



# **Scoping to Develop Dredged Material Management Alternatives in the NY Bight**

U.S. Environmental Protection Agency, Region 2  
U.S. Army Corps of Engineers, New York District

June 24<sup>th</sup> & 26<sup>th</sup>, 2025

## Logistics

- The primary goal of this meeting is for stakeholders to provide EPA with comment for the development of an environmental review document that will consider the continued management of dredged material in the NY Bight Apex.
- This meeting is being recorded, and the transcript will be used to compile verbal comments.
- Feel free to leave questions in the chat.
- **Questions and comments session will be after presentation.**
- **Please remain on mute while speakers are presenting**



# Agenda

## Presentation

Welcome

Agency Roles and Responsibilities

National Environmental Policy Act

Historical Background

HARS Site Management and Monitoring

USACE Request for Ocean Dredged Material Management Site

Zone of Siting Feasibility

Potential Alternatives

## Question and comment session



# Welcome

Mark Reiss

Supervisor, Dredging Sediments and Oceans Section  
US Environmental Protection Agency, Region 2

Kelly Vega

Chief, Dredged Material Management Section  
US Army Corps of Engineers, New York District



# Dredged Material Ocean Management: Regulations, Roles, and Responsibilities

## *Marine Protection, Research, and Sanctuaries Act (MPRSA)*

### EPA

- Develops environmental and testing criteria used to determine the suitability of dredged material for ocean management (MPRSA § 102)
- EPA must concur with USACE determination of material suitability for ocean placement (MPRSA § 103)
- Designates, manages, and monitors ocean dredged material management sites (MPRSA § 102)
- EPA has civil and criminal enforcement authority (MPRSA § 105)

### USACE

- Issues permits for projects and the transportation of dredged material for ocean management (MPRSA § 103)
- Manages dredging projects and supports ocean site monitoring and management
- May select a temporary dredged material management site if EPA designation not reached or is not feasible (MPRSA § 103)

# National Environmental Policy Act

- Requires Federal agencies to assess the effects of their proposed action(s), and reasonable alternatives, prior to making decisions

Biological



Physical



Health



Socioeconomic



- Although not required, EPA will prepare a **voluntary** NEPA document for ocean site designations under the MPRSA

# NEPA Process

June 12-July 14, 2025

September 2025

End of CY 2025

## Scoping

- Publish Notice of Intent in Federal Register
- 30-day public comment period
- Hold public meetings
- Solicit input on environmental impacts and alternatives

## Draft NEPA Document

- Prepare with cooperating agencies
- Publish Notice of Availability in Federal Register
- 30 or 45-day public comment period
- Hold public meetings

## Final NEPA Document

- Address comments received on Draft NEPA document
- Publish Notice of Availability in Federal Register

Proposed Rulemaking Process running concurrently



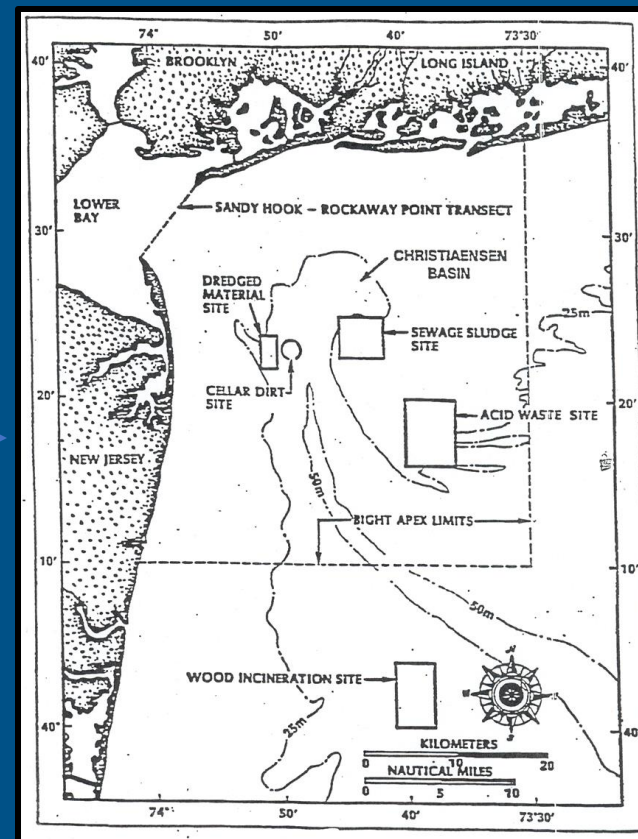
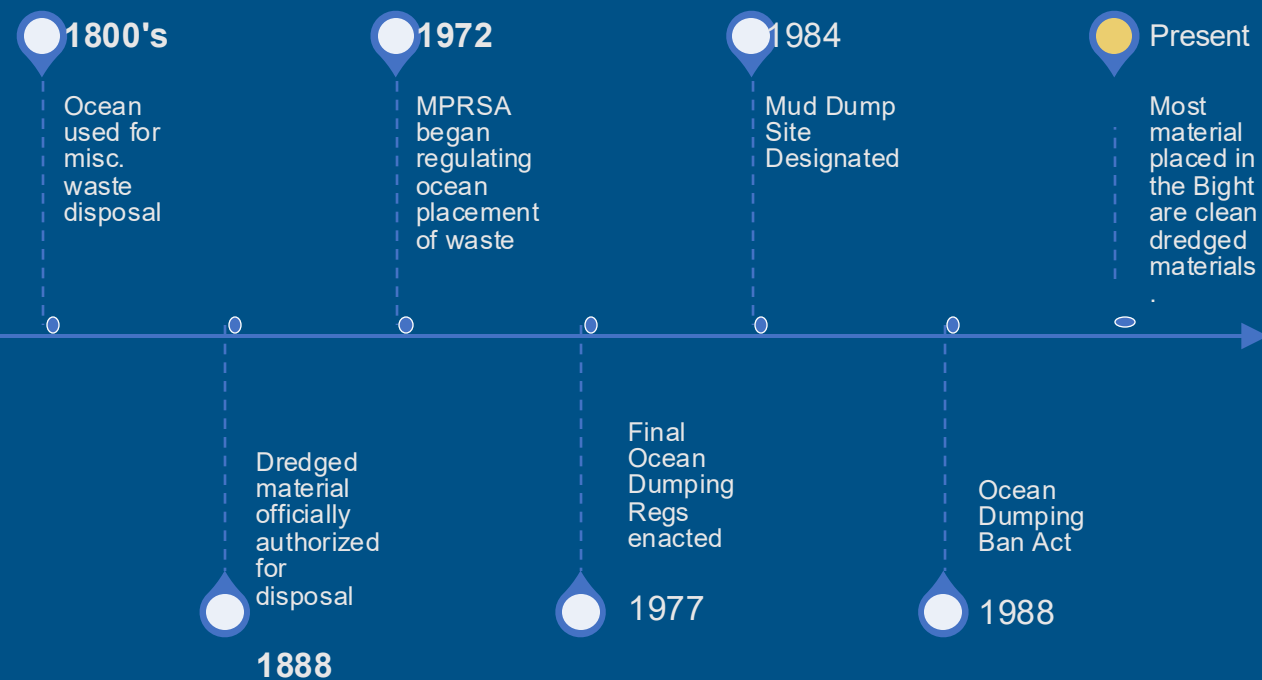
# Environmental Compliance

Ongoing compliance coordination with resource agencies and other interested parties:

- Endangered Species Act
- Magnuson-Stevens Fishery Conservation and Management Act
- Fish and Wildlife Coordination Act
- National Historic Preservation Act
- And others...

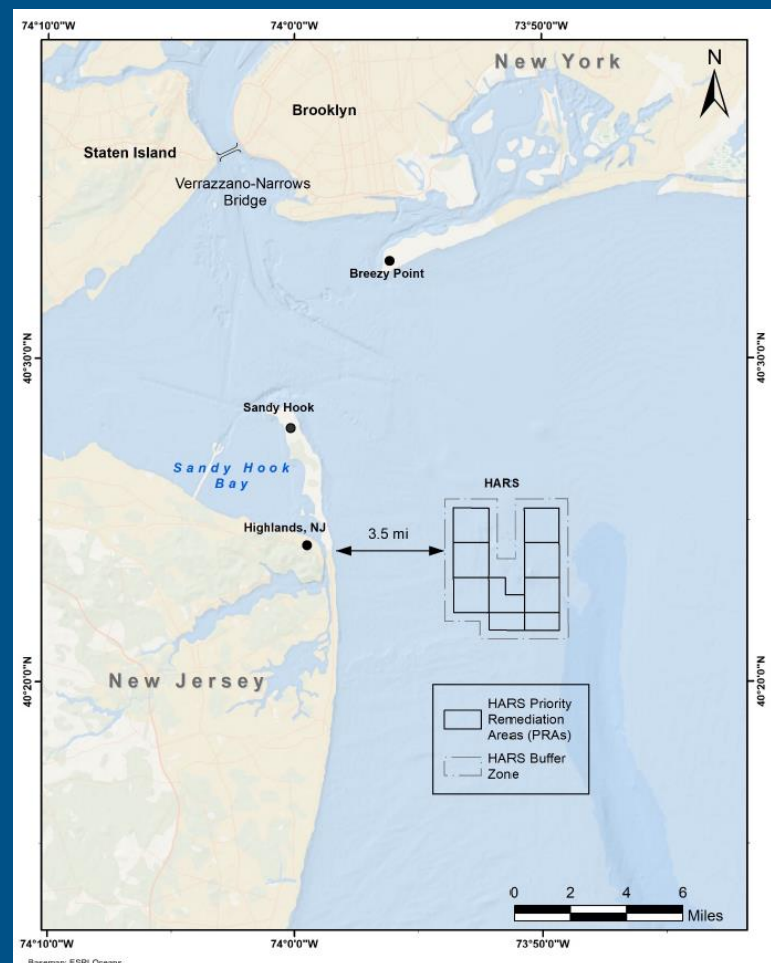


# Historical Ocean Waste Management in the NY Bight/ Mud Dump Site



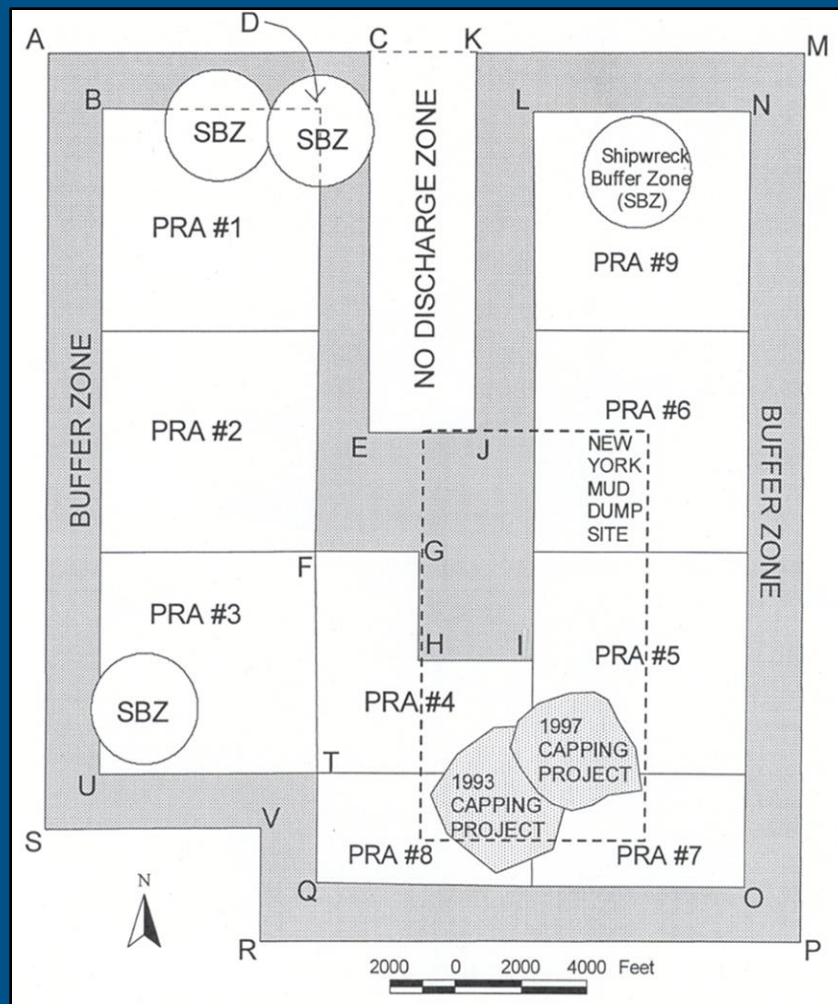
# Historical Area Remediation Site (HARS)

- 1995 - Study of a 23 nm<sup>2</sup> area surrounding the MDS to evaluate impacts from historical disposal and the potential for remediating impacted areas.
- 1997 - MDS closed and HARS designated to remediate the documented adverse impacts of prior ocean placement.
  - 15.7 nm<sup>2</sup>
  - Remediation was to be achieved by placing a cap of at least 1 meter of “Remediation Material.”
  - Remediation Material - Dredged material that meets current Category I standards and will not cause significant undesirable effects including through bioaccumulation.
  - 1997-2003 – Scientific peer review process resulting in revisions to criteria for acceptability of materials for placement.



# Historic Area Remediation Site (HARS)

- HARS Components
  - 9 Priority Remediation Areas
  - Buffer Zone
  - No Discharge Zone
  - Shipwreck Buffer Zones
  - Mud Dump Site
  - 1993 and 1997 Capping Projects



# HARS Site Management and Monitoring

- MPRSA requires that a Site Monitoring and Management Plan (SMMP) be drafted and implemented for all ocean dredged material management sites. SMMPs are reviewed and revised at a minimum on a 10-yr cycle
- The SMMP provides guidelines to:
  - Monitor placement activities
  - Assess the progress of remediation
  - Analyze environmental conditions
  - Address potential environmental issues
- A panel of Port and ocean stakeholder representatives (the HARS Scientific Review Panel) meets annually to provide technical input on EPA and USACE monitoring and management efforts



# HARS Site Management

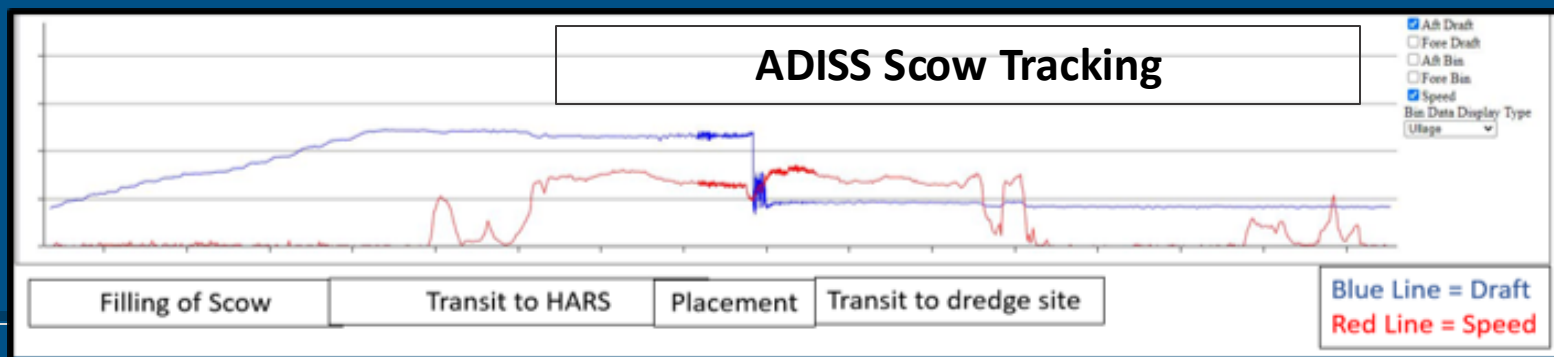
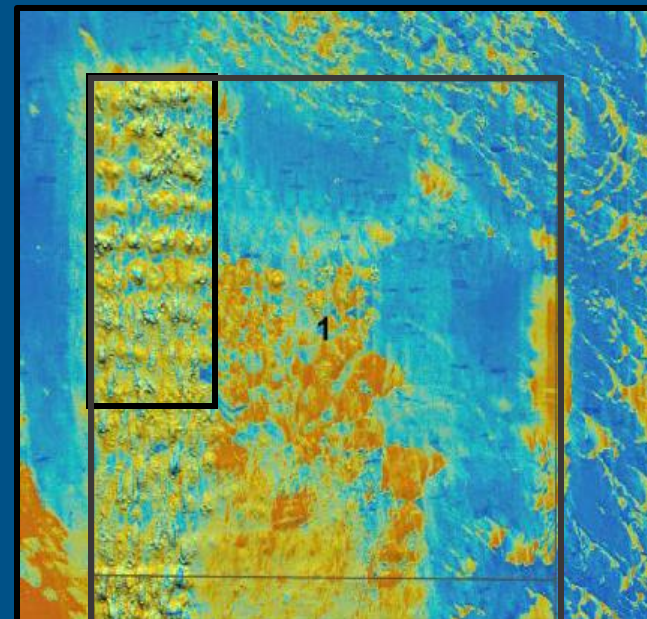
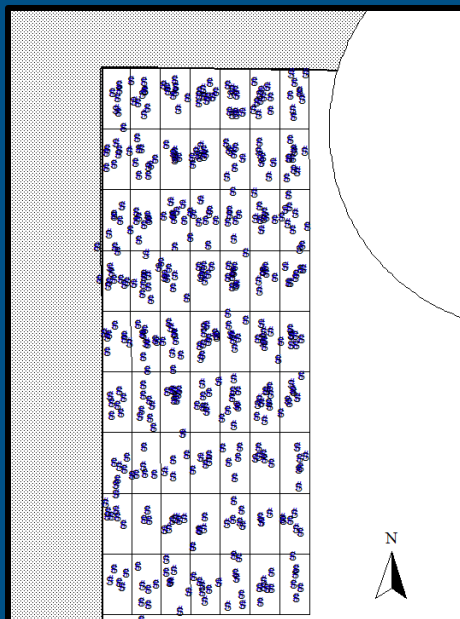
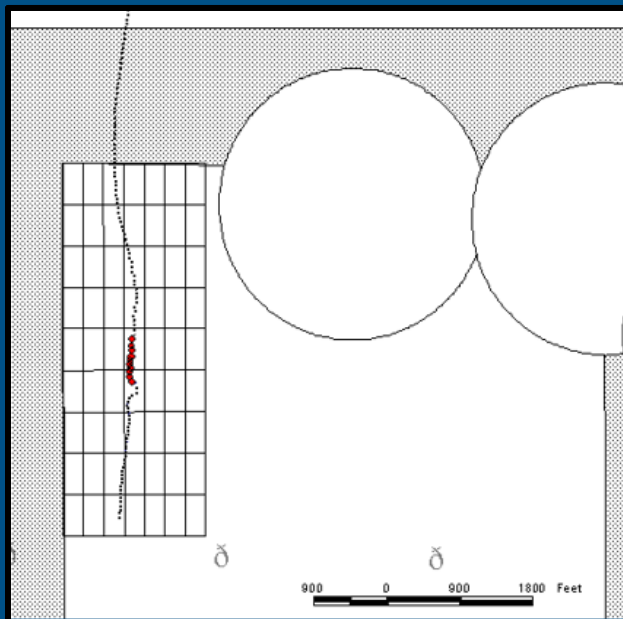
Before being approved for use as Remediation Material at the HARS, dredged material is sampled and rigorously tested following EPA and USACE approved physical/chemical/biological testing procedures

Once a dredging project is approved for HARS remediation, placement grids are developed to designate specific location at the site for managing each project



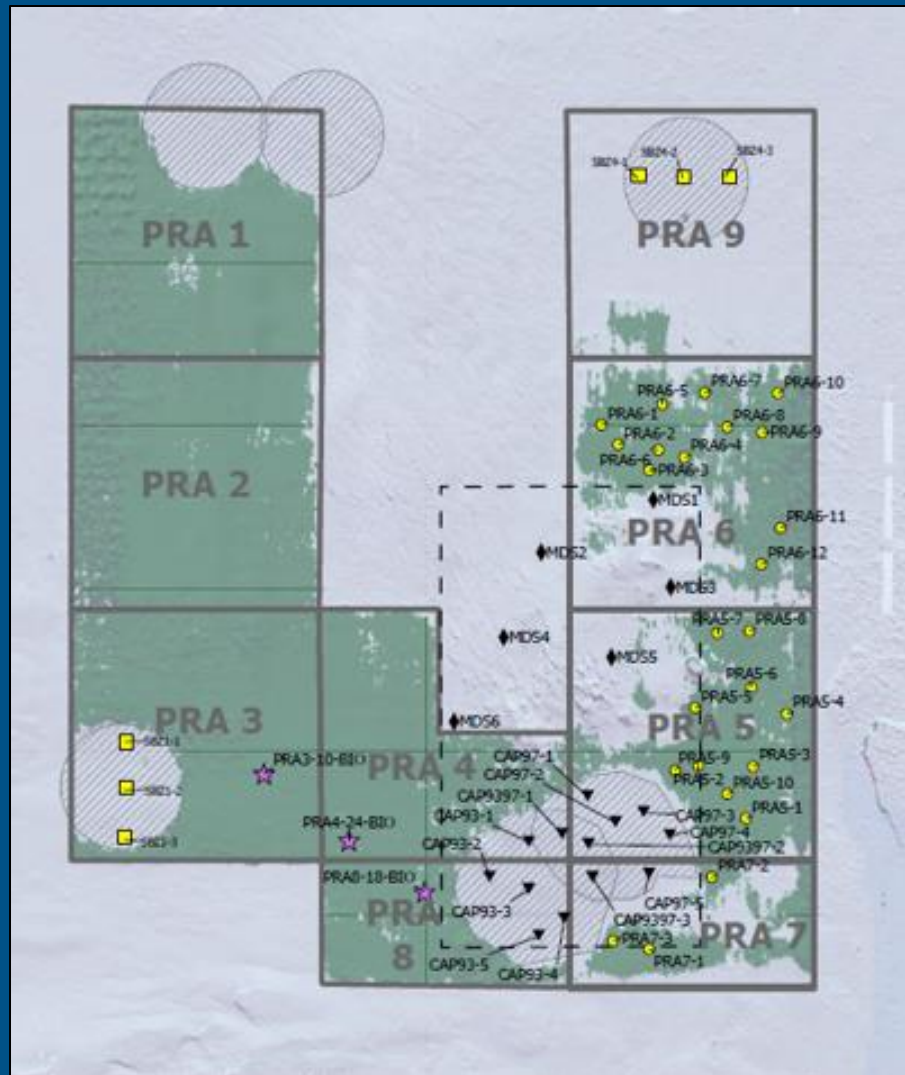
# HARS Site Management and Monitoring

## Project Tracking Example – PRA 1



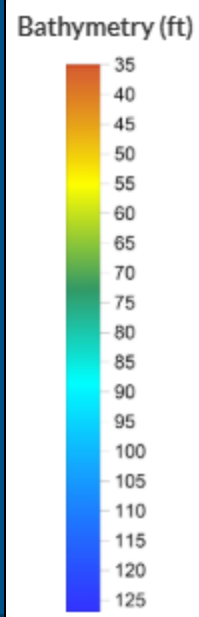
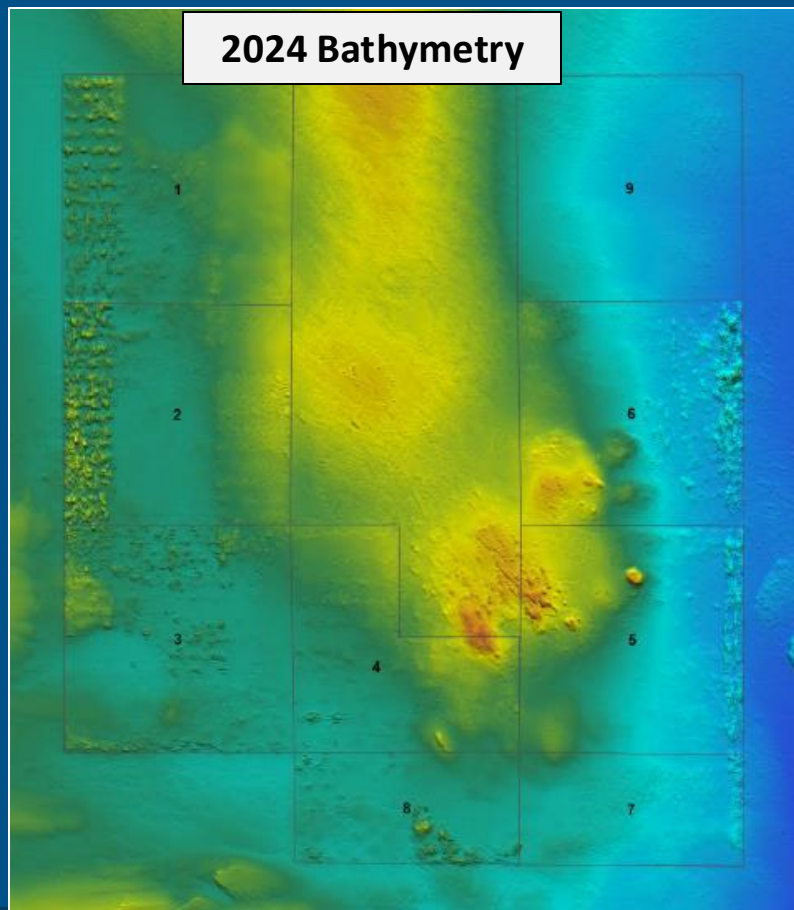
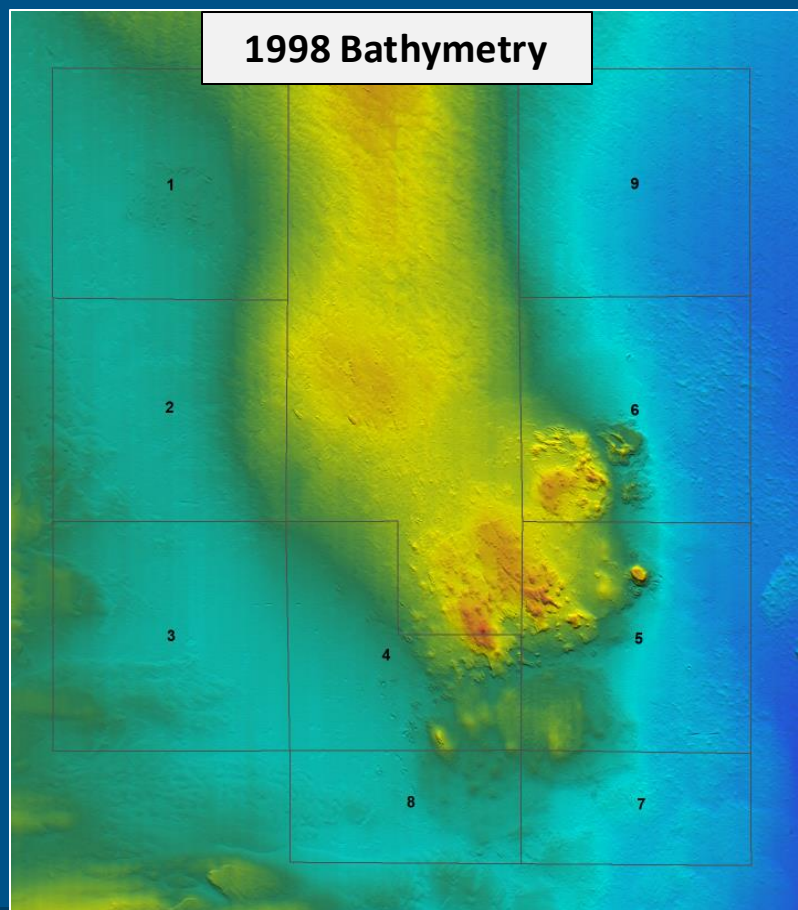
# HARS Site Management and Monitoring

- Post-remediation monitoring of sediment and resident worms
  - Sediment and worm tissue sampling in areas that have recently received at least 1m of Remediation Material
    - Verify that concentrations remain below HARS-specific thresholds
    - 75% threshold for adaptive management



# HARS Site Management and Monitoring

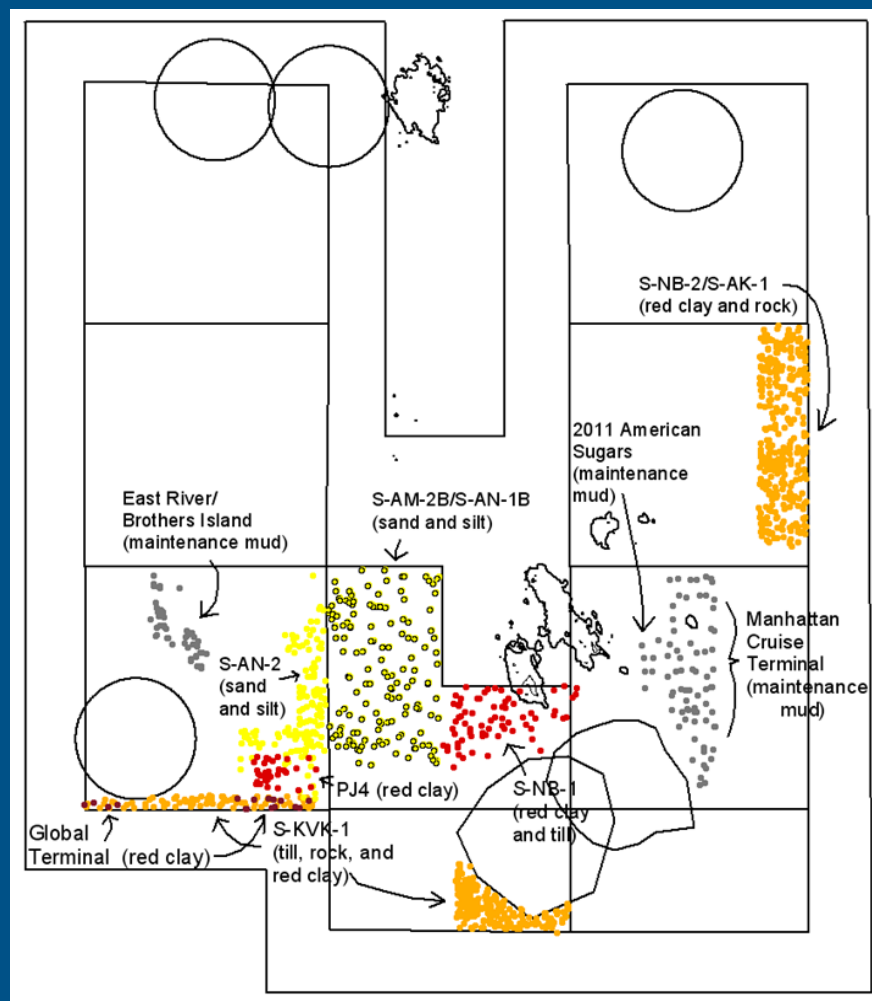
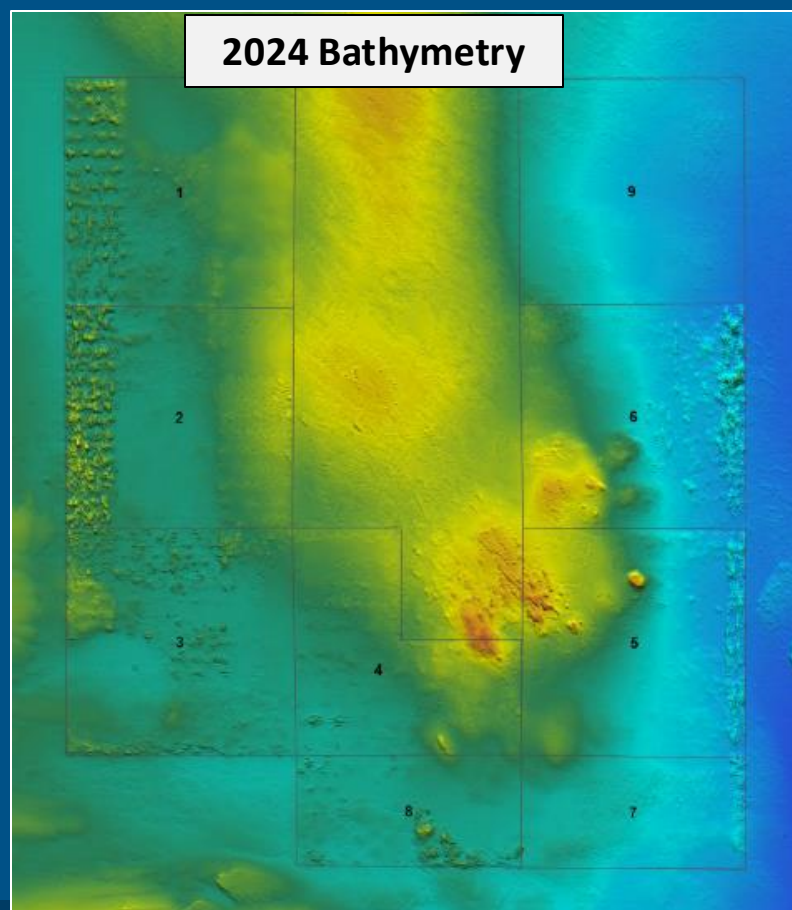
High-resolution bathymetry survey conducted annually



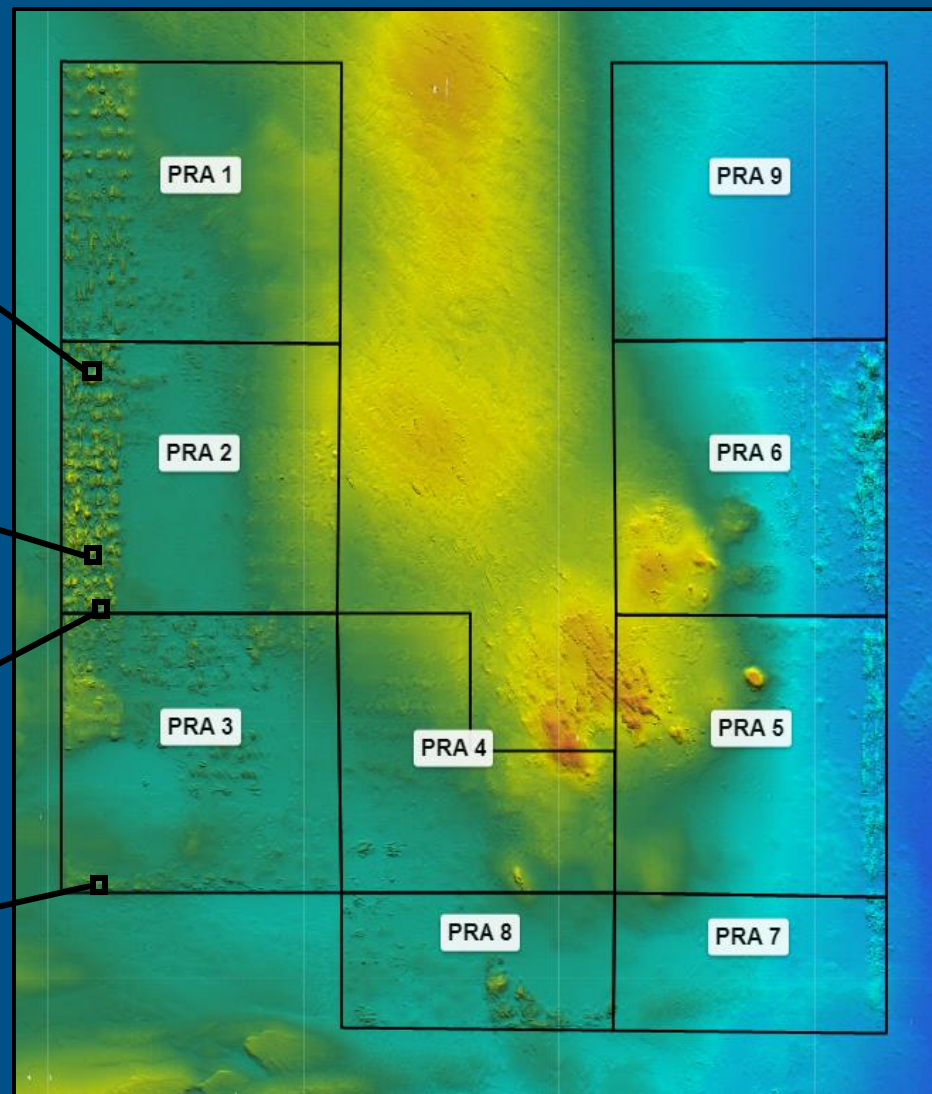
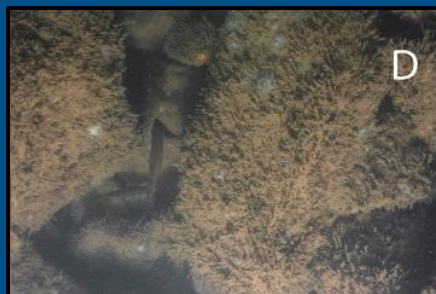


# HARS Site Management and Monitoring

Progressive management of material at the site has created a patchwork of areas of different material types across the remediated footprint of the HARS

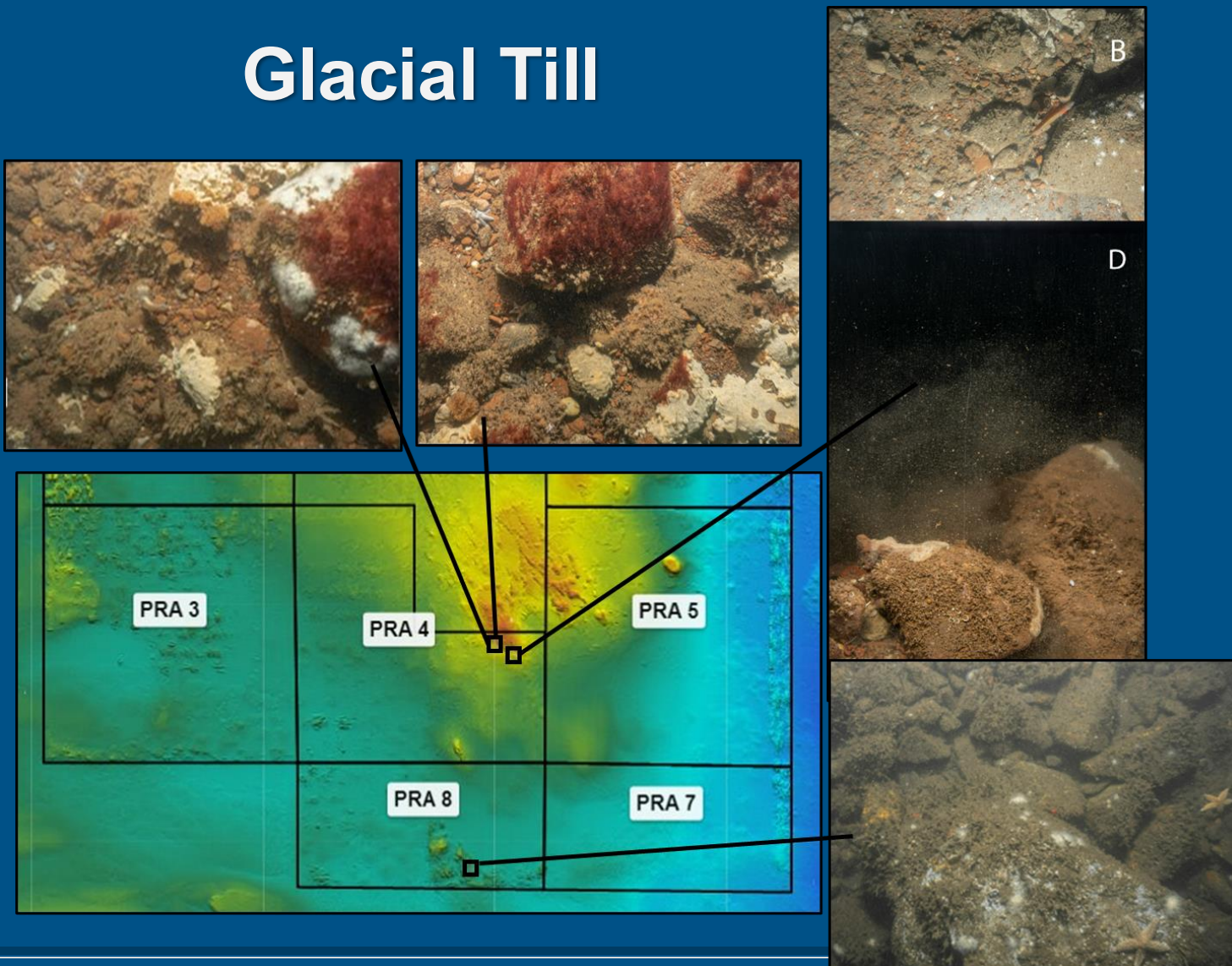


# Rock

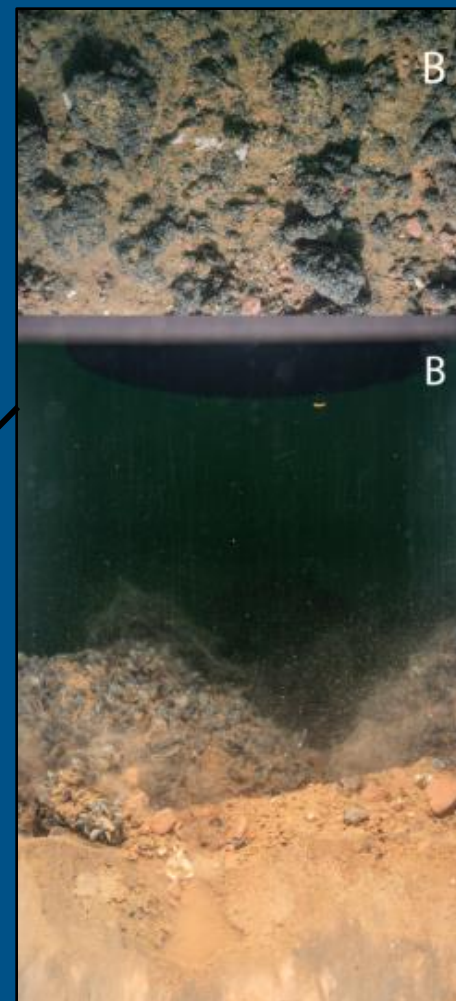
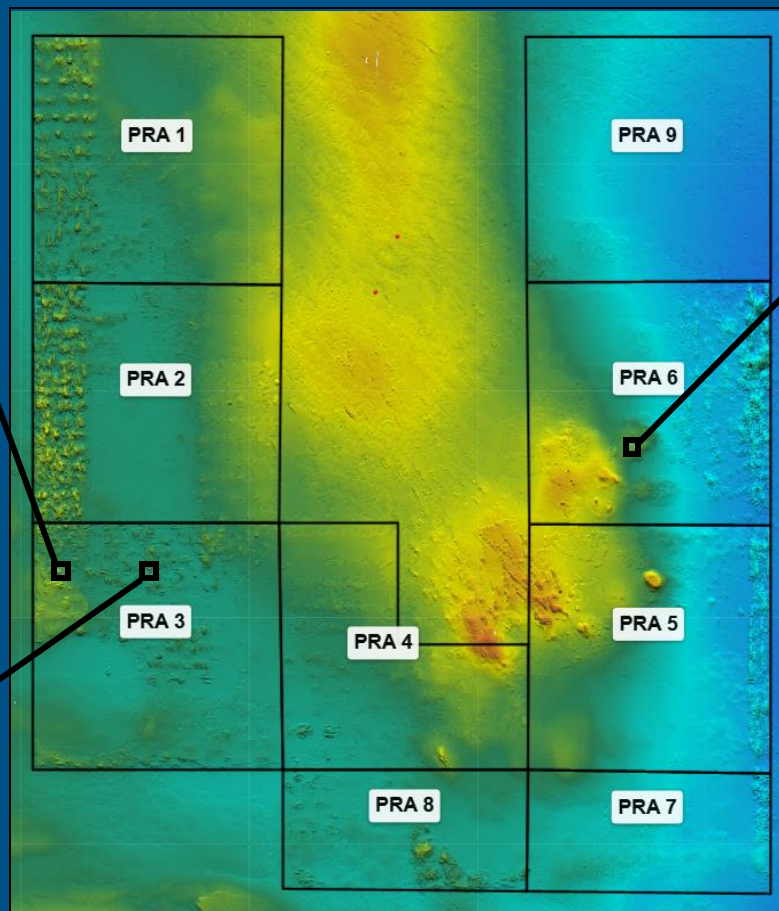
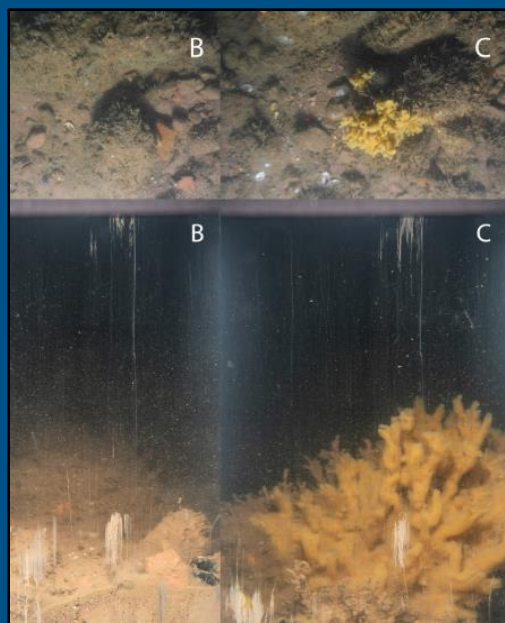




# Glacial Till



# Clay





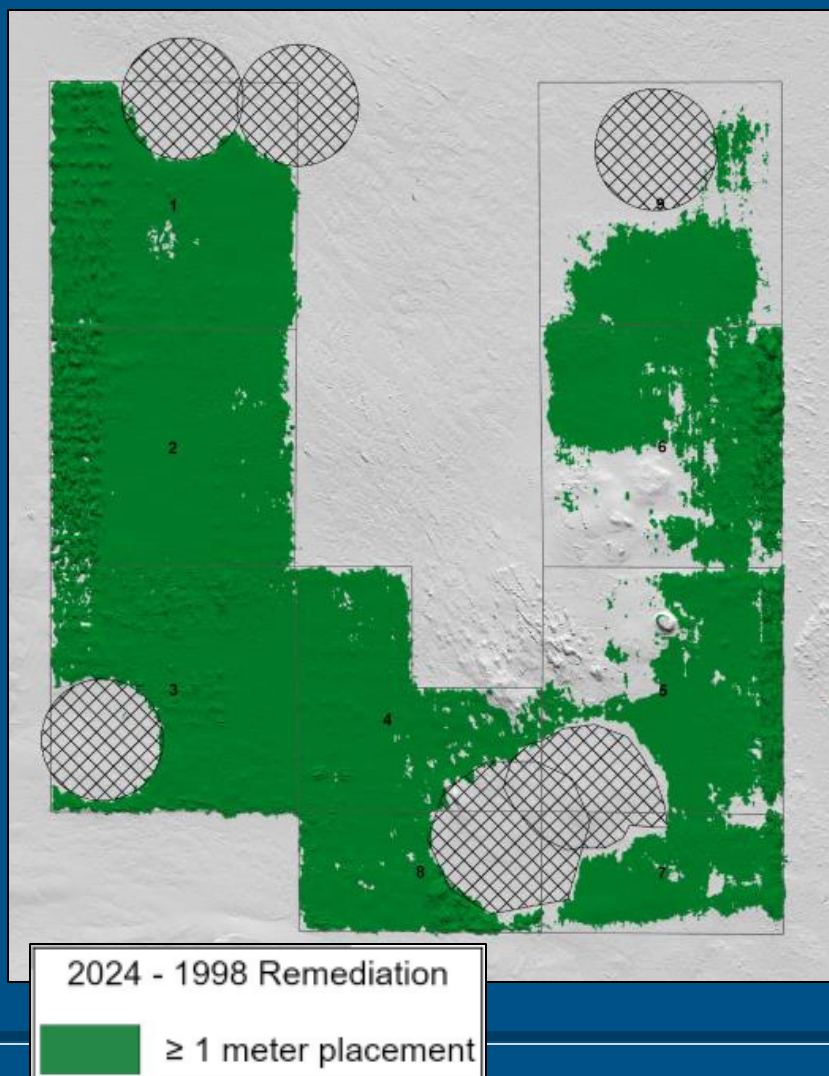
# HARS Management and Monitoring



## Major Findings Since 1997:

- Achieved precise management of material within placement grids
- Material once placed, has remained stable
- Successfully meeting remediation goals with adaptive management as necessary
- Inadvertent benthic habitat creation

# HARS Site Management and Monitoring



## HARS Remediation Status:

- Since September 1997, approximately 89 MCY of Remediation Material has been placed at the HARS
- Remaining capacity is approximately 5 MCY

# REQUEST TO EPA FOR OCEAN DREDGED MATERIAL MANAGEMENT SITE

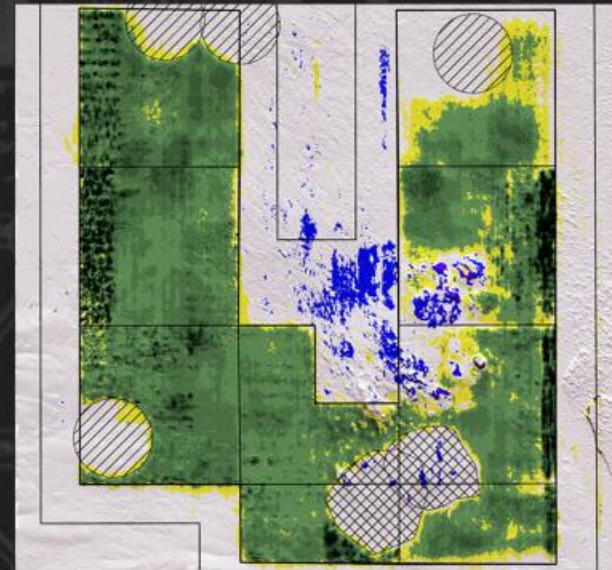
US Army Corps of Engineers –  
New York District  
Operations Division

June 2025

Arsheen Ehtesham  
Geologist, DMMS



US Army Corps  
of Engineers®



Left. Bathymetric  
survey showing  
change in depth at  
the HARS 1998-  
2024





U.S. ARMY

# USACE REQUEST TO EPA

2



Request for New Dredged Material Management Site in the New York Bight

Prepared and submitted to EPA in **June 2023**.

Our request included a **dredged material volume assessment, placement site capacity assessment, and zone of siting and feasibility.**





U.S. ARMY

# DREDGED MATERIAL VOLUMES (HISTORIC AND PROJECTIONS)

3



**USACE** reviewed historical dredging volumes in the **New York District** from **1998 to 2022**, including:

- **Operation and maintenance** projects
- **New work construction**
- **Privately permitted projects** under Department of the Army permits

From 1998-2022, approximately **83 million cubic yards (barge volume)** of Category I dredged material had been placed at the HARS for remediation.



Map showing  
Federal  
Channels  
Maintained by  
USACE NYD

Based on this analysis, USACE developed a **20-year dredging needs projection**, incorporating anticipated material from major upcoming projects.

From **2025-2043**, approximately **51 million cubic yards** of HARS suitable dredged is projected.



U.S. ARMY

# PLACEMENT LOCATION ASSESSMENT



4

## HARS

At the time of our request letter to EPA the recent **bathymetric survey** estimated that the HARS has approximately **6.5 to 7.5 million cubic yards** of remaining capacity.



Image showing percent remediation completion (green) at the HARS 1998-2023

## Upland and Non-Ocean Placement Capacity

At the time of this evaluation, upland placement sites had a combined remaining placement capacity of approximately **22 million cubic yards**.

It should be noted that **cost of placement** of dredged material at upland sites is an **order of magnitude greater** than the HARS.

- Upland alternatives may include but not limited to:
- upland disposal at **landfills**;
  - the use of **confined disposal facilities** (CDFs);
  - **beneficial use** of the material for environmental,
  - economic restoration of **degraded lands**,
  - **beach nourishment** for shore protection and
  - enhancement of existing **fishing reef sites**.





U.S. ARMY

# NEED FOR OCEAN DREDGED MATERIAL MANAGEMENT



5

## NEW YORK – NEW JERSEY HARBOR 2025 DREDGED MATERIAL MANAGEMENT PLAN (DMMP) UPDATE

### PUBLIC INFORMATION SESSION



2025 Dredged Material Management Plan  
Update for the Port of New York and New  
Jersey

Final Integrated Report and Supplemental  
Environmental Assessment



U.S. Army Corps of Engineers  
New York District

June 2025

## *2025 Dredged Material Management Plan (DMMP) Update*

In 2024, USACE New York District initiated the process to update the DMMP. This effort assessed regional dredged material placement demand and capacity. The DMMP Update also included a qualitative and quantitative analysis in support of the updated WRDA 2020 Federal Standard requirement.

The evaluation confirmed the need for additional ocean-based dredged material management alternatives. The draft report is available on the USACE website.

**WRDA 2020** updated the **Federal Standard** by explicitly expanding the USACE authority to **consider beneficial use of dredged material** when determining the “Federal Standard” for dredged material placement.



U.S. ARMY

# ZONE OF SITING FEASIBILITY (ZSF)

6



The **ZSF process** was used to help determine the **operational and economic feasible radius**, based on two representative project types:

**Maintenance dredging** projects with an average volume of **200,000 cubic yards (CY)**

**New work construction** projects with an average volume of **2.5 million CY**

Although dredging projects in the NY/NJ Harbor vary significantly, these scenarios were selected as **representative case studies** for the evaluation.



Source: Pearce Creek Outreach Dredging 101

Image showing mechanical dredge loading dredge material into a scow.



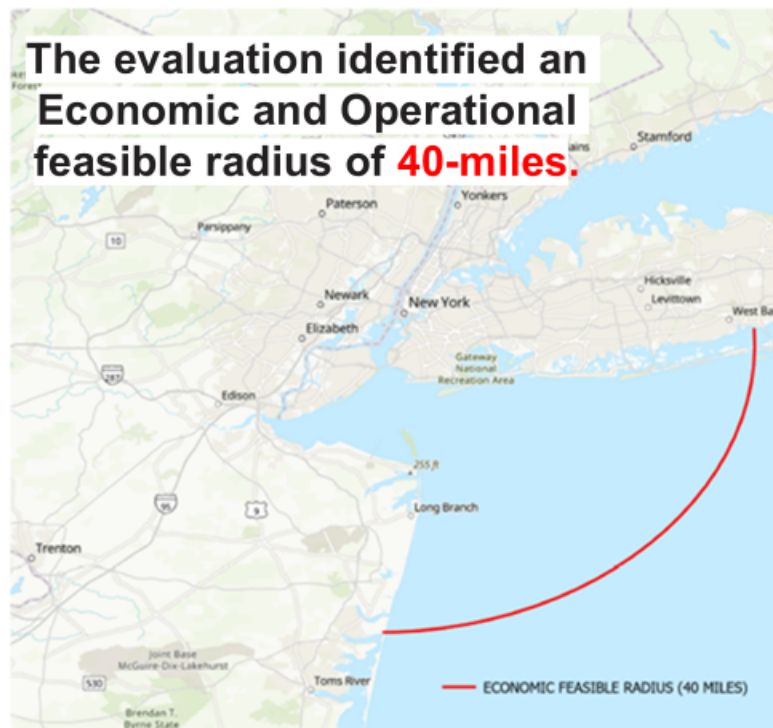
U.S. ARMY

# ZONE OF SITING FEASIBILITY



## Operationally Feasible Radius

The operational radius was assessed by analyzing scow loading times, dredge bucket size, number of scows, scow capacities, and round-trip travel times to the HARS.



## Economic Feasibility

The economic feasibility (i.e. what can USACE afford) was determined by evaluating key operational parameters alongside total project costs, using the **USACE Independent Government Estimate (IGE)** calculation tool, **CEDEP**.

*Cost difference between HARS and Upland placement for 20-year projected dredge volume*

	Operation & Maintenance material	New work-Native Material
Projected Dredge Volume <sup>1</sup>	26 MCY <sup>2</sup>	22 MCY
HARS ( \$18/CY)	\$469 million	\$396 million
Upland ( <b>\$91-\$189/CY</b> )	\$2,300-\$4,800 million	\$2000-\$4,200 million

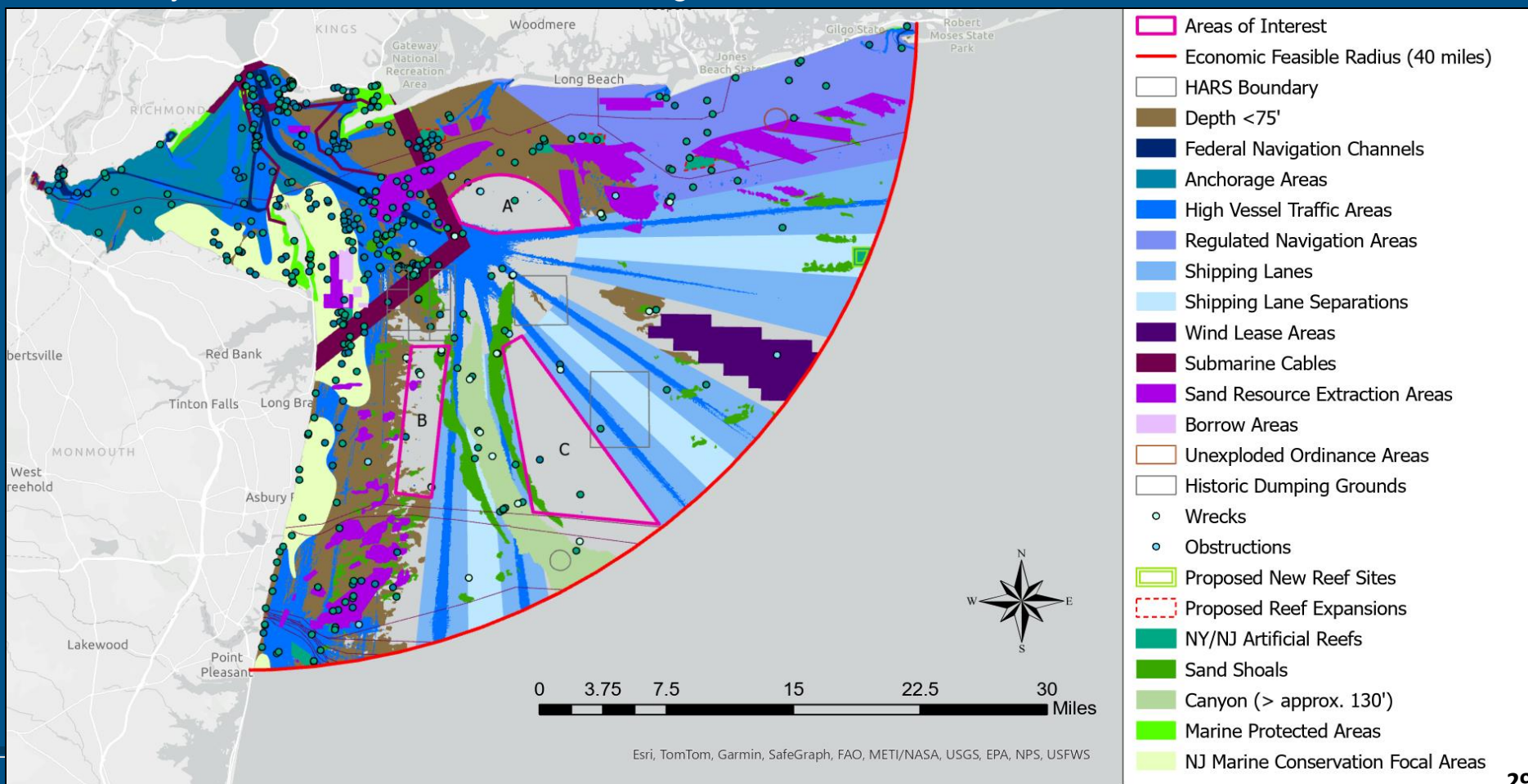
<sup>1</sup> Projected dredge volume of 51 million cubic yards of in-place dredged material

<sup>2</sup> Approximately 3 MCY of O&M sandy dredged material is anticipated and may be beneficially reused.



# Siting within the ZSF

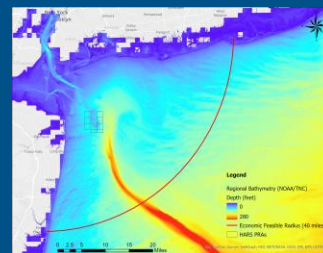
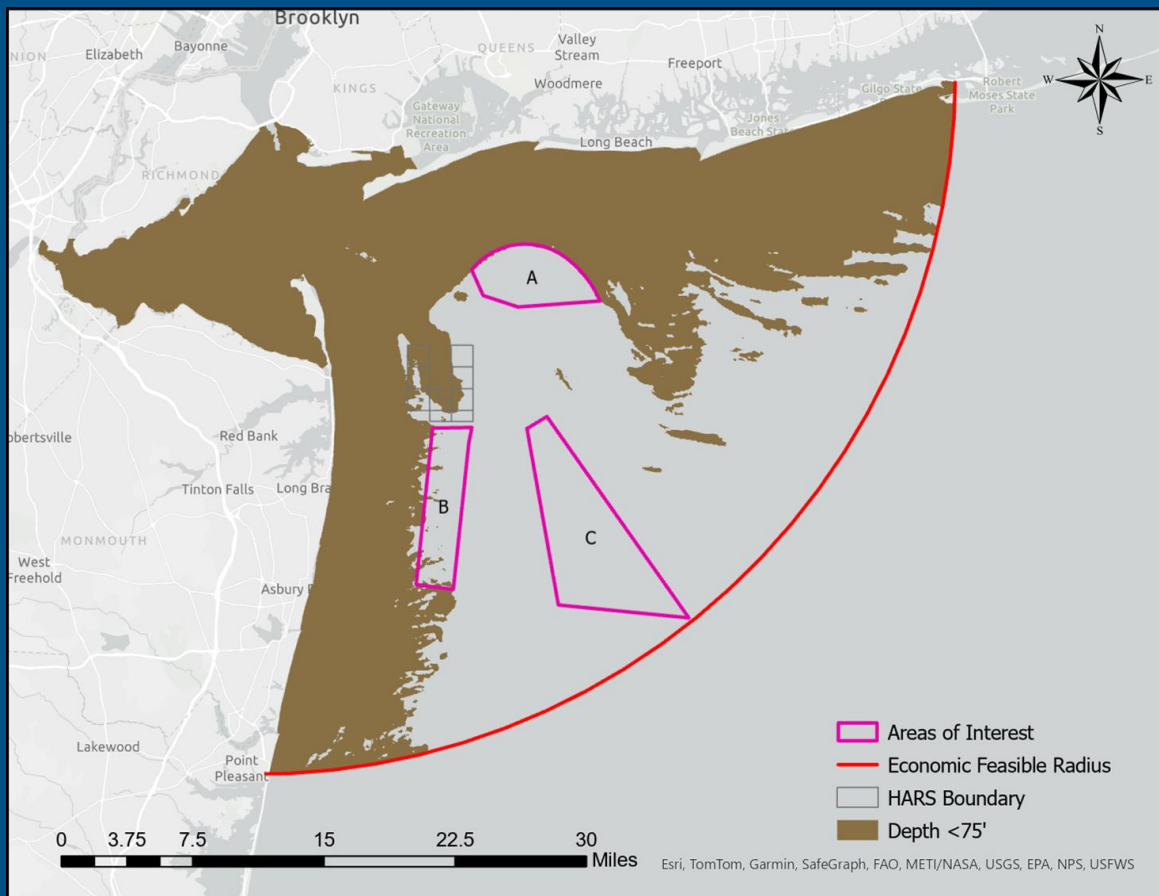
In response to the request for a site(s) for continued ocean management of stringently tested and approved dredged material within the New York Bight ZSF, EPA used publicly available data to identify areas where conflicts with existing uses of the ocean would be minimal.



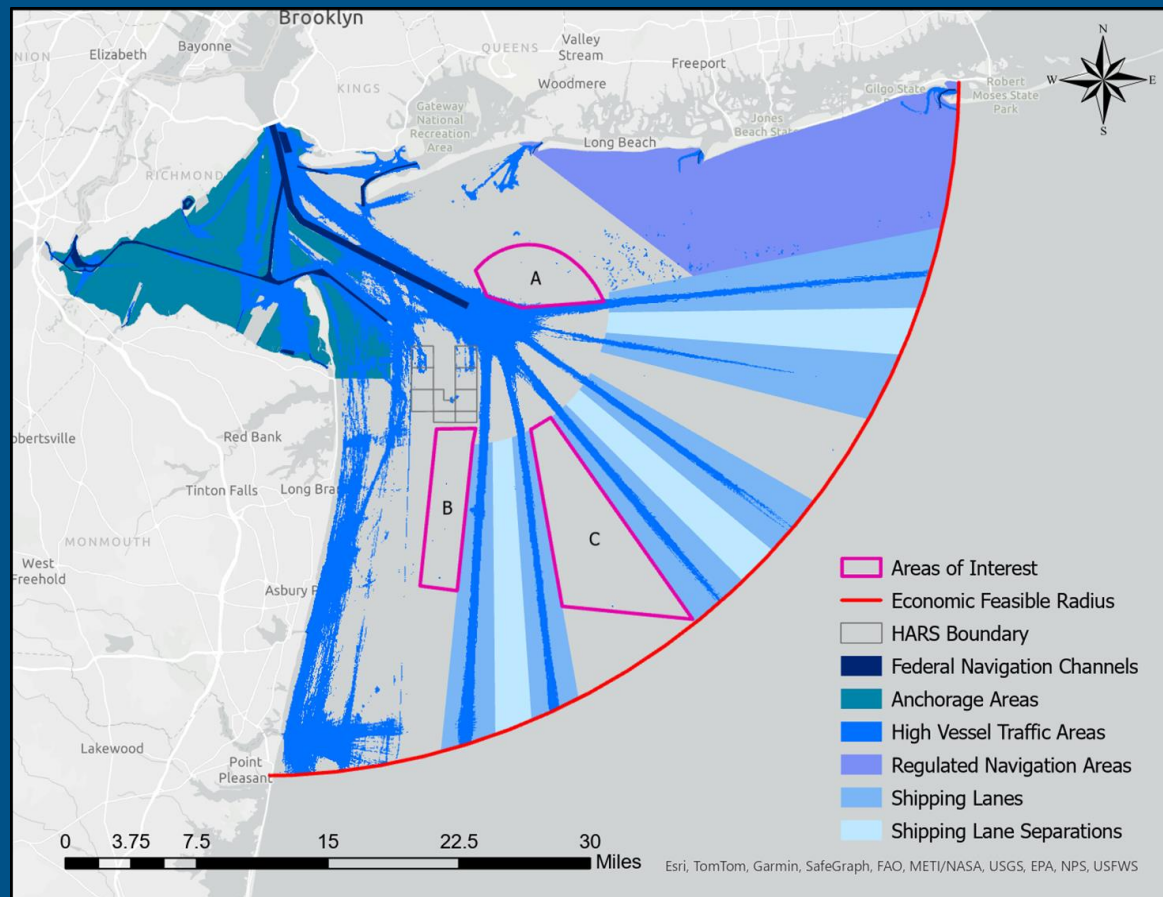
# Siting within the ZSF

## Depth

EPA excluded all areas with a depth less than 75' from consideration. These areas are at depths where mounding of material cannot occur without the potential to create a navigational hazard or to allow for resuspension of material. EPA created this layer using a publicly available regional bathymetry dataset published by the National Ocean and Atmospheric Administration (NOAA) and The Nature Conservancy (TNC).



# Siting within the ZSF

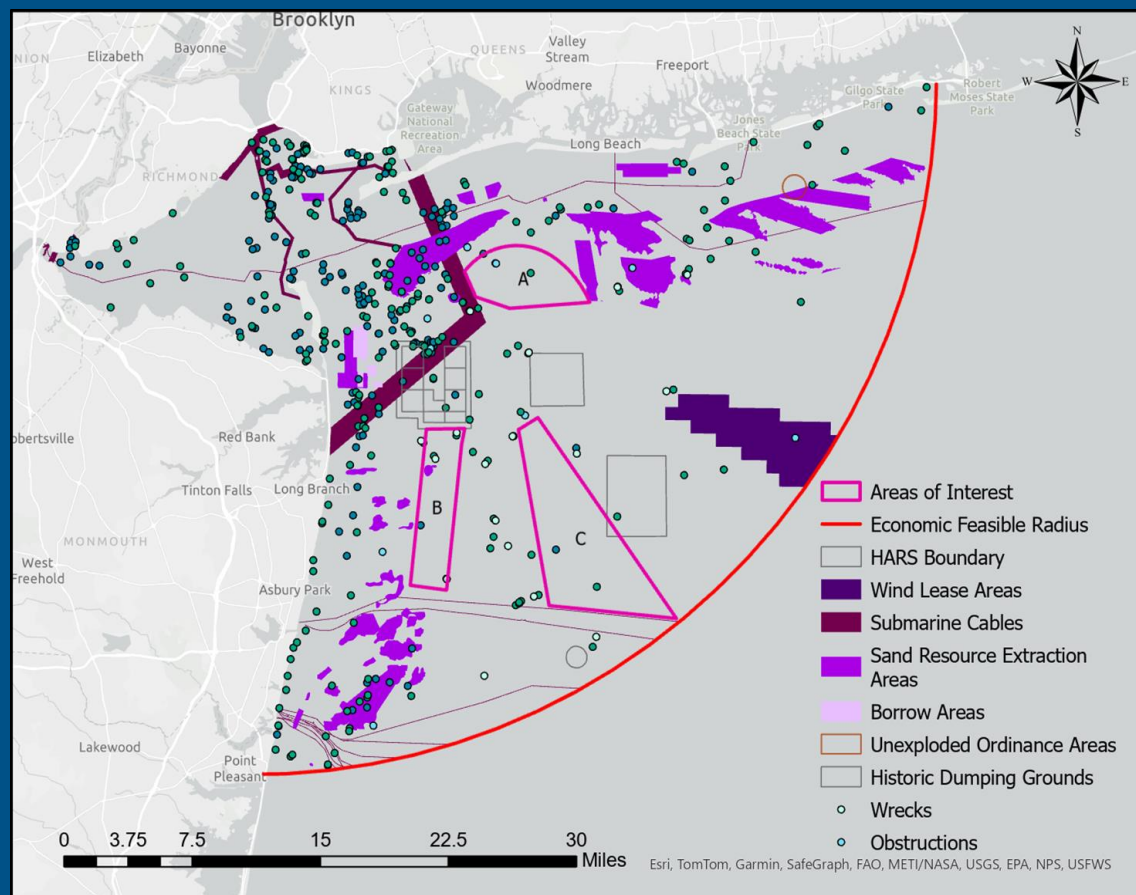


## Navigation/Vessel Traffic

- Federal Navigation Channels (USACE)
- Anchorage Areas (NOAA)
- High Vessel Traffic Areas: based on Automatic Identification Systems (AIS) vessel count data (NOAA)
- Regulated Navigation Areas (NOAA)
- Shipping Lanes/Separations (NOAA)



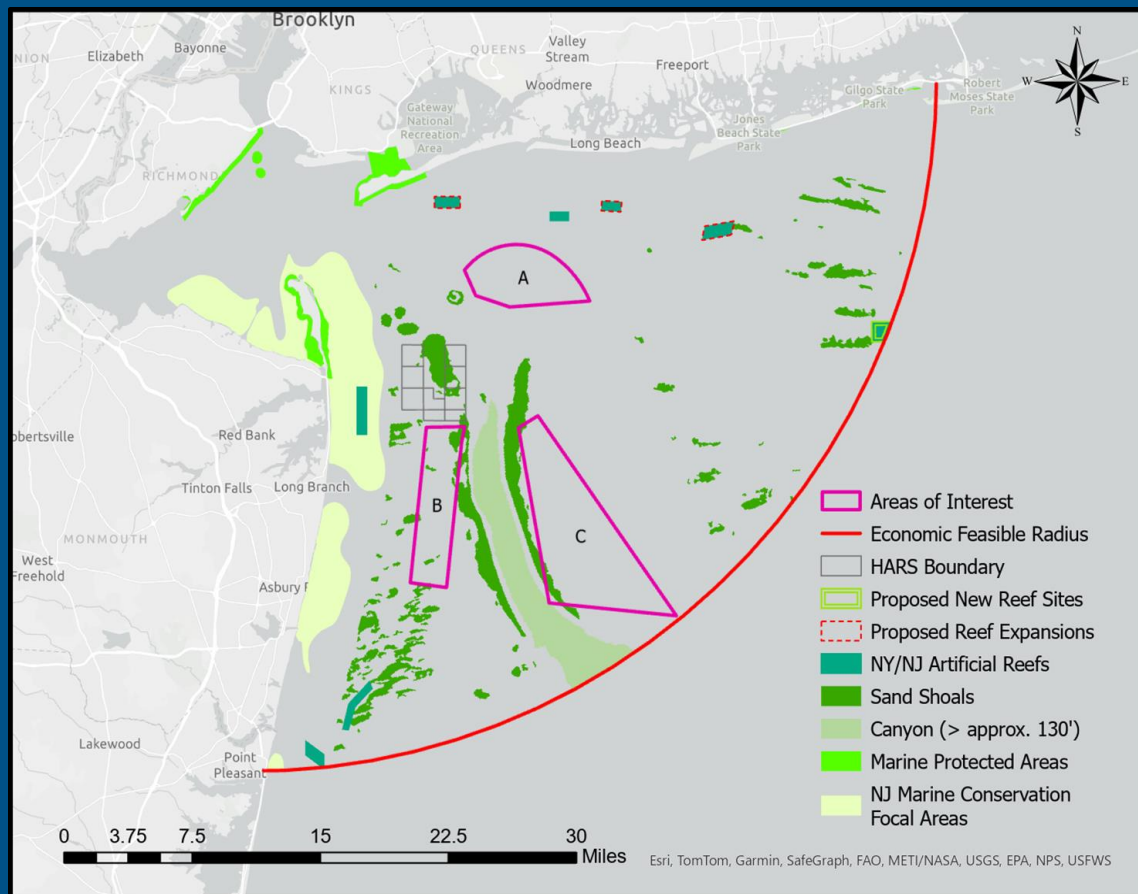
# Siting within the ZSF



## Resources/Obstructions

- Wind Lease Areas (BOEM)
- Submarine Cables (NYSDOS)
- Sand Resource Extraction Areas (NOAA)
- Borrow Areas (USACE)
- Unexploded Ordinance Areas (NOAA)
- Historic Dumping Grounds
- Wrecks and Obstructions (NOAA)

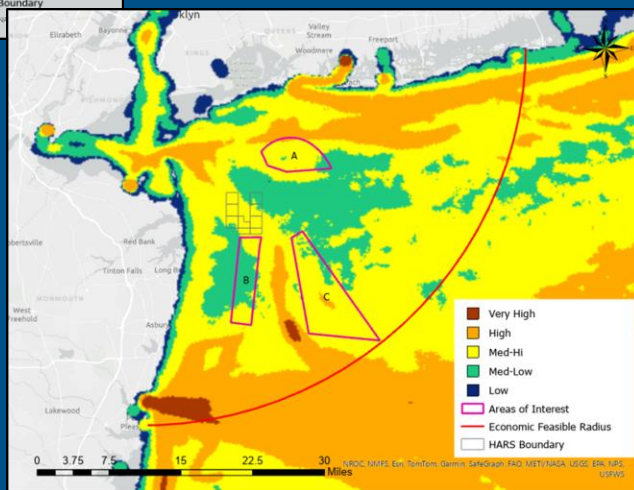
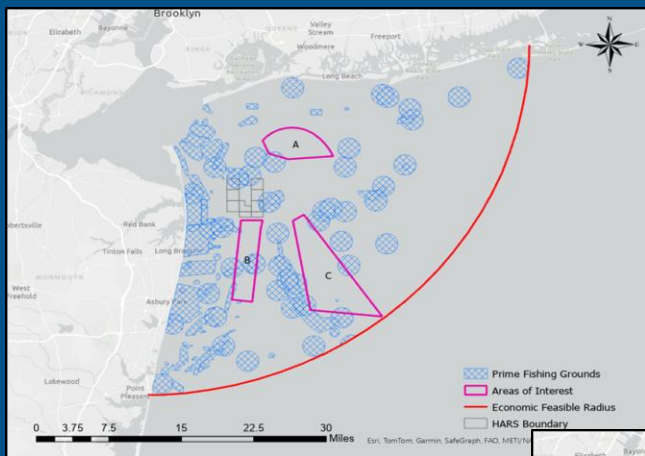
# Siting within the ZSF



## Habitat

- NY/NJ Artificial Reefs (NJDEP)
- NY Artificial Reefs – Planned (NYDEC)
- Sand Shoals (BOEM)
- Canyon: based on Regional Bathymetry (TNC/NOAA)
- Marine Protected Areas (NOAA)
- NJ Marine Conservation Focal Areas (NJDEP)
- Essential Fish Habitat & North Atlantic Right Whale Seasonal Migration Areas: not shown/to be addressed in consultations with NOAA

# Siting within the ZSF



## Fisheries

- Prime Fishing Grounds of NJ data contains locations of identified Commercial and Recreational Fishing grounds of New Jersey (NJDEP)
- Vessel Monitoring Systems (VMS) datasets characterize the density of commercial fishing vessel activity for fisheries in the northeast and mid-Atlantic regions of the U.S. based on VMS from NMFS for the years 2015 to 2019 (NOAA)
  - Ocean Quahog
  - Scallop
  - Squid, Mackerel, & Butterfish
  - Surfclam
  - Herring
  - Monkfish

# Considerations for Evaluating Alternatives

No relaxation of standards is being contemplated for dredged material managed (i.e., must be HARS Remediation quality standards)

Potential impact or benefit will be considered in evaluating alternatives

Approximately 51 million cubic yards of dredged material meeting HARS standards is expected over the next 20 years

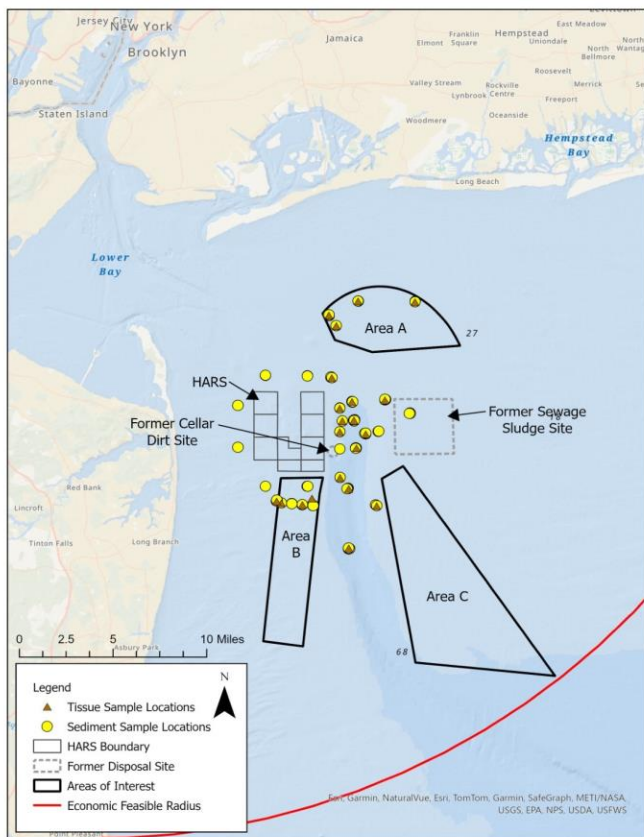
- 29 million cubic yards of maintenance dredged material (approximately 3 million is expected to be sand)
- 22 million cubic yards of native material from harbor improvement (approximately 8.3 MCY of tills, clays and moderately hard rock)

# Potential Alternatives

- **Complete HARS Remediation and Take No Further Action (No Action Alternative)**
- **Designate a dredged material disposal site outside HARS boundaries**  
MPRSA regulations require that "wherever feasible, (EPA is to) designate...sites that have been historically used"
- **Designate a dredged material beneficial use site outside the HARS**
  - remediation site
  - habitat enhancement site
- **Modify the HARS designation to allow continued use after remediation**
  - Manage all materials in one portion of the HARS
  - Manage muds and deepening/native materials separately

# Beneficial Use Opportunities Outside HARS

## Additional Remediation of Impacted Areas



Since 2021, EPA has conducted sampling in areas near other Bight areas used for waste management (sewage sludge, cellar dirt) or in areas of fine sediment inside the potential siting areas

EPA and Corps will evaluate the potential for using HARS-quality dredged material to improve conditions in these areas

Preliminary review suggests that conditions in these areas would not be improved by placement of HARS-quality material



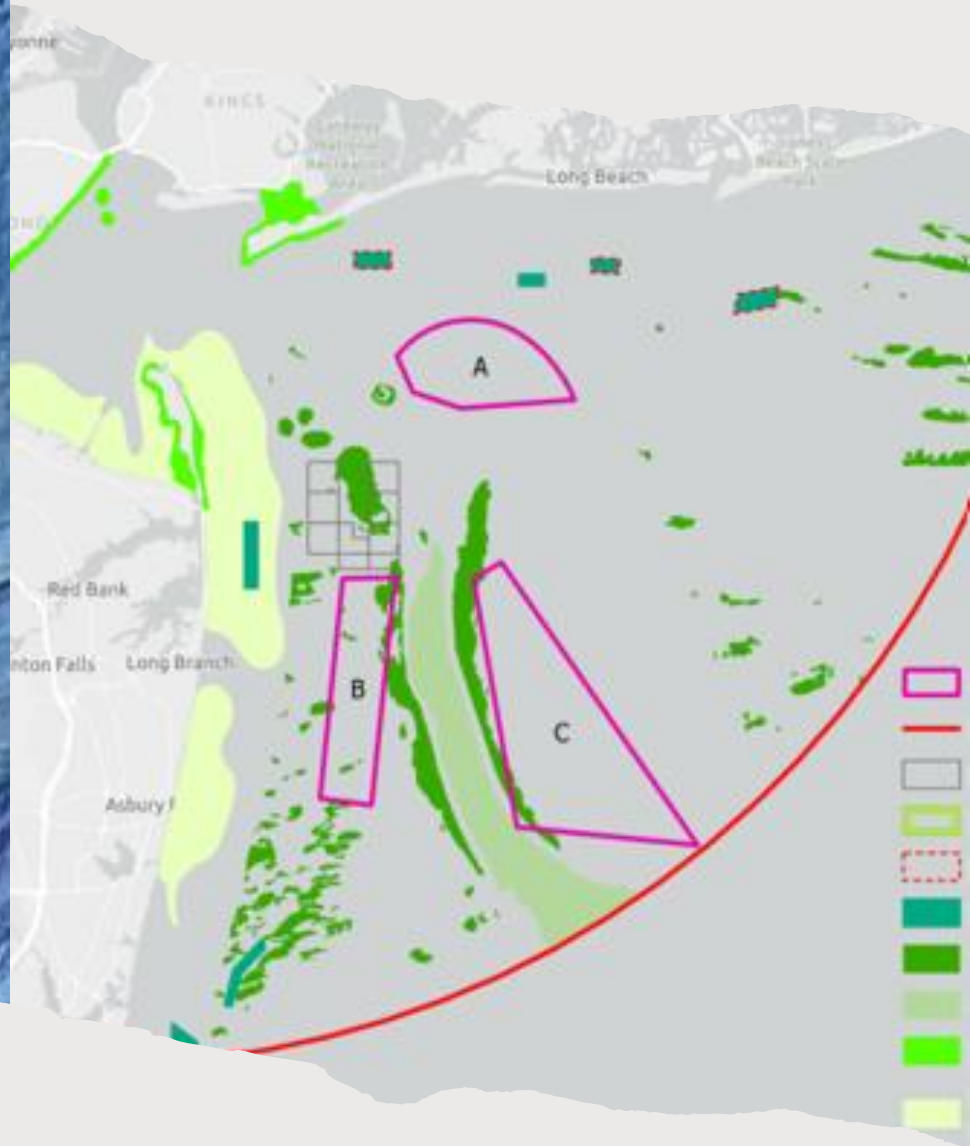
# Beneficial Use Opportunities Outside HARS

## Creation of fishery enhancement features



In 2023 and 2024, EPA met with fish biologists, fishery and habitat managers, and commercial and recreational fishermen to explore the possibility of creating habitat using native dredged material

- General support for the concept but concerns expressed about how and where to construct these features

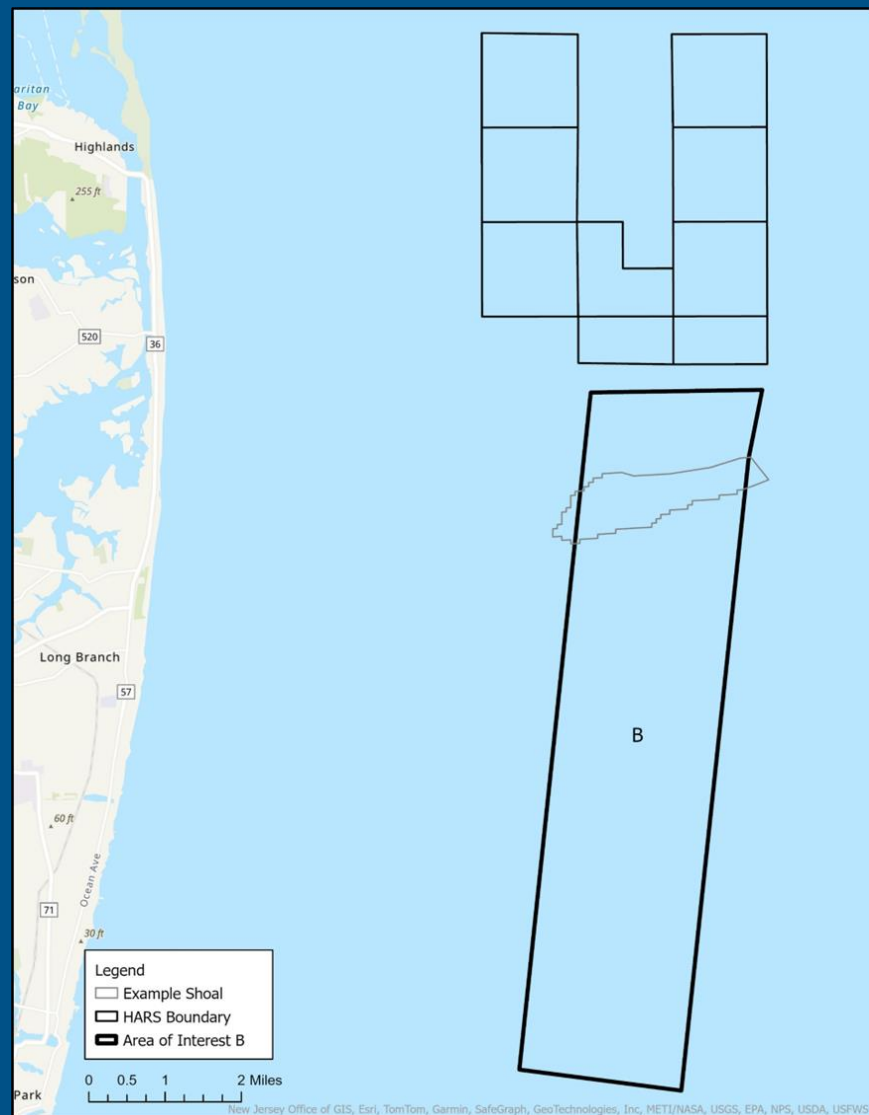


- Shoals exist throughout the Atlantic coast and New York Bight
- Designated as Essential Fish Habitat
- Impacted by sand mining and infrastructure projects



Fish biologists indicated that construction of fishery berm within Area B is probably best location

Example shoal is 10-20 million cubic yards

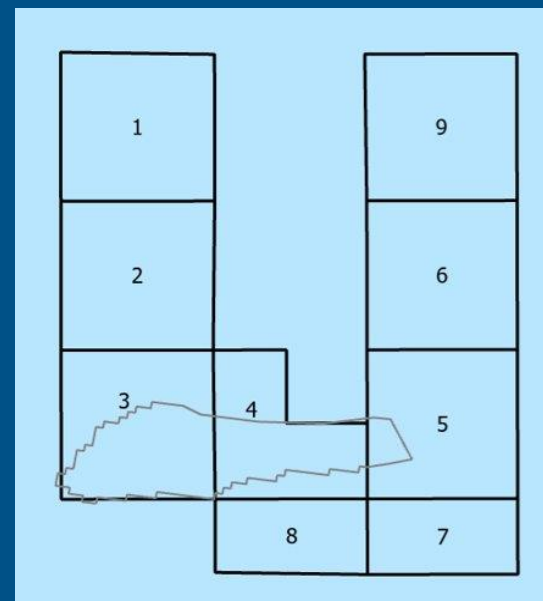
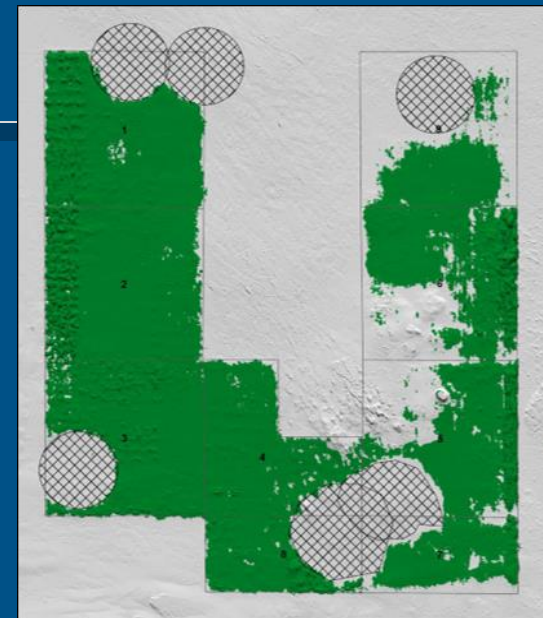


# Modification of the HARS Designation

Specify the area of HARS which would continue to receive dredged material above the targeted one-meter of cover

Consider the basis for maintaining or eliminating (allowing material placement in) two of the four shipwreck buffer zones

Consider purposeful construction of habitat enhancing berms within remediated areas of the HARS



# Next Steps and Scoping Comments

- EPA is currently soliciting scoping comments to support the preparation of the NEPA document

Ways to submit comments:

1. At this meeting
2. In writing:



You may send comments by email to: ***Region2\_MPRSA@epa.gov***

Include “NEPA” in the subject line of the message.

Comments are due by **Monday, July 14 at 11:59 PM EST**

Visit our website for more information and for access to the recordings:

<https://www.epa.gov/marine-protection-permitting/region-2-ocean-dredged-material-management-new-york-bight-atlantic>