



MEETING INVITATION DETAILS



Meeting: March 16, 2021 from 6-7PM EST

Microsoft Teams meeting application will be used

Join on your computer or mobile app (full presentation & audio)

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[Click here to join +1 213-379-9608,,461398873#](#)

Join on any telephone (audio only)

Phone Number: 213-379-9608

Conference ID: 461 398 873#

FORMERLY USED DEFENSE SITE (FUDS) MILITARY MUNITIONS RESPONSE PROGRAM (MMRP) REMEDIAL INVESTIGATION / FEASIBILITY STUDY HINGHAM NAVAL AMMUNITION DEPOT (NAD) PLYMOUTH AND NORFOLK COUNTIES, MASSACHUSETTS

Gina Kaso
USACE Project Manager
USACE New England District

Afton Hess
Project Manager
PIKA-Arcadis JV

Joanne Dearden
Project Manager
MassDEP

Date: March 16, 2021



US Army Corps
of Engineers®



AGENDA

- Introductions
- Project Overview
- Activities Completed / Current Phase
- Available Outreach Materials
- Public Comments/Concerns





INTRODUCTIONS



INTRODUCTIONS



U.S. Army Corps of Engineers (USACE) – Project Oversight

- Hud Heaton: Contract Officer Representative
- Gina Kaso: Project Manager
- Barry Hodges: Technical Manager
- Chad Wood: Geophysicist
- Cindy Auld: Risk Assessor
- Mike Narcisi: Risk Assessor
- Amy Rosenstein: Risk Assessor
- Mike Kulbersh: Geologist
- Yixian Zhang: Chemist



INTRODUCTIONS



Regulatory Involvement

- Joanne Dearden: Project Manager

Stakeholder Involvement

- Town of Hingham
- Town of Weymouth
- Bare Cove Park



INTRODUCTIONS



PIKA-Arcadis JV – Project Execution

- Afton Hess: Project Manager
- Vijay Chennoju: Deputy Project Manager
- Paul Novak: QC Geophysicist
- Hope Nemickas: Risk Assessor



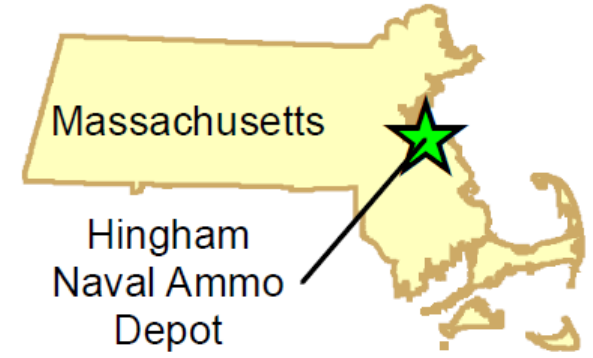
PROJECT OVERVIEW



PROPERTY SUMMARY: GENERAL INFORMATION



- These Formerly Used Defense Sites (FUDS) are located approximately 15 miles south of Boston and comprise 991 acres of land and water in, and surrounding, the Weymouth Back River in Hingham, Plymouth, and Norfolk Counties, Massachusetts.
- The majority of the property is owned by the towns of Hingham and Weymouth, operated by the Bare Cove Park Committee and used for recreational purposes as Bare Cove Park and Great Esker Park.
- The current and anticipated future use of the sites is recreational.





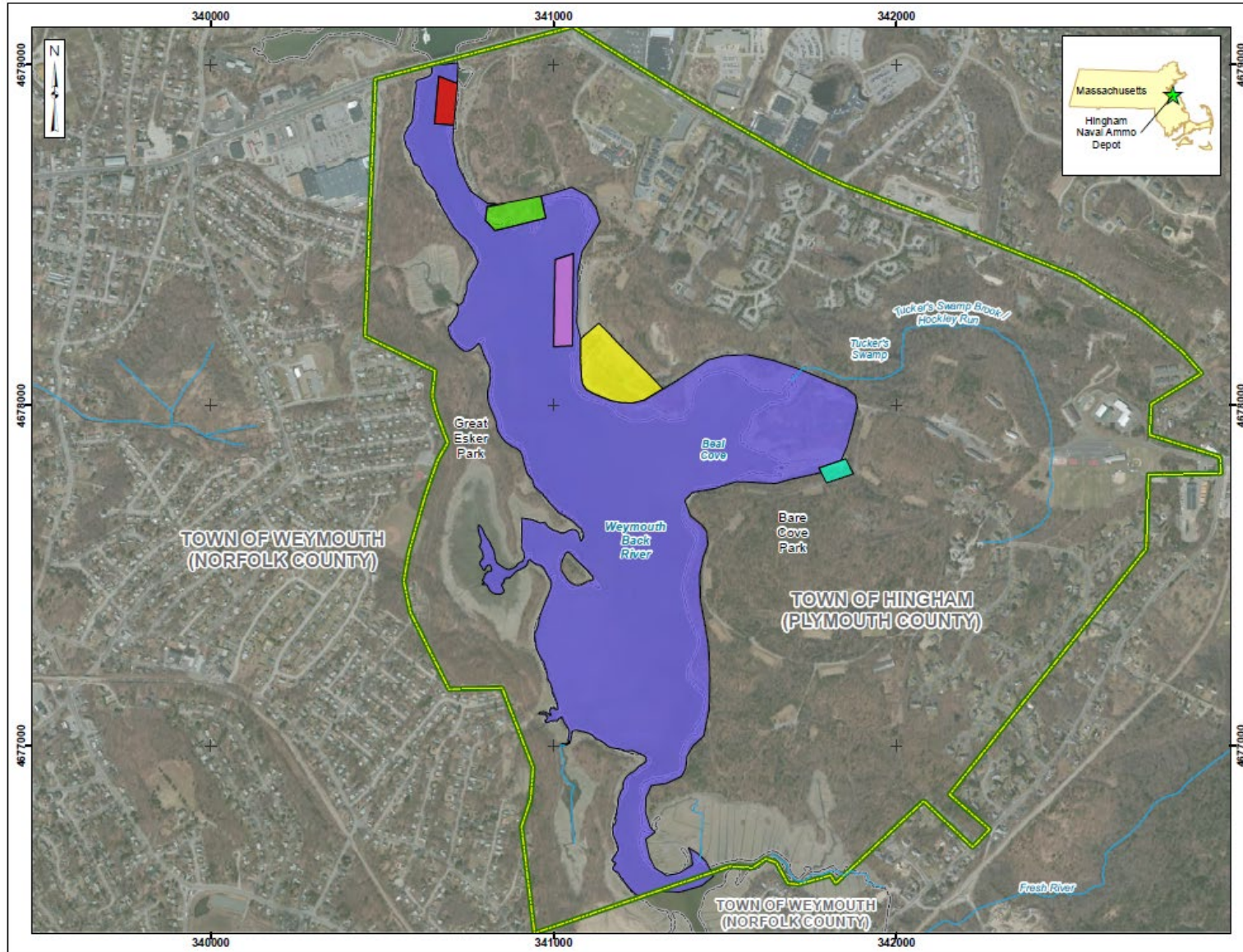
PROPERTY SUMMARY: GENERAL INFORMATION



- Hingham Naval Ammunition Depot (NAD) was used from 1911 to 1961. The six Sites included in the Remedial Investigation include:
 - The 1.8-acre **North Pier** was used for transportation of packaged ammunition.
 - The 1-acre **Dump Area** is on a steep bank on the edge of the Weymouth Back River. It was used for the disposal of solid waste, including munitions and explosives of concern (which may include munitions debris) and range-related materials.
 - The 3.5-acre **South Pier** was used for transportation of packaged ammunition.
 - The 3-acre **Furnace Area** is located between the North and South Piers sites. The site consisted of a small building that housed a “popping” furnace used for disposal of unserviceable and unused munitions. The building has been demolished, but the foundation and other structural items remain at the site.
 - The 8.2-acre **Burial Area** was used for the disposal of solid waste, including munitions and explosives of concern (which may include munitions debris) and range-related materials.
 - The 133-acre **Weymouth Back River** (comprised of 109 open water acres and 24 land acres) consists of a portion of the Weymouth Back River except areas overlapping the North Pier, South Pier, and the Furnace Area. The site was used for transportation of packaged ammunition. The site is recognized as a public waterway between the towns of Hingham and Weymouth.



PROPERTY SUMMARY: GENERAL INFORMATION



Legend

- FUDS Property Boundary
- Town Boundary
- Stream
- Burial Area MRS
- Dump Area MRS
- Furnace Area MRS
- North Pier MRS
- South Pier MRS
- Weymouth Back River MRS



PROPERTY SUMMARY: GENERAL INFORMATION



- The USACE completed a series of environmental investigations at the Hingham NAD to determine the potential presence of munitions and explosives of concern (MEC) and munitions constituents (MC) following the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process, including the following:
 - Initial Inventory Project Report (1993)
 - Archives Search Report (1996)
 - Site Inspection (2008)
 - Revised Inventory Project Report (2014)
 - Remedial Investigation Report (2020)



REMEDIAL INVESTIGATION: MEC ACTIVITIES



- Land and water areas required different survey methods due to varying site conditions. Data was collected using the following survey methods:
 - Digital geophysical mapping surveys using cart-mounted equipment on land and boat-mounted equipment along transects in the water areas; and
 - Analog surveys using hand-held metal detectors on the land and in the nearshore areas not accessible to the digital geophysical mapping survey team. Analog surveys were used instead of digital geophysical mapping surveys on land in areas of steep terrain. Analog surveys were also used in areas near the piers and shallow water areas that were not accessible to the boat mounted equipment.
 - The geophysical team used a Global Positioning System receiver to reacquire each anomaly selected for intrusive investigation.



REMEDIAL INVESTIGATION: MC ACTIVITIES



- Sampling was used to characterize nature and extent of potential MC at the former Hingham NAD.
 - Soil and sediment samples were collected in predetermined locations.
 - Groundwater samples were collected from three wells installed at the Furnace Area site.
 - Based on the specific MC sampling approach at each site, samples were collected at predetermined locations selected to support a statistically valid sampling approach.
 - Sampling would have been conducted at locations of breached munitions and explosives of concern; however, no munitions and explosives concern were identified.
- Analytes/analytical groups included:
 - Explosives
 - Select MC metals (aluminum, antimony, barium, chromium, copper, iron, lead, magnesium, manganese, mercury, nickel, strontium, and zinc)
 - Dioxins and furans
 - Perchlorate (groundwater only)



REMEDIAL INVESTIGATION: SUMMARY OF CONCLUSIONS



- No MEC or MC were identified during the investigation of the 6 sites. Therefore, based on historical information and the results of the Remedial Investigation, there are no unacceptable risk associated with MEC and MC.
- No further action is required to address MEC and MC at the Sites. As such, a Feasibility Study to develop and evaluate remedial alternatives is not needed.

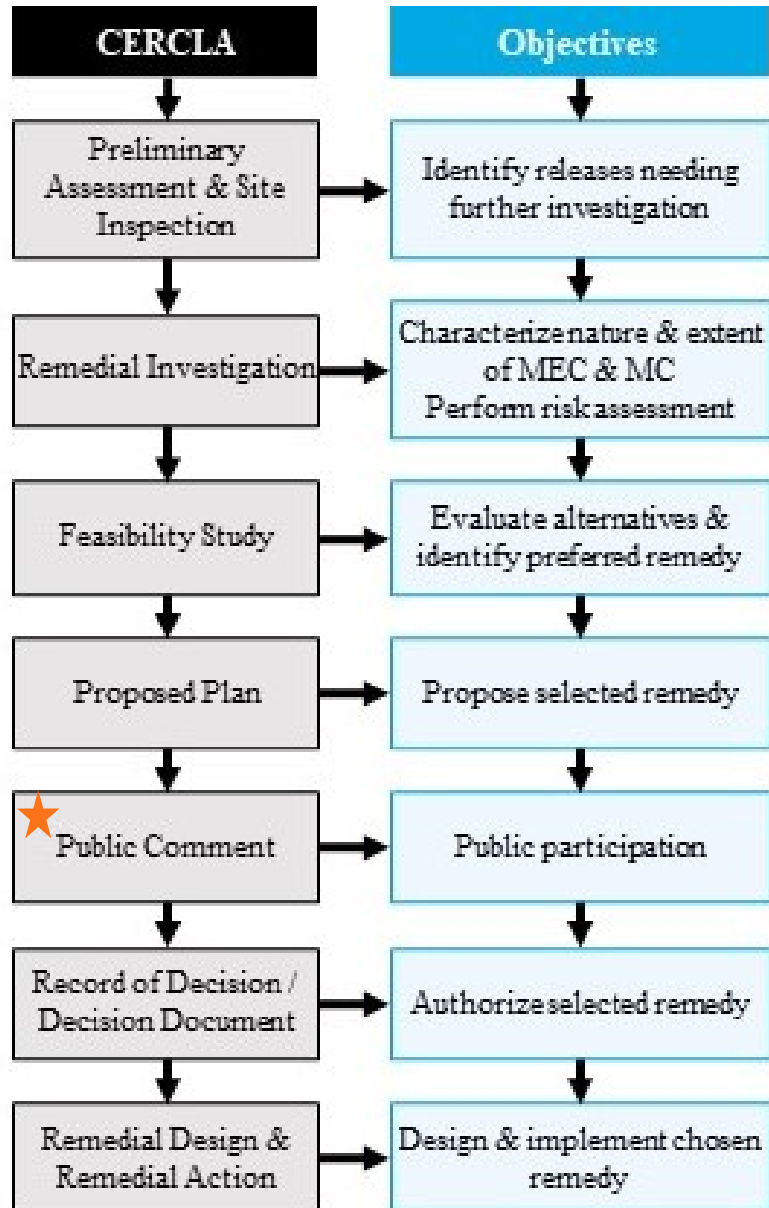
Site	MEC Risk Assessment (Yes/No)	MC Risk Assessment (Yes/No)	No Unacceptable Risk / No Further Action (Yes/No)
North Pier	No	No	Yes
Dump Area	No	No	Yes
South Pier	No	No	Yes
Furnace Area	No	Yes	Yes
Burial Area	No	No	Yes
Weymouth Back River	No	No	Yes



ACTIVITIES COMPLETED / CURRENT PHASE



ACTIVITIES COMPLETED / CURRENT PHASE



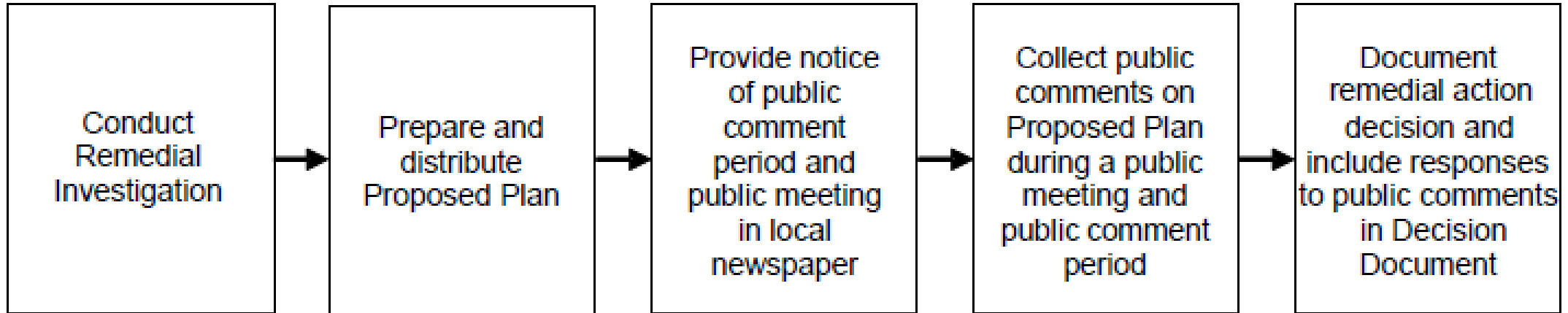
- Preliminary Assessment & Site Inspection (1993 - 2014)
- Remedial Investigation (2020)
- Feasibility Study (Not Required)
- Proposed Plan (March 2021)
- ★ Public Comment (March 2021)
- Decision Document (By June 2021)
- Remedial Design & Remedial Action (Not Required)



ACTIVITIES COMPLETED / CURRENT PHASE



★ Public Participation Process





AVAILABLE OUTREACH MATERIALS



AVAILABLE OUTREACH MATERIALS



- Town of Hingham website (<https://www.hingham-ma.gov/810/Naval-Ammo-Depot>)
- Town of Weymouth website (<https://www.weymouth.ma.us/>)
- For more information and to view project documents, see the Administrative Record file at the following locations:
 - Hingham Public Library (66 Leavitt Street, Hingham, Massachusetts 02043)
 - Tufts @ Pratt Library (46 Broad Street, Weymouth, Massachusetts 02188)
- If you have any questions regarding either the USACE FUDS Program or the Hingham NAD Project, please contact Gina Kaso (Gina.A.Kaso@usace.army.mil / 978-318-8180)



PUBLIC COMMENTS/CONCERNS



SUBMITTED COMMENTS/CONCERNS



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LIST OF ACRONYMS



CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
FUDS	formerly used defense sites
MC	munitions constituents
MEC	munitions and explosives of concern
MRS	Munitions Response Site
NAD	Naval Ammunition Depot
USACE	United States Army Corps of Engineers



LIST OF EXPLOSIVES ANALYZED



Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)

Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)

1,3,5-Trinitrobenzene

1,3-Dinitrobenzene

Methyl-2,4,6-trinitrophenylnitramine (Tetryl)

Nitrobenzene

2,4,6-Trinitrotoluene

4-Amino-2,6-dinitrotoluene

2-Amino-4,6-dinitrotoluene

2,4-Dinitrotoluene

2,6-Dinitrotoluene

2-Nitrotoluene

3-Nitrotoluene

4-Nitrotoluene

Nitroglycerin

Pentaerythritol tetranitrate (PETN)

3,5-Dinitroaniline



SAFETY REMINDER



Remember the 3Rs of Military Munitions Safety:

Recognize:

you may have encountered a munitions item.

Retreat:

from munitions item. Do not touch or disturb it; instead move away carefully, walking out the same way you entered the area. Do not use two-way radios or cell phones within 100 feet of the item.

Report:

what you saw and where you saw it by calling 911.