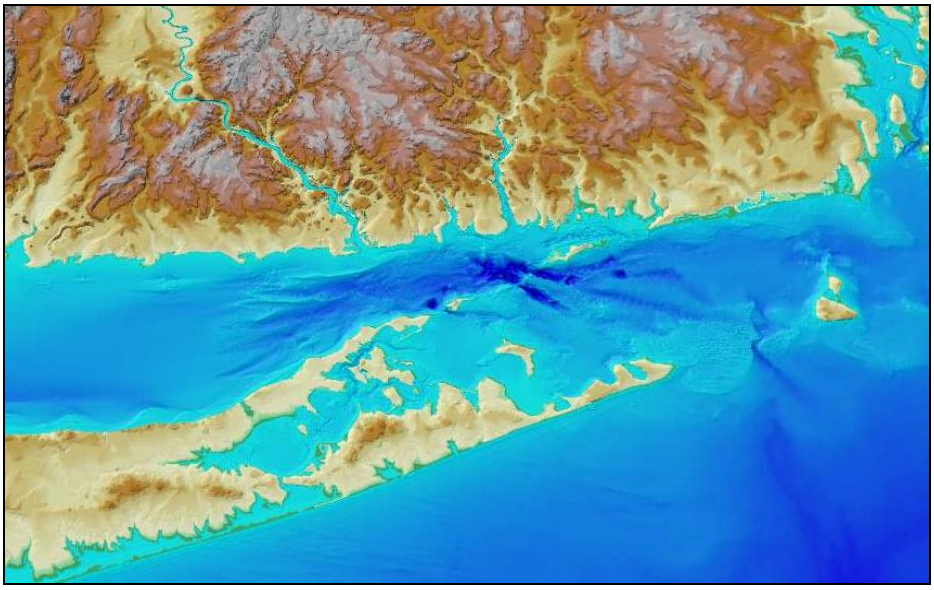
Supplemental Environmental Impact Statement for the Designation of Dredged Material Disposal Sites in Eastern Long Island Sound, Connecticut and New York

Report of Public Hearings on Draft Supplemental Environmental Impact Statement (Riverhead and Mattituck, NY and Groton, CT)

(Public Meetings 7 to 10)



Prepared for: **United States Environmental Protection Agency**

Sponsored by: **Connecticut Department of Transportation**

Prepared by: **Louis Berger**
(under contract to the University of Connecticut)

Louis Berger

July 2016

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REPORT OF PUBLIC HEARINGS ON DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT (RIVERHEAD AND MATTITUCK, NY AND GROTON, CT)

Held on May 25 (Riverhead and Mattituck) and May 26 (Groton [2 hearings]), 2016.
Also referred to as **Public Meetings 7 to 10** for this project.

Prepared for:
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July 22, 2016

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Table of Content

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EXECUTIVE SUMMARY

This report provides a summary of four public hearings held on May 25 and 26, 2016. The primary purpose of these hearings was to solicit comments on the proposed rule for the designation of a dredged material disposal site in the eastern region of Long Island Sound (81 FR 24748) and the Draft SEIS for the Designation of Dredged Material Disposal Site(s) in Eastern Long Island Sound. These hearings were held during the sixty day comment period (April 27 – June 27, 2016). On June 28th, EPA extended the comment period through July 18, 2016.

The SEIS will supplement the Environmental Impact Statement (EIS) for the designation of dredged material disposal sites in the Western and Central Long Island Sound, completed in 2004. The SEIS is prepared for the U.S. Environmental Protection Agency (USEPA), and supported by the Connecticut Department of Transportation (CTDOT). The study is being conducted in consultation with other federal and state agencies of New York State and Connecticut, as well as with consultation of the public.

The four public hearings were held in Riverhead and Mattituck (NY) on May 25, 2016 and in Groton (CT, two hearings) on May 26, 2016. This report is published on the EPA website. In addition, the report will be provided in Appendix A ("Public Involvement") of the Final SEIS. These hearings are referred to as Public Meetings 7 to 10 of the series of public meetings for this project.

1. Introduction

In 2005, the USEPA designated the Western and Central Long Island Sound dredged material disposal sites, following the preparation of an EIS. The two disposal sites in the Eastern Long Island Sound, Cornfield Shoals and New London, are scheduled to close in December 2016. The EPA has prepared a Draft Supplemental Environmental Impact Statement (SEIS) for the potential designation of one or more disposal sites needed to serve the Eastern Long Island Sound region. The Draft SEIS has been prepared in accordance with Section 102(c) of the Marine Protection Research and Sanctuaries Act (MPRSA; also referred to as Ocean Dumping Act [ODA]) of 1972. The USEPA has the responsibility of designating sites under Section 102(c) of the Act and 40 CFR Part 228.4 of its regulations. The SEIS is supported by the State of Connecticut through the Connecticut Department of Transportation (CTDOT).

2. Public Hearings

In accordance with USEPA's voluntary NEPA policy, the USEPA is conducting an extensive public involvement program throughout the development of the SEIS. Public scoping meetings were held on November 14, 2012 (Groton, CT) and January 9, 2013 (Riverhead, NY). Public meetings were also held on June 25 (Riverhead, NY) and June 26 (New London, CT), 2013; these meetings discussed the process and first results of the screening of the Eastern Long Island Sound project area (referred to as the 'Zone of Siting Feasibility' or ZSF) for potential dredged material disposal sites. In addition, public meetings were held on December 8 and 9, 2014 to present the approach and findings of the Physical Oceanography study, conducted by the University of Connecticut (UCONN) in support of the SEIS.

The objective of the Public Hearings was to solicit comments on the proposed rule for the designation of a dredged material disposal site in the eastern region of Long Island Sound (81 FR 24748) and the Draft SEIS for the Designation of Dredged Material Disposal Site(s) in Eastern Long Island Sound. Hearings were held on the following dates and locations:

- May 25, 2016 (1:00-3:00pm) Suffolk County Community College, Riverhead, New York
- May 25, 2016 (5:30-7:30pm) Laurel Library, Mattituck, New York
- May 26, 2016 (1:00-3:00pm) University of Connecticut, Avery Point, Groton, Connecticut
- May 26, 2016 (5:00-7:00pm) University of Connecticut, Avery Point, Groton, Connecticut

Listed below is the agenda for the hearing in Riverhead, NY. The format and agenda for each hearing were identical, except times varied.

Time	**Agenda Item and Presenter(s)**
12:30 pm	*Registration*
1:00 pm	*Logistics/Call to Order* Bernward Hay, Project Manager, Louis Berger
1:05 pm	*Hearing Officer Opening Remarks* Mel Coté, Chief, Surface Water Branch, EPA Region 1

1:10 pm *Supplemental Environmental Impact Statement Study*
Jean Brochi, Project Manager, Ocean and Coastal Protection Unit, EPA Region 1; Bernward Hay, Louis Berger

1:30 pm *Dredged Material Testing and Disposal Site Management*
Steve Wolf, Environmental Resources Section, U.S. Army Corps of Engineers, New England District

1:45 pm *Proposed Rulemaking for Eastern Dredged Material Disposal site (ELDS)*
Mel Coté, Chief, Surface Water Branch, EPA Region 1

2:00 pm *Hearing Procedures*
Jean Brochi, Project Manager, Ocean and Coastal Protection Unit, EPA Region 1

2:05 pm *Public Comments*
Public Testimony (by Hearing Protocol)

3:00 pm *Closing Remarks*
Mel Coté, Chief, Surface Water Branch, EPA Region 1

3. Hearing Summary

The lists of Attendees and Commenters/Speakers from the Public are provided in Attachment 2. Presentations given by Mel Coté and Jean Brochi (USEPA), Bernward Hay (Louis Berger), and Steve Wolf (U.S. Army Corps of Engineers) are provided in Attachment 3. Transcripts, required for all hearings, were prepared by Mr. Charmaine DeRosa and Wayne Galante from Alliance Reporting Service, Inc. (Riverhead and Mattituck hearings, respectively) and by Ms. Margaret Golden from Brandon Huseby Reporting & Video (Groton hearings); their transcripts are enclosed as Attachments 4 to 7, respectively.

Following is a summary of the four hearings:

- **Attendees:** A total of 26 and 33 attendees signed in at the Riverhead and Mattituck hearings, respectively; a total of 33 and 18 attendees signed in at the two Groton hearings. Attendees at both hearings included members from the Public, non-profit organizations, private companies, state and federal agency representatives, and representatives of government officials. Specifically, agency representatives included the USEPA, U.S. Army Corps of Engineers, U.S. Navy, CTDOT, Connecticut Department of Energy and Environmental Protection, New York State Department of State, and New York State Department of Environmental Conservation.
- **Commenters:** After the presentations, five and nine individuals provided comments at the Riverhead and Mattituck hearings, respectively. Eleven and eight individuals provided comments at the two Groton hearings (day and evening), respectively. Copies of written comments provided during the hearings are included in Attachment 8.

Attachment 1

HEARING ANNOUNCEMENTS

From: Grimaldi, Alicia [mailto:Grimaldi.Alicia@epa.gov]
Sent: Wednesday, April 27, 2016 2:15 PM
To: ELIS <ELIS@epa.gov>
Subject: Eastern Long Island Sound Proposed Designation and Draft Supplemental Environmental Impact Statement Released

Today EPA released a proposed rule for the designation of a dredged material disposal site in the eastern region of Long Island Sound (81 FR 24748) and a Draft Supplemental Environmental Impact Statement for the Designation of Dredged Material Disposal Site(s) in Eastern Long island Sound (ELIS DSEIS). The ELIS DSEIS is available on EPA's Dredged Material Management in Long Island Sound page and on Regulations.gov (Docket # EPA-R01-OW-2016-0239). The 60-day comment period for the proposed rule and the ELIS DSEIS ends June 27, 2016. Comments may be sent through the Federal Register, Regulations.gov, or to ELIS@epa.gov. There will also be four public hearings to provide an opportunity to submit oral and written comments:

Wednesday, May 25, 2016
1:00 - 3:00 p.m. (Registration begins at 12:30 p.m.)
Suffolk County Community College Culinary Arts Center
20 East Main Street
Riverhead, NY 11901

Wednesday, May 25, 2016
5:30 - 7:30 p.m. (Registration begins at 5:00 p.m.)
Mattituck - Laurel Library
13900 Main Road
Mattituck, NY 11952

Thursday, May 26, 2016
1:00 - 3:00 p.m. (Registration begins at 12:30 p.m.)
University of Connecticut - Avery Point
Academic Building, Room 308
1084 Shennecossett Road
Groton, CT 06340

Thursday, May 26, 2016
5:00 - 7:00 p.m. (Registration begins at 4:30 p.m.)
University of Connecticut - Avery Point
Academic Building, Room 308
1084 Shennecossett Road
Groton, CT 06340

For more information, visit Dredged Material Management in Long Island Sound. Please feel free to forward this information to any interested parties. If you have questions, need assistance, or would like to be removed from this mailing list, please don't hesitate to contact me at ELIS@epa.gov.

Alicia Grimaldi
Ocean & Coastal Protection
Environmental Protection Agency, Region 1
5 Post Office Square, Suite 100
Mail Code: OEP06-01
Boston, MA 02109
Tel: (617)918-1806
Fax: (617)918-0806

News Release

U.S. Environmental Protection Agency
New England Regional Office
April 27, 2016

Contact: David Deegan, (617) 918-1017

EPA Proposes to Designate a Dredged Material Disposal Site in Eastern Long Island Sound

BOSTON – The US Environmental Protection Agency (EPA) today issued a proposal to designate a dredged material disposal site to serve the eastern Long Island Sound region. The Eastern Long Island Sound Disposal Site (ELDS) would be located offshore from New London, Connecticut, and would be available for the disposal of dredged material from harbors and navigation channels in eastern Long Island Sound in the states of Connecticut and New York.

EPA is proposing the same restrictions on the use of this site as it proposed for the central and western Long Island Sound disposal sites, to support the goal of reducing or eliminating open-water disposal of dredged material in the Sound. These restrictions are intended to promote the beneficial use of dredged material, such as beach nourishment, or other alternatives to open-water disposal whenever practicable.

The proposed action is described in a draft rule and Draft Supplemental Environmental Impact Statement (DSEIS) that also is being released today for public comment. These documents are available for public review and comment until June 27, 2016. EPA will hold two public hearings on the proposed rule on May 25 and May 26. The DSEIS is considered supplemental because it updates and builds on analyses that were conducted for the 2005 Long Island Sound Environmental Impact Statement that supported the designation of the Central and Western Long Island Sound dredged material disposal sites. The DSEIS recommends designation of the ELDS as the preferred alternative from the range of options considered.

EPA determined that a site was necessary because there are currently no disposal sites designated for long-term use in the eastern Long Island Sound region, the dredging needs exceed the available capacity at existing sites, and the regulations require EPA designation for any long-term dredged material disposal site. The U.S. Army Corps of Engineers (USACE) estimates the dredging needs in eastern Long Island Sound to be approximately 22.6 million cubic yards over the next 30 years.

While EPA, the USACE, and the states of Connecticut and New York are committed to developing and promoting the use of alternatives to open-water disposal, EPA has determined that an open-water disposal site still is necessary in case an alternative is not available for some projects. Periodic dredging of harbors and channels is essential for ensuring safe navigation and facilitating marine commerce and recreation.

The designation of dredged material disposal sites by EPA only makes those sites available for use by future dredging projects; it does not authorize the disposal of any material from any project. Any proposal to place dredged material at the ELDS will have a project-specific authorization and must satisfy the stringent requirements of the ocean disposal regulations. Dredged material that does not pass the stringent testing requirements and is determined to be toxic are not, and will not in the

future, be placed in the open waters of Long Island Sound. These materials currently and in the future will require either containment or treatment.

EPA will hold four public hearings to receive comments on the proposed rule and DSEIS. Registration will begin 30 minutes before each of the four hearings:

- May 25, 2016 in New York from 1:00 – 3:00 p.m. at the Suffolk County Community College Culinary Arts Center, 20 East Main St., Riverhead, NY, 11901 and 5:30 – 7:30 p.m. at the Mattituck-Laurel Library, 13900 Main Rd., Mattituck, NY, 11952.

- May 26, 2016 in Connecticut from 1:00 – 3:00 p.m. and from 5:00 – 7:00 p.m. at the University of Connecticut – Avery Point, Academic Building, Room 308, 1084 Shennecossett Rd, Groton, CT, 06340.

Following consideration of the comments received, EPA will issue a Final SEIS which will include written responses to comments.

More information:

- Dredged material management in Long Island Sound and EPA's proposed rule: https://www.epa.gov/ocean-dumping/dredged-material-management-long-island-sound

- Comments on the proposed rule and DSEIS may be submitted to ELIS@epa.gov or mailed to: Jean Brochi, USEPA, 5 Post Office Square, Suite 100, Mail Code: OEP06-1, Boston, MA 02109.

# # #

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Follow EPA New England on Twitter (http://twitter.com/epanewengland)

Connect with EPA New England on Facebook (https://www.facebook.com/EPARegion1)

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Attachment 2

LISTS OF ATTENDEES AND COMMENTERS FROM THE PUBLIC

- Riverhead, NY May 25, 2016 (1:00 pm)
- Mattituck, NY May 25, 2016 (5:30 pm)
- Groton, CT May 26, 2016 (1:00 pm)
- Groton, CT May 26, 2016 (5:00 pm)

Note: Addresses and contact information was provided on the original Sign-in sheets but not listed here for privacy reasons. Spelling of some names and organizations was verified in some cases, using the internet. Names are listed in the order shown on the Sign-in sheets.

Riverhead, NY, May 25, 2016 (1:00pm)

ATTENDEE SIGN-IN

NAME	ORGANIZATION	MADE COMMENTS?
Sarah Anker	Suffolk County Legislator	Yes
Mark Woolley	for Congressman Mark Zeldin (New York)	Yes
Joe Salvatore	Connecticut Department of Transportation	
George Wisker	Connecticut Department of Energy and Environmental Protection	
Mark Habel	U.S. Army Corps of Engineers, New England District	
Harry Somma	Citizens Campaign for the Environment	
Kathleen Burns	Connecticut Marine Trades Organization	
William Pellenz		
Anthony Graves		
Kevin McAllister		
Sid Bail		
Scott Russell	Town of Southold	Yes
Jennifer Street	New York State Department of State	
Dan Gulizio	Peconic Baykeeper	
Jim O'Donnell	University of Connecticut	
Beth Young		
Chris Worth		
John Christensen	Citizens Campaign for the Environment	
Marguerite Purnell		
David Bergen	Peconic Bay Sailing Association	Yes
Steve Wolf	U.S. Army Corps of Engineers, New England District	
Adrienne Esposito	Citizens Campaign for the Environment	Yes
Alicia Grimaldi	U.S. Environmental Protection Agency, Region 1	
Patricia Pechko	U.S. Environmental Protection Agency, Region 2	
Charles de Quillfeldt	New York State Department of Environmental Conservation	
Sean O'Neill	Peconic Baykeeper	
Gabriele Fonage		

Mattituck, NY, May 25, 2016 (5:30pm)

ATTENDEE SIGN-IN

NAME	ORGANIZATION	MADE COMMENTS?
Al Krupski	Suffolk County Legislator	Yes
Nancy Kanz		
Santo Patane		
James O'Donnell	University of Connecticut	
Patricia Pechko	U.S. Environmental Protection Agency, Region 2	
Buddy LoBue	U.S. Environmental Protection Agency, Region 2	
Susan Palmer		Yes
Leah Sullivan	Mattituck Laurel Civic Association	
Jacki Fedynak		
Peter Young	Town of Southold	
Mel Morris	Mattituck Laurel Civic Association	
Christina Ovan (sp?)		
Christopher Worth		Yes
William Kanz		
Susan Harvey		
Steve Wolf	U.S. Army Corps of Engineers, New England District	
Joe Salvatore	Connecticut Department of Transportation	
JoAnn Lechner		Yes
Jack McGreevy		
Ron McGreevy		
Doris McGreevy		Yes
Glenn Goldsmith	Southold Town Trustee	Yes
Pat Nelson		
Jennifer Street	New York State Department of State	
George Wisker	Connecticut Department of Energy and Environmental Protection	
Mark Habel	U.S. Army Corps of Engineers, New England District	
Doug Hardy		Yes
John Cullen		
John McAuliff		
Jim King		Yes
Lisa Finn		
Hugh Switzer		Yes
Kendra Carlson		
Elisabeth Barrows		

Groton, CT, May 26, 2016 (1:00pm)

ATTENDEE SIGN-IN

NAME	ORGANIZATION	MADE COMMENTS?
Paul Formica	State Senator (Connecticut)	Yes
Ellen Graham	for Senator Richard Blumenthal (Connecticut)	
Adon Duncanson	for Congresswoman Rosa DeLauro (Connecticut)	
Ned Farman	Old Lyme Harbor Management Commission	
Syma Ebbin	University of Connecticut	
Jessica LeClair	UCONN Connecticut Institute for Resilience and Climate Adaptation	
Bill Gardiner	Spicer's Marina	
Frank Bohlen	University of Connecticut	
Kristal Kallenberg	Connecticut Department of Energy and Environmental Protection	
Judy Benson	The Day	
John Roccapriore	University of Connecticut	
James Stidfole	New London Port Authority	Yes
Andrew Ahrens	Fishers Island Conservancy	
Peter Francis	Connecticut Department of Energy and Environmental Protection	
Erika Fuery	Cardno	Yes
Kathleen Burns	Connecticut Marine Trades Organization	
Rebecca French	University of Connecticut	
Tammy Daugherty	New London Office of Development and Planning	Yes
Dawn Schieferdecker	Connecticut Marine Trades Organization	Yes
Marguerite Purnell		
William Spicer III	Spicer's Marina	Yes
Jennifer Street	New York State Department of State	
Barry Bryan	Fishers Island Conservancy	Yes
Robert Evans		
Steve Wolf	U.S. Army Corps of Engineers, New England District	
George Wisker	Connecticut Department of Energy and Environmental Protection	Yes
James O'Donnell	University of Connecticut	
Dana Hewson	Mystic Seaport	Yes
Keith Nielson	Docko, Inc.	Yes
Nathan Frohling		
Lou Burch	Citizens Campaign for the Environment	Yes
Stacy Pala	Battelle	
Mark Habel	U.S. Army Corps of Engineers, New England District	
Sylvain Deguise	Connecticut Sea Grant-+	

Groton, CT, May 26, 2016 (5:00pm)

ATTENDEE SIGN-IN

NAME	ORGANIZATION	MADE COMMENTS?
Max Goldman	for Senator Chris Murphy (Connecticut)	
Aundre Bumgardner	State Representative (Connecticut)	Yes
Ayanti Grant	Congressman Joe Courtney (Connecticut)	Yes
Tracey McKenzie	U.S. Navy	
Beth Fitzpatrick		Yes
Ron Helbig	Noank Village Boatyard	Yes
Joe Salvatore	Connecticut Department of Transportation	
Dave Domenie	Brewer Yacht Yards & Marina	Yes
Jennifer Street	New York State Department of State	
Rives Potts	Brewer Yacht Yards & Marinas	Yes
Joe Tasca	WLNC	
Mark Habel	U.S. Army Corps of Engineers, New England District	
Steve Wolf	U.S. Army Corps of Engineers, New England District	
Kathleen Burns	Connecticut Marine Trades Association	Yes
Christian McGugan	Gwenmore Contracting	Yes
James McDonnell	University of Connecticut	
Bill Gash		
Joe Courtney		
Matt Reiser		

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Attachment 3

PRESENTATIONS

- **Mel Coté, Chief, Surface Water Branch, EPA Region 1:**
  -Hearing Officer Opening Remarks: "Eastern Long Island Sound Dredged Material Disposal Site Rulemaking"

- **Jean Brochi, Project Manager, Ocean and Coastal Protection and Unit, EPA Region 1; and Bernward Hay, Louis Berger:**
  "Eastern Long Island Sound Dredged Material Disposal Site Supplemental Environmental Impact Statement (SEIS)"

- **Steve Wolf, Environmental Resources Section, U.S. Army Corps of Engineers, New England District:**
  Dredged Material Testing and Disposal Site Management: "Overview of Monitoring at Open Water Dredged Material Placement Sites"

- **Mel Coté, Chief, Surface Water Branch, EPA Region 1:**
  Proposed Rulemaking for Eastern Dredged Material Disposal site (ELDS): "Eastern Long Island Sound Dredged Material Disposal Site Rulemaking"

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Presentation 1

Mel Coté, Chief, Surface Water Branch, EPA Region 1:
Hearing Officer Opening Remarks: "Eastern Long Island Sound Dredged Material Disposal Site Rulemaking"

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Eastern Long Island Sound Dredged Material Disposal Site Rulemaking

Public Hearings on Proposed Rule

U.S. EPA Regions 1 and 2

May 25-26, 2016

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

MPRSA or Ocean Dumping Act

- Dredged material should not be disposed unless it can be demonstrated that such disposal will not unreasonably degrade or endanger:
  - human health, welfare, or amenities; or
  - the marine environment, ecological systems, or economic potentialities.
- EPA established criteria that consider the:
  - need for disposal;
  - effect of disposal on human and ecological health, and other uses of the ocean; and
  - alternatives to ocean disposal.

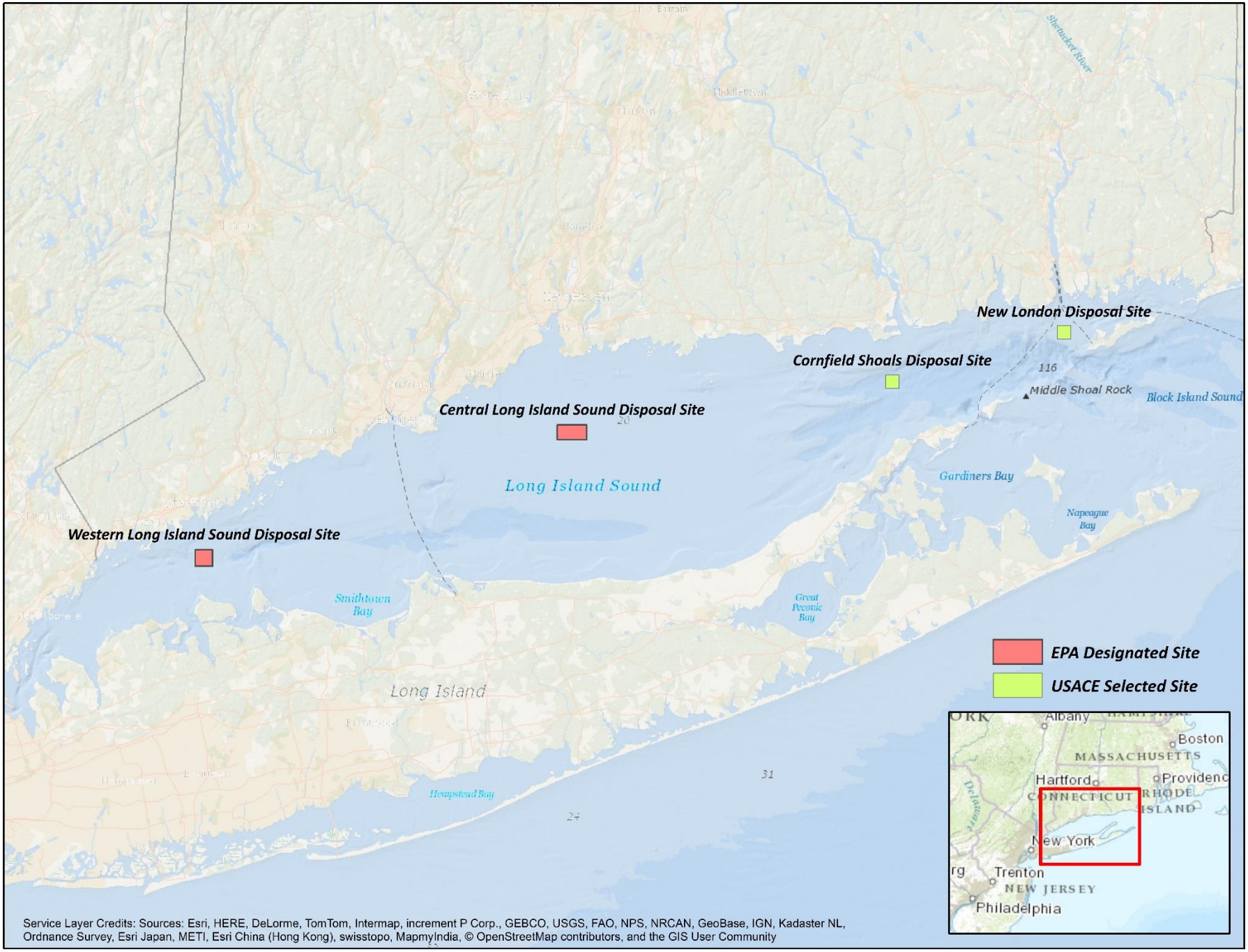
Long Island Sound Dredged Material Disposal Sites

Designated by EPA in July 2005:

- Western Long Island Sound
- Central Long Island Sound

Selected by USACE in 1991, extended for five years by Congress in 2011, scheduled to close December 2016:

- Cornfield Shoals
- New London


New London Disposal Site
Cornfield Shoals Disposal Site
Central Long Island Sound Disposal Site
Western Long Island Sound Disposal Site
Middle Shoal Rock
Block Island Sound
Long Island Sound
Gardiners Bay
Napeague Bay
Smithtown Bay
Great Peconic Bay
Long Island
Hempstead Bay
116
20
31
24
EPA Designated Site
USACE Selected Site
Albany
Boston
MASSACHUSETTS
Hartford
CONNECTICUT
New York
Trenton
NEW JERSEY
Philadelphia
Service Layer Credits: Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

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.

Long Island Sound Environmental Impact Statement

- 1998 – EPA and USACE agree to co-lead site designation process under MPRSA and NEPA:
  - USACE provides funding
  - EPA provides technical assistance
- June 1999 – EPA and USACE initiate EIS to evaluate and potentially designate dredged material disposal sites for entire LIS region.

Long Island Sound Environmental Impact Statement

- 1999-2001 Scoping and field work to collect data for entire LIS region.
- March 2002 – EPA and USACE decide to focus EIS effort initially on central and western LIS regions, with plan to address eastern LIS upon completion of that effort.

Presentation 2

Jean Brochi, Project Manager, Ocean and Coastal Protection and Unit, EPA Region 1; and Bernward Hay, Louis Berger

"Eastern Long Island Sound Dredged Material Disposal Site Supplemental Environmental Impact Statement (SEIS)"

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Eastern Long Island Sound Dredged Material Disposal Site Supplemental Environmental Impact Statement (SEIS)

Public Hearings

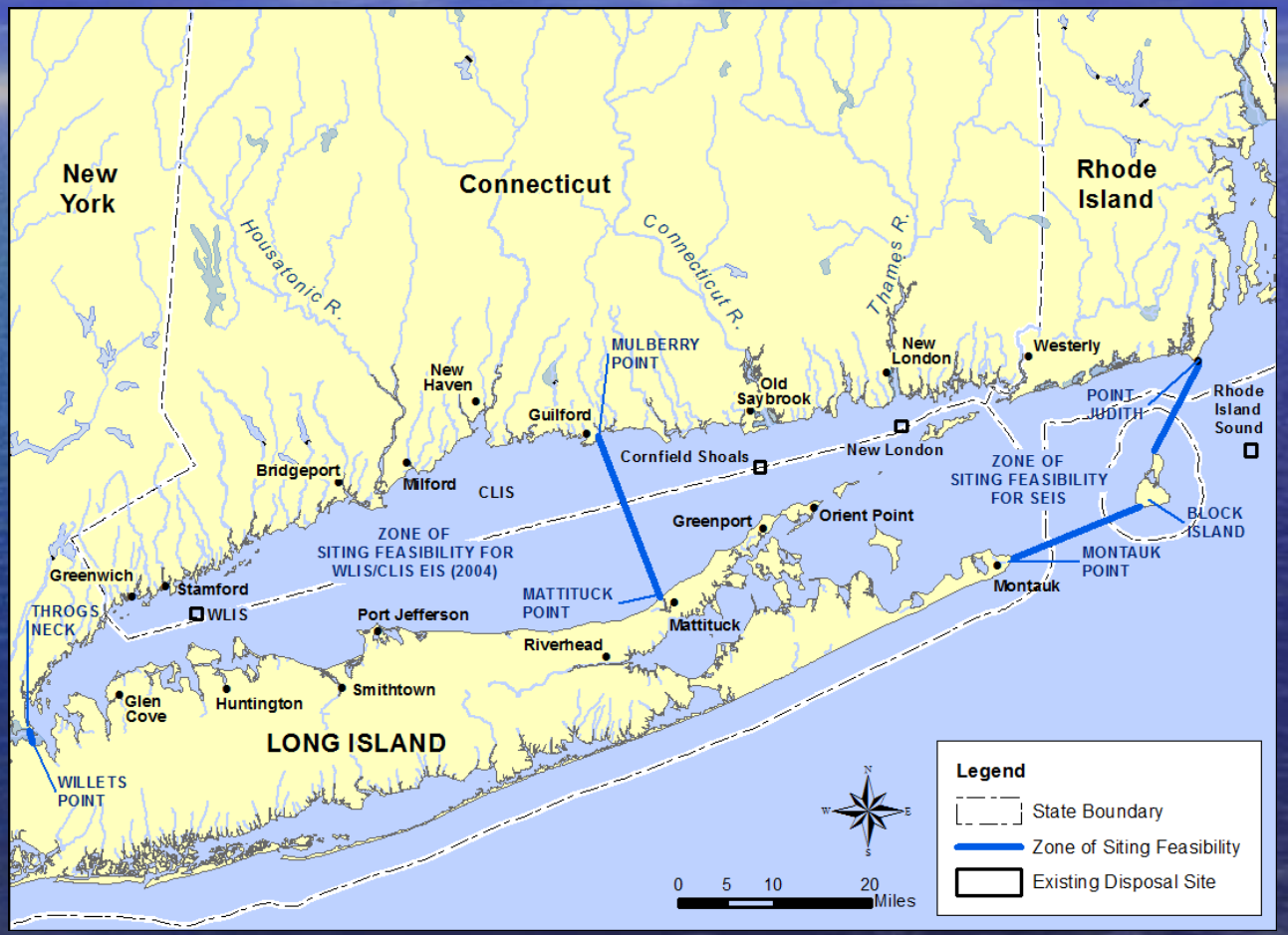
U.S. EPA Region 1
May 25-26, 2016

SEIS-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

SEIS Approach

- Notice of Intent
- Public Participation
- Alternatives to open water disposal
- Site screening
- Studies
- Analysis of three Alternatives
- Selection of Preferred Alternative



SEIS- Existing Dredged Material Disposal Sites

Designated by EPA in July 2005:

- Western Long Island Sound
- Central Long Island Sound

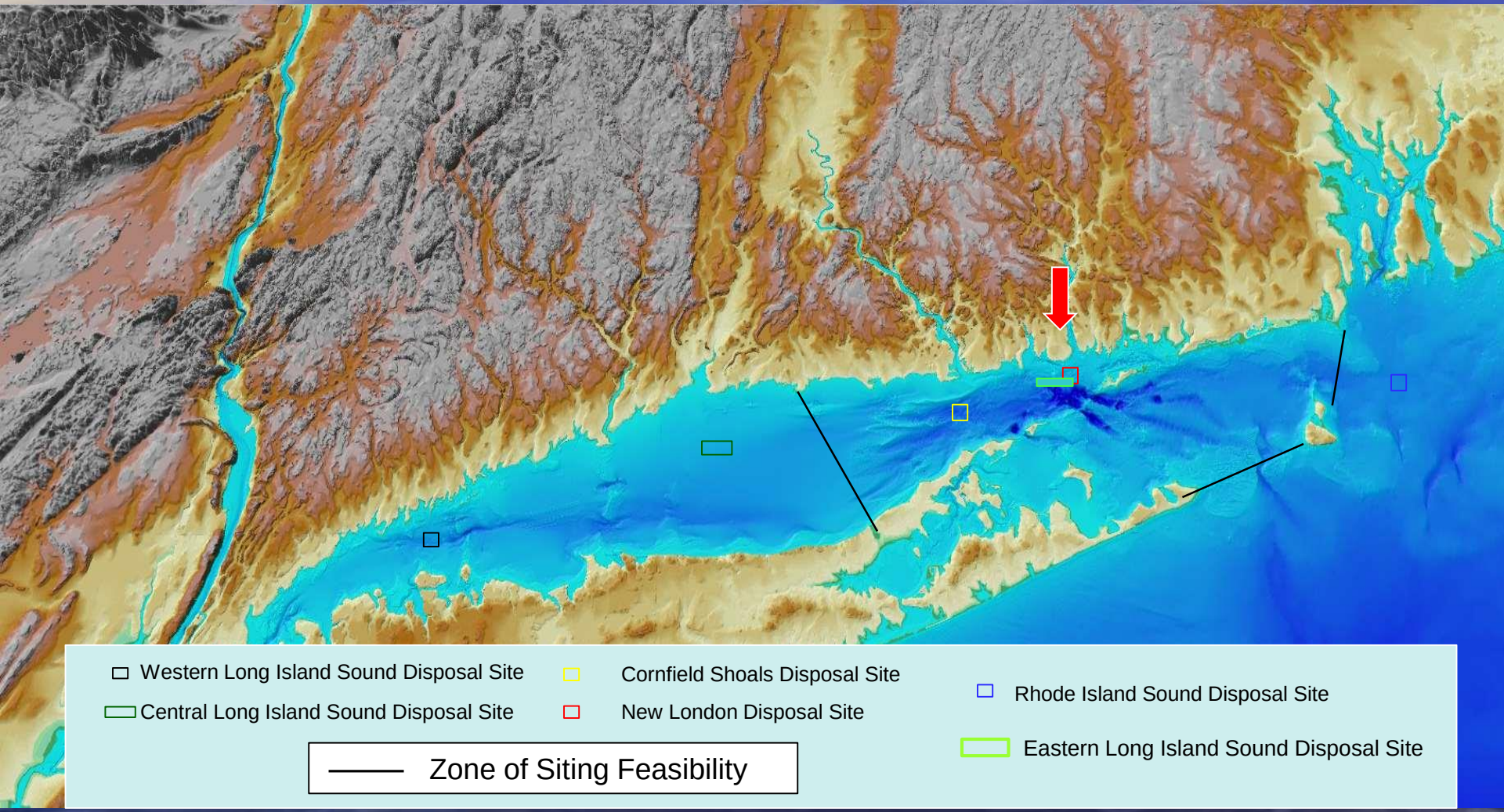
Selected by USACE in 1990s, scheduled to close December 23, 2016:

- Cornfield Shoals
- New London

ELIS SEIS Process

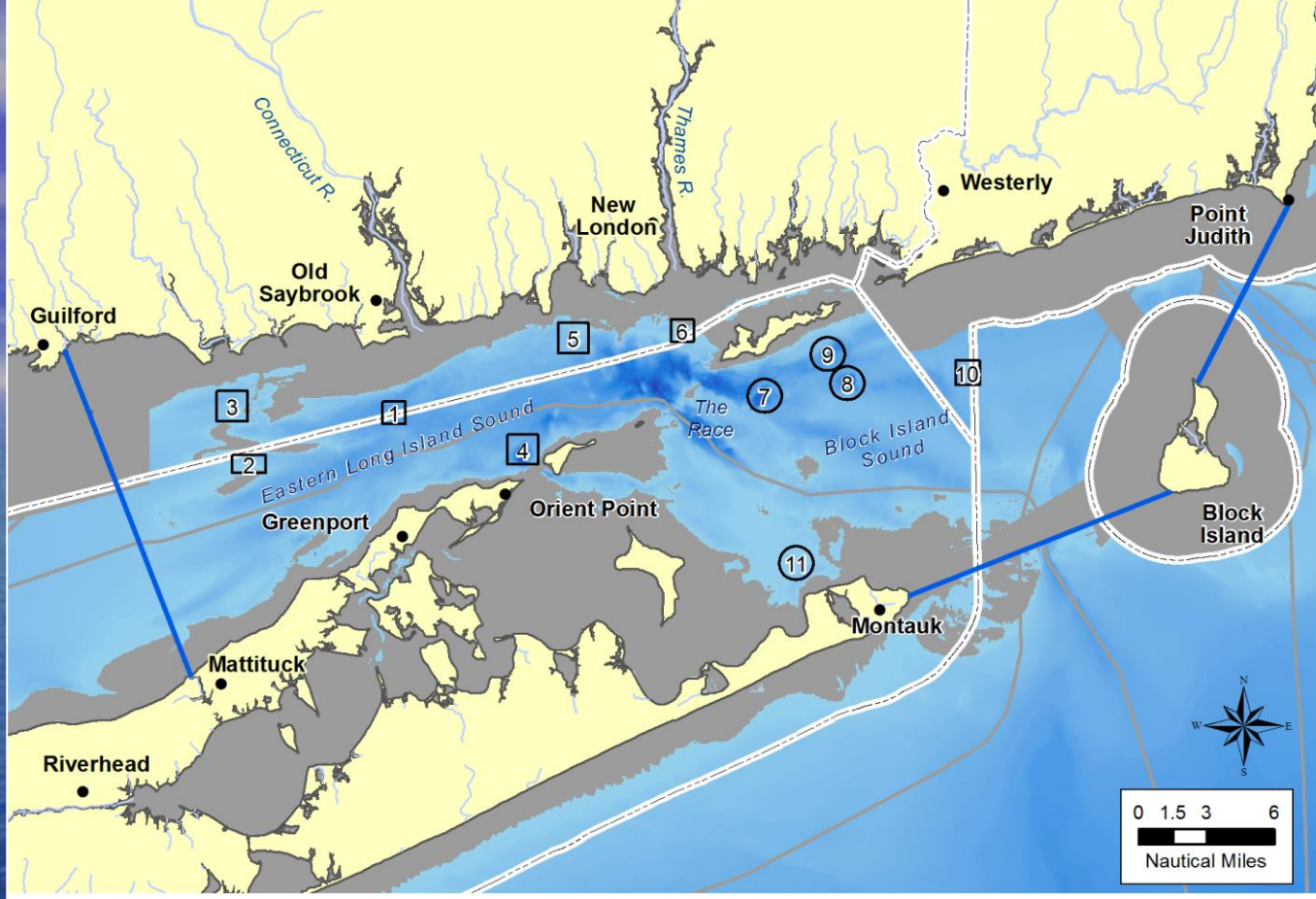
- Notice of Intent published on October 16, 2012.
- Cooperating agency and Public meetings in 2012 and 2013.
- Cooperating agency conference calls in 2014 and 2015.
- Draft Rulemaking and SEIS Published on April 27, 2016.
- EPA website revised: https://www.epa.gov/ocean-dumping/dredged-material-management-long-island-sound
- Email notification system revised and email box established (ELIS@epa.gov).

SEIS -Zone of Siting Feasibility



Site Screening

- Screening Criteria for ocean dredged material site designation based on Marine Protection, Research, and Sanctuaries Act of 1972 (MPRSA) 40 CFR 228



Legend

- Zone of Siting Feasibility
- State Boundary
- Alternative Site
- Area Removed From Consideration

Depth (m)
0
-60
-120

ID	Site Name	Status
1	Cornfield Shoals Disposal Site	Active
2	Six Mile Reef Disposal Site	Historic
3	Clinton Harbor Disposal Site	Historic
4	Orient Point Disposal Site	Historic
5	Niantic Bay Disposal Site	Historic
6	New London Disposal Site	Active
7	Deep Hole South of Fishers Island – West	New
8	Deep Hole South of Fishers Island – East	New
9	Deep Hole South of Fishers Island – Center	New
10	Block Island Disposal Site	Historic
11	Area North of Montauk	New

SEIS-Site Screening

- Sedimentary Environment
  - Bathymetry
  - Currents and Waves; Bottom Stress
  - Sediment Texture (resuspension potential; habitat)
- Biological Resources
  - Shellfish Beds
  - Benthic Community
  - Fish Habitat, Fish Concentrations, and Fishing Areas
  - Breeding, Spawning, Nursery, Feeding, and Passage Areas
- 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

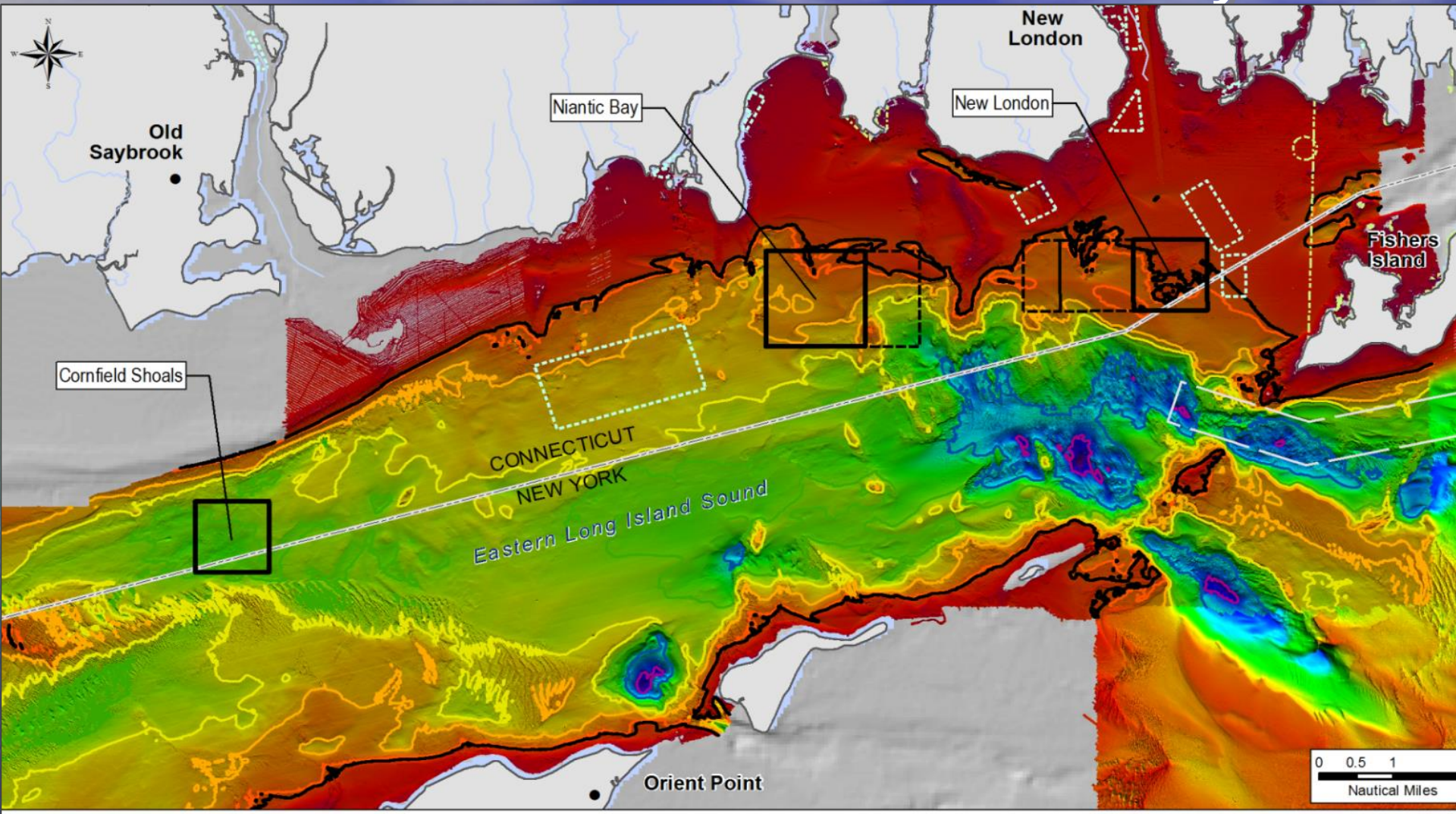
SEIS - Purpose

- Dredging Needs
  - Assessed in LIS DMMP in 2009 and updated in 2015. The Dredging needs for Eastern Long Island Sound is 22.6 mcy and total for LIS is 53 mcy. (see Chapter 2 of the Draft SEIS).
  - Capacity – there is not enough capacity to meet the needs over the next 30 years.
- Environmental Review
  - CT River is largest dredging-center with a haul distance to New London of 12 nmiles and twice that to CLDS.
  - Increase in haul distance increases potential for spills, interference with competing uses.
- Site Monitoring
  - Designated sites have a Management and Monitoring Plan (SMMP).
  - Plans are updated every ten years.
  - EPA and USACE meet annually to discuss the SMMP and may include other agencies (SMMP includes a plan for Physical, Chemical, and Biological monitoring at EPA designated disposal sites.

SEIS – Purpose

- Site Restriction
  - Designated sites have restrictions on site use.
  - Designated sites have specific coordinates approved for disposal each dredging season.
  - Representatives from the states of CT, NY, RI, and other Federal agencies will be members of the Regional Dredging Team to review projects to ensure the use of alternatives to open water disposal.
  - Designated sites are restricted and managed to ensure no adverse impacts to the environment which includes a determination of acceptable dredged material (i.e., not toxic).
- Site Reduction
  - There are currently four dredged material disposal sites in LIS (Central, Western, Cornfield Shoals, and New London). This designation reduces the number of disposal sites in LIS from four to three.

SEIS: Three Alternative Sites Analyzed



Legend

- Zone of Siting Feasibility
- State Boundary
- Alternative Site
- Marine Transportation (2012)
- Anchorage (2012)
- Safety Security Regulated Area

Depth (m): 0.05, -18, -40

-60, -80, -100, -120

Depth (m): -18, -20, -30

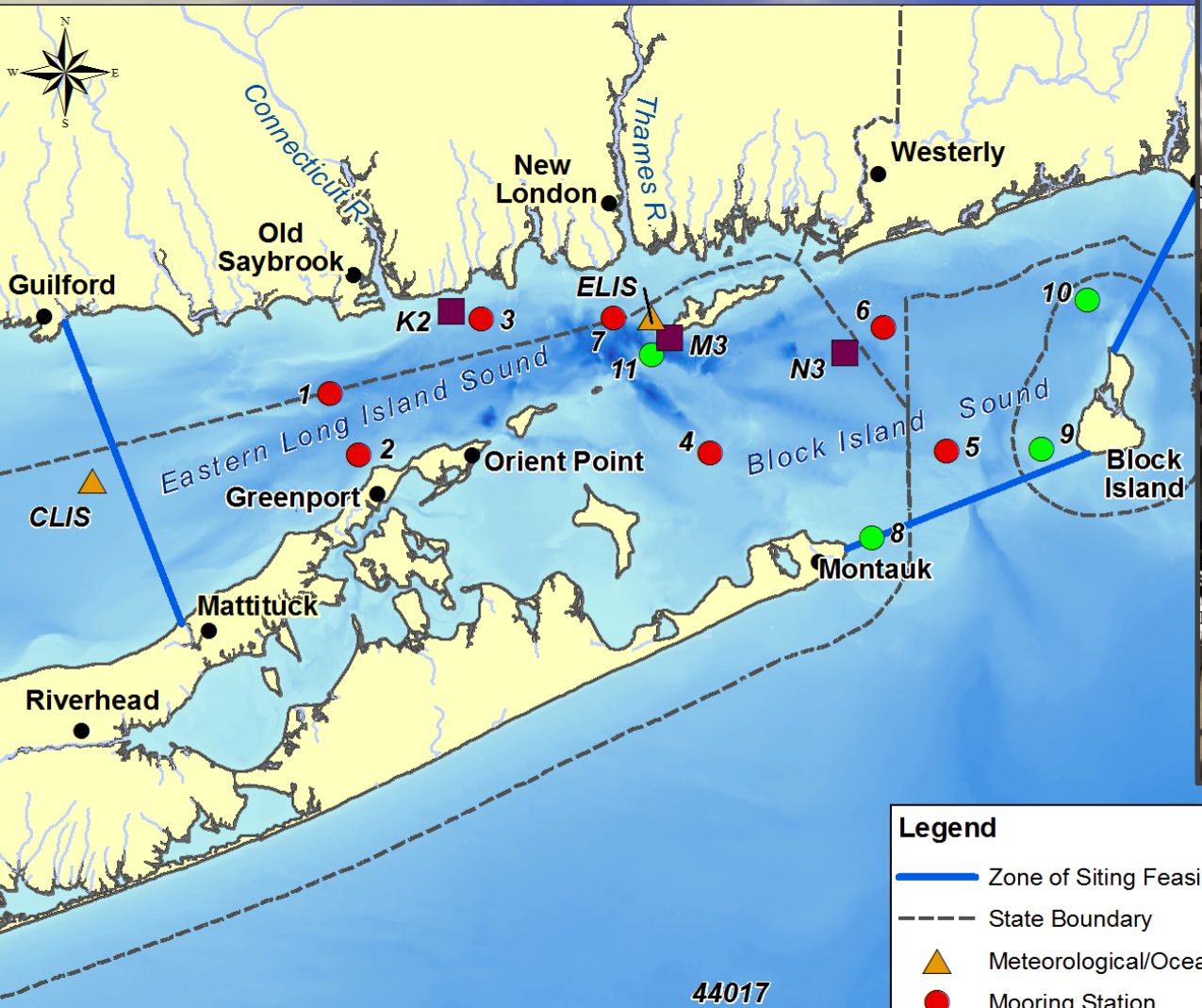
-40, -50, -75, -100

SEIS: Studies

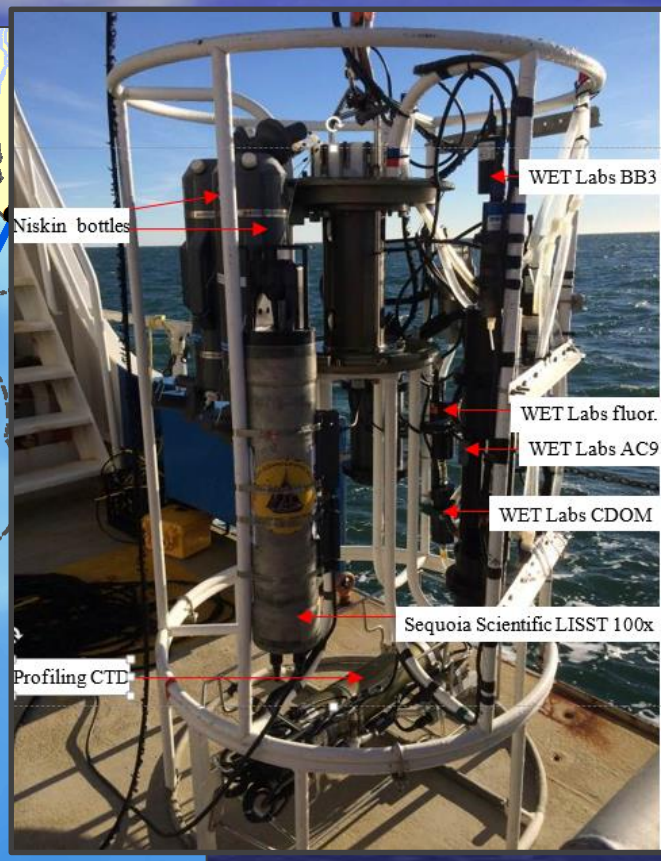
- Physical Oceanography *(UConn)*
- Sidescan Sonar Survey of Seabed *(Woods Hole Group)*
- Biological Characterization *(TetraTech)*
- Sediment Chemistry *(Louis Berger and UConn)*
- Sediment Profile Survey *(DamosVision and USACE)*

SEIS: Physical Oceanography - Stations

- Understanding fate of disposed dredged material

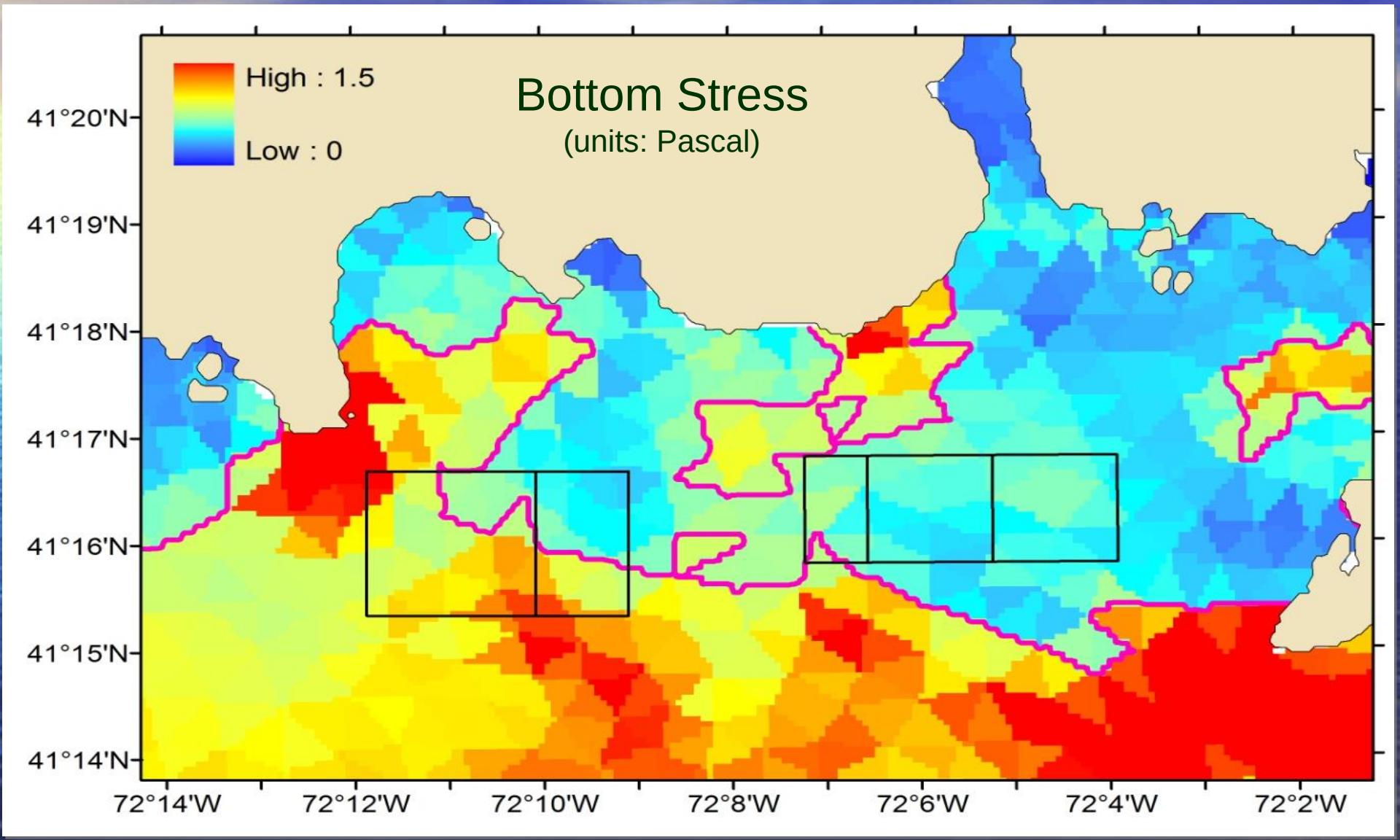


Station locations



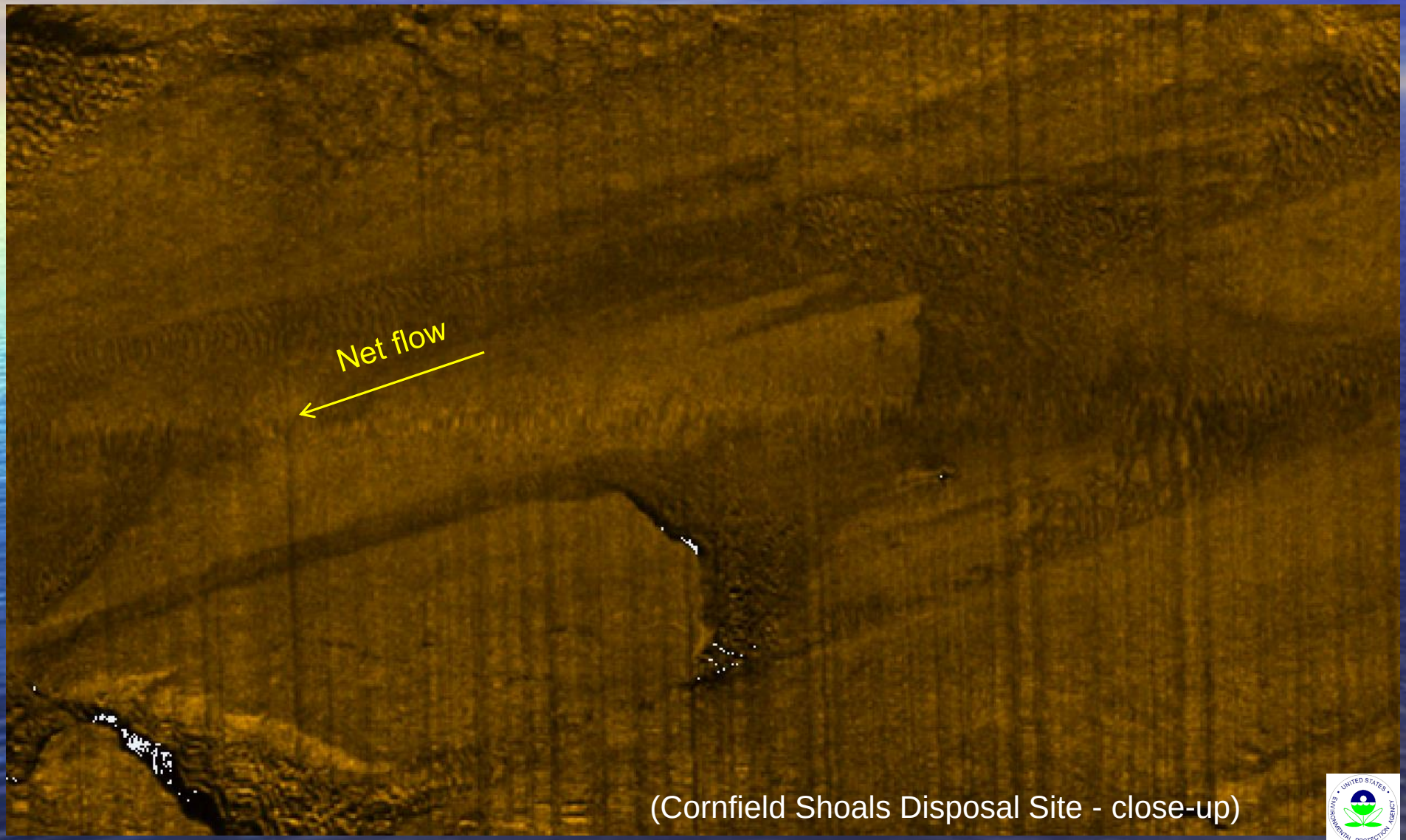
SEIS: Physical Oceanography – Modeling

- Understanding fate of disposed dredged material



SEIS: Sidescan Sonar Survey of Seabed

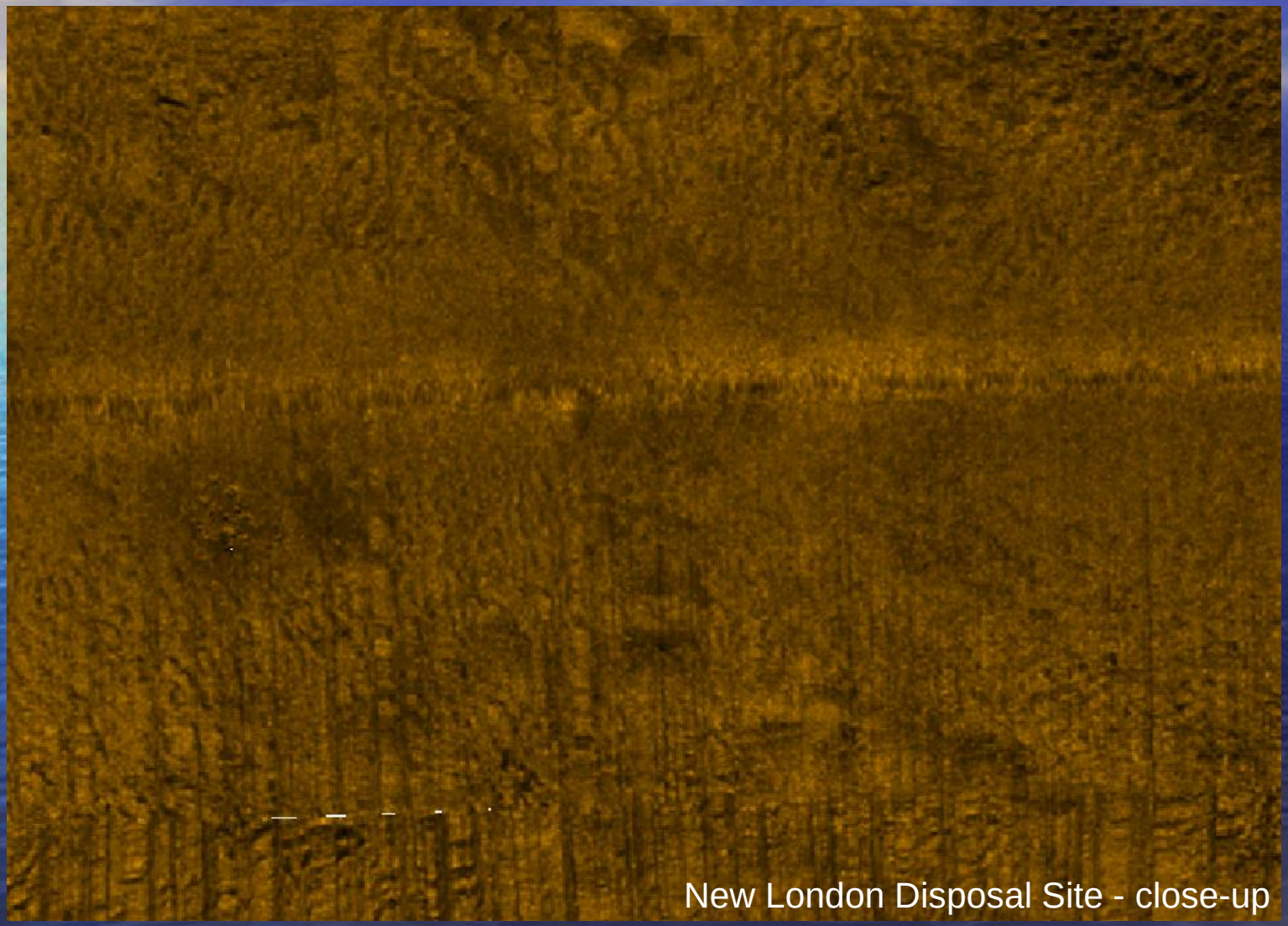
- Characteristics of seabed and locating potential archaeological resources



(Cornfield Shoals Disposal Site - close-up)

SEIS: Sidescan Sonar Survey of Seabed

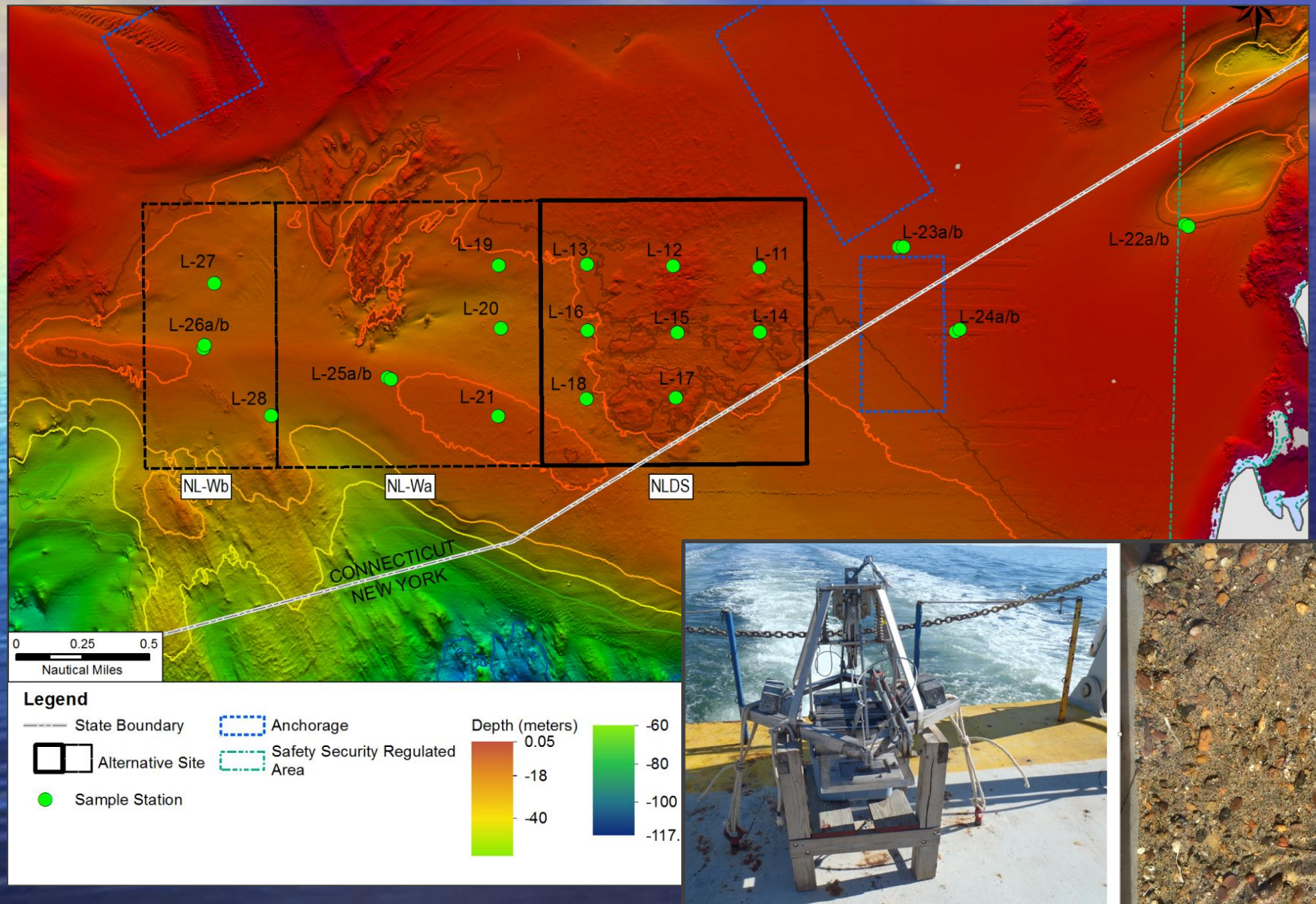
- Characteristics of seabed and locating potential archaeological resources



New London Disposal Site - close-up

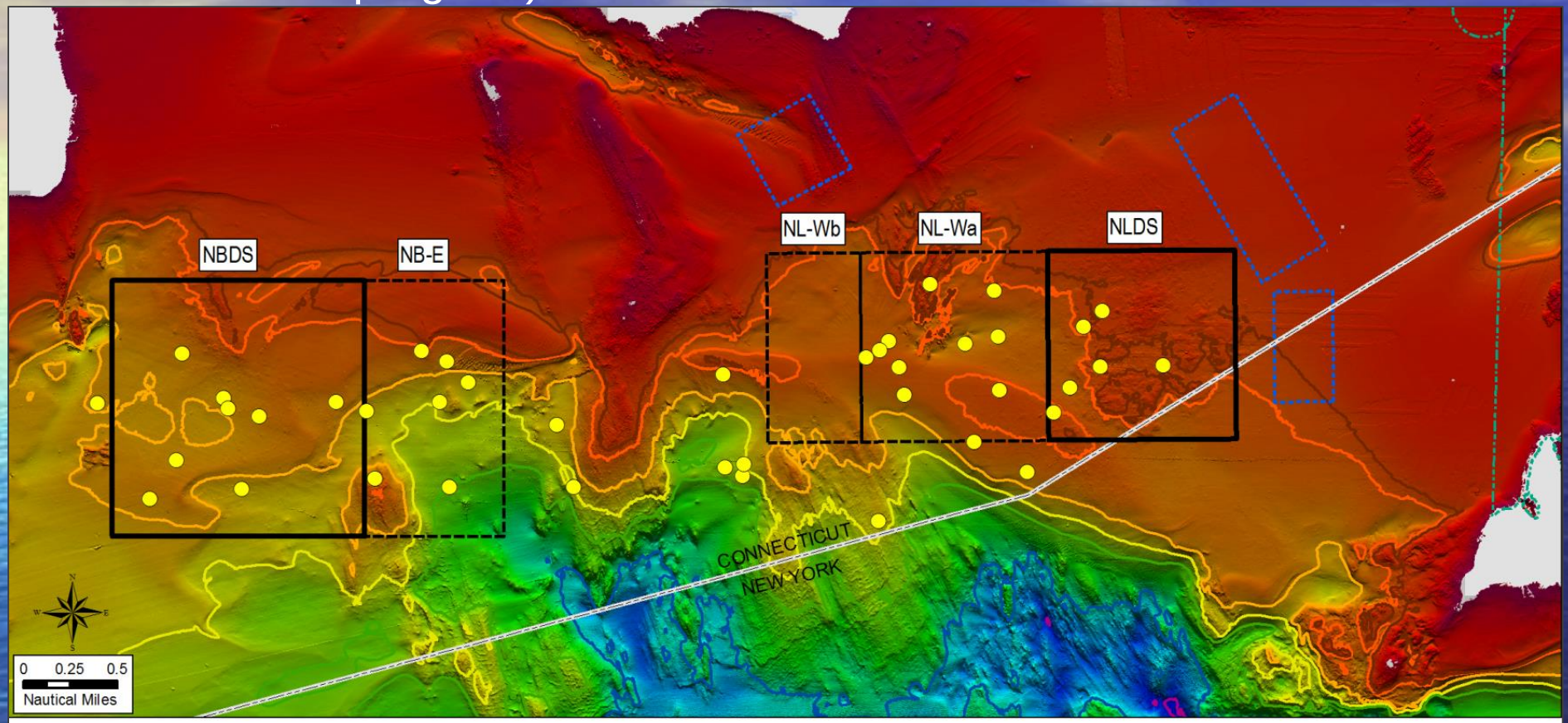
SEIS: Sediment Chemistry

- Physical and chemical characteristics of sediments



SEIS: Biological Characterization

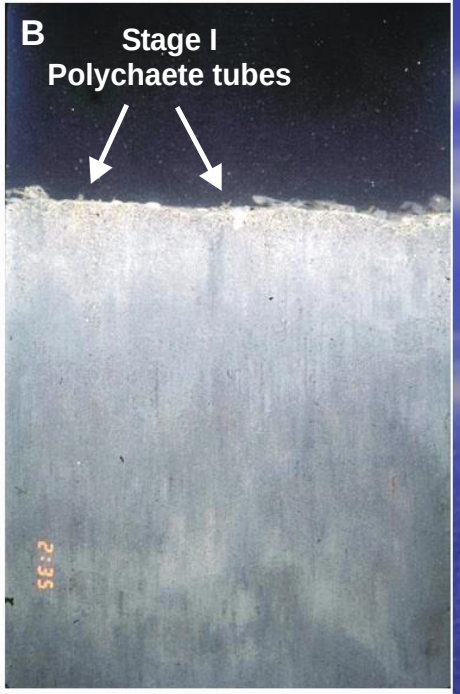
- Benthic health and diversity; fish characterization (w/ CTDEEP LISTS program)

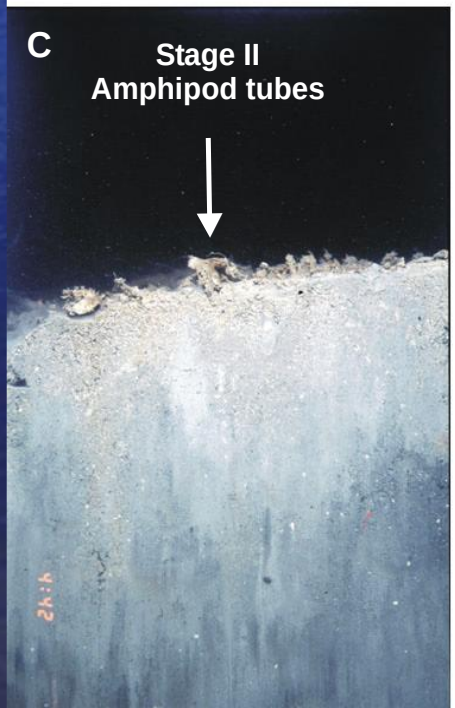


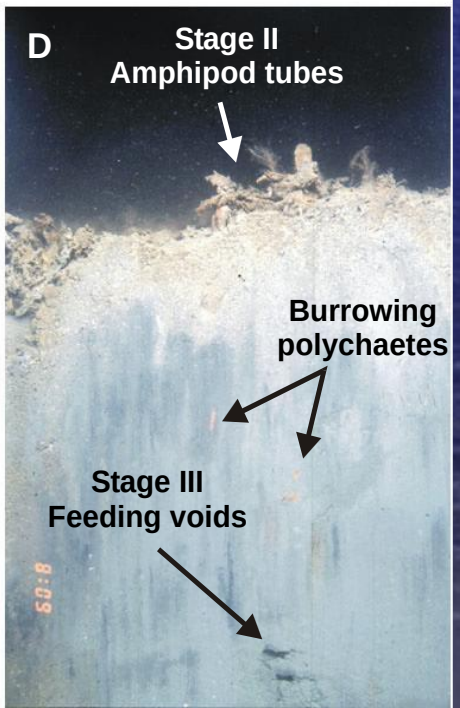
SEIS:

Sediment Profile Survey

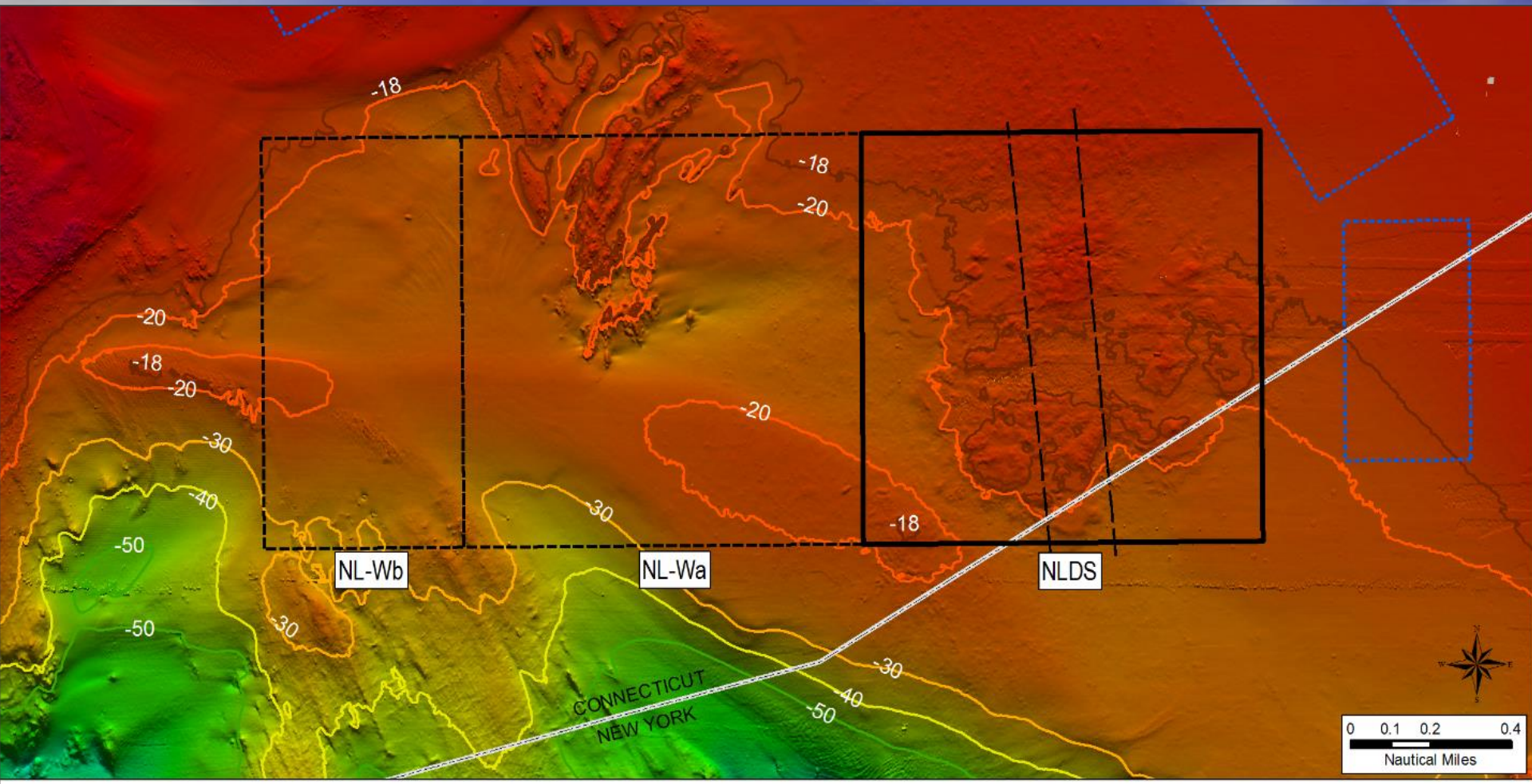
Diversity and health of benthic community







SEIS: New London Alternative



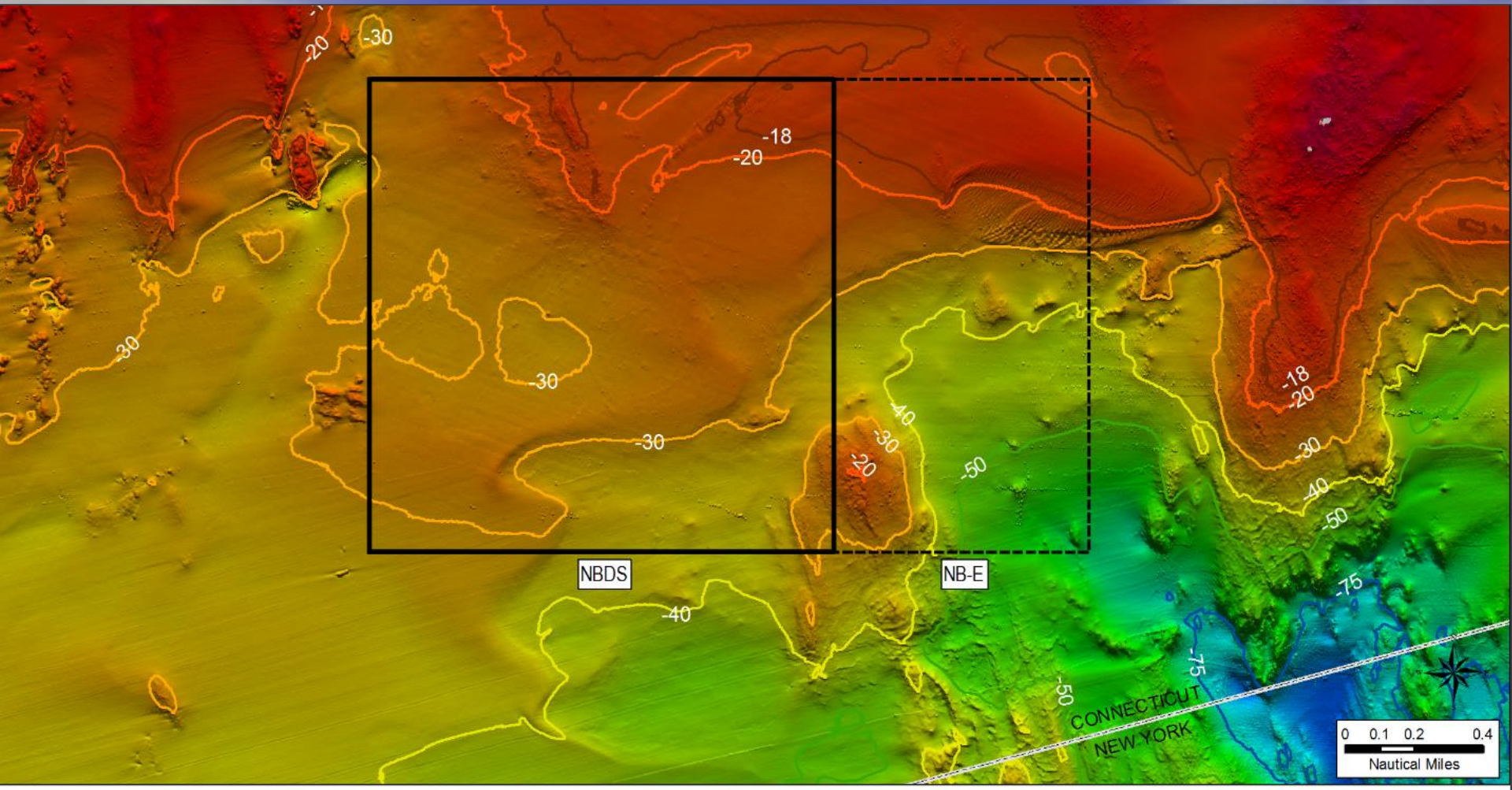
Legend

- Zone of Siting Feasibility
- State Boundary
- Alternative Site
- Anchorage
- Submarine Transit Corridor

Depth (m): 0.05, -18, -40, -60, -80, -100, -120

Depth (m): -18, -20, -30, -40, -50, -75, -100

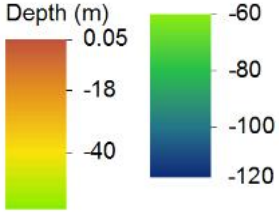
SEIS: Niantic Bay Alternative



Legend

- Zone of Siting Feasibility
- State Boundary
- Alternative Site

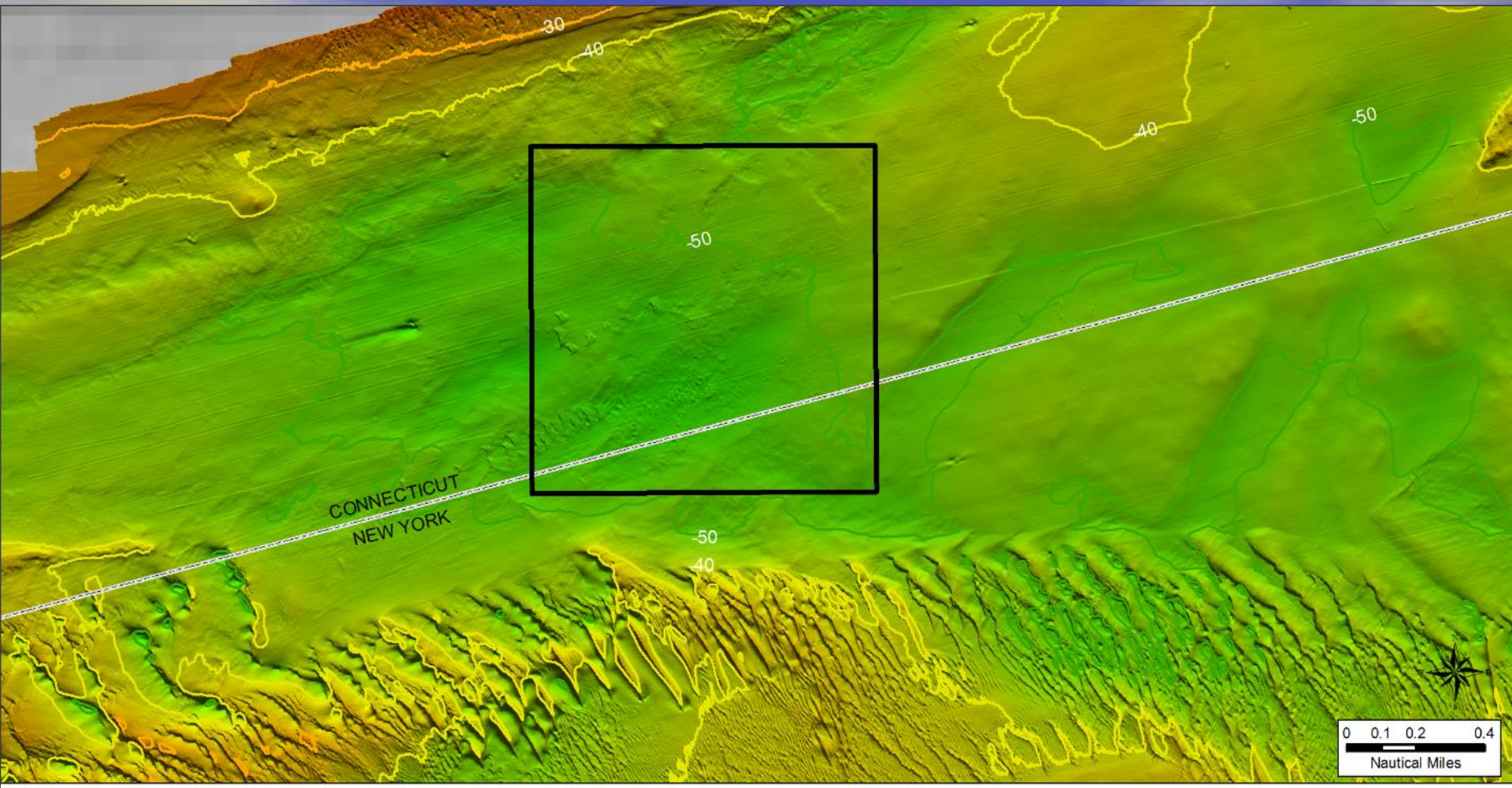
Depth (m)



Depth (m)

- -18
- -20
- -30
- -40
- -50
- -75
- -100

SEIS: Cornfield Shoals Alternative



Legend

- Zone of Siting Feasibility
- State Boundary
- Alternative Site

Depth (m)
0.05
-18
-40

-60
-80
-100
-120

Depth (m)
-18
-20
-30

-40
-50
-75
-100

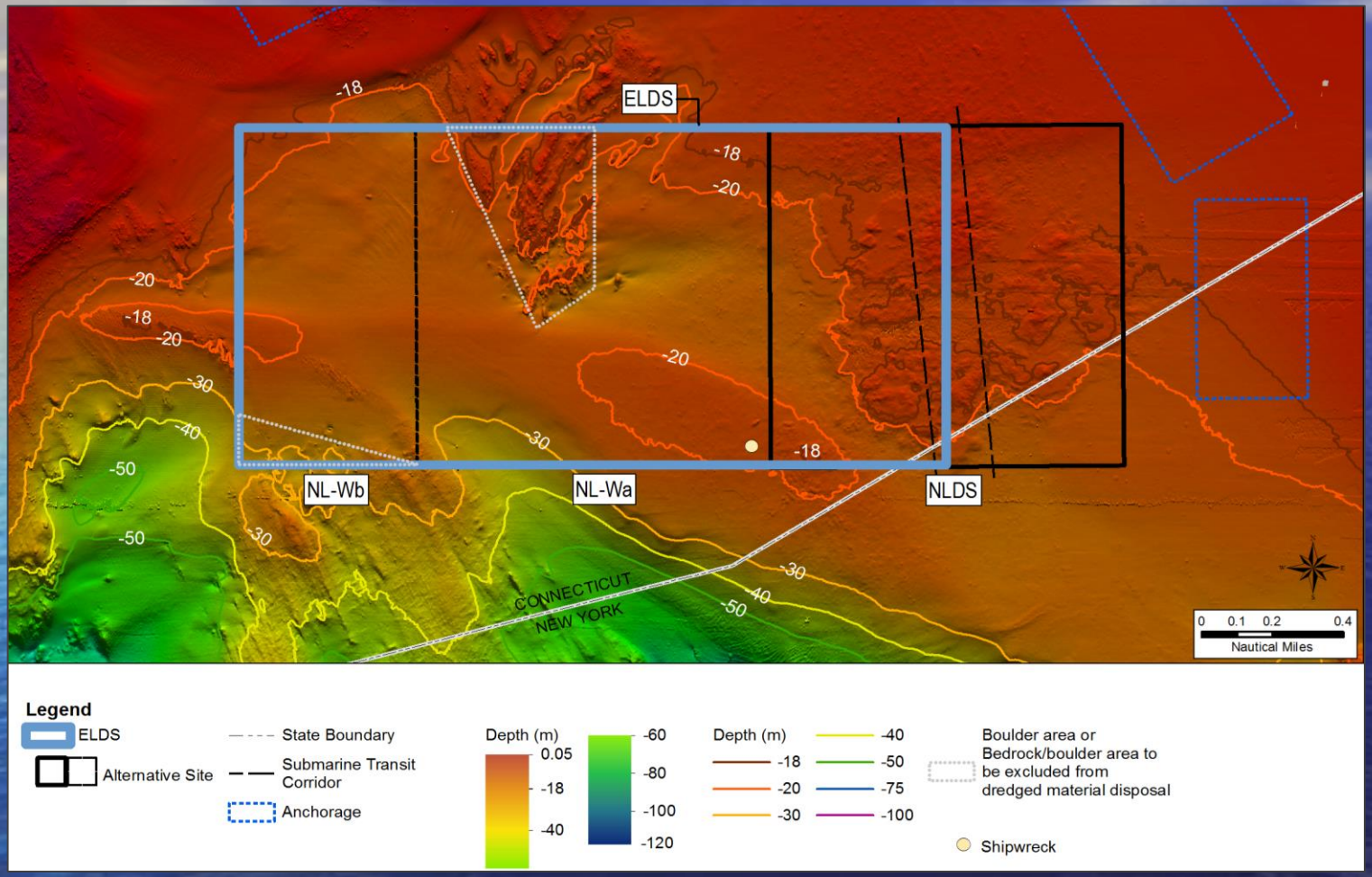
SEIS: Existing Conditions

- Sedimentary Environment
  - *Texture:* Mostly sand; New London finer-grained
  - *Bottom Stress:* Lowest for New London; highest for Cornfield Shoals
  - *Contaminants:* Concentrations low or not detected
- Biological Resources
  - *Shellfish Beds:* None.
  - *Commercial and recreational shellfish:* Low abundance
  - *Fish Habitat:* Similar to other parts of Eastern Long Island Sound
- Socioeconomic and Cultural Resources
  - *Infrastructure:* No cables or pipelines
  - *Navigation:* No interference; no anchoring areas
  - *Conservation Areas* (sanctuaries, wildlife refuges, National Seashores, parks, artificial reefs, etc.): None.
  - *Cultural and Archaeological Resources:* Shipwreck in New London site

SEIS: Environmental Consequences

- Sedimentary Environment
  - *New London:* Containment site
  - *Cornfield Shoals:* Dispersive site
  - *Niantic Bay:* Containment in NE; dispersive in remainder of the site
- Biological Resources
  - *Benthic Community:* Short-term impacts during disposal, but rapid recolonization
  - *Fish Habitat and Fish Concentrations:* Potential impacts minimal
  - *Mammals, Reptiles, Endangered and Threatened Species:* Potential impacts minimal
  - *Bioaccumulation:* Dredged material is required to go through stringent testing before disposal.
- Socioeconomic and Cultural Resources
  - *Commercial fishing:* Potential impacts minimal - not prime finfish or shellfish habitats
  - *Recreational fishing:* Also minimal
  - *Commercial shipping and navigation:* No impact. Site would be managed to avoid navigation hazards.
  - *Beaches, parks, and natural areas:* No impacts
  - *Cultural Resources:* Shipwreck at New London site. Managed with buffer zone.

SEIS: Preferred Alternative – Eastern Long Island Sound Disposal Site



- Sediment is contained within the area
- Previously used disposal area
- Environmental consequences minor, minimal or none
- Shipwreck and boulder areas excluded from disposal
- Close proximity to larger dredging centers

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Presentation 3

Steve Wolf, Environmental Resources Section, U.S. Army Corps of Engineers, New England District

Dredged Material Testing and Disposal Site Management: "Overview of Monitoring at Open Water Dredged Material Placement Sites"

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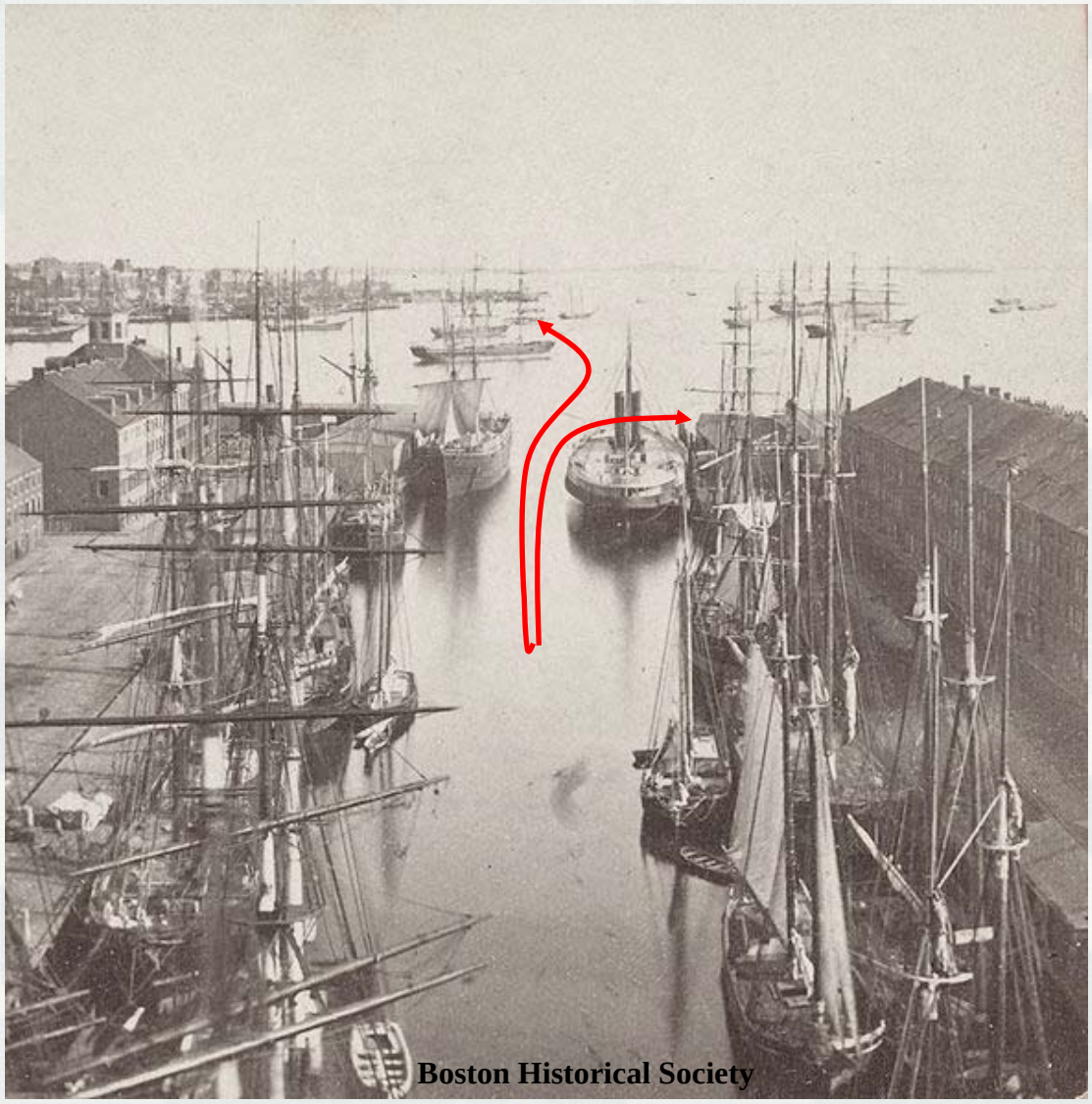
Overview of Monitoring at Open Water Dredged Material Placement Sites

- scow loaded with 3000+ cubic yards of dredged material

Overview of Monitoring at Open Water Dredged Material Placement Sites

- Can you place dredged material accurately?
- Will it stay where you place it?
- Impacts to water quality?
- Impacts to the benthic community on the seafloor?

History of Aquatic Placement of Dredged Material

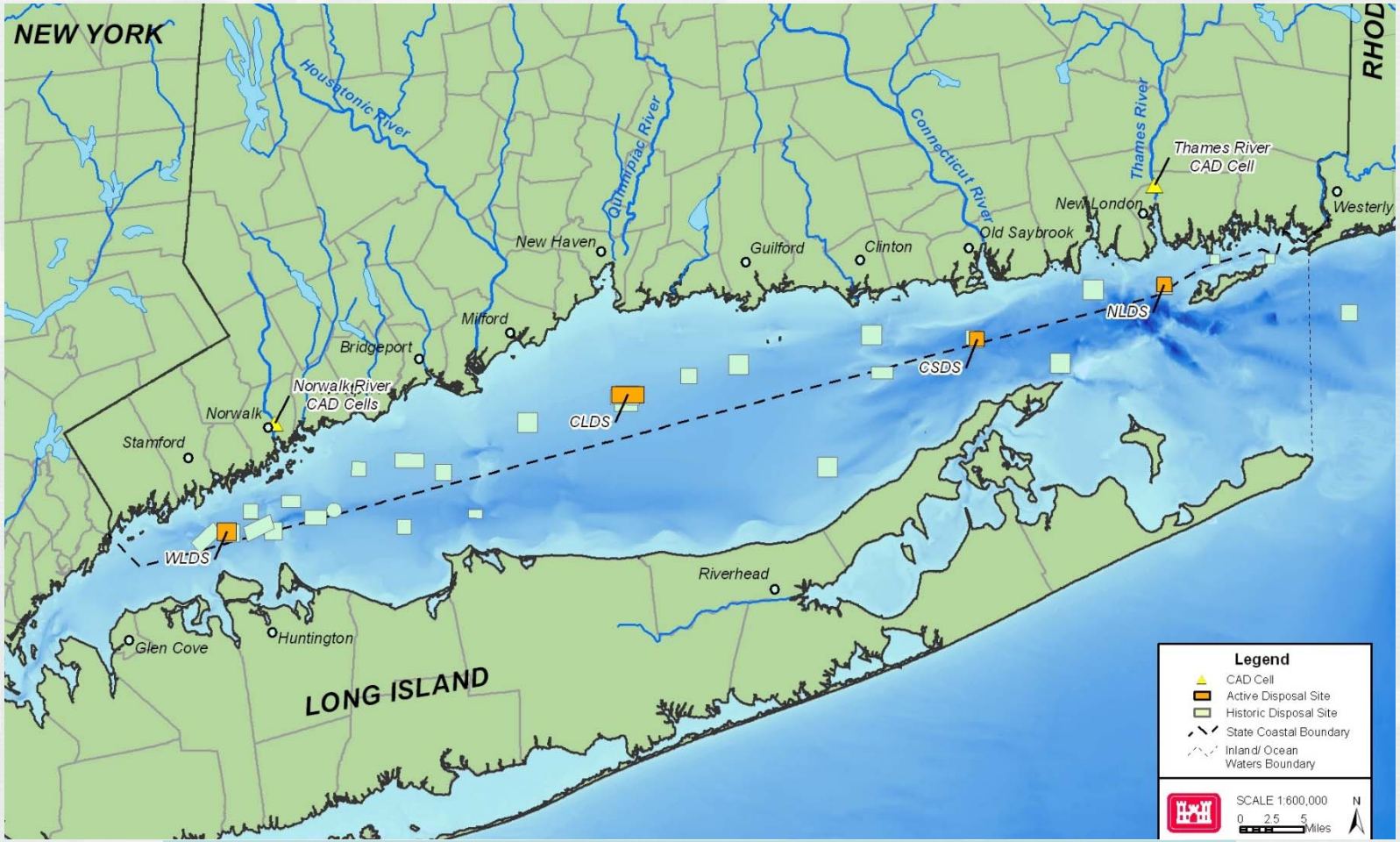


- early dredging efforts relocated dredged material only a short distance

History of Aquatic Placement of Dredged Material

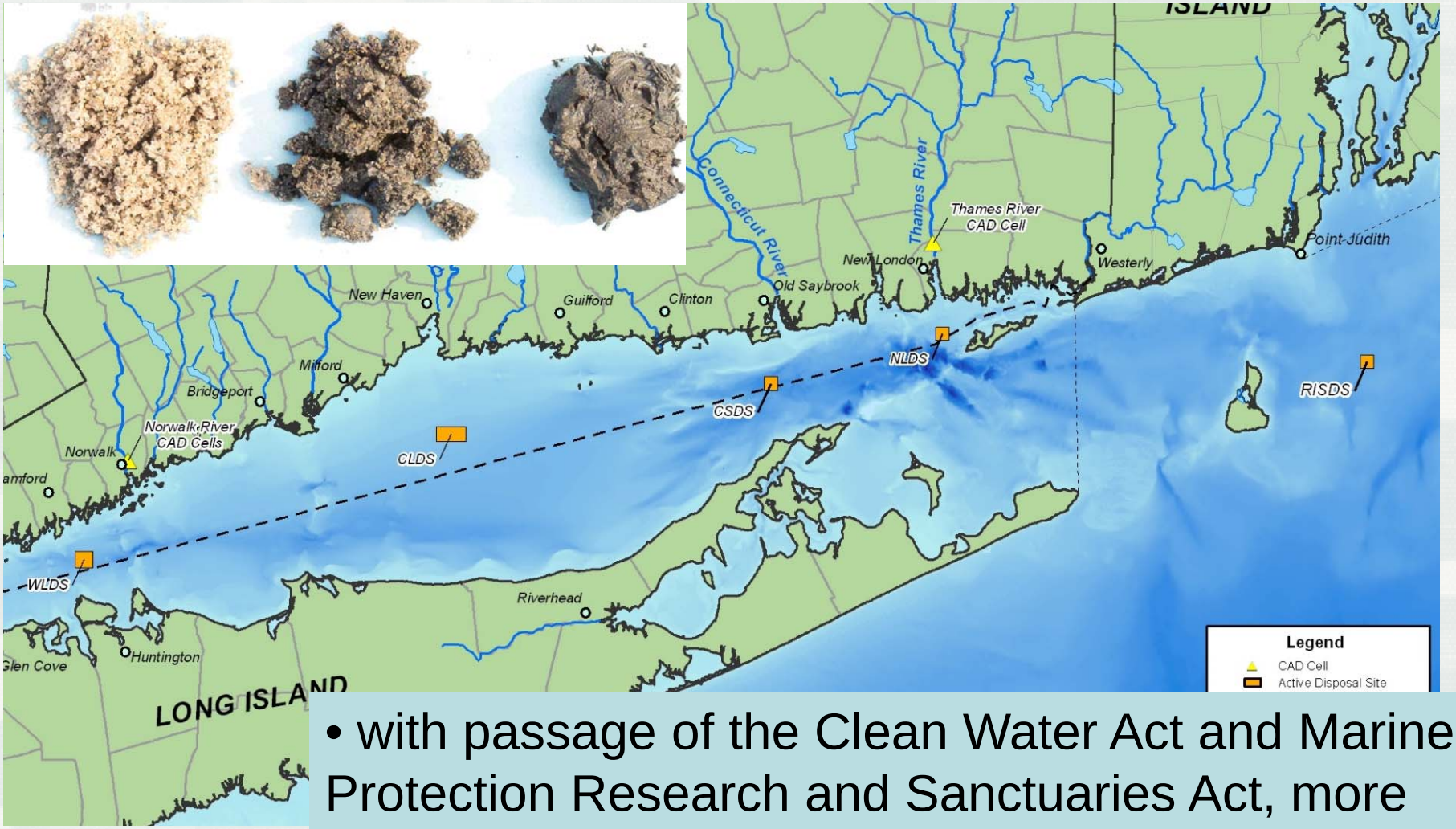
- historical dredged material placement scattered along the NE coast through the early 1900's

History of Aquatic Placement of Dredged Material



- some sites specified in early to mid 1900's but limited placement guidelines

History of Aquatic Placement of Dredged Material

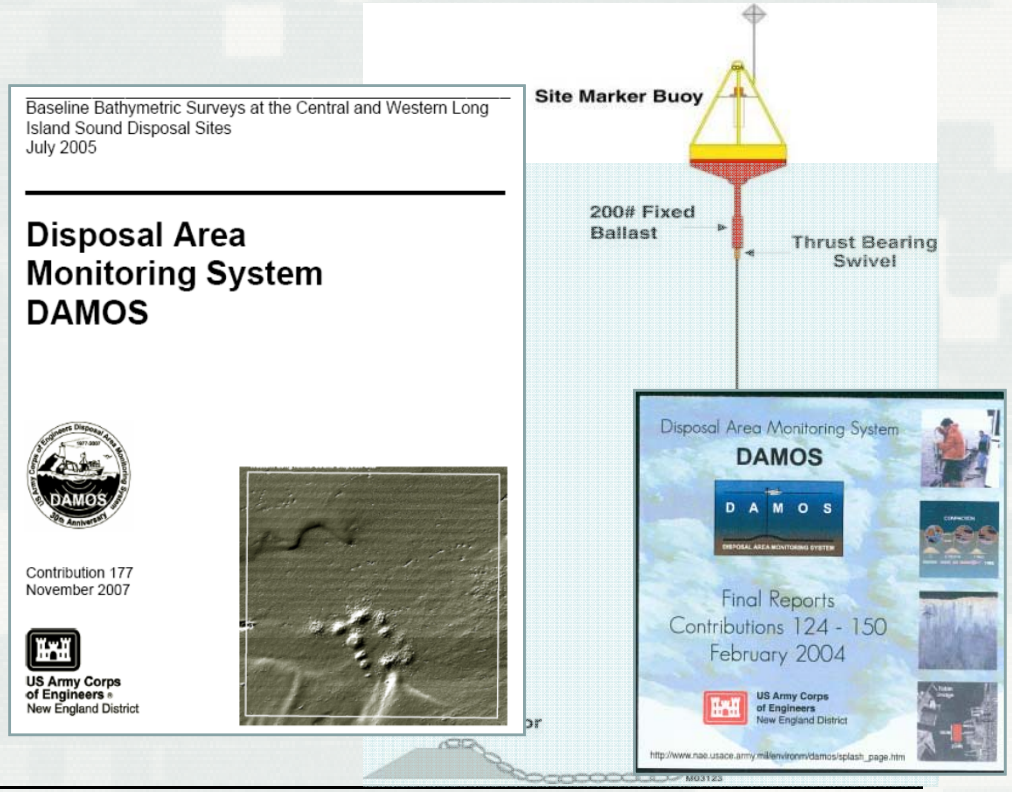


- with passage of the Clean Water Act and Marine Protection Research and Sanctuaries Act, more rigorous process for selecting/designating placement sites and controls on placed material

Placement & Monitoring of Dredged Material

Disposal Area Monitoring System (**DAMOS**) Program was initiated in 1977 and now draws on nearly 40 years of monitoring NE waters

- Can you place dredged material accurately?
- Will it stay where you place it?
- Impacts to water quality?
- Impacts to the benthic community on the seafloor?



Required Testing for Dredged Material

- toxic material ***IS NOT*** placed at the open water sites

East End Beacon
news from the twin forks

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Home » Environment » As LI Sound Dredge Dumping Plan is Released, Politicians Voice Opposition

As LI Sound Dredge Dumping Plan is Released, Politicians Voice Opposition

Posted by East End Beacon · August 18, 2015 · Environment · 6 Comments

On the Sound

Update: Aug. 20, 2015:

The Army Corps of Engineers has responded to public pressure to extend the deadline for public comment on their plan to renew dumping of dredge spoils in the Long Island Sound. The new deadline is October 16, one month later than origionally proposed. The two public hearings will be still be held in New York on Monday, Aug. 24, 2015 in the Village Center at Port Jefferson at 101-A East Broadway in Port Jefferson, N.Y.; and on Tuesday, Aug. 25, 2015 at the Marriott Long Island at 101 James Doolittle Blvd. in Uniondale, N.Y.

Original Story Follows:

The U.S. Army Corps of Engineers released its plan Monday to continue to allow the dumping of toxin-laden dredge spoils from Connecticut rivers into the Long Island Sound, and elected leaders on Long Island were quick to announce their opposition to the plan.

Newsday.com Page 1 of 2

Newsday

Reprints

Cuomo urged to veto plan to dump dredge spoils in LI Sound

February 23, 2016 By Rick Brand

scored an F grade. (Credit: Julia Za

Suffolk County lawmakers, civic leader
Tuesday to veto a U.S. Army Corps of
million cubic yards of dredge spoils in

"There are toxic sands running through
Legis. Sarah Anker (D-Mt. Sinai), who
news conference in Hauppauge.

"The sound is dying and they are trying
(R-Fort Salonga) a longtime spear fishe
Island."

The U.S. Environmental Protection Age
next week will hold public hearings on
at the Port Jefferson Free Library Tues
from 5-7 p.m., and another hearing in
Stamford, Connecticut, the next day.

Cuomo will have until May 10, the dead
final adoption of the plan, to act, accor
the EPA. Cuomo's office did not return
comment Tuesday.

http://www.newsday.com/long island/poli

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Editorial OPINION

Stop dumping dredge waste in Long Island Sound

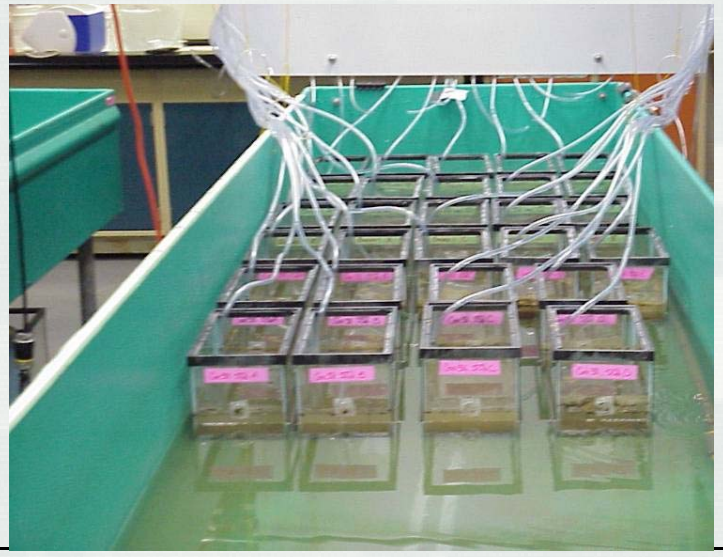
January 14, 2016 6:39 PM

By By the Editorial Board Reprints

The Long Island Sound. Photo Credit: Joseph D. Sullivan

Required Testing for Dredged Material

- EPA and states require rigorous testing of dredged material
- toxic material ***IS NOT*** placed at the open water sites



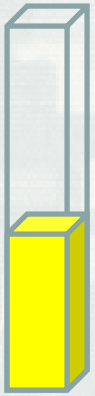
Communicating sediment concentration data

Arsenic

pre-industrialization

background today

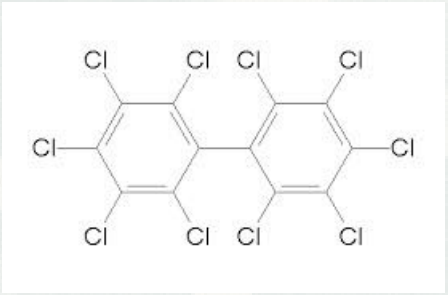
chronic toxicity



acute toxicity

Communicating sediment concentration data

PCBs (polychlorinated biphenyls)

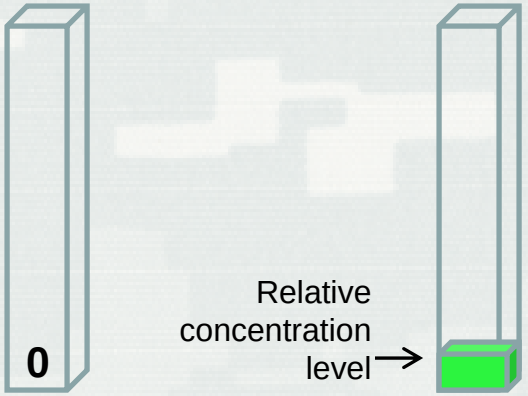


pre-industrialization

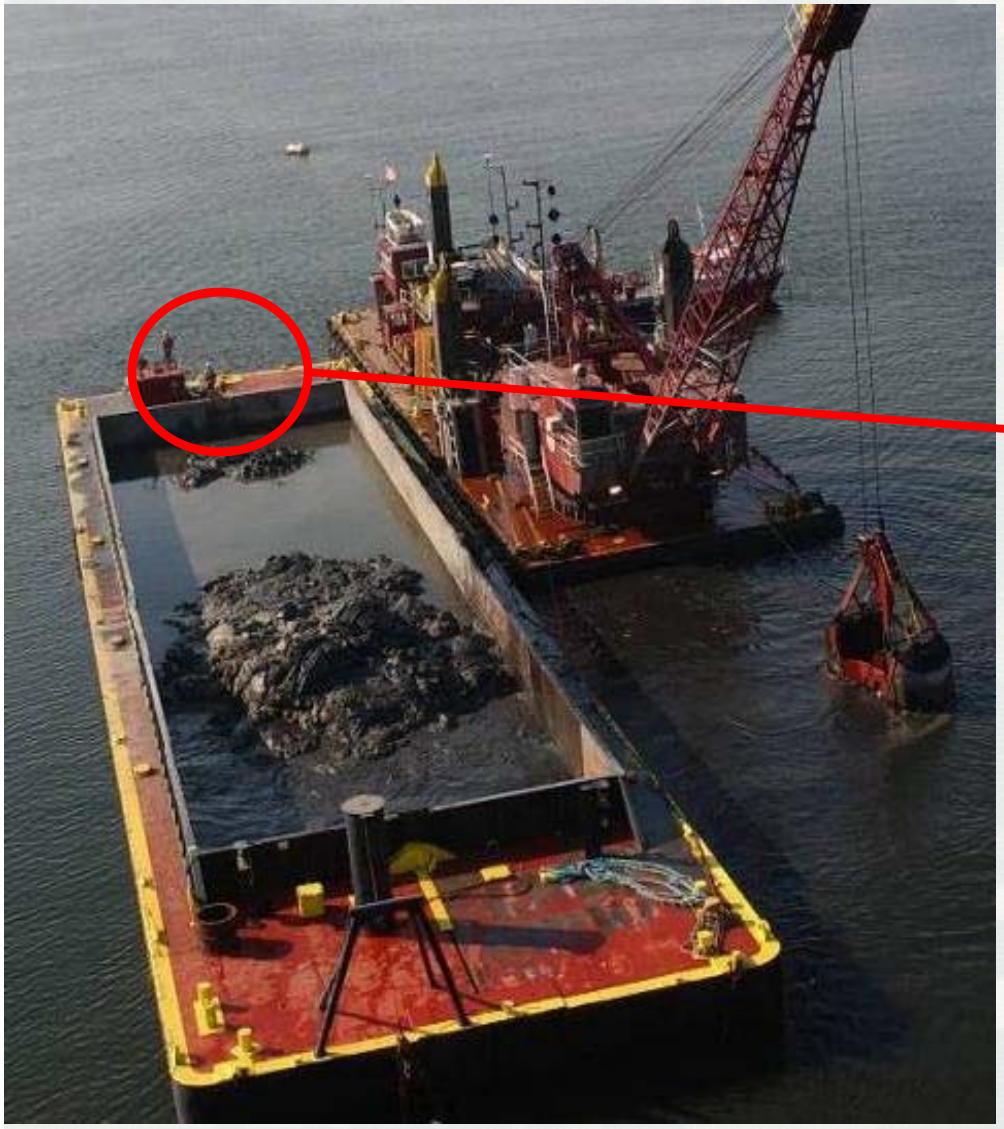
background today

chronic toxicity

acute toxicity

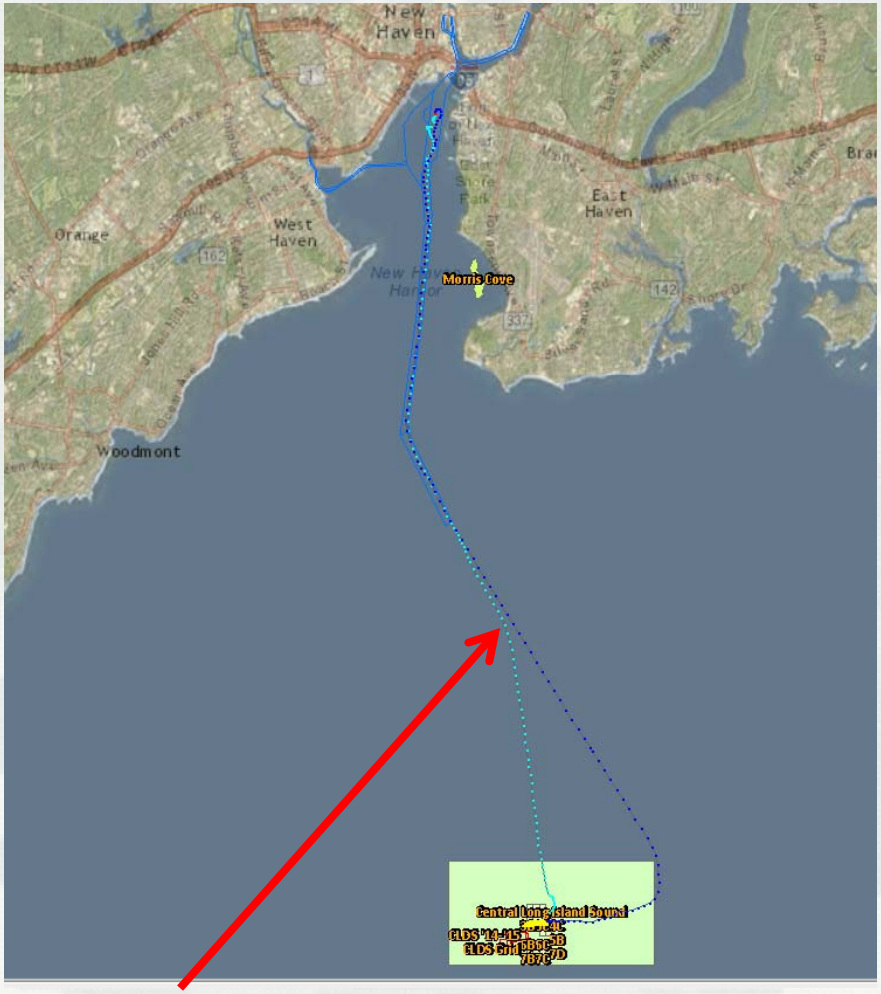


Is Dredged Material Accurately Placed?

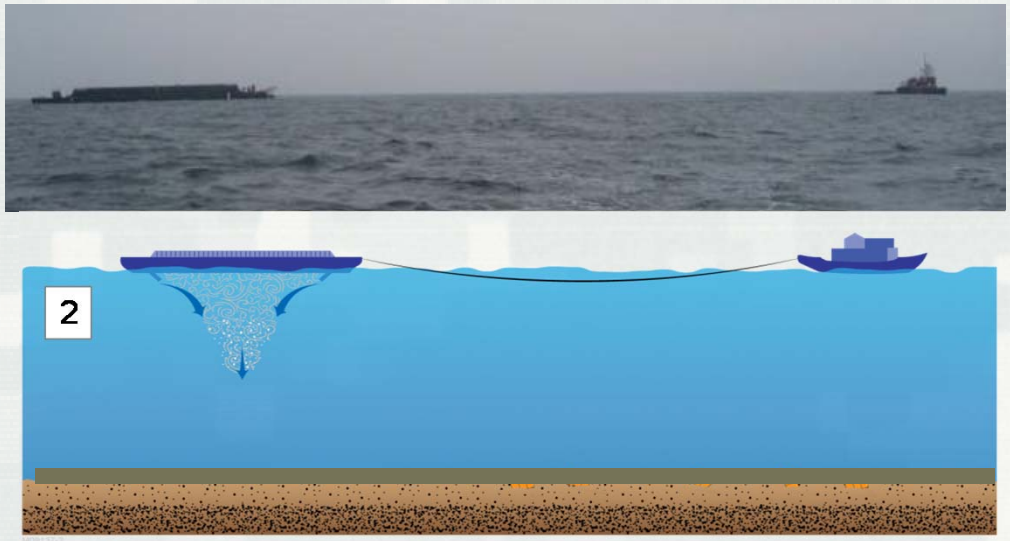


Tracking system required for all placement

Is Dredged Material Accurately Placed?



Example recorded track of scow bringing dredged material from New Haven Harbor to the Central LIS site

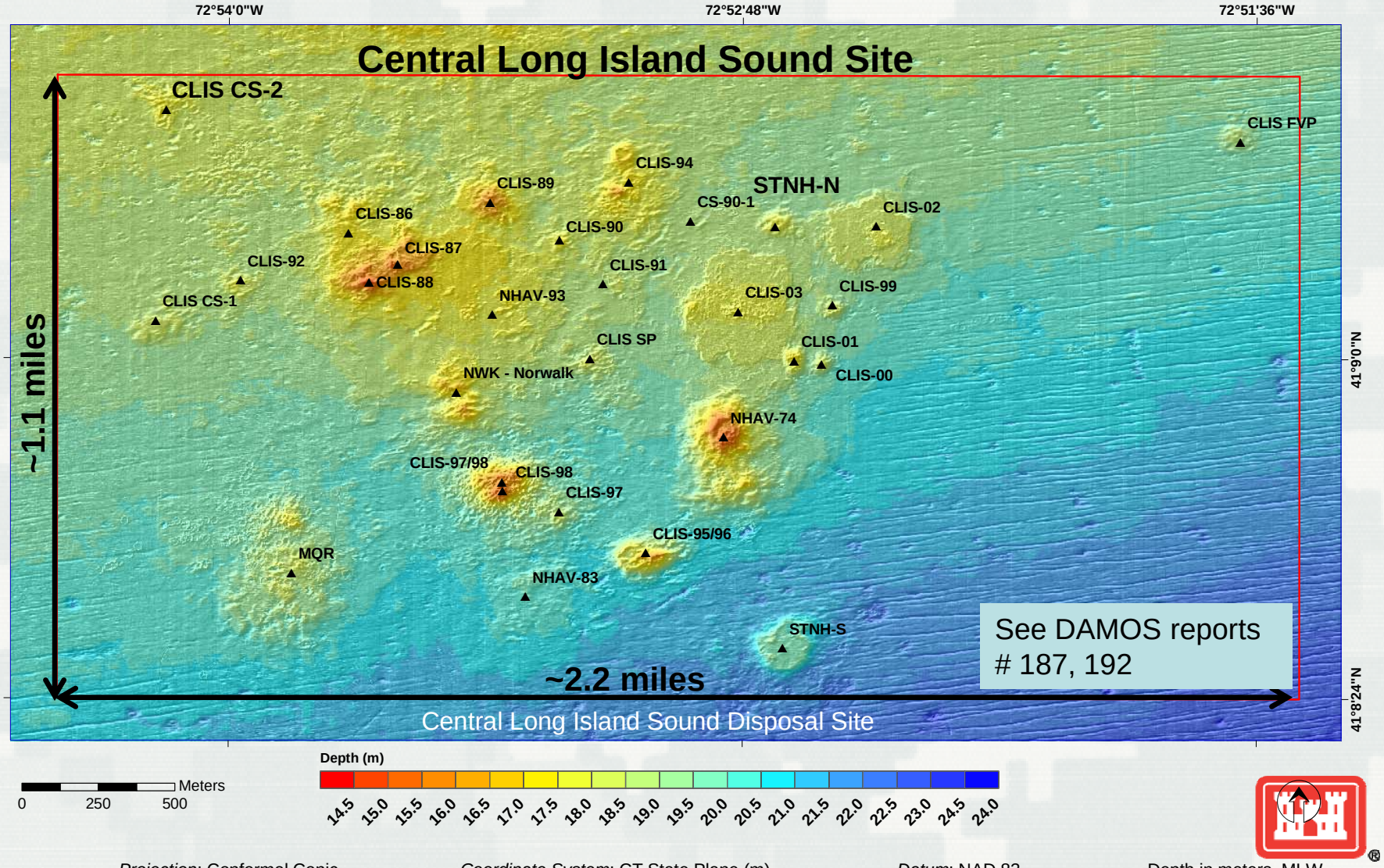


Barge releases material adjacent to target capping area

- GPS allows for tracking the scow over full trip
- hull and draft sensors allow for tracking release of material from the scow

Does Dredged Material Remain Stable on the Seafloor?

- decades long records at multiple sites with passage of hurricanes and nor'easters

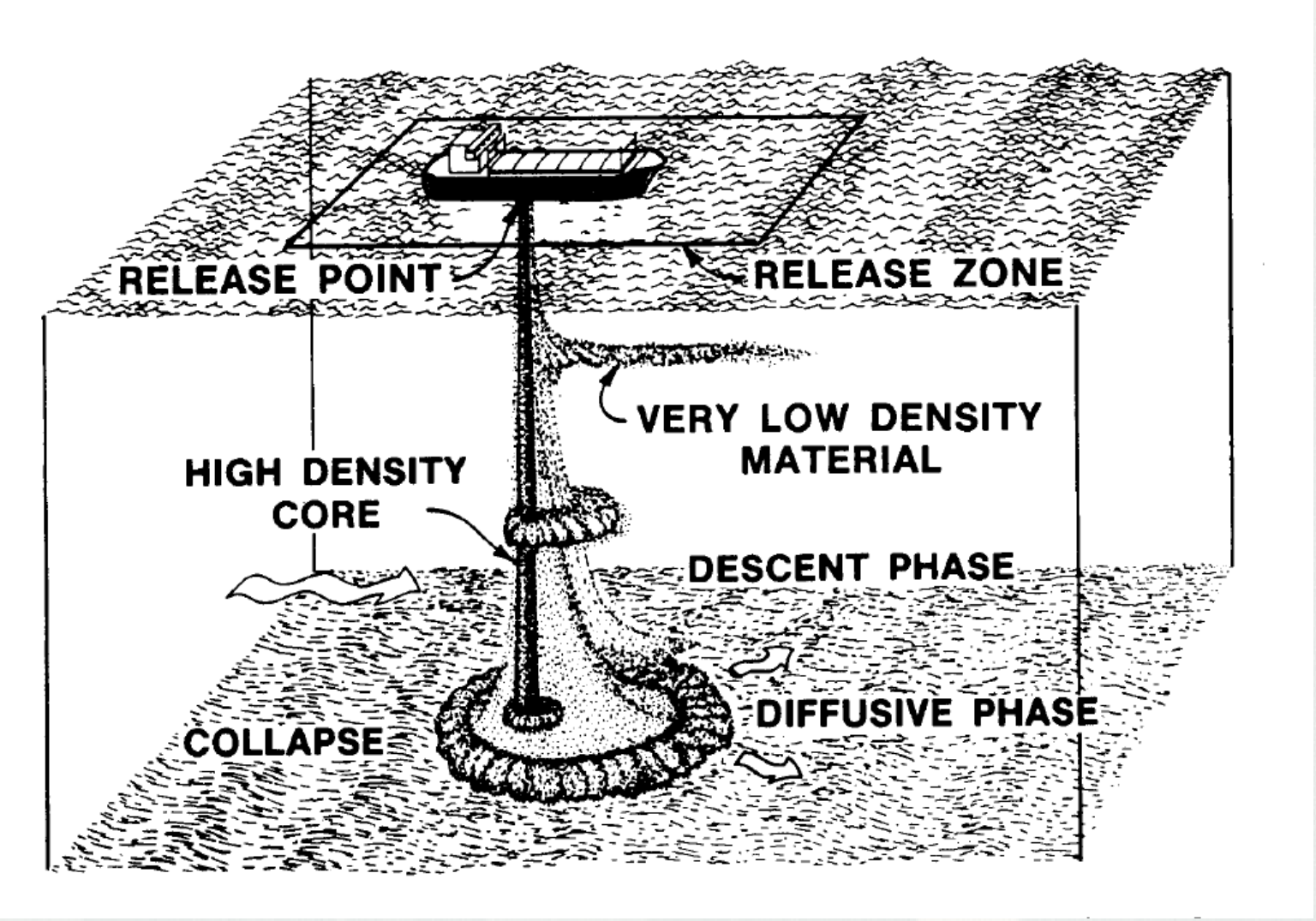


Projection: Conformal Conic *Coordinate System:* CT State Plane (m) *Datum:* NAD 83 Depth in meters, MLW

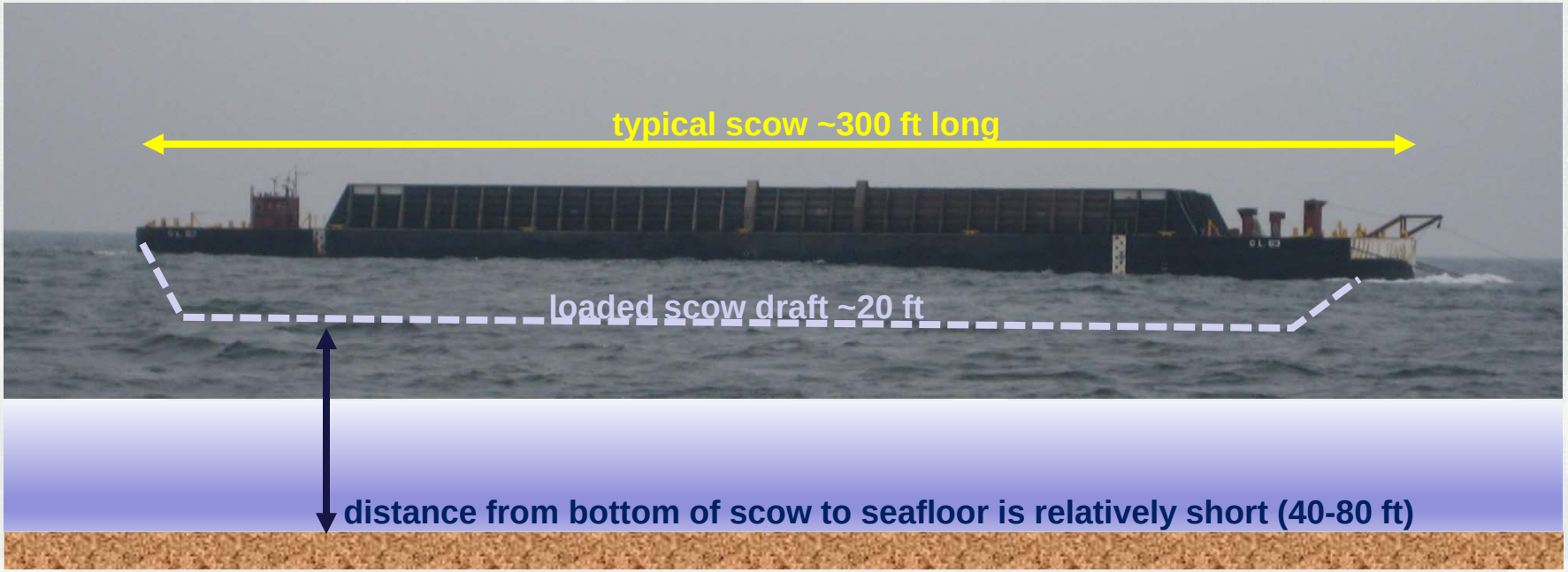
25-26 May 2016

BUILDING STRONG®

What About Impacts to Water Quality?

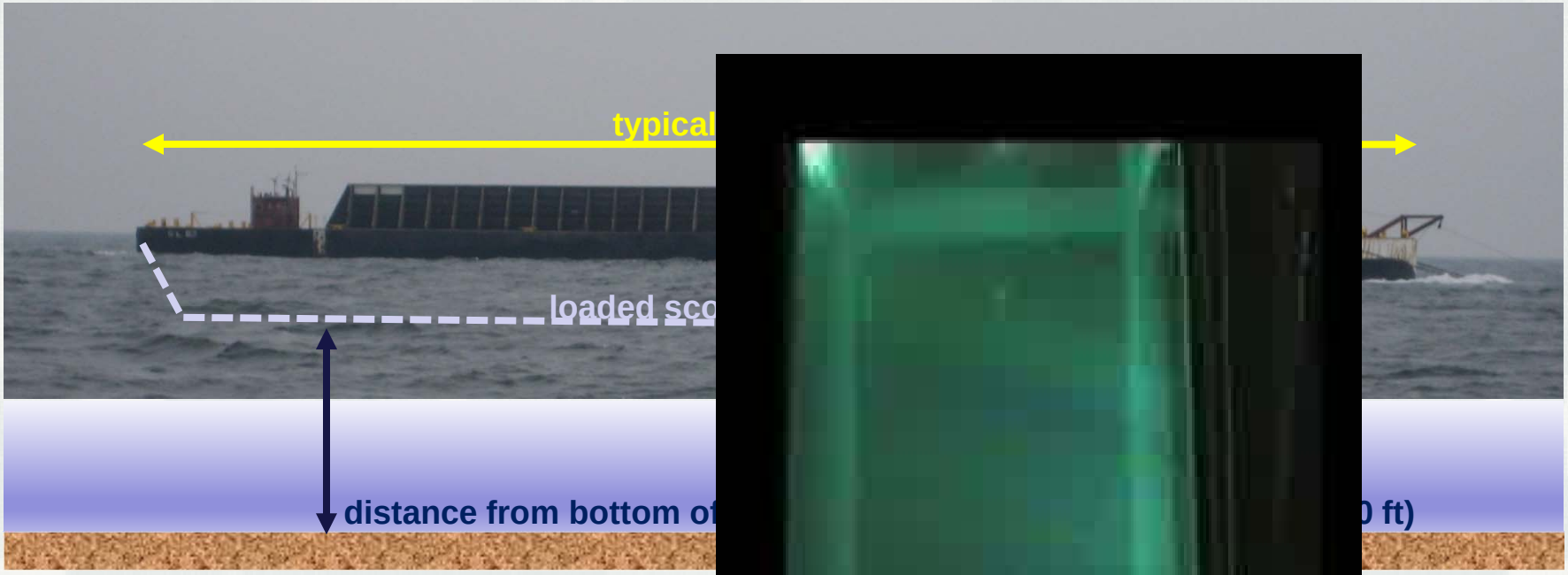


What About Impacts to Water Quality?



Given the relatively shallow depths of the Long Island Sound Sites, the released dredged material reaches the seafloor quickly with minimal release to the water column

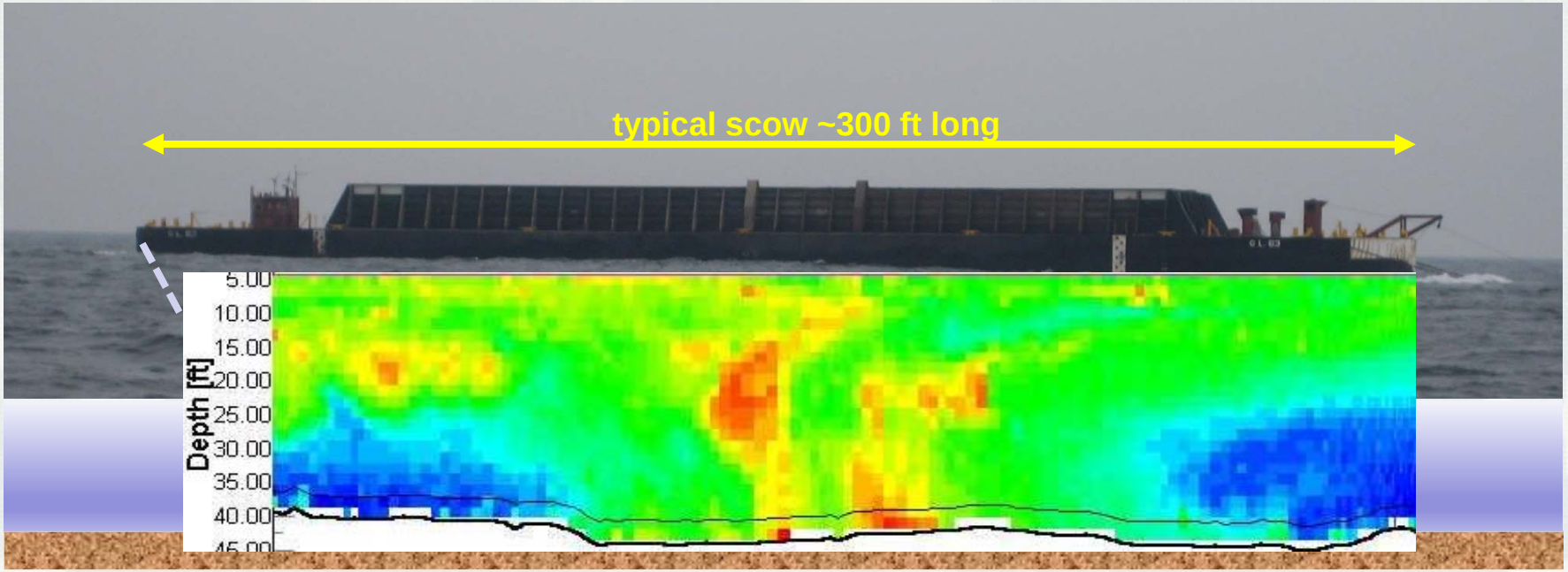
What About Impacts to Water Quality?



Laboratory studies support field observations of limited loss of material to the water column

MIT laboratory simulation of release of material from a scow using scaled fluorescent beads in a ~10 ft tank (Ruggaber 2000)

What About Impacts to Water Quality?

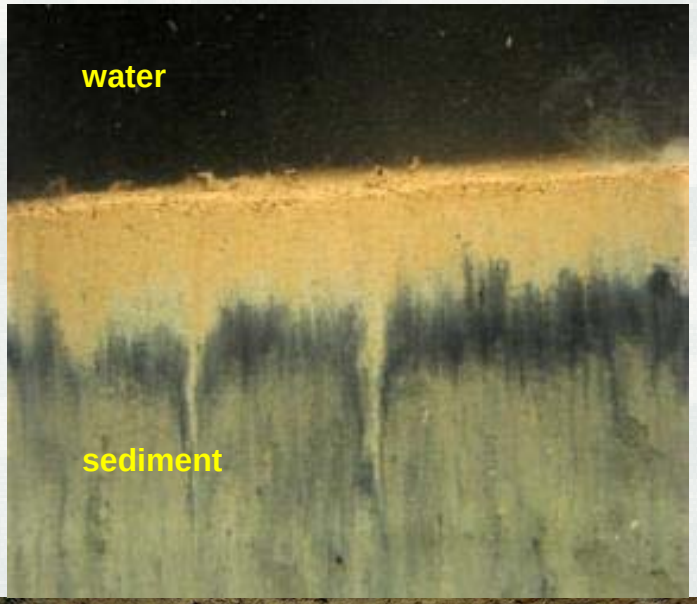


Acoustic Doppler Current Profiler (ADCP) transect run immediately following the release from the scow provides a real-time map of any water column plume

Water column monitoring and sampling with laboratory analysis has demonstrated minimal, short-term impacts to water quality (see DAMOS reports #166, 167, 178)

What Are the Impacts to the Benthic Community?

• Benthic (seabottom) impacts limited to the direct footprint of the material placement

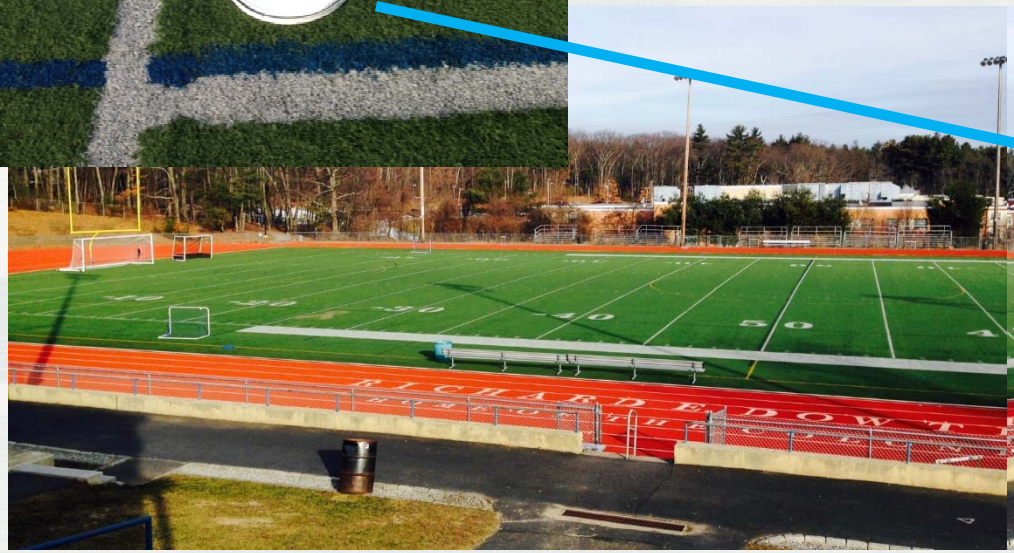


•Tracking this recovery is a primary objective of the DAMOS Program (see reports #188, 191, 192, 193 for recent examples)

What Are the Impacts to the Benthic Community?

What Are the Impacts to the Benthic Community?

- Dredged material placement affects only a very, very small portion of the seafloor of Long Island Sound on an annual basis
- Monitoring has shown that the areas recover within 1 to 2 years



Sediment Transport and Deposition is a Normal Process

Discharge of sediment-laden Connecticut River into Long Island Sound following passage of Hurricane-Tropical Storm Irene

What About Alternatives to Open Water Placement?

- New England Regional Dredge Team meets quarterly
- Beneficial use of dredged material is a standard agenda item

Information

USACE Disposal Area Monitoring System (DAMOS) reports

http://www.nae.usace.army.mil/Missions/DisposalAreaMonitoringSystem(DAMOS).aspx

Steve Wolf, DAMOS Program Manager

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Concord, MA 0172

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Steven.wolf@usace.army.mil

Presentation 4

Mel Coté, Chief, Surface Water Branch, EPA Region 1

Proposed Rulemaking for Eastern Dredged Material Disposal site (ELDS): "Eastern Long Island Sound Dredged Material Disposal Site Rulemaking"

(Note: In the interest of time, Slide 2 ("EPA-USACE Share Responsibility") and Slide 12 ("Dredged Material Disposal Summary 2006-2014") of this presentation were not used during the hearings in Groton, CT.)

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Eastern Long Island Sound Dredged Material Disposal Site Rulemaking

Public Hearings on Proposed Rule

U.S. EPA Regions 1 and 2

May 25-26, 2016

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

Central and Western LIS Dredged Material Disposal Sites

On June 5, 2005, EPA published the final rule to designate CLDS and WLDS with conditions intended to reduce or eliminate open-water disposal :

- Required completion of a regional dredged material management plan (DMMP) for Long Island Sound.
- Established a Long Island Sound Regional Dredging Team to review alternatives analyses for federal and large private dredging projects during DMMP preparation.
- EPA is to propose and finalize, within 120 days of DMMP completion, amendments to the 2005 rule describing procedures and standards that must be complied with.

USACE- DMMP Recommendations

The LIS DMMP and PEIS were completed on January 11, 2016, and included the following recommendations:

- Standards and procedures for reviewing placement or disposal alternatives for dredging projects.
- Federal Base Plans and alternatives for each Federal Navigation Project and harbors.
- Further studies and development of beneficial use and other non-open water alternatives.
- Continuing disposal site management and monitoring, and further research on effects of disposal.

Dredged Material Disposal Sites Rulemaking

- On February 10, 2016, EPA proposed amendments to the 2005 rule for the CLDS and WLDS in the Federal Register.
- The proposed rule includes standards and procedures that support the goal of reducing or eliminating open-water disposal.
- EPA received 119 separate sets of comments and is in the process of finalizing the rulemaking.

Dredged Material Disposal Sites Rulemaking

The ELDS will have the same site use restrictions as the CLDS and WLDS, which are intended to support the goal of reducing or eliminating open-water disposal by establishing “ standards and procedures”:

- encourage the identification, development, and use of practicable alternatives to open-water disposal, and
- require large dredging project proponents to thoroughly evaluate such alternatives.

Dredged Material Disposal Sites Rulemaking

- On April 27, 2016, EPA published the proposed rule to designate an Eastern Long Island Sound Disposal Site (ELDS) in the Federal Register (81 FR 24748).

- EPA is accepting public comments on the ELDS proposed rule and SEIS until June 27, 2016.

Standards and Procedures for Using the ELDS

Standards:

- Unsuitable material shall not be disposed at the sites.

- Sandy material should be used beneficially wherever practicable.

- For fine grained material, proponents must thoroughly evaluate – and use if available – practicable alternatives before open-water disposal will be considered.

Standards and Procedures for Using the ELDS

Standards (continued):

- Federal, state, and local government will continue to exercise existing authorities to reduce the flow of sediments and contaminants into waterways.

- Practicable alternatives must be used if available. Recognizes that additional cost burden may exist.

Standards and Procedures for Using the ELDS

Procedures:

Establishes an interagency Long Island Sound Regional Dredging Team (LIS RDT) that will:

- Ensure all large dredging projects conduct a thorough alternatives analysis and encourage the use of practicable alternatives.
- Proactively develop and promote alternatives.
- Assist EPA and USACE with long-term tracking of dredged material placement and disposal site monitoring.

Standards and Procedures for Using the ELDS

Procedures (continued)

The Long Island Sound Regional Dredging Team:

- Covers all of Long Island Sound.
- Includes representatives of federal and state government agencies with expertise in dredging and dredged material management.
- Determines its own structure and processes.
- Encourages cooperative working relationships with other Long Island Sound-based organizations.

Dredged Material Disposal Summary 2006-2014

	NLDS	CSDS	CLDS	WLDS	Totals
2006	0	0	208,410	15,550	223,960
2007	369,635	9,470	64,970	3,600	447,675
2008	0	11,300	24,575	24,135	60,010
2009	0	197,035	559,760	6,950	763,745
2010	0	7,000	277,474	11,950	296,424
2011	0	41,460	84,940	28,910	155,310
2012	0	31,500	84,500	27,008	143,008
2013	19,100	72,600	122,600	41,400	255,700
2014	0	21,950	1,219,344	35,000	1,276,294
Avg. (1982 - 2004)	*133,459*	*56,348*	*348,682*	*81,344*	*619,833*
Avg. (2006 - 2014)	*43,193*	*43,591*	*294,064*	*21,611*	*402,458*
Difference	**-90,266**	**-12,757**	**-54,618**	**-59,733**	**-217,375**
% Reduction in Use	68%	23%	16%	73%	35%

Next Steps

EPA is seeking public comment:

- Provided in person at the public hearings or in writing, submitted to ELIS@epa.gov or Brochi.Jean@epa.gov.
- Comments must be received by June 27, 2016.
- EPA plans to publish its final rule by the end of this summer.
- The New London and Cornfield Shoals sites close on December 23, 2016.

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Attachment 4

TRANSCRIPT OF PUBLIC HEARING, RIVERHEAD, NEW YORK MAY 25, 2016

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SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT TO EVALUATE THE POTENTIAL DESIGNATION OF ONE OR MORE DREDGED MATERIAL DISPOSAL SITES IN EASTERN LONG ISLAND SOUND

May 25, 2016
1:00 p.m.
103 First St.
Riverhead, NY 11901

SPEAKERS:

LOUIS BERGER
BERNWARD HAY, PH.D
PRINCIPAL ENVIRONMENTAL SCIENTIST

MELVILLE P. COTE, JR.
CHIEF, SURFACE WATER BRANCH
ENVIRONMENTAL PROTECTION AGENCY
REGION 1 - NEW ENGLAND

JEAN BROCHI
PROJECT MANAGER
OCEAN AND COASTAL PROTECTION UNIT
ENVIRONMENTAL PROTECTION AGENCY
REGION 1

STEVE WOLF
DAMOS PROGRAM MANAGER
US ARMY CORPS OF ENGINEERS

[HEARING WAS CALLED TO ORDER AT 1:00 P.M.]

DR. HAY: Good afternoon, everyone. Welcome to the public hearing. Before we start, a couple of housekeeping measures. The bathroom is to the right in the hallway, about thirty feet down the hallway. Both ladies room and men's room are at the same location. Also, if you can turn off your cellphone, or put it on vibrate, I'd appreciate it.

My name is Bernward Hay. I'm with the Louis Berger Group. This hearing here is held to solicit comments on the draft rule making designating the Eastern Long Island Sound disposal site, and on the draft supplemental environmental impact statement. It's also abbreviated SEIS, as you'll see on several slides.

The SEIS is designed to serve the Eastern Long Island region, in Connecticut and New York. The lead Federal Agency is the Environmental Protection Agency. EPA is requesting written comments from the public on the draft SEIS. This document is publicly

available at this time on the EPA's Region 1 website. So, feel free to look it up there.

In addition to the public hearing there will be a second hearing this evening in Mattituck. There will be two additional hearings tomorrow in Groton, CT. The comment period for the SEIS ends on June 27th, and comments can also be sent to the address, ELIS@EPA.GOV. You'll see that later on a slide again, until midnight of the 27th of June. EPA and other agencies will present information about the project during this hearing in the next hour, until about 2:00 p.m.

After the presentations have been completed, the floor will then be open for comments until about 3:00. If you wish to speak, I ask you to sign in at the registration desk outside of the room. When registering to speak, please provide your contact information, also your affiliation. Speakers will be heard in the order that they registered, I think we have enough time for everyone, with elected official and government representatives being

first.

You may also submit your comments in writing at the registration desk, at which point they become part of the public record. Again here, also include your contact information, and affiliation.

We ask you to keep your comments limited to five minutes to provide everyone an opportunity to speak. If you have extended comments, feel free to provide those in writing, and again they become part of the public record. Please note that the focus of this hearing is to receive verbal comments on the Draft SEIS, and the presentations this afternoon, and also the regulatory process that we'll be presenting on.

The hearing is recorded by a stenographer, Charmaine, and also recorded on audio devices. The transcript of the hearing will be entered into public record. It will become available on EPA's website at a later point.

We'll now move to the presentations. Please note that the presentations will be available also on the EPA's website,

after the hearing, and the agenda, I think everybody has picked up an agenda. Follow it. We'll start with Mel Cote, who is the Chief of the Surface Water Branch of EPA, Region 1. He will open the meeting officially. We will follow up by the presentation of the supplemental EIS, by Jean Brochi, who's the Project Manager of the Ocean Coastal Protection Unit at EPA, and by myself. Then Steve Wolf from the Army Corp of Engineers will talk about dredged material testing and disposal site management. And then Mel Cote will speak again about proposed rule making for the Eastern Long Island Sound Dredged Material disposal site.

The presentation then will be followed by a brief overview of the hearing procedures by Jean Brochi, and then the floor again is open for public comments.

That's in the time frame between 1:00 and 3:00. With that, Mel, do you want to open the meeting officially?

MR. COTE: Thank you, Bernward. Good afternoon everybody. Thank you for coming to this public hearing. We really

appreciate you coming to learn more about the process, and to provide comments on our proposed role to designate an Eastern Long Island Sound Dredged Material Disposal Site and the Draft Supplemental Environmental Impact Statement that supports our proposal.

As Bernward mentioned, my name is Mel Cote. Surface Water Branch comprises our Ocean and Coastal Protection Unit and our Watersheds and Nonpoint Source Unit, and I've been in this position for about a year. Prior to taking that position last year, I managed the Ocean and Coastal Protection Section in my branch for 13 plus years, and before that spent nine years as the Region 1 Coordinator for the Long Island Sound Study and Connecticut's Nonpoint Source Program. So, I've spent a lot of time on and around Long Island Sound. I have a real affinity for this region.

Before we take your comments -- Actually, Bernward has already gone through the speaker line up. I'm going to skip that, but I also do want to acknowledge and thank Buddy Labue and Pat Pechko from EPA Region 2 in New York

City, Mark Habel from our Corps New England District and other state agency staff from New York and Connecticut for coming today. We will provide a brief presentation on the SEIS and the process we will follow. We appreciate your attendance and interest.

So, this is my first slide here. Okay. I'm going to first talk about EPA's role in respect to the designation to dredged material disposal sites, and then I'm going to step back and provide some background, the designation of central and western disposal sites, which was completed in July of 2005.

As most of you probably know, EPA and the Army Corp of Engineers, jointly regulate dredging, and dredged material disposal under Federal authorities provided by Section 404 of the Clean Water Act, and Sections 102 and 103 of the Marine Protection, Research, and Sanctuaries Act, which also is known as the Ocean Dumping Act.

In administering these programs we work closely with other Federal resource agencies, including the National Marine Fisheries Service, US Fish and Wildlife

Service, and state environmental agencies and coastal zone management programs to ensure proper coordination and consistency with statutory and regulatory requirements, and environmental standards.

Since 1980, EPA and the Corps have been applying the sediment testing requirements of the Ocean Dumping Act to all Federal dredging projects, and all private projects that generate more than 25,000 cubic yards of sediment.

Dredged material that meets these criteria and is determined to be suitable, meaning clean enough, for ocean disposal may be disposed of at any one of the four current sites in Long Island Sound, known as the Western Long Island Sound, Central Long Island Sound, Cornfield Shoals, and New London disposal sites.

The Western and Central Long Island Sound sites were designated by EPA in 2005, as I've mentioned, and as many of you probably know, EPA proposed amendments to that site designation rule on February 10th that removed some of the original conditions,

for example, like the Corps completing the Long Island Sound Dredged Material Management Plan, and it places new conditions that are intended to reduce or eliminate open-water disposal of dredged material in Long Island Sound.

The Cornfield Shoals and New London sites were evaluated and selected as disposal sites pursuant to programmatic and site specific environmental impact statements prepared by the Army Corps, most recently in 1991.

In 1992 Congress added a new provision to the Ocean Dumping Act that, for the first time, established a time limit on the availability of Corps selected sites for disposal activity. The provision allows the selected sites to be used for a five-year period, beginning with the first disposal activity after the effective date of the provision, which was October 31, 1992.

It also provides for an additional five-years, beginning with the first disposal activity commencing after completion of the first five-year period. It's complicated. Nevertheless, there are two five year

periods, and they don't exactly have to be bumped up against each over.

Use of the selected site can be extended, however, if the site is designated by EPA for long-term use. Use of the site also can be extended, as we found out in 2011, if Congress imposes an extension through the legislative process.

Nevertheless, the statutory construct is that the Corps can select disposal sites only for short-term, and limited use, whereas Congress authorized EPA to undertake long-term site designations, subject to ongoing monitoring requirements to ensure the sites remain environmentally sound.

To summarize, EPA's responsibilities related to dredging and dredged material disposal include: Designating disposal sites for long-term use; promulgating regulations and criteria for disposal site selection and permitting discharges; reviewing Army Corps dredging projects and permits; developing site monitoring and management plans for every one of our designated sites; and monitoring disposal sites jointly with

the Corps.

Now, I'm going to provide some background on how the proposed designation of an Eastern Long Island Sound Disposal Site relates to the Central and Western sites.

The process began in 1998, eighteen years ago, when EPA and the Corps agreed to conduct a formal site designation process for all the Long Island Sound disposal sites following the criteria established in the Ocean Dumping Act.

We also agreed that, consistent with past practice in designating sites, we would follow EPA's "Statement of Policy for Voluntary Preparation of National Environmental Policy Act [NEPA] Documents," and would prepare an environmental impact statement to evaluate different dredged material placement options.

In June 1999, the EPA published a "Notice of Intent" in the Federal Register announcing our plans to prepare, in cooperation with the Corps and other Federal and State agencies, an EIS to evaluate, and potentially designate dredged material disposal sites for the

entire Long Island Sound region.

We began the Sound-wide field data collection effort in 1999, but were slowed by both the technical complexities and financial constraints associated with a large-scale, multiple-site project. In March 2002, with the Central Long Island Sound Disposal Site scheduled to close in February 2004, that's when the second of two five-year periods of use, under it's Corps-selection expired. EPA and the Corps announced their intent to develop the EIS in two stages, focusing first on western and central Long Island Sound, followed by the eastern Sound, once a site or sites had been designated to serve the western and central regions. That was fourteen years ago.

As it turns out, the designation of the Central and Western Long Island Sound Disposal Sites was contested by the State of New York, which lead to the inclusion of conditions that would need to be met in order for the sites to remain open for the long term.

The most significant of those conditions

was the completion of the Long Island Sound DMMP by the Corps, just this past January. So, all the human and financial resources that would have gone into moving forward on a site designation process for Eastern Long Island Sound were focused on completing the DMMP.

Some of the initial studies conducted for the DMMP, including the dredging needs survey that was completed in 2009, and updated again in the last year -- two years ago, and the analysis of placement alternatives, which was completed in 2012, formed the basis for EPA determination that there was in fact a need for at least one disposal site to serve the Eastern Long Island Sound region. Upon making that determination, EPA began the process for preparing an SEIS.

At this time I'm going to turn it over to Jean Brochi, the EPA project manager for the SEIS, and then she'll be turning it back over to Bernward after that.

MS. BROCHI: Thank you, Mel. So, as Mel has covered, I'm just going to summarize the regulatory act that allows EPA

or gives EPA the authority to designate a long term disposal site is the Marine Research, Protection and Sanctuaries Act, Section 102.

As most of you, who has been to these public meetings before, know that this process has been going on since 2012. This slide presentation, Bernward is going to assist me, will talk about the study itself. The approach was initiated with a Notice of Intent in 2012, followed by public participation. This right now, is the seventh and eighth public meeting for this process. EPA originally looked at eleven sites, and evaluated the sites using the site screening criteria, which I'll get into in a minute. We analyze the sites. We look at alternatives for those sites as well as a no action alternative, which means what happens if nothing is completed, and then we select a preferred alternative, which is where we are now.

So, as Mel had mentioned I'm going to summarize again, the Cornfield Shoals and New London sites were selected for five-year

short term use, and they expire December 23, 2016. So, the process again, in addition to the public meetings, we had cooperating agency meetings and webinars throughout the process.

EPA established a notification system for e-mail. We updated our website, and then we created a separate email for comments, which is ELIS@EPA.GOV. We issued a draft rule making for the eastern site on April 27, 2016. So, the first step in looking for the alternative sites was to establish a zone of siting feasibility. And the black lines here indicate the boundaries of that zone.

However, this study also included information for Block Island Sound and Rhode Island Sound. Here you can see with the red arrow, is the eastern site that we're discussing today and receiving comments on.

So, the site screening is five general and eleven specific criteria, under the MPRSA. And it's 40CFR, Section 228 and I'm going to go through what some of those

criteria include, and what we look at when we are evaluating it. So, you can see the study and the evaluation should include the sediment environment, we looked at bathymetry. We looked at currents, waves. Bernward is going to go into more detail about those specific studies and the data.

We looked at biological resources, habitat, fisheries, shell fisheries. We look at areas of conflicting use. Is there navigation nearby? Are there recreational areas? Are there shipwrecks or are there artifacts, historical or culturally significant areas?

So one thing, for the purpose of this SEIS, was again, driven from the dredging needs, and the determination in the DMMP dredging needs report was that Eastern Long Island Sound, over the next thirty year period, had a need of 22.6 million cubic yards. That need exceeds the available capacity. This process, by designating a site also includes an environmental review.

So, we take into consideration the distance for shoaling or for moving dredged

material to other sites, the haul distance, environmental concerns with that.

We also, when designating a site, have the ability to manage and monitor it, and we can collect that data on an annual basis. Steve Wolf will go into more detail about what that includes, but I think as Mel mentioned, for the designation we have a site management monitoring plan, and it's updated every ten years. That's only for EPA designated sites.

So, another reason for the designation is we can restrict the site use, which Mel will get into when he discusses the rule making, and he did high-light, and we're reducing the number of sites.

So, currently there are four sites available. There will be three available with this designation. So, again, Bernward is going to go into more detail. So, Bernward?

DR. HAY: I'm not sure what happened to that slide, color-wise.

MS. BROCHI: The color on the projector is off.

MR. HAY: It's definitely off. I'm going to provide a brief overview of -- It's too bad because I'm going to use this slide. Is this going to happen with all the slides, Jeannie?

MS. BROCHI: It's the projector.

AUDIENCE MEMBER: If you want to refer to that for the colors, I believe, Bernward.

MR. HAY: I want to talk to the colors so --

MS. BROCHI: It's not like it's so crowded we can't see that.

DR. HAY: Because I want to use my pointer. Can you see the screen over there? Jeannie? I think I can advance from here.

AUDIENCE MEMBER: You should be able to.

DR. HAY: So, I'm just going to give you a brief overview of the document that is several thousand pages thick, and I encourage you to take a look at the EIS if you want to have more details. This is the main report. It's 450 pages and has a lot of data and information in it. The three sites

that were selected after the site screening process, as Jeannie mentioned, are the New London alternative, Niantic Bay alternative, and the Cornfield Shoals alternative.

What you see as different colors here is basically water depth. The brown color represents shallow waters, the shelf for example, and blue waters -- or blue colors rather, indicate deep water, deeper water. The deepest point here, The Race. There is deep water in Orient Point.

So, the studies that Jean mentioned, there were five studies that were conducted, in addition to the analysis of all the existing data that is available for Long Island Sound. The five studies are physical oceanography, sidescan sonar survey of the seabed, the biological characterization, sediment chemistry and sediment profile, sediment profile survey, and I'll talk about those in a few minutes, shortly.

The physical oceanography study basically deals with the dynamics of the ocean. It deals with waves, its currents, and its tidal forces. One of the key questions that

we're asking is, what happens to the dredged material once it's deposited in Long Island Sound. They also call it fate of the dredged material. A very extensive study was conducted by Jim O'Donnell, who sits in the back of the room, from the University of Connecticut. The study lasted about two years. It included extensive data collection in the field. And extensive modelling. What you see on this slide here is a number of survey stations, both survey stations where equipment was deployed for an extended period of time, as well as survey stations visited during ship cruises. It shows mooring locations. It shows locations of other monitoring programs, for example, that Connecticut DEEP is conducting.

So, I want to show this slide with this data frame here, again this was an example of a number of instruments being used in the survey. This is an example of the outcome of the study. What you see here is bottom stress. Bottom stress basically reflects the forces that act on the sediment on the

bottom.

So, if you dispose dredged material, you would want to know, is it going to stay or is it going to move. So, bottom stress gives you that information, and it tells you how strong the forces are acting on that sediment. What you see in this slide here are two different sets of colors. I'm sorry. You see the blue which indicates low bottom stress. You can see the reddish, orange, magenta colors, which indicate higher bottom stress.

Notice that the New London site is in the blue area. The blue and the orange areas that are divided by the magenta line, which is defined in the study through the modelling as basically the line within which you have either an area where material stays, we call it containment area, or an area where material is dispersed. In other words, forces would eventually move the sediment that is disposed at this location, given the characteristics of dredged material.

There was also a sidescan sonar survey. That's basically a sonar survey that looks at

the bottom. The idea is to find out, what are the characteristics of the seabed? What can be done about sediment movement? What can we learn about cultural resources present at the seabed. Here's an example --

AUDIENCE MEMBER: Are you going to take questions afterward? Do you want us to ask as you go along?

MR. HAY: I'll take a few questions afterwards, but not during the presentation. What you see here is an example of the sea bottom at Cornfield Shoals. I just want to point out a few features. What you see here is a sand dune. There are large ripples on the sand dune. The shape of the sand dune indicates sediment movement. You can see by this arrow the net direction of sediment movement.

You can get that kind of information from these types of images. In contrast, this is an image from the New London disposal site. You don't see those kinds of sedimentary features, basically material stays. You don't get what they call bedforms in geology, that indicate certain movement on

the sea floor.

There was also a sediment chemistry survey, abour forty samples were collected throughout the three alternative sites. They were tested for organics. They were tested for grain size, heavy metals, PCB's and PAH's, pesticides, and the instrument used was a grab samplers which basically reflects the upper six to eight inches of the sediment bottom. This is just a sample, typical sediment sample, from Cornfield Shoals.

Then there was a biological survey that looked at the benthic health and the diversity of the organisms living on the bottom. It also characterized fish, through a survey, conducted in conjunction with the Connecticut DEEP. We also looked at fishing patterns in the area.

You can see by the number of stations of where the survey was taking place, with regards to benthic organisms.

Finally, the fifth survey was the sediment profile survey, which looks at the diversity and health of the benthic

community. It's a study that is commonly used by the DAMOS program, DAMOS from the Corps of Engineers. They study the sediment material disposal sites on a regular basis.

Steve Wolf is going to talk more about this. But basically it slices into the sediment, and it shows you the different stages of benthic organisms. If you dispose sediment material, initially benthic organisms would be covered, but then over time they recolonize, and you can see an example in this case, not in this case, but this case is stage three, you can see benthic organisms already again at depth in the sediment column, indicating a healthy population.

A quick tour over the three alternative sites. This is -- I think we're back in color. Maybe I'll stay on this side here with my pointer. What you basically see on this slide is, you can see the existing New London disposal site on the right. You can see two additional areas that were added in the analysis. These areas were

added because of the needed capacity to accommodate the dredging need over the next thirty years for the region.

Other features in the site you can see, when you look closely within the New London disposal site, you can see an uneven surface here. These are basically disposal mounds. They haven't moved. They basically are very visible features in this image. Otherwise, the area consists of sand. It's pretty plain, with the exception of a boulder field here. I'll come back to that a little bit later. There's a shipwreck here down in this corner, and we'll come back to that a little bit later as well.

This is the Niantic alternative. It's also mostly sand, it has a small boulder field as well here. Otherwise it's a very plain area. This area is a transitional area with regards to sediment movement. The northern part is basically a containment area, bottom stress that we talked about earlier, would contain dredge material in this area. Whereas, the remaining part of the Niantic Bay alternative would be what

they call dispersive, material would eventually move from that area.

This is Cornfield Shoals. Basically, a flat bottom, about 150 feet deep or so. You don't see any indication of dredged material disposal, even though disposing of dredged material is taking place there. That's a result of the fact, as was mentioned earlier, that the site is dispersive. Material that's moved from the site eventually, with that net flow going to the west, material on balance moves in this direction.

Just to summarize very quickly, as there's a lot of data to summarize, as I mentioned earlier, but just in a nutshell summary: The main difference between the three alternative sites is the fact that -- I'll come back to that later.

So, the sediment environment, the texture at all three sites is mostly sand, although it's finer grained at the New London site, but overall the primary grain size at all three sites is sand.

Bottom stress, we talked about that.

It's low in New London, high in Cornfield Shoals, and it's transitional in Niantic Bay. Contaminant concentrations, metals, PCB's etc, they were low or not detected at all at the forty stations that we investigated.

None of the sites have shellfish beds. Commercial fishing and recreational shellfish abundance is low, and overall the fishing habitats are similar to the central part of Long Island Sound.

With regards to socio-economic and cultural resources, none of them have cables or infrastructure or other kinds of pipelines. Navigation is not impeded. There are no anchoring areas in those sites. None of them are conservation areas, and the only shipwreck located is in the southern part of the New London site, which can be managed.

So, with regards to environmental consequences for these sites, again, in a nutshell summary: The main difference, again, is the fact that sediment would move from Cornfield Shoals, part of Niantic Bay.

Sediment would stay with New London and a portion of Niantic Bay.

With regards to biological resources, there will be short term minor impacts during disposal. In other words, benthic organisms that sit on the bottom would be covered by dredged material when it's disposed. All of the DAMOS program has shown rapid recolonization of those disposal mounds.

With regards to fish habitat and fish concentrations, as well as endangered species, reptiles, and mammals, the potential impact is minimal because these species are, mobile and they can get out of the way of the dredged material, disposal event.

Finally, bio-accumulation, the dredge material is required to go through a very stringent testing program. So, the risk for bio-accumulation is very minor or minimal.

With regard to socioeconomic and cultural resources, because these sites are not unique, with regards to fish abundance, the impact is also minimal. Same for commercial

as well as recreational fishing.

With regards to shipping and navigation, there's no impact on that. There will be site management during disposal events to avoid impacts at the time of disposal. No impacts on beaches or parks or natural areas, and the shipwreck in the southern corner would be managed by creating a buffer zone around the shipwreck.

So, looking at all this information, and again there's a lot more information that we looked at. The conclusion was, or the decision was, to select a portion of New London disposal site as the preferred alternative.

The preferred alternative is called the Eastern Long Island Sound Disposal Site to match the name Central and Western Long Island Sound Disposal Sites. You can see it outlined with the blue boundary. With the black boundary you see the full New London Disposal Site.

In other words, it includes the western half of the existing New London Disposal Site, as well as the two areas to the west of

the New London disposal site. It has an area of two by one square nautical miles. And to summarize the main reasons for the site, the material in the site would be contained. The site has been used previously as a disposal site, which is one of the criteria under MPRSA, Environmental consequences are minor, minimal or none.

The shipwreck is here located in this corner, would be excluded from disposal, as well as the boulder area located in this position, within the site.

Finally, the site is close to dredging centers, which has some of the larger dredging centers. With that --

AUDIENCE MEMBER: May I ask a question while the slide's up though?

DR. HAY: Yes.

AUDIENCE MEMBER: Why did you not choose the eastern portion there that's already disturbed? Why was that left out of the selected Eastern Long Island Disposal Site?

DR. HAY: That's a very good question.

AUDIENCE MEMBER: Thank you.

DR. HAY: You can see in black here, the contour line of eighteen meters. Eighteen meters is a threshold above which dredged material would not be disposed. It was one of the site's selection criteria. Everything to the left of the eighteen meter line, is deeper than eighteen meters. So, much of the area, in fact part of this area here, that is within the box is already filled, if you want, and not suitable for material because it's too shallow. So, hence for site management purposes it makes sense not to include this area and to limit it, because site management, the larger the site the more it needs to be managed.

So, a decision was made to select this box. Jean, would you like add to this?

MS. BROCHI: No.

DR. HAY: Okay. Thank you. With that, I know you have questions. Do you want to hold questions for later?

MR. COTE: There's maybe one or two quick clarifying questions, based on

Bernward's, because we do want to finish so we can get comments.

AUDIENCE MEMBER: The one I had was on the slide that showed whether it's a high, medium or low energy, you had said it was blue, but when I looked at it, it looked like fifty percent or greater was moderate with a green color. Do you have that slide that you can pull back up?

DR. HAY: What I meant was a blueish color. The dividing line was the magenta line. This one here.

AUDIENCE MEMBER: Yes, that one there.

DR. HAY: The green is included in what I defined in what I called blue or blueish. So, this is the dividing line, the magenta line. Everything above or to the north of this dividing line would be considered containment areas. Everything to the south or the orange, redish, yellow areas would be considered dispersive.

AUDIENCE MEMBER: Are those done on average or are you saying this is a consistent stress, or is it on average?

In other words greater or less than?

DR. HAY: This slide actually represents the maximum bottom stress simulation for the period of 2011-2014, which includes the Superstorm Sandy. This is, like, a worst case scenario. Jim, you want to add to this?

MR. O'DONNELL: Sure. I worked on this. The blue-green color show that actually, the maximum stress that would occur during a typical winter in this area. Most of the time the stress is much lower but we went through our simulations is at maximum, and mapped that. The idea of being, that sediment moves, when the stress is at its maximum.This is going to move. It's going to move when its stress is at its maximum. These blue and green shades, are below the threshold which we expect it to move.

MS. BROCHI: Can you identify yourself, Jim, please?

MR. O'DONNELL: I'm Jim O'Donnell. I'm Professor of Marine Sciences at the University of Connecticut.

AUDIENCE MEMBER: I just want a clarification based on the slides as well. I think it was Jean maybe made the statement that sites were entirely within Connecticut, but I'm looking at the slides and I'm seeing the boxes extending into New York. So, I wanted to clarify that.

DR. HAY: Okay. What we had was a small piece here on the preferred alternative, that extended in New York. You're talking about the boxes that were analyzed?

AUDIENCE MEMBER: Yes, and also Cornfield Shoals, it looks like. I mean, I want to clarify the statement, because the statement was that the sites were entirely within Connecticut. Is that correct?

DR. HAY: The existing disposal sites are mostly in Connecticut, but a portion of it is in New York waters.

MS. ESPOSITO: And the proposed sites are?

DR. HAY: The proposed site is mostly in Connecticut. There's a tiny portion that is in New York. Okay, with that, we

should move on. The next speaker would be Steve Wolf from the Army Corps of Engineers. He will talk about dredge material testing and disposal site management.

MR. WOLF: How many folks were at the Western and Central? I know one, two -- a few of you. I apologize if you're going to see a lot of the same material here. Let me pull up my slides.

It will be a test. I slipped in a few new ones that will be a bit different here, which would be good. I'll start off. I'm Steve Wolf and I work with the Corps of Engineers. The hat that I wear is to monitor these dredged material disposal sites, once they've been designated, to make sure that all the predictions that were made during the EIS process we're living up to.

To start off I've got a little bit of a video of a dredged material disposal event for those of you that haven't actually seen one, because that's what we're talking about today. This is about a three to four thousand cubic yard scow of dredged material. When the scow is over the position, over

the designated site where it's going to be released, the hydraulics are engaged, and in really a matter of ten to fifteen seconds, the bottom of that scow splits open and all that material falls out the bottom of it, and it's so much gone in a very short time period.

This is pretty much how the lions share of it go. I can go on to the next one. But we know that it raises some questions for folks, and that's probably why some of you are here today about, do we get it in the right place? As Bernward was saying, you know, that we're making predictions that once it's there it's going to stay there. Will we want to make sure of that?

What about the impact to the water column? What about the impacts of the benthic system that's there? I'm going to try to address all those briefly here but I think it's good to digress a little bit to go back in history and let you know how we got to this point today.

Historically, if you go back to some of the first ports for dredging in New England,

and pretty much anywhere in those early days it was pretty much just getting the sediment outside of my berth, where I've got an issue. So, often times it was pretty much push to the end of the wharf or somewhere right out of the port, and it was someone else's problem.

As time went on as we got up until the early 1900's, you can still see a record of material that was placed along much of the New England Coastline. We've got so many small harbors. Each one has almost a signature of that material from really a hundred or more years ago.

As we moved into the early to mid-1900's, we started to see sites that were specified. So, if you looked on an older chart, you might see one. If you looked in some township records you might see a site that -- this is where we want you to place material from the harbor, but what we didn't have in those days were really sort of the check and balances on where it was going and what type of material was going out there. That really didn't come until we got

up into the 1970's with the acts that Mel and Jeannie had mentioned.

So, we've got now regulations that say very specifically how you select a site. Where you can put the material and what sort of testing do you have to do to make sure that it's acceptable to actually go out to a site like that.

And so, that's where the program that Bernward had mentioned that I work with DAMOS, Disposal Area Monitoring System, really got it's birth. That was back in the late 1970's and was really focused specifically to answer those main questions. So, we've got a long history, almost forty years of study of trying to address those questions. We turned out a myriad of reports. I'll have a listing for the website of where we got those. And I think we've learned a lot over the years.

Before I get to those specific questions, I'll step back and talk about the testing that Bernward had mentioned happens to that dredged material because I think certainly related to the central and western

designations, which happened recently, and I think as far as this one, there have been a fair amount of misconceptions, and mis-reporting in terms of what is actually being placed in the Sound.

The first one I really want to clear up is that toxic material is not placed in the Sound. It may have been historically, just as it was historically been pretty much everywhere in the world, but with the passage of regulations that we have, that's just not the case anymore.

So, in terms of the testing, you've got a harbor that you want to dredge. You can't just do it, and take that material out. You've got to follow a very specified step-wise procedure to sample that material, send it to the lab, and we're looking at it physically. Is it fine or is it coarse grained? We're looking at it chemically, what sort of constituents are in it, at what kind of concentrations.

Then we do what's called biological testing, where you see the aquarium in sort of the central section in the bottom. Now

we're actually putting some of that sediment in with critters in the water column, down living in the sediment, and we see how they react to it. What we're trying to do is get a gage as to what is the concentration as of a particular chemical, and does it have an effect.

So, if you take an element such as arsenic, which is naturally occurring, and we look pre-industrialization. So, before there was any development along the coastline here, and you could say, what are the concentrations of arsenic in the sediment at the shoreline. You will see the blue bar charts represent a relative concentration, from green meaning very low concentrations, to red being very high, particularly in areas up in New Hampshire. That's because it's a naturally occurring element.

So, you can't just go by the concentration. What we're really interested in is, what is the effect associated with that concentration. That's what we call the toxicity. An acute toxicity means if a critter is in contact with that, it probably,

doesn't have, at that level and that concentration, it's probably going to die in a fairly short period of time. That's clearly an indication that something is wrong with the sediment and would call it toxic. Chronic toxicity is when an organism can live, but it can't thrive, and maybe doesn't grow as well, or maybe it doesn't reproduce as well. So those are also triggers that we're looking at.

So, if those are unacceptable, then the material isn't going to be placed in the Sound.

Similarly for PCB's, and I won't go into this, but it's different for organic chemicals because some of these didn't exist before the industrial revolution. Now, they're ubiquitous, you find some levels of them everywhere, but we do the same sort of analysis. We look to see is it chronic toxicity? Is there acute toxicity and that's our driver for a threshold for allowing the material to go out into the water.

So, if the material has been tested,

and it's found to be acceptable, then what happens when it goes out? How do we answer those questions. How do we ensure that we're getting it in the right place. With the advancements that we have in electronic positioning, those of you who are boaters, you know almost all the time exactly where you are.

There's a requirement now for every scow that's loaded, like the one here, to be outfitted with a number of sensors. So, back on the stern, which is the little blow up on the right there, we've got a sensor which says, is the hull open or closed. We've got a draft sensor that says, is it sitting low in the water? Is it full or is it sitting high because it's empty? We've got a GPS sensor that we know right where the scow is and then we've got a data logger, which is tracking the position of it. What that gives us is a record, and the one I pulled off of our system. On the left you'll see a map, and this is the dredging that took place in New Haven a few years ago. You see a breadcrumb trail that the scow took on its

way out to the disposal site. It changes colors. When the scow's draft changes so we know right where material left the scow.

Even if the tug is hundreds of feet in front of the scow, the tug operator sees the image, again thanks to electronics, of his scow on the map. So, we're really, I'm don't want to say on a dime, but we're really really able to get very accurate with where we are placing the material. What that allows us to do is, when we specify a site, such as the eastern one today that's fairly large, a mile roughly by two miles, we're not putting material over that annual basis. We're focusing on a very small point. We're minimizing our impact on any given year.

This is a slide, Central Long Island Sound, which is a site, which is the same dimensions. It's a mile by two mile. Each of the little humps that you see there, the orange, the yellow, those lighter colors represent a particular project or a year or several years where we targeted placement of materials. So, in any given

year we're really focusing on a very small area.

So, we're very comfortable in terms of being able to place the material there, in a particular site. The others that I should mention is that you can see dates on some of these. They're numbers that go back into the 70's. I think as Bernward mentioned, if the site is selected correctly, this material is very stable at the bottom. It does not get up and move. Some of these sites, these individual mounds of material on the sea floor has been through a number of hurricanes; Hurricane Sandy, Hurricane Gloria, a number or nor'easters. We go back out and we measure the bathymetry sequentially, before and after storms, and we see that these things are locked up once they're down there. Again, once we selected the right site.

Then moving on to the question about what happens as the material moves through the water column. You've got concerns that some of this material, even if it's suitable, it's still a lot of suspended material, that can

cause an issue in the water column.

This is a sort of text book image of a release from a hopper dredge of the surface falling down to the bottom. This is kind of a picture that I had in my mind before I spent much time working on this, but this is before you do the math, a ship that would typically be three or four hundred feet long, this is a very very deep site. This is to scale. Maybe typical of one of our West Coast sites. It's clearly not typical of anywhere in New England, particularly the Long Island Sound. Because it we set this up as a real picture, scaled, that's a scow that's about three hundred feet long. When it's fully loaded, there's about twenty feet of it under water. If you scale this out, you would say well where is the sea floor, and most of the sites that we're looking at, the sea floor is only forty to eighty feet below that. So, if you scale the drawing as this one is, you can see that it's actually a very short distance. So, when the scow opens, and that material falls out pretty quickly, what we see is

that it hits the bottom very very fast.

This is a, some poor graduate student at MIT got to spend a good portion of his life simulating the release. This is about a fifteen foot tank, where beads have been dropped to the surface, and they're tracking the fall of those. What you can see is the initial descent of when that is released is very fast. It's actually drawing water in. It isn't until it gets much deeper in the tank that you begin to get this sort of spreading out a bit. That's very much favorable for us, because all of the sites that we have really the material hits the bottom before it starts that spreading out component. That's simulations, that's math but we do go out into the field and we track this. We've got instrumentation that's similar to fish finders, as some of you may use fish finder, very accurate fish finders.

So, once the disposal is taking place, we'll run over that, we'll look at the floor where there is the most disturbed water column, we go back and take a sample of that water and send it off to the lab because we

want to confirm that we're not having an impact, that's going to be significant or large.

Finally, what about the benthic community in terms of who's sitting on the sea floor. Clearly if you put a full load, like I showed in the beginning on the material, everything that's within the footprint of that gets covered up. That's just the way that is. What we see is, if we try to minimize that foot print, and over the period of just one season, that will start to come back. Once the placement has stopped, just as if you'd put clean fill on a field, you've initially covered up the grass and the insects that are underneath that, that fill, but in a very short period of time you've got things beginning to sprout on it. You've got insects starting to colonize, which is actually something that happens on the sea floor. That's what we track to make sure that these things are recovered.

It's one of the things to wrestle with is, yes it is an impact but to try to put it into some sort of scale, that you can get

your arms around. One thing we like to do as environmental scientists is try to scale things. So, if we said, let's say that Long Island Sound has been scaled down to the size of a football field, and they give a year for the site that you need, that Bernward has just presented, how big of an area on that football field would be impact with the placement of dredged material.

What we do zoom in over here, about the size of a pie plate or maybe a bucket lid, is really all that gets impacted on a given year, and then we let it sit and we track it and we make sure these it recovers.

So, we are very comfortable and I think there's been a lot of work out there, not just by the Corps of Engineers, but by some of the academics. Dredged material, there's no link between placement of dredged material and the diminishing of the lobster fishery in the Long Island Sound, lots of other causes, but dredged material is not the focus out there.

Likewise, in terms of nitrogen loading, there are lots of issues associated with the

Sound in terms of nitrogen loading. Placement of dredge material, in terms of the scale of what actually happens there, is just not an issue. But we do realize that there are minimums, and there are impacts, and we work very hard to focus on trying to find a beneficial use for the dredged materials.

We're going to have to continue to dredge in the future. I like this slide. It's a good representation of why we dredge. This is the Connecticut River discharging into the Long Island Sound, after the passage of Hurricane, Tropical Storm Irene, tremendous amount of sediment in just a short period, a day or two, way more than we would put out in years and years and years. It's a natural event, the Sound recovers, but what that does is it means we have to dredge a number of the harbors.

So, we're continually focused on ways to be able to beneficially use that material, and try to reduce the amount of what we are putting directly into our harbors. A group that the EPA and the Corps of Engineers co-chair is called the New England Regional

Dredge Team, it's Federal agencies as well as representatives from each of the the New England States. We meet quarterly every year, four times a year, and on our agenda, there is a standard item which is beneficial use of dredged material. The EPA is developing a very good tracking algorithm that allows us to look at all the various ways for using dredged material. Rhode Island just completed a pilot program, for putting it on marshes, to be able to help build up the elevation of the marsh so they can keep track, keep pace, with sea level rise. We certainly are already putting lots of material on beaches or on the near shore to help augment that, and we're going to continue that, but it's balance. We realize that there are times where there just isn't a beneficial use that's feasible, and in those cases we look for responsible managed placement at the Long Island Sound sites. That's it, except that I do have some contact information. There's lots of reports and all the reports we do the day we collect and it's all public. So, if you've

got questions, and I know we're not going to have much time for questions today, but I welcome them, the Corps. I mean, we welcome folks to come out. We invited the representative from Citizens Campaign of the Environment out last year. I think it went really well. We're going to do that again. We've taken some advice in terms of the type of monitoring. We're going to shift our program to try and answer some of those questions.

Again, we're trying to do this responsibly, but we want to answer the mail if you guys have questions or comments on this. So, with that I think I turn it over to Mel again, who is going to actually tell you about the draft rule.

AUDIENCE MEMBER: Can I just ask a quick question? I'm curious in San Francisco, they favor deep disposal, seventy-five miles off-shore, and the advantages of shallow disposal or dispersal. Why is deep good on the west coast and shallow good on the east coast?

MR. WOLF: One is deep water is very

very close in San Francisco. So, they don't have to go very far.

AUDIENCE MEMBER: No, it said seventy-five miles off.

MR. WOLF: That's the track to get out of the harbor. They have a very specified plan that designates how much is placed in the bay, and how much can go off-shore. That would work out as a long term agreement. You could probably speak better than this, Mel, than I can. I know from a technical point of view, San Francisco Bay is a much shallower system overall, and I think they looked at what the system can handle in terms of sediment load and also the question about the depth of the site, is there a limitation. You can't bring it up to shallow, one, from a navigational point of view, but two, from a hydro-dynamic point of view. You get to a certain shallowness, which is a lot of San Francisco Bay and you can change the circulation to that. Is there anything else to add?

MR. COTE: I'd only add that there's the Farallones National Marine Sanctuary once

you get outside the Bay and they actually had to go out and around that. It forced them to go out even further. The fact that they have to go so far. Also, they have a lot of restoration needs in the bay, where they have all of these salt marshes, salt production, and now trying to restore that so there's a lot of those sediments in there. That's the type of thing we do need to do more of in the Long Island Sound.

Thank you very much Steve. I really want to try and go quickly, so that we have plenty of time for public comment.

So, again, my name is Mel Cote, Chief of Surface Water Branch, EPA in Region 1, which covers New England, New England States. You've now heard about the history of dredge material disposal sites in Long Island Sound, the Supplemental Environmental Impact Statement, and dredge material management and monitoring. My job is to get us backed focused on the proposed rule before we move into the public hearing part of the session.

As you've seen already plenty enough, EPA and the Corps share responsibility for

dredged material management. Our focus today is on EPA's responsibility, under Section 102, to designate disposal sites.

As I mentioned earlier, June 2005, we published the final rule designating the Central and Western disposal sites. To address concerns raised by the State of New York and others, these site designations are subject to restrictions on their use.

Those restrictions were intended to reduce or eliminate the disposal of dredged material in Long Island Sound, and they included requirements for: Corps completing a Dredged Material Management Plan for the entire Long Island Sound Region, which they did earlier this year; Establishing an inter-agency, Federal and State, Long Island Sound Regional Dredging Team to review alternatives analyses for federal and large private dredging projects during the development of the DMMP; and EPA rule making.

So, upon completion of the DMMP, EPA was to propose and finalize amendments to the 2005 rule, describing standards and procedures that must be complied with in

the future, with the goal of reducing or eliminating open water disposal. These standards and procedures are to be consistent, at a minimum consistent, with the recommendations in the DMMP.

Those recommendations include: Establishing standards and procedures for reviewing placement or disposal alternatives for all Federal, and large private dredging projects, to support the goal of reducing and eliminating open water disposal. It describes Federal Base Plans and alternatives for each and every Federal Navigation Project and harbors around the Sound. It recommends further studies and development of beneficial use and other non-open water alternatives; and continuing disposal site management and monitoring, and conducting further research on the effects of disposal, along the lines of what Steve was talking about.

So, back on February 10th, again as I mentioned earlier, we took the first step in meeting its obligation by publishing proposed amendments to the 2005 rule in the Federal Register for a 45-day public comment period

that ended on March 25th. We thank those of you who submitted comments.

The proposed rule includes standards and procedures. Hopefully you've seen those by now. They are to be followed by all Federal and large dredging projects, private dredging projects, that are intended to help reduce or eliminate open water disposal. We received 119 individual sets of comments, the majority which support the proposed action. We are right now in the final stages of finalizing the rule and expect it will be published the week after next, June 6th in the Federal Register.

Why this is important, why is this important, is because EPA intends to us the same restrictions on the use of the proposed Eastern site as it has proposed for the Central and Western sites, namely that there will be standards and procedures that will encourage the identification, development, and use of practicable alternatives to open-water disposal, and require large dredging project proponents to thoroughly evaluate those alternatives. This applies to

all Federal dredging projects and all private projects generating more than 25,000 cubic yards.

On April 27th, as Jeannie mentioned, we published a proposed rule in the Federal Register for a 60-day public comment period, which ends on June 27th.

So, here are the standards that are included in the proposed rule. They echo the standards recommended in the Corps' DMMP.

Unsuitable material, shall not be disposed at the sites. That just reiterates an already existing one. Sandy material should be used beneficially wherever practicable. These materials have high value for uses such as beach nourishment or near shore bar/berm nourishment. As long as it's a practicable alternative, project proponents will need to identify and secure funding for any needed non-federal cost sharing.

Finally, for fine-grained material, and this is the tough stuff, proponents must thoroughly evaluate practicable alternatives and use them if they are available. This material is not typically

considered appropriate for beach or near shore nourishment. But in the future, such uses as marsh creation or restoration may become practicable.

Only if no other alternative is determined to be practicable, may suitable fine grained material be placed at the designated sites.

The proposed rule expects that all levels of government will continue to exercise their existing authorities and programs to reduce the flow of sediments and contaminants into waterways, including storm water and nonpoint management programs. The proposal does not create any new obligations, but instead focuses attention on those existing programs in coastal communities and along the tributaries to the Sound.

Finally, the proposed standards retain the 2005 restriction that requires that practicable alternatives be used if they are available.

Now, the procedures, we talked about standards, the procedures in the proposed rule are built around making the inter-agency

Long Island Sound Regional Dredging Team, or LIS RDT, a permanent body and enhancing its role. The RDT's goal is to reduce or eliminate open-water disposal wherever practicable. The RDT's primary purpose will be to ensure that all large dredging projects conduct a thorough analysis of alternatives to open-water disposal and make recommendations to the Corps on each project. Of equal importance, the RDT will provide a forum for continual exploration of beneficial use alternatives, for promoting the use of these alternatives and suggesting approaches for cost-sharing opportunities. This proactive role for the RDT is a new one.

The RDT also will be expected to assist EPA and the Corps with long-term activities intended to track disposal of dredged material and monitor dredging impacts in the Sound. These include supporting the DAMOS program that Steve just described for us.

The geographic scope of the LISRDT will include all of Long Island Sound, previously applied just to the Central and Western

Regions and now apply to all, so it looks at opportunities for alternatives broadly.

The RDT will consist of representatives from Federal and State government agencies or authorities with expertise in dredging and dredged material management.

We expect the Team would include Federal representatives from EPA Region 1 and 2 offices, the New England and New York Districts and North Atlantic Division of the Corps, and National Oceanic and Atmospheric Administration. We also expect the states of Connecticut, New York, and possibly Rhode Island to participate through their environmental agencies, coastal zone management programs, and relevant port authorities, and all that stuff.

We propose that the specific details of the structure and process of the Long Island Sound Regional Dredging Team be left for them to determine and be allowed to evolve as best accomplishes the RDT's purpose.

Finally, the EPA encourages the RDT to establish and maintain cooperative working relationships with other Long Island Sound

based organizations, such as the Long Island Sound Study's Science and Technical Advisory Committee.

One last point I'd like to make before closing, is that we have made excellent progress toward meeting the goal of reducing or eliminating open-water disposal since the 2005 rule.

The chart on the screen shows how much dredged material has been disposed at each of the four currently active disposal sites, from the first dredging season after the rule, which is 2005-2006, through the 2013-2014 dredging season. As you probably most of you know, dredging only occurs in winter.

While the right-hand column clearly shows the variability in the amount of dredging from year to year, the most important results are the numbers in the lower right hand box. This was the average for the previous 22 years, and the average for the last 9 years in this record here, 35 percent -- 35 percent reduction, over that time frame over that time frame, including the previous 22 years.

I'll conclude my presentation by reminding you of the opportunity to provide comments on the EPA's proposed rule and draft SEIS. In just a few moments you will have an opportunity to provide oral comments for the record. You can also provide comments in writing. Jeannie already went through that. I'll stop right there. Thank you for your attention and patience. I'm going to turn it over to Jeannie to get the comment period kicked off.

MS. BROCHI: Thank you, Mel. We ask that you approach the mic and speak cleary so the transcriptionist can record the information, and we ask that you identify your affiliation or organization.

I'd also like to acknowledge first, Mark Woolley from Lee Zeldin's Office, and I apologize if I'm mispronouncing that, and Sarah Anker, Suffolk County Legislator. Sarah Anker, please approach if you have comments.

MS. ANKER: Hi everybody. Thank you for coming out. Again, I want to thank the presenters today for explaining the process

and again I can't wait for what Adrienne has to say. I really can't because, you have been a leader in this and following this. How long has this been?

MS. ESPOSITO: It's only been twelve years.

MS. ANKER: Twelve years. I have been a legislator for five. I have not been a legislator for five years, and I have folders, not just files, but probably crates of paperwork, from the past actual ten years, that has taken seven million dollars, it's taken to find alternative locations. It's good to know that the area has been reduced. There's like, what is it that was mentioned, as far as in New York.

Again, a few questions maybe. Now, you mentioned there's what was described as low or not detected contaminants. As far as I'm concerned, that's the most important concern that we may be contaminating the Long Island Sound. Long Island Sound produces up to thirty-six billion dollars of economic value for the area, and we've spent hundreds of millions, if not billions of dollars cleaning

it up, and making sure that it's sustainable. Can I ask questions, or is this just for comment?

MS. BROCHI: This is just for comments on rule making process.

MS. ANKER: Mainly my concern is that, you do mention that there is still accepted low contaminants, low level contaminants, and as I was looking at the map, you know, you show, what are they called, they're like the hills of the old contaminants. How far does the dumping go? Oh, I can't ask questions. Excuse me?

MS. BROCHI: You mean mounds?

MS. ANKER: Yes, mounds. Adrienne, how far does that go back, contaminant dumping?

MS. ESPOSITO: I think the New London site started in the 1970's.

AUDIENCE MEMBER: 1950.

MS. ANKER: 1950. Do I hear 1940? I'm sorry. A long time ago. With the understanding that this has gone back decades and decades, and of course we have the use of asbestos, and lead and some pretty crazy

contaminants, and also the synergistic effects of all these types of contaminants, and the toxins, have those mounds been tested, as far as what's happening today, now that we have a better understanding of those contaminations.

Again, that's a concern, that before we continue to keep dumping more silt and sediment, let's find out what's down there, and the effect that it's having currently with the marine life down there.

Again, thank you for coming out, I'm very eager to hear some of the public comment today. My legislative district consists of Mt. Sinai, the entire North Shore up to Wading River, and I'm on the Environmental Committee for the County. I've been following this for, like Adrienne said, probably ten, twelve years. I'm very happy to hear that the area has been reduced but again, there is some issues pertaining to contaminants that I'm still concerned about that continues to stay in this document.

I may have some more questions later after I hear some of the comments. Again, I

do appreciate the public hearing because that is what government is about, is allowing the public to have input. So, thank you.

MS. BROCHI: Thank you. David Bergen.

MR. BERGEN: First, before I start my comments, on behalf of Dr. Sean McKay and Suffolk Community College, we welcome you all here. We are glad to be a host of this event, and we look forward to hosting more of them in the future, if they're wanted, if need be. Thank you. My name is Dave Bergen, I reside in Cutchogue. I served as a Southold Town Trustee for ten years, working with Suffolk County, as a liaison between the Town and Suffolk County Department of Public Works, dredging and hydraulic dredging. So, I'm very familiar with the dredging process.

I also currently serve as a Commodore for East End Sailing Association. Contained in our association's mission statement, is the language to preserve our amazing local marine environment. I attended a scoping session in this very facility in December 2015, where

a discussion took place regarding the movement of the surface waters in Long Island Sound from various Connecticut rivers.

The research demonstrated that strong tidal currents took both surface and subsurface waters south and east around Fishers Island and as far south as Plum Gut. Clearly the dredge boils from these rivers will contain in-organic matter, including heavy metals, which will not all sink to the bottom, but will move with the very strong currents of Long Island Sound, ending up in Southold Town waters.

Long Island Sound was only a few years ago designated by the EPA as a no discharge zone. As such I find it incredulous that the same Federal agency, which designated this fragile water body as a no discharge zone, would today consider allowing for the dumping of dangerous toxic materials in their no discharge zone.

What message does this send to all the local stake holders, for spending an incredible amount of tax payer and private dollars on efforts to clean up Long Island

Sound. I understand that elected officials at a local, County and State level are fighting this.

I call upon our elected officials on the Federal level, Senator Schumer, Joel Brennan and Congressman Zeldin, to use their common influence to stop this preposterous plan in its tracks. Thank you very much.

MS. BROCHI: Thank you. Scott Russell.

MR. RUSSELL: Yes, I also want to reiterate, thank you in giving us the opportunity, coming to Riverhead. I also recognize and I appreciate wanting comment to be brief. I will certainly try and keep it under five minutes.

Based on the lack of attendance I don't really think I'm bogging down the process by going any longer. Let me say the Town Board is commenting on the draft Dredged Material Management Plan and the draft Programmatic Environmental Impact Statement for Long Island Sound. My mistake from the outset, that it's the Town Board's position that dredging of waterways for the safe and

economically viable navigation is appropriate, and it's important we understand that.

However, the Town of Southold strongly is opposed to further open water disposal of dredged spoil in the Long Island Sound. I'm just going to comment on some of the things contained in your document, and I'm going to reference the pertinent sections as I comment and also quote from the document.

The document identifies that dredged material, transportation and placement cost matrix, was developed by the Army Corps, and its contractors to enable cost comparison of the alternatives. Does the assessment calculate potential costs for remediation in the event that significant adverse environmental impacts occur, that are unexpected. How is remediation to be accomplished?

I also want to comment on the non-Federal projects. Of the total volume, about 35 and a half percent is coming from non-Federal dredge activities. The consideration of allowing disposal of 18 million cubic yards

of dredged spoil, from private non-Federal facilities in public waters, is very concerning.

Private projects should arrange disposal in upland beneficial sites where their impacts can be contained, and not adversely affect waterways and natural resources.

Also, I want to mention that it references about 2.1 million cubic yards of dredged spoil to come from Little and Great Peconic Bays. We are unaware of any project that requires a disposal of dredged material. It's perplexing that the study includes dredged spoil from Peconic Bay projects, and we think this creates a false needs assessment.

The concern is the level of contamination of the area that is proposed to be dredged. It's not clear in the documentation, that the sampling protocol of the sediments from non-Federal facilities is sufficient.

What is the sampling protocol of the sediments from a non-Federal facilities? Are the Federal and non-Federal sediment testing

protocol established and comparable? What are the quality control measures on testing of non-Federal projects? What are the costs to the private non-Federal actions in the event of remediation is necessary, as I referenced? It is a substantial remediation bond and impact fees required for private non-Federal operations?

Second, concerns over suitability or compatibility of dredged materials. The document states that the suitability of material was determined based on most recent sediment testing results, and or most recent placement site reviews by the Army Corps o ther than Federal agency projects.

In some cases the most recent testing was performed decades ago, and may not reflect current conditions. That's quoting your document. The statement that the most recent testing occurred decades ago, and may not reflect current conditions is concerning, in that impact assessment in some areas do not reflect current conditions.

References to concern on toxicity tests, the document states that toxicity tests

consist of exposing test organisms in the proposed dredged material and comparing survivability rates to selected organisms, exposed to both reference and control materials.

What number of species that occur in the Long Island Sound have been exposed to control materials? Is there test animals? Have marine mammals been exposed to toxicity tests been evaluated? The discussion on the potential impacts on the American Lobster is deficient in the PEIS? The PEIS identifies lobsters for testing were harvested in the year 2000, fifteen years ago. Have there been current in-depth and scientific analysis on the effect of open water dredged spoil on this species?

It is concerning that the US EPA, the evaluation of dredged material proposed for discharge in waters of the US Testing Manual, Inland testing manual was created in 1998. It's a seventeen year old document. Were these manuals used for testing? We also have concerns over exposure and ecological and human health.

The document states that the testing results are evaluated and determine the risk of exposure to ecological and human health. Dredged material that is determined through the testing protocols to pose unacceptable risk to humans or ecological health is deemed suitable for ocean placement.

These findings may be accompanied by placement management requirements. The above narrative specifies an unacceptable risk to humans or ecological health. Is there an acceptable risk to contaminants in sediments? If so, what are the maximum contaminants levels of risk? What are the placement management requirements? Concerns on impacts for smaller dredging projects, the materials from 214 of the document. Materials from these smaller dredging projects that exhibit adverse impacts might sometimes still be placed in open water, under CWA, with proper placement management.

The action we believe, by segmenting, small projects, segments the NEPA process using cubic yards, under 25,000 as a quantifying threshold without addressing

cumulative adverse impacts on multiple events. According to the CEQ regulations, agencies are required, for environmental review purposes to consider connected actions, which are defined as proposed actions that automatically trigger other actions which may require environmental impact statements, can not or will not proceed unless these actions are taken previously or simultaneously.

This concern is justified by the following narrative. I won't read that section of the document, it's rather wordy. What I'm going to raise is also, failure to assess impacts on marine mammals, PDEIS and DDMP, grossly fails to assess potential adverse impacts on large marine mammals. Porpoise and whales in Long Island Sound in their habitat.

Multiple sightings of these have been confirmed in the Long Island Sound, including pods and calves. Humpback whales have been observed, multiple articles are available describing the sightings.

Has the potential adverse impacts on

marine mammals, porpoise and whale species, been discussed or assessed? What are the acceptable impacts on Federally protected species? Can the statement, however dredging related impacts are not expected to be significant to be compared to impacts associated with climate change stated above, be clarified impacts in relaton to Federally managed species.

I want to comment on concerns regarding alternatives. The list of potential alternative sites for small and non-Federal projects include 75 beaches, 30 concrete and asphalt plants, 16 potential de-watering sites. These alternatives are not being evaluated with the DEIS. Could it be clarified that these alternatives are not being evaluated?

NEPA requires a hard look at all the alternatives. As discussed at past public hearings, clean sand and other suitable material is valuable to mitigate storm impacts and damage. Is it recommended that the stockpiling alternative section be broadened for beneficial use?

Have I hit five yet? I'm probably closing in on seven.

MS. BROCHI: Yes.

MR. RUSSELL: General comments, I will skip all the other things. We are submitting written commentary on this thing. The Town of Southold strongly supports the Army Corps of Engineers goal of eliminating the open water placement of dredged materials. The Southold Town Board is also opposed to continued disposal of dredged spoil in open water, of Long Island Sound based on insufficient or incomplete information as identified in the DDMP and the PEIS on potential adverse impacts of the action. To continue the safe navigation of our water bodies is paramount to our region, and dredging is necessary to preserve these. However, the right to clean waters, a safe food supply, viable jobs and quality recreation, and tourism experiences are also paramount, and the citizens of Southold Town and New York State deserve no less. Thank you.

MS. BROCHI: Thank you.

Mark Woolley, Congressman Zeldin's Office. I apologize for not saying that correctly the first time around.

MR. WOOLLEY: It's okay. Thank you. I do appreciate the opportunity to speak to you today on behalf of Congressman Lee Zeldin, who represents the First Congressional District.

Before I get into his official comment on this, I just want to say for a moment as someone who grew up on the North Fork, and at an event today, totally unrelated to this event, which I ran into a woman who was from the Town of Southold. She said to me, are you going today and I said, yes. She asked if I'd be going tonight and I said I have a dental appointment, almost likening it to something like this.

She said she feels like she's assaulted everyday that she wakes up on the North Fork of Southold. It's big trucks and helicopters and now it's this. We're keeping the big trucks off, we have a plan to go ahead and try to re-route the helicopters off the North Fork to the South Fork. We're working at it.

This is something different. This is another way for people to wake up and feel that they are assaulted. It's their way of life out here. It's our way of life on the East End.

So, I'm really here to reiterate and re-enforce the position of Congressman Zeldin on this important issue. Stringent EPA testing must be performed on all dredged waste to ensure that material will not harm the environment into which it is placed.

Long Island Sound can not be a dumping ground for any questionable waste dredged out of Connecticut rivers, and that includes the area that EPA has designated near Fishers Island, Town of Southold.

Congressman Zeldin supports phasing out all open water disposal of dredge waste in the Long Island Sound. More needs to be done to speed up this process, not less.

Today's hearings should be a time for as EPA to not only listen to the concerns of East End residents, and officials, but also an opportunity to incorporate their comments to a final rule that protects Long Island Sound for generations to come.

In closing, this was from Congressman Zeldin. In closing, it's important to really hear these folks because they are the ones who are from here, and that live with this all the time, and they're doing their best to protect their way of life. I'm going to continue to work with them until it gets done. Thank you very much.

MS. BROCHI: Thank you. Adrienne Esposito.

MS. ESPOSITO: See what happened? Mark testified and the whole thing just fell apart.

[INDICATING MICROPHONE]

Thank you very much. My name is Adrienne Esposito, I'm the Executive Director for Citizens Campaign for the Environment.

Let me start out by saying, as you know we've been engaged in this issue for over a decade now, for fourteen years, but who's counting. I just have to say, I came to an environmental Ground Hog Day. We keep coming here and saying that we're adamantly opposed. The public comes, elected officials, from Federal to State, to County

to Town all come, and they all keep saying they're opposed and yet the Army Corps keeps telling us how comfortable they are with this. He keeps telling us why it's okay and the EPA is fine with it also.

So, I'm going to testify today but I want to say I'm doing it under protest, because honestly you haven't changed a thing really in twelve years. We are dramatically disappointed in the EPA, and we are still hoping for better. That is why we are once again to testify once again.

I'm going to make five points here.

1) Again, we do not see any goals established in this plan for the reduction and reuse of dredged materials. Happy to hear about the establishment of the Long Island Sound RDT or Regional Dredge Task Force. That's great but one of the things that's not included in the RDT was the establishment of goals for reduction.

As you know, assessing alternatives, discussing alternatives doesn't necessarily lead to the implementation of alternatives. The RDT needs to have as part of their

mandate, establishing goals for reduction. I don't just mean reduction of goals for disposal into Long Island Sound because that could just be attributable to less dredging. I mean goals that would be advancing beneficial reuse and upland disposal, and the other things.

The second thing is, it was unusual and disturbing to see Niantic Bay as being part of this potential site. I know that you dismiss it, but I don't even know why it was mentioned. Niantic Bay, the EPA well knows has been identified in the Long Island Sound plan as being in need of restoration, that it receives more than its fair share of thermal pollution from the Millstone Nuclear Plant, and also the because of the Millstone's open loop system, millions of gallons of water are drawn out of Niantic Bay each and every year, causing a depletion in winter flounder, and other finfish and shellfish.

So, the Bay has been identified for that reason, for restoration. It was used from 1969 to 1972 as dredge dumping site.

I don't know why it's being discussed. It should be off the table. It should have never been in the room in the first place. We ask you to just eliminate that.

The second thing is Cornfield Shoals, happy to hear that could potentially be closing, as it should. It's been listed for years as a high dispersement site. As you saw from the overheads here, you couldn't even see where the dredge material had gone, which means it's gone to multiple places.

Last, New London site. We're now renaming it the Eastern Long Island Site. There were some very curious things in the draft EIS. The first thing is that it recognizes, the draft EIS, that Eastern Long Island Sound is one of the most biologically diverse and productive segments of Long Island Sound. In fact, this area is considered an essential fish habitat, as designated by the DEC and the EPA.

So, on one hand it's an essential fish habitat, and that definition says that these waters provide necessary breeding ground, feeding ground, nursery grounds, for

fish to survive and mature, and then it lists fifteen fish, including the ever dwindling Winter Flounder, and other important key fish as the Atlantic Salmon, the Spanish Mackerel, the King Mackerel, Sand Tiger Sharks and Dusky Sharks and much more.

Well, if it's such an essential fish habitat, the plan goes on to say, even though you want to increase dumping from 8.9 million cubic yards, which has already occurred, to 22.6 over the next thirty years, a tripling, and says it's going to have no impact. It's an essential fish habitat, fifteen fish identified. It claims that there will be no adverse impact, and everything is okay.

The document also claims that even though it's an essential fish habitat, you found only one commercial fisherman that fishes that area. I've got to tell you, I'm just not buying that. That is impossible in the Long Island Sound. Where there's fish they will come. If you only found one guy, it's because you didn't look. There are way more. The competition is

heavy. The competition is fierce to get those fish, and to survive -- for the survival of the commercial and recreational fishermen. I have to believe that due diligence was not done in that area there.

Last, we're going to very respectfully, once again, and as we have done for every year for fourteen years, respectfully disagree with the Army Corps of Engineers that this material is not toxic. Of course it is. Okay. Taking materials from the mouths of rivers, which we agree that dredging needs to be done, but that material is run-off. It does contain trace amounts of heavy metals, trace amounts of pesticides, trace amounts of volatile chemicals. It contains these contaminants, and dumping it into the open water column puts it once again into the eco-system. and puts it once again into the food web.

So, we know that the Army Corps is comfortable with this, as was repeated several times today. We are not comfortable with this. In fact, we spent thirty years fighting against contaminants going into the

Long Island Sound. We would appreciate if the EPA would have the same position as well.

So, having said all that, I'm sure my time is up, but I'm sad to say, after twelve years, you know, Long Island Sound looks like it's going to have three permanent dump sites.

We went backwards. We didn't go forward. In the whole northeast there's six open water disposal sites, for the entire northeast. Long Island Sound has three more. It's disproportionate, and it is not helping the Long Island Sound's recovery.

Thank you for the opportunity to come in.

MS. BROCHI: Thank you. Is there anybody who would like to comment that did not sign up or register? Identify yourself and your organization, or affiliation.

MR. GRAVES: Thank you for the chance to comment and thank you for coming down. My name is Anthony Graves, and I'm representing Supervisor Edward Romaine, of the Town of Brookhaven.

A few comments, the limits placed on the site screening appear arbitrary. It seems to be one of a set of arbitrary limits that lead to -- inevitably to the conclusion to continue the open water dumping. That appears to be part of the original that say, pre 2005 agreement between the governors of Connecticut and New York to try to minimize dumping in the Long Island Sound. It's a continuation of the process that Army Corps has used all along. So, we can't see that there's been any change.

There doesn't seem to be any special attempt to limit sediment inputs into the systems that are driving the need for dredging these harbors and waterways in the first place, and we think that to really protect the Sound, to have some kind of special regulations that reduce the amount of sediment that was shown, for instance, the slide of, I believe it was Hurricane Irene, where you have a gigantic plume coming out of the Connecticut River. We think that some kind of special provision to limit the inputs to the harbors to begin with

would be a very good way to make sure that the Sound is not being used for dumping fifty years from now.

Again, we think the process has been flawed from the outset. It really appears that the economics have been the driver, and for instance the box that limits the dredge site, that are being screened, appears way too small. If we used a process similar to the West Coast, where you have sites that are far off shore, the economics would be very very different, and a host of alternatives to open water dumping would all of a sudden become feasible.

Again, thank you for the chance to comment.

MS. BROCHI: Thank you. Please approach.

MS. PURNELL: Good afternoon. My name is Marguarite Purnell. I'm here today as a Southold property owner. I've been involved in this, dredged material disposal issue, probably since the mid-1980's. This is really an example of the definition of insanity because we

continue to go through this again, and again and again, and for many members of the public and the environmental community, we keep on hoping for a different result. But we're back at the same place again.

With regard to New London, New London was first used sporadically in the 50's after the Navy tried to do some upland disposal on the sub-base, and it peeled the paint off the walls, and it turned the white paint yellow and they decided they were going to be pretty much be putting most of the materials in the open water.

With regard to the Trident submarines, there was litigation that ensued, and the settlement for that litigation directed the agencies to look for alternatives, for viable alternatives, for dredged material disposal. Here we are forty years later, and we're still dealing with this.

I have to say it is really discouraging because we really had an opportunity here, and the agencies had an opportunity. We have a lot better technology. We've got great GIS information and granted it appears with

this particular draft EIS, that you really didn't cross the T's and dot the I's, in terms of the data collection. You just let the work that was done for Western Long Island and Central Long Island sort of carry the day, when in reality a lot of that information was absent for the Eastern portion of the Sound, and that was after you reduced the zone of site of feasibility.

I haven't had the opportunity, I've worked with a number of different organizations. For twenty years I was with Fishers Island Conservancy, working on this. I have also represented Connecticut Watershed Groups, as we have looked at the Dredged Material Management Plan, and I have to say that it's really discouraging because, if you actually designate an open water site, everyone would clamber to use it because it is by far the cheapest way of disposing of the material. No one really wants to make the hard choices, and no one really wants to. There has to be a paradigm shift of how we look at this material. We've always talked about source reduction

and limiting the source reduction, both in the volume of sediment as well as the contamination level.

I will take exception to commentary that you don't put contaminated materials or toxic material into the Sound, because it happens. It's just not acutely toxic according to the various bio-assessments that you all use, on little tiny critters and plants and worms. That is really not representative. The chronic toxicity is there. DAMOS reports will show, and a number of different DAMOS reports will show, dredged material found outside of the disposal sites, there will be indications of sections that aren't recovering. You don't go back to the same area and test it the following year. It's usually tested a number of years afterwards.

The whole thing is really quite discouraging. In terms of, I guess what the lastly what I will say, I'm submitting written comments and they will certainly be more cogent. But the actual area, you know, in reconfiguring the New London

dump site into the Eastern Long Island -- whatever you're going to call it. You're enlarging it and you're shifting it.

So, what that translates to -- New London was moved once before, and was shifted up into the northwest a little bit to sort of get it out of your New York State waters, a little bit more out of New York State waters.

Both New London, Central Long Island, Western Long Island -- I mean in Western Long Island, the dump site -- the outline was moved so there's a huge swath of area where dredged material was indeed disposed. I can tell you that, you know at Fishers, when material is being disposed of, we get fine grained sandy sediment that comes up on our North Shore.

Our North Western Shore, we got a little beach there, where little kids play and little kids wading around. I don't have kids but I feel for them. I feel for them and I feel for the people that eat the fish, and eat the creatures that are bio-accumulating the materials we are putting in the Sound and

we spend hundreds of millions of dollars to restore these areas. And then you look at someplace, a beautiful place with potential, like Plum Island, that has the potential of possibly being a reserve and yet we're going to be putting this contaminated material in the Sound immediately adjacent to The Race.

I remember the Seawolf and I can't remember if it was Pier 15, 17 or if it was Seawolf, but the original fine grained material when that went down, they went back to go find it before they actually capped it, 33 percent of the material was gone.

I dispute that New London is a full containment site. You know, I will grant that some of the material that actually does reach the bottom, tends to stay there, though there's still movement. The currents are strong, and things get moved around. It's not clear what is actually there. There are relic lumps and things, that is true, but a lot of the material is all over the Sound.

You know, New London's had enough. I

think forty years, fifty, sixty years of putting this stuff down there, it's enough. It's a very, for Long Island Sound, we've actually -- Because there has been less sediment disposal and the fine grained materials in particular, we've had a comeback of our eel grass beds, we've had many more marine mammals. The seals are hauling out all over the rocks that are offshore, even some that are on-shore on Fishers Island. You know, it's just really discouraging that this is going to start up again. Thank you and I will submit written comments.

MS. BROCHI: Thank you. Are there any further comments? Please approach.

MR. McALLISTER: Good afternoon. My name is Kevin McAlister. I'm the founding president of Defend H2O. I'm a marine scientist by academic and professional training. My experience spans approximately thirty years. I've worked in government, consultancy in the Non-Profit sector.

I've been speaking to this, I don't know what public hearing, or comments that I will

provide today. I don't know what number that is. I will tell you that back in 2005, I really thought this program was dead on arrival. It was a public hearing in Port Jefferson, then US Congressman Tim Bishop, spoke. Ms. Esposito was there. Ultimately the sentiment from the community from Long Island was very strong and really thought this was gone.

Let me speak to process here, because having contributed to EIS's Environmental Impact Statement, written environmental regulations for water resources, coastal resources protection, in the consulting end, developing mitigation plans. There's a process here. I'm not trying to be disrespectful but I will call this ultimately a bit of a game in process. Ultimately the technical analysis that's been done and presented, and I recall sitting in this room in December, ultimately with speaking about the disposal, a bit on the fluid dynamics, you know, very deep science if you will.

We went onto, I think there's

absence in the biological analysis. You've had a myriad of public meetings on both sides. This has been really zipped up really nicely. There's very little opportunity, or I'll say, ability to contend the findings here. I'm going to bring you back to a little bit of reality, and certainly in my experience, having worked in the time of dredging, both on the permitting side, pulling permits, and then monitoring these operations. We are talking about depositional sites. These river mouths and the harbors that you're talking about, there's commentary or presentation on assurances of the toxicity. These are sinks. The storm water discharge into these areas, these rivers extending many miles up in northern lands with industrial uses on these rivers.

Again, anyone that knows dredging knows that at a minimum we're talking mud, unless there's episodic events, such as Hurricane Sandy, where all of a sudden a marine base perhaps has coarse sand in it. What you will be bringing out there is in fact mud.

It's very likely there's toxicity in these sediments.

There were comments earlier about the frequency of the testing. It doesn't seem as though that will be responsive to what I'll call the pulses of water coming down in storm events, delivering toxicity to said sediments. This is in fact the easy way out, and again, you've sealed it up very nicely.

So, it's very difficult for the community, without a myriad of other scientists, and legal actions, quite frankly, to challenge this. But at the end of the day, this is an economic decision to ultimately dispose of questionable sediments at a minimum, get back to, turbidity problems and water quality problems, just by the mere fact this is mud disposal. It's being done so because of costs, and ultimately, the term was unreasonable degradation. That's a very ambiguous term, if you will. All I can do is express the opposition that you've heard widely, certainly from New York State, and disappointment, but also recognition that,

you know this train, perhaps left the station a long time ago. Maybe in Port Jefferson, back, I think it was in, roughly in 2005.

It doesn't reflect well on EPA. It doesn't reflect well on the US Army Corps. An estuary of national significance with all the pressures and threats this water body. This is just another insult that, quite frankly, that there doesn't have to be if there was the investment of dollars to do an alternative disposal of this material. Thank you.

MS. BROCHI: Thank you. Are there any additional comments?

[THERE WAS NO RESPONSE]

Again, I'd like to thank you for commenting. I'd like to remind everybody, please send in written comments. We will be responding to the comments in a document with the final decision.

I want to thank Sarah Anker. She requested at one of the public hearings that we have a webinar and have an educational webinar on dredged material and it was the Corps, and EPA Region 1 and Region 2. We'd

be happy to do that again if you would like webinars, to talk about different aspects of the process.

Again, June 27th is the comment period and I thank you very very much for your time.

[WHEREUPON HEARING WAS CLOSED]

[TIME NOTED: 3:00 P.M.]

CERTIFICATION

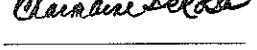
COUNTY OF SUFFOLK)
SS:

STATE OF NEW YORK)

I, Charmaine DeRosa, Certified Court Reporter, in the State of New York, do hereby certify :

THAT, the foregoing is a true and accurate transcript of my stenographic notes, taken in the matter of the PUBLIC HEARING, on this 25th of May, 2016.

IN WITNESS WHEREOF, I have hereunto set my hand on this 25th day of May, 2016.



Charmaine DeRosa, CSR

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Attachment 5

TRANSCRIPT OF PUBLIC HEARING, MATTITUCK, NEW YORK MAY 25, 2016

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SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT TO EVALUATE THE POTENTIAL DESIGNATION OF ONE OR MORE DREDGED MATERIAL DISPOSAL SITES IN EASTERN LONG ISLAND SOUND

May 25, 2016
5:30 PM
Mattituck-Laurel Library
13900 Main Road
Mattituck, NY 119527

S P E A K E R S:
LOUIS BERGER
BERNWARD J. HAY, PH.D
PRINCIPAL ENVIRONMENTAL SCIENTIST
MELVILLE P. COTE, JR.
CHIEF, SURFACE WATER BRANCH
ENVIRONMENTAL PROTECTION AGENCY
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JEAN BROCHI
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OCEAN AND COASTAL PROTECTION UNIT
ENVIRONMENTAL PROTECTION AGENCY
REGION 1

STEVE WOLF
DAMOS PROGRAM MANAGER
US ARMY CORPS OF ENGINEERS

(Hearing is called to order at 5:30 PM)

DR. HAY: Well, good afternoon. Thank you, very much, for coming out on this beautiful day and spending your time with us. This is a public hearing. Before we get started I would like to point out a couple of things. There is a sign-in sheet outside. There is a men's room outside to the left and there is also another bathroom, ladies room and men's room upstairs next to the -- unless the library is closed. I'm not sure what time the library closes, but there is another one upstairs. If you can turn off your cellphones, that would be appreciated.

My name is Bernward Hay, I'm with Louis Berger, a consultant firm working with the EPA. This hearing is held to solicit comments on the draft rulemaking to designate the eastern Long Island Sound dredged material disposal site and on the draft of the Supplemental Environmental Impact Statement, which is also abbreviated SEIS, which you'll see in various spots.

The process is designed to serve the eastern Long Island Sound region in Connecticut and New York. The lead federal agency for this process is the US Environmental Protection Agency. EPA is requesting written comments from the public on this draft SEIS. The document is publicly available on

EPA's Region 1 website. This is a copy of it. Please take a close look if you are interested in more details than what you see today.

In addition to this public hearing there was a second meeting this afternoon in Riverhead and there will be two additional meetings tomorrow in Groton, Connecticut.

The comment period ends on June 27th, this next month, and comments can also be sent to ELIS, which is the website, an E-mail address, rather, ELIS@epa.gov, until midnight of the 27th.

EPA and other agencies will present information about this project for the next hour, until about 6:30, and after the presentation you'll have an opportunity to present your comments until 7:30.

So if you wish to speak, we'll ask you to sign in outside at the registration desk. So when registering to speak, please provide your contact information and also any affiliation, if you are representing your organization. And speakers will be heard in the order that they are registered to speak, with elected officials and government representatives speaking first.

In case you also submit comments in writing at the registration desk, in which case we'll ask you to

provide your contact information again, and your affiliation, and any records, written or verbal, will become part of the public record.

We ask you to limit your comments to five minutes to provide everybody with an opportunity to speak. If you have extended comments, you may want to summarize them in a verbal statement and submit your comments in writing at the registration desk. Again, it will become part of the public record.

So this hearing today is focused on this evening's verbal comments and also written comments if you hand them in, on the draft SEIS, the presentations this afternoon and on the regulatory process.

The public hearing is recorded by a stenographer and an audio recording device. The transcript of the hearing will be entered in the record also and posted on EPA's website.

So we now move to the presentation portion of the hearing. Please note that presentations, again, will be made available on EPA's website as well. The agency representatives that will be presenting are shown on the agenda. I hope you all have a copy that you picked up outside.

In summary, there will be three agencies giving

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presentations: That is Mel Cote who is the Chief of the Surface Water Branch from EPA Region 1; Jean Brochi who is a project manager with the Ocean and Coastal Protection Unit of EPA, and Steve Wolf who works for the New England District of the Army Corps of Engineers.

So with that, I would like to ask Mel Cote to officially open the meeting.

MR. COTE: Thank you, Bernward, and good evening. Good afternoon, I guess, still, to everyone. And thank you, very much, for coming to this public hearing. We really do appreciate you coming to learn more about the process and provide comments on our proposed rule designated in the Eastern Long Island Sound Dredged Material Disposal Site and the draft Supplemental Environmental Impact Statement that supports our proposal.

Can you folks hear me in the back?

(Affirmative response).

As Bernward mentioned, my name is Mel Cote, I'm Chief of the Surface Water Branch at EPA Region 1, which is our New England Regional office. The Surface Water Branch administers the Ocean and Coastal Protection and Watersheds and

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Nonpoint Source programs for the six New England states. Prior to taking this position last year I managed the Ocean and Coastal Protection Section in my branch for 13-plus years, and before that I spent nine years as the Region 1 program manager for the Long Island Sound Study, it's our natural estuary program, and Connecticut's Nonpoint Source program. So I've spent a lot of time on and around Long Island Sound and I have a great affinity for this region.

Well, jumping ahead here, but, before we take your comments, we'll provide a brief presentation on the SEIS and the process that will follow. But I'll first describe EPA's role with respect to the designation of dredged material disposal sites, and then I'll take a step back and provide a little bit of background on the designation for central and western Long Island Sound sites which was completed July of 2005 and explain why that matters for eastern.

Bernward has already explained about the rest of the speakers. But following Steve Wolf I'll be back up here to explain EPA's proposed site designation rule for an eastern disposal site.

But before I go on, I also want to acknowledge and thank Buddy LoBue and Pat Pechko from our

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EPA Region 2 office in New York City, and also Mark Habel from Army Corps New England District, and also state agency staff from both New York and Connecticut. Thank you, for being here today.

So, as probably many of you know, EPA and the US Army Corps of Engineers jointly regulate dredging and dredged material disposal under federal authorities provided under Section 404 of the Clean Water Act and under Sections 102 and 103 of the Marine Protection, Research and Sanctuaries Act, part of which is called the Ocean Dumping Act.

In administering these programs, we work closely with other federal resource management agencies such as the National Marine Fisheries Service and US Fish and Wildlife Service, and state environmental and coastal zone management agencies to ensure proper coordination and consistency with statutory and regulatory requirements and all environmental standards.

Since 1980 EPA and the Corps have been applying the sediment testing requirements of the Ocean Dumping Act to all federal dredging projects and to private projects generating more than 25,000 cubic yards of material. Dredged material that meets these criteria and is determined to be suitable, that

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means clean enough, for ocean disposal, may be disposed of at any one of the four current sites in Long Island Sound, known as the western, central Long Island Sound sites, Cornfield Shoals and New London disposal sites.

The western and central Long Island Sound sites were designated by EPA, as I mentioned, in 2005, and as many of you probably know EPA proposed amendments to that site designation rule just this past February, February 10th, that removed some of the original conditions, like the Corps completing a Long Island Sound Dredged Material Management Plan, and placed new conditions that are intended to support the goal of reducing or eliminating open-water disposal of dredged material in the Sound.

The Cornfield Shoals and New London sites were evaluated and selected as disposal sites pursuant to programmatic and site-specific environmental impact statements that the Army Corps did most recently in 1991.

In 1992, Congress added a new provision to the Ocean Dumping Act that for the first time established a time limit on the availability of Corps-selected sites for disposal activity. The

provision allows the selected sites to be used for a five-year period beginning with the first disposal activity after the effective date of the provision, which was October 31st, 1992.

It also provides for an additional five-year period beginning with the first disposal activity commencing after completion of the first five-year period. So you have two five-year periods of use, but not necessarily consecutive.

Use of the selected site can be extended, however, if the site is designated by EPA for longterm use.

Use of the site also can be extended, as we found out in 2011, if Congress imposes an extension to the legislative process.

Nevertheless, the statutory construct is that the Corps can select disposal sites only for short-term limited use, whereas Congress authorized EPA to undertake longterm site designations, subject to ongoing monitoring requirements to ensure the sites remain environmentally sound.

To summarize, EPA's responsibilities related to dredging and disposal site designations includes: Designating disposal sites; promulgating regulations and criteria for disposal site selection and permitting

discharges; reviewing Corps dredging projects and permits; developing site monitoring and management plans for designated sites; and monitoring disposal sites jointly with the Corps.

Now I'm going to provide some background on how the proposed designation of an eastern Long Island Sound disposal site relates to the central and western sites.

The process began in 1998 when EPA and the Corps agreed to conduct a formal site designation process for all the Long Island Sound disposal sites following the criteria established in the Ocean Dumping Act. And just so people know, that agreement was basically part of a settlement of the seawolf case in 1998, I want to say. We also agreed that consistent with past practice in designating dredged material disposal sites, we would follow EPA's "Statement of Policy for Voluntary Preparation of National Environmental Policy Act" or NEPA documents, and would prepare an environmental impact statement to evaluate different dredged material placement options.

In June 1999, we published a "Notice of Intent" in the Federal Register announcing our plans to prepare, with the Corps and other federal and state

agencies, an EIS to evaluate and potentially designate dredged material disposal sites for the entire Long Island Sound region.

So we began the Sound-wide field data collection effort in 1999 but were slowed by both the technical complexities and financial constraints associated with a large-scale, multiple-site project.

In March, 2002, the central Long Island Sound disposal site, that's the most heavily-used site basically because of where it's located, scheduled to close in February, 2004, when the second of the two five-year periods I mentioned earlier were set to expire.

EPA and the Corps announced their intent to develop the EIS in two stages, western and central Long Island Sound first, followed by the eastern Sound once a site or sites had been designated to serve the western and central regions.

As it turns out, the designation of the central and western Long Island Sound disposal sites was contested by the State of New York, which led to the inclusion of conditions that would need to be met in order for the sites to be open for the longterm.

The most significant of those conditions was the completion of the Long Island Sound DMMP by the

Corps. So all the human and financial resources that would have gone into moving forward on a site designation process for eastern Long Island Sound were focused on completing the DMMP.

Some of the initial studies conducted for the DMMP, including the dredging needs survey, was completed in 2009 and updated last year, and analysis of the placement alternatives, completed in 2012, formed the basis for EPA's determination that there was in fact a need for at least one disposal site to serve the eastern Long Island Sound region. Upon making that determination, we began the process for preparing an SEIS.

So at this time I'll turn it over to Jean Brochi, the EPA project manager for the SEIS, Supplemental Environmental Impact Statement, and Bernward Hay. Thank you.

MS. BROCHI: Thank you, Mel. I apologize, it takes a few minutes for the presentation to come up on top.

So again, this is a public hearing for the Supplemental Environmental Impact Statement and the rulemaking associated with the eastern Long Island Sound disposal site.

In addition to the Section 102 that gives EPA the

authority to designate a longterm disposal site, EPA also is involved with permit reviews and concurrence on Army Corps of Engineers selected sites.

So the approach to the SEIS is in 2012 we issued, EPA issued a notice of intent. We had six public meetings, public information meetings. Some of you may have attended. We look at alternatives to open-water disposal and we also look at a no-action alternative. So we have to review what happens if no action takes place.

We did site screening studies, which I'll go into in a minute, but EPA has five general and eleven specific site screening criteria we use when we evaluate a site for designation. We started with eleven sites. The majority of those sites were historically used, so we have to evaluate that first, and EPA, according to the general criteria, we look at a site that has been used as preferable.

So we started with eleven sites and we went down to three. Right now what you see on the screen is what we call the zone of siting feasibility, and that is the area that we selected representing eastern, the eastern region.

As Mel had mentioned, right now there are four existing sites. They have been selected by the

Army Corps of Engineers. The western and central sites are, have been proposed for designation by EPA. And we are currently discussing a new site in eastern. The Cornfield Shoals and New London sites will go away December 23, 2016.

So in addition to the public meetings, we have a group of agency representatives that are cooperating agency members, and we have meetings and webinars to discuss aspects of the process and the studies along the way.

In addition to publishing the draft rulemaking on April 27th for the eastern site, EPA also revised a website and we created a new E-mail address called ELIS@epa.gov, which, if you want to provide comments you could send the comments to that website or to my address Brochi.jean@epa.gov.

The comment period that Mel had mentioned ends on June 27th, 2016.

So here is the zone of siting feasibility. You can see the outlines. What you are looking at are, the squares are the disposal sites that currently exist. Western, central, Cornfield and this is New London. This is not to scale, but this green area is the site that we are proposing here, eastern Long Island Sound site. And then here is a site in Rhode Island.

So the site screening criteria that we use is based on Section 40 CFR 228, and it's the Marine Protection Research and Sanctuaries Act. And as I had said before, there are eleven sites, initially, and we narrowed it down to three alternatives that we reviewed in the SEIS, and we are requesting comments on one preferred alternative.

So the site screening involves, and this is a summary of some of the areas and some of the technical aspects that we look at. And one is the sediment environment. So we look at bathymetry, currents, waves, transport of sediment, physical conditions of the sediment.

For this study we also did an additional physical oceanographic study where we deployed buoys and collected our own data and also modeled the transport of the sediment. We also look at the biological resources, shellfish beds, fishery habitat.

In addition to breeding and spawning areas we are required to consult with National Marine Fishery Service on essential fish habitat and endangered and threatened species.

Areas of conflicting uses, we look at navigation channels, we look at commercial, we look at cables and pipelines, any other conflicting uses that might

be in that area. So as Mel had mentioned, the dredging needs were assessed, it was in 2009, as part of the Long Island Sound Dredge Material Management Plan by the Army Corps of Engineers, and the needs projected 22.6 million cubic yards of needs over the next 30 years for the eastern portion of the Sound. Total for the Sound is 53 million cubic yards. The capacity available is not available to meet that need.

Again, if I didn't mention, the document, the SEIS and the rulemaking are all available on the EPA Region 1 website.

So the other part of this is an environmental review. One thing that we consider is the haul distance of dredged material and any navigational conflicting uses with the transport of that material. So a haul distance from New London to the Connecticut River, which is the largest dredging center, is, 12 miles if you go out to Connecticut. So it's twice the distance from New London.

One of the other things that happens when you have a designated site is EPA is able to manage and monitor that site in conjunction with the Army Corps of Engineers. And so we create a plan that we update every ten years, and we review annually,

and we get feedback on that with the other agencies.

So the purpose of this designation and some of the things that are unique with this, as well as central and western right now is that the sites will be restricted. So they are restricted for use. So a designated site is restricted where a selected site, which is how they currently are, is not restricted. Again, we created an RDT, a Regional Dredging Team, that has members of New York, Connecticut and Rhode Island, and the federal agencies, looking at alternatives.

Site reduction. There are currently four sites that we reduced to three sites. So central, western and eastern.

With that, I'm going to introduce Bernward Hay who will discuss the studies.

DR. HAY: Continuing on where Jeannie left off. In essence there was a site-screening process; it reduced the number of sites that were initially screened based on various factors down to three sites. These three sites are the New London site, Niantic Bay site -- by the way, notice here that the Niantic Bay site is the name it's given. It's actually not in Niantic Bay but it's to the south of it, it's in

Long Island Sound. As well as the Cornfield Shoals site.

The Cornfield Shoals site and the New London site are currently active sites. Specifically this one-by-one nautical mile box. And I'll come back to these sites a little bit later.

The colors that you see on this image reflect bathymetry or water depths. Brown colors, orange colors are shallow waters; dark blue colors are deep waters. For example, here you see The Race, this is Fishers Island, you see Plum Island here, you see Orient Point and the deep hole near Orient Point. Just to get you oriented. This is the Connecticut River. Grey just means there are no high resolution bathymetry data available.

The studies that Jeannie mentioned, the specific studies that we used both for the screening as well as for the analysis of the three alternative sites were five: Physical oceanography, sidescan sonar survey -- and I'll explain those in a minute -- biological characterization, sediment chemistry and the sediment profile survey.

The physical oceanography study in essence dealt with the dynamics of the environment within the zone of siting feasibility pointed out by Jeannie.

This is the box here. It deals with waves, with currents, with tidal forces, and it's in essence trying to understand where does material go when it's disposed of at a disposal site. What is the fate, as they call it in the business, what is the fate of the material.

So lots of measurements were done, in different ways. The red stations represent stations where equipment was deployed for several-month long periods, several times throughout the year. The green stations represent stations where equipment was lowered from a ship to get the whole water column, and in this case you actually see the instrument frame that was used for this activity. Lots of different instruments looking at different kinds of parameters, studying the water column and its variabilities.

The study was done by Jim O'Donnell who is a professor at the University of Connecticut, who is in the audience here as well.

In addition, information from other buoys and other studies were incorporated to provide a longterm time series and to allow for modelling of the conditions, the physical oceanographic conditions and the environment.

Just to show you one product, this is a slide that shows the maximum bottom stress simulation for the period 2012 to 2014, October to January, 2014, which includes conditions of Hurricane Sandy. So these are conditions, worse-case conditions.

What you see here, and I'll explain this for a second, bottom stress is basically the force that acts on the particles that sit on the bottom. So if you have a particle and you have strong currents, the particles may get dislodged if the force is strong enough, or it may stay. It depends on the force that is acting on it as well as the characteristics of the particle. If you have a piece of gravel it would require a lot more force than a small piece of sand.

So the bottom stress typical for dredged material is reflected in this slide. And it's important for us to determine would material stay or would material be eventually mobilized from the area.

You again see in this case the two dredged material disposal sites, Niantic Bay and the New London site. Bluish/greenish colors in essence mean the bottom stress was low enough for dredged material to stay in this location. Reddish and brownish colors indicate at some point bottom stresses can be high enough to mobilize sediment.

The separation between these two types of areas is indicated by this magenta line. So we can see, for example, the New London site is almost entirely within the area of what we call containment or low-level bottom stress.

Niantic Bay site, on the other hand, is partially in an area where sediment will be mobilized and partially in an area where sediment is contained, will stay at the site.

Another study that was done was the sidescan sonar survey, basically collecting an image of the bottom of the ocean with sonar equipment. Here you see a close-up of a piece of the Cornfield Shoals site and again you see structures and features that are relevant to specifically ask the question what does the seabed look like, what are potential archeological resources that we need to take into consideration.

So in this case, just as an example, you see a dune here, and the shape of the dune, for geologists, you can see a steep face here, a gradual face here, it clearly indicates net sediment transport toward the west. So those are features that allow us to, again, interpret the seabed.

If you look at a similar image for the New London

site, you don't see those kinds of what we call bedforms, sedimentary structures which indicate there are forces at play which create those kind of dunes. So sediment is stable here, which is consistent with what you just saw on the slide for bottom stress.

Another study was done that looked at the sediment chemistry. Sediment grab samples using a grab sampler were collected at 40-plus stations throughout various alternative sites in a systematic pattern. The sediments were analyzed for grain size, metals, organic compounds like PAH's, PCB's, pesticides.

And this is an example here of what the substrate looks like and what the sediment sample looks like from the Cornfield Shoals area. Coarse grained, which is, again, an indication of heavy forces that sort the material into coarser particles.

We have the biological characterization, another study, it looked at the benthic health or the health of the organisms that live on the sea bottom and their diversity.

The study also included the fish characterization study that was done in conjunction with the Connecticut DEEP LISTS. That's a long word that stands for Long Island Sound Trawl Survey

program, that on a regular basis trawls for fish throughout Long Island Sound.

It also looked at various other studies like fishing patterns in the area.

And finally, the fifth study is the sediment profile survey study. What you see here is a vertical profile, this in black is the water column, and this is the sediment column. In other words, it's a slice that is about 27 meters deep, cutting into the sediment, but it allows you to determine what happens with regards to benthic organisms such as these polychaete tubes, over time.

It's a tool that is commonly used by the DAMOS program. It's a program that has been in use for many years. Steve Wolf will talk more about this program. And it allows you to determine how fast dredged material disposal mounds recover after disposal at a site. For example in this case you see burrowing tubes deep in the sediment. So this is stage two which means -- stage three, actually, which is an advanced stage of recovery.

So just a quick tour of the three sites, what have we learned about those three sites. This is the New London alternative, about 50 to 79 meters -- feet deep, rather, consists of the existing New London

disposal site. Notice here, for example, the uneven surface which indicates dredged material disposal mounds and which indicates that the material disposed at this location actually stays here. Here is a mound, here are more mounds, you see very uneven, undulating surfaces.

The area was expanded to also include this box here, these two sub-boxes, if you wish, to provide the necessary capacity that is needed for dredged material disposal for the next 30 years.

The area includes a boulder field here, this small boulder field down here in this corner as well, and a shipwreck that is not shown on this image, which I'll show a little later.

This is the Niantic Bay alternative. The site consists in essence of sand, it has some sedimentary bedforms, you see some kind of dune feature here. You see some large sand ripples here. And other than sand, we have a bedrock area down at the bottom and a boulder field in this area here. It's a deeper site which goes up to about 80 meters. About 250 feet or so.

And finally, the active Cornfield Shoals site. Now this is an active disposal site as well, and compared to the New London disposal site you don't see any

dredged material disposal mounds. Again, remember, this is a dispersal site where material, where the bottom stress is such that material disposed at this site is mobilized and is transported. It's a deeper site, it's about 150 feet deep. These measurements are in meters. But otherwise it's fairly flat.

These features here represent large sand waves, south of the site.

So summarizing very quickly, the existing conditions, and again, there is a ton of detail in this document here, this single slide doesn't do it justice, but just to capture the essence, with regard to sedimentary environment, the primary grain size at all three sites is sand. In New London there is also finer grained material, but the predominant grain size is sand.

Bottom stress, we talked about this. Lower in New London; highest in Cornfield Shoals; and transitional in Niantic Bay.

With regard to contaminants, all of the sediment chemistry results indicate low or no concentrations of contaminants.

Biological resources at these sites: None of the sites have shellfish beds. Deep enough water so

there are no shellfish beds there. And they would have been screened out otherwise, anyway, in the initial program. The commercial and recreational shellfishing activity in the area is low because of low abundance of those shellfish. Similar for fish habitat, these alternative sites are similar in terms of the habitat to other, these other parts of eastern Long Island Sound, in the central regions of eastern Long Island Sound. So they're not unique in terms of fish habitat is what I'm trying to say.

With regard to socio-economic and cultural resources, there is no infrastructure, cables, pipelines, et cetera. The sites would not present interference with navigation, there are no anchoring areas, for example, there are no conservation areas at any of those sites.

And with regards to cultural resources, there is only one wreck found at the southern border of the New London site.

This is one summary slide of the environmental consequences for those three sites. Due to the different bottom stress with regard to sedimentary environment, due to the different bottom stress, material disposed at New London would stay because it's a containment site. It would be more,

continue to be mobilized at Cornfield Shoals, and it would be partially mobilized or partially stay, depending on where the dredged material disposal mound would be. In the northeast, it would stay, in the central part and southern part of Niantic site, should it be chosen, it would be mobilized.

With biological resources, there would be short-term impacts to benthic organisms, organisms that live at the bottom of the site, due to disposal. They would basically would be covered by the dredged material. Some would survive, others would be buried. But the DAMOS program has shown that colonization is very rapid and the benthic community recovers. Again, Steve will talk more about this.

The impact to fish habitat, the fish concentration, would be minimal, because fish are in a position to move out of the way. Similar for mammals and reptiles and other mobile endangered and threatened species.

With regard to bio-accumulation, dredged material is required to go through a very stringent testing program. Steve is going to talk about that and Jeannie talked about that as well. So risk of bio-accumulation as a result will be low.

Then finally, socio-economic and cultural resources, because of the low abundance of fish and the fact that it's not a unique fishing habitat, the impacts to fishing, commercially and recreationally, would be minimal. There will be no impact to commercial and shipping and navigation because the sites would be deep enough and also disposal activities would be managed to avoid any navigational hazards.

And with regard to cultural resources, the shipwreck at the New London site would be managed with a buffer zone.

So in conclusion, putting all these facts and these analyses together, EPA has decided to select a site in the blue box as the preferred alternative. It's called the eastern Long Island Sound disposal site, as you heard. It basically has a footprint of a two-by-one nautical mile box. It's a little smaller than the analyzed New London disposal site which was at 2.5-by-one nautical mile box. The reason being is this area here already is fairly shallow, has a lot of material, and basically would not be able to receive additional dredged material. So they reduced the area to the two-by-one nautical mile box.

This area here which is the boulder field would be excluded from dredged material disposal, as well as this corner here which has some boulder areas as well. And the shipwreck here that I mentioned before on this graphic, it's shown, is just down here in the corner, and there will be a buffer zone surrounding it.

Again, one of the main reasons we have summarized down below is sediment will be contained at this site. And it's also a previously-used disposal site, which is one of the requirements.

So with that, I would like to pass it on to Steve, who is going to talk more about the DAMOS monitoring program.

MR. WOLF: Thanks, Bernward. And if you guys can hear me, I'll probably avoid the mic. Let me know if I need to speak up.

So, again, Steve Wolf, Army Corps of Engineers. The hat that I wear there is monitoring these sites. So if a site like this proposed one is selected or some of the existing sites in Long Island Sound, we are doing the checks to make sure that the material is in the right place, it is staying there, all the expectations that we had up front are met in terms of the recovering.

Just to make sure that everybody is on the same page that we are talking about placement in the water, I just want to show you a short video clip. This is about 3,000 cubic yards of dredged material in a scow that is about to be released at a dredged material disposal site. So when the tug captain realizes he's over the right spot, and determines, he engages a hydraulic and the scow just opens up right along the center line and all the material falls right out the bottom. And the whole process takes ten to 15 seconds, and all that material is gone. So it's relatively quick.. And we understand it's a quick process, but we also understand that it raises a number of questions that I think probably some of you are here about tonight in terms of can we place that material accurately where we want it; if it's there, does it stay there, what about impact to the water column; and then, as Bernward mentioned, what about those impacts to the benthic system in terms of knowing that is recovers and are those significant.

Those are things that I would like to try to address with a little bit of background on our monitoring. But before we get there, we probably need to back up a little bit more and realize sort of

how we got to this point in monitoring and selecting sites.

So we dial back to, back to the 1800's as our New England ports were developed, or even earlier, some of the earliest dredging was really just get the material out of my berth area. There was just not a whole lot of thought put into it, often times just prop washed or pushed outside of the general wharf area without any real thoughts about its impacts to other folks.

But as we moved into the early 1900's and a lot more of the ports were developed along New England, pretty much anywhere that you look along outside of each of the larger ports in Long Island Sound you are going to find remnants probably of some dredged material that was placed there.

Again, it was a practice, a common practice, the same practice that happened in ports all around the country or around the world. That's the 1800's into 1900's.

As we moved into the early to mid-1900's, we started to see specific locations that were specified where you put the dredged material. So if you look at all these light-colored squares on here, you go back to a historical nautical chart, maybe you look in

some town records and state records, you are going to see specifications for some of these. So there was clearly a collected effort that said, you know, we need to be a little bit more organized about where we put this stuff so that it doesn't bother other folks.

But again, in that time period, there still was not, there really was very limited control over what type of material went out there. And again, this is the same case as you would find anywhere in the world and dredging of ports back in that era.

It was not until we got to the 1970's and the various environmental regulations that Jeannie and Mel from EPA had mentioned, that now we start to see a lot more specifications about where you can put the material, how you site the material at this disposal site and what type of material can be placed out there.

So that is how we get to the place that we are today. And that's really what led to the program that I work with at the Corps of Engineers, DAMOS, or the Disposal Area Monitoring System, got it's birth in 1977 related to some dredging right in New London, and what we have done is over the years, almost 40 years now, trying to answer these various questions, address those, because we realize there

are concerns.

A lot of reports, a lot of data has been generated, all of that is publically available on the website and I'll have that at the end of the presentation here.

So, just a note about the testing that I know got brought up before, and one thing that I want to clear up, both for the siting of central and western Long Island Sound, which has happened just not that long ago, in terms of the proposed rules for those, as well as some of the background related to this siting, there is a lot of misinformation that is out there, and I wanted to make it really clear that toxic material is not placed out in the Sound. It may have been historically, both in Long Island Sound as well as elsewhere around the country, but with the passage of the environmental regulations and the constraints that the controls of the states and the EPA puts on it today, that just is not the case. So there is very stringent testing that is required to be able to say is this material acceptable to go out into the Sound. That is physical testing, so you want to know is it course-grained, is it fine-grained. It's chemical testing, you want see what concentrations of various chemicals are in it. As well as what we call

biological testing where you put some of the material into an aquarium with critters, the type of critters that you would find here in Long Island Sound, and then you see how they survive both in the water column as well as down in the sediment. And that allows us to set benchmarks and say is something acceptable or not to allow material to go out into the Sound.

And just to give a little more background, let's use arsenic as an example. It's a naturally occurring metal. If we look at these bar charts as giving us an idea about concentrations in the sediment, low to high, before the industrial revolution we can see anywhere in here or anywhere in New England, very low concentrations of arsenic to very high concentration of arsenic, because it's naturally occurring, and it varies naturally depending on where you are.

So if you were to look at background concentrations today, same thing, you get that wide variation. But what does that mean. What we need is to put it into a context. Acute toxicity, is a very high concentration, whether it's in the water column or in the sediment where a critter is. By acute, we mean that that can actually be lethal to an organism

in that concentration. Or chronic toxicity, where an organism can survive but it doesn't thrive. Maybe it doesn't grow so well, maybe it can't reproduce so well. And so these are the sorts of tests that we use, not just for a specific concentration, but we are looking to see what sort of toxicity we have, and if that's a determination that it is toxic, then it doesn't go in the Sound.

Same thing for organic chemicals, I won't go through this one, but PCB's, but again, there is a whole list of chemicals, a laundry list has to be tested to determine sort of the background concentrations and is that material acceptable to be placed in a water environment.

So if you determine that it is acceptable, then what sort of controls do we put on it to make sure that it goes to the right place. In the older days we used to put out a marker buoy, which worked reasonably well, but in today's age of electronics, we can do exceedingly well.

So here is a scow that is loaded with several thousand yards of dredged material. If you look back here on the stern, here is a blowup of all the instrumentation that is back here; there is a sensor that can tell when the scow is open or closed; we've

got a draft sensor so that we can tell whether it's fully loaded, sitting low in the water or high and it's empty; a GPS sensor to pick up its location; and a data recorder that pulls all that information together and gives us a record after the scow has made its trip.

And here is an example. Here is some dredging that happened up in New Haven Harbor, and that material was taken out to the central Long Island Sound site, and what you can see is this bread crumb trail of the whole path of the scow on the way out. There is a color change in the track after it releases the material. And that allows, even if we've got a tug that is far in front of the scow, it allows the tug operator to see exactly where his scow is. So we have gotten really, really accurate of placement of the material. So in a given year we are specifying we would like, even though this is the central site, which is about two-by-one miles, we are not spreading that material over the whole site. In a given year or given project we are specifying a specific location where we would like it to go. And this is a blowup of that central Long Island Sound site. So again, about a mile-by-two miles. This is bathymetry, so we see a trace of what the bottom

shape looks like. And each one of these little bumps with a name here is a specific project or a year where we were targeting the placement of dredged material.

We do bathymetry before, we measure what the bottom looks like, we do it afterwards, gives us an idea was it in the right place, but also tells us is that material stable on the sea floor. And you'll see either dates on here, some of them go back to the 1970's which means that these mounds have been through, some of them, Hurricane Gloria, Hurricane Sandy, a number of nor'easters, and so we can say with really great confidence that in this location, you put the material on the sea floor, it stays there. It doesn't get up and move with the various storms. So we are comfortable that we can put it in the right place, that it stays there.

What about impacts to the water column as you release the material from the scow. This is a picture out of an older textbook, when I first got started in this, this is kind of what I had in my mind, is that you've got a dredge up here, a barge at the surface, releases the material that's falling, falling, falling down to the sea floor and there's potential for lots of it to be released into the water column. But if you

do the math on here, this is maybe a three or four-hundred foot shift, that means it's in easily over a thousand feet of water to have that much distance for it to fall through. That might be the case out on the west coast, the Pacific Ocean, but where we are, especially in Long Island Sound, that just is not the case at all. We are in much shallower water.

So if we set something up that is a little bit more appropriate in terms of a figure, here is a typical scow, which is about 300 feet long, it's probably fully loaded because you can see it's sitting low, probably about 20 feet of draft below the water line there. Which means, in Long Island, Long Island Sound, we've got maybe 40 to 80 feet, 100 feet tops, to get to the sea floor. So when that scow opens up and that material drops out, in ten to 15 seconds, it's on the sea floor in literally a matter of seconds. There is very little water column for it to fall through and that material to be stripped out.

And so that is what the math tells us. But there has also been a lot of investigations, but again there is a point of concern. A poor graduate student at MIT, spent I think several years of his life tracking, this is about a 15-foot tank, he was releasing fluorescent beads up at the top of it and tracking

their fall through the surface, and what you can see is in the beginning, and we'll get another one, that material falls really quickly, and it just necks down. And it's not until you get very deep into the water column where this begins to spread out. So again this tells us this should not be an issue in these water depths.

So we've got math, we've got simulations, but we actually go out and do some monitoring. And for those of you who are fishermen, you've got fish finders, you know you can pick up a lot of things in the water column now. There is very high instrumentation that can allow us to pick up things the size of the grains that are released in a dredged material disposal event. So after a scow releases its load, we can run a transect across here, paint a picture like this, look where we've got high concentrations and low in terms of what is in the water column, turn the boat around, go back there, grab a sample of the water and see just what is there. Are we releasing things that should be an issue in terms of the suspended sediment or any potential chemicals, anything that could be an issue. And we have done a lot of this monitoring, and those reports are available, and we just have not

really seen an issue associated with that.

So then what about the benthic community. Bernward showed some images, again, where we see the water up above, the sediment down below. This is an image looking down on the site.

If you are directly below where that material falls, undoubtedly a lot of critters are going to get covered up in that immediate footprint. But what we try to do on an annual basis is limit that size of that footprint, and we liken it very much to you put some fill on a field, wherever that fill, that dump truck dropped a load of fill, things underneath it, the grass, insects that are there, they are buried. Some of them can dig their way out, some of them can't. But what you find is that in a very short period of time it starts to grow back. Things start to grow on that material, the insects come back, and that's exactly what we see with dredged material. It's very resilient, the benthic habitat, and so once it's disturbed, in a very short period of time we see that recolonization, and that's one things we track on a regular basis through the monitoring program.

But we understand there is an impact, we understand that is clearly a concern. And one of the things we do as environmental scientists is try to put

that in some perspective and some scale that says, you know, is this significant in terms of an affect on Long Island. And if we said we took the whole Sound and we shrunk it down to the size of a football field, how much of, on an annual basis, are we actually affecting with the dredged material placement. So if you say, you know, you look at the size of the footprint of where we place the material and you zoom it to one end of this, about the size of a dinner plate, maybe a bucket lid, is what is affected on an annual basis by the placement of the material. And then we move on, we move over here to the next year or two, and within a year or so this area recovers. And so we are very confident that this has a very limited impact on the Sound overall.

And I guess I would close with sort of we've got that comfort that we have a lot of data that shows that dredged material placement has no significant impacts in terms of the ecosystem that is out there, and dredging is going to have to continue. This is a picture I like to show, this is the sediment-laden water coming out of the Connecticut River following Hurricane Irene. Back then, that was 2011, tremendous amount of sediment went out into the Sound, much more than years and years' worth of

dredging and placement. And the Sound recovers from that. And so we understand that it's a very resilient system, and we are managing it in a way such that we believe we are minimizing those impacts.

We believe that there is really good data out there that shows that the issues, unfortunate issues with the lobster fisheries are in no way connected to the placement of dredged material. And likewise, the nutrient issues associated that are going on in the Sound, again, there is lots of data that shows that that is not related to dredged material placement.

So we don't believe it's an issue as long as it's managed effectively. But we also understand that we could probably do better things with that dredged material, make a beneficial use out of it, and we are constantly, we have that on our mind. We have an organization called the New England Regional Dredge Team made up of, chaired by EPA and the Corps, but it has all the various federal agencies and state agencies who are involved in it, and one of our standard agenda items, we meet four times a year, is beneficial use. What can we do.

EPA has developed a new tool for tracking what

we are doing. There has been a recent pilot of using fine grained dredge material to augment a marsh in Rhode Island because as we see rising sea levels we know that a lot of marsh areas are going to be starved for some sediment, and that's one of the things we can beneficially use that for.

We are continually looking at effective ways to place it both on the beach and in the near shore environment for coarser-grained material, and we'll continue to do that as time goes on.

Then I finally close, if you look this up, contact information is on there. We are clearly interested in your comments. That's why we are here today. But if you've got questions, you look at some of the material for the monitoring that we have done and you have questions associated with that, please feel free to give me a call. Because again, we are trying to get the information out there, we are trying to make this connection that we are -- it's definitely on our minds when we place the material it's not out of sight out of mind. It's very much on the mind of the Corps at that point in time.

So with that, I think I'll turn it over to Mel to talk about the actual proposed draft rule there.

MR. COTE: Thanks, Steven. I'm mindful of

the clock here and the need to get on with the most important part of the session, which is your comments. I'm going to pretty much try to fly right through this presentation on the rule.

So, again, Mel Cote, EPA's New England Regional Office.

You have now heard a lot about the history of disposal sites in Long Island Sound, about the Supplemental Environmental Impact Statement and dredge material management and monitoring, and I'm just now back focusing on the proposed rule while we are here tonight.

As you have now seen from the previous presentation, EPA and the Corps share responsibility for dredged material management, and I should add that the states play a very significant role as well as the coastal zone and environmental agencies.

Back in 2005, as I mentioned in my first presentation, EPA published the final rule that designated the central and western sites and to address concerns raised by New York and others. These site designations are subject to restrictions on their use. These restrictions were intended to reduce or eliminate open-water disposal in Long

Island Sound, and they include, for example, the Army Corps completing a Dredged Material Management Plan for all of Long Island Sound, which they did earlier this year; establishing an interagency Long Island Sound Regional Dredging Team to review alternative analyses for federal and large private dredging projects; and EPA rulemaking.

Upon the completion of the DMMP, EPA, was to propose and finalize amendments to the 2005 rule, describing standards and procedures that must be complied with in the future, with the goal of continuing the goal of reducing or eliminating local disposal. And these standards and procedures are to be at a minimum consistent with the recommendations in the DMMP.

These recommendations include: Establishing the standards and procedures for reviewing placement or disposal alternatives for all federal and large private projects, to support the goal; federal based plans and alternatives for each federal navigation project and harbors; further studies and development of beneficial use and other non-open water alternatives; and continuing disposal site management and monitoring and further research

on the effects of placement and disposal.

On February 10th, EPA took its first step in meeting its obligation by publishing proposed amendments to the 2005 rule in the Federal Register for a 45-day public comment period. That ended on March 25th. The proposed rule does include standards and procedures to be followed by all federal and large private projects. They are intended to help reduce or eliminate open-water disposal.

We received 119 individual sets of comments from the public and government agencies, the majority of which support the proposed action.

We are in the final stages of finalizing that rule and we expect it to be published the week after next, the week of June 6th. And the site-use restrictions will be somewhat enhanced from what we saw in the proposal.

The reason this is important is because EPA tends to include the same restrictions on the use of the proposed eastern site as it has proposed for the central and western sites, namely that there will be standards and procedures that will encourage the identification, development and use of practical alternatives to open-water disposal, and will require

all large dredging projects proponents to thoroughly evaluate those alternatives.

So on April 27th, EPA published a proposed rule in the Federal Register for a 60-day public comment period which ends June 27th. Again, that's for our eastern, proposed eastern site. Again, it's a proposal.

So here are the standards that are included in the proposed rule. They echo the standards recommended in the Corps DMMP, such as that: Unsuitable material shall not be disposed. It's not allowed now. This just emphasizes that point.

Sandy material should be used beneficially wherever practicable. As we all know, these materials have a very high value for uses such as beach nourishment and offshore bar and berm nourishment.

And as long as there is a practical alternative, project proponents will need to identify and secure funding for any needed non-federal cost sharing.

And finally, for fine-grained materials, and this is the most difficult nut to crack. Proponents must thoroughly evaluate practicable alternatives and use them if they are available. This material is not typically considered appropriate for beach or near

shore re-nourishment. But in the future, and Steve alluded to that, and others have, uses such as marsh creation or restoration may become practicable.

Only if no other alternative is determined to be practicable may suitable fine-grained material be placed at the designated sites.

The proposed rule expects that all levels of government will continue to exercise their existing authorities to reduce the flow of sediments and contaminants into waterways. And by the way, since 1970-'72 when a lot of these major environmental statutes passed, the sediments are much cleaner because the water, waste water and industrial waste going into these waterbodies is much cleaner.

This proposal does not create any new obligations but instead focuses attention on existing programs such as those that address storm water through our federal and state permitting programs and nonpoint sources of pollution in coastal communities and along the tributaries draining into the Long Island Sound.

And finally, the proposed standards retained in the 2005 restriction requires that practicable alternatives must be used if they are available.

The procedures -- and talked about standards -- the procedures we are proposing are built around making the interagency Long Island Sound Regional Dredging Team, or RDT, a permanent body, enhancing its role. The RDT's goal is, again, to support efforts to reduce or eliminate open-water disposal wherever practicable.

The RDT's primary purpose will be to ensure that all large dredging projects thoroughly, thoroughly evaluate and analyze alternatives of open-water disposal and make recommendations to the Corps on each project.

And of equal importance, the RDT will provide a forum for continued exploration of beneficial use alternatives; for promoting the use of these alternatives and suggesting approaches for cost-sharing opportunities.

This proactive role for the RDT is a new one. So it's not just reactive proposals. But it is now working and developing and implementing programs.

The RDT also will be expected to assist EPA and the Corps with longterm activities intended to track the disposal of dredged material and monitor dredging impacts in the Sound. These include supporting the DAMOS program that Steve

described in his presentation.

The geographic scope of the Regional Dredging Team will include all of Long Island Sound so that it looks at opportunities for alternatives broadly.

The RDT will consist of representatives from federal and state government agencies or authorities with expertise in dredging and dredged material management, and expect that would include representatives from the two EPA's regions, the two Army Corps districts, National Marine Fisheries Service, possibly, and we expect the States of Connecticut and New York, and potentially Rhode Island will also participate through their environmental agencies, coastal zone management programs.

I'm just about done here. We are proposing that the specific details of the structure and process of the Regional Dredging Team will be left for that group to determine and be allowed to evolve as best accomplishes the RDT's purpose.

Finally, we encourage the RDT to establish and maintaining working relationships with other Long Island Sound based organizations such as the Long Island Sound Study's Science and Technical Advisory Committee.

And then one last point I would like to make before closing, is that we've made excellent progress toward meeting the goal of reducing or eliminating open-water disposal since the 2005 rule. The chart on the screen shows -- and one of the other conditions in both the 2005 rule is that we track where the stuff is going, and so we did that. And we put out an annual report each year. We don't have the last couple winters' dredging seasons calculated, but at least for the nine years that we have, what we have seen is from '82 to 2004, this is the average amount that went to these four sites. And then from 2005-06 winter to 2013-14 winter is here.

So overall, about a 35% reduction in the annual amount of disposal. I'm not saying that's entirely through our efforts. A lot of that is the federal budget, frankly, but we feel that with this new rule in place and the amended rules for central and western and the new rule for eastern, we'll see continuously further reduction with further attention on looking for those alternates.

So I'll conclude my presentation by reminding you of the opportunity to provide comments, I don't know if I said that enough times already, but the

comment period ends on June 27th, and we plan to publish the final rule for the eastern site by the end of this summer. And I'll stop there.

MS. BROCHI: Okay, if you have not filled out a card that you wish to provide verbal comment, please do so. I would like to recognize Legislator Krupski. Normally we would have him speak first, but we do have one person who does need to leave, so, if it's okay. Doris McGreevy. I'll call up your name, please come to the microphone, identify yourself and your affiliation so the transcriptionist can record the information, please.

MS. MCGREEVY: Hi, I'm Doris McGreevy, I'm a resident of Mattituck. And I was at the last meeting, in 2014, at the Culinary Institute, and we had gone through a similar presentation and I voiced my opposition to the whole plan.

I don't think this is a very popular project and I would like to reiterate just some of the things and then move on to some new things.

At that time, I said that Long Island has a high rate of cancers, and we don't know why, and a lot of people are questioning our environment and being the EPA, Environmental Protection Agency, we would hope that you would consider all the other

aspects besides the technical. There is the social aspects, it's the cultural aspects, it's the fears of the people in general. Because when people get sick, it's just so debilitating. And we on Long Island feel that any disturbance to our environment, whether you can claim that it's okay, is not okay. That's my personal opinion and may be shared by many others.

The conditions need to be met and was mentioned there, all right, who is watching this dredged material placement? In other words who is watching the Army Corps? Because I know from personal experience with the Army Corps at Mattituck Inlet, they were supposed to dredge Mattituck Inlet and put the materials on the beach for beach nourishment, and they were supposed to take 100,000 cubic yards, and that was the recommendation, that was the whole process. However, they only did 70,000, and they were done. Okay? And if it wasn't for an outside monitor realizing this, that they were shorting the community 30,000 cubic yards, they would have walked away with it and said it's completed. So we are not very trusting of the Army Corps because of that.

The other thing was they had to go back into

Mattituck Inlet and dredge deeper in order to meet the 100,000 cubic yards that they were supposed to dredge. So when you say that the Army Corps will monitor this and take care of that, you know, that leaves a question mark to a lot of people. Who is monitoring the Army Corps? Do you expect us to monitor them? I mean, no. So who is? The Army Corps is going to monitor the Army Corps? That, you know, you would need some stringent, more stringent, observing people.

The other thing was we are talking about the commercial, the commercial endeavors on Connecticut River. Okay, there are quite a lot of commercial businesses along that Connecticut River, and I did a little research and I found out the Connecticut River is 410 miles long, you know, it goes from, actually from Canada down, the Connecticut River. So, and who is watching what they are dumping into the Connecticut River?

We on Long Island know that we don't have anything like the Connecticut River, with all the commercial dumping; legal, maybe; maybe illegal. We don't know. And I know that they also have a problem with the fishing and the fisheries and preserving the water life there. So that is a problem.

Why are we in Long Island and living along the Sound and in Long Island, why do we have to take dredge material from the Connecticut Rivers and put them in Long Island Sound.

Now that poses a question. If it is clean, I don't know how the gentleman put it, but, you know, if there is no deleterious stuff in it, then why don't you put it on the beaches? Why do you have to even think about that? And he didn't, say if it was toxic, he never said what he's going to do with it. I mean, that's skipped over. If you have, if you are monitoring for toxicity, why aren't you telling the public that we found so much, and what you did with it. I mean -- and then at the meeting a few years ago, they said, oh, we'll take core samples. Core samples is, all right, they'll take a core sample in one section, and if the core sample doesn't come to your liking then we'll just turn the other way and we'll take a core sample somewhere else until we get what meets our criteria. That, you know, that can happen. Not that it may. But, you know, there are possibilities there, which makes the trust component even more important.

And then they said that some of the materials in the central area will be mobilized, the Cornfield, that

area, the, you know, the stuff is mobilized. And we know, on Long Island, that a lot from Connecticut winds up on Long Island beaches. Now, you can say what you want, it will never come, believe me, I've done a lot of beach cleanups over the years and we found a lot of stuff from Connecticut. One of the things was a cleaning component that was in one commercial endeavor, and I sent it, I put it in an envelope, it was a little plastic, we found them all over the beach, we didn't know what they were. We send them to the American Littoral Society and they found out it came from one of the commercial areas in Connecticut, they forgot to close, it was supposed to clean things. But it didn't. Okay. They didn't close it off and it wound up in the Sound and it wound up on our beaches. We see balloons, we see logs coming down from the Connecticut River that come on our beaches. So just to say, that, oh, this doesn't happen, is questionable.

I'll finish up by saying that we have done this now, this is the second time I have been here, and I'm sure there have been hundreds of people, and you are coming up with an idea of what to do with it. What to do with it, okay, but nobody -- if you spend half the time on what to do with this other than

dumping in the Sound, you would have had your answer to this whole problem. I don't think the ecosystem appreciates it, I don't think the people appreciate it. This is the 21st century, we have come a long way, we just cannot accept this type of behavior. And project. Period. Thank you.

MS. BROCHI: Thank you.

LEGISLATOR KRUPSKI: Thanks, for the opportunity.

MS. BROCHI: Sure. And before you start, we are going to try to limit the speakers to five minutes, if we can.

LEGISLATOR KRUPSKI: Thanks, Doris.

MS. BROCHI: Sorry.

LEGISLATOR KRUPSKI: Legislator Krupski, Distinct 1, Suffolk County.

This is, I have been coming to these hearings that the Army Corps and EPA have been holding since 2012. And it's the same oversimplified sad tale of trying to justify dumping Connecticut's waste product in Long Island Sound. You know, you hire a consultant, and I can't imagine what the consultant is being paid. We have a lot of staff here from EPA, from the Army Corps, who, I don't know if they are here today, and just simply to justify something that

New York is not allowed to do but somehow Connecticut feels they should be.

A lot of the information has been contradictory. In the lab it showed vertical dispersal of the dredged material, and then the aerial view of the sediment coming into Long Island Sound after Hurricane Irene showed a great deal of dispersal, not in a lab situation. So it's obvious that this is, this presentation is not, I don't think was well done at all.

All the money that has been spent over the years to clean up the Sound, and not just, you know, so a lot of people who are in business have to spend money, a lot of municipalities have to spend money, and all that money should be improving water quality. And when you go and you try to, you dump your garbage in the Sound, you are obviously going in the wrong direction.

The statement that fish can get out of the way is actually not true because the fish can't get out of the water. So that should not even be part of the presentation.

The idea of creating another bureaucratic work group, that LIS RDT, you want create another permanent government entity that is going to work full-time now, to justify dumping materials in the

Sound, that should not be dumped in the Sound.

So I think that should be discouraged. The last thing we need is another agency of the United States government that might or might not be productive.

And I have written comments, so I will keep it brief. I'll read just the end of my written comments here and then I'll submit the rest of them.

The latest proposed rule comes after a long history of missteps and poor decisions made by the EPA and Army Corps of Engineers. During the development of the Dredged Materials Management Plan for Long Island Sound, these federal agencies did not adequately consider alternatives to open-water disposal, despite the agreement between the former governors of New York and Connecticut that open-water disposal should cease.

In addition, calls from New York's elected officials, environmental advocacy groups and Long Island residents to end open-water disposal have been ignored. EPA and the United States Army Corps of Engineers have failed the citizens of both New York and Connecticut. The EPA's proposed rule, which will endanger the health of this important resource by allowing the State of Connecticut to

continue to dump potentially toxic dredge spoil into the Long Island Sound for short-term economic expediency, is unjustifiable and negligent. I encourage you to abandon this site designation.

MS. BROCHI: Thank you.

Glenn Goldsmith, Southold Town Trustees.

MR. GOLDSMITH: As you said, my name is Glenn Goldsmith, I represent the Southold Town Trustees. I just want to address some of the hypocrisies I've seen with this presentation, one of which is the Long Island Sound is designated as an Estuary of National Significance. And what that means is it's programmed to protect and restore the water quality and ecological integrity of estuaries of national significance. How does dumping toxins protect and restore the water quality and ecological integrity of the estuary? It seems completely contrary to me as well as the rest of the Trustees.

One of my colleagues on the Board, Nick Krupski, has worked with habitat restoration throughout the Long Island Sound, and through the Army Corps, and now to dump dredged materials and toxins just counteracts all the hard work he and others have put in to protect this vital waterway.

We as Town Trustees are entrusted with

protecting the water quality, protecting the waterways. We do everything that we can to reduce the pollutants and protect the waters, and for all our hard work to go down the drain so the Army Corps can save a buck by dumping dredged material out in the Sound, it's a slap in the face of all those who want to protect the environment.

The presentation had a lot of nice charts and talked about math and all that kind of stuff, but what it lacked was complete common sense. The idea that there will not be any negative environmental impact from dumping dredged material in the Sound is preposterous.

98% of all the eel grass left in New York State waters is located in and around Fishers Island. And this new proposed dumping area is right adjacent to Fishers Island. And on a personal note, from having a family business and marina, and doing dredging there, the Army Corps, the DEC, all of them, they make us deposit our dredge materials on land, so it has to be dewatered, and then we can dispose of it. So it's a case of government saying do as I say, not as I do. Thank you.

MS. BROCHI: Thank you, Joann Lechner. I apologize if that is mispronounced.

MS. LECHNER: That's okay.

My name is Joann Lechner, I live, I have a home in Mattituck. I heard about this meeting and I thought it would be more open. I'm very disappointed.

Environment Protection Agency is supposed to protect. It's supposed to inform. There was nothing in this that informed us about the negatives of this whole thing.

There was an article in the paper that said a decade ago when dumping permits were set to expire, Pataki blocked a similar plan, and the EPA agreed that they should come up with another plan. That was in 2005, I believe. We are still dumping. It has not changed.

Critics say the federal plan ignores the intent of the 2005 agreement between New York and Connecticut to begin phasing out the need to use Long Island Sound as a waste dump, and to begin using other methods of disposal. So that's eleven years.

On this chart they showed something from 1982, I think, until now. And they stopped dumping 37% a year. I mean that's disgusting. That's outrageous.

Our waterways are already polluted. You are

taking sediment and dirt from areas that have ships coming in, probably sewage going in the water, sewers from homes going in. They are taking that and they are dumping it into an area that we have spent as taxpayers billions of dollars to clean up.

I have heard today the words "low pollution," "much cleaner," "potential chemicals." Any pollution is unacceptable.

You are saying well the fish underneath are going to die and they are going to swim out of the way and the ones on the bottom, so what. You have an ecosystem at this point that is teetering. We have algae blooms every year, low oxygen in the water. So what are we doing? Any time you start and you affect any kind of ecosystem, because the bigger fish eat the little fish, the little fish are not there to eat, the big fish starve. We've lost so much here in water quality. We are trying to get it back. And this is not the answer. It really is not the answer. And I think -- I don't understand what the EPA is doing. They should be out there protecting waterways. That should be protected. Not dumping pollutions in. Nobody knows what pollutions, but they are low pollutions, much cleaner, and potential chemicals. But I'm definitely against it. Thank you.

MS. BROCHI: Thank you.

Susan Palmer?

MS. PALMER: Hi, my name is Susan Palmer-Austin, actually. I live in Laurel. The words that caught my attention tonight were when somebody said "clean enough." Clean enough. What does that mean? When I bought my house in Laurel, we had Temik in our well water. And Union Carbide, who created the Temik, they were now in charge of putting the system on my well water, and they told me that the system they put on was going to take the Temik out of my drinking water and it was going to be clean enough. So I've heard this term before, and I was not able to get ahead of the Temik situation.

And the brown tide on the Peconic Bay is another issue. So let's try and get ahead of this issue. This doesn't have to happen. And as a community, I think we have to be very vocal. Thank you.

MS. BROCHI: Thank you. Doug Hardy?

MR. HARDY: I'm Doug Hardy, from Southold. I'm an old antique, retired oceanographer. I worked at what was then known as the Marine Science Center in Stony Brook, and

we did hydrographic surveys of Long Island Sound.

There are three points I guess I would like to make. One is, I think it was 1975, the Corps of Engineers was being sued and I was asked to testify at a trial in Connecticut, I suppose. And at that session, they were doing a diving, scuba diving surveys of the dumping site off New London, and they could only dive during slack water. Because by the time the year of the flood started it was too strong to safely dive.

I noticed today that we were assured that the current was very mild. But there was no figures of how many meters per second the water flow was over this dump site, or at least the maximum. It varies during the month.

This brings to the point that there are four currents, ebb and flood a day, every six hours. When you dump a pile of muck on the ground, you change the silhouette of the bottom and you interact the laminar flow which after time the current shears away any obstructions to the current. And so this means then that these obstructions, particularly angles that stick out in the lump of mud, are sheared off. And they have to go somewhere, either east or west.

We happened, I think it was '75, '76, we were winding down a study on the south shore, off the south shore of Long Island, tracking an oil spill, and we had a number of wood head bottom drifters, and so we dumped a bouquet of these drifters over the New London dump site. Unfortunately we were terminating that study, but within two months, two of these bouquets wound up on or were returned by beachcombers on the shore of Mattituck. So that means that while this is not a definitive and very -- it's more subjective because do these bottom drifters duplicate, they -- but it does duplicate exactly where sediment. But it does tell us, indicate that the water mass can land or move a bottom drifter. These bottom drifters looked like little tiny umbrellas, with a yellow top, a plastic stem, and at the bottom. So it looks like a mushroom or an umbrella. And at the bottom is a tiny weight. So they are about the density of seawater. So it just, it tracks. But it doesn't track so, with an ebb and flood it would move back and forth. So in that several months, over two months I guess it was, they journeyed a great distance with the ebb and the flood. But eventually they landed on Mattituck.

A second point that you made and didn't quite

complete, is you mentioned then infauna and polychaetes and amphipods. And you didn't mention some of the smaller bivalves that are there. Their role in bioturbation, bioturbation is a process where this infauna then is working through the soil, loosening it up. And then with, you have then strong tides or -- did I mention at the Connecticut hearing, I don't have notes -- oh, if I did mention it, divers could only dive in slack water. So there are strong currents going through there, and any fisherman who works in the eastern, on the eastern section of Long Island Sound knows the strengths of the currents from the Plum Gut and Pigeon Shoals and so forth. These bioturbators will quickly settle in on the new dumped material. Species, amphipods, like ampelisca (sic), capitella, polychaete capitella, they are small bivalves and so forth. Particularly ampelisca and capitella capitata polychaete. They are short lifespan, rapid reproducers, and they work the soil. And this stirs it up. So with strong currents, six times a day, going back and forth.

The other thing that would promote the shear and loss of sediment would be is, in dunes the prevailing wind blows in one direction. And so you get then the sands, fine grain sands, and produce a

shape or path of the least resistance to the wind and create a laminar flow rather than a turbulent flow. So in a dune you have facing the wind a long, sloping surface, and then a steep drop off. In the case of underwater, where you have then strong currents, six times a day, but each time it's in a different direction, alternates in a different direction, that means then after the somewhat laminar flow of one tide, suddenly the water changes and it's faced with a resistance on the other side, the steep part of the dune, and it reshapes it. And so you get a constant reshaping back and forth with the changing of the tides.

There was one -- oh, the other point, is generally, the sediment that you are getting from the harbors are anaerobic, in a reduced chemical state. The wonderful thing about Fishers Island Sound, unlike Cornfield Shoals or the dumping grounds in the central or western basins, is that this eastern dumping ground is oxygenated all year-round. Whereas in the central basin and western basin you get then depletion and it becomes anoxic. So that the sediment, this plume of sediment that is dumped from the hopper dredge, I guess is what they are using, you get a plume of debris that will spread for

miles depending on the tide at the time. Then it will drop down. But as it drops down it has a chance of being oxygenated. And this then changes the chemical state of the chemicals in the sediment. They may become more stable and less prone to dissolution or to being dissolved, but it may release other compounds that were in a state of stability and they become soluble in the water. This was not discussed in this discussion.

So what other alternatives could this sediment be dumped. You've got the sea level rising. You are going to need sand and so forth to protect the shoreline. That is one potential use for it. It could be warehoused for later use as the sea level continues to rise.

A second use might be, these wind turbines -- is areas offshore that are not used by the fishing community and that have low currents. And on one of these could be is the proposed wind farm.

You could, because if there are wind farms it certainly will limit fishing in those immediate areas. So there are other alternatives that could be done. But the fact is, that you have presented today, one is the current velocity, how far this sediment will be spread, you did not -- you mentioned the presence of

infauna but you didn't -- you disregarded bioturbation.

And basically what it's coming down to is money, is you don't want to pay for pollution. And this is the cheapest alternative that you can think of. Thank you.

MS. BROCHI: Thank you. Is there anybody else who has not signed up who would like to speak? Please approach the mic.

MR. WERTH: My name is Christopher Werth, I'm a citizen of Riverhead. And in looking at the proposed rule, an important part that I thought was important, was with reference to 40 CFR 228.5(e) that states that the EPA will, whenever feasible, designate ocean dumping sites beyond the edge of the continental shelf and other such sites that have been historically used.

And the reason why they are not dumping beyond the continental shelf outside the Sound is I believe given very short shrift. The explanation is that the evaluation, determine that the long distances and travel times between the dredging locations in eastern Long Island Sound and the continental shelf pose significant environmental operational safety and financial concerns rendering

such options unreasonable.

First, is the language. The regulation doesn't state that it can't be unreasonable. It says that it can't be feasible. So it is feasible to bring these materials out into the ocean. We can do it. Like the doctor just said, it's just a matter of money. Do we want to spend the money to do it. And it's just cheaper to put it in our Sound, is what we are hearing.

Nowhere does -- and I admit that I haven't looked at the study because it's just come to my attention recently -- but is there a cost benefit analysis conducted as to how, what is the cost to bring these materials out beyond the shelf?

This proposed rule talks about increased risk of encountering endangered species during transit. What does that mean? We are going to hit a whale with a barge? Doesn't that happen all the time?

Increased fuel consumption and air emissions. It's 80 more nautical miles. So the benefit to us is to just dump it in our water as opposed to spending some extra gas and more emissions in the air? Well, if that's the case then where is the study for that? Where is the cost benefit analysis for that?

And the greater potential for accidents in transit

that could lead to dredge materials being dumped in unintended areas. It's interesting that the intended areas for dumping is the Long Island Sound, when the continental shelf is 80 nautical miles away. It's not that far. We are not in Lake Michigan. It's feasible. So where is the explanation from the EPA as to why it's not feasible?

I would like to just echo the doctor's comments that this is about money and the dumping this beyond the shelf or other uses for these materials is possible if we just put our minds to it. Thank you.

MS. BROCHI: Thank you. Further comments? This gentleman, then you.

MR. SWITZER: Thank you. I'm Hugh Switzer, Peconic. I would just like to speak as a citizen paying all of your salaries. What I would have expected from a bunch of professionals who work for us, would be a very balanced presentation about the alternatives, the pros and cons, as one of the speakers mentioned, cost benefit analysis. Instead I think what we were presented with today was a justification for what you have decided to do. And I'm very disappointed. I don't think it's complete. I think it was very biased in trying to make a point and prove your point. You didn't

provide us with any real information. It was just data to support your conclusion. And for that I'm very disappointed.

And again, I'm speaking as a citizen who helps to pay your salaries and to support your missions. Thank you.

MR. KING: Jim King. Thanks, for the opportunity to speak. My name is Jim King, I live in Mattituck. I'm a lobster fisherman, I been chasing lobsters in this Sound for about 53 years now. I have had experience fishing around these dump sites. In 1964, a dump site off New Haven was prime lobster ground, and I fished there. Then when they dredged New Haven Harbor and came out, the pots were just covered with debris, you would not believe what was in some of this stuff. I had to leave the area.

This is just simply the wrong thing to do. And the bottom line here is it's the cheapest, easiest way to get rid of dredge spoils, and we can sit here and scream and shout all we want and they are going to get it done. Thank you.

MS. BROCHI: Thank you. Any other comments?

(No response).

Okay. Again, if you submit written comments, I didn't go through the process, but we'll respond to comments in our response comments document that will come out with the final. Again, you can submit the written comments to ELIS@epa.gov. Send them directly to EPA. The comment period closes June 27th. And we thank you, very much, for coming out tonight and sharing your thoughts with us.

(The hearing is concluded at 7:17 PM).

CERTIFICATION

COUNTY OF SUFFOLK)
SS:
STATE OF NEW YORK)

I, WAYNE GALANTE, Certified Court Reporter, in the State of New York, do Hereby certify:

THAT, the foregoing is a true and Accurate transcript of my stenographic notes taken in the matter of the PUBLIC MEETING, on this 25th day of May, 2016, at 5:30 P.M.

IN WITNESS WHEREOF, I have hereunto set my hand on this 7th day of June, 2016.

Wayne Galante

WAYNE GALANTE, CSR

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Attachment 6

TRANSCRIPT OF PUBLIC HEARING, GROTON, CONNECTICUT MAY 26, 2016 (1:00PM)

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Eastern Long Island Sound

Supplemental Environmental Impact Statement

HELD AT: University of Connecticut
Avery Point
1084 Shennecossett Road
Groton, Connecticut
Academic Building

DATE: May 26, 2016

TIME: 1:00 p.m. to 3:00 p.m.

REPORTER: Margaret R. Golden, RPR

APPEARANCES:

Bernward Hay
Project Manager
Louis Berger
Mel Cote
Chief, Surface Water Branch, EPA Region 1

Steve Wolf
Environmental Resources Section
US Army Corps of Engineers
New England District
Jean Brochi
Project Manager
Ocean and Coastal Protection Unit
EPA Region 1

MR. HAY: It's a few minutes past 1:00, so let's get started. So welcome to the public meeting. Thanks for joining us, and on this beautiful day. Before we start, a couple of housekeeping measures. The bathroom is upstairs down the hallway on the right side. And turn off your cell phone, please. That would be appreciated.

My name is Bernward Hay, and I'm an environmental scientist with Louis Berger, and this hearing is held to solicit comments on the draft rulemaking decision to designate the Eastern Long Island Sound Dredged Material Disposal site, the ELDS, and the draft of the Supplemental Environmental Impact Statement, or SEIS. The action is designed to serve the Eastern Long Island Sound in Connecticut and New York. The lead federal agency for the project is U.S. EPA. We hope to solicit comments on the draft SEIS.

This document will be available on EPA's public website. It's a very sizable document that supports the findings in this document. I hope you had a chance to take a look.

In addition to this public meeting, there were two public meetings yesterday held in New

York, and there will be an additional public meeting this evening starting at 5:00. The comment period for the SEIS ends on June 27th, 2016. And during the presentation we will give you contact information where you can submit your comments.

The EPA and another agency, USACE, will present information about the project in the next hour, until about 2:00 p.m. After the presentations have been completed, the floor will be open for comments until about 3:00. If you wish to speak, we ask you to please sign in at the registration desk.

When registering to speak, please provide your contact information, which you may have done already, and your affiliation representing your organization. Speakers will be heard in the order that registration received them, with elected officials and government representatives speaking first.

We ask you to keep your comments to no more than five minutes to provide everybody an opportunity to speak, but there won't be a problem today. If you have extended comments, you may want to summarize them in a verbal statement and make your comments in writing to the registration desk,

which will then become part of the public record. Please note that the focus of this meeting is to receive verbal comments on the draft SEIS, the presentations this afternoon, and the regulatory process.

This public hearing is recorded by a stenographer and an audio recording device. The transcript of the hearing will be entered into the public record and posted on the EPA Region 1 website.

We will now move to the presentations for this hearing. Please note that also these presentations will be available on the EPA website and will be made available at some point in the near future. There are several agency representatives that will be presenting today.

I hope you have had a chance to look at the agenda above. Again, representatives will be Mel Cote, who is the Chief of the Surface Water Branch at EPA's Region 1. Jean Brochi is a Project Manager with the Ocean and Coastal Protection Unit, EPA Region 1; and Steve Wolf, who is from the Environmental Resources Section, U.S. Army Corps of Engineers, from the New England District.

And now, Mr. Cote will be opening the

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meeting at this point.

MR. COTE: Thank you very much. And good afternoon, everyone. Thank you for coming to this public hearing. We really appreciate you coming to learn more about the process and provide comments on our proposed rule to designate an Eastern Long Island Sound Dredged Material Disposal Site and the draft Supplemental Environmental Impact Statement.

As Bernward mentioned, my name is Mel Cote, Chief of the Surface Water Branch, which basically covers -- it includes our ocean and coastal programs, which I previously did to this job and supervised for 13 years, and our Watersheds and Nonpoint Source programs.

Prior to managing the Ocean and Coastal Protection unit, I also spent nine years as the Region 1 program manager for the Long Island Sound's National Estuary Program and Connecticut's Nonpoint Source Program as well. So I spent a lot of time on and around Long Island Sound and its watershed, and I have a great affinity for the region.

I also want to acknowledge and thank a couple of other agency staff here today. Mark

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Habel from the Army Corps of Engineers in the New England District; Peter Francis and George Wisker from the Connecticut DEP; Jennifer Street with the New York Department of State.

Before we take your comments, we will provide a brief presentation on the SEIS and the process we will follow. But I'm first going to describe EPA's role in respect -- with respect to the designation of the dredged material disposal sites, and then I'm going to take a step back and provide a little bit of background on the designation of the Central and Western sites, which was completed in July 2005. And then -- oh, Bernward has already gone through the progression of speakers.

So following Steve's presentation, I'll be back up here to talk about the rule, specifically that -- the proposed rule that, when it's finalized, will designate the site.

Probably most of you understand -- well that the EPA and U.S. Army Corp of Engineers jointly regulate dredging and dredged material disposal under federal authorities provided by Section 404 of the Clean Water Act, Sections 102 and 103 of the Marine Protection, Research, and

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Sanctuaries Act, a part of which is also known as the Ocean Dumping Act.

In administering these programs, we work very closely with other federal resource management agencies, like the National Fishery Service, and the US Wildlife Service, as well as our state environmental coastal management agencies, to make sure that we have proper coordination, consistencies of statutory regulatory requirements, and other environmental standards.

Since 1980, EPA and the Corps have been applying sediment testing requirements for the Ocean Dumping Act to all federal dredging projects and all nonfederal projects, generating more than 25,000 cubic yards. Dredged materials that meet these criteria and is determined to be suitable and clean enough for ocean disposal may be disposed in one of four sites in Long Island Sound, known as the Western Long Island Sound, Central Long Island Sound, Cornfield Shoals, and New London disposal sites.

The Western and Central Long Island sites were designated by EPA in 2005. As many of you probably know, the EPA proposed amendments to

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that site designation rule on February 10th that remove some of the original conditions, like the Corps completing the Long Island Sound Dredged Material Management Plan and places new conditions that are intended to reduce or eliminate open-water disposal of dredged material in Long Island Sound. The Cornfield Shoals and New London sites were evaluated and selected as the disposal sites pursuant to programmatic and site-specific environmental impact statements prepared by the Corps most recently in 1991.

In 1992 Congress added a new provision to the Ocean Dumping Act and for the first time established a time limit on the availability of Corps selected sites for the disposal activity. Use of a selected site, however, can be extended if the site is designated by the EPA for long-term use. Use of a site also can be extended, as we found out in 2011, if Congress proposes an extension through the legislative process.

Nevertheless, the statutory construct is that the Corps can select disposal sites for short-term use, whereas Congress can authorize EPA to designate sites for long-term use but they are subject to ongoing monitoring requirements.

So summarizing the agency's responsibility to dredged material disposal, they include designated disposal sites for long-term use, promulgating regulations and criteria for disposal site selection and permitting discharges, reviewing Corps dredging projects and permits, developing site monitoring and management plans with designated sites, and monitoring disposal sites jointly with the Army Corps.

Now I'm going to provide some background on how the proposed designation of Eastern Long Island Sound disposal sites relates to Central and Western sites. The process began in 1998, 18 years ago, when the EPA and the Corps agreed to conduct a formal site designation process for all the Long Island Sound disposal sites following the criteria established by the Ocean Dumping Act. This was actually part of the settlement on the Seawolf case.

We also agree that, consistent with past practice in designating dredged material disposal sites, we will follow EPA statement of policy for voluntary preparation of the National Environmental Policy Act, or NEPA, documents, and we will prepare the EIS to evaluate different

dredged material placement options. Jean Brochi is also the project manager for that, along with Mark Habel.

In June 1999, EPA published the Notice of Intent in the Federal Register announcing our plans to prepare, in cooperation with the Corps and other federal and state agencies, an EIS, to evaluate and potentially designate dredged material disposal sites for the entire Long Island Sound region.

We began the Sound-wide field data collection effort in 1999 but were slowed by both the technical complexities and financial constraints associated with the large scale multiple-site project. In March 2002, with the Central Long Island Sound disposal site scheduled to close in February 2004, EPA and the Corps announced their intent to develop the EIS in two stages: Western and Central Long Island Sound first, followed by the Eastern Sound once the site or sites had been designated to serve the Western or Central regions.

As it turned out, and as most of you know, the designation of Central and Western Disposal Sites was contested by the state of New

York, which led to the inclusion of conditions that need to be met in order for the sites to remain open for the long-term. The most significant of those conditions, and as I mentioned earlier, was the completion of the Long Island Sound DMMP by the Corps, so all the human and financial resources that would have gone to move forward on the site designation for the Eastern Long island Sound were focused on completing the DMMP.

Some of the initial studies, however, were conducted through the DMMP, including the dredging needs survey that was concluded in 2009 and updated last year, and the analysis of placement alternatives that was completed in 2012. Those form the basis for EPA's determination that there was, in fact, a need for at least one disposal site to serve the Eastern Long Island Sound region. Upon making that determination, we began the process for preparing a supplemental EIS and supplemental information that was generated.

So at this time I'm going to turn it over to Jean Brochi, our EPA project manager for the SEIS, and she'll be followed by Mr. Bernward Hay.

MS. BROCHI: Thank you. I first would like to acknowledge that Mr. Paul Formica from the Connecticut Senate District 20 is here today. Thank you very much.

After the presentations, we'll open it up for comments, and he'll be the first to speak. So thank you for coming. Again, the EPA is seeking comments on the environmental -- Supplemental Environmental Impact Statement, as well as the rulemaking for the Eastern Long Island Sound Dredged Material Disposal Site.

This presentation -- next will be Bernward Hay from Louis Berger. He will join me. He will talk about the studies. I'm going to go over the process for the SEIS, and then Mel will speak about the rulemaking.

So again, the Marine Protection, Research, and Sanctuaries Act, Section 102 is the authority that the EPA uses to designate sites. And the EPA designation of a dredged material disposal site is for long-term use.

The Corps has selected sites, as Mel had mentioned, which is a short-term use for five years, total of ten years. The EPA also reviews dredged material disposal permits.

So the process is that EPA, in 2012, issued a Notice of Intent. We then held public participation meetings. We've had six meetings before these meetings. We had two yesterday. And the public information meetings were just to talk about the project. These meetings are to actually get comments on the project.

The Environmental Impact Statement also looks at alternatives. So we're evaluating sites and we also are looking at a no-action alternatives. So what happens if no site is designated? That document and the study itself ends up with a conclusion and an EPA preferred alternative. And in this case, the site is the Eastern Long Island Dredged Material Disposal Site.

The document itself, and I apologize, but we are going to summarize very concisely a lot of information. The document itself is 3,300 pages. There are nine appendices and ten chapters all available on the EPA website. So if you have not had an opportunity to look at it, please do. And the comment period will end on June 27. But you will hear that quite a few times during the presentation.

Again, there are currently four sites available in Long Island Sound. Cornfield Shoals and New London are the two that were evaluated as part of this process. Central and Western were evaluated in 2005.

In addition to the public meetings, we have members from New York and Connecticut DOS, DEC, DEP and federal agencies that are part of a cooperating agency group. And we met several times and had participation in the studies and the process throughout the four years.

In addition, EPA also drafted the rulemaking on April 27th, 2006. That's also available on our website. And we revised our website throughout this time frame, and we have an e-mail notification system. So anytime there's a change to the website, we will notify you.

And when you registered this evening, you had an option to check off if you wanted to receive e-mail. And that's what that was about. We will notify you whenever we post anything on the website. Or if there's anything pertinent to the study, we will e-mail you.

So the website for extending your comments is at elis@epa.gov, or you can send it to

my attention. That's brochi.jean@epa.gov.

So the initial start of the project, we determined a zone of siting feasibility. And you can see right here from the black lines, this is the area that we considered Eastern. What you're looking at for the boxes are the actual disposal sites that currently exist.

So you have Western, Central, and New London and this is Cornfield Shoals. And this green area right here, where the red arrow is pointing to, the Eastern site. This is not to scale.

One of the major aspects of the Environmental Impact Statement evaluation is to go through five general and 11 specific criteria that can be found in the MPRSA 40 CFR, Part 228. And those criteria help us draft the study and make sure that we're considering different aspects and evaluations.

So some of those things, and Bernward will cover this when he goes into detail, but some of the things we look at is the physical conditions and sedimentary environment, the currents, the waves, the energy, sediment transport, we look at biological resources, are

there shellfish beds? Are there fishery habitats? We look at essential fish habitat, and we also look at marine mammals. And we look at conflicting uses, navigation, recreational use, either pipelines or anything that -- artifacts that might be on the bottom that would make that site not acceptable.

And so the site-screening process, we go through, and we use these aspects to evaluate each site. And we determine -- we narrow the scope down and determine which sites we want to select as a preferred alternative.

So as Mel mentioned, the Army Corps of Engineers Dredged Material Management Plan in 2009 had a dredging needs report. And the needs were estimated at 22.6 million cubic yards for Eastern Long Island Sound alone. And that's over a projected period of 30 years. That does not mean that all of the material will be dredged and will be disposed. It's a projected need. There are many other factors that go into whether disposal will actually occur.

The total for Long Island Sound was 53 million cubic yards. And we determined that, based on the open-water disposal and available

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alternatives, there's not enough capacity to meet the need for Eastern Long Island Sound.

So part of the environmental review, one of the other things that we took into consideration is the haul distance for transport, and there's a -- from New London it's 12 miles, which would be twice that to Central, and that's from the Connecticut River Dredging Center, which is one of the major and one of the largest dredging centers.

There's also an economic consideration. We did a cost analysis in the SEIS that if you took 100 million cubic yards and went from 20 miles to transferring it 100 miles, you triple the cost. And Bernward will talk about some of the specific studies. And more information on that, if you're interested, can be found in Chapter 5, which is the Environmental Consequences section.

In addition, for designated sites we have a monitoring effort that we jointly manage and monitor the sites with the Army Corps of Engineers. Those plans are drafted and updated, revised every ten years. And the Army Corps of Engineers and EPA meet annually to discuss the management and the monitoring of those sites. And

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in that, we look at chemical, biological, and physical changes at the sites.

So as part of this process to designate, EPA is going to restrict the use of the sites. So along with the designation, you get site restrictions on the use. We now have representatives from Connecticut, New York, and Rhode Island, as well as the federal agencies in a group called the Regional Dredging Team. And we'll be looking at and ensuring the use of alternatives to open-water disposal. The sites -- Mel will discuss this a little further when he comes up.

The sites are managed to ensure no adverse impacts to the environment, and the sites have been reduced. Right now, there are four sites in Long Island Sound. After the designation, the Cornfield Shoals and the New London site will close in December 23rd, 2016. And we'll have three sites. We'll have Central, Western and Eastern Long Island Sound Disposal Site.

With that, I'm going to introduce Bernward Hay, who is going to discuss the studies. Thank you.

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MR. HAY: Thank you. So I want to point out that the study was done by the University of Connecticut with Jim O'Donnell as the principal investigator, who is also in the audience here. And Louis Berger was a subcontractor to the University of Connecticut. The study has been funded by the Connecticut Department of Transportation.

So as Jean mentioned, there was a site selection process that looked at the big picture in the zone of site feasibility that then reduced it down to 11 sites that were screened in more detail with a net result that we ended up with three locations, three sites, alternative sites, that were then analyzed in more detail.

Those sites, just to give you an overview, are the New London site, which is over here; the Niantic Bay site, which is over here, which incidentally, is not located in Niantic Bay, because Niantic Bay is up here. This just happens to be the name that is reported by the Corps. It's a historic disposal site. And the Cornfield Shoals site, which is located in deeper water.

The map indicates water depth, or bathymetry, taken at high resolution -- by doing

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high resolution surveys by the U.S. Geological Survey and NOAA. So for example, the brown color represents shallow waters, close to shore; green is mid-depth; and blue is deep waters. Here, this is Fishers Island. This is Plum Island, and again, blue water here in The Race with tidal currents.

Notice that the existing New London site is a bit larger than the alternative site. And I'll come back to that in a minute. Same for the Niantic Bay site. The historic disposal site is this box here. We added on this area. The active Cornfield Shoals site is not extended. It's the same area.

There are a number of studies that were done for the screening, as well as the analysis of the three sites. Physical oceanography, I'll just go through them, and I'll explain them a little more. Physical oceanography, side scan sonar survey of the seabed, biological characterization, sediment chemistry, and sediment profile survey.

As you can see at the end who was responsible for the data analysis and the studies. The physical oceanography study, in essence, deals with the dynamics in the water, waves, currents,

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tidal forces. The ultimate goal, or at least one of the primary goals, is to understand the fate of disposed dredged material; what happens to the material during the disposal process, as well as long term, once it has been based at the bottom of the seabed.

And you want to know about the currents, because currents transport the material. You want to know about extreme events, because conditions vary during different tidal conditions and current conditions.

So the physical oceanography study was done by, as I mentioned before, by Professor Jim O'Donnell from the University of Connecticut and involved a very extensive survey. It involved field work, which consisted of deployment of equipment for an extended period of time, more than a year.

And these red stations throughout the entire zone of siting feasibility involved shipboard surveys. Ships would go out and take measurements in the water column with various types of instruments. You can see the instrument frame on the right side here. You can see all the different types of instruments we used to look at

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turbidity, to look at the temperature, to look at all types of parameters that we needed in order to analyze the information.

It included also studies, you see the boxes here from other programs. This is from the Connecticut DEEP. It included meteorological survey station data, at least one station was incorporated. Here's another station that's incorporated. Lots of data analysis. I think Jim's appendix alone is about 1,000 pages. So we know you have a long weekend coming up here, feel free.

So the end result of this analysis, again, is to understand the fate of the dredged material, short-term during disposal as well as long-term once it's placed.

This is just one example of many figures that Jim has produced. And it shows bottom stress, a critical parameter. This shows maximum bottom stress simulated for the period of 2012, total 2012 to January 2014. And it includes extreme events, like Hurricane Sandy. Again, extreme bottom stress conditions.

Now, bottom stress basically is a force that acts on the sediment and determines if

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material is going to move. Different particle sizes move at different bottom stress. If you have gravel, you need more stress, more force in other words, to move the particle than if you have, for example, sand or clay, for that matter.

Cohesion is another factor. In other words, how sticky is the material. Dredged material is typically very cohesive, which makes it actually less transportable than, for example, a loose grain of sand. And what you see here on this graph, okay, you see bluish and greenish colors in the northeastern, northern area, and you see the yellow, orange, reddish colors in the south.

These two types of areas are separated by a magenta line here, which separates the areas of blue and green as lower bottom stress and these areas here of high bottom stress. Specifically, with the types of dredged material that you have, materials in these areas would not move over time from the area during extreme events, but they would move in this area here. High bottom stress here; low bottom stress here. Notice that the New London alternative is almost entirely within the area within which sediment would not move,

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according to the model.

The Niantic Bay alternative would be partially within the area of movement, partially outside of the area of movement. So we have a kind of hybrid situation. Side-scan sonar survey sends down a sonar signal and gets a reflection back. And it tells you, at high resolution, what the substrate looks like. It's a window to the sub bottom.

What you can tell with the side-scan sonar survey is what type of bedforms exist. Bedforms are structures, geologic structures, on the sea bottom that tell you things like grain size, sediment movement, flow direction. It also tells you about potential ecological resources of significance.

Here's an example subset from the Cornfield Shoals site. And I'm not sure you can see that. You can't see very well here, but this happens to be a sand dune that travels on balance. Tides go back and forth. So you've got to keep that in mind. But the net flow, on balance, based on the shape of the structure, is towards the west.

You see a number of different

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sedimentary structures using this type of survey. By comparison, if you look at the side-scan sonar image from the New London site, you don't see those types of sedimentary structures. Sedimentary structures form, or are a function of, the tidal forces, and the forces that are at play at the bottom. So high bottom stress, different type of structures.

So let me go back. So if you can see that, that's a sand dune. And again, the emphasis is net flow. Tidal forces go back and forth, but on balance, looking in this direction you can see that by having the steeper face here on that dune, on that side of the dune. You can see striations here as well and other kinds of features that we marine geologists often look at.

Then we also did a sediment, chemistry survey done between the University of Connecticut doing the sampling, and Louis Berger doing the analysis of the data. The sediment survey involved taking grab samples with this type of sampling device, collect sediment samples from about eight inches, ten inches of the sediment surface. And you get this type of sample back. This is, for example, is from the Cornfield Shoals

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site with the coarser grained material. And stations were located throughout the alternative sites. This happens to be the New London site. And you can see it's all throughout the area, including dredged material disposal mounds.

Samples were analyzed for grain size, organic compounds like PAHs, PCBs, pesticides, and also for metals. Concentrations in all the samples were low or not detected. Many samples, for example -- there were only two samples that had low concentration of PCBs, for example.

Then we did a biological characterization. The biological characterization looked at benthic health, the health of the benthic organism, organisms from the seabed that could potentially be affected by placing dredged material at this location.

We looked at diversity. We also looked at fish, and that was done with trawls by the Connecticut DEEP Long Island Sound Trawl Survey Program. It's a program the DEEP has been doing for a long time in conjunction with New York looking at fish abundance and diversity throughout the entire Long Island Sound region. They happen to be doing this every year, and the data has been

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incorporated and analyzed.

It also looked at the toxicity of sediments within the site, and having a reference site outside of the site to identify any difference in toxicity levels.

Finally, the fifth survey was a sediment profile survey. That survey, in essence, took a slice of the upper sediment. You can see the water column here. This is the sediment surface here. Then you have 20 centimeters of sediment. It basically looks into the sediment itself and looks inside the sediments.

You can tell, like in this slide, here you have feeding voids, indication of organisms, looking in this sediment. At other stages we don't see that.

So the DAMOS program, which is a program by the Corps of Engineers, and Steve Wolf will talk about this, is using this kind of program to look at how fast dredged material disposal mounds recover, once the material has been placed. So that's another survey that was incorporated in the analysis.

Just to gave you a brief overview of the three different alternatives that we looked

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at. This is the New London alternative. It consists of the existing New London disposal site as well as an extended area to the west. The added area was selected since the existing site does not have sufficient capacity, capacity to accommodate the dredging needs for the next 30 years for the Eastern Long Island Sound region. So with the extended area, this capacity need can be met.

You see here, in the existing New London disposal site, uneven surfaces. These are basically the mounds from dredged material disposal. This is kind of a hilly, very uneven surface. You also see the submarine transit channel in the middle. The water depth of this site is about 45 to 79 feet. It's shallow here and deeper here, at this point -- more over here.

There's a boulder field that is located here. I'll come back to that in a minute. And there's a shipwreck, not shown here, which is located right in this location here. Mostly, the material consists of sand as well as fine grained material here. But on average, the entire site has sand as its primary grain size.

This is the Niantic Bay alternative,

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the historic site. It's a 1.3 square nautical mile site. By the way, the New London disposal site alternative has a dimension of 2.5 to one nautical mile. This is 1.3 in this direction. And with the extension, it's 2.1 nautical miles.

This is mostly sand. It's a dispersive area is this location here, and a containment area here, as we saw a little earlier in looking at the bottom stress. We have a bedrock area in the bottom here, and some in this area here that we looked at as well. It's a little deeper, especially this area here, than the New London alternative, but the upper part has the same water depth as the New London alternative.

You can see some sedimentary structures, which indicate flow, which is consistent with the fact that you have stronger currents and a dispersive environment in the southern half of the alternative.

And finally, the Cornfield Shoals alternative is deeper. Water depth is 50 meters, which is about 150 feet that goes down to about 190 feet in this area. Fairly flat. And even though it's an active disposal site, you don't see the uneven surfaces that you saw in the New London

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site. That's because the bottom stress is high. The material moves, and it's eventually transported from this site, because it's a dispersive site. You've heard that before.

So for your information, what you see here, these large ripple-type structures, these are sand waves, sedimentary structures that are a reflection of the currents that are active in this area.

So summarizing, and this doesn't do it justice. Again, there's a lot of detail in here. And I encourage you to take a look at -- very briefly, in summary, to look at the key elements of the existing conditions. All three sites are mostly sand, finer grained at the New England alternative because of the dredged material disposal in the eastern part of the alternative, but otherwise primary grain size is sand.

Bottom stress, we talked about that. Lower in New London; higher in Cornfield Shoals, hybrid conditions in Niantic Bay. Contaminants, all the concentrations that we measured are either low or undetected.

With regards to biological resources -- None, none of the alternatives have shellfish

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beds. Recreation fish, shellfish, the abundance of those are low. Fish habitat, it's a similar type of fish habitat as in in other parts of the central part of Eastern Long Island Sound region. In other words, it's not a unique environment with regards to fish habitat.

There are no cables, no pipelines. There's no interference with navigation. There are no anchoring areas. And there are also no conservation areas of various types. And finally, with regard to cultural and ecological resources, most of these resources are located in the southeast.

So in terms of environmental consequences, this slide summarizes environmental consequences. New London would be a containment site; Cornfield Shoals would be a dispersive site. And Niantic Bay would be transitional.

There will be short-term impacts on the benthic community, because they couldn't get out of the way. But as was determined, it will be discussed by Steve Wolf in a moment, there is rapid recolonization in the benthic habitat.

Impact on fish concentrations, habitats, reptiles, mammals, other species is

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minimal, mostly because these organisms are mobile. And with regards to bioaccumulation, dredged materials are required to go through very stringent testing before disposal. As a result, the risk of bioaccumulation is very low.

With regard to socioeconomic and cultural resources, because there is low abundance of fish, there's also -- there's minimal impact on commercial or recreational fishing. There's no impact on shipping and navigation, because the dredged material sites are deep enough, and it would be managed during disposal. There would be no impact on beaches, parks, or natural areas.

And finally, the shipwreck I mentioned at the New London alternative would also be managed -- with a buffer zone.

So my final slide summarizes the preferred alternative chosen by EPA. It's a subset of the New London alternative. This is the Eastern Long Island Sound Disposal Site. It's outlined with the blue box. It's a 2 x 1 nautical mile area. It includes half of the existing disposal site. Again, part of this area here is filled with dredged material. So dredged material disposal could not take place, in much of this

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area, anyway. So this reduces the area that is to be managed by EPA.

You can see the key features here that assisted in the selection process. The sediment is contained within the area. It's a previously used disposal site, which is one of the selection criteria. The environmental consequences that we looked at are minor or there are no consequences. There is one shipwreck here that can be managed. There is a boulder area that would be included in the Site Management Plan. And finally, there's a close proximity to the larger dredging centers, which has economic impacts.

As Jeannie mentioned, and this is my final point, please take a look at Chapter 5.3, which looks at the comparison of transport costs to different locations.

With that, I pass it on to Steve.

MR. BURCH: Is there an opportunity for some question here?

MR. HAY: Excuse me, is --

MR. BURCH: Is there an opportunity for a question or clarification?

MR. HAY: We don't take questions. We take comments on this. If you have a comment at

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the end --

MR. BURCH: This is a public presentation. You have some information that you are offering that is very relevant, and these questions are fresh in my mind that I don't think you covered in your presentation. So if this is going to be an open and transparent public process, then I think there needs to be an opportunity to have some dialogue.

MR. HAY: Go ahead.

MR. BURCH: I'm just wondering, because you talk about some of the issues that were examined as part of the Supplemental Impact Statement, but there's some information that's being left out here.

And I'm concerned because, you know, you talk about the fact that we look at shellfish populations, at aquatic wildlife and this kind of thing, but you don't actually list the results of that research. It's almost as if it's glossed over. And there are many consequences to what you just said; specifically, when you talk about the fact that there are low fish populations in the area but then you talk about the fact that disposal in these areas has very minimal impact

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and very -- recolonization.

It doesn't mention the fact that in this document the number of those areas are designated as essential fish habitat. And you just gave a presentation that told the public that that is not -- that that fish habitat is not any different from other areas in the Sound.

So I'm just -- I'm just wondering why -- this is supposed to be a public summary, why there is so much information that's being left out, and frankly, why this whole process is being glossed over.

MS. BROCHI: Could you identify yourself, please?

MR. BURCH: Yes. My name is Lou Burch. I'm the program director for Citizens Campaign for the Environment.

MS. BROCHI: Thank you. I'm not sure if you were heard, but in the beginning, this is a really large document, a lot of studies. So we're trying to summarize it.

In regard to EFH, we, as part of our designation, we have to consult with the National Fishery Service and the states on endangered species and EFH. And we have. And part of the

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that consultation is to get concurrence that there are no impacts to those species in the areas that we're going to designate. And that is in Chapter 3 and 5.

So if you have comments, we just please ask that you come up and speak at the end of the presentation. We're trying to move this quickly so that everybody has an opportunity to speak. Thank you.

Steve.

MR. WOLF: All right. The next step after you have gone through the investigations and determined --

PARTICIPANT: I can't hear you. Use the mic.

MR. WOLF: So once the investigations have been performed and the site has been selected and designated, then the hat that I wear at the Corps of Engineers is ensuring that placement is accurate and that the various impacts that were identified, or the lack of impacts identified in the SEIS, actually that's actually the case. So there's verification.

So that really starts with placement or the disposal at the site. So I've got a quick

video here for those of you haven't seen a dredged material disposal event at site. This is a scow with about 3,000 yards plus of material positioned over a dredged material disposal site. Hydraulics are engaged. The scow is up on the center lines. And within about ten to 15 seconds, the material has fallen out the bottom of the scow and down to the bottom.

So it's a short event, but we understand that it raises a number of questions. That's probably why some of you are here today. Those are the types of things which were addressed in the SEIS. Then we follow up with monitoring afterwards, such as are we accurately placing the material?

Once it's down there, we have these estimates of bottom stress, but we want to make sure that's really the case, that that material really does stay there on the bottom. And what about impacts to the water column as the material falls through the water column?

And then finally, the impacts, I think as Mr. Burch was alluding to, in terms of on the sea floor for the benthic system itself. Those are all things that are part of the monitoring

that we take -- that the Corps performs in conjunction with the EPA.

I'm going to step back a little bit in time to talk about how it got to the point where we are today. Historically, if we go back to the early days of dredging in the early to mid 1800s, it was a very casual process, just get the material outside of the berth area, really probably no controls over where it went. So it might be someone else's problem.

But as some time went on and our ports got busier, what you can see is that a lot of the material was taken out of the mouths of the harbors. And we see a historical record outside most of our New England ports where dredged material was placed at some point in time, with very little control as to where or what type of material went out there.

Then as we got into the 1900's, as you start looking at some of the older charts, you look at the town and state records, now you can start to see that there were specific locations, such as a lot of light-colored boxes shown here, where there was specification that said, Take your dredged material from this particular harbor to

that location. So some drivers as to where it went, but very few drivers as to what type of material actually went out there.

And it really wasn't until we got into the middle 1900's, the 1970's, to be more exact, with the various regulations that Mel Cote and Jean Brochi mentioned where now we start seeing a lot more stringent guidelines on how you can site a dredged material disposal site and what type of material could actually go out there. Again, that was not until the 1970's when that came into play. Not just here in New England, but that's really around the country and in a lot of cases internationally.

And that's what gave birth to the program that I think Bernward had mentioned that I work with at the Corps, DAMOS, or the Disposal Area Monitoring System. So again, it got its birth back in the 70s. The regulations say, You have to monitor. You have to keep track of this stuff.

So what we now have is nearly a 40-year record. We go out every year. We monitor a variety of sites. And we do a variety of times of investigations to really address those four major

questions that I mentioned at the beginning here.

We've got a large body of literature reports that are all publicly available. The data is all publically available. We'll have a website at the end of the presentation here. But we really focused and made use of the various technology over the years to try to, again, address these specific questions.

Just a note about testing, too, the type of material that could go out there, I want to clarify. There has been a lot of misinformation particularly bad for the Central and Western Long Island Sound sites but also some for the Eastern here.

There has been a lot of press that talks about toxic sludge, toxic material going out into the Sound. The regulations that we have in place now and the testing that's in place is that toxic material cannot be placed in the Sound. It's as simple as that. And the regulations specify very detailed testing that has to take place, whether you're dredging a small marina all the way up to a large federal channel. There's very specified steps.

We have to look at the material

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physically; that is, is it fine-grained material? Is it coarse-grained material? Particularly if it's coarse-grained, we can almost always find a beneficial use for it.

Chemically, what concentrations of chemicals are in the material? And then we look biologically. If you look in the center part here, you see a series of aquaria. Some of the sediment was actually placed in contact with water and critters, critters that would be found here in the Long Island Sound. And we see how they survive, the ones that are in the water column as well as down in the sediment. Because those are all conditions that will help us to determine, Is this material suitable to go out in the Sound? If it isn't, then we have to find something else to do with it; somehow to sequester it or to take it somewhere where it will also be sequestered.

And just a quick note on the -- because I know there's been lot of information out there on how we gauge chemical concentrations. Here's an example of arsenic. Here's some arsenic in its actual pure mineral form here. It's a naturally occurring element. If we were to collect a sample before the Industrial Revolution, and these bar

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charts represent the relative concentrations in that, let's say, sediment sample of arsenic. It could range from really low, in the green bar, to very high, because it's a naturally occurring substance. It just depends on where you are. Some areas of New England have naturally very high concentrations of it.

So the background concentrations today we would find are very similar, ranging from very low to very high. So how do we gauge that? What's appropriate in terms of materials suitable or not? We do biological testing; that is, if some of that material is in the sediment and maybe released to the water column, is it acute toxicity of the potential area? That is, are organisms that could be in contact with it expected to have lethal -- to die within a short period of time? Or do we expect to have chronic toxicity? That is, organisms that are in contact with it might have a diminished life expectancy. They might not grow as well. They might not reproduce as well. Those are the benchmarks that we use to determine if material is suitable or not to be placed in an open water environment. If it is toxic, then it has to go somewhere else, where it's sequestered,

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it's isolated from organisms in the water column.

Similarly, for PCBs, I won't go into this, but different types of chemicals, you know, of organic chemicals, some of which didn't exist before the Industrial Revolution, we created them, now are everywhere. Essentially, we have to go through the same exercise and determine what's a chronic level, what's an acute level in terms of being concerned about organisms being in contact with those.

Then if we determine the material is suitable to be placed in the open water, now we address the specific questions in terms of where the material ends up. With the advances of electronics that we have today, we are very accurate at being able to place material on the sea floor.

Every scow, such as the one shown here, this is the 3,000 plus yard scow, has a series of instrumentation located generally back on the stern. And you see on the right side of that screen, we've got a hull sensor that determines whether the scow was open or closed. We have a GPS sensor up on the top so we know right where the scow is. We have a draft sensor located down

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in the hull, so we can tell whether it's sitting low in the water and fully loaded or whether it has released its load and is sitting up high.

And then finally, we have a data logger to collect all the information and transmit it back to shore. What that gives us is for every load, be it a private project or a federal project, every load of dredged material that goes out, we have a complete record. You can see the trail of breadcrumbs here.

This a project in New Haven. And you can track the scow as it went out to the Central site. The color changed when the draft changed. That material is released, and the scow got lighter in the water column and then went back into the port.

So we know its track out there. We know specifically where the material is released. And because the tug operator here can actually see where the scow is, even if he has a long tow out, he can very accurately position, as you saw. It only takes ten to 15 seconds for that material to be released, so he can position specifically where that material hits the bottom.

So then once the material is on the

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bottom, we've got to track to make sure that it's in the right place and that it stays there. And so this is a bathymetric map of the Central Long Island Sound site, which is about a 1 x 2 mile rectangle. And all of the little bumps that you see here are one to two football fields sized, what we call mounds.

Those are areas where, in a given year, in a given project, we directed the scow operators, the tug captains, to go to this particular point in that specific project or year to place the dredged material. And we basically try to pile it up as neatly as we can. And that minimizes the area that's affected in a given year, in any dredge season.

And then what it allows us to do is, at the end of the season, go out and perform the bathymetry very accurately, the mapping of the sea floor, just as the one you see here, and we can determine, yes, this is exactly where we wanted it. We can see how much of a spread and the accuracy is literally in the Sound within a few inches.

So what we can do is map it one year and come back the next year after a nor'easter,

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after Hurricane Sandy or after Hurricane Gloria. Some of these mounds go back decades. And we can compare how high was that mound, you know, three years ago? How high was it after Hurricane Sandy? And we can determine if it were actually losing material.

And what we found is if these sites are selected properly, these mounds are stable literally for decades. So once they are down there, they are stable formations on the sea floor.

So then what about the impact, the potential impacts, of a water column? This is a generalized schematic of the release up here at the surface with a fairly deep water column material falling, falling, falling, this potential for release. And this is what I had in my mind when I first got involved in this work. But I think scaling is a really important thing.

And if we look at -- if we try to visualize exactly what that looks like from Long Island Sound, this is a typical scow. It's about 300 feet long. It's got about 20 feet below the waterline when it's fully loaded. And if you say, well, where is the bottom in relationship to that

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scow? It's 300 feet long, typically it's only 40 to 80 feet.

So what you see is, we have a very short distance for the material to fall before it hits the sea floor. It's not going a long, long way. So the math tells us that that material is going to hit the sea floor very quickly and have very little opportunity to actually be washed into the water column to currents.

Here's a video, a short video clip, of a poor graduate student who spent probably several years with about a 15-foot tank, releasing different types of beads from the top, and then tracking that material as it falls through the water column.

And what you see, and you'll get another one here. In the beginning, the material actually necks in. It pulls in on itself because it's so dense. And it's not until it gets very, very deep in the water column that you actually start to have that material spread out and be available for the tidal currents.

And that's actually what the case is in Long Island Sound, because it's so shallow, the material hits the sea floor that, we call it a

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bolus, actually has had a chance to spread out. So that's what the predictions are.

But we actually go out and do real measurements using something that you might have as a fish-finder. We have a very, very sensitive one which allows us to see even very small particles within the water column.

So after disposal of that has happened, we run our vessel across here, and basically paint a picture like this, within a matter of a minute or two, as to where the more turbulent water is, in the center here, with these brighter colors. Then we can go back, lower down the sampler, collect some of that water, send it off to the lab, and verify, Are we having an issue here? Are we releasing chemicals? Do we have too much suspended sediment in the water column?

And again, there's a number of reports out there that I'm happy to direct you to is that this just hasn't been an issue for the type of disposal that we do in the Long Island Sound.

Then what about the impacts to the sea floor? Clearly, clearly if you're placing a load of 3,000 yards of material, where the direct footprint of where that material is at the sea

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floor, there's no doubt there's an impact on the benthic system.

Lots of critters, such as the ones shown here, are buried. But it's a very short-term impact. And what we found is a disturbance. And we've done a number of investigations where we looked within a matter of days, weeks, months to years afterwards. And what we see is a very rapid recovery.

As Bernward showed, some of the images, some of the profile images where you have the water column here and the sediment down below, you can see what kind of critters are in that habitat. And literally, within a few days of placing the material, we've got worms and things coming back in.

And generally, for the warmer waters of Long Island Sound, within a season, we've got a lot of those more advanced like bivalves, things that are digging and bioturbating in the sediment zone. So we see a complete recovery generally within one or two seasons. That's the type of thing that we track to ensure that we're placing material correctly and that all the testing we've done up front is sufficient to ensure that the

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area recovers after we place the material.

But how do you put that into a scale that's a little bit more recognizable? One way we try to do that is, in environmental science, is to bring it down to a scale that's more recognizable for us. Clearly, every time we place dredged material, we have some limited impact on the sea floor. Is that a significant one? That's what we have to weigh. That's what the SEIS has to weigh.

So if we do some scaling, let's say we take the entire Long Island Sound, and we shrink it down to the size of a football field, relatively, we shrink down the size of the area we are placing material at in a given season, what's the comparisons there? And we have to zoom in all the way over here to the corner of the field.

And in a given year, we're placing the bottom on a particular site like the Eastern Long Island Sound site that would be impacted. This is about the size of a plate to a bucket lid. It's very small.

Again, we don't believe it has a significant impact. Lots of the other studies, I know there have been concerns for the Long Island Sound, like lobster abundance, like nutrient

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loading. There's ample data out there to show that dredged material placement has not been -- does not have an impact on or is not a significant cause of those issues.

Again, I'm happy to direct folks to those data, to those reports. So if you're interested, please get ahold of me afterwards.

So we believe it can be done. If it's managed well, it can be done responsibly with minimal impact. Certainly there is some to the benthic system, but minimal overall.

But yet we're still trying to make beneficial use of this material. Clearly, all of the coarse grain material we can generally find a home for, beach renourishment, near-shore placement. It's the fine-grain material that has a harder time finding a home, but we're definitely working on it. And you'll see numbers that show we made progress.

This is a slide that I like to show in that context. This is the Connecticut River discharging a huge sediment load following Hurricane Irene, Tropical Storm Irene, which inundated a lot of Northern New England.

What I want to get across in this one

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is really twofold. One, is that sediment transported into the Sound is a natural process. It happens on a regular basis. And this is far more than many, many years of dredged material placement in the Sound.

But the Sound recovered. It's a natural part of an ecosystem to be able to deal with sediment loading. As long as it's managed well, we feel we are consistent with the system. The other is that we are always going to have to dredge. There are always going to be events like this, even though we have done a lot, made a lot of advances at being able to limit the amount of runoff from our various urbanized areas.

To clean up the amount of what's in that material, we're still going to have to dredge material that's of a higher quality, but we have to find a home for it. So we're trying on a regular basis.

We've got a group of folks called the New England Regional Dredge Team, which is made up of federal agencies as well as representatives from all of the New England states. We meet four times a year in different areas of New England. And we've got a standard agenda item, which is

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Beneficial Reuse of Dredged Material.

So we want to know what the various states are doing in terms of beach nourishment, near-shore placement. There was recently, in the state of Rhode Island, a pilot project to use material to augment a marsh which was too low. And this is something we expect to see more of with sea level rise.

So there's a lot of promise in there, potential marsh creation in areas where historically it had marsh that are now washed out. So we're clearly working on the problem, and it's clearly one that's on the forefront of all the New England states.

The EPA is in the process of putting together a tracking tool that I think, at some point, will be publicly available. And you'll get to see where all the states are and where all the beneficial use of material is actually going.

So with that, I think I'll close. And if again, the slide with contact information is in the website, as shown here. And feel free to give me a ring, if you have an interest or question related to some of the monitoring that was done.

And with that, I'll turn it over to

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Mel, who is going to actually roll out the details of the Draft Proposed Rule here.

MR. COTE: Thanks, Steve. I do want to acknowledge and thank Adon Duncanson from the Congressman's office for attending today's hearing. Thank you.

And thanks again, Steve, and good evening, I guess, everybody. Mel Cote, Surface Water Branch, EPA Region 1.

You now heard about the history of dredged material disposal sites in the Long Island Sound, the Supplemental Environmental Impact Statement, or SEIS, and dredged material management and monitoring. I'm going to go through this really quickly, because we're already over our time, and I apologize for that.

Let's see. As you heard earlier, in June 2005 we published a final rule designating the Central and Western disposal site to address concerns raised by the state of New York and others. These site designations are subject to restrictions on their use.

Those restrictions were intended to help reduce or eliminate the disposal of dredged material in Long Island Sound and included

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requirements for the completion of a regional Dredged Material Management Plan for the entire Long Island Sound region, which the Corps completed earlier this year, establishing an inter-agency Long Island Sound Regional Dredging Team, to review alternative analyses for federal and large dredging projects, private dredging projects during the development of the DMMP, and EPA rule makings.

So upon completion of the DMMP, the EPA was to propose and finalize amendments to the 2005 rule, describing standards and procedures that must be complied with in the future to support the goal, again, furthering reduction and elimination of open-water disposal.

These standards and procedures are at a minimum to be consistent with the recommendations of the DMMP. Those recommendations include establishing standards and procedures for renewing placement or disposal alternatives for all federal and large private dredging projects in harbors, further studies and development of beneficial use and other non-open water alternatives, and continuing disposal site management and monitoring, and further research on effects of

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disposal.

On February 10th, we took the first step in meeting our obligation by publishing the proposed amendments to the 2005 rule in the Federal Register for a 45-day public comment period that ended March 25th. We received 119 individual sets of comments, the majority of which supported the proposed action. Right now, we're in the final stages of finalizing the rule. And we expect it to be published in the next couple weeks.

The reason this is important, Central and Western support to this issue, is because EPA intends to use the same restrictions on the use of the proposed Eastern site as it has proposed for the Western and Central sites; namely, that there will be standards and procedures that will encourage the identification, development, and use of practicable alternatives to open-water disposal and require large dredging project proponents to thoroughly evaluate such alternatives.

So on April 27th we published a proposed rule in the Federal Register for a 60-day public comment period that ends on June 27th.

So here are the standards that are

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included in the proposed rule. They echo the standards recommended in the Corps's DMMP, and some of the cases go a little beyond that.

First, unsuitable materials should not be disposed at the sites. And that just emphasizes an already distinct point.

Secondly, sandy material should be used beneficially, wherever practicable. I think all of us recognize that these materials have high value for uses such as beach nourishment or near shore bar or berm nourishment. And as long as it's a practicable alternative, project proponents will meet to identify and secure funding for any needed non-federal cost sharing.

Finally, for fine-grained material, and this is the really tough material to deal with, proponents must thoroughly evaluate practicable alternatives and use them, if they are available. This material is not typically considered appropriate for beach or near shore nourishment. But in the future, such use such as marsh creation or restoration may become practicable. And there are a number of pilot projects that are underway in other regions of the country.

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Only if no other alternative is determined to be practicable may suitable fine-grain material be placed at the designated sites. The proposed rule expects that all levels of government will continue to exercise their existing authorities to reduce the flow of sediments and contaminants into waterways. The proposal doesn't create new obligations but instead focuses attention on existing programs such as those that address storm water and nonpoint sources of pollution in coastal communities and along the tributaries of the Sound.

Those of you who are involved in water quality management, and I recognize there are a lot of efforts between our stormwater NPDES permitting. There's a lot of activity underway.

Finally, the proposed standards retain the 2005 restriction that requires that practicable alternative must be used, if they are available.

So that's standards and procedures. The proposed rule is built around making the interagency Long Island Sound RDT a permanent body and enhancing its role. The RDT's goal is to

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reduce or eliminate open-water disposal wherever practicable.

The RDT's primary purpose will be to ensure that all large dredging projects conduct a through analysis of alternative to open-water disposal and make recommendations to the Corps on each project.

Of equal importance, and this is a new proactive goal for RDT that wasn't -- the previous RDT didn't do, the RDT will provide a forum for continual exploration of beneficial use alternatives, for promoting the use of these alternatives, and suggesting approaches for cost-sharing opportunities. The RDT also will be expected to assist EPA and the Corps with long-term activities intended to track disposal of dredged material and monitor dredging impacts in the Sound. These include supporting the DAMOS program that Steve just talked about.

The geographic scope of the Long Island Sound RDT will include all of Long Island Sound. The RDT will consist of representatives from state and government agencies or authorities with expertise in dredging and dredged material management. We expect that will include the two

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EPA regions, the Army Corps of New England and New York Districts, possibly the NOAA's National Fisheries Service. We expect the state of Connecticut, New York and possibly Rhode Island to participate with the environmental management agencies and relevant port authorities.

We are also proposing that the specific details of how RDT operates will be left to them to determine and be allowed to evolve as best accomplishes the RDT's purpose.

Finally, EPA encourages that the RDT to establish and maintain cooperative working relationships with other Long Island Sound based organizations, such as the Long Island Sound Study's Science and Technical Advisory Committee.

One last point I'd like to make before closing is that we have made excellent progress toward meeting the goal of reducing or eliminating open-water disposal since the 2005 rule. While there is significant variability in the amount of dredging from year to year, the most important results is that there's been an overall 35 percent reduction in the amount of materials disposed annually from the past nine years, as compared with the 22 years prior to that.

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So I'm going to conclude my presentation by reminding you of the opportunity to provide comments on EPA's proposed rule and the draft SEIS. In just a few minutes, you will have the opportunity to provide oral comments for the record. You can also provide comments in writing. The address is right up there.

And we are interested in comments on our preferred alternative, the Eastern Long Island Sound Disposal Site, but also the other alternatives that we are not recommending. Thanks for your attention and your patience. I'm now going to open the meeting to a public session.

MS. BROCHI: Thank you, Mel. So the next step in the process, the EPA will be responding to comments in our Response to Comments document. So if you wish to speak, we're having this recorded. So when you -- Bernward Hay will walk around with the microphone. Please identify yourself and your affiliation. We're taking speakers in the order to which they came in. So senator Paul Formica, please.

SENATOR FORMICA: Good afternoon. And thank you for the opportunity to comment on this proposed rule. My name is Paul Formica. I'm the

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current state senator of the 20th district, which includes a portion of Old Saybrook, Old Lyme, East Lyme, Waterford, New London, and a portion of Montville and Bozrah.

I stand in support of the proposed rule for many of the reasons that were spoken about today. The rule concludes that the site is sufficient to meet the dredging needs of Eastern Long Island Sound. It also speaks that there are no practicable alternatives to this open-water disposal with sufficient capacity to handle the projected volume.

Also it speaks to the importance of dredging in military navigation in association with the sub base and the Coast Guard facilities which provide critical and important homeland security and public safety opportunities and support for both those operations.

Shifting the disposal site also will similarly reduce the conflict with activities. The rule also asserts it would provide minimal potential for interfering with other existing or ongoing uses of the marine environment. The dredged material disposal is being regulated sufficient to mitigate any environmental impact.

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Having been the owner of a small business of a fish market for the last 33 years, I'm intimately aware of what's going on with some of the problems in Long Island Sound and the support of the fishing industry in that region over those many years.

This rule is consistent with the federally approved Coastal Zone Management Act for New York and Connecticut, and it supports activities which contribute substantially to the region's economic output. And for those reasons I stand in support and speak in favor of this, as it benefits the economic and marine vitality in many of the towns and regions up along the 20th District.

So thank you very much for the opportunity to speak today.

MS. BROCHI: Thank you.

George Wisker.

MR. WISKER: Good evening. My name is George Wisker. I work for the Department of Environmental Protection's office of the Long Island Sound program. As an environmental analyst 3, I've been involved with dredging issues for the past 30 years. I was asked to read a statement

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tonight.

Thank you to the EPA for scheduling this and the other public hearings in New York and Connecticut to receive comments on a draft Supplemental Environmental Impact Statement and rule for the potential designation of sites in Eastern Long Island Sound. EPA determined that a site was necessary because there are currently no disposal sites designated for long-term use in the Eastern Long Island Sound region.

Dredged sediment management needs exceed the current available capacity of alternative management options. And the regulations require EPA designation for any long-term dredged material open-water site. The state of the Connecticut applauds the efforts by EPA and its contractors, which was funded, as you heard earlier, primarily by the Connecticut Department of Transportation.

They documented the existing physical, environmental, and socioeconomic conditions of the alternative sites, evaluated the three final alternatives against the factors that were listed earlier by Jeannie, and selected the Eastern Long Island Sound alternative as the preferred site.

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Connecticut is committed to working with our state and federal partners to develop practicable alternatives to open-water disposal of dredged materials. However, it is important that all parties recognize that considerable time and financial resources will be required to implement such alternatives, and we must be realistic in our expectations.

If reductions in open-water disposal are to be achieved, it is likely they will take place over a longer time horizon and in small communities. During this time, it is essential that open-water disposal sites in Long Island Sound, including an eastern site, remain available as environmentally sound, cost-effective options for numerous water-dependent uses in Connecticut and New York.

An Eastern Long Island Sound disposal site is vital for serving the dredging needs in the region, as the increased cost of transporting material to the Central Long Island site is excessive in many cases and the elimination of an open-water option in the Eastern Sound would have dire consequences for the local businesses.

The EPA's proposal will maintain the

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availability of an open-water site in the Eastern Long Island Sound, which is critical for meeting future dredging needs to support recreational boating, the coastal economy, and continued operations of the U.S. submarine base and Electric Boat.

Thank you.

MS. BROCHI: Thank you.

Bill Spicer.

MR. SPICER: William C. Spicer, III, speaking on behalf of Spicer's Marina, 93 Marsh Road, Noank, Connecticut.

There's one issue that we haven't quite addressed yet, and I'm going to address it. There are times in the affairs of men that you have to stand up and call a spade a spade. This is one of those times.

In my opinion, the New York Department of State, NYDOS, has been engaged in predatory, discriminatory, and unfair actions that adversely affect the state of Connecticut and its working waterfront. The NYDOS submitted four letters of objection to the recent federal dredging in the Mystic River that was helping maintain Mystic's historic waterfront viability together with its

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historic Mystic Seaport and Marine Museum.

The NYDOS did not succeed in stopping the federal project, but it did stop or severely and adversely affect all of the 12 or so associated nonfederal dredging projects that also wanted to utilize the New London disposal site at that time. The NYDOS evidently thought it was somehow perfectly okay to hamstring small Connecticut waterfront entities while doing considerable TV advertising that if business entities would just come to the state of New York and invest, those entities would be blessed with ten years of no New York state taxes and some other goodies.

I am here to tell you it is not okay to hamstring small Connecticut waterfront entities while prejudicially and discriminantly favoring your instate investors. The monkey business of the NYDOS has to stop.

I'm going to reread this section again. I'm here to tell you it's not okay to hamstring small Connecticut waterfront entities while prejudicially and discriminantly favoring your own instate investments. The monkey business of the NYDOS has to stop.

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The EPA proposed rule designating the Eastern Long Island Sound disposal site located offshore from New London, Connecticut for the disposal of dredged material from harbors and navigation channels in Eastern Long Island Sound in the states of Connecticut and New York should be given final approval immediately. The New York Department of State, NYDOS, should be told in no uncertain terms to cease harassing Connecticut waterfront entities. William C. Spicer, III.

We thank you all that have worked on the project and have commented on this and will comment for their sincere and genuine efforts to try to produce a good result. The baloney from New York has to end.

Thank you.

MS. BROCHI: Thank you.

James Stidfole. I apologize if I mispronounced.

MR. STIDFOLE: If you want to have it spelled, it's S-T-I-D-F-O-L-E.

Hi, James Stidfole, New London Port Authority. This whole -- I find this a little bizarre in that the ELDS is necessary. And it's obvious. What's the problem? Go for it.

MS. BROCHI: Thank you.

Barry Bryan.

MR. BRYAN: Could I come and use the lectern? I've been in these proceedings for about 40 years. And so why don't you go ahead with the next speaker, and I'll walk down.

I'm Barry Bryan, a 30-year resident of Fishers Island, year-round for the last 18 and a long-term member and former director of the Fishers Island Conservancy. I would like to make a brief statement on behalf of the Conservancy to be followed up by a detailed comment in these proceedings.

Since its founding, the Conservancy has been opposed, as a general matter, to all open-water dumping of dredged spoils in Long Island Sound, but it has consistently recognized that dredging harbors and navigation channels is necessary and that limited open-water dumping may be required to meet the Sound's legitimate dredging needs until alternative disposal methods and technologies can be developed and mandated by the regulatory authorities.

Fishers Island and the Conservancy have a long and frustrating history with the New London

dumping site. In 1978 a legal challenge to the Trident submarine dumping, brought by NRDC and Fishers Island, ended in a settlement, which obligated the Army Corps to prepare an environmental impact statement considering the disposal sites of Block Island Sound and nearby waters.

This obligation was consistently ignored by the Corps ever since. In 1981, as you know, the Ocean Dumping Act was extended to cover Long Island Sound, and that was systematically ignored for 21 years by the Corps and the EPA, during which it designated or selected no disposal sites properly under the Ocean Dumping Act.

In 2002 the Conservancy's 1995 lawsuit challenging the Seawolf dumping was settled on terms that forced the Corps and the EPA to begin complying with the law of the Sound for really what amounted to the first time. And soon after that, the proceedings, which we are continuing today, started.

In 2005 the EPA conditionally designated sites in Central and Western Long Island Sound and suspended the proceedings with respect to Eastern Long Island Sound, pending

preparation by the Corps, of a dredged management plan, DMMP, which was mandated by the governors of New York and Connecticut and the EPA, to examine alternatives to open-water dumping with the goal of reducing or eliminating open-water dumping in Long Island Sound, wherever practicable.

When these designation proceedings were suspended, much of the science supporting the designation of the Central and Western Long Island Sound had been completed. But that science had not been completed for the Eastern Long Island Sound. Some of it still has not.

But the record of proceedings, at the time they were suspended, clearly and overwhelmingly supported the position of the Conservancy that the New London dump site was manifestly unsuited for open-water dumping under the ODA criteria and under common sense. The currents at the site located at the mouth of The Race were too strong for containment of dredge spoils. The waters were too shallow. It was situated right in the middle of the Navy's submarine lane, and the commercial navigation lanes for New London and eastward of the Sound.

It was located within a mile or so of a designated significant coastal fish and wildlife habitat in The Race, including its formerly abundant lobster fishery, and also within a mile of Fishers Island oyster farm and Connecticut's shellfish beds. It was located a mile and a half from Fishers Island and its public beaches in West Harbor and even on the South Shore as well as Connecticut beaches.

While these designation proceedings were going on, the Corps kept dumping at NLDS under its purported selection of the site in December 1994, just before the Seawolf dumping. Even assuming that the Corps' selection of that site was proper in accordance with the criteria of the Ocean Dumping Act, that selection expired ten years later, in December 2004.

But the Corps just kept dumping in violation of the Ocean Dumping Act for seven more years until it bailed itself out by sneaking a provision into its appropriations bill in the dark of the night on December 23, 2011, without giving notice to anyone, extending the purported selection of NLDS for five years, until December of 2016. That obviously is now water over The

Race, but there it is.

So here we are today, after 14 years of these designation proceedings, tens of thousands of pages of data and scientific reports, and millions of dollars. The EPA has recommended designation of a slightly reconfigured New London dump site, now renamed the ELDS, as the containment site for dumping of a projected 14 or maybe it's 25 million cubic yards of dredged spoils in Eastern Long Island Sound over the next 30 years.

Given our sad history with the New London dump site, it should surprise no one to learn that the Conservancy is strongly opposed to the designation of ELDS as an ODA site now for the same reasons that we have opposed dumping there for 40 years.

Nothing has really changed. The currents are still there. The EPA assures us that the bottom currents are calm, even in storms. But the assurance is based on the flimsy scientific evidence; effectively, a single data point in a very complex hydrological environment. The waters have not gotten noticeably deeper, at least not yet. The submarine and shipping lanes are still

there. The eastern portion of NLDS has been closed in the reconfiguration of the NLDS so that the ELDS is now on the westerly side of the submarine lane. And it is worth noting that neither the EPA nor the Corps makes any mention of the history of the submarine groundings on the NLDS.

We are told that the commercial navigation lanes have moved, but it appears from EPA's own charts and its SEIS that all of the eastbound traffic of barges, tankers, container ships and ferries coming through The Race are dumped just south of the NLDS with vessels heading for New London passing right over it to get to the Thames ship channel.

The designated fish habitat and lobster fishery in The Race, the oyster farm, shellfish beds, and all the beaches are still there. The DMMP has been completed but gives little comfort that the Corps will actually carry out its mandate to seriously consider alternatives to reduce or eliminate open-water dumping wherever practicable.

Instead, the Corps makes it quite clear that it sees its mission as business as usual, dredge and dump in open waters at the, quote,

"least cost environmentally acceptable," closed quote, with no room for weighing environmental cost and benefits.

The DMMP also indicates that the bulk of the material to be dumped in the ELDS would be, quote, "suitable fines," closed quote, presumably fine-grained material that has passed the ODA and Clean Water Act toxicity tests. Fine grains, of course, are precisely the kinds of spoils unsuitable for dumping in a site with strong currents like ELDS.

How much makes it to the bottom before it disperses? How much of it stays there? During past periods of dumping at NLDS there have been sightings of fine grain gray foam at Race Point on Fishers Island. And although we have no evidence specifically tying it to dumping at NLDS, in recent years, the docks at West Harbor have silted up with fine grains drifting in with the tides, and deposits of purple, black, hopefully not toxic, regularly appear on the beaches on the South Shore of Fishers Island.

The economics and politics of the NLDS have certainly not changed, with Connecticut contributing nearly all of the industrial waste

spoils and getting nearly all the jobs and all the economic benefits from dredging. And New York getting stuck with half of the environmental cost, which is so far unmeasured, of degradation of our shared estuary.

In fact, one of the very few changes since these designation proceedings were suspended in 2005 is the appointment of the University of Connecticut, a Connecticut State-owned institution, compensated by the Connecticut Department of Transportation as EPA's independent contractor to evaluate the scientific studies supporting EPA's recommendations to place -- in place of consulting firms, like SAIC and Battelle.

MS. BROCHI: Excuse me. So in order to have all of the speakers have an opportunity to speak, I'm going to ask everyone, if they could, just three to five minutes. You can provide the written comments. You can e-mail me with written comments. But if you could just keep the verbal comments to three to five minutes, that would be great.

MR. BRYAN: I haven't had my five minutes. Can I have two more minutes?

MS. BROCHI: Sure.

MR. BRYAN: It is hard not to be a little cynical about all this, 40 years of this. The New London dump site was a bad place to dump admittedly toxic and contaminated spoils in the Trident and Seawolf dumps in 1976 and '95. It is still a bad place to dump allegedly suitable fine grains there today.

It is also very hard to understand how the good faith application of a GIS multicriteria analysis of the entire Eastern Long Island Sound area, even an analysis of the EPA's truncated Zone of Siting Feasibility which arbitrarily cut off the waters of Rhode Island and waters off the continental shelf, which are favored by the Ocean Dumping Act.

It is hard to understand how all this process could come up with only two possible containment sites, New London and Niantic Bay a few miles up the Sound, neither of which is remotely suitable for the purpose under the ODA criteria. And one does not have to -- one does not have to be at all critical to wonder whether the nine other alternative sites presented by the EPA were serious candidates that made it through the screening process or just straw men picked to

make ELDS look good by comparison.

In any case, what the EPA has done is to present stakeholders with a modified Hobson's choice between two unacceptable options. Two nags that couldn't make it to the next town. And one traveler complains, the liveryman, Hobson, says, "You think these horses are bad? You should have seen the nine I turned down at the auction."

The Fishers Island Conservancy opposes the designation of the New London dump site under -- as a designated site under Section 102. It has not yet concluded its position with respect to the Niantic Bay disposal site. That one is a little less bad, but it is probably the lesser of two evils. But the Conservancy is still not sure whether it can half-heartedly support that one or support only the no action option.

Thank you.

MS. BROCHI: Thank you.

Tammy Daugherty.

MS. DAUGHERTY: Hello. I am the Director of Development and Planning for the City of New London. And I would like to thank the thoughtful effort of those involved in creating this proposal. The City of New London, as Jim

Stidfole said before me, is in favor of the proposal.

While maritime-linked commerce and military vessel navigation are vastly important to our economy, so is the environmental health of Long Island Sound. And we feel that the studies have proved that out. So we just wanted to make sure that we were on the record as supporting.

Thank you.

MS. BROCHI: Thank you.

Lou Burch.

MR. BURCH: For the record, again, my name is Lou Burch. I'm the Connecticut program director for Citizens Campaign for the Environment. CCE stands in opposition to the U.S. EPA proposal to establish the Eastern Long Island Sound disposal site as a long-term disposal site for dredged material. In addition, we remain opposed to the extension of the Cornfield Shoals disposal site and the re-establishment of the entire Niantic Bay disposal site as alternatives to the Eastern Long Island Sound site.

In 2004 CCE opposed EPA's plan to designate two sites in the Western portion of Long Island Sound as designated dredged material dump

sites for 20 years. We were joined by thousands of residents and elected officials from every level of government in New York and Connecticut. The CCE's position at that time was that it is counterproductive that after millions of dollars of public funds being allocated and spent to restore Long Island Sound to then go on to aid in the degradation of the Sound by the designation as a long-term dumping ground.

In 2005 the states of New York and Connecticut entered into an agreement with the EPA to phase out the antiquated practice of open-water dumping. Per the terms of that agreement, U.S. Army Corps of Engineers was required to develop a Dredged Material Management Plan that would create a framework for robust beneficial reuse program for dredged material in the Long Island Sound region.

In 2005, the U.S. Army Corps of Engineers released a business as usual plan to continue the practice of open-water disposal in Long Island Sound as the primary waste disposal plan for millions of cubic yards of contaminated dredged material.

To date, an estimated 17 million cubic

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yards of dredged material has been disposed already in Long Island Sound. The DMMP released by the U.S. Army Corps of Engineers earlier this year seeks to allow an additional 25 to 30 million cubic yards to be dumped in the sensitive ecosystem over the next 30 years. And that was, once again, after ten years of a process spending 7 million dollars so that the Army Corps of Engineers can come back and say, let's keep disposal sites open indefinitely, and we will look at beneficial reuse.

The plan was supposed to focus on beneficial reuse and create solutions to reduce and eliminate open-water dumping in the Long Island Sound. Instead, once again, the plan focuses on the cheapest and easiest solution, which is open-water disposal.

Despite the work of the regional dredging team, we do not see significant substantive progress in phasing out open-water disposal. As the EPA and Army Corps have continued to push the same old dumping plan for the last decade to change, CCE will offer the same response, and that is that the designation of a long-term dumping plan, they provide a cheap and

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easy fix. But it is not a long-term solution, and it is not an activity without negative environmental consequences to the Long Island Sound ecology.

We need a plan that reduces open-water disposal of dredged material and starts the process towards creating a long-term disposal plan that focuses on beneficial reuse options.

And while CCE recognizes that dredging for the safety of navigation is absolutely necessary, we maintain that open-water disposal of those materials is not. Between them, the U.S. EPA and the Army Corps of Engineers have received literally thousands of comments from the public in opposition to this proposal and so far, not addressed the concerns of countless New York and Connecticut residents, environmental groups, and elected officials that have all waited. For the sake of those in the room who may not have had the opportunity to read through all these proposals over time, and are only hearing one side of these issues, I will offer the following comments.

First of all, Niantic Bay should remain inactive. It should not be designated as a long-term disposal site. This site was active

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from 1969 until 1972 and has already received more than 176,000 cubic yards of dredged material. Niantic Bay has since become a central focus of Long Island Sound restoration efforts as multiple factors have contributed to its declined water quality and biodiversity over the years.

For example, it has been documented by the Long Island Sound Study that Niantic Bay has experienced a disproportionate rise in seasonal water temperatures over the last 30 years. This is due in large part to the thermal pollution coming from Millstone Nuclear Power Station, which pulls in millions of gallons of water on a daily basis to cool its reactors. This super heated water is then returned to the Sound through a one screw open cooling system. The thermal pollution has had significant impact on cold water species such as winter flounder, which are known to spawn and habitate the bay during winter months.

The increase in water temperatures, combined with other water quality challenges, have led a measurable decrease in cold water species in the Niantic Bay and an increase in fish species, many of which are invasive, that have adapted to the warmer water temperatures.

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Niantic Bay ecosystem supports are already under distress, and the SEIS does not adequately address how reopening a disposal site from millions of cubic yards of potentially contaminated material could impact the sensitive environment.

Additionally, the Cornfield Shoals site has been identified as a dispersive site and should not be designated as a long-term disposal or indefinite site. This site has been identified by the Corps as a dispersive site because material is known to have moved after placement.

Dredged materials can contain various quantities of heavy metals, pesticides, and other contaminants and should not be disposed in places where material is known to readily be transported, contaminating other areas of the Sound.

The New London Site has already received 8.9 million cubic yards of dredged material. The new plan to dispose 22.6 million cubic yards over 30 years is more than double the current amount, and remarkably, the EPA has not identified any adverse impacts. The draft document significantly undervalues the habitat supported by these waters and fails to assess how

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long-term dumping will affect these species adversely. In addition, the document glosses over federally designated essential fish habitat. The document notes that parts of the proposed areas are federally designated essential fish habitat, defined as those waters and substrates necessary to fish for spawning, breeding, feeding or growth to maturity; a document that lists 15 different species of fish that could be affected, including winter flounder, an already struggling species in Long Island Sound.

So with the addition of 22.6 million cubic yards of dredged material, these impacts can harm economically and recreationally important fish species. EPA seems to believe the impacts would be mitigated because the fish will simply swim away from the affected area and return when the dumping stops.

The Eastern Long Island Sound is also a very busy zone for navigation, national security, waterborne commerce, and recreational boating. And yet the draft document fails to assess how these activities might be affected because of the long-term dump site. The document does note that vessels approaching New London would pass in the

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center or over the Western portion of the alternative dump site, and submarines would be crossing over the center of the site, contributing to increased turbidity.

However, the document does not address how these activities might harm or hinder due to long-term designation of those sites. Eastern Long Island Sound site is also an important spot for commercial and recreational fishing. And yet, the draft document claims that one commercial fisherman and a handful of recreational fisherman utilize the area of New London site. CCE believes that this is an inaccurate representation.

So in conclusion, the Dredged Material Management Plan, there were several beneficial reuse options that were discussed with eastern dredging projects. These include the Sandy Point Marsh, Manchester landfill, Rocky Neck State Park, and nearshore area's Bluff Point State Park. Unfortunately, the DMMP repeatedly dismisses beneficial reuse options because open-water dumping is cheaper. The EPA seems to dismiss the opportunity for beneficial reuse as well in their no action alternative scenario for utilization of appropriate land-based or beneficial reuse

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alternatives and conclude that New York, Connecticut, and Southwest Rhode Island have no available upland sites or beneficial reuse sites which could provide a reasonable long-term alternative to open-water dumping.

So I will wrap up by reiterating that by establishing long-term dump sites, we are continually choosing a cheap, easy fix instead of creating a long-term solution. And if protecting and restoring Long Island Sound is truly a priority for the EPA, they must adopt a uniform set of values in managing Long Island Sound and prioritize beneficial reuse as a real and meaningful alternative to open-water disposal. Thank you.

MS. BROCHI: Thank you.

I'm going to quickly acknowledge and thank the University of Connecticut for offering this facility and to mention that Jim O'Donnell and Frank Bohlen were part of this study.

I'm going to open it up now. Is there anybody else who wanted to speak who did not fill out a card and did not have an opportunity? Okay. I'll ask that you try to limit that to one minute. We're running overtime.

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So before you begin, sir, I would also like to recognize Ellen Graham from Senator Blumenthal's office. Thank you.

MR. NEILSON: My name is Keith Neilson. I work professionally in this area by doing permitting and design for waterfront development projects, including dredging. And I support the proposal as has been submitted.

For the foreseeable future, we will have to continue to dredge. And we can do so in accordance with the best management practices of the industry. As our best option today, the DMMP and DEIS, in my opinion, are thorough and present sound scientific basis. They are based on extensive studies.

This is a regional program. It's an important tool of a broad section of our economy, both people who live here and utilize the waterfront and those who depend upon it for their livelihood. We can do this with substantial working together with public and government participation to minimize conflicts.

I realize this will be a transitional undertaking. It will change in the future, and we have to be ready for it, and we have to be willing

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to work together toward mutually beneficial goals.
The broad consideration of alternatives will be important. The controls on dredging that we have seen in the last few years are going to have to continue and can be done in accordance with the program guidelines that we have watched.
The monitoring of the disposal sites will be important, and it will bear out the science that has been used as the basis for this program. The continuing evaluation of alternatives is already being realized in many of the dredging projects that we have to undertake, and the consequences of such, in some cases, we do use upland disposal. But for many of the sediments that are so fine grained we will have to continue to use open-water.
I have confidence in the findings of this report, and I support it wholeheartedly. And they will work to make the program better as it progresses in the future.
Thank you.
MS. BROCHI: Thank you.
Up front.
MS. SCHIEFERDECKER: My name is Dawn Schieferdecker. I'm a business owner and also the

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chairman of the Marine Trades Association.
Respectfully, two of the speakers ahead of me both took ten minutes, so I'm going to speak what I have prepared and provide further detail electronically.
Thank you for the opportunity to comment on the Environmental Protection Agency's proposed Rule 81FR 24748. I support the proposed rule and its basis as found in the U.S. Army Corps of Engineers' Dredged Material Management Plan and the draft Supplemental Environmental Impact Statement for Long Island Sound.
Dredging is critical to ensure public access and commerce. And my business is one of many that depend on safe, reliable navigation in order to survive. The membership of the Connecticut Marine Trades Association has a vested interest in preserving access to these placement sites in order to provide economically viable dredge solutions.
We need, need, the Eastern Long Island Sound disposal site to be open and operational in conjunction with Niantic Bay and Cornfield Shoals' disposal sites as corresponding options, options, for the best planning and decision-making possible

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for the regional dredge team.
I have been to many of these types of hearings over the years, and they are oftentimes filled with emotion. And to some extent I can understand that. It's an emotional topic. Let me share the emotion that's a little less -- (phonetic.)
Waterfront property owners and their water-dependent businesses have very, possibly, the highest level of interest in keeping the waters of our state and in Long Island Sound in the best condition possible. They pour their blood, sweat, and tears by working long, hard hours in order to provide the best possible public access to those resources.
Who would want to recreate and spend time in a grossly decaying environment? In 1980 the state of Connecticut recognized this and enacted the Coastal Management Act. This was a codification that included, among other things, the determination that the highest and best use of waterfront property is a water-dependent use and also included a commitment from the state to protect those water-dependent uses while also protecting our environment.

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The state of New York has nearly identical language in its coastal management program. And both programs are consistent with the Federal Coastal Zone Management Act of 1972. Here is -- (phonetic.) The property owners are not legally able to sell to whoever they want to, because their water-dependent use needs to be maintained.
For example, there's no option of selling a marina to a condo builder. If there were, public access would be put in severe jeopardy. Without the ability to dredge and relocate that material in a planned way that is both economically and environmentally sensible, the property loses value, because it loses its water dependancy.
So here we are. Property owners have been legislatively guaranteed protection by maintaining a water-dependent use. However, the regulatory part of government is receiving pushback after its through development, management, and continued research to attain that balance.
Our industry welcomes an alternative to open-water disposal. Contrary to what some may

believe, it is a multi-year process, involving many layers of professional design, sampling, permits, and contractors that is lengthy, expensive and full of challenges. Not cheap and not easy.

After seeing the presentation prior to public comment, it makes it a lot easier to understand why we have to jump through all those hoops. This science is coming along, but it's not quite there yet. I'm frightened to think how the negative impact to jobs in the economy if we cannot maintain appropriate open-water disposal while the technology moves forward.

Between Connecticut and the Long Island Sound region of New York, just the recreational boating industry alone generates nearly 12 billion dollars and over 13 thousand jobs, with Connecticut leading the way. Consider the impact of laying off skilled workers who will need to relocate outside of Connecticut and New York to find gainful employment. And that only includes one sector of the working waterfront region.

The present issue of the time seems to come down to a common theme: Balance. That can be emotion versus reason. It could be rumors

versus science. Today the science that is proposed is based upon and clearly indicates open-water disposal to be the most cost-effective and environmentally compatible method of placement without adversely affecting Long Island Sound through the majority of dredged material.

They never said it was all dredged material. They said it was the majority. With continued diligence of testing, monitoring, and innovative alternate solutions, I believe the open-water location sites offer an acceptable balance to not only maintain Long Island Sound as the treasure that we know and love, but also work to make it better.

Thank you.

MS. BROCHI: Thank you. Okay. Anybody else?

MS. FUERY: My name is Erica Fuery. I'm an environmental scientist with Cardno. I've been working on dredged material management and dredging projects here in the area for 15 years. I do support the designation of these sites, as they are a necessary means to dispose of clean dredged material. However, I believe the state of Connecticut has not reached its full potential in

terms of beneficial reuse. There's a lot of talk about wanting to implement that more often. However, here, especially in the Eastern Long Island Sound region, we are severely hindered by a lack of shore side facilities with which to dewater the dredged material and prepare the transport to upland disposal sites.

Unfortunately, the cost of real estate in this area, maybe it's not feasible. Also this material, once it hits the air, there's a lot incompatible uses when it comes to locating these facilities. But I believe that should be looked at if beneficial reuse in this area is fully realized.

MS. BROCHI: Thank you.

MR. HEWSON: Good afternoon. I'm Danny Hewson. And I'm one of the vice presidents in Mystic Seaport. And just a little bit of background about the museum. We have -- it's about a 17-acre site on the water side of Route 27. And we have over 2,200 linear feet of bulkheads and waterfront structures. And we have about 275,000 visitors a year to the museum.

Out of all of that, we have over $300,000 of direct income that's directly

attributable to access by boats, large and small, to the museum. And I think it's important to remember that within the last year or so the Mystic River Channel was dredged to its historic approved amount of 12 feet above the Route 1 Bridge. And we have several berths within the museum and vessels that we own that require drafts of more than 12 feet.

For us to be able to operate our ship lift requires a draft in excess of 12 feet. So it's important that at least we get access to the channel from those deep sites that also need to be dredged again. They have been dredged in the past. But we're not likely talking about any original dredged material. It's material that's come in since I've been working at the museum for the last 30 or 40 years.

We also have a large transient boat business that is dependent on access to our docks and our waterfront. And I would just like to end by saying it is vitally important that there's an acceptable way for us to be able to dispose of dredged material. And it's very important for the economic development in our area.

Thank you.

MS. BROCHI: Thank you.

Any more? One more. Would anybody else like to speak?

Okay. I'm going to introduce Mel Cote to officially close up the meeting. I thank you all.

MR. COTE: And I want to thank Keith again. I want to thank everybody here who attended and took the time to listen, about listening to the process and listen to what our preferred alternative is, what our plans are for the future.

And I want to thank the University of Connecticut for hosting. I also want to welcome anybody else who wants to go through it one more time at 5:00 this afternoon. We'll still be here. Thank you very much. The hearing is adjourned.

(The hearing adjourned at 3:06 p.m.)

CERTIFICATE OF REPORTER

I, Margaret R. Golden, a Registered Professional Reporter/Notary Public within and for the State of Connecticut, do hereby certify that the foregoing proceedings were heard by me on May 26, 2016, and thereafter transcribed by me to the best of my ability.

I further certify that I am neither counsel for, related to, nor employed by any of the parties to the action in which this hearing is taken; and further, that I am not a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of the action.

WITNESS my hand and affixed my seal this 18th day of June, 2016.

Margaret R. Golden

Margaret R. Golden, RPR

My commission expires: October 31, 2018

Attachment 7

TRANSCRIPT OF PUBLIC HEARING, GROTON, CONNECTICUT MAY 26, 2016 (5:00PM)

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Eastern Long Island Sound
Supplemental Environmental Impact Statement

HELD AT: University of Connecticut
Avery Point
1084 Shennecossett Road
Groton, Connecticut
Academic Building

DATE: May 26, 2016
TIME: 5:00 p.m. to 7:00 p.m.

REPORTER: Margaret R. Golden, RPR

APPEARANCES:

Bernward Hay
Project Manager
Louis Berger
Mel Cote
Chief, Surface Water Branch, EPA Region 1

Steve Wolf
Environmental Resources Section
US Army Corps of Engineers
New England District
Jean Brochi
Project Manager
Ocean and Coastal Protection Unit
EPA Region 1

(The hearing commenced at 5:06 p.m.)

MR. HAY: Okay. We'll get started. It's six minutes after 5:00, so we're a few minutes late. So welcome to this public meeting this afternoon. Before we start, a couple of housekeeping measures. One is, the restroom is up the stairs in the corridor, to your right. And secondly, please turn off your cell phone, if you would.

This hearing -- my name is Bernward Hay. I'm with the Louis Berger group. I'm an environmental scientist. This hearing is held to solicit comments on the draft rulemaking to designate the Eastern Long Island Sound Dredged Material Disposal Site and the draft of the Supplemental Environmental Impact Statement, abbreviated, SEIS.

The action is designed to serve the Eastern Long Island Sound region of Connecticut and New York. The lead federal agency is the U.S. Environmental Protection Agency. The EPA is requesting comments from the public on the draft SEIS.

This document is publicly available on the EPA Region 1 website. In addition to the

public meeting, there were also public meetings yesterday; two meetings in New York, and there was an earlier one today, here, in the same facility. We thank the University of Connecticut for making this facility available.

The comment period for this ends on June 27, 2016. You can see the website for information. The EPA and other agencies will present information about the project for the next hour. After the presentations, the floor will be open for comments until 7:00 p.m. If you wish to speak, we ask you to sign in at the registration desk, if you haven't already. When registering to speak, please provide your contact information and any affiliation.

Speakers will be heard in the order in which they are registered to speak, with elected officials and government representatives speaking first. We ask that you limit your comments to five minutes so that others can speak, although I think it probably won't be a problem.

If you have extended comments, you may want to summarize them in a verbal statement and submit your comments in writing at the registration desk, which will make them a part of

the public record. Please note that the focus of this hearing is to receive verbal comments on the draft SEIS, the presentations this afternoon, and the regulatory process.

This public hearing is being recorded by a stenographer and an audio recording device. The transcript of the hearing will be entered into the public record and posted on the EPA's website.

We will now move to the presentations. Please note that also the presentations will be made available on the website, and you can look at it at a later stage. The agency representatives that will be presenting here today will be Mel Cote from the Surface Water Branch, the EPA's chief of that branch; Jean Brochi, who is the project manager from the Ocean and Coastal Protection Unit and EPA Region 1, and Steve Wolf from the Corps of Engineers for the New England District.

With that, let's welcome, please, Mr. Cote to the meeting.

MR. COTE: Great. Thanks, Bernward, and good evening, everyone, all of you.

Thank you for coming to this public hearing. And we really appreciate you coming to

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learn more about the process and provide comments on the proposed move to the designated Eastern Long Island Sound Dredged Material Disposal Site and the draft Supplemental Environmental Impact Statement that supports our proposal.

As Bernward mentioned, my name is Mel Cote. The Surface Water Branch, for those who care, administers the ocean and coastal programs for the six New England states, I should say five and then other programs. So the branch of these two sections, the ocean and coastal is an (inaudible) source. Before that I managed the ocean and coastal programs for 13 years, and prior to that, I spent nine years as the Region 1 Program Manager for the Long Island Sound Study. So I'm pretty familiar with Long Island Sound's watershed and the various issues associated with it.

I'm sure many of you know that EPA and the Army Corps of Engineers co-regulate dredging and dredged material disposal under federal authorities by Section 404 of the Clean Water Act and under Sections 102 and 103 of the Marine Protection Research and Sanctuaries Act, also known as the Ocean Dumping Act.

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In administering these programs, we also work closely with other federal resource management agencies like the National Marine Fisheries Service and with state environmental coastal zone management agencies to ensure proper coordination and consistency with statutory and regulatory requirements and environmental standards. Since 1980, EPA and the Corps have been applying sediment testing requirements of the Ocean Dumping Act to all federal dredging projects and private projects generating more than 25,000 yards.

Dredged material that meets these criteria and is determined to be suitable for ocean disposal may be disposed of at one of the four sites in Long Island Sound, known as the Western Long Island Sound, Central and Long Island Sound, Cornfield Shoals, and New London disposal sites.

The Western and Central Long Island Sound sites were designated by EPA in 2005 and, as you probably know, we proposed amendments to that site designation rule on February 10th that removed some of the original conditions, like the Corps completing a Long Island Sound Dredged Material Management Plan, and places new conditions that are intended to reduce or eliminate open-water disposal of dredged material in Long Island Sound.

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The Cornfield Shoals and New London sites were evaluated and selected as disposal sites pursuant to programmatic and site-specific environmental impact statements that were prepared by the Corps most recently in 1991. In 1992, Congress decided any new provisions of the Ocean Dumping Act for the first time that established time limits on the availability of Corps' selected sites for disposal activity.

Use of the selected site can be extended; however, the site is designated by EPA for long-term use. So the statutory construct is that the Corps can select disposal sites for only short-term limited use, whereas Congress authorized the EPA to undertake long-term site designation, subject to ongoing monitoring requirements, to ensure the sites remain environmentally sound.

To summarize, the EPA's responsibilities related to dredging and dredged material disposal include designating disposal sites for long-term use, promulgating regulations and criteria for disposal site selection, and permitting discharges, reviewing Corps' dredging projects and permits, developing site monitoring and management plans for designated sites, and monitoring disposal sites jointly with the Corps.

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I'm going to provide some background on how the proposed designation of an eastern disposal site relates to the Central and Western Long Island Sound sites.

The process began in 1998 when the EPA and Corps agreed to conduct a formal site designation process for all the Long Island Sound disposal sites following the criteria established in the Ocean Dumping Act. We also agreed that the system with the past practice of designating disposal sites would follow the EPA statement of policy for voluntary preparation of National Environmental Policy Act, or NEPA, documents and would prepare an Environmental Impact Statement, or EIS, to evaluate different dredged material and placement options.

In June 1999, we filed a Notice of Intent in the Federal Register announcing our plans to prepare with the Corps and other federal

and state agencies an Environmental Impact Statement, EIS rather, to evaluate and potentially designate dredged material disposal sites for the entire Long Island Sound region.

We began the Sound-wide field data collection effort in 1999 but were slowed by both the technical complexities and the financial constraints associated with the large scale, multiple site project. In March 2002, the Central Long Island Sound disposal site scheduled to close in February of 2004. That's when the site selections expired.

EPA and the Corps announced their intent to develop the EIS in two stages, Western and Central Long Island Sound first, followed by the Eastern Sound once the site or sites had been designated to serve the Western and Central regions. As it turns out, and as probably most of us know, the designation of the Central and Western Long Island Sound disposal sites was contested by the state of New York, which led to the inclusion of conditions that would need to be met in order for the sites to remain open for the long term.

The most significant of these

conditions was the completion of the Long Island Sound DMMP by the Corps. So all the human financial resources that would have gone into moving forward on the site designation process for the Eastern Long Island Sound was focused on completing the DMMP.

Some of the initial studies that were conducted for the DMMP, including the Dredging Needs Survey completed in 2009 and updated last year, and the Analysis of Placement Alternatives, completed in 2012, formed the basis for the EPA's determination that there was, in fact, a need for at least one disposal site to serve the Eastern Long Island Sound region. Upon making that determination, the EPA began the process for preparing the SEIS.

So, at this time, I'm going to turn it over to Jean Brochi, our project manager for the SEIS.

MS. BROCHI: Thank you, Mel. I would like to take a moment to acknowledge Max Goldman from Senator Murphy's office.

So again, this meeting or this hearing is to accept comments on the Supplemental Environmental Impact Statement and the rule making

for Eastern Long Island Sound. As Mel had mentioned, the Marine Protection Research and Sanctuaries Act, Section 102, authorizes the EPA to designate sites for long-term use. EPA also is involved in reviewing permits, Army Corps of Engineers' permits, under the Clean Water Act and MPRSA.

So I'm going to cover the approach, and then Bernward is going to go into details on the study itself. So the approach was that EPA went out, in 2012, with the Notice of Intent that we were going to start this process. We had public participation meetings throughout the process, and those meetings were informational meetings where we would gather -- presenting information and gathering comments. We looked at alternatives to open-water disposal. We used site screening, which we'll get into in a minute. And that's how we evaluate disposal sites.

We narrowed it down from 11 sites, originally, to three alternative sites. And now we're proposing the one site, Eastern. That is the preferred alternative. As Mel had said, there are four sites available currently. Cornfield Shoals and New London site expire in December

23rd, 2016.

So, again, it was October 16, 2012 when we did the Notice of Intent. We've had, in addition to the public meetings, there were six public meetings. We had a meeting here and yesterday. We've had two hearings. In addition to that, we've had cooperating agency meetings. And a cooperating agency includes representatives from New York, Connecticut, other federal agencies. We met throughout the process.

In addition to that, the EPA issued a draft rulemaking on April 27th, 2016. EPA also revised the website and all of the documentation, including the 3,300 page SEIS, ten appendices are all uploaded to our website. So I encourage you to look at those.

We also have an e-mail notification system. You may have noticed, when you registered, it asks you if you wanted e-mail. We'll add you to the e-mail mailing list if you checked that off. We also have a mailbox to accept comments, it's elis@epa.gov.

So the first step in the process was to create a site of -- a zone of site feasibility to cover the eastern region. And what you can see,

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the black lines are that area. And then you can see disposal sites. This is Western, this is Central, Cornfield and then New London. This green box represents the eastern site that we're proposing. And this is not to scale.

So part of the site screening criteria, again, is from the Marine Protection and Ocean Sanctuaries Act, it's 40 CFR, Part 228, and there are five general and 11 specific criteria that we use when we are creating our Environmental Impact Statement.

What I show you here is the original 11 sites that were then scaled down because they did not meet the criteria down to three preferred sites and, ultimately, down to the one preferred alternative.

Some of the things we consider are sedimentary environments. So currents and physical conditions. We look at biological resources, shellfish beds, fishery, habitat, recreational use, conflicting uses, commercial, navigation, are there pipes, are there cables, all those things we consider. And we evaluate and screen out sites based on those conditions.

As Mel mentioned, the report from the

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Army Corps of Engineers came out in 2009 and was updated in 2015. That was a 30-year projected estimate of what the needs in the region would be. For that, the estimate is 22.6 million cubic yards for the eastern portion of the Sound and 53 for Long Island Sound; so total, 53 million cubic yards.

The capacity available between alternatives and open-water sites is not enough to meet that need. In addition, we take into consideration environmental review, haul distance, and just from the Connecticut River dredging center, which is the largest dredging center here, to New London it's 12 miles, nautical miles. And then to Central Long Island Sound it's twice that.

One of the things with a designated site is that we have -- we establish a site management and monitoring plan. And we monitor the sites in conjunction with the Army Corps of Engineers. That plan is updated every ten years. Army Corps of Engineers and EPA meet annually. As part of that revision, we will meet with other state and regulatory agencies to discuss the management and monitoring. And we look at, have there been biological changes, are there any

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physical changes.

As Mel had mentioned, there are site restrictions. So with the EPA designated site, we can restrict the site use. In this case, Mel went through them, but we have representatives from Connecticut, Rhode Island, and New York who will serve on our regional team to ensure alternatives are used and to discuss the dredging projects. We also are going from four sites that currently exist to three. So there's a site reduction.

Bernward Hay now is going to discuss the sample studies. Thank you.

MR. HAY: Thanks, Jeannie. So after the screening process, we were left with three alternative sites that we'll talk about in more detail. That's the New London site, Niantic Bay site, and the Cornfield Shoals site. The New London site consists of the active disposal site with an extended area. The Cornfield Shoals consists of the existing Cornfield Shoals site, and the Niantic Bay site consists of the historic Niantic Bay disposal site and an extension of the area. The colors shown on this graph represents water depths, with brown being shallow waters and blue being the deepest part of the water. So if

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you were to pick a point here, Plum Island will be here, Orient Point.

So for this analysis we did a number of studies. We did four or five studies, both for the site screening as well as the analysis of the three sites. And I should acknowledge here, the document was prepared by the University of Connecticut as a prime contractor. Louis Berger, my company was a subcontractor. And the study was financed by the Connecticut Department of Transportation.

So the five studies consist of the physical ocean graphics, sorry, physical oceanography study, the side-scan sonar survey, the biological characterization, sediment chemistry survey, and the sediment profile survey. I'll talk about those a little bit more in detail.

The physical oceanography survey and study deals with the dynamic in the ocean, waves, currents, tidal forces, et cetera, and tries to determine, as one of the key items, the fate of the dredged material. Where does the material go once it's disposed and also when is it disposed. And for that study, a one-year monitoring program was taking place.

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All these different stations, as you see here, is equipment on the sea floor as well as shipboard surveys that had an extensive amount of equipment, which you can see here. For example, this was an instrumentation frame that was lowered multiple times over this one-year study in all these different locations and incorporated additional data from Connecticut DEEP as well as buoy stations it has for meteorological data. So all this data was put together into a model, and a number of different products were produced.

What are the currents, what current directions occur at different times of the year at different times of the tidal cycle, as well as this image here that shows bottom stress. It's an important image, and it shows maximum bottom stress based upon data collected over approximately a year.

The bottom incorporates the maximum conditions that occur, for example, Hurricane Sandy, which was a pretty extreme event. So what you see basically in light colors is the bottom stress. Bottom stress is basically the force that acts on the particles and result in resuspension, depending on the forces. If the force is light,

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you don't get resuspension; if the force is heavy, you do.

So relatively low bottom stress exists north of this magenta line here, and relatively high bottom stress exists south of the magenta line. So we call this area as containment. The material in this area is contained under those kinds of conditions. We notice that the New London site is within this blue zone, whereas this zone here, forces are such that material is dispersed, because sites located in zone -- dispersive sites, you notice that the Niantic Bay site has both conditions of containment as well as conditions of dispersion.

The Cornfield Shoals site is located entirely in a dispersive area, the material there moves. The side-scan sonar survey basically consists of an image of the sea floor and allows us to tell us what kind of features exist. Those features allow us to tell things like currents, current directions, current strength.

Here you see, for example, a dune, a steeper face on this side, and a shallow face on this side. Even though the current moves in both directions in this area, the net flow is towards

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the west. So that's the sample image from the Cornfield Shoals site, which I mentioned is a dispersive site for material.

By comparison, if you look at the New London site, you don't see those kinds of sedimentary features indicating that material actually is not mobilized. It is consistent with what you learned on the physical oceanography study through the bottom stress calibrations. The sediment chemistry investigation was -- consisted of taking samples at about 40 different stations. Some samples were collected with a grab sampler.

This is an example of what a sample looks like. This is an example of the New London site, but samples were also taken at other locations. These samples were then analyzed for metals, organic compounds, PCBs, pesticides and other organics, as well as grain size and metals. We also did a biological characterization of the area.

Notice the sampling stations here. The investigations checked the health of organisms living on the sea floor. And there was a trawl survey done by the Connecticut DEEP Long Island Sound Trawl Survey Program looking at fish

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diversity in the area, both on site or near site to prepare the data.

Finally, the fifth study was a sediment profile survey that looked at the diversity of the benthic community from a different perspective. What you see here is a water column, sediment surface, then a slice of the sediment. You can tell by -- here, for example, the position of organisms. You can tell how healthy the sediment is. It's a program that is used commonly by DAMOS, by the monitoring program of the Corps of Engineers. And Steve Wolf will talk about this.

So all of this put together, let's have a quick overview of the three sites then summarize the existing conditions. This is the New London site. The features here are the existing dredged material disposal site. Notice the uneven surface there, indicative of the dredged material disposal mounds. That's still there after all these years of disposal. You see all of this here, this area, and some on this corner. There's a shipwreck located right in this corner here that's not shown in this graph. Water depth is about 45 to 80 feet. The size of the entire box is two and a half miles by one nautical mile.

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Niantic Bay, this is the historic Niantic Bay disposal site. The extended area here was added to accommodate an area here that is a containment area. There's not much happening here. It's mostly sand, fairly flat. Some sedimentary features indicating sediment transport, consistent with its dispersive nature. You see bedrock here and a boulder area here.

Finally, the Cornfield Shoals site. It's 150 feet to 190 feet deep, fairly flat. You don't see any features, features that we saw earlier at the New London site like the disposal mounds. Again, this is consistent with the fact that it's a dispersive site. Down here you see some sand waves, again, indicative of the tidal forces at play in this part of the Sound.

So let's just summarize quickly. And this slide really doesn't do justice to the stuff in here, which is like 440 pages, and the other 2,500 pages which have data, facts, and information, results. So I encourage you to take a look at this, as Jean mentioned already, to really get the details.

But if you want to summarize in one slide, this will be the slide. With regards to

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the sedimentary environment, it's mostly sand at all three sites. In New London it's finer grained. But the primary grain size is sand. The bottom stress is lowest in New London and highest in Cornfield Shoals, as you've seen.

Contaminants that we measured are either very low or not detected. From the point of view of biological resources, there are no shellfish beds, because the water is too deep. There's low abundance of fish, so as a result, there is no unusual recreational or commercial fishing in the area.

With regards to fish habitat, it's similar to other parts of Long Island Sound, specifically Eastern Long Island Sound. So it's not unique in that sense in all three sites. With regards to the socioeconomic and cultural resources, there are no cables. There are no pipelines. The sites don't interfere with navigation. They are deep enough.

There are no anchoring areas. There are no conservation areas. And the only cultural and archeological resource located was at the New London site in the form of a shipwreck in the south portion.

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In terms of environmental consequences, and again, it's just one slide. There's a lot of information in here about that. The main difference with regard to the sedimentary environment is that sediment would not move in New London and would move in Cornfield Shoals because it's a dispersive site. Niantic Bay is both a dispersive area as well as a containment area.

With regards to the benthic community, organisms on the sea floor, there would be short-term impacts when you dispose of the material. Benthic organisms would be covered up in a very small footprint, as you will see in Steve's presentation. But the monitoring has shown there is rapid recolonization of dredged materials that is disposed at the bottom.

With with regards to fish habitat, the impacts, in essence, are minimal. Same applies to the mammals, endangered species, and reptiles, also the potential impacts are minimal. Fish and mammals, impacts are minimal.

In terms of bioaccumulation, dredged materials are required to undergo stringent testing before disposal. And Steve is going to talk more about that.

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And to summarize, socioeconomic and cultural resource impacts, we mentioned earlier there's low abundance in terms of fish and the impact to commercial fishing, recreational fishing would be minimal. Commercial shipping and navigation impacts, because it's deep enough, there would be no impacts. And the site will be managed for disposal to avoid hazards to ships at that time. Beaches are far enough away to not be impacted, there are no parks or natural resource areas, and aside from the shipwreck in New London, which would be managed with a buffer zone.

So in summary, looking at all this information that we accumulated, looking at all the pros and cons, the preferred alternative that was chosen was a subset of the New London alternative site. The subset is called the Eastern Long Island Sound Disposal Site, which is this blue box here.

The eastern part of the existing site was removed, because much of the area here is already filled with dredged material. So there's no need to add this to the area, so that it doesn't need to be managed.

As I mentioned, here is the boulder

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field that would be excluded from disposal. Similarly, the shipwreck area would be also removed through a buffer zone. So again, the key points here, sediment is contained in this area. This area was previously -- is previously used for dredging material disposal, which is one of the criteria under MPRSA.

Sediment, the environmental consequences are minimal or minor, or there are no consequences. Shipwreck and boulder areas are excluded, and the close proximity to the larger dredging centers in the Eastern Long Island Sound region.

So with that, I would like to hand it off to Steve Wolf, you're up, who will be talking about the monitoring program.

MR. WOLF: First, I would like to acknowledge Congressman Courtney who has joined us here.

I'm going to pick up where Bernward left off. I'm from the Army Corps of Engineers. And the hat that I wear is, after the site has been designated, then what sort of monitoring, testing do we do to ensure that only suitable material goes out there and that we don't have any

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unwanted environmental impacts.

I'll start with a quick video, just to make sure we're on on the same page, we are talking about placement. This is about 3,000 yards of dredged material in a scow that is being released over a dredged material disposal site. When it's in position, the scow splits along the center line, and the material falls out in just ten to 15 seconds. It's basically all gone.

So it's a relatively quick process. The scow goes back in and gets loaded up again. But we understand that it raises questions, and that's probably why some of you are here today in terms of did we get it in the right place, does it stay there, what about impacts to the water quality and the benthic system.

And I'll try to address it with some of the monitoring that we've done. But just dialing back the clock a little bit, to give you an idea how we get to where we are today, here we look at the 1800s. There wasn't a lot of thought to dredged material placement. It was just, Get it outside my berth, and maybe just outside of that, and let it be someone else's problem.

As we moved into the 1900s, we can see

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now dredged material was starting to move outside of the berth, the port areas, but generally, not very far out. If you look historically, you can probably see remnants of dredged material placements all along the New England coast, really just outside the harbors themselves.

It wasn't until we get to probably the early to mid 1900s where now you start seeing specified sites. Each one of those lighter green boxes on there is a site that might show up on a historical NOAA chart, or before NOAA, just one of the nautical charts, or may show up in town or state records as terms of a specified location to take the material. So a little bit more organized at that point, but no real controls in terms of what type of material, testing of the material, to go out there.

It really wasn't until we get to the 1970s, various regulations that were mentioned previously, that we start to see much more specifics about how you determine, specify a site, where you take dredged material and what sort of material actually goes out there. And those same regulations gave rise to the program that I work with today, the DAMOS, or Disposal Area Monitoring

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System program, which really was designed to answer -- address those specific questions that I noted in the beginning.

So DAMOS has now almost a 40-year record of visiting these sites all up and down New England. We have a host of reports, a whole lot of data, and all that's publicly available on our website. Again, that has allowed us to try to answer those specific questions.

Before we go through those individually, just a note about testing. There's been a lot of misinformation both with the siting of the Western and Central disposal sites recently, as well as some with this site itself about the placement of toxic material and the Sound. And I want to note that given the specifications from the EPA and the states, there's no toxic material which is being disposed in the Sound. It may have happened historically, and certainly did here in New England. It happened nationally, and it happened internationally. But with the regulations in place now and where we are in the environmental spectrum, that doesn't happen at this point.

We know that because we require very

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specific detailed testing for anyone in the private projects all the way through a very large federal project, we're required to do various tiers of testing, physical testing, to determine is it sand, is it silt. Chemical testing to determine the various concentrations of material there, as well as biological testing.

You can see in the center an aquarium. So you take the sediment from the area that's going to be dredged, put it in the aquarium with some of the same critters that are here in the Long Island Sound, and we look to see what sort of effects do they have on those. As we look at a specific chemical, like arsenic, we know it has naturally a range from very low to very high in the background on -- both historically as well as today, because it's a naturally occurring element.

But what we are really interested in is, is that concentration toxic? Is it acutely toxic; that is, is it at a high enough level to actually be lethal to an organism or is it chronically toxic such that an organism doesn't thrive? Maybe it doesn't grow well. Maybe it doesn't reproduce well.

And those are the sorts of triggers

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that we say, if that's the case, then this material is unsuitable for placement in an open-water environment. We don't want any contact with critters or the open-water. Same for other chemicals like PCBs.

So we go through this sort of exercise with every chemical that we know is of concern here and look at that spectrum in terms of is there some toxicity issue associated with it. So if a material has gone through this testing and it's determined to be acceptable, then it can go offshore, if we can't find a beneficial use for it. And we do a lot of things to track it and determine if there's any issues associated with it as we're placing it.

In terms of figuring out where it goes, each scow is outfitted with a lot of sensors that allow us to determine where it is, is the scow open, what's the draft of the water column, and to store and transmit all that data. So when we have a load of material, such as the one shown here, we get a record.

And here's an example from dredging in New Haven Harbor. We see a trail of breadcrumbs where that scow went out on its way out to the

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Central Long Island Sound disposal site and see a change in color when the draft changes. So we know exactly where the material came out of that scow. Then we see its trimmed back into the harbor. This allows a tug operator, who may be way in advance of the scow itself, because of its tow, to know exactly where it is.

He is looking at a computer screen. It's just like a video game. He knows the spot and can engage the hydraulics remotely and drop that material. We get really accurate placement.

And we also know that that material at these sites, as Bernward had mentioned, that our depositional sites, containment sites, they have low bottom stress. We know the material stays there. This is a Central Long Island Sound disposal site, about a one by two mile square. And each one of these lumps on here, this is a bathymetry map at the bottom, each one of those is roughly a football field, couple football fields sized area where we've mounded dredged material over the course of one project, or maybe a couple of dredged seasons, because we really want to contain it for a given year. We want to know where that material came from, and we want to

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isolate sort of how much of the bottom we're covering.

And that allows us to better manage the site and get the most amount of storage out of it, as well as limiting the impacts. It also allows us to compare one year to the next and determine is this material actually stable on the sea floor. So you'll see some of these have numbers on them associated with the year, and some go back to the 70s. So some of these mounds have been not only through Hurricane Gloria and a number of nor'easters, as well as Hurricane Sandy, so some major storm events. And we can see that they change literally within an inch or two. So the material is very stable once it's on the sea floor.

In terms of concerns about release to the water column, this is sort of the classic conceptual picture, is what I would have in my mind when I first started on this, about what a release looked like. You often picture a scow or a ship up here far at the surface and a long way from the water column for this material to fall, the potential for it to be stripped out. But in reality, some scenario like this is really deep

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water that might be similar to something we would see on the west coast of the United States.

If we look for various kinds of scale to look for Long Island Sound, we have a typical scow, which is about 300 feet long. If it's fully loaded, about 20 feet of it is under water. And if we look how far is it down to the sea floor, typically for the sites we're looking at, it's only 40 to 80 feet.

So again, this is a scaled drawing, it's a very short distance. What we see is that material hits the bottom, we predict it hits the bottom very soon after, a very limited potential for release to the water column.

And that's supported by lab studies. Some poor graduate student from MIT spent a couple years of his life dropping beads into about a 15-foot tank and tracking sort of how they fall and how things spread out over time. For the depths that you see in Long Island Sound, we're right about here. So that material is really yanking in and falling very discretely to the bottom. And it isn't until you get into much deeper water where you start to see things that are spreading out.

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And that tells us, again, very limited potential for release to the water column. But we've done further studies to try to confirm that with actual measurements. So we have instrumentation, which is akin to a very, very sensitive fish finder, so we can see very, very tiny particles in the water column.

So after a disposal event, after this scow releases this load, we run a transect right across here. It takes a minute or two and we paint a picture like the one here you see here. You see where the high concentrations of sediment might be in the water column. And that allows us to go back to collect the sample and confirm, or do we have an issue or impact associated with the water column. And that hasn't been the case.

And then finally, what about the benthic community. Bernward mentioned that somewhat, and clearly there's an impact. You drop a load of several thousand yards of material, anything directly in that footprint is going to get covered up.

So the organisms can come up, if it's a fairly thin layer. But thicker layers, they are covered up. But what we see is, through a number

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of studies, we see in a very short period of time that area recovers. It's resilient. It's a natural feature of a benthic system like this. And this is why we avoid putting materials on hard bottoms.

We put it in a soft bottom environment. Once it's covered up, within a matter of days it starts to get recolonized by worms. And typically, within one or two seasons, we see it recovers back to the reference areas elsewhere in the Sound. So what -- our management of the sites really limits the area that we're impacting on a given year, and then we track to see the recovery of those over the subsequent years.

We've tried to put this into some context of scaling so that -- to give folks an idea, clearly, it's an impact, but we don't believe it's a significant impact. And one way to do that is to scale things.

So if we took the entire area of Long Island Sound and shrank it down to the size of a football field, and then said, in a relative sense, how much of that will be affected in a given year in terms of placing this dredged material? Does it come out to the ten-yard line,

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the 20-yard line? If we do the math and we zoom in, the area that we impact, like one of these disposal sites in a given year is about the size of a plate maybe, or a bucket lid.

We're very good at containing and making this footprint very small and then tracking the scene of recovery. So we see overall we're very comfortable that we're managing these things successfully and have a limited impact.

And I close with this. This is a slide I like to show for a couple reasons. This is the Connecticut River discharging a very large sediment load following Hurricane-Tropical Storm Irene back in 2011. We see a tremendous amount of sediment coming out of the harbor and into the Sound.

And I show that for you two reasons. One, this is why we need to continue to dredge. It's a natural process. The harbors are going to fill in, and we're going to have to do things with that material. We'll try to find beneficial uses for them.

But the other reason is that also to note that it's a natural process. The Long Island Sound recovered from this event, and this is far

more sediment than many years of dredged material disposal dispersed over a large area. This puts a context into the volume and placement of our sediment in the Sound.

So again, we believe that they are not significant impacts, but we're also cognitive of the fact that we should be thinking about how to beneficially use this material, as was mentioned previously. Sandy material is very easy to find in locations near shore or on beaches, but fine grain material, that's harder, but we're working at it.

We have a group of folks all up and down New England, called the New London Regional Dredge Team, made up of federal agencies as well as state agencies. We meet quarterly, four times a year. One of our standard agenda items is beneficial use. Who has done what with dredged material? Have you found a creative way? What did it cost? What were the headaches?

EPA is working on a database to allow us to track what all the states are doing so that, again, we're making use of lessons learned there and making as many good choices as we can for beneficial use.

And with that, I'll close. Note, I have some contact information here. And if folks are interested in any of the data that I've got, or have questions, please feel free to contact me.

MR. COTE: Thanks very much, Steve. Once again, my name is Mel Cote, chief of the Surface Water Branch, EPA Region 1 Office. I do want to acknowledge and thank Aundre, State Representative Aundre Bumgardner, for being here this evening.

So he mentioned I was the primary author of this proposed site designation rule. You heard a lot about the history of dredged material disposal sites in the Long Island Sound. You've heard about the Supplemental Environmental Impact Statement and dredged material management and monitoring, and my job is to get us focused back on the proposed rule.

As you heard earlier, in June 2005, the EPA published the final rule designating the Central and Western disposal sites. To address concerns raised by the state of New York and others, the site designations are subject to restrictions on their use. The least restrictions were intended to reduce or eliminate the disposal

of dredged material on Long Island Sound, and it included requirements for the Corps completing a Dredged Material Management Plan for all of the Long Island Sound, which they did this earlier this year, establishing an interagency Long Island Sound Regional Dredging Team to review alternatives analyses for federal and large private dredging projects in the development of the DMMP and EPA rulemaking.

And upon completion of the DMMP, the EPA was prepared to finalize the amendments of the 2005 rule, describing standards and procedures that must be complied with in the future to support the goal of further reduction and elimination of open-water disposal.

These standards and procedures are to be consistent, at a minimum, consistent with the recommendations of the DMMP. Those recommendations included establishing standards and procedures for reviewing placement and disposal alternatives for all federal and large private dredging projects that support the goal of (inaudible).

Reducing disposal includes also federal based plans and alternatives for each federal

navigation project and harbors as further studies and the development of beneficial use and other nonfederal alternatives, continuing disposal site management and monitoring and further research on the effects of disposal.

On February 10th, the EPA took the first step in meeting its obligation by accomplishing the proposed amendments to the 2005 rule in the Federal Register for a 45-day public comment period that ended March 25th. The proposed rule includes standards and procedures to be followed for all federal and large nonfederal dredging projects that are intended to help reduce or eliminate disposal. The EPA received 119 individual sets of comments, the majority of which support the proposed action.

We are in the final stages of finalizing the rule, and we expect it to be published in the next couple weeks. Now, the reason this is important is because EPA intends to include the same restrictions on the use of the proposed eastern site that it has proposed for the Central and Western sites; namely, that there will be standards and procedures that will encourage the identification, development, and use of

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practicable alternatives to open-water disposal and require large dredging projects to thoroughly evaluate such alternatives.

So on April 27th we published the proposed rule in the Federal Register for a 60-day public comment period, which ends on June 27th. Here are the standards that are included in the proposed rule. And they largely echo the standards recommended in the Corps' DMMP.

First, unsuitable material shall not be disposed at the sites. That's an existing requirement. We've had that for many years. But I want to emphasize that. Sandy material should be used beneficially wherever practicable. Those materials have high value for uses such as beach nourishment or near shore berm or bar nourishment. And as long as it's -- it is a practical alternative, project proponents will need to identify and secure funding for any needed nonfederal cost sharing.

For fine-grained materials, and as we know, these are the most difficult to manage, proponents must thoroughly evaluate practicable alternatives and use them, if they are available, if this material is not particularly considered

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appropriate for beach or near shore nourishment. But in the future, uses such as marsh creation or restoration may become practicable, only if no other alternatives determined to be practicable be suitable for fine-grained material be placed at the designated sites.

The proposed rule expects that all levels of government will continue to exercise their existing authorities, reduce the flow of sediments and contaminants into waterways. The proposal doesn't create any new obligations but instead focuses attention on existing programs such as those to address storm water under our Clean Water Act authorities and nonpoint sources of pollution in coastal communities and along the tributaries of the Sound.

Finally, the proposed standards retain the 2005 restriction that requires the practicable alternatives must be used if they are available.

So now the procedures. Procedures in the proposed rule are built around making the interagency Long Island Sound Regional Dredging Team, or LIS RDT, a permanent body and enhancing its role. The RDT's goal is to reduce or eliminate open-water disposal wherever

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practicable. The RDT's primary purpose will be to ensure that all large dredging projects conduct a thorough analysis for alternatives to open-water disposal and make recommendations to the Corps on each project.

Of equal importance, the RDT will provide a forum for continued exploration of beneficial use alternatives, for promoting the use of these alternatives, and suggesting approaches for cost-sharing opportunities. This proactive role for the RDT is a new one.

The RDT also will be expected to assist EPA and the Corps with long-term activities intended to track disposal of dredged material and monitor the dredging impacts in the Sound. These include supporting the DAMOS program that Steve just described in his presentation.

The geographic scope of the Long Island Sound Regional Dredging Team will include all of Long Island Sound so that it looks at opportunities for alternatives broadly. The RDT will consist of representatives from federal and state government agencies or authorities with expertise in dredging or dredged material management.

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We expect that the team would include representatives from EPA's Region 1 and Region 2 offices, the New England and New York districts, and North Atlantic Division of the Corps and National Marine Fisheries Service. The EPA also expects the states of Connecticut, New York, and possibly Rhode Island will participate through their environmental agencies' coastal management programs and relative port authorities.

EPA proposes that specific details of structure and process of Long Island Sound RDT be left for them to determine and be allowed to evolve, as best accomplishes the RDT's purpose.

And finally, the EPA encourages the RDT to establish and maintain cooperative working relationships with other Long Island Sound based organizations such as the Long Island Sound Study's Science and Technical Advisory Committee.

One last point I would like to make before closing is that we made excellent progress toward meeting the goal of reducing or eliminating open-water disposal since the 2005 rule. While there is significant variability in the amount of dredging and therefore disposal from year to year, the most important results is the result that

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there is an overall 35 percent reduction in the amount of material disposed annually over the past nine years as compared with 22 years that preceded the 2005 rule. So we're making an effort, and we're going to continue that.

So I'm going conclude my presentation by reminding you of the opportunity to provide comments on EPA's proposed rule and the draft SEIS. In a few moments, you will have an opportunity to provide oral comments for the record, and you also can provide comments in writing through June 27th, 2016.

And I want to point out that we are interested both in your views on our preferred alternative, the ELDS, as well as the other two alternatives that we are not recommending at this time.

So I want to thank you very much for your attention and patience, and I want to open to public comment session and turn the proceedings over to Ms. Jean Brochi.

MS. BROCHI: Thank you, Mel. For the people who would like to comment, we ask that if you need a podium that you use that podium to read off of your written comments, that you address

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your comments to the official record. Again, the transcript will be uploaded on the EPA website.

Bernward is here with the microphone to walk around, and if Congressman Joe Courtney could speak, please.

CONGRESSMAN COURTNEY: Thank you, Bernward. And I have written remarks, and I'm going to enter for the record and summarize quickly, because I know we have other individuals that have waited patiently to add input.

I want to first say in the nine and a half years that I've been a member of Congress, this is an issue, as Mel alluded to, that really has been sort of moving along, both within the Congress but also at the state levels. And I know folks here from the state agencies who are very close to this as well as obviously the Army Corps of Engineers and EPA.

The regional offices, Colonel Barrett at the Army Corps and Curt Spalding at the regional office of the EPA in my opinion have been incredibly transparent and open to sharing information. And frankly, I think that is critically important in this process, which is that the public really have the ability to

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understand every step of the way, you know, what is being proposed and really sort of dispelling any sort of, you know, unfounded concerns that many people have about what this process is about.

I know there's stakeholders here during the process. Again, back in 2007, 2008, Senator Leland and I were able to get funding to have the DMMP move forward. We got a delay in terms of the site proposing. And in the meantime, we actually had to still assist in terms of different projects and concerns whether it was Westbrook or Clinton in terms of making sure that, again, the 9 billion dollars in economic activity that takes place on Long Island Sound again was not going to be hindered by just the fact that the government wasn't moving along in that process.

We sort of, you know, echo Mel's comment or validate the comment that really there has been very strong good faith efforts to look for alternative ways to dispose of material. The Clinton dredging project, that material was disposed of in Hammonasset Beach, and it came out terrific.

The folks in Madison in that area were extremely pleased with the high quality material

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and the fact that it really did improve Connecticut in terms of the state park system that's there. But again, at the end of the day, we have to stop sort of doing this just Band-Aids. We need to get a real clear horizon for a long period of time so that again, a lot of the stakeholders can move forward. The 30-year DMMP plan which was referred to earlier, again, I think is a product of a lot of hard work. I support it.

I think that all of the -- I call them reforms in terms of the regional disposal team approach and the, I think, built-in preference for updated disposal, you know, is really, I think shows a serious attempt to try and, again, shrink the scope of this program over time.

On the other hand, it still allows some measure of open space -- open-water disposal, which at the end of the day, it really is sort of a math equation in the fact that you just can't do it in terms of upland disposal in any way that's practicable. Congress is not going to fund the cost that -- you know, 100 percent of the disposal it would entail.

So again, I give both the EPA and Army Corps high marks in terms of their balancing act

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that they struck in terms of the DMMP and the Eastern Long Island Sound disposal site.

My only sort of encouragement would be that on that map that showed the Eastern Long Island Sound Disposal Site, maybe you've been -- moving it a little further west I think would be a positive amendment to the plan, and for two reasons.

Number one, I think it might reassure some of our friends to the south and that, you know, Connecticut is a responsible steward in terms of the will to monitor and manage this disposal system.

The other is that that perforated line that was on the map actually is part of the submarine transit corridor. And we're celebrating the 100th anniversary of the sub-base, sub-base New London located in Groton. It's kind of one of those historical things that's there. But, you know, Captain Whitescarver, his predecessor Captain Lahti, the fact of the matter is the dredging of the Thames River is existential in terms of that base being able to perform its mission. And we're not going to do a background this year, but look at anybody in this room who is

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from the region who understands that at some point there's going to be a recurrent approach by either future administration or Congress in terms of we might have sort of accumulated in terms of the branches of the military.

When the navy looked at the 2005 background, the confidence level, in terms of having a dredged plan that keeps that base operational, it's something that they were very much focused on. So in terms of really getting this across the finish line, there are a lot of commercial interests that are here that obviously care a lot about making sure we have a viable, functioning disposal plan.

But frankly, one of the most critical pillars of Southeastern Connecticut in terms of the sub-base, I mean, we have to get this done, again, in a measured, balanced, reasonable way that protects the quality of the waters and regions. Again, I think that a balance, maybe that slight little alteration EPA and Army Corps found that sweet spot with the proposal.

So with that, again, I'll yield back the floor, as they say in Washington. And thank you again for the opportunity to weigh in and

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support the great work that the team has done. Thank you very much.

MS. BROCHI: I would like to take a moment to also acknowledge that in addition to the Connecticut DOT, the Navy provided contractor support for one of the studies, and EPA also provided some funds.

So Aundre Bumgardner, I apologize. Would you like to speak?

MR. BUMGARDNER: Thank you for coming out to southeastern Connecticut. I know yesterday you were in Long Island. So I hope the trek over on the ferry wasn't too strenuous, but it's great to have you.

So I support the U.S. Environmental Protection Agency's Region 1 proposal, the proposed rulemaking, also supported by the U.S. Army Corps of Engineers in the state of Connecticut for the designated Eastern Long Island Sound site for the relocation of dredged material in an environmentally safe manner as set forth in the recently issued Dredged Material Management Plan and draft Supplemental Environmental Impact Statement for Long Island Sound.

I understand that additional safeguards

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have been incorporated, as recommended in the final Long Island Sound Dredged Material Management Plan, released by the U.S. Army Corps of Engineers on January 11 of this year.

The DMMP and SEIS determined that open-water relocation of dredged materials is an environmentally sound and judicious option that should be used when appropriate. Without this designation, the extensive array of marine industries in the eastern segment of Long Island Sound would be greatly jeopardized.

So collectively, the Connecticut marine industry generates over 7 million in revenue and over 7,000 jobs. So clearly, it's incredibly important, not just to the state's economy, but southeast Connecticut's economy.

My district, which encompasses the southern half of Groton, so the city of Groton to Mystic and the southern portion of New England, its marinas, boatyards and clubs--I think many of you are in the room--and with that much stretch, there are waterways periodically to maintain sufficient navigational depth, without dredging, these facilities will be greatly crippled -- will greatly cripple access for the public onto the

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Sound.

In addition, the USACE's scientific disposal area monitoring system within Long Island Sound has found dredged material relocation to Long Island Sound relocation sites to be environmentally safe and a viable option.

For most marinas and boatyards and clubs in Long Island Sound, open-water relocation is the only economically, environmentally, and logistically feasible option.

Permitting for dredging relocation is quite rigorous, thorough, and costly, with many points of views. As our Congressman stated, Groton is also home to the United States submarine base, 10,000 sailors and 15 attack subs that require a channel depth of about 40 feet.

In addition, Groton's largest employer, Electric Boat, is currently in the design phase of a new, high-tech submarine and is about to embark on an unprecedented ramp up for constructing these ships. Nearly two and a half times larger than the Virginia-class of attack subs, these ships will be built by employees of Electric Boat with Groton and Quonset, who already employ nearly 13,000 area residents.

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In 2005, as the Congressman also stated, the navy raised serious concerns about the future dredging disposal within the Long Island Sound and highlighted it as an issue that needed to be addressed. I can speak for any elected official who represents Groton and certainly within Southeastern Connecticut, avoiding another wreck is of critical concern to anyone and everyone living in this region. And risking jobs is not an option.

While this project garnered support from both the U.S. Navy and Electric Boat, the project has also received support from U.S. EPA and states Connecticut -- state of Connecticut's DEEP, Department of Energy and Environmental Protection. It is critical to put this issue to rest and embrace the plan, which has earned support from an array of stakeholders throughout the state.

So thank you for allowing me the opportunity to testify, and thank you to all who came to support this project.

MS. BROCHI: Thank you.

Beth Fitzpatrick.

MS. FITZPATRICK: Thank you for the opportunity to comment on this proposed rule. I have reviewed the draft SEIS, and it states in the draft SEIS that the U.S. Army Corps of Engineers will solicit comments from state and federal agencies as appropriate in preparing the sampling and testing plans that initiate the permitting process.

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The draft SEIS from EPA mentions the beneficial reuse of dredged materials as beach nourishment. And several of our wonderful beaches, such as Hammonasset, Rocky Neck, Waterford Town Beach and Bluff Point are among the beaches listed that would be receiving the dredged material.

Bottom paints for boats can contain up to 70 percent copper, and the copper is used because it is a marine pollutant. Typically antifouling paints work by dissipating metals at the hull surface to kill organisms and prevent them from adhering. The Connecticut Department of Environmental Protection -- I'm sorry. They used to be the Department of Environmental Protection. Now it's the Department of Energy and Environmental Protection, has established remediation standard regulations, also known as the RSRs.

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In the RSRs they establish that you cannot exceed 2,500 parts per million of copper in order to protect human health in the environment. I would like to see the Army Corps of Engineers enforce that Connecticut remediation standard regulations need to be adhered to in order to use the material for beach nourishment.

Thank you.

MS. BROCHI: Could you just tell us your affiliation?

MS. FITZPATRICK: I'm actually representing just myself today. I grew up in the area, and I have ties to the area. And I'm just representing myself, despite what my shirt says.

MS. BROCHI: Thank you.

Ron Helbig.

MR. HELBIG: My name is Ron Helbig. I would like to thank the EPA and the Army Corps for today's event, and I would like to thank Congressman Courtney and Representative Bumgardner for being here as well.

Basically, I represent Noank Village Shipyard, Mystic Shipyard, which is my family businesses, three generations old. I'm also a

board member of Connecticut Marine Trades Association, and I would like to believe and pass on that a lot of the things that I see here today are representative of a lot of marine trades organizations that I represent under that umbrella.

My business is three businesses on the Mystic River, totaling approximately 500 slips of moorings. And basically -- basically just saying that the EPA and the Army Corps have done a tremendous amount of work, and I want to thank you for all the studies that have been done.

And as a business owner and in the marine environment every day, we work very hard to approach our business in a pro-environmental manner. That being said, we also have to be realistic about what we can do for the environment and the marine environment.

Open-water disposal for businesses like myself--we have fine material--is going to be the only alternative that we have. While I think the alternatives of -- other than open-water disposal are a wonderful and great idea, there's businesses like mine and many others that open-water disposal is going to be the only way to do it. The studies

for the stress on the bottom, the locations that have been chosen, all this hard work, we were here a year ago talking about the same thing, proves and points out that you've done your work, the sites have been chosen, they exist, and the stress on the environment and the Sound is unsubstantiated.

And those people that feel like they are stewards of the environment, that are trying to protect the environment by unsubstantiated threats, concerns, why all those concerns are top of my and businesses like myself, unless there's evidence to support them, I think the EPA and the Army Corps needs to make a decision and go with the substantiated facts.

That being said, I think that after all this evidence, the proof that major storms like Hurricane Sandy, Irene, that dumped tremendous amounts of material into our sounds, filling our basins, filling facilities like my facility, do so much more harm. And we're really, I think, trying to create a mountain out of a molehill, as far as the minimum impacts.

My businesses are 50 years old in my family. And we've only had to dredge one time in

these 50 years. We're not talking about dumping every -- not disposing materials on a constant basis, while some facilities are. All we're asking to do is something that's very minimal impact.

And that being said, I appreciate the opportunity to speak. Thank you.

MS. BROCHI: Thank you.

I would like to confirm with Max Goldman from Senator Murphy's office that you do not wish to speak?

Okay. Thank you.

Christian McGugan.

MR. MCGUGAN: Hi. My name is Christian McGugan. I'm a part owner of Finley Marina in Mystic and also an owner of Gwenmor Contracting, which is a marine construction company that does dredging on Long Island Sound since 1989. So I guess I have two different perspectives. One is as a dredge contractor; one is a marina that needs dredging occasionally.

Obviously -- maybe it's not obvious, I support the plan. I've worked closely with DEEP and Army Corps for about 20 years now. I've seen the -- and EPA in certain instances, watched the

regulations get more stringent, more testing, get more complex. And the levels that are acceptable become tighter and tighter.

And I've also been going to these periodically, the hearings that the Army Corps and EPA had since 2006, I think. And today was pretty impressive, and what Frank Bohlen did last year was very impressive. I don't want to mention the opponents, but the opponents since 2006, you know, there's a lot of studies and research, data, and actual facts that have gone into the study, not to mention a lot of taxpayers' money. And the opponents of this New London disposal site, they just don't want dredging. They don't want a disposal site.

But from my point of view, there's no study, I don't know if they spent a single dollar for a ferry to come over here and protest it, but there hasn't been any substantial facts, data, studies, whatever you want to call it, from the opposition to this that I have ever seen. And if anyone in this room has seen it, please let me know.

And so I think it's great. And every time I come to one of these, there's more facts

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and data and information that taxpayers' money spent to show that this is a suitable site. And I would never be one of them to bite the hand that feeds me. This is my living.

But just to illustrate a point that marinas and yacht clubs, I know the EPA and Army Corps are charged with a different task; that is, to keep the harbors and the channels dredged. But I'm more of the smaller side.

But to illustrate a point, Fishers Island Yacht Club, which I would venture to say has members of the Fishers Island Conservancy in it, that's a pretty good guess, dredged this past year. But they had to break the dredging up into two seasons because the cost to go to Central, we dredged it to go to Central, and it was two months to do in one season. They couldn't swing it. I'm not sure how they are actually going to do the dredging, because they can't swing it, because it's too much money. But I suspect when the New London dump site is open, they would probably go there and dump.

That's just to illustrate the point between the Bridges Marina, which is on the Connecticut River and, I believe, in New Haven, at

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low tide there's slips that are dry. What we're talking about happening is already happening, in my point of view. I guess that's what I'm trying to say.

So obviously, I support it. I've seen it happen. And I know the stuff stays in New London. I listened to Frank Bohlen. He made sense. There was no one there that day that refuted what he was saying, no one from the opposition that sort of rebuffed what he said, because it all made sense.

So I guess I support this, and thank you.

MS. BROCHI: Thank you.

Douglas Domenie.

MR. DOMENIE: Thank you. If I may -- I'm with the Brewer Yacht Yards. A special request: Any chance we can pull up Google Maps, look at Essex on the screen?

MS. BROCHI: I can try.

MR. DOMENIE: I ask that because I think the harbor in Essex and North Cove in Essex is a great microcosm of what we saw on the map with Hurricane Irene and the sediment that was being disposed, the example that I would show, if

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we can pull it up, is what I deal with there with having to keep my harbor dredged. I manage it through a yacht yard in Essex, and I have responsibilities to some of the other --

MS. BROCHI: We don't have Wi-Fi capabilities, so we are not able to do that.

MR. DOMENIE: Thank you. First of all, I want to thank you for this hearing and thank you for this opportunity. I want to lend my support to the establishment of the disposal sites in Eastern Long Island Sound.

The reason I was going bring of up that example of Essex and North Cove in Essex is I've been there for 31 years now, and approximately 28 years ago we did our first dredge up there. And at that time, I was able to take a good percentage of my material to Cornfield Shoals, because it was deemed to be of a sandy silt and that could be taken there.

At that time it cost me 7 dollars a cubic yard to dispose of dredge material. Most recently with some work that we did in one of our other locations on Connecticut River it cost us between 32 and 37 dollars per yard to dispose of dredged material, because we have to take it to

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Central Long Island Sound.

If I were to apply a three percent rate hike based on the 7 dollars a cubic yard, over a 25-year period, we would be somewhere between 14 and 17 dollars a yard. We're paying 32 to 37 dollars a yard to get rid of the material because of the added costs in permitting, testing, and the distance that we have to travel to the Central Long Island Sound disposal site.

The other interesting thing about the Essex area is that North Cove has got the Falls River that comes down from various parts of Connecticut Valley there. And when that testing was done 25 years ago on two areas on my property of dredging, it came up to be, we'll call it dirty, okay?

The two areas that came up -- were up with was where the town's 15-inch culvert comes out from my bulkhead and deposits everything that comes down from Main Street and Pratt Street. I was fortunate to work with the town and get them through one of their small town grants to put in a great siltation system so we don't deal with that anymore.

The other area that was deemed to be

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dirty was the area where the Falls River enters on to our property. That cove in the early 1900s used to be deep enough so that you could have major schooners up there. Today at low tide it's mud flats, but it's all that siltation that comes down from the Falls River that has caused me a lot of pain and a lot more expense in disposing of the material, dredged material.

Thank you for this opportunity.

MS. BROCHI: Thank you.

Kathleen Burns.

MS. BURNS: Good evening. I'm Kathleen Burns, the executive director of the Connecticut Marine Trades Association. I represent 320 businesses and nearly 7,000 employees who are all water-dependant facilities.

I'm excited that you are here tonight, but there would be many more that would like to be part of this process. Unfortunately, there's that old saying that you have to make hay while the sun is shining. And on this night, they are launching boats, as they should be, for all our recreational boaters.

CMTA has provided comments, historically, on the DMMP, the first proposed

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rule, and now today. The message has always been the same. We must preserve an economical and environmentally acceptable means of disposal for dredged material. And according to the DMMP that led to this rule, open-water disposal remains a practical alternative. And the designation of the ELDS and the Niantic and Cornfield Shoal sites as alternatives are essential.

Yesterday I had the opportunity to attend the hearing over in Riverhead and this morning the earlier hearing as well. And in listening to the testimony, it was clear that regardless of where one stood on this issue, there is a bit of, well, for lack of a better term, perhaps fatigue, that the process of designation and use has been going on for 15 or more years, that the state and federal governments have spent millions of dollars on this research, and that throughout those years the need to maintain access to our marines, boatyards, ports, and harbors continues; that the water-dependent facilities have been in the precarious position of not knowing, year to year, not knowing whether they can dredge and dispose or, regardless of where their permits are set, their future has been in

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limbo. And it continues to be until this process is complete.

How can one, whether a government entity or private entity, how can one plan, budget, coordinate, and implement when disposal options are a moving target? But during the same time period, the science has remained relatively unchanged. The outcome of years of testing has resulted in the same conclusions today as they did 10 or 15 years ago. So in our opinion, we believe it's just time.

As I returned yesterday from the ferry, and I looked at this fabulous body of water, surrounded by geography, two coast lines which are so drastically different, it's clear that we have to live in harmony. It's clear there is a solution here.

But along those lines, no one jurisdiction, not one town, regardless of resources or one organization, can or should dictate the Sound or the fate of the state's economy or livelihoods of thousands or our national security. To do so, based on emotion or unproven science, has not been productive dialogue in creating solutions.

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It's time to get on with the designation process. It's time for private facilities, marinas, and boatyards, public ports, harbors, and rivers that are managed by those in which we have placed public trust, now we have the ability to plan and secure a proper path forward to maintain a nautical access. It's time that our elected officials and administrative teams continue to reach across the Sound and agree that the science has been proven and that the rigorous testing required of all projects that they utilize the options that open-water disposal has a place in maintaining access.

It's time that the resources that have been spent defending this position over the last 10 or 15 years are now repurposed for finding a new and cost-effective, viable alternative that are sought out in this ruling.

It's time that the rule designates ELDS and its alternatives, which are proven for specific types of material, are utilized for the purposes needed and that barriers to prevent such are finally once and for all removed.

Finally, I would like to thank all of you for your time, your efforts, your science,

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your studies, and to listening to us and all the varied opinions year to year and to this point; for basing your decisions on the path of science and the knowledge that protection is both environmental and economic.

I'll be submitting a written version for the record, and I want to thank you all for the opportunity this evening.

MS. BROCHI: Thank you.

Rives Potts.

MR. POTTS: Good evening. I'm Rives Potts. I'm the president of Brewer Yacht Yards. We have 12 facilities in Connecticut, New York, along the northern shore of Long Island Sound. And we have four facilities in Long Island that are on Long Island Sound.

The dredging issue has had a profound impact on us, plus all our neighboring marinas. When I first started in the business in Westport, Connecticut, our dredging -- and Steve, you know this, Chris McGugan's family has done a lot of our dredging at a cost of around 6 or 7 dollars a yard. And now it's way over 30 dollars a yard.

Our testing has gone up tenfold. It used to cost us $50 a sample. Now it's over

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$1,500 a sample. We used to be able to dredge in our facility in Westbrook, Connecticut. Our testing -- we would have to do three samples. And the last time we had to do 27 samples. It's gotten absurd.

And what makes it so disappointing is when you see the statistics. You see the figures. And the verbiage we saw up here tonight is a word kept coming up is "minimum." Low impact. You see it all over. Nowhere do I see, we've got a problem. And this has been going on for a long, long time.

We had a project in Westbrook where we had to dredge -- we had been taking our materials from Westbrook to Cornfield Point site for years and years and years. And Westbrook is getting cleaner and cleaner and cleaner every year. There's no industry that's been added. There's been no extra pollutants.

All our marinas, all the harbors in Mystic River are clean marinas. We are using copperless bottom paints almost exclusively now. We are all doing our part. We are probably as stringent as environmentalists, whatever that word really means, as anybody on Long Island Sound.

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Our livelihood depends on how clean the water is and how comfortable our customers feel enjoying it.

We had one particular project about seven years ago where we planned to take it to Cornfield Point. We had a test done that cost us $28,000 to do a test, just to test the stuff we dredge every year. We had two of our samples out of 27, 28 samples came back with one part per million more cadmium than had been in there before.

Cadmium occurs in nature. It occurs in coral in upstate Connecticut. It's everywhere. It's a big issue.

Anyhow, it had gone from three parts per million to two parts per million as the allowable dosage, if you will, that goes into Cornfield Point, out of two samples. Out of 28 samples we had taken, it had two elevated amounts of cadmium.

For that they made us take all our yardage, we had about 20,000 yards, up to Central Long Island Sound. It cost us $150,000 more that year to do that because these two samples that, God knows, if we had taken two more it probably

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would have been less.

It's gotten to the point where it's so absurd from a financial point of view and for a job's point of view. When we have to spend that much money, we can't give our guys raises. Our 401Ks are affected. And everything is affected. And we can't dredge our channels deep enough to get boats we used to get in.

Now most of our boats go to Rhode Island. Some of that is because of taxes, but a lot is because they can't get in the channel anymore. And it's just so frustrating to see that.

If we were to look at the verbiage that we saw on the screen tonight from the EPA and DEP and the Corps of Engineers, and they have been saying, we've got a real problem. We've got a horrible bottom. We've got horrible sediments. We've got poison in the water. That would be one thing, but we just don't see that. You just don't see that at all.

And it's so frustrating for us in business to see that, the data that says that we're pretty clean, to keep having to fight this and pay more and more and more in relocating in

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relocating materials in our harbor.

And I use the term "relocate" because if one believes that the sediment that we have in our harbor and most of the harbors, whether it's Mystic River or whether it's the Connecticut River or the Patchogue River in Westbrook, the sediment comes from one or two places. It either comes from upriver or it comes from the Sound. That's where it comes.

And all we're doing is relocating it. We're taking the stuff that God probably would have taken out, take it to the Sound anyway, or God would have blown it in and we would move it back out. It's not like we're picking up some horrible material from some waste water somewhere and dumping it out in Long Island Sound. It's coming from the same water that Long Island Sound is having all the time. And it's just very, very frustrating to see the data and have to put up with what seems like harassment almost.

Another issue, my last thing will be, we used to be able to dredge -- anybody who knows more than I do, has a better memory, used to be able to dredge I believe September to May. A long time, back in the 80s. We used to get permits.

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We got a ten-year permit, a ten-year permit that allows to dredge in the Sound. We had to notify the DEP that we were doing it, but we did that. Now we have to do it every three years. We have to -- in Pilots Point we have to pay $28,000 every three years to do our testing.

And what's frustrating about it is that if one -- I've suggested this to the DEEP a few years ago, and they liked it, but they said they had their hands tied. I'm not sure by whom they had their hands tied, but one of the complaints that I have is if you don't have enough money to do the testing and you don't have enough money to monitor things and all this type of stuff, and I know the state's budget is not in great shape for this state right now, but if you look at localities, whether it's Connecticut River, Mystic River, Patchogue River, Saugatuck River, whatever, and look to see what's happening in the environment. What in that river is causing perhaps a change in the environment?

For example, if you were to do the testing in any one of the rivers I just mentioned, and you have a level of toxicity, for lack of a better word, of three, and I'm just making up a

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level, and that level is thought to be okay, it fell within the standards that allowed us to take the stuff out of Long Island Sound and relocate it, that hasn't changed in 25 years.

As a matter of fact, it had gotten down to two. And it's getting better all the time. And there's no industry, there's no reason to think that it might be getting worse. In particular with marinas using copper-free bottom paint and all the other things. Aluminum. We've been using aluminum instead of zinc. We're doing all the things we possibly can to keep things clean.

If there's no evidence of additional pollutants, if you will, in any of the places I just mentioned, then why do we have to test every three years? Who is making -- I mean, I know the labs are making a lot of money. I don't know who is making a lot of money, but it seems like it's kind of absurd.

My feeling would be that for the testing alone, they could do a study. It's pretty easy. We've got everybody's data. You could look it up, a place like Westbrook, we look at the Patchogue River, and they say, Here's the level

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where we are right now of cleanliness of the river. And they want to dredge. We're going to look back and see the cleanliness in 2007. Is there any reason that should have changed?

Look up the river. They've built a giant jewelry plant or something. They built a sewage treatment plant, and they built something up. Have they done anything up that could cause it to get worse? If they haven't, let's go ahead and issue the permits. We'll do one representative sample just to see if there's anything wrong. But they don't do that.

I think it's gotten to the point when I talk to DEEP guys, and they are good people. They are really good people. They say, We've got our hands tied. We've got to do this. Because somebody else makes us do it, people that don't like dredging anymore, because when their grandparents were here, they used to enjoy not seeing the boats. It seems there's no science and a lot of emotion.

The very last thing I'll mention is when I was talking about the dredging used to be from September to May, the reason it's squinched down in a lot of locations, and Chris, correct me

if I'm wrong, but most of them I think is like the November, December and January, certainly in Central Long Island Sound. That's pretty much it. And the reason given is because of the winter flounder. It's their mating season.

We have tried to find out what data that tells us that the dredging, sort of the turbidity, is what we were told, that may cause the flounder to not mate very well. We've asked if there's any test, hard tests or studies. Show us the studies that show that dredging has affected winter flounder. We have not gotten one single one.

When I was on the Long Island Sound Commission, we asked eight years ago that the DEEP and the Corps of Engineers to show us some data to show that winter flounder birthing population, if you will, was affected by dredging. Not one single study. They don't have any studies. They don't. But somehow they have constricted the dredging window by -- instead of September to May it's gone from November to February.

And what this has done is kill us. We used to have four or five dredging companies that could basically service us all. Now we have two

or three, perhaps. And those guys are so booked up they can't do anything.

So once again, we are being forced to live under rules that -- rules were made with no data, no positive statistics. It's just hearsay, I think.

Thank very much.

MS. BROCHI: Thank you.

Is there anybody who would like to speak that did not fill out a card? Thank you all for speaking. I'm going to invite Mel Cote up. And just one more thing. We are going to respond to comments in a Response to Comments document. All the information from the hearings will be available on our website. Please check out as well in April EPA Region 1 and 2 an educational webinar that's available online. We welcome any suggestions for more of that. We can talk about testing. We can talk about process. So please let us know if you are interested.

Mel.

MR. COTE: Thank you, Jeannie. I want to thank the team here, and I want to thank the University of Connecticut very much for hosting our hearings today. I want to especially thank

everybody who took the time to come here today to tell us about your views on our proposal and learn about the process took to get there. I think we covered everything else.

We see right there, our plans to publish a final rule by the end of the summer, come hell or high water. But that's our plan, and certainly all of these we've heard today, earlier today, last night, and yesterday afternoon brought into our consideration for any further changes to what we proposed.

So that's it. Thank you very much, and keep in touch. That's how you do it. You have another month to provide comments. So bring it on. I hope you have a good night and a safe trip home.

(The proceedings adjourned at 6:47 p.m.)

CERTIFICATE OF REPORTER

I, Margaret R. Golden, a Registered Professional Reporter/Notary Public within and for the State of Connecticut, do hereby certify that the foregoing proceedings were heard by me on May 26, 2016, and thereafter transcribed by me to the best of my ability.

I further certify that I am neither counsel for, related to, nor employed by any of the parties to the action in which this hearing is taken; and further, that I am not a relative or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of the action.

WITNESS my hand and affixed my seal this 18th day of June, 2016.

Margaret R. Golden

Margaret R. Golden, RPR

My commission expires: October 31, 2018

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Attachment 8

COPIES OF PREPARED STATEMENTS

- **Riverhead, NY:**
  - Sarah Anker

- **Mattituck, NY:**
  - Al Krupski

- **Groton, CT (1:00pm):**
  - William Spicer III
  - Barry Bryan
  - Lou Burch

- **Groton, CT (5:00pm):**
  - Joe Courtney

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THE OFFICE OF SUFFOLK COUNTY LEGISLATOR

Sarah S. Anker

Suffolk County Legislator, 6th District

Chairwoman of the Seniors & Consumer Protection Committee ● Vice Chairwoman of the Veterans Committee
Environment, Planning and Agriculture Committee ● Soil and Water Conservation District Board ● BNL Legislative Roundtable
Suffolk County Cancer Prevention and Health Promotion Coalition ● Chairwoman of the School Traffic Safety Commission

May 26, 2016

Mrs. Jean Brochi
U.S. Environmental Protection Agency
New England Regional Office
5 Post Office Square, Suite 100
Boston, MA 02109-3912

Dear Mrs. Brochi,

I recently submitted a letter in opposition to the Environmental Protection Agency's proposed amendments to the 2005 rule regarding Dredged Material Disposal Sites. This proposal planned to incorporate the Final Dredged Material Management Plan (FDMMP) submitted by the United States Army Corps of Engineers on July 11, 2015. As submitted, The FDMMP has failed significantly to find alternatives to dumping toxic dredge spoils into the Long Island Sound and provide alternative opportunities for beneficial reuses of the dredged material. In addition, the EPA's proposed amendments to this plan do not sufficiently address the concerns voiced by many environmental experts, elected officials, and residents.

While routine dredging is necessary to maintain safe and navigable waterways, sediments from river and harbor dredging may contain toxic materials including mercury, lead, PCBs, and pesticides that threaten the water quality and aquatic life. Recently conducted studies show contaminants were detected within and around existing disposal sites, including elevated PCBs in fish and elevated copper levels in lobsters.

The Long Island Sound generates up to $36 billion in economic value every year. Hundreds of millions of dollars have been invested into cleaning up the sound. The Long Island Sound Study, a partnership with the EPA, New York, and Connecticut, was initiated to restore and protect the sound. The study created the Long Island Sound Futures Fund in 2005 through the EPA's Long Island Sound Office and the National Fish and Wildlife Foundation and invested $13 million in over 300 community projects to restore the sound. The fund has also generated over $38 million for locally based conservation programs.

The Army Corps' current plan may provide the cheapest and more convenient disposal of dredge material, however it's not an alternative and will cause irreversible damage to the sound that will

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Sarah.Anker@suffolkcountyny.gov

have not only negative financial impact but will also threaten the health of the Long Island for years to come.

I continue to urge the Environmental Protection Agency to support the phase-out of open water dredge spoils disposal by requiring the DMMP be amended the plan to incorporate beneficial reuse approaches, such as landfill capping and habitat restoration projects as sustainable alternatives to dumping toxic dredge spoils into the Long Island Sound.

Thank you in advance for your attention to this important matter.

Sincerely,

Sarah S. Anker

Sarah S. Anker
Suffolk County Legislator
Sixth Legislative District

SSA/rf

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AL KRUPSKI
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SOIL & WATER CONSERVATION DISTRICT
SEWER AGENCY
SPACE MANAGEMENT STEERING COMMITTEE
DREDGE PROJECT SCREENING COMMITTEE

May 25, 2016

Curt Spalding, Administrator
Environmental Protection Agency, Region 1
5 Post Office Square, Suite 100
Boston, MA 02109

Dear Mr. Spalding,

I am writing to express my strong objection to the United States Environmental Protection Agency's (EPA) proposed rule (81 FR 24748) which if adopted, would designate the site known as the Eastern Long Island Sound Disposal Site (ELDS) as the one disposal site in the Long Island Sound for open water disposal of dredged materials. The site is located is located south of Thames River, approximately halfway between Connecticut and Fishers Island which is part of Town of Southold in the State of New York. Fishers Island is located in my Legislative District so I feel an added sense of responsibility to see this imprudent plan thwarted.

As you are aware, the Long Island Sound is an "Estuary of National Significance" and provides not only recreational, boating and fishing opportunities for tens of thousands, but it supports the commercial fishing industry as well. A clean and productive Long Island Sound provides millions of dollars each year to the economy the North Fork and to the entire County of Suffolk.

This latest proposed rule comes after a long history of missteps and poor decisions made by the EPA and the United States Army Corps of Engineers (USACE). During the development of the Dredged Materials Management Plan for Long Island Sound, these federal agencies did not adequately consider alternatives to open water disposal despite the agreement between the former governors of NY and CT that open water disposal should cease. In addition, calls from New York's elected officials, environmental advocacy groups and Long Island residents to end open water disposal have been ignored. EPA and USACE have failed the citizens of both New York and Connecticut.

The EPA's proposed rule, which will endanger the health of this important resource by allowing the State of Connecticut to continue dump potentially toxic dredge spoil into the Long Island Sound for short term economic expediency, is unjustifiable and negligent. I encourage you to abandon this site designation.

Sincerely,

Al Krupski

Al Krupski

423 GRIFFING AVE. - SUITE 2, RIVERHEAD, NEW YORK 11901 • (631) 852-3200 • FAX (631) 852-3203
EMAIL: AL.KRUPSKI@SUFFOLKCOUNTYNY.GOV

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Spicer's Marina, LLC
93 Marsh Road
Noank, CT 06340
860-536-4978

May 24, 2016

There are times in the affairs of men that you have to stand up and just call a spade a spade. This is one of those times.

In my opinion the New York Department of State (NYDOS) has been engaged in predatory, discriminatory and unfair actions that adversely affect the State of Connecticut and its working waterfront.

The NYDOS submitted four letters of objection to the recent federal dredging of the Mystic River that was helping maintain Mystic's historic waterfront viability together with its historic Mystic Seaport and Marine Museum.

The NYDOS did not succeed in stopping the Federal project but it did stop or severely and adversely affect all of the 12 or so associated non-federal dredging projects that also wanted to utilize the New London Disposal Site at that time. The NYDOS evidently thought it was somehow perfectly OK to hamstring small Connecticut waterfront entities while doing considerable TV advertising that if business entities would just come to the State of New York and invest, those entities would be blessed with ten years of no New York State taxes and some other goodies.

I am here to tell you it is not OK to hamstring small Connecticut waterfront entities while prejudicially and discriminately favoring your own in-state investors. **The monkey business of the NYDOS has to stop!**

The EPA proposed rule designating the Eastern Long Island Sound Disposal Site located off shore from New London, Connecticut for the disposal of dredged material from harbors and navigation channels in eastern Long Island Sound in the states of Connecticut and New York should be given final approval immediately. **The New York Department of State (NYDOS) should be told in no uncertain terms to cease harassing Connecticut waterfront entities.**

William C. Spicer, III

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May 26, 2016

Statement of Barry R. Bryan for Fishers Island Conservancy

I am Barry Bryan, a 30-year resident of Fishers Island (year-round for the last 18) and a longtime member and former director of the Fishers Island Conservancy. I would like to make a brief statement on behalf of the Conservancy, which will be followed up by a detailed written comment. Since its founding, the Conservancy has been opposed as a general matter to all open water dumping of dredge spoils in Long Island Sound, but has recognized that dredging harbors and navigation channels is necessary, and limited open water dumping may be required to meet the Sound's legitimate dredging needs until alternative disposal methods and technologies can be developed and mandated by the regulatory authorities.

Fishers Island and the Conservancy have a long and frustrating history with the New London Dumpsite (NLDS, now proposed to be reconfigured and renamed ELDS):

- **In 1976 the legal challenge to the Trident submarine dumping brought by NRDC and Fishers Island ended in a settlement agreement obligating the Army Corps of Engineers to prepare an Environment Impact Statement considering disposal sites in Block Island Sound and "nearby ocean waters" – an agreement effectively ignored by the Corps.**
- **In 1981 the Ocean Dumping Act was extended to cover Long Island Sound, only to be systematically ignored for 21 years by the Corps and EPA, during which no LI disposal sites were designated by EPA under ODA Sec. 102(c) or properly selected by the Corps under ODA Sec. 103(b).**
- **In 2002, the Conservancy's 1995 suit challenging the Seawolf dumping was settled on terms that forced the Corps and EPA to begin complying with the law of the Sound (as it were), and the proceedings we are still engaged in here today were commenced for the designation of disposal sites in LI Sound.**
- **In 2005, the EPA conditionally designated sites in Central and Western LI Sound and suspended the designation proceedings with respect to Eastern LI Sound, pending completion by the Corps of a comprehensive Dredged Material Management Plan (DMMP), mandated by the Governors of NY and CT and the EPA to examine alternatives to open water dumping "with the goal of reducing or eliminating" open water dumping in LI Sound "wherever practicable".**
- **When these designation proceedings were suspended in 2005, much of the science supporting the designation of CLDS and WLDS had not been completed for Eastern LI Sound (and some still has not), but the record of the proceedings at that time overwhelmingly supported the position of the Conservancy that NLDS was manifestly unsuited for open water dumping under the ODA criteria and common sense:**

1. **Currents at the site located at the mouth of the Race were too strong for "containment" of dredge spoils.**
2. **Its waters were too shallow.**

3. **It was situated in the middle of the Navy submarine lane and the commercial navigation lanes for New London and eastward up the Sound.**
4. **It was located within a mile or so of the Designated Significant Coastal Fish and Wildlife Habitat of the Race, including its (formerly) abundant lobster fishery, Fishers Island's oyster farm, and Connecticut shellfish beds.**
5. **It was located a mile and a half from Fishers Island and its public beaches in West Harbor and on its south shore, as well as CT beaches.**

- **While these designation proceeding were going on, the Corps kept dumping at NLDS under its purported "selection" of the site in December 1994, just before the Seawolf dumping. Even assuming that the Corps' 1994 "selection" had been properly made in accordance with ODA Sec. 103(b), it expired ten years later in December 2004. But the Corps just kept dumping, in violation of the ODA for seven more years, until it bailed itself out by sneaking a provision into its Appropriations Bill in the dark of night on December 23, 2011, without giving notice to anyone, which extended its "selection" of NLDS for five years until December 2016.**

So here we are, after 14 years of these designation proceedings, tens of thousands of pages of data and scientific studies, and millions of dollars, EPA has recommended designation of a slightly reconfigured NLDS (renamed ELDS) as the "containment" site for dumping the projected 14.4 million cubic yards of Eastern LI Sound dredge spoils over the next 30 years. Given our sad history with NLDS, will anyone be surprised to learn that the Conservancy is strongly opposed to the designation of ELDS as an ODA Sec. 102(c) site for the same reasons that we have opposed dumping there for 40 years. Nothing much has changed:

- **The currents are still there. The EPA assures us that the bottom currents are "calm" even in storms, but this assurance is based on the flimsiest scientific evidence -- effectively, a single data point in a very complex hydrological environment.**
- **The waters have not gotten noticeably deeper (yet).**
- **The submarine and shipping lanes are still there. The eastern portion of NLDS has been closed in the reconfigured ELDS, so that ELDS is now on the westerly side of the submarine lane – and it is worth noting that neither the EPA nor the Corps makes any mention of the history of submarine groundings at NLDS. We are told that the commercial navigation lanes have been moved, but it appears from EPA's own charts in its SEIS that all the eastbound traffic of barges, tankers, containerships and ferries coming through the Race are dumped just south of ELDS, with vessels heading for New London passing right over it to get into the Thames ship channel.**
- **The Designated Fish Habitat and lobster fishery in the Race, the oyster farm and shellfish beds, and the beaches are all still there.**
- **The DMMP has been completed but gives little comfort that the Corps will actually carry out its mandate to seriously consider alternatives to "reduce or eliminate open water dumping wherever practicable". Instead, the Corps makes it quite clear that it sees its mission as business as usual, dredge and dump in open waters at the "least cost environmentally acceptable", with no room for weighing environmental costs and benefits.**

- **The DMMP indicates that the bulk of the material to be dumped at ELDS would be "suitable fines", presumably fine grain material that has passed the ODA and Clean Water Act toxicity tests. Fine grains, of course, are precisely the kind of spoils *unsuitable* for dumping in a site with strong currents like ELDS. How much makes it to the bottom before dispersing? How much stays there? During past periods of dumping at NLDS there have been sightings of fine grain gray foam at Race Point on Fishers Island. And although we have no evidence specifically linking it to dumping at NLDS, in recent years the docks at West Harbor have silted up with fine grains drifting in with the tides, and deposits of purple/black silt (hopefully not contaminated) regularly appear at low tide on beaches as far away as the south shore of the Island.**
- **The economics and politics of NLDS have certainly not changed, with CT contributing nearly all of the industrial waste spoils and getting nearly all of the jobs and other economic benefits of dredging, and NY getting stuck with half the (unmeasured) environmental cost of degradation of the shared estuary.**
- **In fact, one of the very few changes since these designation proceedings were suspended in 2005 is the appointment of the University of Connecticut, a CT State-owned institution, compensated by the CT Department of Transportation, as EPA's "independent" contractor to conduct the scientific studies supporting EPA's recommendations, in place of consulting firms like SAIC and Battelle.**

It is hard not to be a little bit cynical after 40 years of this. The New London Dumpsite was a bad place to dump admittedly toxic and contaminated spoils in 1976 and 1995. It is a bad place to dump allegedly "suitable" fine grain spoils today.

It is also very hard to understand how the good faith application of a GIS multicriteria analysis of the entire Eastern LI Sound area (even an analysis of the EPA's truncated "Zone of Siting Feasibility", which arbitrarily cuts off the waters of Rhode Island and waters off the Continental Shelf favored by the ODA) could come up with only two possible "containment" sites: New London and Niantic Bay a few miles east up the Sound, neither of which is remotely suitable for the purpose under the ODA criteria. One does not have to be at all cynical to wonder whether the nine other alternative sites presented by the EPA were serious candidates that made it through the screening process or just straw men picked to make ELDS look good by comparison. In any case, what the EPA has done is to present stakeholders with a modified Hobson's Choice between two unacceptable options, two nags that couldn't make it to the next town, and when the traveler complains, liveryman Hobson says, "You think these horses are bad; you should have seen the nine I turned down at the auction."

In fact, both ELDS and NBDS are so flawed that the no-action option looks very attractive as a way to put real pressure on the Corps and the EPA to develop alternative strategies and technologies for dredge disposal. But until this happens, we recognize that there is a need for limited open water dumping, and with great

reluctance the Conservancy supports the designation of NBDS as significantly the lesser of two great evils presented to us by the EPA. Most of historic NBDS, we are told, has strong scouring currents that make it suitable only for dispersal dumping of clean sandy material, but additional "containment" capacity could be provided by adding on area to the east. NBDS would remain a poor choice for a containment site, but at least it is away from the Race with its currents, Designated Fish Habitat and lobster fishery, and out of the submarine and shipping lanes -- therefore less woefully inadequate than ELDS. In supporting NBDS at all, the Conservancy is relying heavily on the EPA and the other members of the Regional Dredge Team to monitor closely the permitting process at the site and compel the Corps to use alternatives to open water dumping "whenever practicable".

If any "containment" site is ultimately designated in Eastern LI Sound, it would seem to us sensible to take some pressure off that site by designating Cornfield Shoals to continue its role as a dispersal site for clean, sandy material.

CITIZENS CAMPAIGN FOR THE ENVIRONMENT

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Groton, CT Public Hearing
RE: Docket # EPA-R01-OW-2016-0239
Designation of a Dredged Material Disposal Site in Eastern Region of Long Island Sound; Connecticut

Comments Submitted by
Citizens Campaign for the Environment
May 26, 2016

Citizens Campaign for the Environment (CCE) is a not-for-profit grassroots environmental organization in New York and Connecticut. CCE has been engaged in campaigns to protect our environment and public health since its inception in 1985. We are active members of the Long Island Sound Study Citizens Advisory Committee and have been engaged in the issue of dredged material management for over 20 years.

CCE stands in firm opposition to the U.S. Environmental Protection Agency (EPA) proposal to extend the permitted lifespan for the Eastern Long Island Disposal Site (ELDS) and Cornfield Shoals Disposal Site (CSDS) for the disposal of dredged material. In addition, CCE remains opposed to the re-establishment of the retired Niantic Bay Disposal Site (NBDS) as an alternative to extending existing disposal sites.

The public has vehemently opposed open water disposal for over a decade yet, the EPA continues to recommend and support open water disposal in Long Island Sound.

In 2004 CCE opposed the Environmental Protection Agency's plan to designate 2 sites in the western portion of Long Island Sound as designated dredge material dump sites for 20 years. We were joined by thousands of residents and elected officials from every level of government in both NY & CT. CCE's assessment was that it was counterproductive that after millions of dollars of public funds were allocated and spent to restore the Sound we would then aid the degradation of the Sound by designating it as a long-term dumping ground.

In 2005, the States of NY and CT entered into an agreement with the EPA to phase out the antiquated practice of open water dumping in Long Island Sound. Per the terms of that agreement, the U.S. Army Corps of Engineers (USACE) was required to develop a Dredged Materials Management Plan (DMMP), which would create a framework for a robust beneficial re-use program for dredged materials in the LIS region.

In 2013, nine years later- the EPA opened the scoping process to again designate areas in the Sound as a dumping ground for dredged material. Again, members of the public, elected officials, and community groups opposed.

In 2015, USACE released a plan to continue the practice of open water disposal in LIS as the primary waste disposal plan for millions of cubic yards of contaminated dredge material. To date, an estimated 17 million cubic yards of dredged material has already been dumped in the Sound. The DMMP released by the USACE this year seeks to allow an additional 30-50 million cubic yards to be dumped in this sensitive ecosystem over the next 30 years.

The plan was supposed to focus on beneficial re-use for dredged material and creative solutions to reduce and eliminate open water dumping in the Long Island Sound. Instead, once again, the plan focuses on the cheapest, easiest solution— open water dumping. The plan recommended more open water disposal sites to be located in the Sound. The USACE DMMP and the EPA proposal to extend the useful lifespan of these sites stands in direct conflict with the 2005 bi-state agreement and represents a gross violation of public trust.

Now in 2016 we again find ourselves in an environmental version of the movie "Ground Hog Day". Once again, the EPA is advancing the polluting proposal of using the Long Island Sound as a dumpsite. And once again, CCE is opposing this damaging plan. This time the proposal is for 22.6 million cubic yards of dredged material to be dumped in eastern Long Island Sound. **We do not see any substantive progress in phasing out open water dumping**. In the spirit of EPA and Army Corps advancing the same plan for the last decade, CCE offers the same response. **The designation of long term dump sites may provide a cheap, easy quick fix but it is not an activity without negative environmental consequences to the LI Sound ecology. We need a plan that reducing open water disposal of dredge material and starts the process of creating a long-term disposal plan that focuses on beneficial re-use options.**

CCE agrees that dredging for the safety of navigation is a necessary activity; however, open water disposal of the dredge materials is not. Moreover, the U.S. EPA and Army Corps of Engineers have both received literally 1000s of comments from the public in opposition to this ill-conceived proposal, and have so far not addressed the concerns of countless NY and CT residents, environmental groups and elected officials who have already weighed in. This public comment period and the subsequent public hearings being held on this issue are little more than a one-sided effort to create **the illusion** of an open, transparent process with meaningful opportunities for public participation. In reality, the EPA and USACE have no real intention of phasing out open water disposal and are resistant to change.

1. **Niantic Bay Disposal Site should remain inactive and should not be designated as a long-term disposal site.**

   As part of the proposed rule, EPA is considering re-opening the inactive Niantic Bay Disposal Site (NBDS) situated between the shores of East Lyme and Waterford, CT. This site was active from 1969 until its retirement in 1972, and to date has already received more than 176 thousand cubic yards of dredged material. Niantic Bay has since become a central focus of Long Island Sound restoration efforts, as multiple factors have contributed to its water quality and biodiversity over the years.

It has been documented by the Long Island Sound Study that Niantic Bay has experienced a disproportionate rise in seasonal water temperatures over the last 30 years[1]. This is due in large part to thermal pollution coming from the Millstone Nuclear Power Station, which pulls in millions of gallons of water on a daily basis to cool its reactors. This super-heated water is then returned to the Sound via a once-through "open loop" cooling system. This thermal pollution has had a significant impact on cold water species such as winter flounder, which are known to populate the bay during winter months. This increase in water temperatures, combined with other water quality challenges have led to a measurable decrease in cold water species in Niantic Bay and an increase in fish species (many are invasive) that are adapted to warmer water temperatures. Niantic Bay and the ecosystem it supports are already in a state of distress, and the EPA has not adequately assessed how re-opening a disposal site for millions of cubic yards of potentially contaminated dredged material could impact this sensitive environment.

2. **Cornfield Shoals should not be designated as a Long Term Disposal Site and should be permanently closed to dredged material.**

In the Dredged Materials Management Plan Cornfield Shoals is identified as a dispersive site. ***This site is identified by the Corps as a dispersive site because material is known to move during or after placement.*** Dredged Materials can contain heavy metals, pesticides, and other toxic contaminants and should not be disposed of in places where material is known to be readily transported, contaminating other areas of the Sound.

3. **The New London site has already received 8.9 million cubic yards of dredged material. The new plan is to dispose of 22.6 million cubic yards over 30 years which is more than double the current amount, and yet, the EPA identifies not one adverse impact.**

   a. *The Document portrays Eastern Long Island Sound as a barren desert with barely any fish or shellfish species*. Yet, Eastern Long Island Sound is the most biologically diverse portion of the Sound. CCE believes the draft document underestimates all the species located in these waters and assess how long-term dumping will affect species diversity. However, where species exist they seem to be found around the New London site. The document notes (page 4-103) that when they conducted trawl studies near the proposed locations, the trawl study located closest to the New London site had the highest number of individual fish, which included the presence of winter flounder.

   b. *The document glosses over the federally designated Essential Fish Habitat*. The document notes that parts of the proposed areas are federally designated "Essential Fish Habitat" (EFH). EFH is defined as "those waters and substrates necessary to fish for spawning, breeding, feeding, or growth to maturity." The document then lists 15 species of fish that could be affected—including winter flounder, a struggling species in the Sound (page 4-101).

[1] http://longislandsoundstudy.net/?indicator_types=climate-change

Specifically, within the New London Alternative, EFH has been designated for Atlantic salmon (juveniles and adults), Atlantic sea herring (adults), bluefish (juveniles and adults), cobia (all life stages), dusky shark (juveniles), king mackerel (all life stages), red hake (adults), sand tiger shark (larvae), and Spanish mackerel (all life stages) (5-53). The EPA states that despite the areas being designated as an Essential Fish Habitat, there would be no impact because the "conditions quickly return to baseline after each dredged material disposal event." Impacts to EFH would include increases in turbidity, sedimentation, and nutrient availability, as well as a decrease in prey abundance due to burial of benthic prey items, followed by a increase in prey abundance during site recolonization (5-52).

With the addition of 22.6 million cubic yards of dredged material, these impacts can harm economically and recreationally important fish species. EPA seems to believe these impacts will be mitigated because the fish will simply "swim away" from the affected area and "return" when the dumping stops.

c. *The Document minimizes effects that the dumping will have on the struggling lobster populations*. Through trawl data, the only proposed site eastern site that they found lobsters was the New London site (4-114). The lobster population is already struggling. We should be implementing policies that are protective of the existing population, not dumping an additional 22.6 million cubic yards of material into known habitat.

Recently, dolphins and whales have returned to Long Island Sound, a sign that the water quality is improving and there is an abundance of fish to feed on. The designation of long-term dump sites has the potential to adversely impact this positive trend.

4. **The Eastern Long Island is also a busy zone for navigation, national security, waterborne commerce, and recreational boating. The draft document fails to assess how these activities might be harmed or hindered because a long-term dumpsite.**

The document does note (4-150) that vessels approaching New London would pass near the center or over the western portion of the alternative site and submarines would cross the center of the site. However, the document does not address how these activities might be harmed or hindered due to a long term designation.

5. **The Eastern LIS is also an important spot for commercial and recreational fishing. The draft document claims that only 1 commercial fisherman and only a handful of recreational fisherman utilize the area of the New London site. CCE believes this is an inaccurate representation.**

The document points to a 2014 survey done to document the presence of commercial fishing in the proposed areas (4-144). The survey found only 1 commercial fisherman was operating around the New London site and none where operating around the other proposed sites. CCE believes this data is flawed.

According to the same survey "some of the respondents occasionally fished near the New London site for finfish". The document fails to define how many respondents they had in the survey and what qualifies as "some".

6. **The Document fails to Prioritize Beneficial Re-use.**
   In the Dredged Materials Management Plan (DMMP) there were several re-use options that were discussed for the eastern dredged projects. These included: Sandy Point Marsh Creation, Manchester Landfill, Rocky Neck State Park nearshore areas, and Bluff Point State Park. Unfortunately, the DMMP dismissed the beneficial re-use options because dumping is cheaper.

   The EPA dismisses the use of beneficial re-use as well. In their No Action Alternative Scenario 4 they explore the development and utilization of appropriate land-based or beneficial use alternatives. They conclude that that NY, CT, nor southwestern Rhode Island have available upland sites or beneficial use sites which would provide a reasonable, long-term alternative to open-water dumping.

By creating additional long-term disposal sites in the Sound we are choosing the cheap, easy fix, instead of creating a long-term solution. The EPA must prioritize beneficial re-use options and phase out open water disposal.

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Statement of Congressman Joe Courtney
Second District, Connecticut
ELDS Hearing
Groton, Connecticut
May 26, 2016

Good evening. My name is Joe Courtney and I am the Congressman for Connecticut's Second District in the House of Representatives. Connecticut has 332 miles of coastline, coves, and harbors on Long Island Sound, much of which is found along the coast in my district. As a member Congressional Long Island Sound Caucus, I have long been a strong advocate for protecting and rehabilitating the Long Island Sound as a critical natural, recreation and economic resource for our region and the nation.

I have long spent my time in Congress working closely with stakeholders on the federal, state, and local levels in addressing the critical issue of maintaining our ports, harbors, and channels. Since the drafting of the Dredged Material Management plan, or DMMP, last year, I have been proud to work with our regional branches of the Environmental Protection Agency and Army Corps of Engineers to ensure that this comprehensive management framework shape the designation and management of our open-water disposal sites in Long Island Sound.

This is why I strongly support the approval of the EPA's proposed rule for the designation of the Eastern Long Island Sound Dredged Material Disposal Site, or the ELDS. The EPA's preferred ELDS location, located south of the Thames River Estuary, would consolidate the current New London and Cornfield Shoals Disposal Sites into an area that is two square nautical miles and will be able to meet the dredging needs of eastern Long Island Sound for the next 30 years.

While the ELDS and other open-water disposal sites are exceedingly important to maintaining the dredging needs of Long Island Sound, it is also important that we consider alternative placement of dredged material when appropriate. To that end, this proposed rule continues the effort of the DMMP to identify and evaluate environmentally sound, on-land disposal options for certain dredging projects. In fact, in Connecticut, dredged materials have not only been used for shoreline replenishment, but also for capping landfills and brownfields sites upland. Notably, I was recently involved in helping facilitate a dredging project that helped to restore a beach in Madison, Connecticut using dredged sand.

The environmental soundness of Long Island Sound dredging is a clear focus of the ELDS. The proposed rule is consistent with the federally-approved Coastal Zone Management Plans for New York and Connecticut. Furthermore, it should be noted that without access to the ELDS, it is expected that transporting dredged materials to other sites, like the Rhode Island Disposal Site, will increase carbon emissions from ships and risk of dredged material spills as transport distance is extended. Connecticut has been responsibly dredging using open-water placement for 35 years and I believe that swift adoption of the ELDS, along with an increased effort to find

sustainable on-land solutions for suitable dredged materials, will provide the Long Island Sound region with a balanced approach for future waterway maintenance projects.

In addition to the critical goal of protecting Long Island Sound and its resources, access to ELDS is absolutely vital to the economy of my district and state – and that of the entire Long Island Sound region. According to the aforementioned DMMP, economic activities that utilize Long Island Sound waterways contribute more than $9 billion annually in economic output. Additionally, these economic activities support more than 55,000 jobs in the Long Island Sound region. As important, our region is host to a range of federal and military facilities dependent on the viability of accessible and cost-effective placement options. These include Connecticut-based facilities like Naval Submarine Base New London, the United States Coast Guard Academy, as well as the premier submarine builder Electric Boat.

Connecticut's maritime industry has a long and rich history. As the industry makes a resurgence, it is important to note that without reliable and timely dredging, our deep-water ports in Bridgeport, New Haven, and New London have seen an 80 percent decrease in imports over the last decade. Establishment of the new Port Authority, and increased focus on strategic investments needed to expand our major ports creates a significant opportunity to create jobs and grow Connecticut's maritime economy. Last year, I worked with state, federal and local stakeholders secure critical new federal funding to increase the capacity of the freight line—that we will break ground on this autumn—that runs to the Port of New London to support this focus on our state's maritime economy. Realizing this goal, however, will be contingent on a continued effort to maintain our channels and harbors properly.

Approving the ELDS is of critical importance to support navigation-dependent industries that border and traverse eastern Long Island Sound. The proposal states that shipping bulk materials, petroleum fuels, recreational boating and fishing, commercial fishing, interstate ferry operations, and military navigation all lend a hand to the Long Island Sound region's economic output. We must continue to embrace our maritime heritage and support this balanced, sustainable proposal to maintain our dredging needs.

The ELDS proposed rule has earned my support and deserves the support of stakeholders on both sides of Long Island Sound. I thank you for taking the time to consider my views on this important topic. I look forward to the timely approval of the ELDS and continued constructive engagement with stakeholders in Connecticut and throughout the Long Island Sound region on managing dredging needs in the future.

END OF REPORT.