# Eastern Long Island Sound Supplemental Environmental Impact Statement (ELIS SEIS) Public Meetings (NY & CT)

U.S. EPA Region 1 and 2
June 25-26, 2013

# ELIS SEIS Agenda

**2:00 pm Registration**

**2:30 pm Ground Rules/Logistics**
**Facilitator, Bernward Hay, the Louis Berger Group, Inc. (LBG)**

**2:35 pm Welcome/Project Update**
**Jean Brochi, Project Manager, Ocean and Coastal Protection Unit**
**EPA Region 1**

**2:55 pm Site Screening/GIS**
**Bernward Hay, LBG**

**3:30 pm Discussion and Next Steps**
**Bernward Hay, LBG**

**4:30 pm Adjourn**



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# 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



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# EPA's Role in Dredging

- Designate ocean dredged material disposal sites for long-term use (following EPA's voluntary NEPA policy to prepare an EIS)
- Promulgate regulations and criteria for disposal site selection and permitting discharges
- Review USACE dredging projects and permits
- Develop site monitoring/management plans (SMMP)
- Monitor disposal sites jointly with USACE



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# Long Island Sound Dredged Material Disposal Sites

Designated by EPA in July 2005:

- Western Long Island Sound
- Central Long Island Sound

Selected by USACE in 1990s, scheduled to close December 2016:

- Cornfield Shoals
- New London

# Long Island Sound Environmental Impact Statement

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



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# Long Island Sound Environmental Impact Statement

- June 2005 – EPA publishes final rulemaking to designate CLIS and WLIS 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 (or 2014)
  - 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



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# Eastern Long Island Sound Supplemental Environmental Impact Statement (ELIS SEIS)

- October 2012: Published a Notice of Intent
- November 14, 2012 and January 9, 2013 Public meetings
- January 8, 2013, May 20, 2013 and June 18, 2013 Cooperating Agency meetings
- Literature and Data gap analysis ongoing
- Physical Oceanographic Study (initiated March 2013) ongoing
- Screening using data available in Geographic Information Systems (GIS) ongoing

# ELIS SEIS Partners

- COOPERATING AGENCIES:
  EPA R1 and R2, NYDOS, NYDEC, CTDEEP, RICRMC, USACE NYD, USACE NED, NOAA, and USCG.

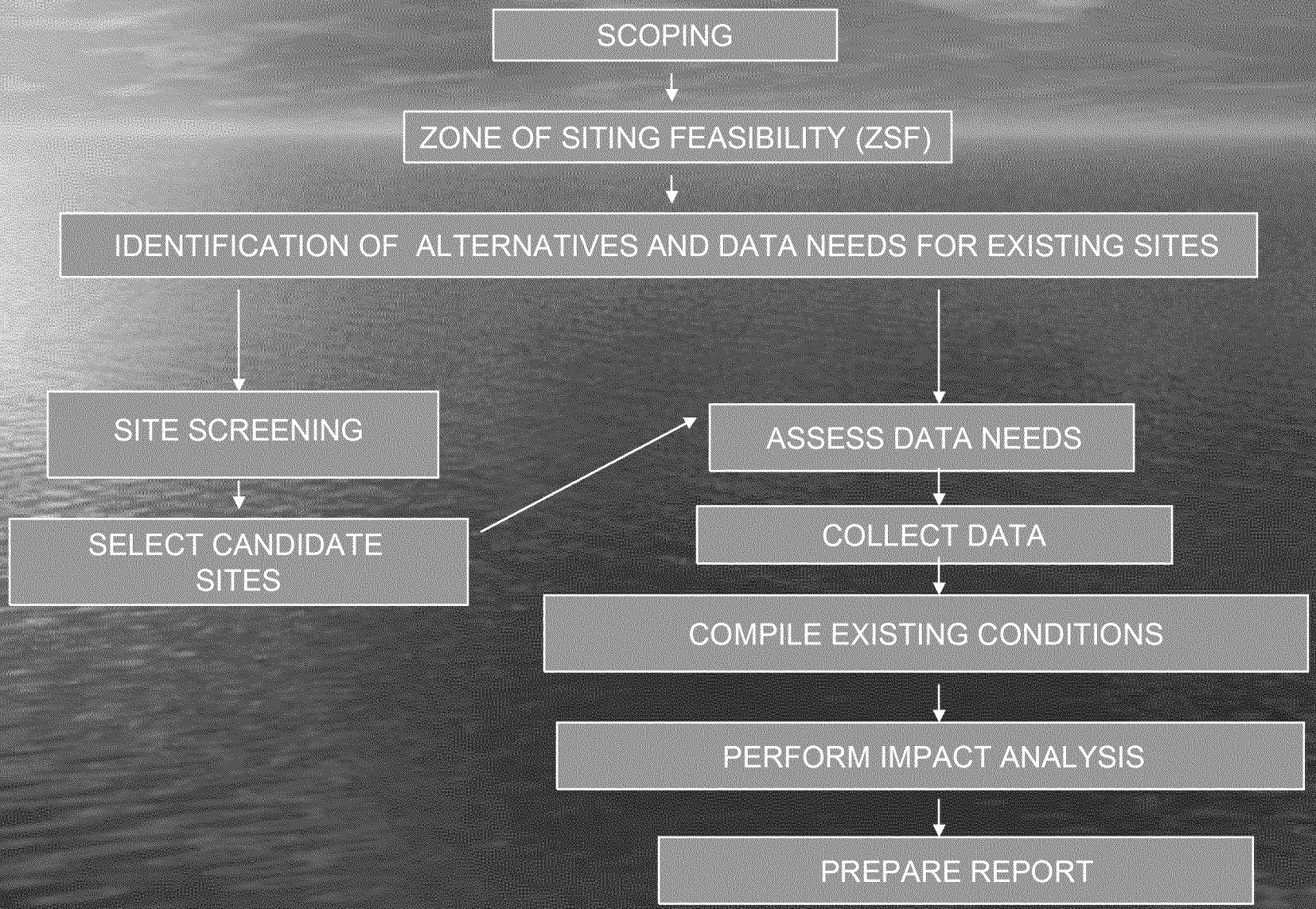
- COORDINATING AGENCIES:
  USFWS and the NAVY

- Additional Coordination: Tribes, SHPO's

# ELIS SEIS Schedule

- Draft SEIS by December 2014
- Final SEIS by December 2015
- Assuming SEIS recommends designation of one or more sites, publish final rulemaking by December 2016

# ELIS SEIS Process



# LIS DMMP Studies

Dredging Needs Report completed in October 2009:

- Determined that approximately 13.5 million cubic yards will be dredged from ELIS harbors and channels over the next 26 years (planning horizon to 2028)

Upland, Beneficial Use, and Sediment Dewatering Reports completed in 2009-2010:

- Determined that there are very few alternatives to open-water disposal sites in CT, and most of those are beach nourishment



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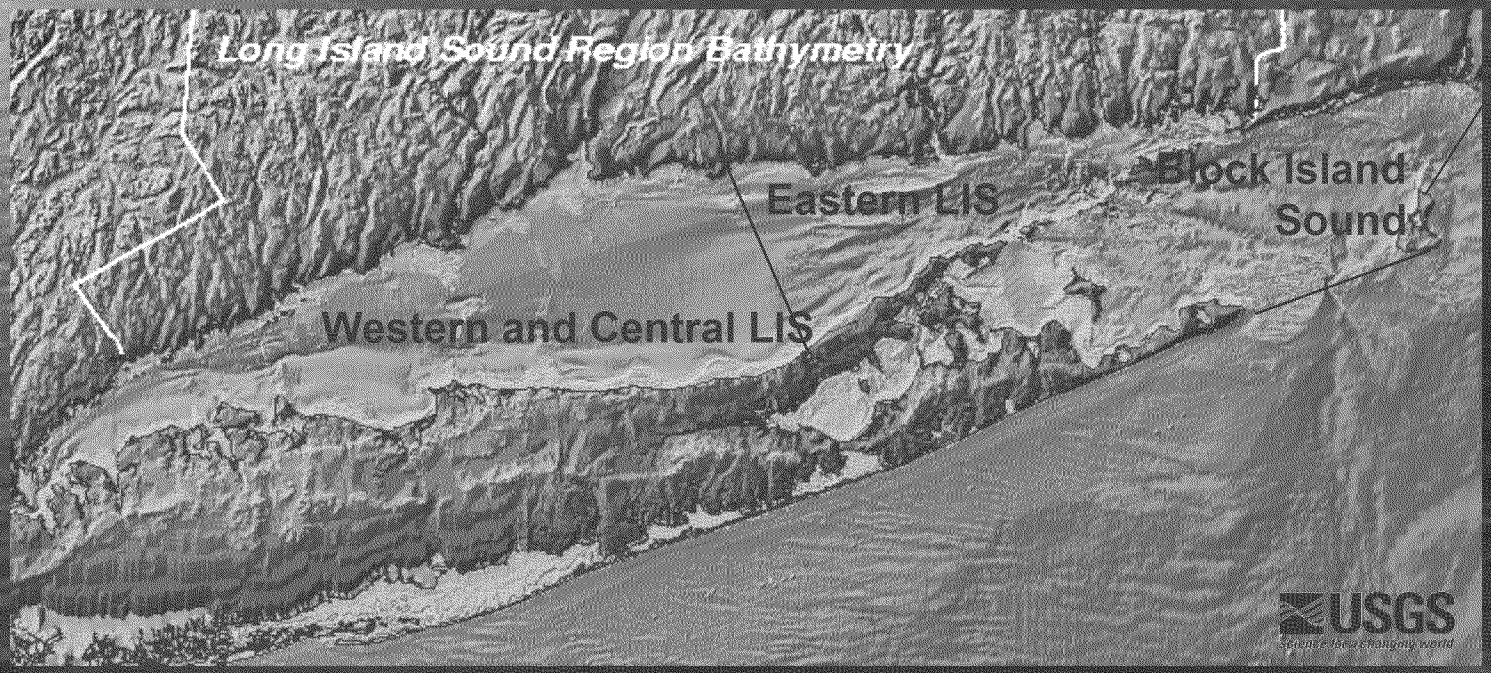
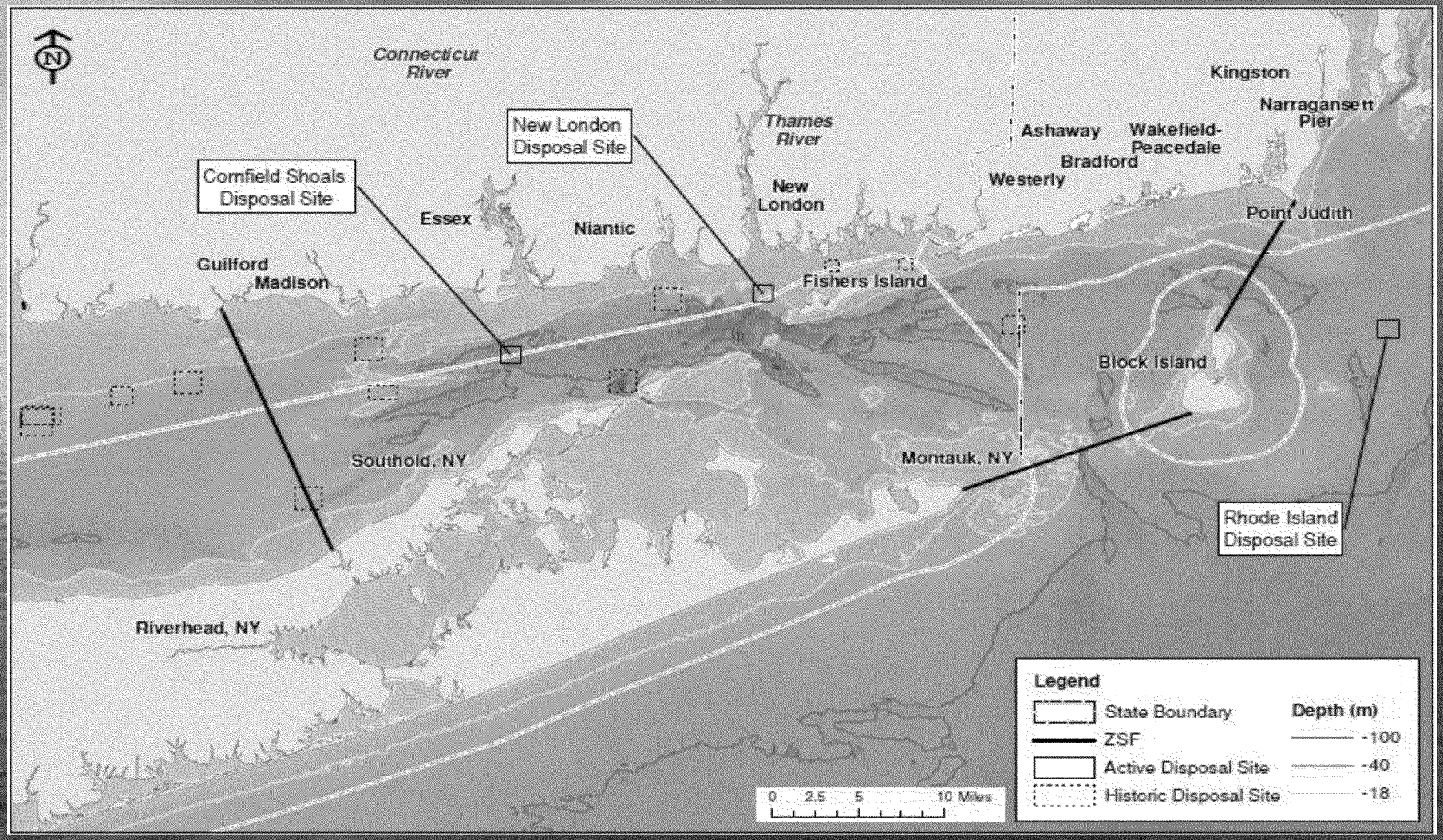
# ELIS –SEIS
# Zone of Siting Feasibility

- SEIS will address the eastern region of Long Island Sound, and Block Island Sound



# ELIS SEIS – Active Dredged Material Disposal sites



# 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.)

# Approach to Screening MPRSA -11 specific criteria (40 CFR 228.6)

1. Geographical position, depth of water, bottom topography and distance from coast
2. Location in relation to: breeding, spawning, nursery, feeding, passage areas of living resources
3. Location in relation to beaches, public use areas
4. Types and quantities of disposal, etc.
5. Feasibility of surveillance and monitoring
6. Dispersal, horizontal transport and vertical mixing characteristics of the area, including prevailing current direction and velocity, if any
7. Existence and effects of current and previous discharges and disposal in the area (including cumulative effects)
8. Interference with shipping, fishing, recreation, fish and shellfish culture, areas of special scientific importance and other legitimate uses of the ocean
9. Existing water quality and ecology of the site
10. Potentiality for the development or recruitment of nuisance species in the disposal site
11. Existence at or in close proximity to the site of any significant natural or cultural features of historical importance.



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# Approach to Screening MPRSA - 5 general criteria (40 CFR 228.5)

1. Conflicting Uses - in areas selected to minimize the interference with areas of existing fisheries or shellfisheries and regions of heavy commercial or recreational navigation.

2. Conditions - will be so chosen so that temporary perturbations in environmental conditions caused by disposal operations will be reduced before reaching any beach, shoreline, marine sanctuary, or known geographically limited fishery or shellfishery.

3. Site Use - at any time if approved sites do not meet the criteria for site selection set forth in Sections 228.5 through 228.6, the use of such sites will be terminated as soon as suitable alternate disposal sites can be designated.

4. Site Size - the sizes of ocean disposal sites will be limited in implement effective monitoring and surveillance programs; the size, configuration, and location of any disposal site will be determined as a part of the disposal site designation study.

5. Historically Used - USEPA will, wherever feasible, designate disposal sites beyond the edge of the continental shelf and other such sites that have been historically used.



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# Site Screening - Examples

- 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



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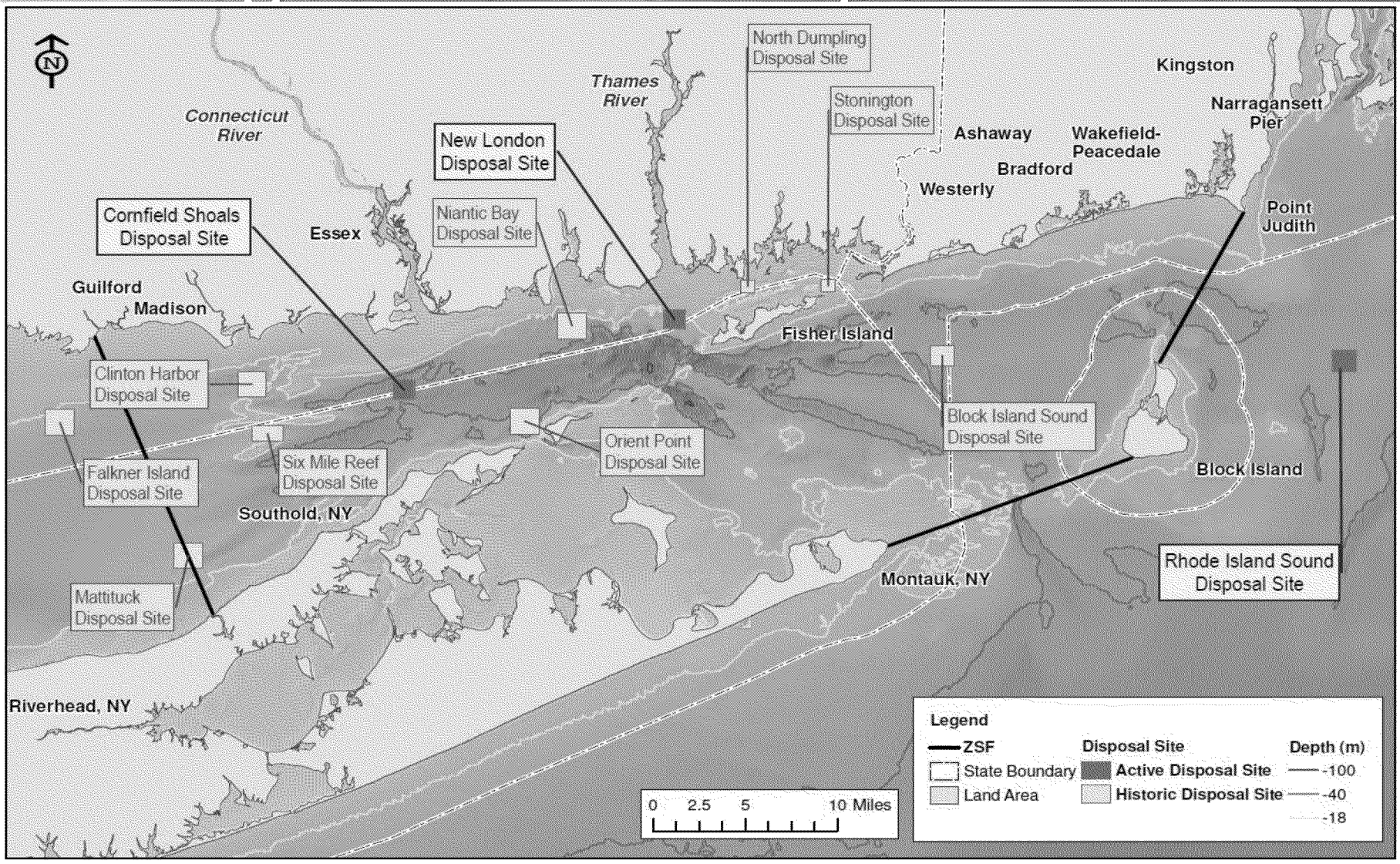
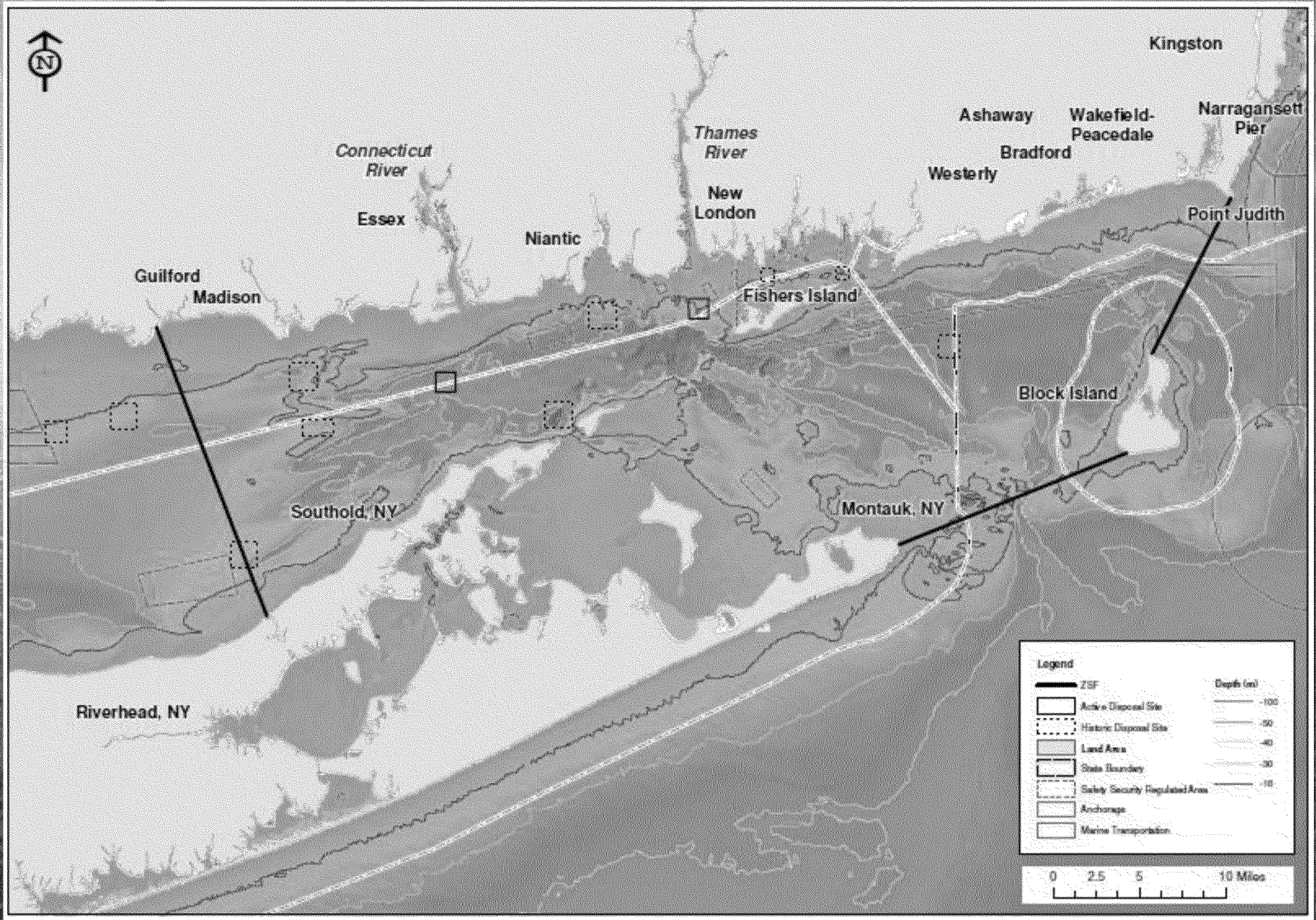
# ELIS SEIS – Historic Dredged Material Disposal sites

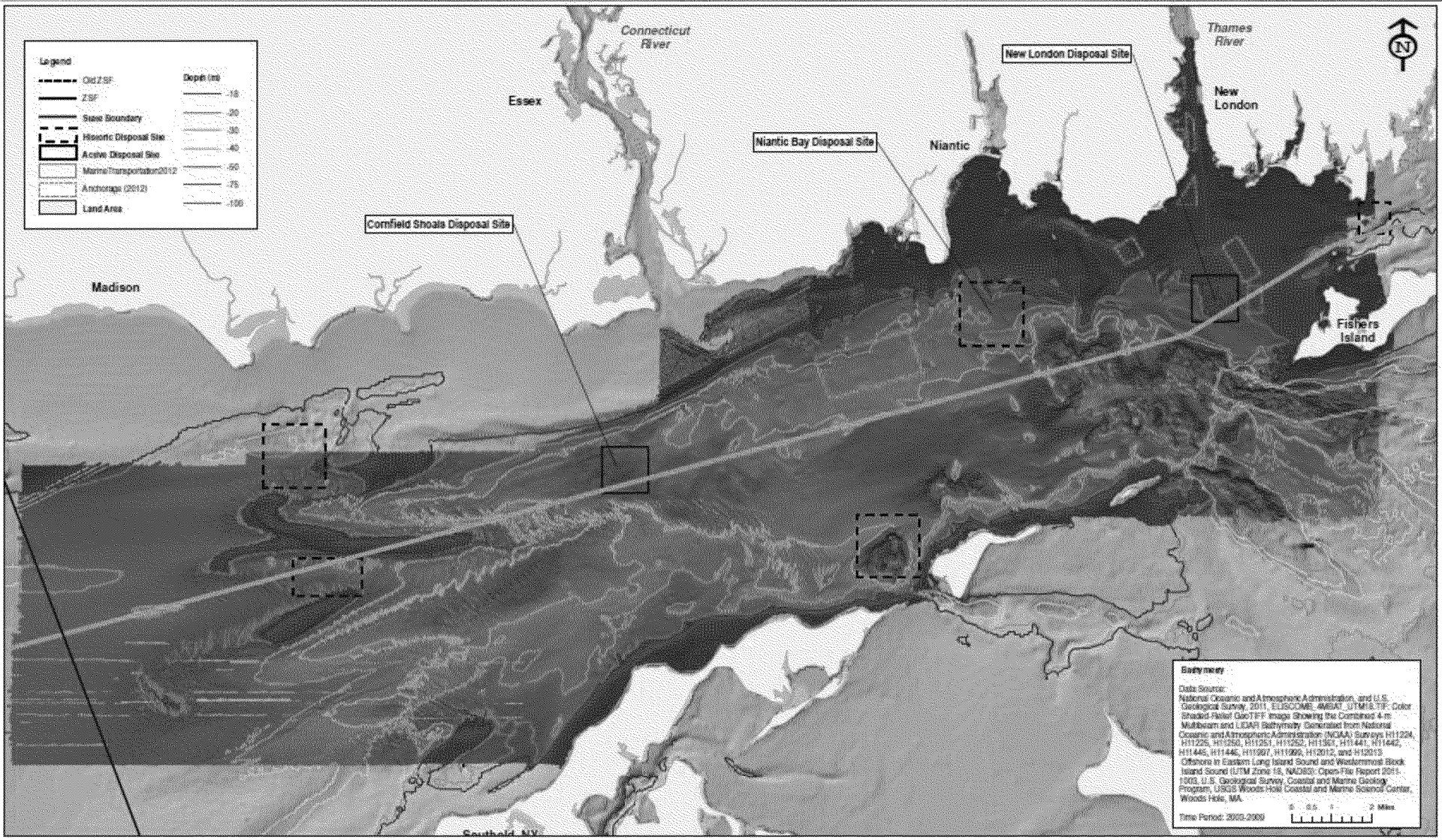


# Sedimentary Environment

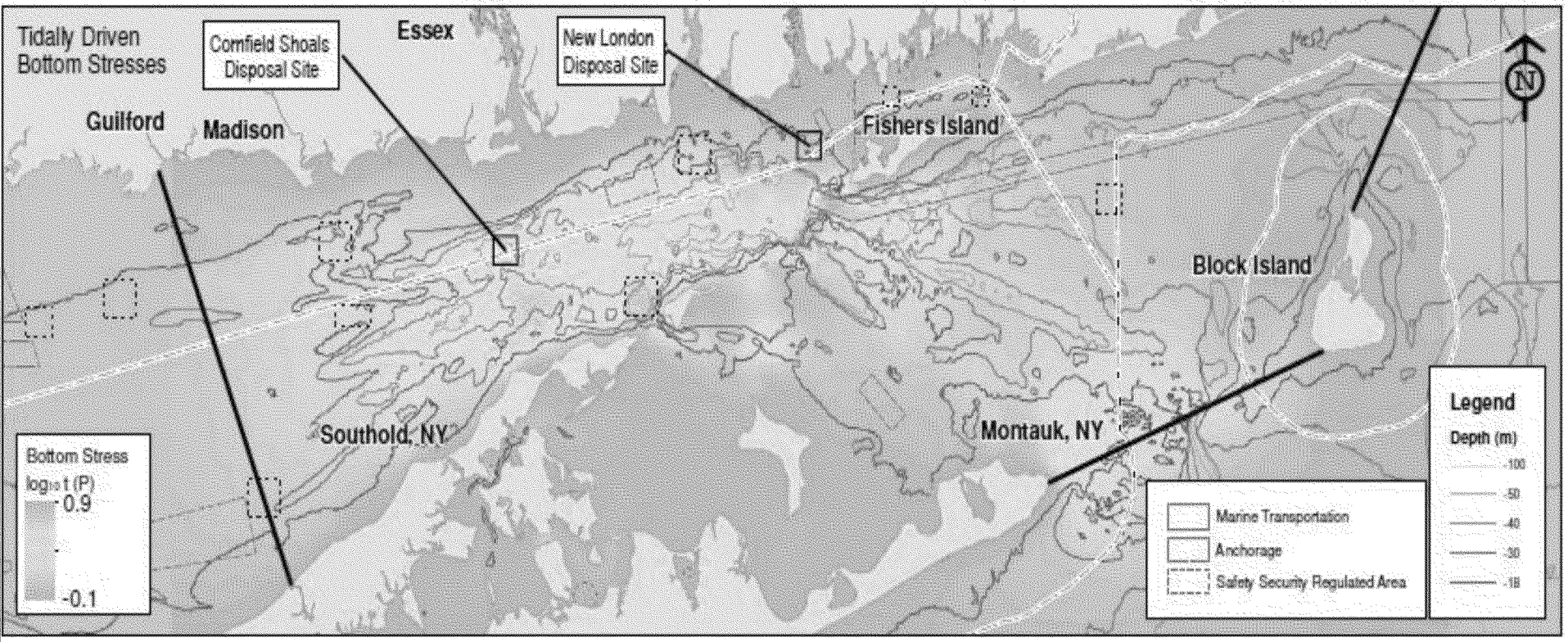
# Bathymetry (ZSF)



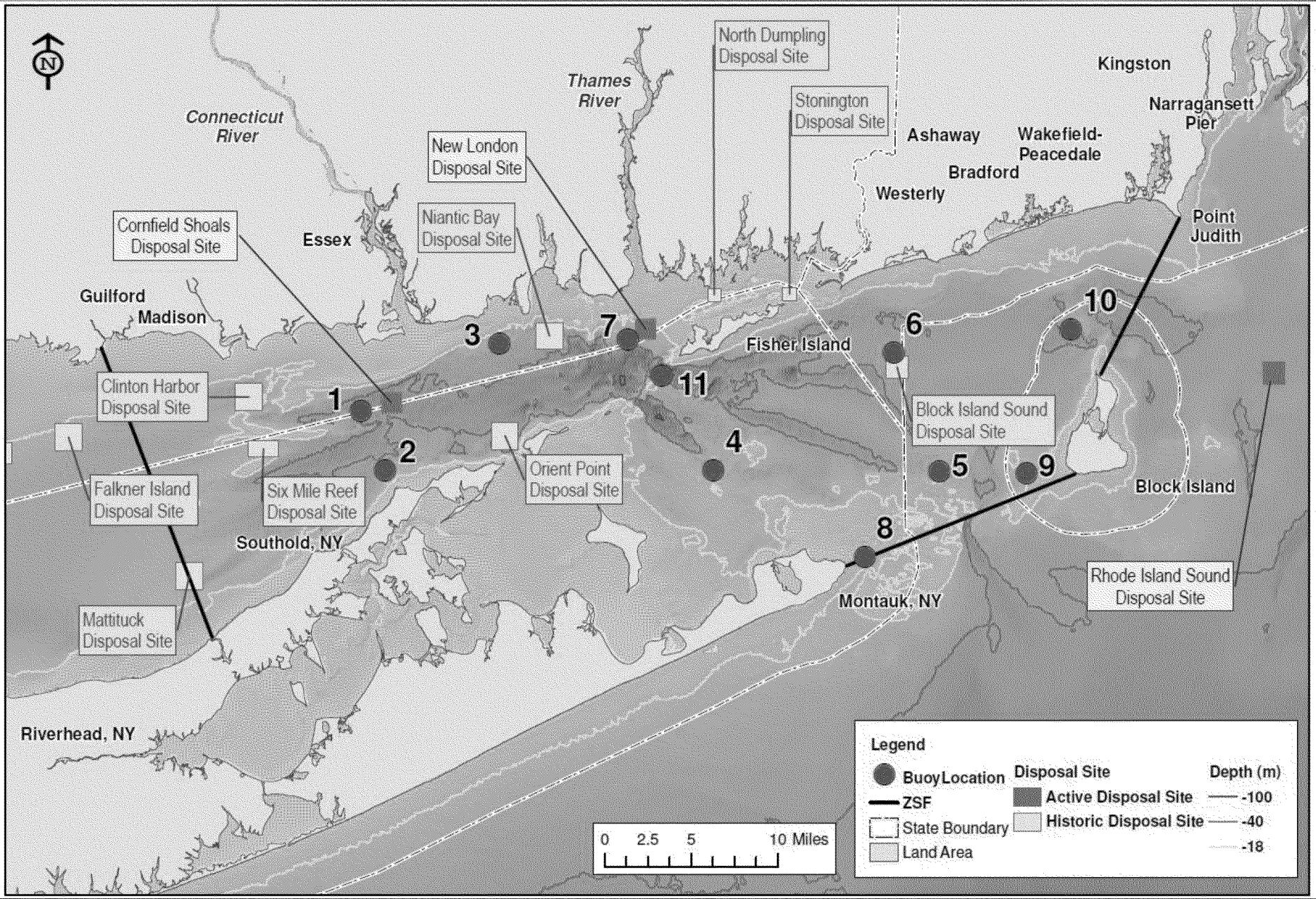
# Bathymetry (Eastern LIS)



# Tidally-Driven Bottom Stress

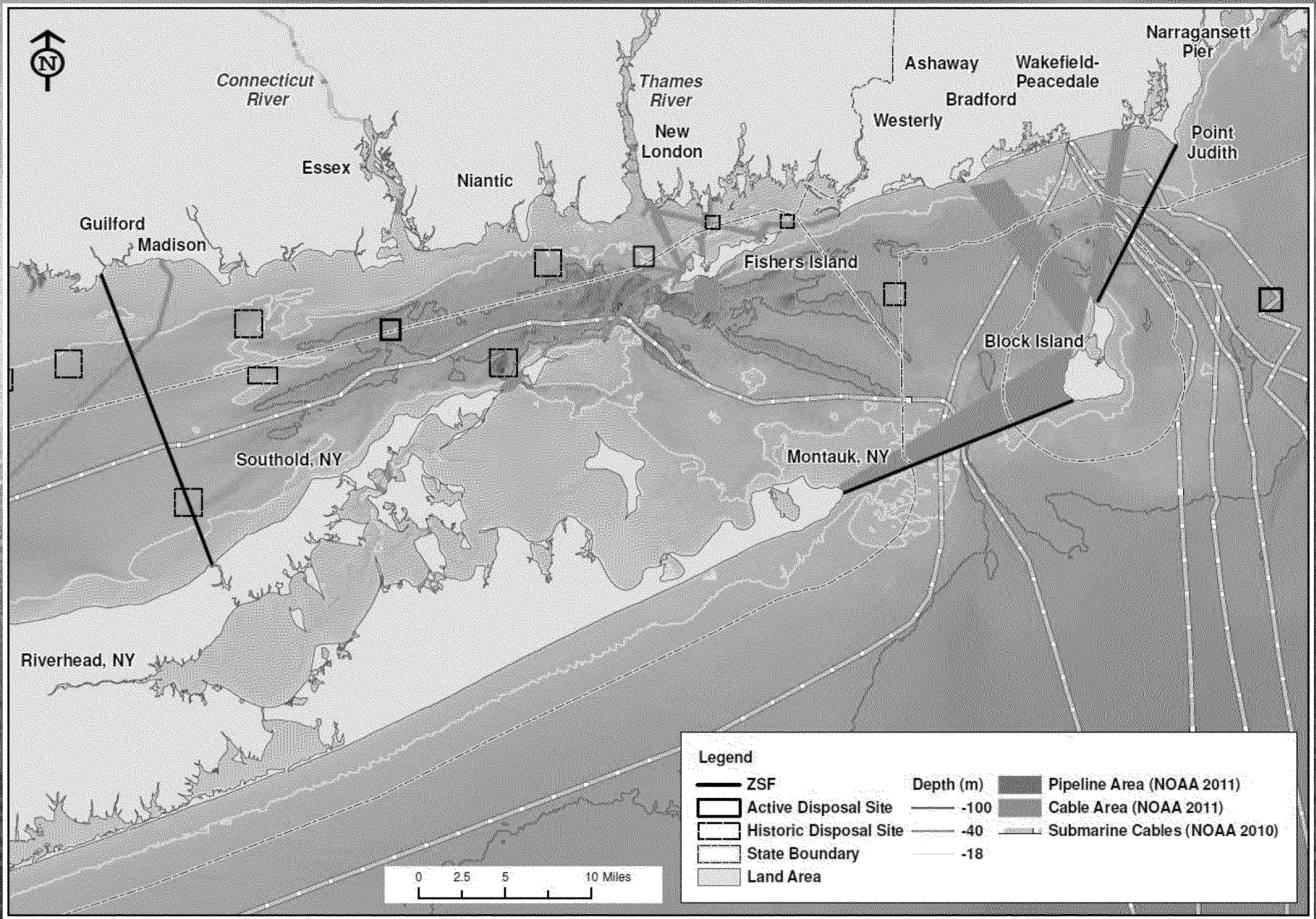


# Physical Oceanography Study – Buoy Locations

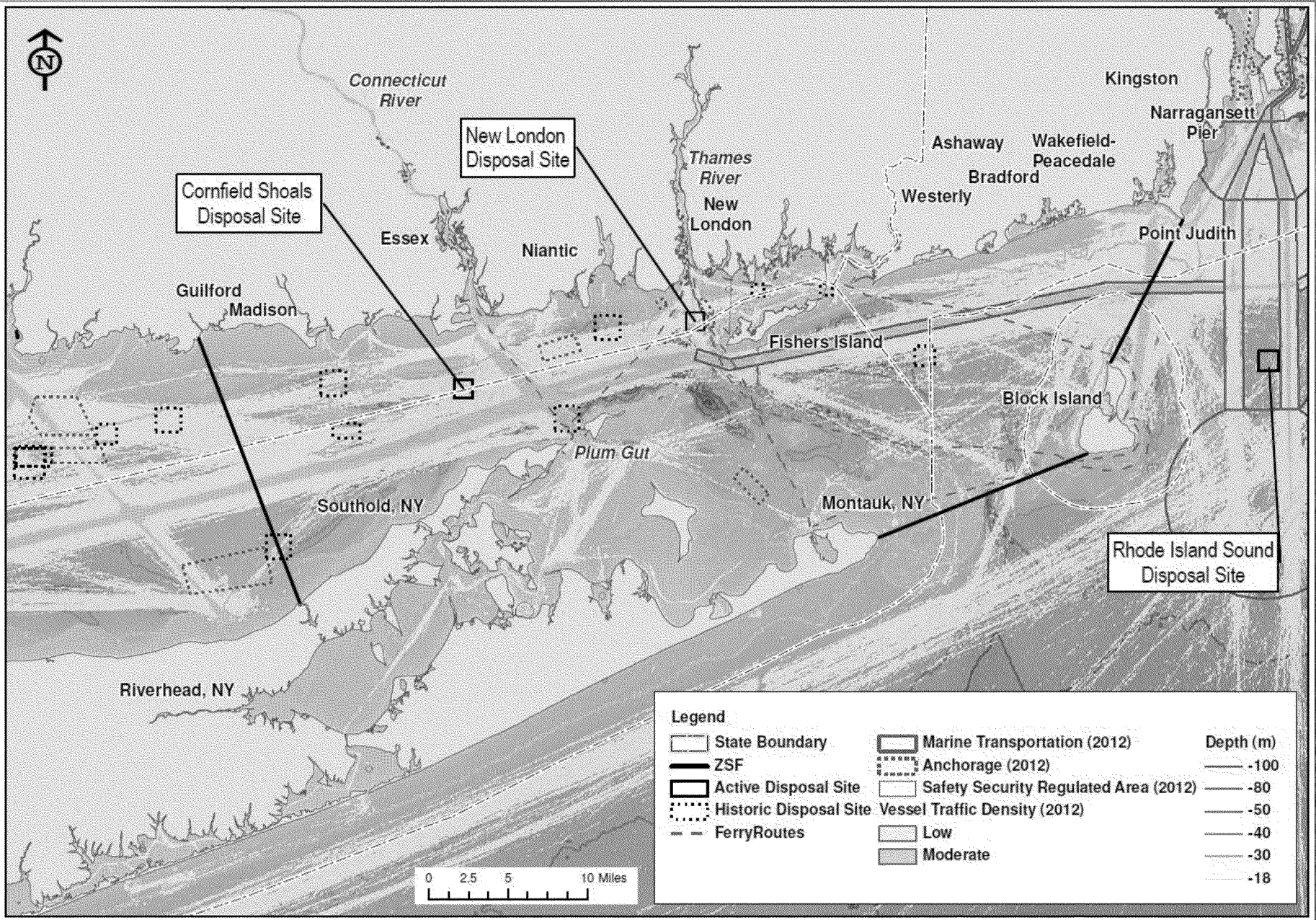


# Areas of Conflicting Uses

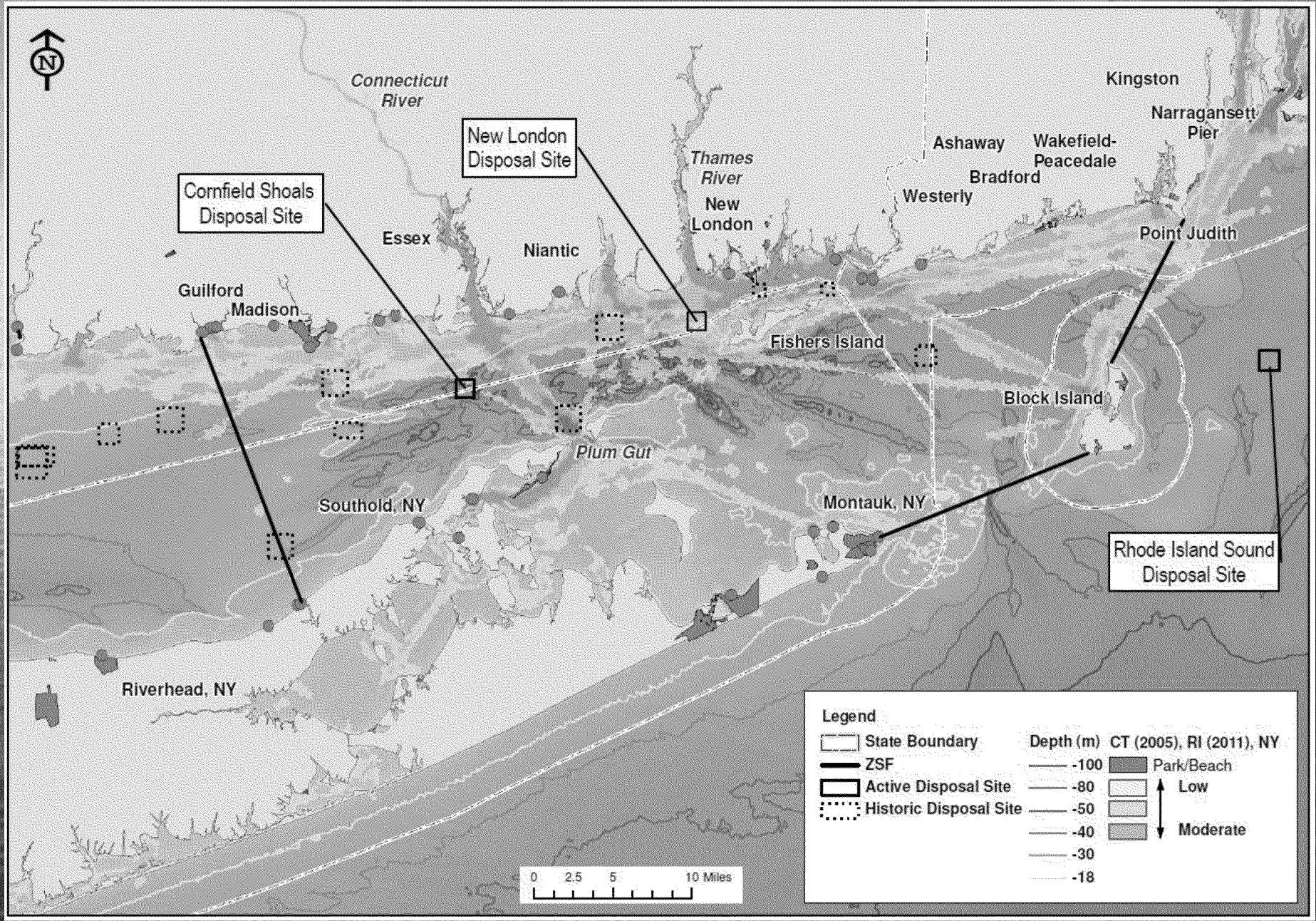
# Cables and Pipelines



# Vessel Traffic Density, Anchoring Areas

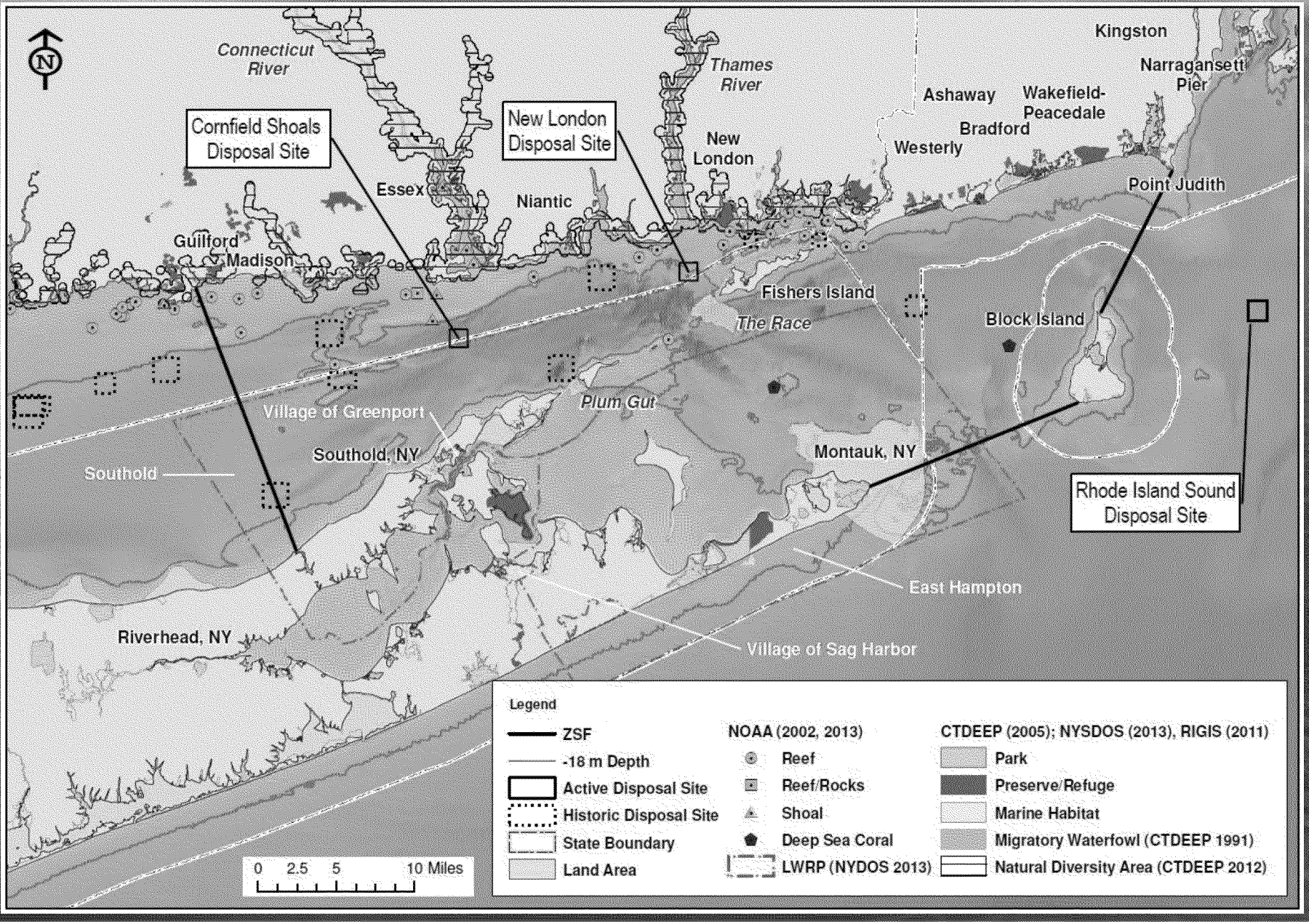


# Recreation (Areas and Navigation)

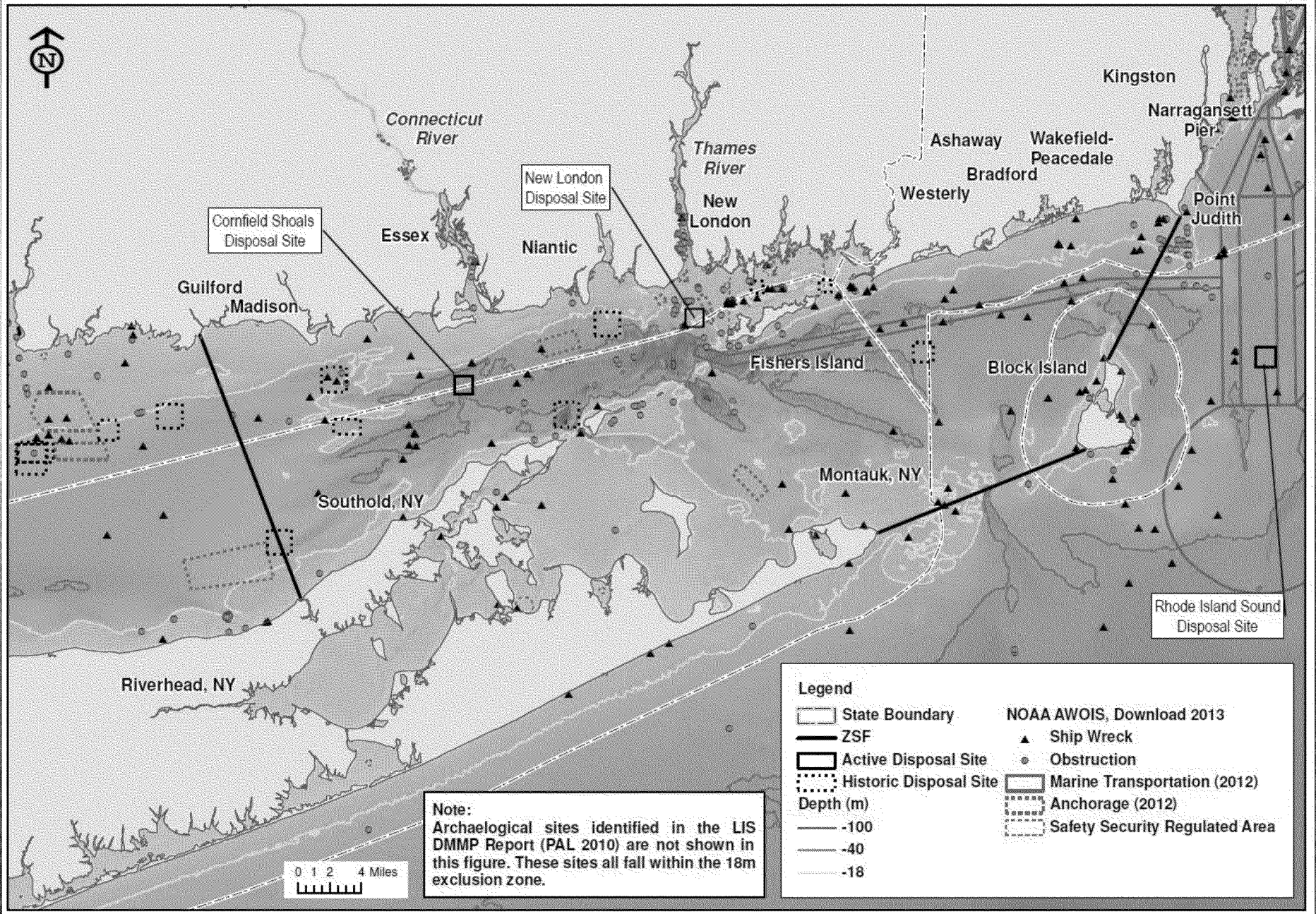


# Conservation Areas

(sanctuaries, wildlife refuges, national seashores, parks, artificial reefs, etc.)

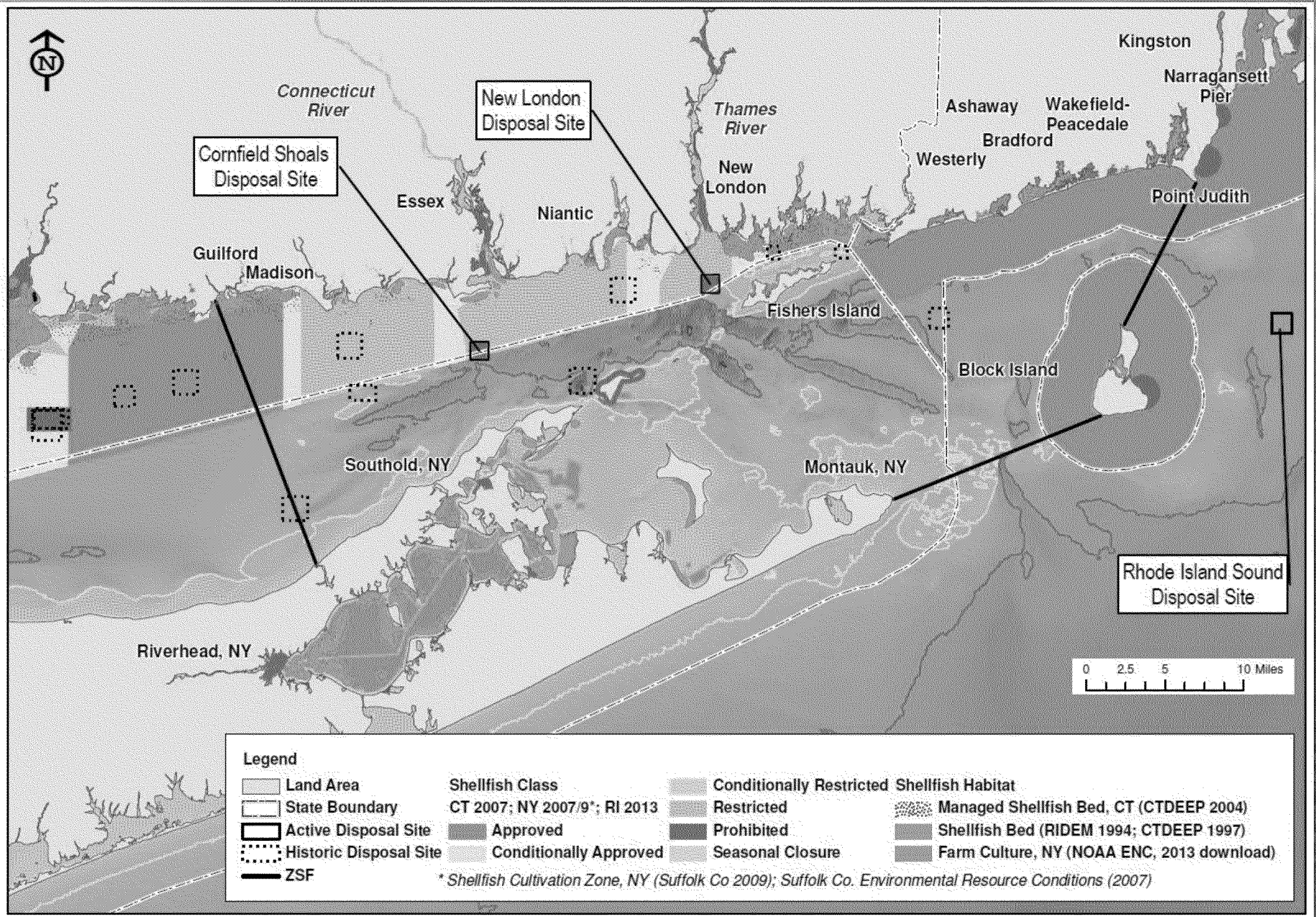


# Archaeological and Cultural Resources

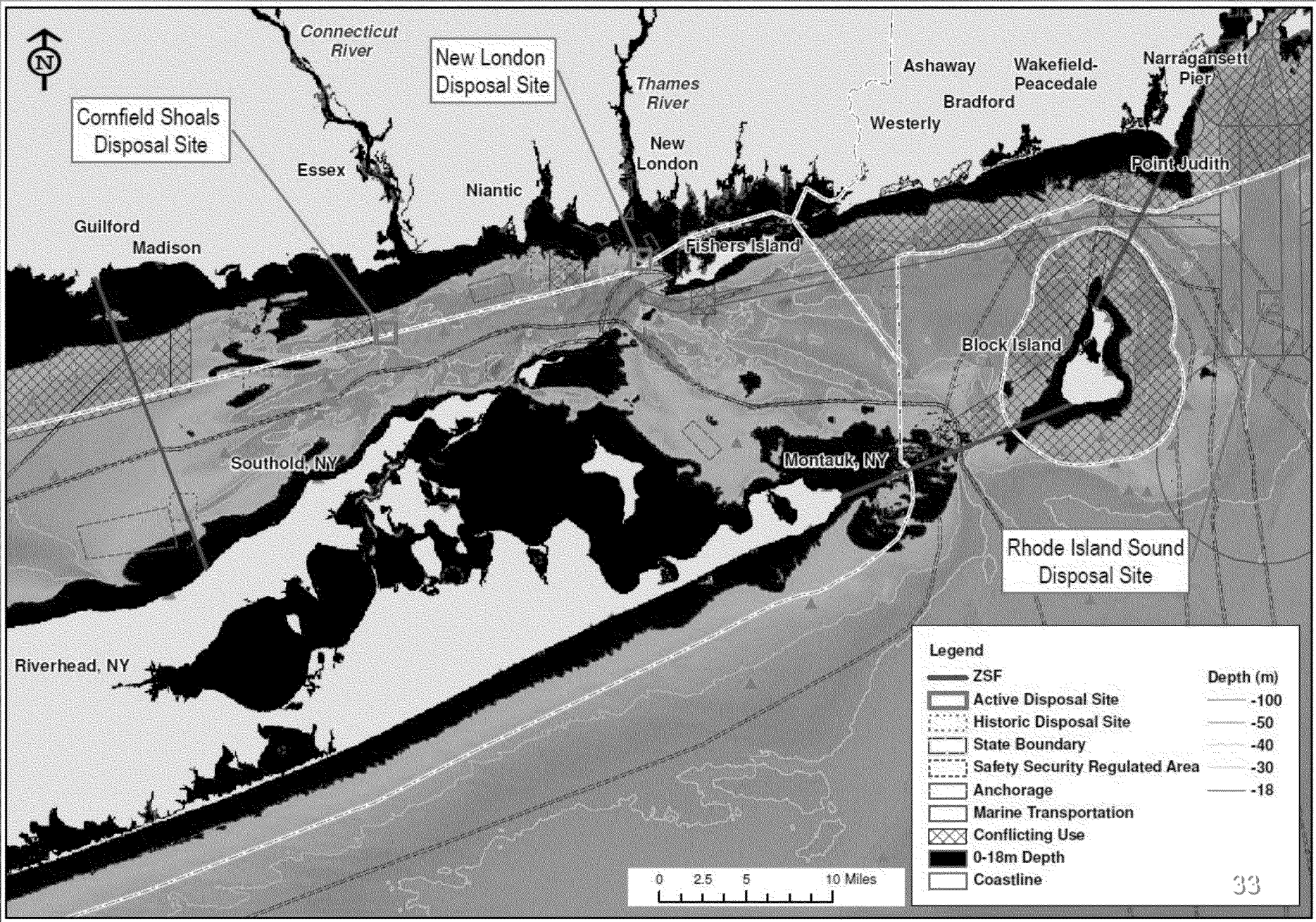


# Biological Resources

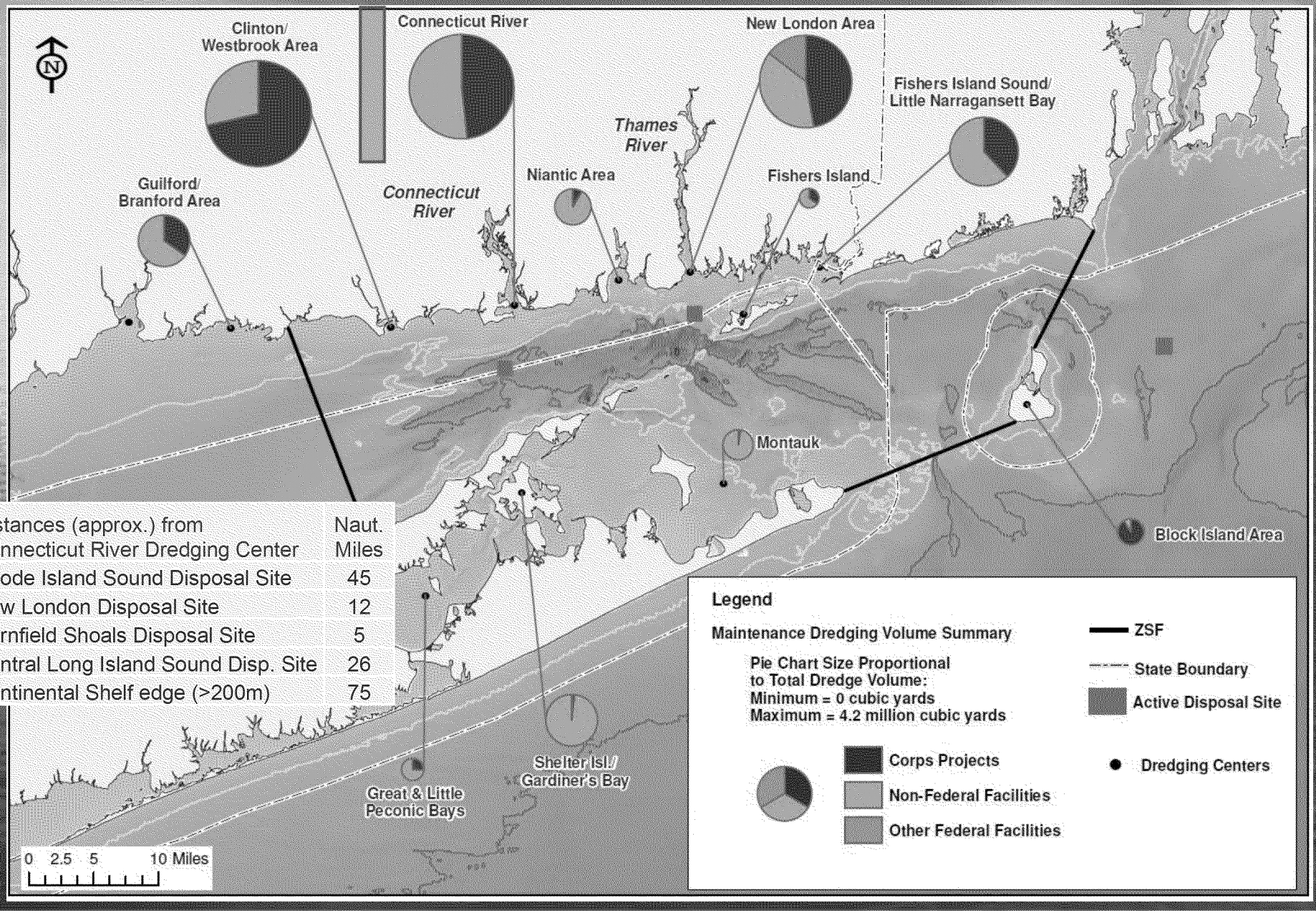
# Approved / Prohibited Shellfishing Areas



# Overlay


Connecticut River
New London Disposal Site
Thames River
Ashaway
Wakefield-Peacedale
Narragansett Pier
Bradford
Westerly
Cornfield Shoals Disposal Site
Essex
New London
Point Judith
Niantic
Guilford
Madison
Fishers Island
Block Island
Southold, NY
Montauk, NY
Rhode Island Sound Disposal Site
Riverhead, NY
0 2.5 5 10 Miles
Legend
ZSF
Active Disposal Site
Historic Disposal Site
State Boundary
Safety Security Regulated Area
Anchorage
Marine Transportation
Conflicting Use
0-18m Depth
Coastline
Depth (m)
-100
-50
-40
-30
-18

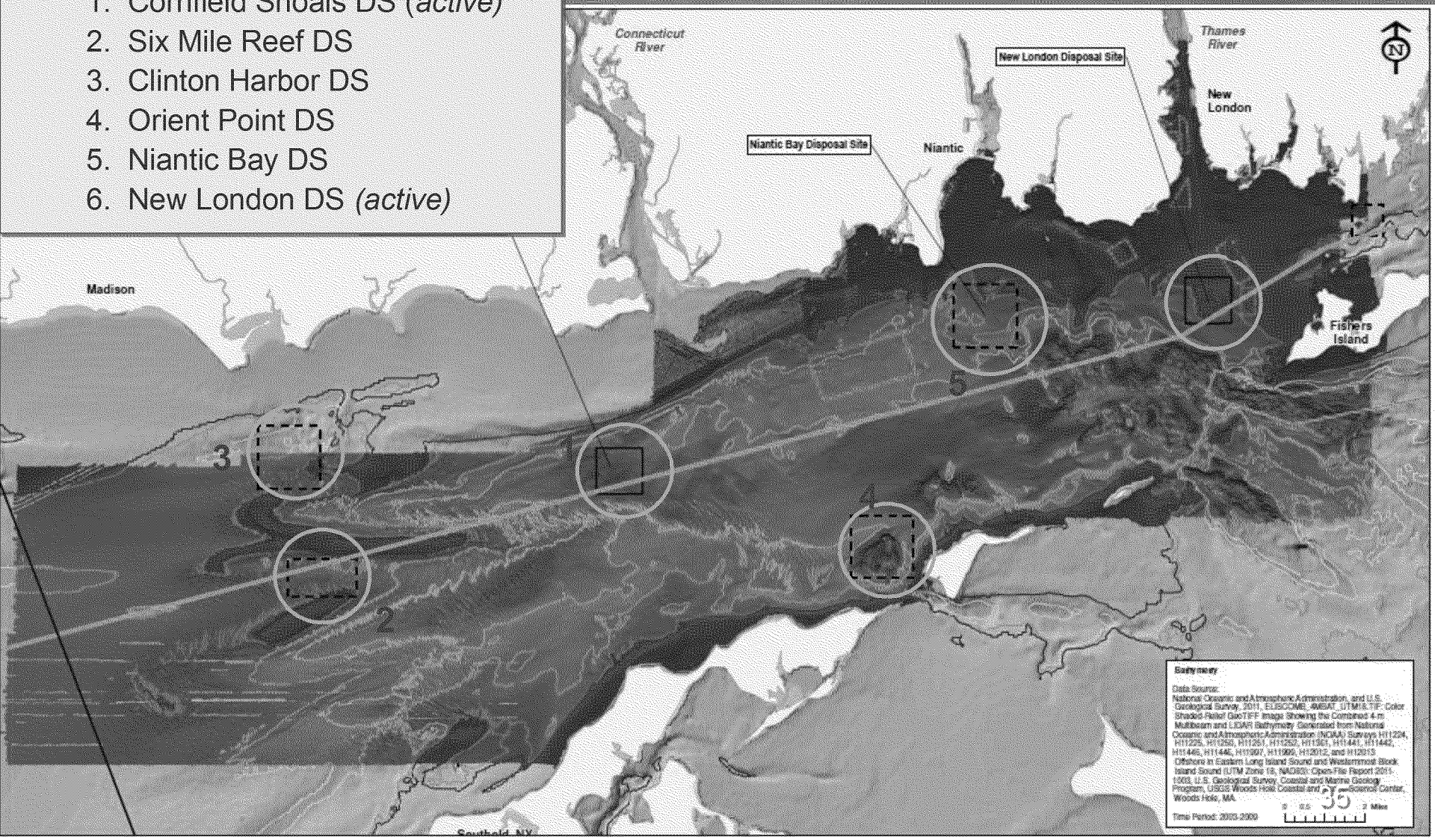
# Dredging Centers and Disposal Distance




| 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 |

# Areas identified in Eastern Long Island Sound

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)*



# Next Steps

- Assess sites in more detail
  - Integrate additional available information
  - Identify and fill remaining data gaps including safety, economics.
  - Review existing and newly collected data for priority sites
- Collect additional data on sediment and biological resources
- Review data from Physical Oceanography Study for Cooperating Agency Meeting in fall
- Public Meetings in winter



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