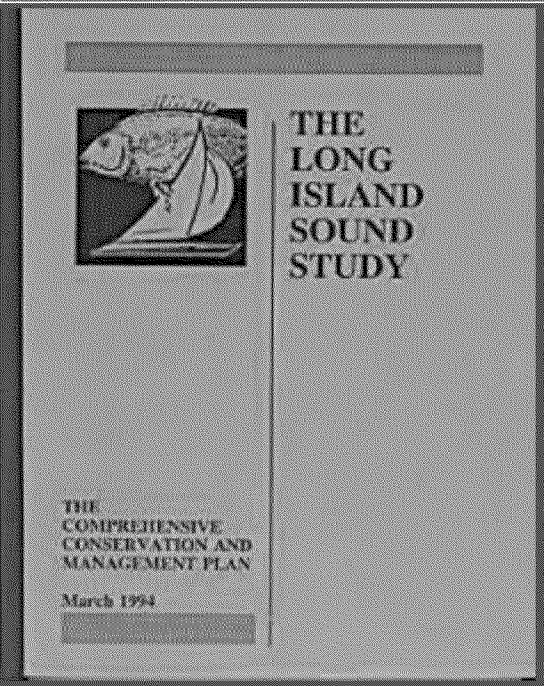
LONG ISLAND SOUND STUDY

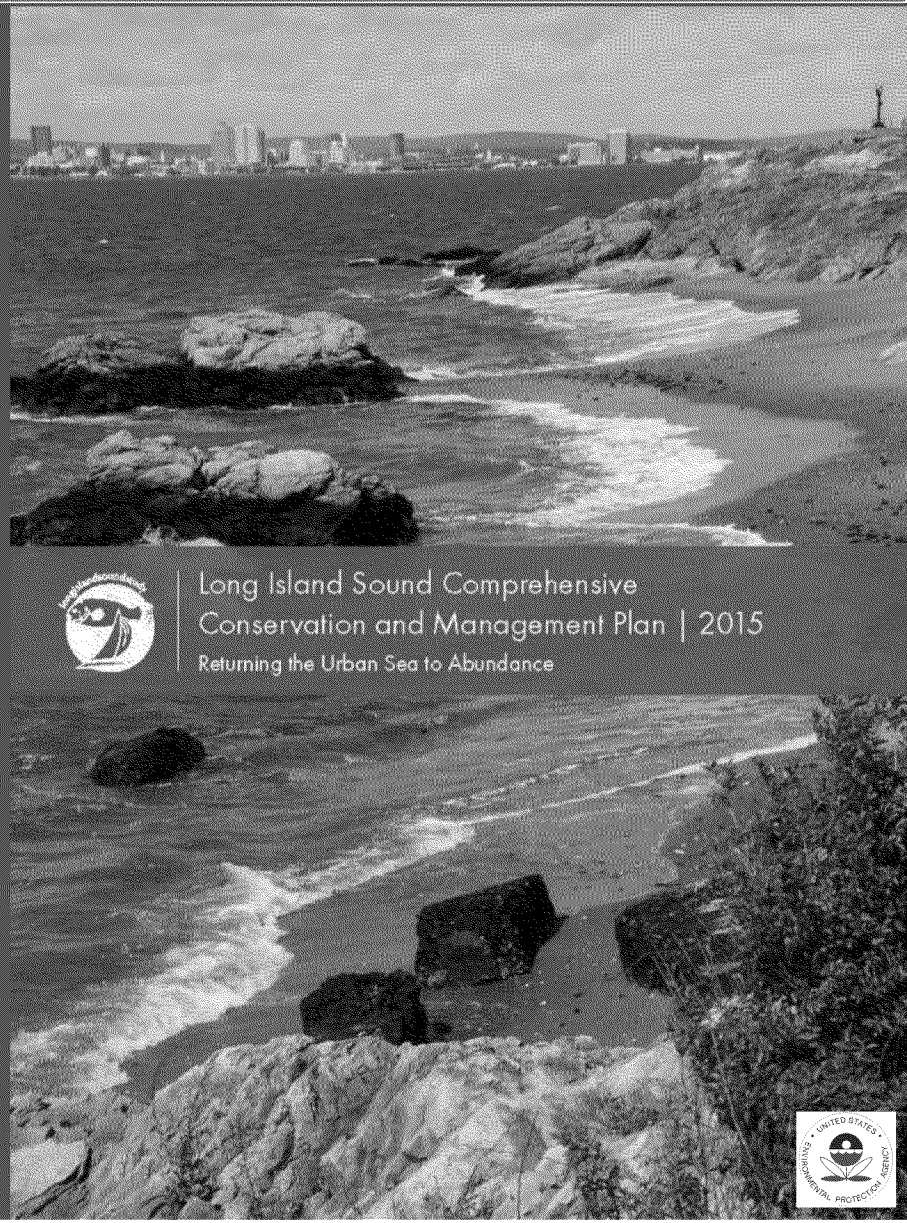
A PARTNERSHIP TO RESTORE AND PROTECT THE SOUND

- One of 28 Estuaries of National significance and part of the EPA National Estuary Program
- Comprehensive Conservation and Management Plan (CCMP) revision in 2015

LONG ISLAND SOUND STUDY

A PARTNERSHIP TO RESTORE AND PROTECT THE SOUND





- *Continues* focus on nitrogen reduction and habitat protection and restoration
- *Adds* climate change resiliency
- *Integrates* sustainability and green infrastructure

Success: Reducing nitrogen

- 50% decrease from sewage treatment plants; 40 million pounds annually
- 25% decrease from atmospheric deposition
- 25% decrease in agriculture

→

- Decreased nitrogen in rivers
- Decreased nitrogen in LIS
- Eelgrass increasing
- Decreased severity of hypoxia

But…more progress needed

- Storm water
- Septic systems
- Turf fertilizer
- Additional treatment plant upgrades

→

- Opportunities to link nitrogen pollution to local community needs for clean water, recreation, and economic health

LONG ISLAND SOUND STUDY

A PARTNERSHIP TO RESTORE AND PROTECT THE SOUND

- ★ Opened 300 miles of riverine migratory corridors to diadromous fish since 1998.
- ★ Restored 1,548 acres of habitat since 1998, 77% of 2000 acres by 2020 goal.
- ★ Protected 2,580 acres of land since 2006

Success: Restoring habitat

Eastern Long Island Sound Supplemental Environmental Impact Statement and Long Island Sound Dredged Material Management Plan

Congressional Staff Briefing

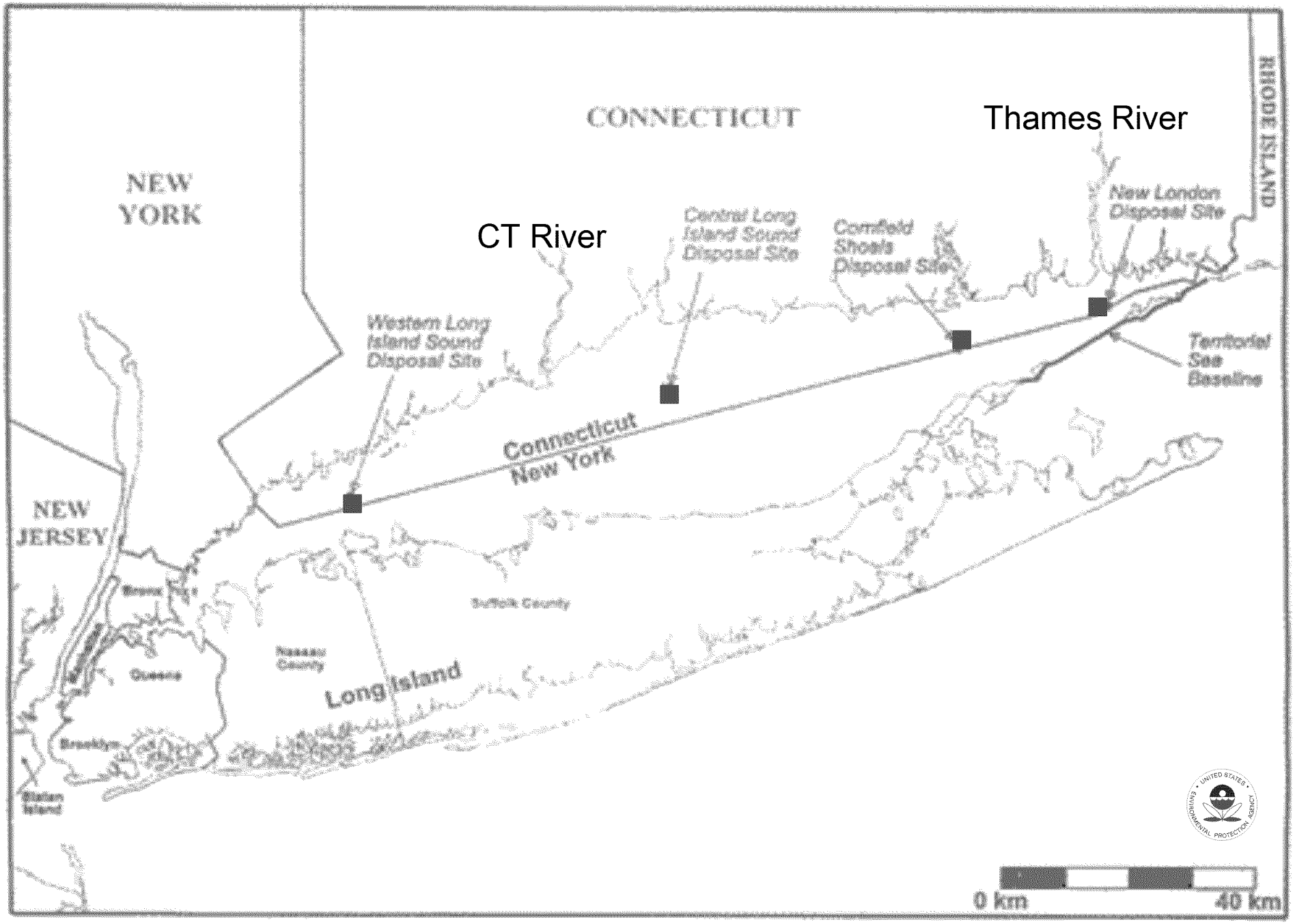
U.S. EPA Region 1
August 6, 2015

Dredged Material Management EPA-USACE Share Responsibility

- Marine Protection, Research, and Sanctuaries Act (MPRSA, aka Ocean Dumping Act)
  - Section 102: EPA Designates Sites
  - Section 103: USACE Selects Sites subject to EPA concurrence

- Dredged material disposal at these sites must meet criteria in Ocean Dumping Regulations (40 CFR Parts 220-229)

- Clean Water Act (CWA)
  - Section 404: USACE issues permits subject to EPA concurrence
  - Section 404(c): EPA has veto authority



CURRENTLY ACTIVE DREDGED MATERIAL DISPOSAL SITES IN LONG ISLAND SOUND

Central/Western LIS Site Designations

- April 2004 – EPA and USACE complete EIS recommending designation of CLDS and WLDS disposal sites, initiates final rulemaking
- June 2004 – NYS DOS objects to proposed federal action as inconsistent with CZM Program
- September 2004-May 2005 – EPA, USACE, NOAA, NY and CT negotiate conditions to site designation rule so NY can withdraw its objection

Site Designation Rule Requires DMMP

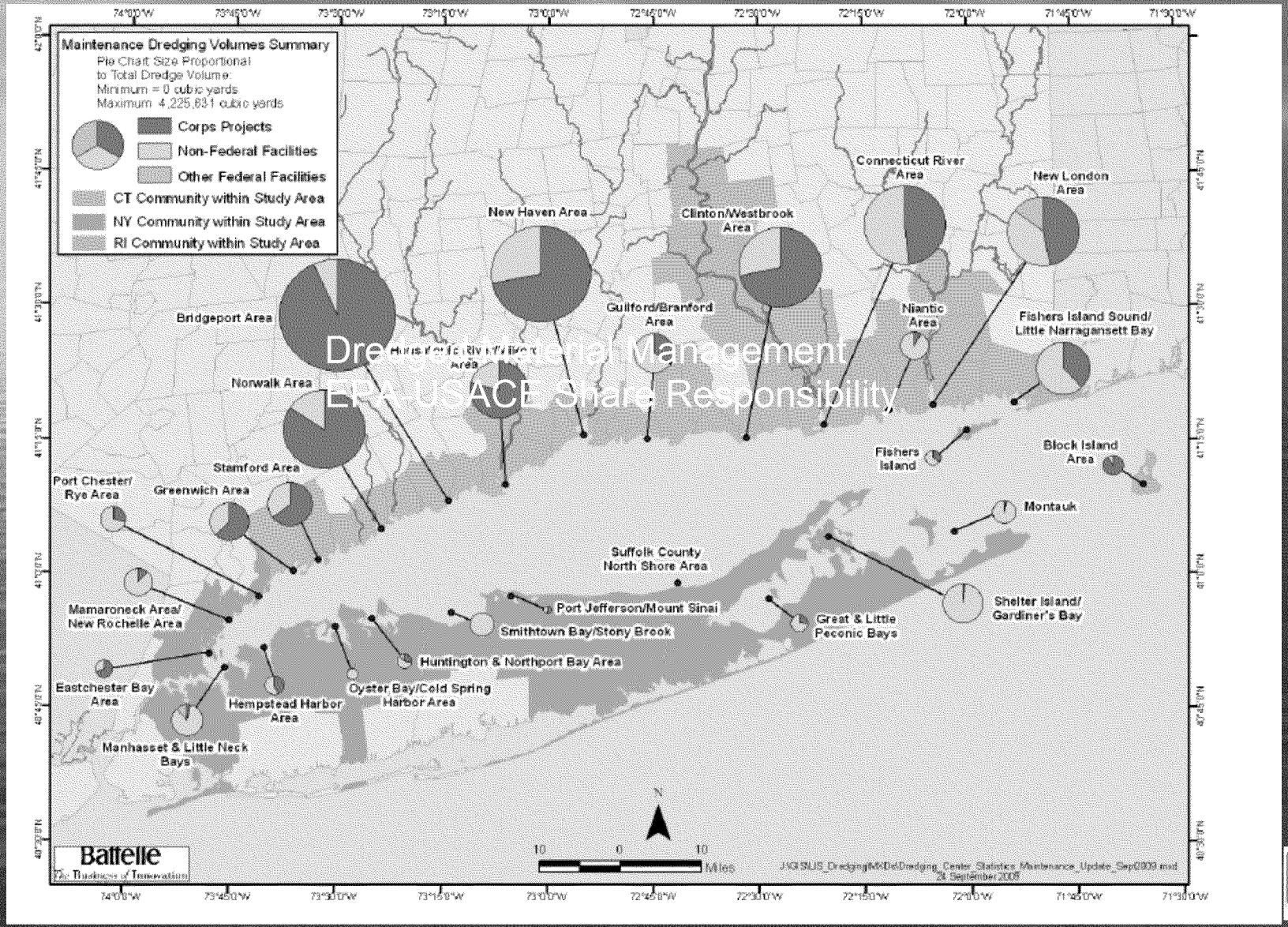
- June 2005 – EPA publishes final rulemaking to designate CLDS and WLDS with conditions which, if not met, will result in sites closing, including:
  - Completion of a regional dredged material management plan (DMMP) for Long Island Sound by 2013*
  - Formation of a Long Island Sound Regional Dredging Team to review alternative analyses for federal and large private dredging projects
  - Production of an annual report by EPA on progress toward completion of the DMMP, and disposition of dredged material from all projects each year

Dredged Material Management Plan

- A USACE comprehensive planning process and decision making tool to address the management of dredged material for a specific harbor or navigation project, group of related projects, or geographic area.

- USACE (NED, NYD, NAD)
- EPA (Reg 1 & 2)
- NYS DOS, NYS DEC
- CTDEEP, CTDOT, RICRMC
- NOAA

LIS Dredged Centers



Dredge Material Management
EPA-USACE Share Responsibility

LIS DMMP Schedule

August 17 – USACE releases draft LIS DMMP for public comment.

August 24 – USACE will conduct public meetings in NY and CT

December 2015 – USACE releases final LIS DMMP

January 2016 – EPA publishes proposed rule to keep CLDS and WLDS open, with “procedures and standards” for their use that will help “reduce or eliminate” open-water disposal

April 2016 – EPA publishes final rule

ELIS SEIS

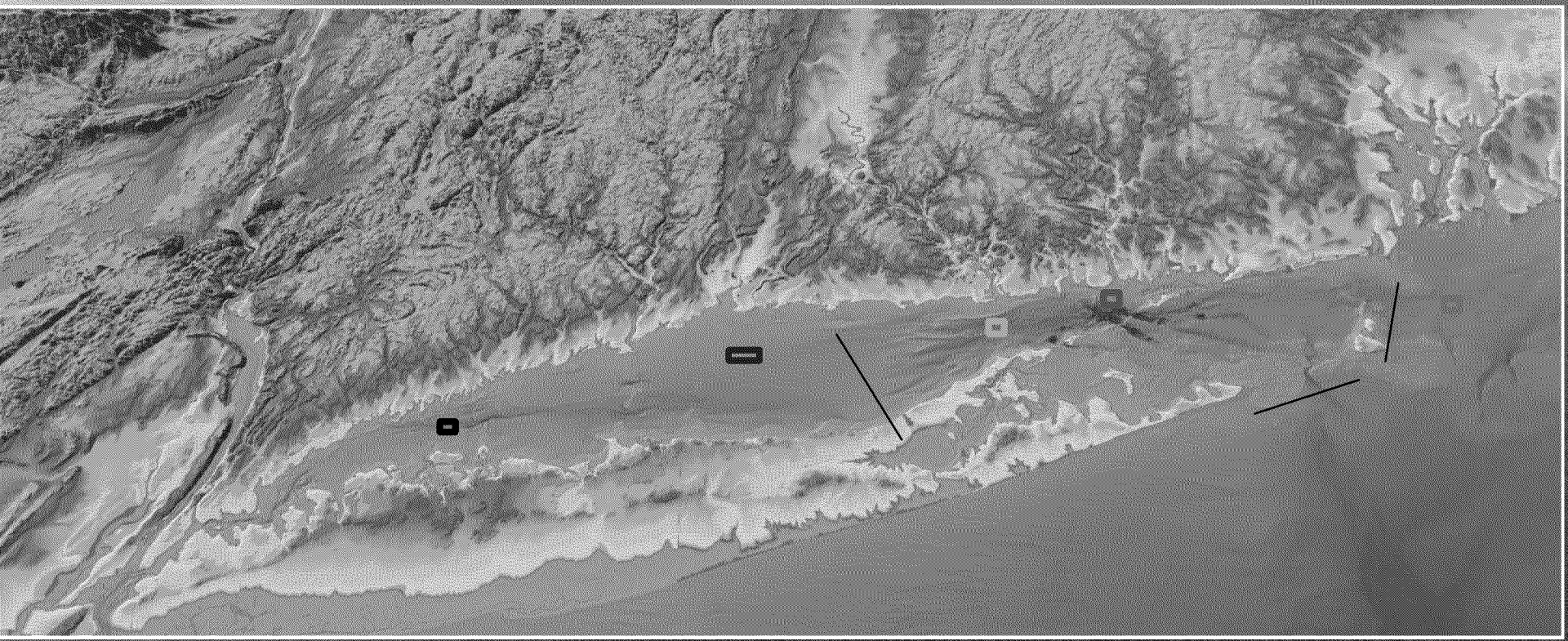
October 2011 – CT DOT funding secured

October 2012 – EPA issues Notice of Intent

November 2012 - EPA hosts public information meetings

2012-2014 – Site screening, cooperating agency meetings, additional studies/data collection, public meetings, data collection/capacity evaluation.

ELIS SEIS Process



Western Long Island Sound Disposal Site

Central Long Island Sound Disposal Site

Cornfield Shoals Disposal Site

New London Disposal Site

Rhode Island Sound Disposal Site

Zone of Siting Feasibility

Approach to Screening

- Marine Protection, Research, and Sanctuaries Act of 1972 (MPRSA): Criteria for ocean dredged material site designation:
  - 5 general criteria (40 CFR 228.5)
  - 11 specific criteria (40 CFR 228.6)

- Screening levels
  - Initial Screening of areas potentially acceptable as an open water disposal site
  - Further evaluate areas using additional data (this may include additional field work, research, etc.)

ELIS SEIS – Approach

- Contributors:
  EPA R1 and R2; USACE; Cooperating Agencies
  Contractors: Tetratech (Navy contract), Coastal Vision (DAMOS-USACE contract- SPI report), Louis Berger (CT DOT contract),UConn (CT DOT contract), ERG (EPA HQ contract), WHG (CT DOT and EPA HQ contract), and Battelle (CT DOT contract)

- Site screening - Data sources:
  LIS DMMP, LIS EIS, contractor support, OSV Bold surveys

- Physical Oceanography Study:
  - Sedimentary Environment/Bottom Stress
  - Captured data from Superstorm Sandy
  - Sediment transport modeling will include chemical signature for sediment transported to shoreline (UConn)

- Biological/Risk/toxicity study
  - evaluating dredged material project data in addition to available literature

ELIS SEIS – Budget

- CT DOT - Connecticut State Bond Commission approved $1.8 million in October 2011. An additional $750,000 contributed in 2012. $1.4 obligated to date. <u>$1.1 million available</u>.

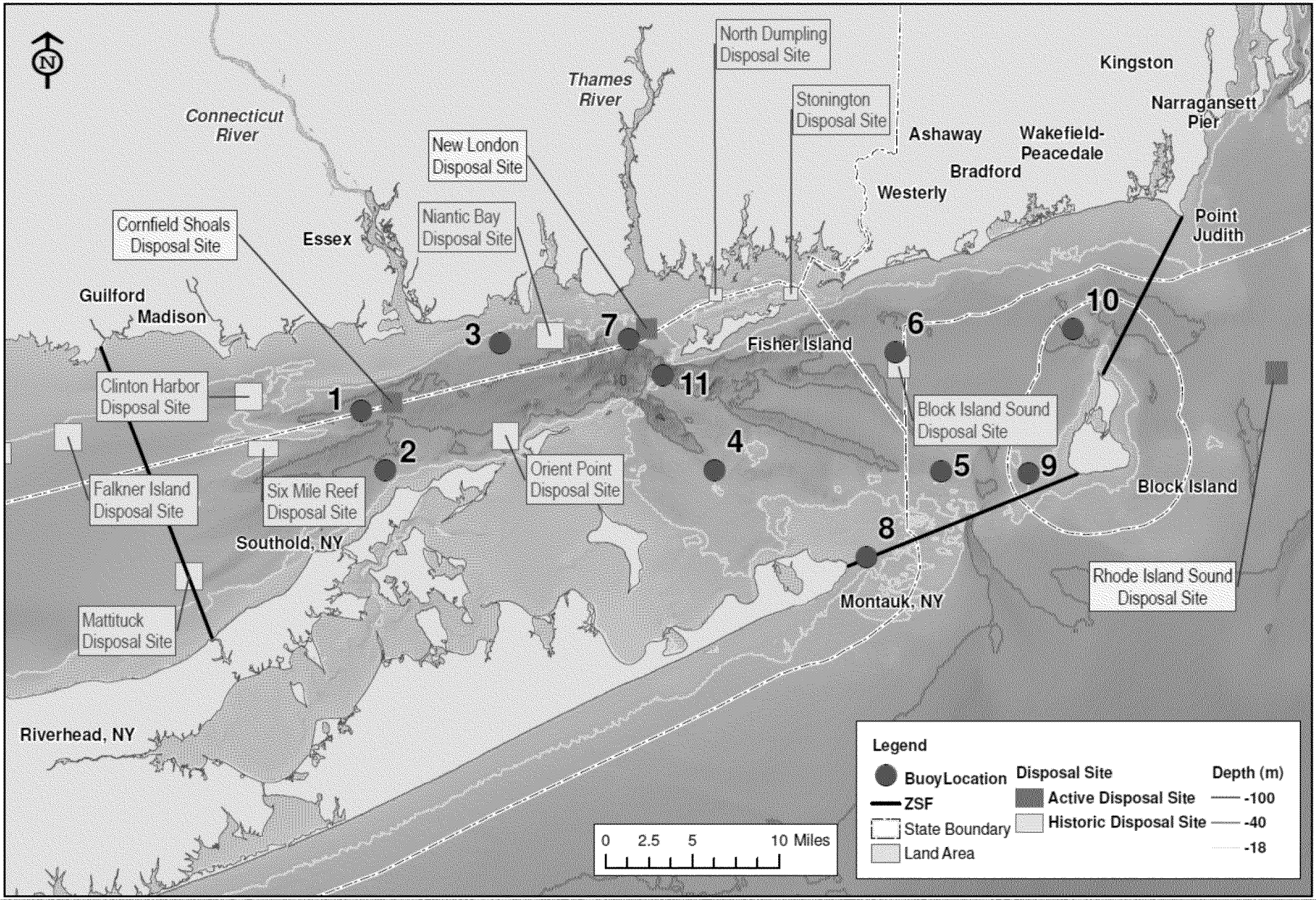
- Navy provided $410,000 for biological resource characterization.

- EPA provided $40,000 for technical support for USACE labor and $100,000 for data analyses.

ELIS SEIS – Site Screening

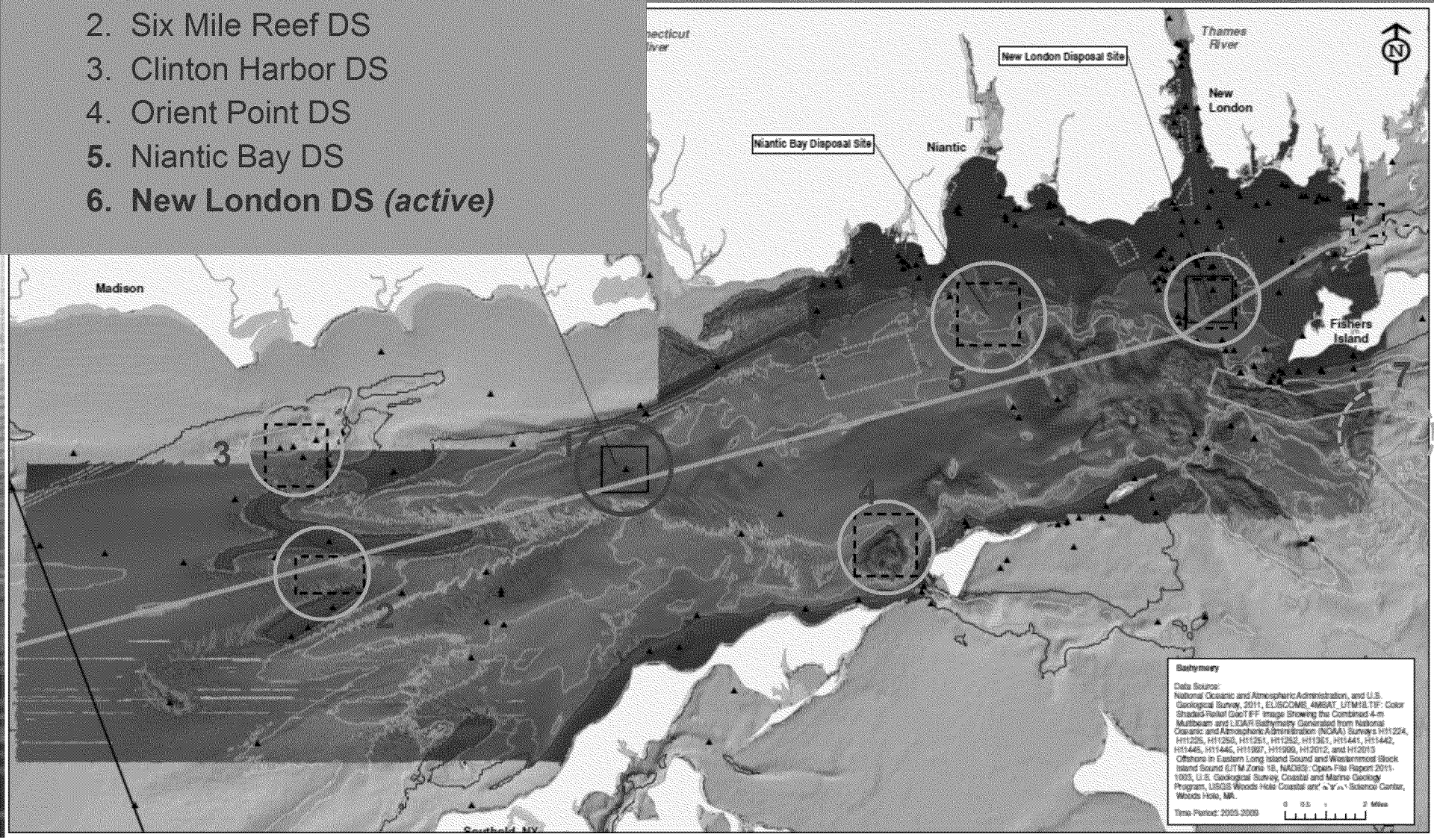
- Sedimentary Environment
  - Bathymetry
  - Currents and Waves; Bottom Stress
  - Sediment Texture (resuspension potential; habitat)
- Areas of Conflicting uses
  - Infrastructure (cables, pipelines)
  - Navigation (shipping lanes, anchoring areas)
  - Recreation (areas and navigation)
  - Conservation Areas (sanctuaries, wildlife refuges, National Seashores, parks, artificial reefs, etc.)
  - Cultural and Archaeological Resources
- Biological Resources
  - Shellfish Beds
  - Benthic Community
  - Fish Habitat, Fish Concentrations, and Fishing Areas
  - Breeding, Spawning, Nursery, Feeding, and Passage Areas

Physical Oceanography Study – Buoy Locations

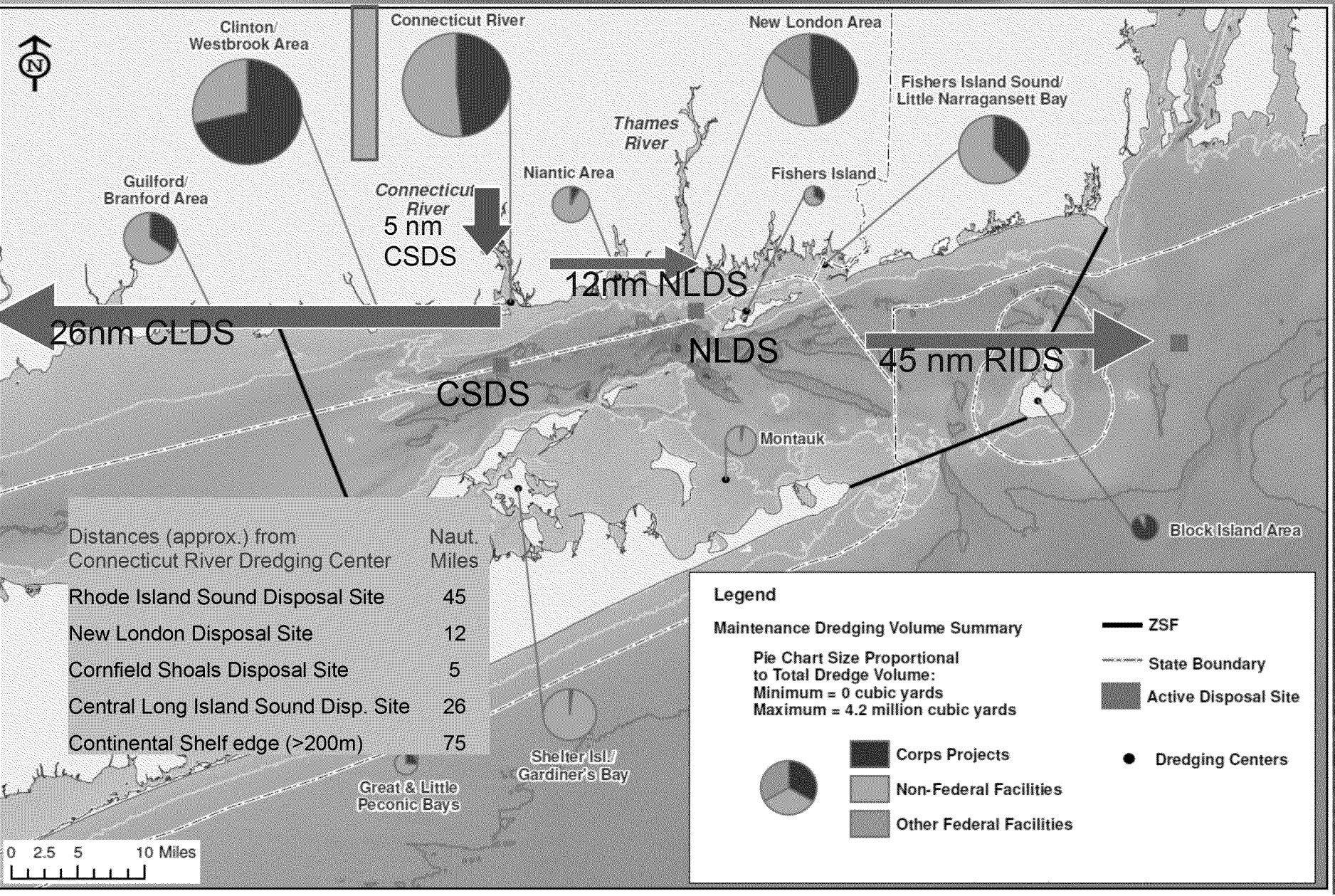


ELIS SEIS – Site Screening

1. **Cornfield Shoals DS (*active*)**
2. Six Mile Reef DS
3. Clinton Harbor DS
4. Orient Point DS
5. Niantic Bay DS
6. **New London DS *(active)***



Dredging Centers and Disposal Distance



Distances (approx.) from Connecticut River Dredging Center	Naut. Miles
Rhode Island Sound Disposal Site	45
New London Disposal Site	12
Cornfield Shoals Disposal Site	5
Central Long Island Sound Disp. Site	26
Continental Shelf edge (>200m)	75

ELIS SEIS – Dredging Needs

- Dredging Needs for LIS over 30 years reported in 2009 by USACOE:

  30.5 mcy (20 mcy in CT)

- Dredging Needs for LIS over 30 years reported in 2015:

  53 mcy (38 mcy in CT, 12 mcy in NY and 2 mcy in RI)

- Dredging Needs for eastern LIS in 2015:

  21.5 mcy (16.4 mcy in CT)

  10.8 mcy suitable fine and 5.6 mcy suitable sand

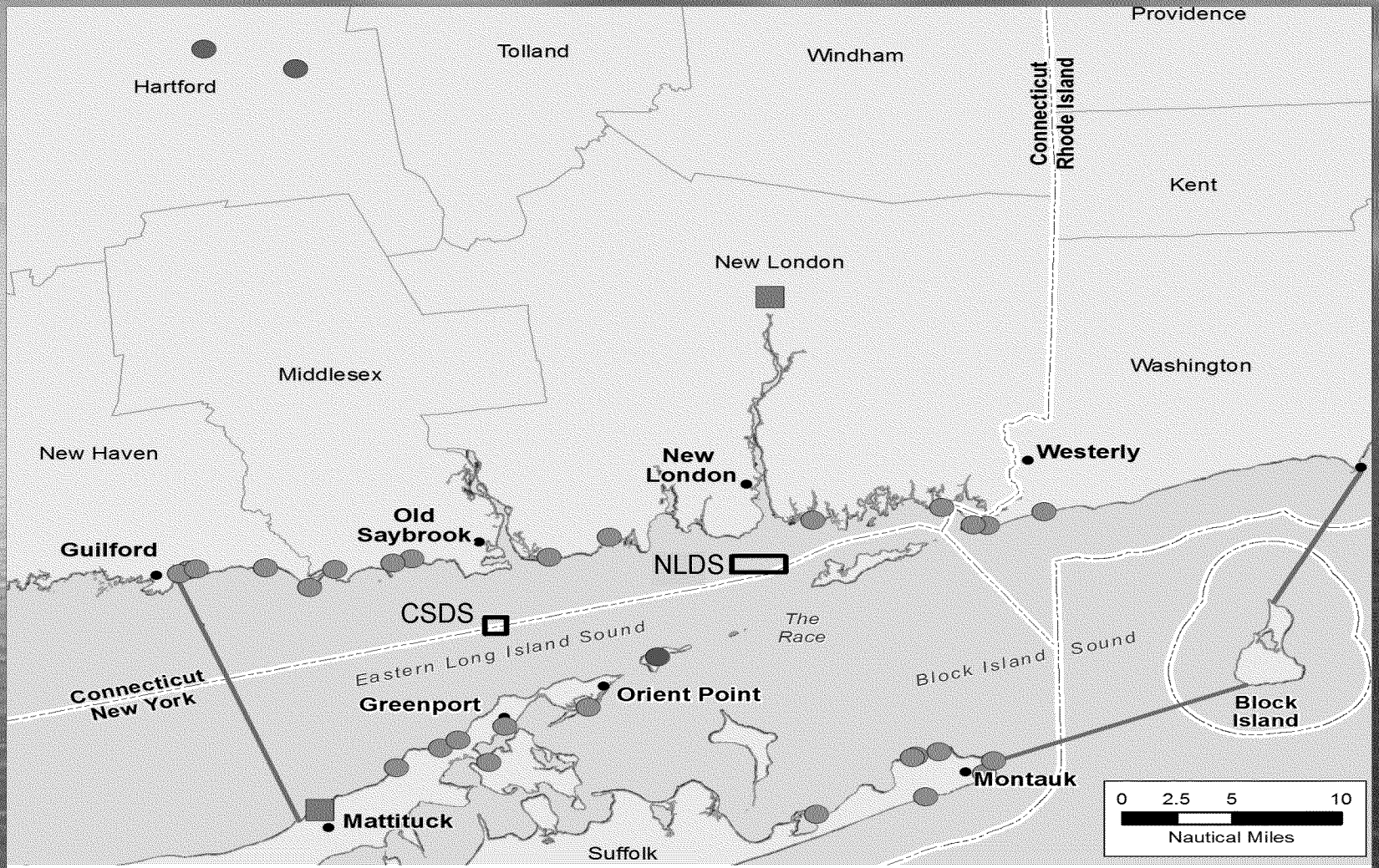
- Available capacity: Open water, beach nourishment, near shore berm sites, CDFs, Upland sites in NY and RI

- Two major upland sites (land fills) in CT are no longer available

ELIS SEIS – Alternatives

- 18 potential near shore berm sites (total 1.9 mcy capacity – 18% in CT)
- 5 potential island CDF sites (30 mcy capacity)
- 26 potential beach nourishment sites (capacity 2.8 million to 3.4 million cy)
- 72% of the maximum capacity in NY, 23% in CT, and 5% in RI.

ELIS SEIS – Beach Nourishment



Legend

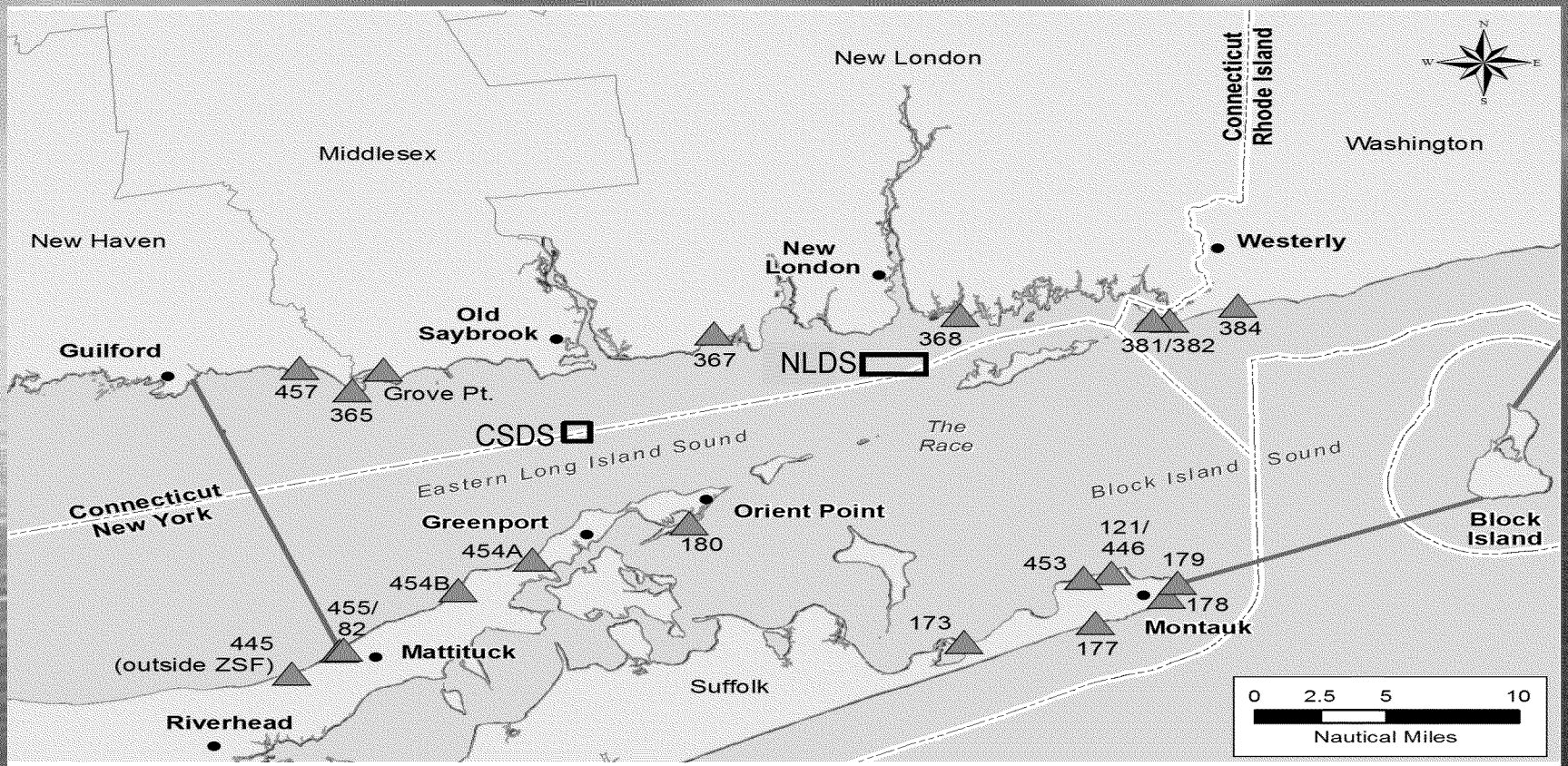
- Zone of Siting Feasibility
- State Boundary
- County
- Currently Used Disposal Sites

Upland Beneficial Use and Dewatering Sites

- Dewatering
- Landfill

- Beach
- Habitat Restoration
- Redevelopment

ELIS SEIS – Near-Shore Berms



Legend

- Zone of Siting Feasibility
- State Boundary
- County
- Currently Used Disposal Sites
- Nearshore Berm Site

ELIS SEIS Schedule

September – Cooperating agencies review final agency draft SEIS

October – EPA releases draft SEIS and proposed site designation rule for public comment

November – EPA conducts public meetings

June 2016 – EPA releases final SEIS and rule

QUESTIONS?