## RESTORATION ADVISORY BOARD (RAB) MEETING

Former Fort Devens Army Installation November 10, 2022





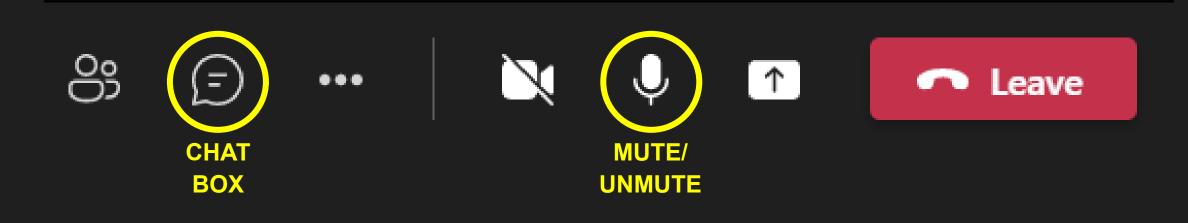




## **WELCOME!**



- 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."







### 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

Andy Vitolins, Steven Perry, Mark Pasquarello, and Amy Henschke SERES-Arcadis JV Team

## Regulatory and Development Board Members:

Carol Keating
U.S. Environmental Protection
Agency (USEPA) Region 1

ZaNetta Purnell USEPA Region 1 Public Affairs Specialist

Joanne Dearden Massachusetts Department of Environmental Protection (MassDEP)

Roy Herzig MassDevelopment

## Community Board Members:

Julie Corenzwit
Amy McCoy
Dave McCoy
Chris Mitchell
Laurie Nehring
Alix Turner





### **Tonight's topics**

**Community Involvement** & RAB Update

**Project Updates & Upcoming** Work

**Next Steps** & Meeting

4

**Questions** & Answers





### **Community Involvement Plan Update**



Information repository is at the Ayer Library and being updated with PFAS project documents



Digital Administrative
Record (AR) continues
to be developed and
populated with project
documents



Military munitions notifications and public outreach efforts continue



The next quarterly RAB meeting will be on February 9, 2023

The Community Involvement Plan (CIP) and all other documents including the ARs are available on the Fort Devens Environmental Cleanup website at:

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





### **RAB Technical Committee Meeting**

Technical Committee meeting held on October 6, 2022

Primary topics of discussion included:

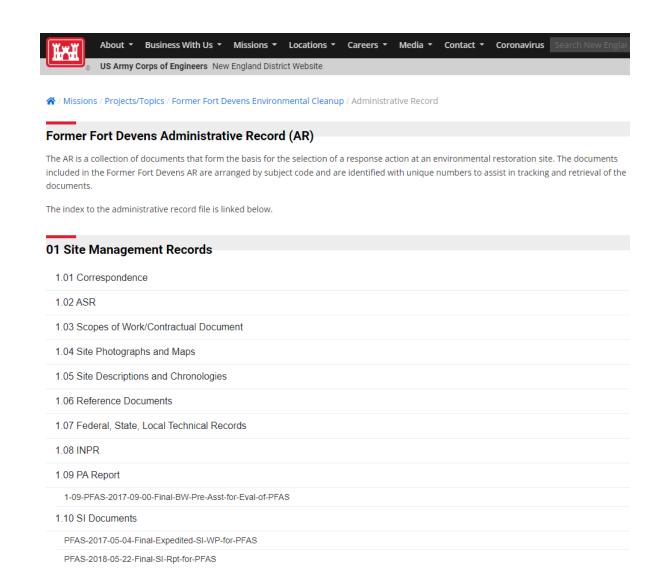
- Additional sampling of soil and groundwater at the AOC 31 Former Fire Training Area (FFTA) at Moore Army Airfield.
- Next steps at FFTA, including how sampling and bench-scale treatability study results will be used.
- Overview of current planning for PFAS investigation in Area 1, including the scale and scope for sampling of soil, groundwater, surface water, sediment, and fish tissue.





### **Digital Administrative Record**

- 100+ documents have been uploaded to the digital AR accessible via the project website
- Initial focus is making PFAS and recent Shepley's Hill Landfill documents accessible (2016 – current)
- Next phase of uploads is starting now, focused on inventorying, scanning, and uploading digital copies of paper materials currently on base
- A helpful index to documents and links is expected to be ready and posted in November 2022







## **Evaluation of Ideal Location for Physical Information Repository (IR)**

Location	Able to Serve as IR?	Hours	Open Evenings/Weekends?	Access Details	Distance
Ayer Library	Yes, currently serving as the repository	Tues/Thurs: 10-6 Wed: 10-8; Fri: 10-5 Sat: 9-2	10 hours per week	Current room is open and easy to access and maintain.  A table and chairs are available in the room adjacent to the shelving where documents are stored.	Adjacent
Ayer Police Department	No			Insufficient supervision and document controls	Adjacent
Ayer Town Hall	Yes	Mon/Weds/Thurs: 8-4 Tues: 8-6; Fri: 8-2	1 hour per week	Documents would be in the Great Hall, which is unsupervised. Documents would not be able to be monitored and controlled via a check in/out sheet.	Adjacent
Fitchburg Library	No			No space available during construction (2022-2025)	12 miles
Harvard Library	No			No adequate space available.	7 miles
Hazen Memorial Library (Shirley)	No			No adequate space available.	2 miles
Leominster Library	No			No adequate space available	9 miles
Thayer Memorial Library (Lancaster)	Yes	Mon/Weds/Thurs: 10-8 Tues: 12-8; Fri: 10-5 Sat: 10-2	16 hours per week	No public access to historical documents room, not a browsable space. Potential to have document list or instructions on the community board.	10 miles





## **Current Information Repository at Ayer Public Library**



Current shelving



Table available



More shelving is ready





#### **Final Documents Posted Since Last RAB Meeting**

- Final In-Situ Air Sparge Pilot Test Implementation Report Shepley's Hill Landfill (SHL)
- Final 2021 Annual Monitoring Reports SHL, Main Post, AOC 50 (MAAF)
- Final SHL Arsenic Treatment Plant Design Memorandum SHL

#### **Draft Documents Submitted to Agencies Since Last RAB Meeting**

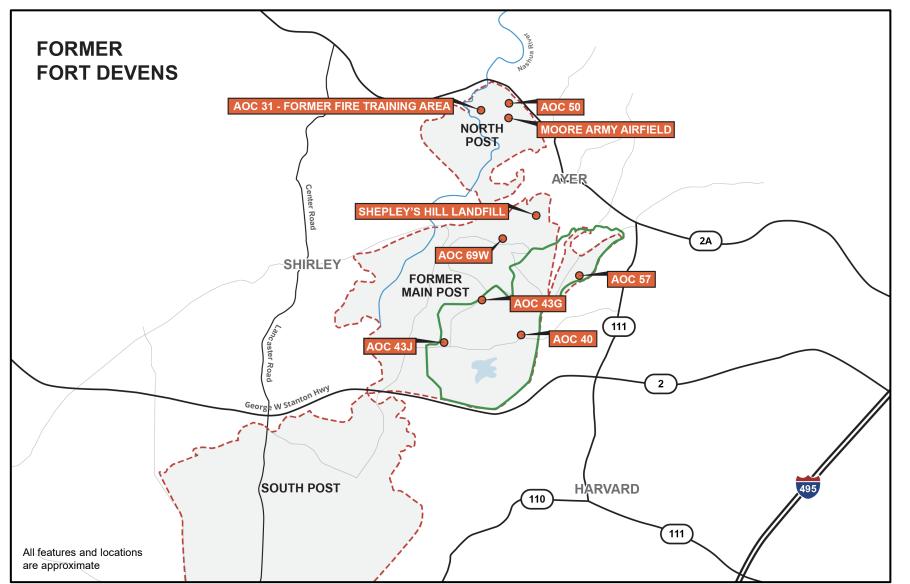
- Draft Outline SHL Focused Feasibility Study (FFS)
- Revised Draft Post-ROD AOC 57 Supplemental Remedial Investigation (RI) Work Plan Main Post
- Spring 2022 Long-Term Monitoring Data (Validated) SHL, Main Post, Former Moore Army Airfield (MAAF)
- Draft AOC 57 Land Use Control Implementation Plan (LUCIP) Main Post
- Draft SA 71 LUCIP Main Post
- Revised Draft MR-QAPP Nashua River

#### Responses to Comments/Revised Docs. Submitted to Agencies Since Last RAB Meeting

- RTCs: Draft PFAS Area 1 Phase 2 RI Work Plan
- RTCs: Draft AOC 69W LUCIP
- RTCs: Draft AOC 43G Post-ROD Supplemental RI Work Plan
- RTCs: Revised Draft AOC 69W Post-ROD Supplemental RI Work Plan







Discussion Areas



\_ \_ \_ Former Fort Devens
Boundary





### **Former Moore Army Airfield Updates**

#### **Current Concerns**

- PFAS in soil and groundwater at AOC 31 Former Fire Training Area (FFTA)
- PFAS discharge to surface water (Nashua River)
- Remnant perchloroethylene (PCE) in groundwater (post-remediation)

#### 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.

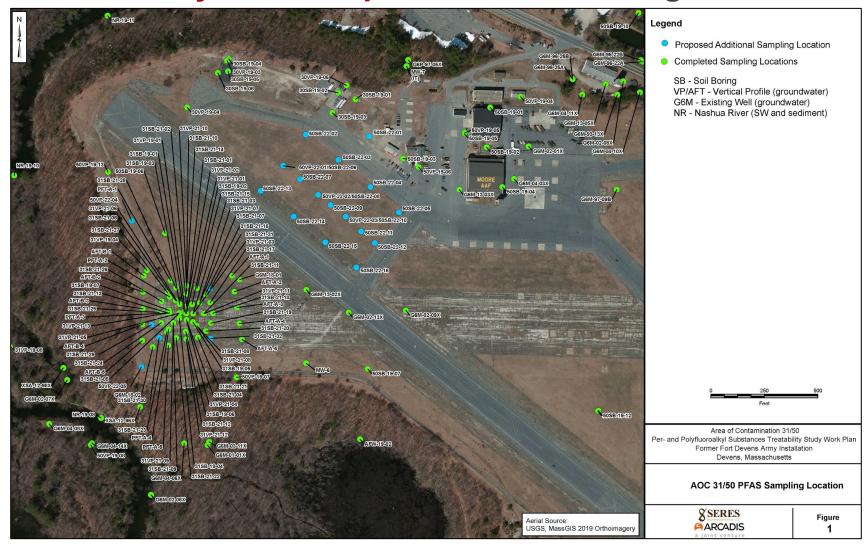
**Updates:** Soil and groundwater sampling began in June 2022 and was completed in September 2022. Treatability study initiated in October 2022. Additional soil and groundwater sampling planned October through December 2022.







## **Former Moore Army Airfield Updates - FTA Investigations**

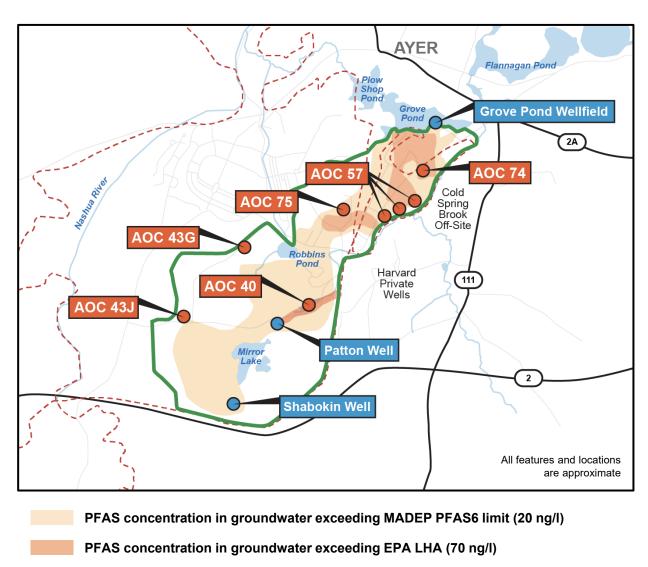






### **Area 1 Phase 2 PFAS RI Update Current Concerns**

- Horizontal and vertical extent of 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)
- PFAS discharge to surface water bodies
- PFAS in private wells in Harvard
- Potential for PFAS migration beyond surface water bodies (Cold Spring Brook, Grove Pond)
- Risks to human health and the environment from PFAS presence in environmental media



O AOC PFAS Area 1



Water Supply Wells





### **Area 1 Phase 2 PFAS RI Update**

**Draft Work Plan Summary (Post-USEPA/MassDEP Comment in Army RTC)** 

Task	Concern/Area Addressed	Quantity (as presented in draft document or RTC)	
Surface Geophysics (seismic profiling)	Bedrock surface depth	30,000 linear feet	
Soil Borings	Presence/magnitude of PFAS in unsaturated soil	30+ locations (multiple depth intervals each)	
Vertical Aquifer Profiling	Horizontal and vertical extent of PFAS in overburden groundwater	15 locations (approx. 8 intervals each)	
Overburden Monitoring Well Installation	Horizontal and vertical extent of PFAS in overburden groundwater	30 wells (in additional to 37 existing)	
Bedrock Monitoring Well Installation	Presence of PFAS in bedrock aquifer	11 wells (in additional to 3 existing)	
Stream Gauge Installation	Groundwater/surface water discharge patterns	6 locations (in addition to 8 existing)	
Surface Water and Sediment Sampling	Presence and concentrations of PFAS in surface water and sediment	46 surface water locations in 9 surface water bodies (CSB, CSB Pond, Mirror Lake, Robbins Pond, Grove Pond, Plow Shop Pond, Balch Pond, Nashua River, Bowers Brook), 7 additional sediment locations (39 previously sampled)	
Fish Tissue Sampling	Presence and concentration of PFAS in edible portions of fish (human health consumption risk)	6 surface water bodies, 10 fish per location (CSB, Mirror Lake, Robbins Pond, Grove Pond, Plow Shop Pond, Nashua River)	
Groundwater Sampling	Presence and concentrations of PFAS in overburden and bedrock groundwater. Groundwater flow direction.	2 events – fall/spring; 92 locations per event	
Human Health Risk Assessment	Potential human exposure pathways and risk associated with PFAS in the environment.	Human Health Risk Assessment (HHRA) per EPA guidance.	
Ecological Risk Screening	Potential ecological exposure pathways and risk associated with PFAS in the environment.	Screening Level Ecological Risk Assessment (SLERA) per EPA guidance.	





### **Shepley's Hill Landfill Updates**

#### **Current Concerns**

- Arsenic in groundwater downgradient (north) of landfill
- Ability of existing groundwater extraction system to meet cleanup goals







### **Shepley's Hill Landfill Updates**

#### **Groundwater Remedy Evaluation**

**Objective:** Evaluate alternatives to existing groundwater extraction system.

**Tasks:** In-Situ Air Sparging Pilot Study; Focused Feasibility Study (USEPA 2016 SHL SOW Phase 3).

**Updates:** Final Air Sparging Pilot Study Report submitted in September 2022; Draft Final Focused Feasibility Study Outline and table of ARARs to be submitted November 2022.

#### **Arsenic Treatment Plant (ATP) Pilot Test**

**Objective:** Optimize the post-groundwater extraction treatment process.

**Tasks:** Replace oxidant with permanganate (currently chlorine).

**Updates:** Final Design Memo for metals removal systems submitted to Agencies in October 2022; installation of alternate metal removal system estimated Spring 2023.





## **Shepley's Hill Landfill Updates**

(continued)

#### **Plow Shop Pond Barrier Wall Evaluation**

**Objective:** Confirm that the barrier wall is preventing groundwater discharge containing arsenic to Plow Shop Pond.

**Tasks:** Conduct field investigation in accordance with Work Plan approved in April 2022.

**Updates:** Field work to be conducted once contracting is complete (spring 2023).

#### **Long-Term Monitoring**

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

**Updates:** Spring sampling completed in May 2022; fall sampling completed in November 2022.





### **Former Main Post Updates**

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, groundwater flow evaluation.

**Updates:** RTCs for Revised Draft Work Plan for AOC 69W and Draft Work Plan for AOC 43G submitted in October 2022; Draft Work Plan for AOC 57 submitted in August 2022; field work to follow Work Plan Approval.

LUCIPs for AOCs 44/52, AOC 69W, AOC 57, and SA 71

**Current Concern:** ROD-specified land use controls 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:** Draft LUCIPs for AOCs 44/52, 69W, and 57 under review by agencies; RTCs for Draft AOC 69W LUCIP submitted in; SA 71 LUCIP submitted in August 2022.



## 4 | QUESTIONS & ANSWERS









# THANK YOU! YOUR PARTICIPATION IS APPRECIATED!

NEXT RAB MEETING IS: FEBRUARY 9, 2023

(Second Thursday of the month)