

RESTORATION ADVISORY BOARD (RAB) MEETING

Former Fort Devens Army Installation
August 31, 2023





U.S. ARMY

WELCOME!



- This call is being recorded to help develop meeting minutes.
- Unless speaking, please remain on mute to reduce background noise.
- There is time for Q&A, but you can ask a question via the chat box at any time during the meeting and speakers will respond as time allows.
- If you need to leave the call, click “Leave.”



CHAT
BOX



MUTE/
UNMUTE



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WELCOME!



Thank you for joining us tonight.

U.S. Army and Support:

Thomas Lineer
*U.S. Army HQDA/ODCS G-9
Base Realignment and Closure
(BRAC) Environmental Coordinator
(BEC)*

Dan Groher, P.E.
*U.S. Army Corps of Engineers
(USACE) New England District*

Pete Phillips
*U.S. Army Corps of Engineers
(USACE) Baltimore District*

Andy Vitolins and Amy Henschke
SERES-Arcadis JV Team

**Regulatory and Other
Board Members:**

Michael Daly
Shawn Lowry
*U.S. Environmental Protection
Agency (USEPA) Region 1*

ZaNetta Purnell
USEPA Public Affairs Specialist

Joanne Dearden
*Massachusetts Department of
Environmental Protection (MassDEP)*

**Community
Board Members:**

Julie Corenzwit
Amy McCoy
Dave McCoy
Chris Mitchell
Laurie Nehring: Co-Chair
Alix Turner: Co-Chair

Guests:

Heidi Hulst
*Office of the Deputy Assistant
Secretary of Defense
(Environment and Energy Resilience)
Environmental Cleanup
Communication & Outreach*

Tim Sueltenfuss
Galen Driscoll



WELCOME!



Tonight's topics

| | | | | |
|---|--|---|--|--|
| <p>1</p> <p>Project Updates & Upcoming Work</p> | <p>2</p> <p>Nashua River Military Munitions Update</p> | <p>3</p> <p>Questions & Answers</p> | <p>4</p> <p>Community Involvement & RAB Update</p> | <p>5</p> <p>Next Meeting</p> |
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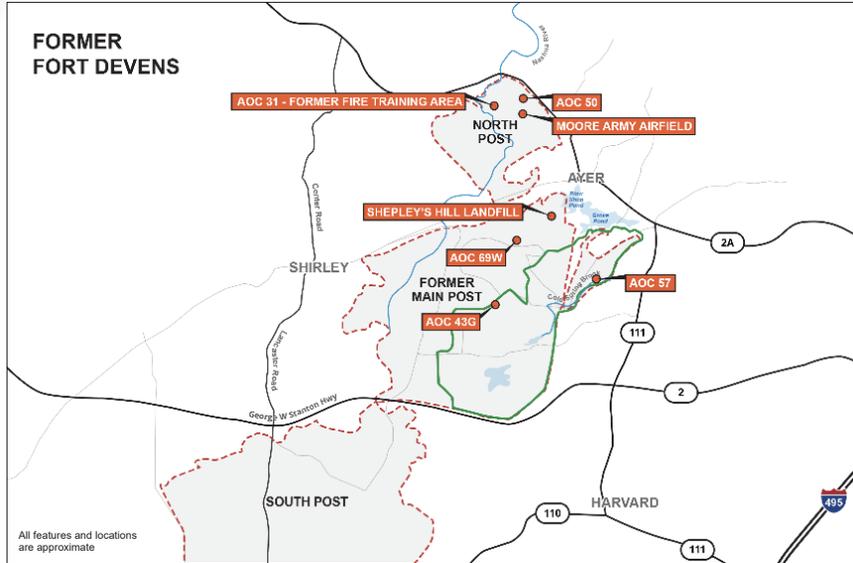


1 | PROJECT UPDATES & UPCOMING WORK

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FORMER FORT DEVENS



- Discussion Areas
- PFAS Area 1
- Former Fort Devens Boundary

All features and locations are approximate

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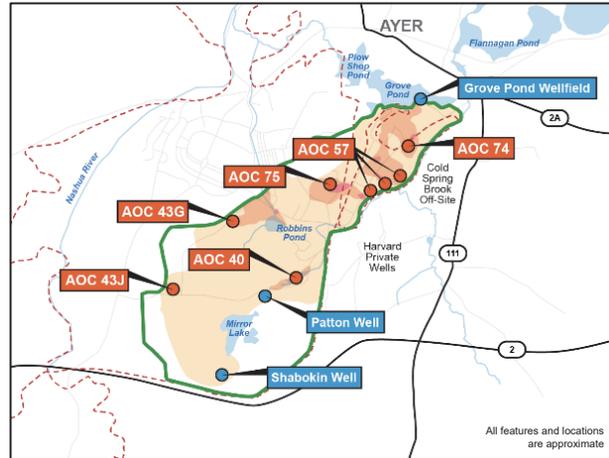
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Area 1 Phase 2 PFAS RI Update

Current Concerns

- Horizontal and vertical extent of per- and polyfluoroalkyl substances (PFAS) in soil and groundwater (overburden and bedrock)
- Sources of PFAS in drinking water supply wells at former Fort Devens (Grove Pond, Patton, and Shabokin wells)
- Potential for PFAS to enter surface water bodies
- Potential for PFAS in private wells in Harvard
- Potential for PFAS to move beyond surface water bodies (Cold Spring Brook, Grove Pond)
- Risks to human health and the environment from PFAS presence in the environment



- Approximate extent of the area exceeding the site-specific screening levels (SSSLs)
- Approximate extent of the area > 10x SSSLs
- Approximate extent of the area > 100x SSSLs
- PFAS Area 1
- AOC
- Water Supply Wells

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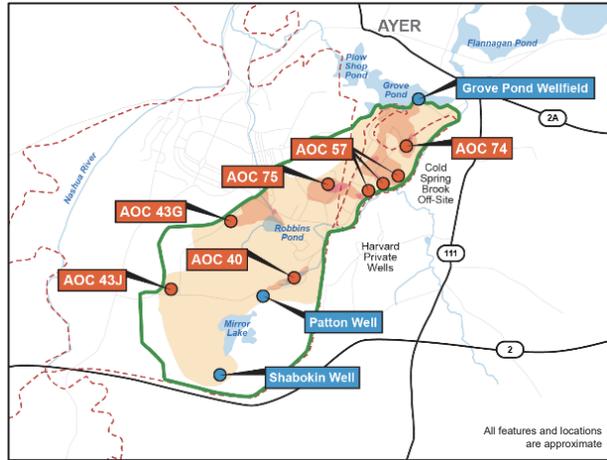


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Area 1 Phase 2 PFAS RI Update (continued)

Updates

- Final Work Plan with Responses to Comments (RTC) to be submitted to USEPA and MassDEP in September 2023
- USEPA Recission - 2019 Memorandum "Interim Recommendations to Address Groundwater Contaminated with Perfluorooctanoic Acid and Perfluorooctanesulfonate"



- Approximate extent of the area exceeding the site-specific screening levels (SSSLs)
- Approximate extent of the area > 10x SSSLs
- Approximate extent of the area > 100x SSSLs
- PFAS Area 1
- AOC
- Water Supply Wells

All features and locations are approximate

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Former Moore Army Airfield Update

Current Concerns

- PFAS in soil and groundwater at Area of Concern (AOC) 31 - Former Fire Training Area (FFTA)
- PFAS discharge to surface water (Nashua River)
- Perchloroethylene (PCE) in groundwater; plume reduced through remediation since 2004.

FFTA Pre-RI Data Collection and Treatability Study

Objectives: Collect additional data to support bench-scale treatability studies for FFTA soil.

Tasks: Collect soil and groundwater samples to evaluate PFAS concentrations with depth; conduct bench-scale treatability study of potential in-situ remedial technologies for soil.

Updates: Laboratory treatability study is ongoing.

Next Steps: Lysimeter installation (week of September 11th) and data evaluation.



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Shepley's Hill Landfill Update

Current Concerns

- Ability of existing groundwater extraction system to meet cleanup goals
- Safety and reliability of existing aboveground groundwater treatment system (arsenic treatment plant)



Features and locations are approximate.

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Shepley's Hill Landfill Update Groundwater Remedy Evaluation

Objective: Evaluate alternatives to existing groundwater extraction system.

Tasks: Focused Feasibility Study (per USEPA 2016 Shepley's Hill Landfill Scope of Work Phase 3).

Updates:

- Draft Focused Feasibility Study: Comments received from USEPA and MassDEP. Meeting to discuss comments held June 2023. Subsequent meeting held August 2023. Draft final report to be submitted Fall 2023.
- 3rd Extraction Well Pilot Testing Work Plan submitted August 2023.

Improve Performance of Existing Groundwater Extraction System

Objectives: Optimize the aboveground treatment process; pilot test of improved groundwater capture with third extraction well.

Tasks: Replace oxidant with permanganate (currently chlorine).

Updates: System upgrades from August through October 2023.

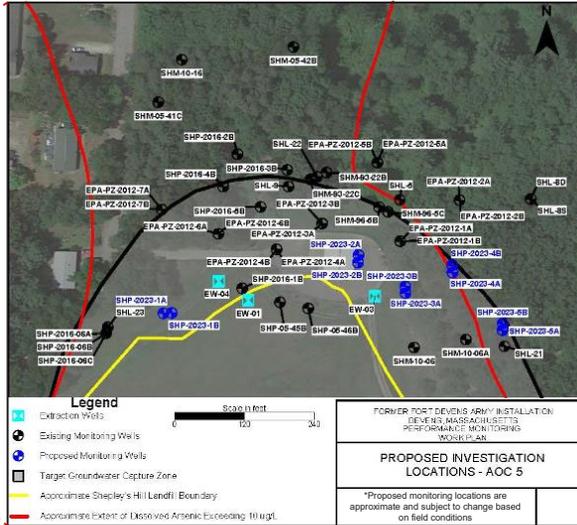


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Shepley's Hill Landfill Update

Improve Performance of Existing Groundwater Extraction System





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Shepley's Hill Landfill Update

(continued)

Plow Shop Pond Barrier Wall Evaluation

Objective: Confirm that the barrier wall is performing as intended.

Tasks: Conduct field investigation in accordance with work plan approved in April 2022, which includes:

- *Surface water sampling (28 samples)*
- *Sediment sampling (28 locations, 140 samples)*
 - *Collecting split samples with EPA at 4 locations*
- *Pore water sampling (28 locations, 12 samples)*
- *One year of water level monitoring (16 locations)*

Updates: Field work started August 2023.

Long-Term Monitoring

Objective/Tasks: Groundwater sampling performed semi-annually to evaluate remedy performance.

Updates: Spring 2023 sampling completed in June 2023. Fall sampling scheduled for October 2023.



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Former Main Post Update

Supplemental Post-ROD RIs for AOCs 69W, 57, and 43G

Current Concern: Is current groundwater remedy still effective/protective?

Objective: Evaluate fate and transport of remaining contaminants.

Tasks: Temporary and permanent groundwater monitoring well installation, groundwater sampling, and groundwater flow evaluation.

Updates: Field work began in July 2023. Monitoring well drilling and vertical aquifer profile sampling completed in August 2023. Baseline groundwater sampling completed in August 2023.

Land Use Control Implementation Plans (LUCIPs) for AOCs 44/52, AOC 69W, AOC 57, and SA 71

Current Concern: Land use controls specified in the Record of Decision (ROD) have been implemented but are not memorialized in CERCLA documents.

Objective: Memorialize requirements for implementing, monitoring, and enforcing ROD-specified land use controls.

Tasks: Prepare LUCIPs for MassDEP and USEPA approval.

Updates: AOC 69W LUCIP approved and final. Draft Final LUCIPs for AOCs 44/52, AOC 57, and SA 71 under review by USEPA and MassDEP.



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Final Documents Posted Since Last RAB Meeting

- AOC 69W LUCIP
- AOC 69W Post-ROD Supplemental Remedial Investigation Work Plan
- AOC 43G Post-ROD Supplemental Remedial Investigation Work Plan
- AOC 57 Post-ROD Supplemental Remedial Investigation Work Plan

Draft Documents Since Last RAB Meeting

- None

Response to Comments / Revised Documents Since Last RAB Meeting

- Draft Focused Feasibility Study – Shepley’s Hill Landfill Groundwater Remedy
- Draft 2022 Annual Monitoring Reports – Main Post, SHL, MAAF (AOC 50)
- Draft Final LUCIPs for AOCs 44/52, AOC 57, and SA 71



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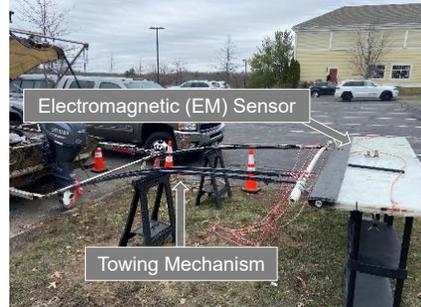
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Nashua River Military Munitions Updates

Project Summary

- Anomaly avoidance activities performed on July 18, 2022, and July 13, 2023, to support water chestnut removal events along river.
- Began field operations to support underwater digital geophysical mapping (UDGM) survey in late February 2023.
- UDGM provides digital record of data to inform follow-up activities (intrusive investigation) and decisions on future actions.
- Goal is to collect reliable, usable data to support overall investigation objectives.
- Site has challenges impacting the ability to collect high-quality, usable UDGM data.
- Purpose of update: review what has been done to date, what has been learned about the project site, and how to achieve objectives moving forward considering the site challenges.



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Nashua River Military Munitions Updates

Anomaly Avoidance Activities

- A Nashua River Watershed Association event was held on July 13, 2023, along Nashua River, similar to last summer, for water chestnut scouting/removal, which occurred from Hospital Rd to West Main St.
- A safety briefing and anomaly avoidance were performed by the Army contractor's Unexploded Ordnance (UXO) Technician in support of volunteers during the event.
- Anomaly avoidance will also be considered to support a potential event next summer.



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Nashua River Military Munitions Updates

Summary of Completed Field Activities

- Initial side scan sonar (SSS) and bathymetry survey conducted in March 2023.
 - Observed and detected numerous obstructions at water surface and underwater (tree limbs, entire trees, natural debris).
- Quality assurance/quality control seeding conducted in March 2023.
- Began UDGM survey work in April 2023.
- Attempted initial step of survey (instrument verification strip [IVS])
 - UDGM team reported electromagnetic (EM) sensor getting hung up because of obstructions and river bottom sediment conditions.
- New or moved obstructions encountered posed added challenge.
- Second SSS conducted in April 2023 to assess changed conditions within the areas of potential interest (AOPs) and along study area, for comparison with initial SSS.



Narrow passage due to treefall between Oxbow Boat Launch and State Route 2 Bridge AOP



Underwater Obstructions Between Oxbow Boat Launch and State Route 2 Bridge AOP

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Nashua River Military Munitions Updates

Site Conditions and Resulting Limitations

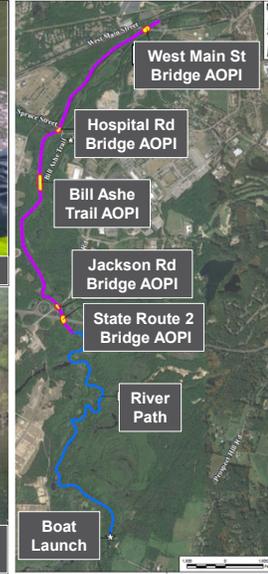
- Significant obstructions and river bottom sediment within and between AOPs impacting navigation, safety, and survey coverage capabilities
- Access to project area (Oxbow Boat Launch ~2 miles away) limited with obstructions along river path
- Sediment impacts sensor height above river bottom – for successful detection, measured signal must be greater than the noise profile
- Seasonal water flow variance – high runoff periods move obstructions (typically late winter/early spring with snowmelt) to calmer waters in summer
- River with steep slopes and varying water depth (shallow to deep conditions)
- Tree canopy/vegetation and bridges limit global positioning system (GPS) efficacy



West Main St Bridge AOP



Between Jackson Rd Bridge AOP and Bill Ashe Trail AOP



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Nashua River Military Munitions Updates

Additional Examples of Surface and Underwater Obstructions:



Between Oxbow Boat Launch and State Route 2 Bridge AOPI.



State Route 2 Bridge AOPI



Jackson Rd. Bridge AOPI

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Nashua River Military Munitions Updates

UDGM Challenges and Way Forward

- IVS was unable to be performed this summer because of contractor availability and canopy/vegetation impacts on GPS efficacy.
 - IVS will be installed and performed in September 2023 and site noise profile assessed (i.e., evaluate target/anomaly picking threshold).
- Navigate obstruction challenges and collect reliable UDGM data from study area if noise does not prohibitively affect project detection requirements.
- Clear natural debris at Jackson Rd Bridge AOP1, as possible, and conduct supplemental analog underwater survey using UXO divers to identify anomalies per responses on the handheld underwater magnetometer.
- If UDGM can gather reliable data, then subsequent underwater intrusive operations will be conducted to investigate target/anomaly locations from UDGM and analog surveys.
- If UDGM cannot gather reliable data, then underwater analog survey will be conducted followed by an intrusive investigation of the anomalies.



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QUESTIONS & ANSWERS





4 | COMMUNITY INVOLVEMENT & RAB

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Next Community Update factsheet will be distributed September 2023 – Plow Shop Pond



Digital Administrative Record (AR) continues to be populated with project documents; Index is [live](#).



Military munitions annual notifications sent in June 2023



The next quarterly RAB meeting will be November 9, 2023 (in-person/hybrid)

The Community Involvement Plan (CIP) and other information is available on the Fort Devens Environmental Cleanup website at:

<https://www.nae.usace.army.mil/missions/projects-topics/former-fort-devens-environmental-cleanup/>

Digital AR link is now live and initial documents are available at:

<https://www.nae.usace.army.mil/Missions/Projects-Topics/Former-Fort-Devens-Environmental-Cleanup/Administrative-Record/>

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THANK YOU!
YOUR PARTICIPATION IS APPRECIATED!

NEXT RAB MEETING IS:
NOVEMBER 9, 2023

(Second Thursday of the month)