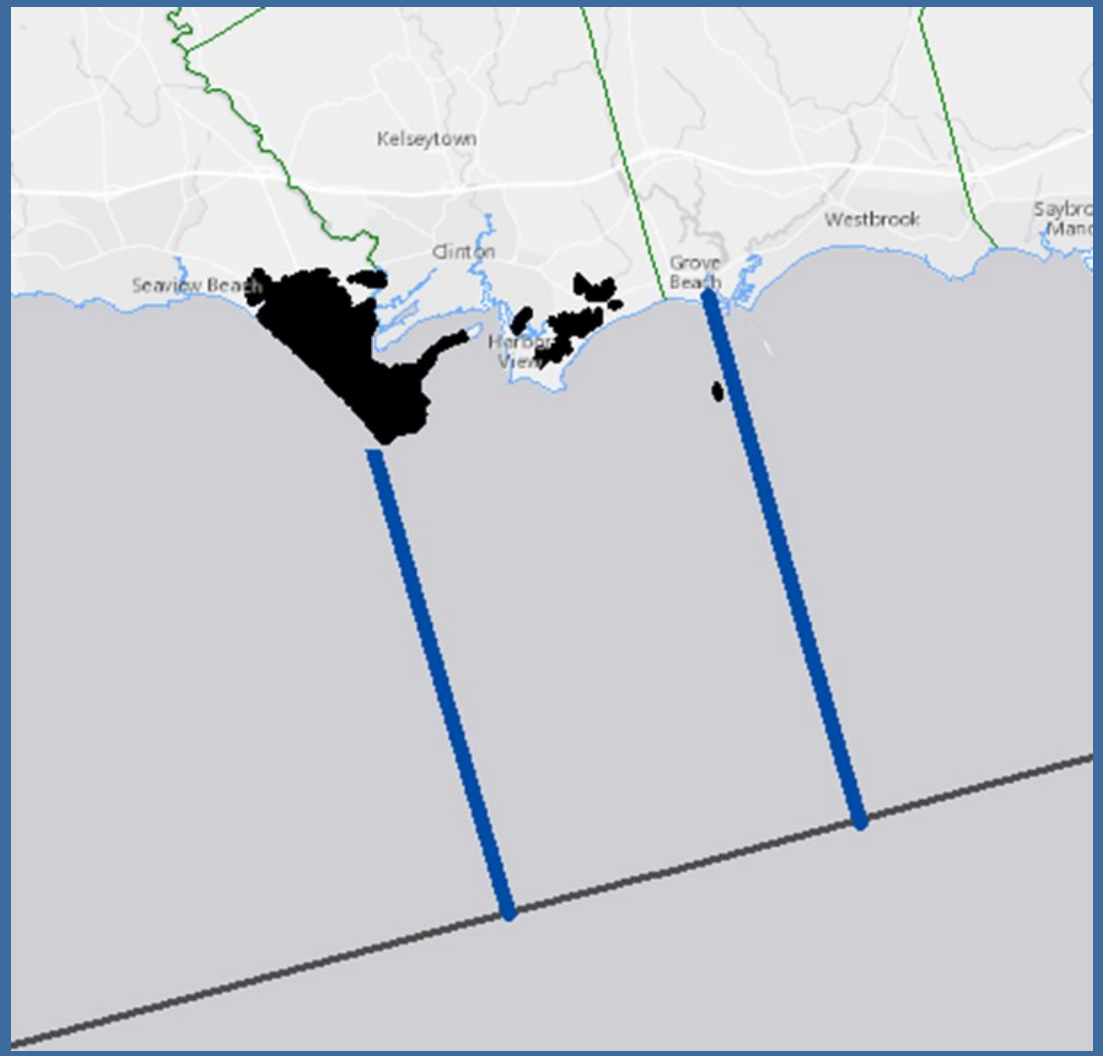
- **4 multi site complexes in WLIS, Central LIS, the CT River and ELIS**
- Exemplary habitat types and quality; variety of habitats;
- Established research and educational opportunities and/or pathways
- Easy points of access through normal modes of transportation;
- Existing or potential infrastructure capacity;
- NOAA typological uniqueness:
  - Off-shore areas provide depth regimes and various bottom types (notably hard bottom)
  - Other examples - or pathways to examples - based on additional characteristics (vegetation, hydrology, etc.) that can extend the case.

CT NERR Overview – Preliminary Selection Process



Western LIS Region: Combination of State and Federal properties, notably the Norwalk Island, Great Meadows, and Milford Point Unit of the Stewart B. McKinney NWR, plus Sherwood Island State Park, and Wheeler Wildlife Area

CT NERR Overview – Preliminary Selection Process



Central LIS Region:

Hammonasset SP/NAP, Hammock River WMA, Duck Island WA)

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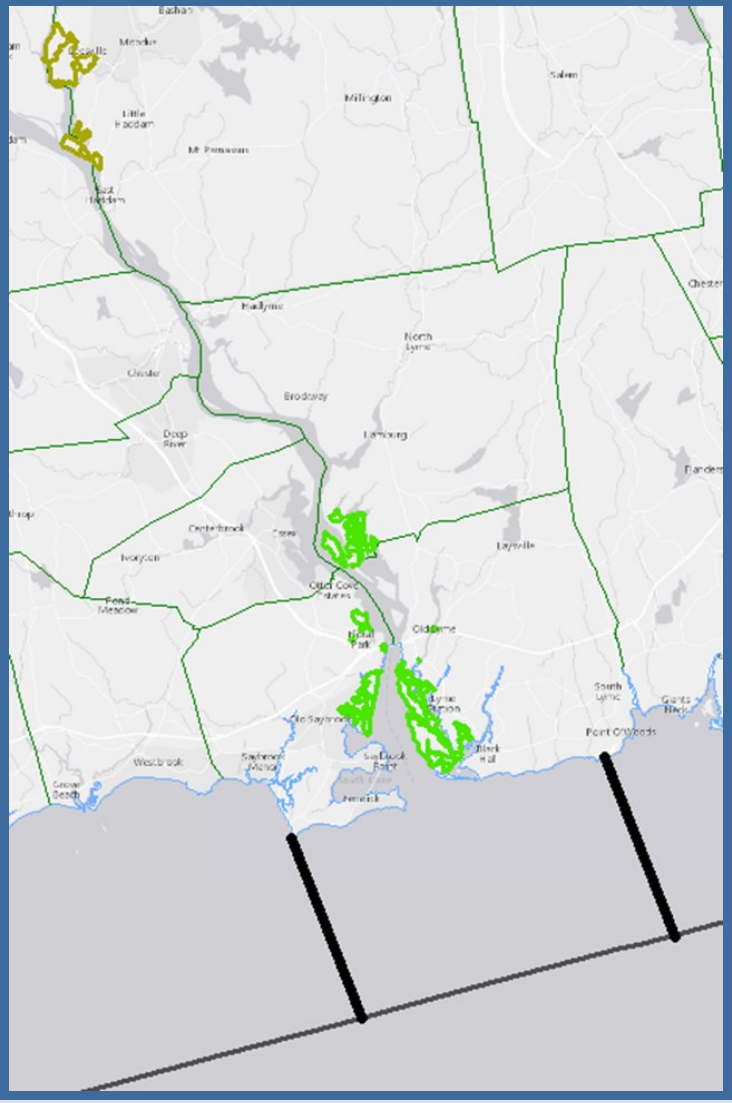


CT River Region:

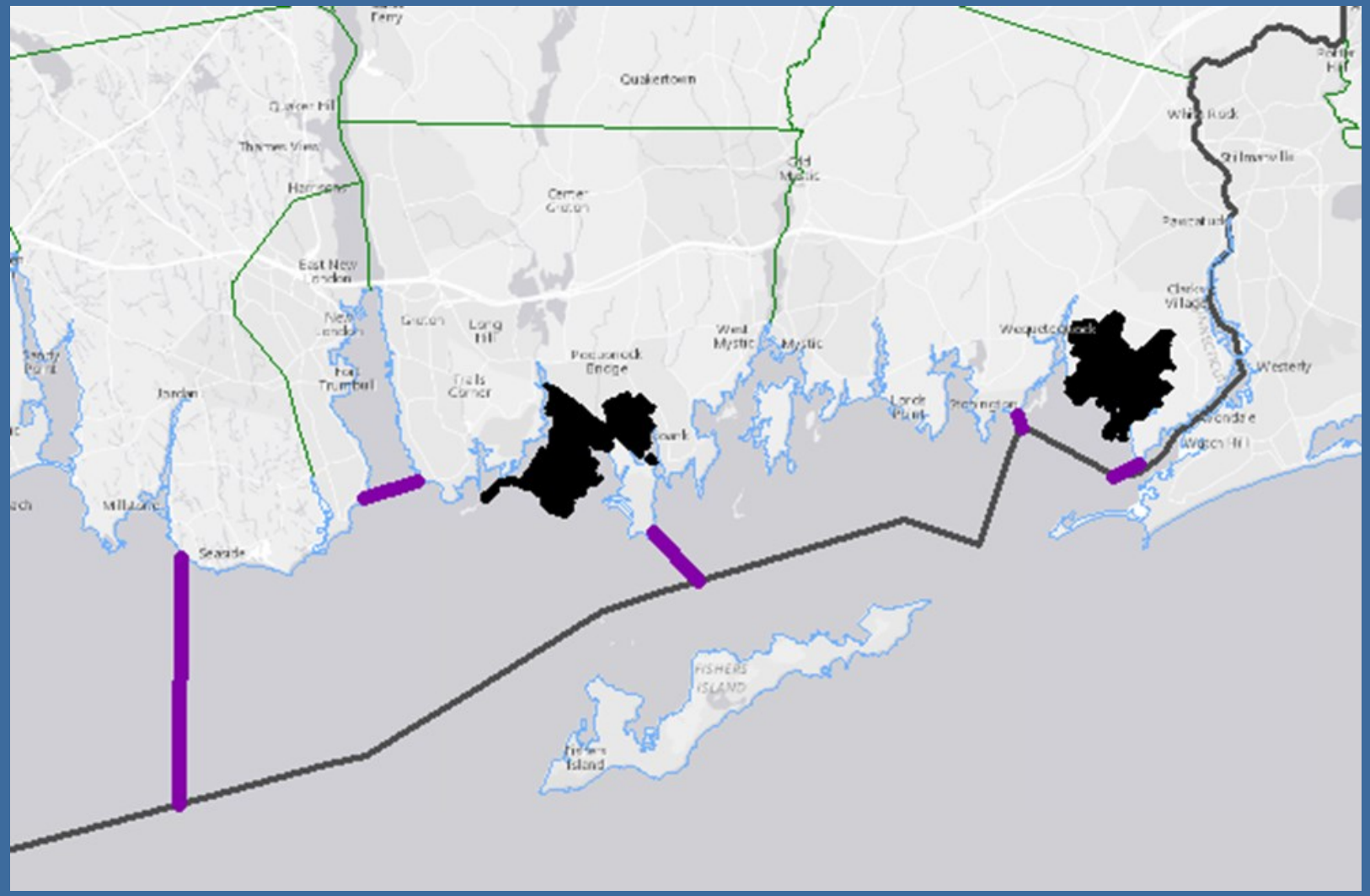
Upper (Freshwater) Component:

Haddam Neck WA, Machimoodus SP

Lower (Brackish) Component:

Ferry Point WA, Great Island WA, Lord Cove WA, Nott Island WA, Ragged Rock Creek WA

CT NERR Overview – Preliminary Selection Process



Eastern LIS Region:

Bluff Point SP/NAP/CR, Haley Farm SP; Barn Island WMA

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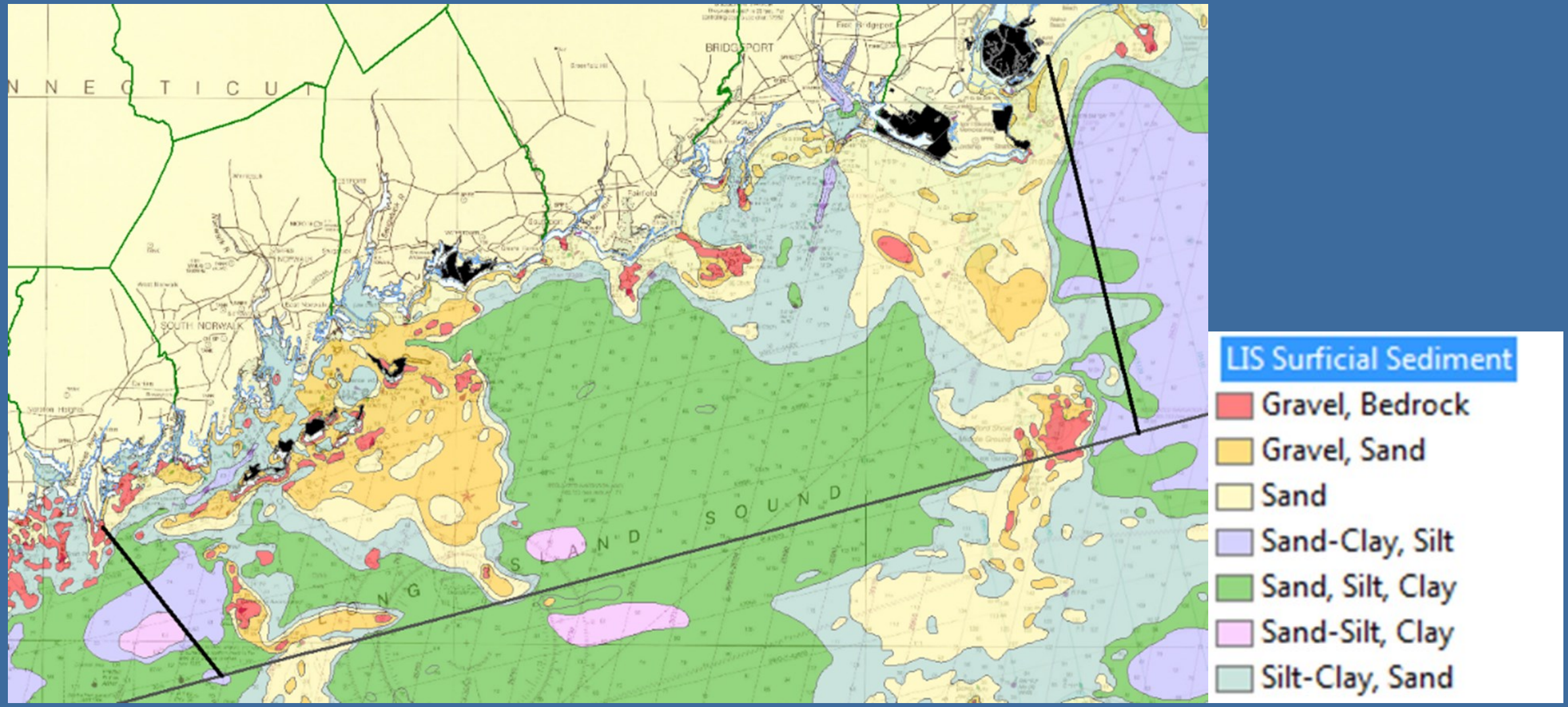
CT NERR Overview – Preliminary Selection Process



CT NERR Overview – Preliminary Selection Process

Avery Point, DEEP Marine HQ, Meig's Point NC, Sherwood Island NC, Stratford Audubon Ctr.

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CT NERR Overview – Detailed Selection Process

Detailed Screening:

Each finalist is evaluated based on 32 criteria developed from national guidelines and adjusted for CT.

Category	Number
Environment Characteristics	11
Meshes with NERR System Goals	9
Management Considerations	12

Habitat Composition/Complexity: This is a measure of the diversity of habitat types present within the major ecosystem type found within the boundaries of the site. This criterion is based on the assumption that sites that have a high diversity of habitat types are of higher relative "value" for protection and management than those with a low diversity of habitat types. Major ecosystem type is defined here as that type that comprises approximately 40% of the site. Use the habitat designation listed above for "ecosystem composition".

Table 1.3: *Habitat Composition/Complexity Scoring*

3 points	The candidate site has a **high diversity** of habitat composition within its major ecosystem type, i.e. it contains three or more habitat types or subtypes within its major ecosystem type (e.g. site consists of a combination of swamps, coastal marshes, and mud flats) or has a combination of multiple coastal marsh types (e.g., high, mid, and low marsh zones).
2 points	The site has a **moderate diversity** of habitat composition within its major ecosystem type, i.e., it contains only two habitat types or subtypes within its major ecosystem type (e.g., consists of a combination of swamps and a single coastal marsh type).
1 point	The site has **a low diversity** of habitat composition within its major ecosystem type, i.e., its major ecosystem type consists of a single habitat type (e.g., maritime forest or Juncus marsh).

CT NERR Overview – Detailed Selection Process

Detailed Screening:

- SST is actively seeking and compiling information to address the detailed criteria.
- SST separated into teams based on Criteria Categories to assess each site complex consistently
- Continue through the Summer, with another Fall meeting to collectively regroup, share information and score finalists.

CT NERR Overview – Detailed Selection Process

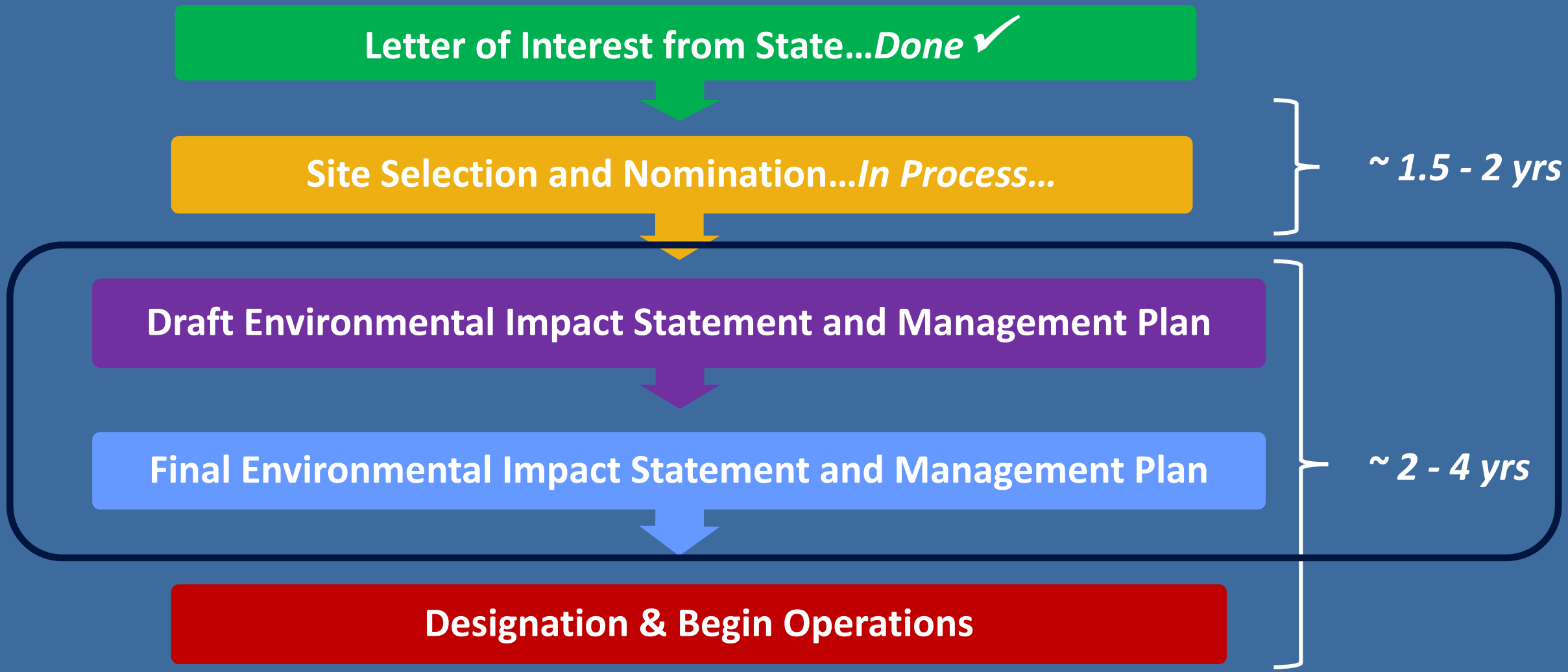
Detailed Screening:

- Once a final site is chosen to nominate, another (formal) public meeting will be held.

- Announced in local papers and Federal Register; held in vicinity of nominee; invites also target specific adjacent landowners, municipal staff, etc.

- Goal – Explain process, accept formal public comments to be included in the nomination package to NOAA

NERR Overview – Process to Establish



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CT NERR Overview – Wrap up

1. CT NERR Steering Committee:

Brian Thompson, Peter Francis - CTDEEP
Sylvain DeGuise - CT SeaGrant
Jim Edson, Ivar Babb, Craig Tobias - UCONN

2. Federal NERR Team:

Erica Seiden, Allison Castellan, Chris Kinkade – NOAA OCM

3. Volunteer New England NERR staff

Betsy Blair and staff - Hudson River NERR, others as needed (hopefully!)

CT NERR Overview – Wrap-up

Core Members:

Susan Whalen, CTDEEP
Dave Kozak, CTDEEP
Mark Parker, CTDEEP
Shannon Kearney, CTDEEP
Chris Elphick, UConn
Jamie Vaudrey, UConn
Michael Whitney, UConn
Roman Zajac, University of New Haven
Scott Warren, Connecticut College
Chantal Collier, The Nature Conservancy
John Forbis, CT Audubon Society, Roger Tory Peterson Estuary Center Board
Ralph Wood, CT Audubon Society, Roger Tory Peterson Estuary Center Board
Peter Auster, Mystic Aquarium
Diana Payne, CT SeaGrant
Julianna Barrett, CT SeaGrant

Outside Experts
(Currently including but not limited to:)

Jennifer Mattei, Sacred Heart University
Shimon Anisfeld, Yale University
James Ammerman, EPA Long Island Sound Study
Suzanne Paton, US Fish & Wildlife Service
Patrick Comins, National Audubon Society
Ralph Lewis, UConn Marine Sciences Emeritus
Ron Rozsa, Public

CT NERR Overview – Wrap up

Outcomes for this meeting:

1. Steering Committee to share an update on progress and results.
2. Seek input and information:
   - Local knowledge? Topical expertise? Comments and/or concerns?
   - Interest in involvement? (Outside expert? Kept in the loop? Other?)

On behalf of Steering Committee - Thank you!

For more information:
www.ct.gov/DEEP/NERR
Kevin.Obrien@ct.gov (860-424-3432)