

Air Force Installation & Mission Support Center



Updates on Air Force Response Actions for PFAS at Ellsworth AFB

Rita Krebs, PG

Environmental Restoration Program

March 12, 2026



Purpose



***To present an update on the Air Force response to PFAS impacts at
Ellsworth AFB***



- **Results of the 2025 Restoration Advisory Board Interest Assessment**
- **Air Force plans to continue addressing PFAS**
- **Update on new waterline construction**
- **Resources for additional information**



2025 Restoration Advisory Board (RAB) Interest Assessment



- **RAB:**
 - Formal board made up of government and community members
 - Follows formal procedures (like a city council meeting)
 - Discusses the entire environmental restoration program at an installation
- **Ellsworth had a formal RAB in the 1990s that was dissolved in the 2000s**
- **RAB interest assessment required every 24 months**
 - Ellsworth AFB wing commander is responsible for decision to reinstate RAB
 - Based on feedback from the community
- **Interest in reinstating the RAB was solicited via:**
 - Article in June 2025 Newsletter
 - Public notice published in the Rapid City Journal (June 17, 2025)



2025 RAB Interest Assessment



- **Two responses, both expressing interest in participating in a RAB**
- **Ellsworth AFB wing commander decided not to reinstate the RAB based on several factors, including the robust community involvement program already in place**
 - **In the 24-month assessment period:**
 - 8 newsletters published
 - 2 Town Halls held
 - Open House hosted
 - **Read the memorandum on the Administrative Record (AR# 8938) at <https://ar.cce.af.mil/>**
- **The next RAB interest assessment will be conducted in 2027**



Integrating PFAS MCLs into Cleanup Program



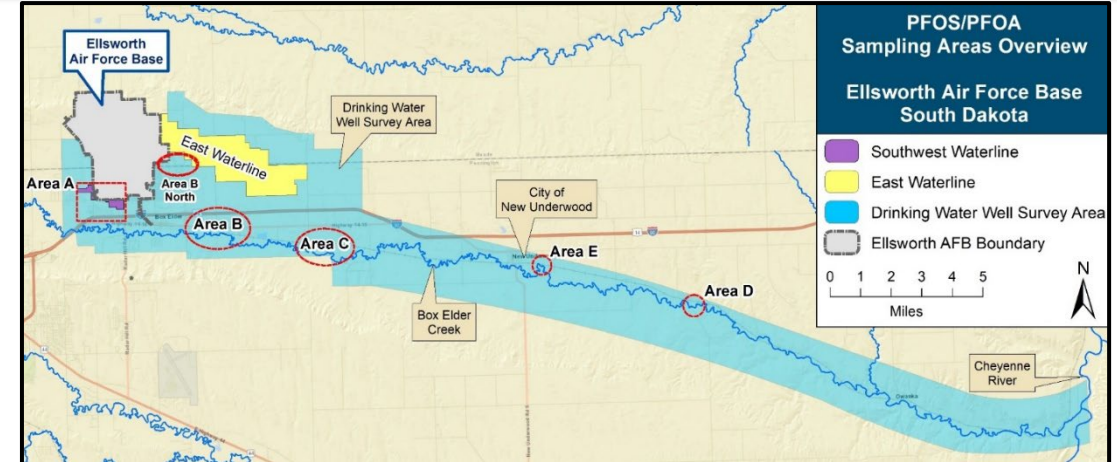
- **U.S. Environmental Protection Agency (EPA) published Maximum Contaminant Levels (MCLs) for PFAS in 2024**
 - **Rule provided 5 years for regulated public water systems to comply**
 - **Individual MCLs in parts per trillion (ppt)**
 - PFOA = 4 ppt
 - PFOS = 4 ppt
 - PFHxS = 10 ppt
 - PFNA = 10 ppt
 - HFPO-DA = 10 ppt
 - **Hazard index for PFHxS, PFNA, PFBS, and HFPO-DA = 1 (unitless)**



Integrating PFAS MCLs into Cleanup Program



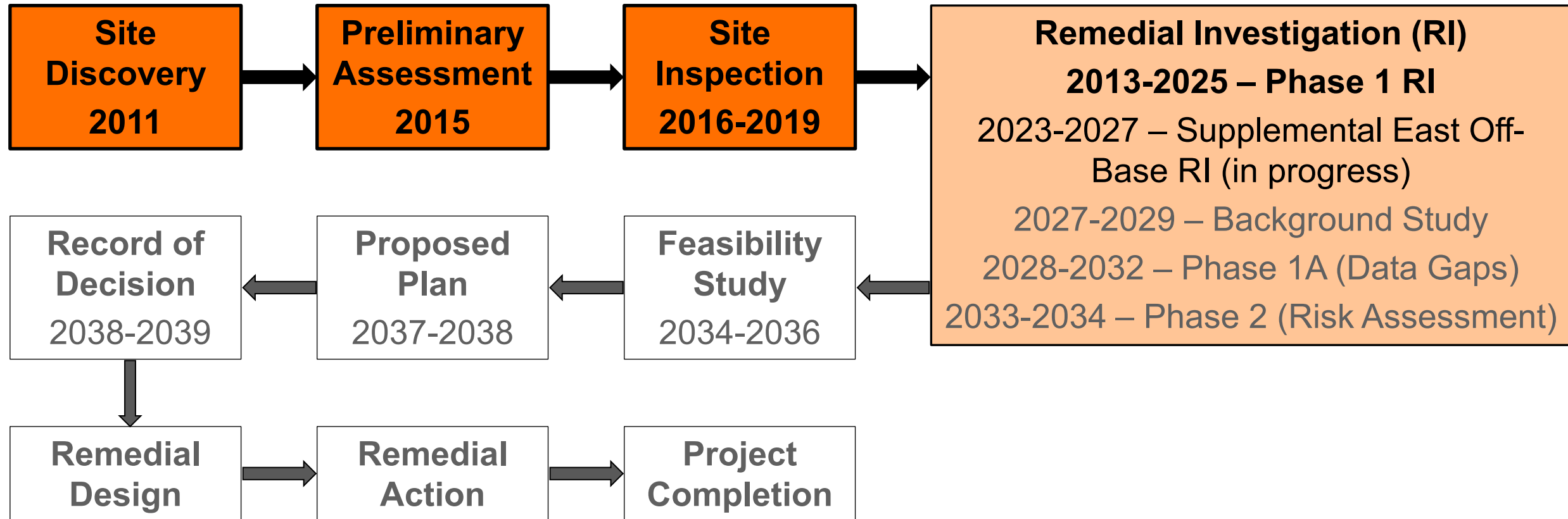
- New contract scheduled for award in 2026
- Initial focus is on War Department's priority installations (Ellsworth is on the priority list)



- 1st Step: Drinking water wells with PFAS greater than 3 times MCLs will receive a point-of-use (under kitchen sink) filtration system (8 near Ellsworth)
- 2nd Step: Drinking water wells with PFAS between the MCLs and 3 times the MCLs will receive a point-of-use filtration system (0 near Ellsworth)
- 3rd Step: Drinking water wells sampled previously will be resampled to ensure concentrations remain below the MCLs (80+)
 - Includes wells not previously sampled (at least 2)



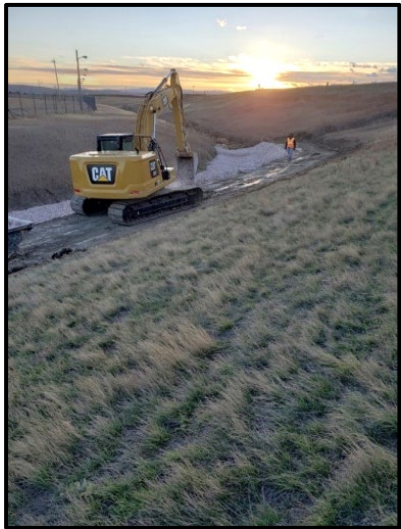
Timeline of PFAS Projects within the CERCLA (AKA “Superfund”) Process



Interim actions can be taken at any stage of the CERCLA process.

PFAS Cleanup Projects

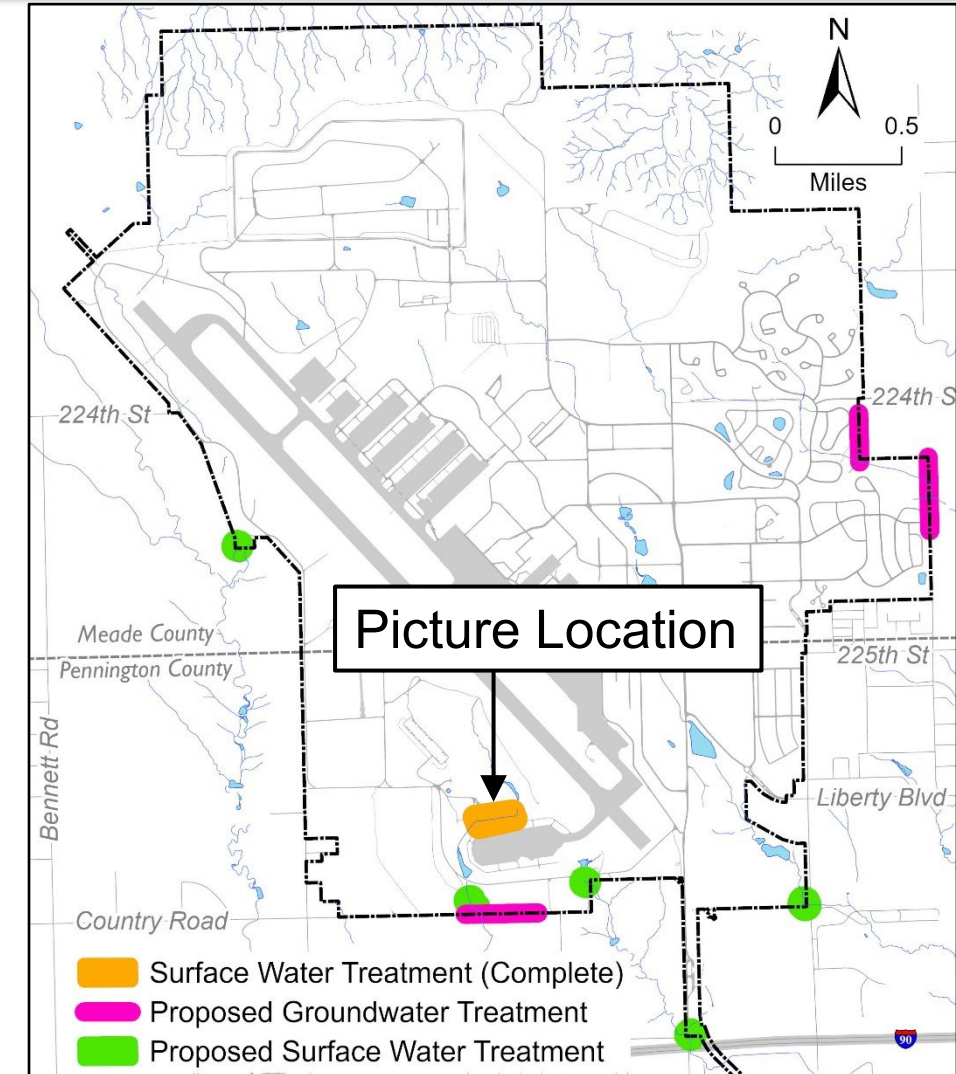
- **Completed Action (Demonstration Project)**
 - Surface water treatment – Clay Mats
- **Proposed Base Boundary Actions**
 - Groundwater treatment – Pump and Treat
 - Surface water treatment – Clay Mats



Installing clay mats in the drainage south of the fire training area in 2021



The surface water drainage after installation of the clay mats





Update on New Waterline Construction Work Completed to Date



- **Construction started September 2024**
- **Work is 90% complete**
- **Water main installed, pressure tested, and chlorinated to meet drinking water standards**
- **Municipal water hookups complete at:**
 - **Mobile home park in Area A**
 - **2 properties in Area B**
- **37 connections to complete by July 2026**

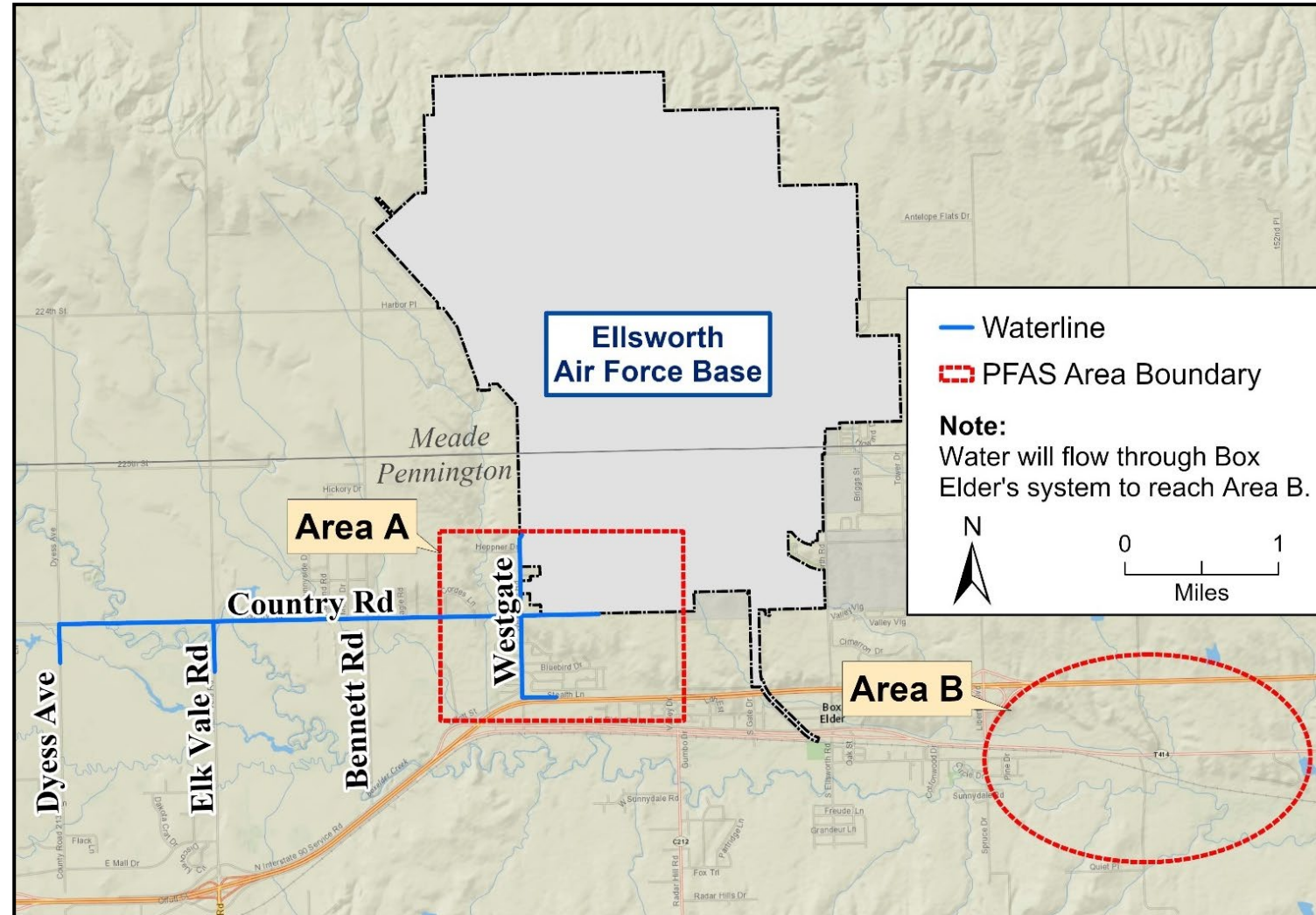




Update on New Waterline Construction Upcoming Connections



- **Mid-March to Mid-April:**
 - Country Rd, west of West Gate Rd
 - West Gate Rd, north of Country Rd
- **Mid-April to Early May:**
 - Heppner Dr
- **Late-April to Mid-May:**
 - Country Rd, east of West Gate Rd
- **Mid-May to Mid-June:**
 - Halsey Dr
 - D&R Rd
- **Mid-late June**
 - Sunnydale Rd





Removing the PFAS Treatment System at the Mobile Home Park in Area A





Resources for Additional Information



■ Twice-Yearly Newsletters

- Mailed to ~300 off-Base residents and local/state officials
- Moving from quarterly to twice-yearly publication
- Most recent issue – February 2026
- Next Issue – September 2026

■ Administrative Record Website

- <https://ar.cce.af.mil/>
- Search for “Air Force Administrative Record”

■ Environmental Matters Website

- <https://www.ellsworth.af.mil/About-Us/Environmental/>

■ Annual Community Town Halls

Restoration NEWS
February 2026 | Issue 36
NEXT NEWSLETTER
The next newsletter will be released in September 2026.
VISIT OUR WEBSITE
<https://www.ellsworth.af.mil/About-Us/Environmental/>
View the following:

- Past newsletters
- PFAS Updates
- Presentations
- Public announcements

CONTACT
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Ellsworth AFB, SD 57706
(605) 385-5056
FOR MORE INFORMATION
Visit the Administrative Record (AR) Website
<https://ar.cce.af.mil/>

- From the “Installation List” on the left, scroll down and select “Ellsworth AFB, SD”
- If you know the AR number enter it next to “AR #” and click “Search”
- Click on the eye icon to open
- Numerous other search blocks can be used

ELLSWORTH AIR FORCE BASE

Keeping residents informed of cleanup activities
Community Town Hall Meeting
Thursday, March 12th at 2:00 p.m.
900 Concourse Drive (New Location)
Host: Pennington County Board of Commissioners and U.S. EPA Region 8
Purpose: Updates on environmental cleanup actions at Ellsworth AFB
Location: The Commission Chambers at the Pennington County Administration Building in Rapid City (900 Concourse Drive, Suite 100)
The meeting will also be available remotely via the Zoom link below.

Speaker	Topics
Travis Lasseter Meeting Moderator	Opening remarks / introductions Closing remarks / questions
Rita Krebs Air Force Civil Engineer Center	Update on the New Waterline Construction Air Force Plans to Address Per- and Polyfluoroalkyl Substances (PFAS) Results of the 2025 Restoration Advisory Board Interest Assessment
Ned Turner HydroGeoLogic	Preliminary Results from the Supplemental PFAS Remedial Investigation of the East Off-Base Area
Jens Christensen Air Force Civil Engineer Center	2025 Five-Year Review No Further Action at Site OW525 Update on Cleanup Progress of Trichloroethene in Groundwater

Figure 1. New Location of the Pennington County Administration Building at 900 Concourse Drive.

****To watch the Community Town Hall via Zoom, use one of the following links or the QR code on the right:**
<https://us02web.zoom.us/j/7755207200?pwd=ekR0NGovRkVkekk2dFh7aElwRVdEUT09&omn=86459140451> or
bit.ly/4aBYcHA
Zoom Meeting ID: 775 520 7200 // Passcode: 1234



Your Success is Our Mission!

Supplemental Remedial Investigation of Per- and Polyfluoroalkyl Substances (PFAS) within the East Off-Base Areas at Ellsworth Air Force Base



**Ellsworth Air Force Base
Meade and Pennington Counties, SD**

12 March 2026



PFAS Investigation Area

ELLSWORTH AFB – EAST OFF-BASE AREA

► Why This Investigation Is Being Conducted

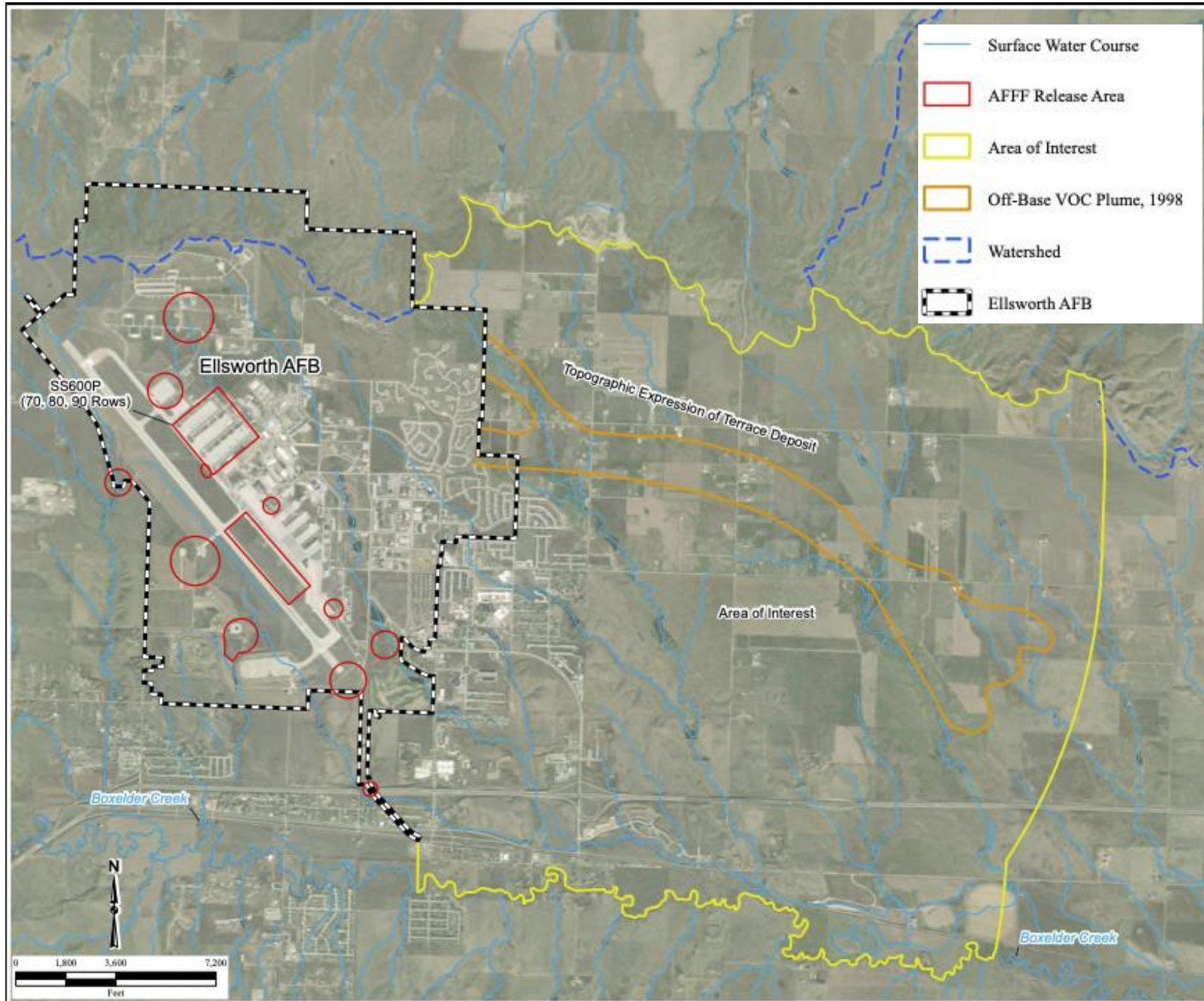
- PFAS are chemicals historically associated with firefighting foam use at military installations.
- PFAS have been detected in groundwater near Ellsworth AFB.
- The Air Force is conducting a Supplemental Remedial Investigation to further define conditions east of the base.

► Study Area

- Focused on approximately four miles east of the base.
- Includes groundwater, soil, surface water, and sediment.
- Known as the “East Off-Base Area” (EOBA).

► Investigation Objectives

- Define the extent of PFAS in groundwater.
- Evaluate surface water and sediment conditions.
- Collect data to support future cleanup decisions.



PFAS Investigation – East Off-Base Area Rounds 1-3 (2023-2025)

ELLSWORTH AFB – EAST OFF-BASE AREA

► Round 1 – Initial Assessment (Fall 2023)

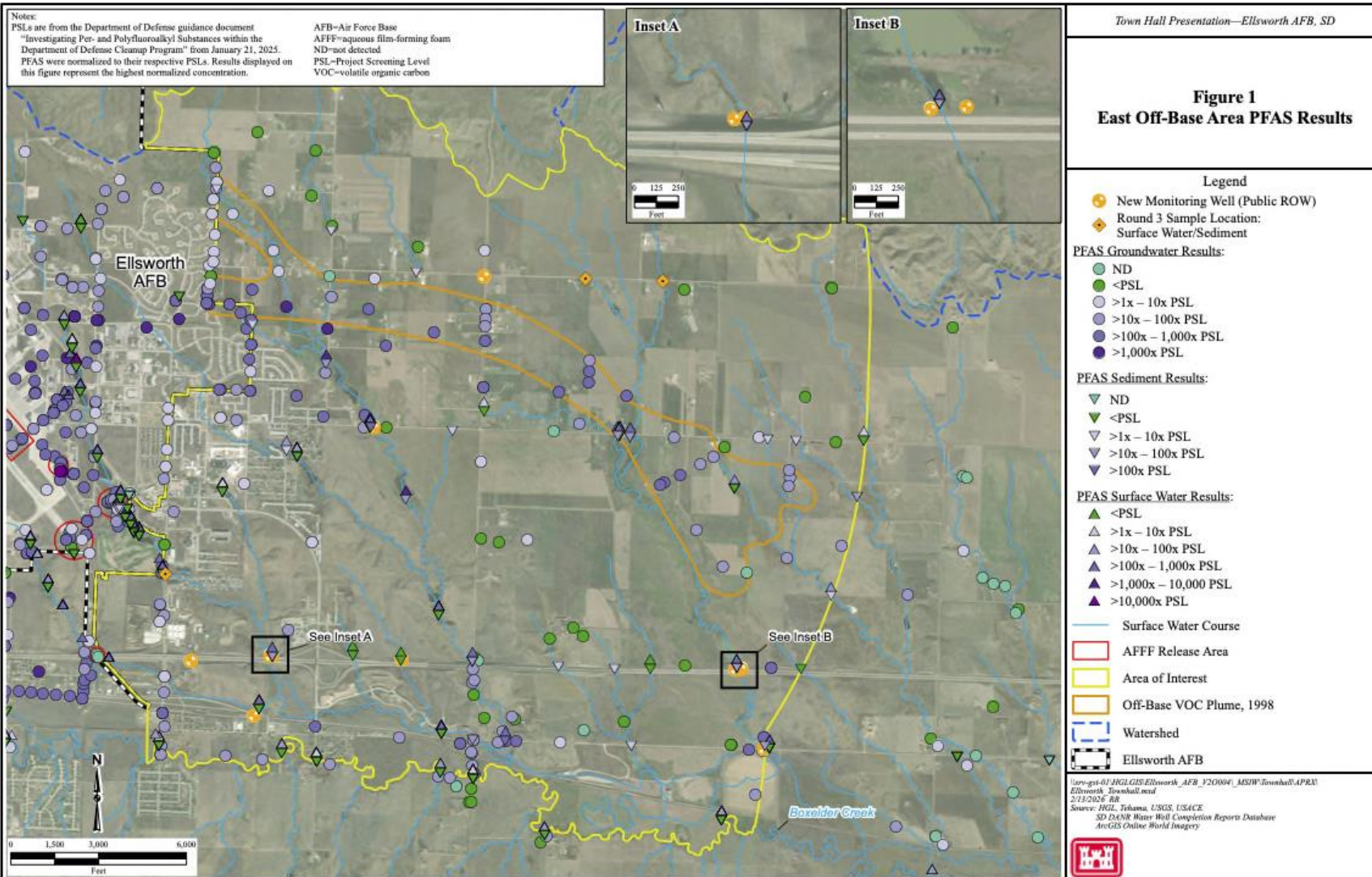
- Sampled existing monitoring wells
- Collected groundwater grab samples
- Conducted surface water and sediment sampling
- Established baseline PFAS conditions in the East Off-Base Area

► Round 2 – Monitoring Network Expansion (Winter 2024-2025)

- Installed and sampled new monitoring wells to expand coverage
- Expanded surface water and sediment sampling
- Improved understanding of PFAS distribution and flow direction

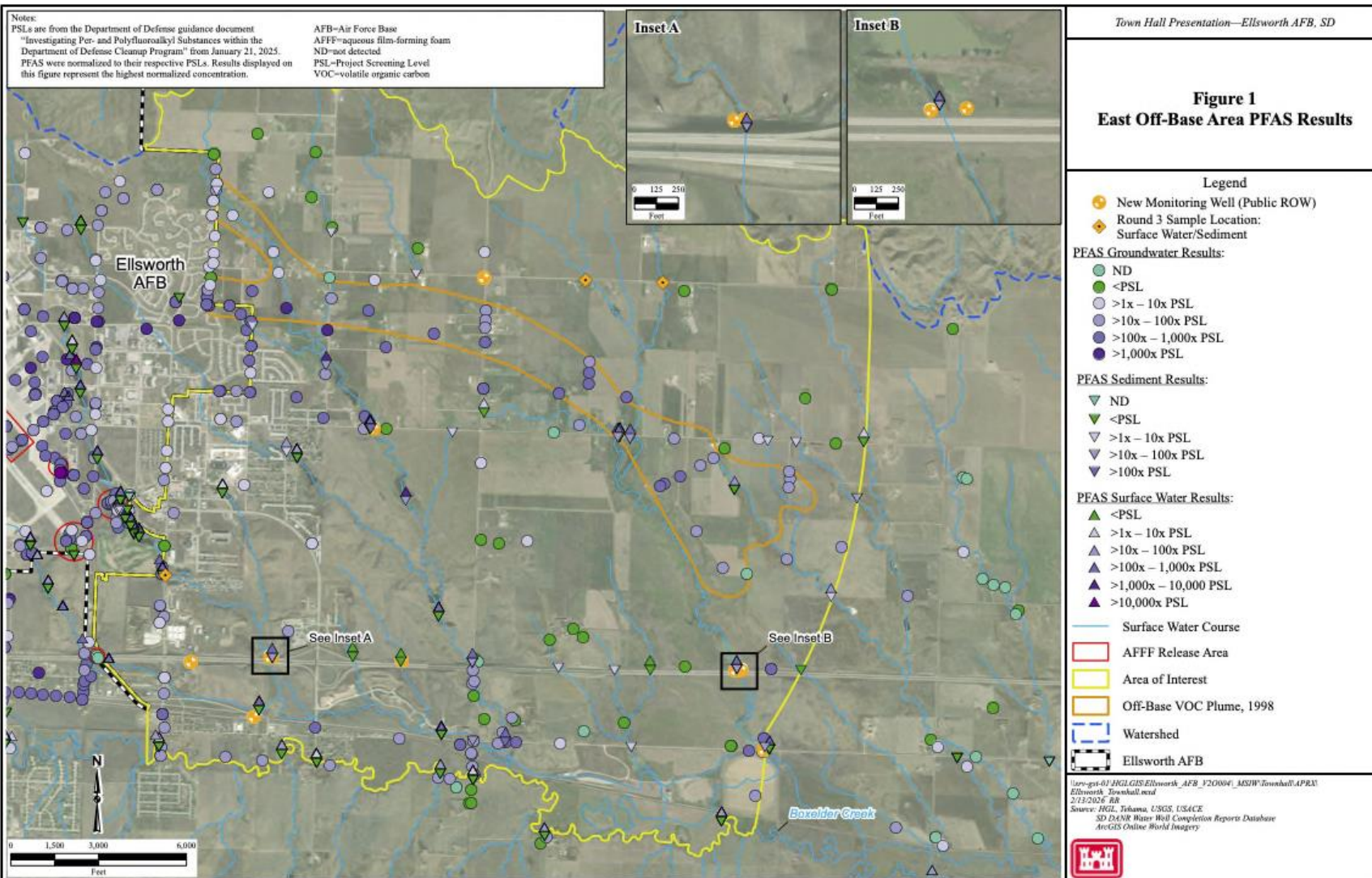
► Round 3 – Extent Refinement (Fall 2025)

- Installed and sampled 10 additional monitoring wells
- Collected surface water and sediment samples
- Sampling observed by EPA and SD DANR



PFAS Investigation – East Off-Base Area Results to Date (2023-2025)

ELLSWORTH AFB – EAST OFF-BASE AREA



▶ Groundwater

- ▶ PFAS have been detected in portions of the East Off-Base Area.
- ▶ The highest concentrations remain closest to the base boundary.
- ▶ Concentrations generally decrease with distance to the east.
- ▶ Round 3 wells further defined the downgradient extent.

▶ Surface Water

- ▶ PFAS detected at select locations along Boxelder Creek.
- ▶ Some sampling locations were dry during certain events.
- ▶ Seasonal monitoring continues to evaluate conditions.

▶ Sediment

- ▶ PFAS detected in sediment at select locations.
- ▶ Concentrations are generally lower than groundwater concentrations.

PFAS Investigation – East Off-Base Area Next Steps (2026-2027)

ELLSWORTH AFB – EAST OFF-BASE AREA

► 2026 Monitoring (Spring and Fall 2026)

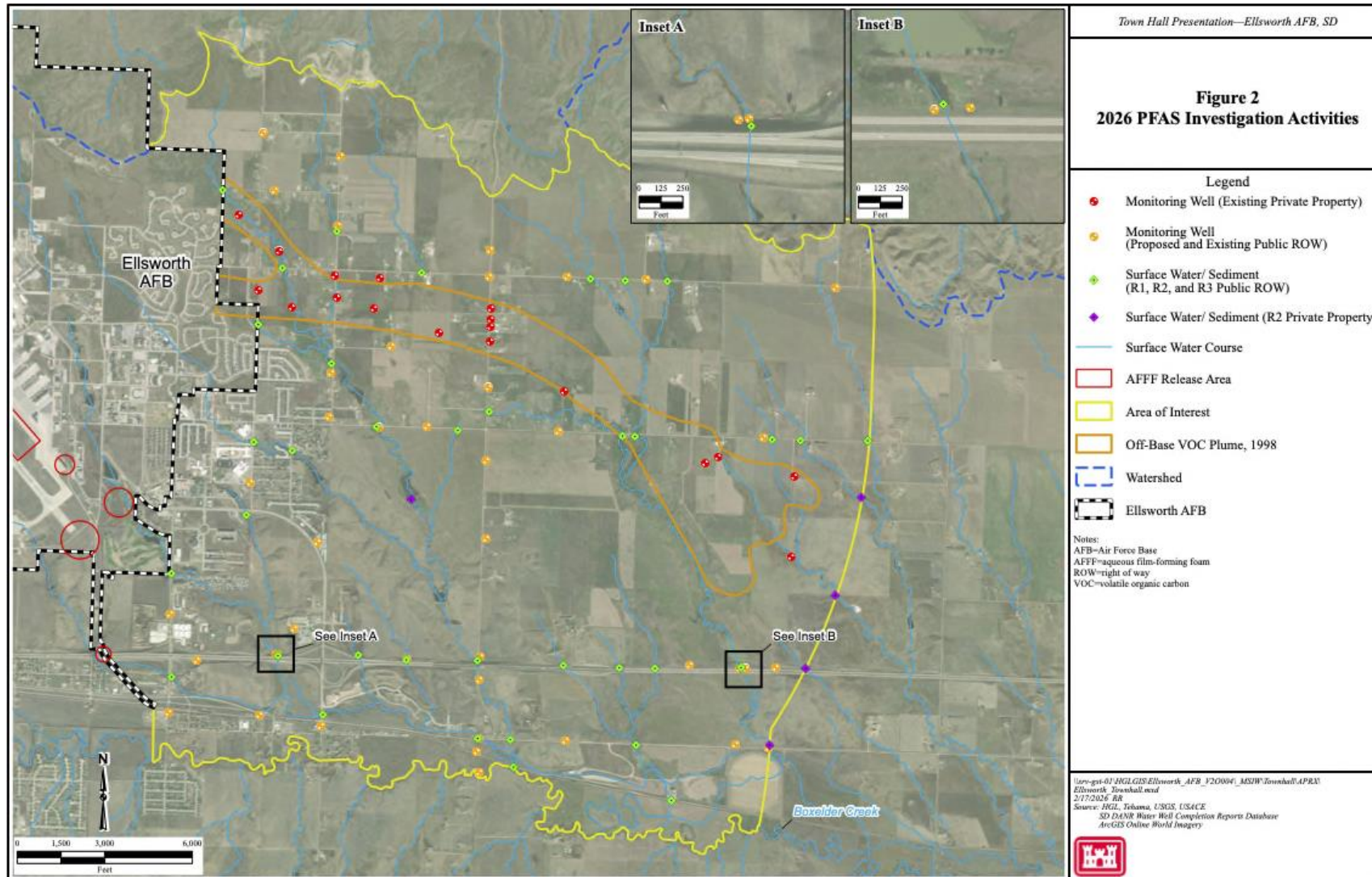
- Semiannual groundwater sampling (Spring and Fall 2026)
- Continued surface water and sediment sampling
- Evaluation of seasonal and flow-related variability

► Data Evaluation (Fall and Winter 2026)

- Compile and validate all Rounds 1–3 data
- Refine understanding of PFAS extent and groundwater flow
- Evaluate whether additional delineation is needed

► Reporting and Decision Process (2027)

- Prepare Supplemental Remedial Investigation Report
- Share findings with regulators and the public
- Use data to support future cleanup decisions



PFAS Investigation - Open Discussion and Questions

ELLSWORTH AFB - EAST OFF-BASE AREA



Air Force Installation & Mission Support Center

Updates on Air Force Response Actions for Trichloroethene and Petroleum Sites at Ellsworth AFB



Jens Christensen, PE

Environmental Restoration Program

March 12, 2026



Purpose:

Present an update on the response to TCE and Petroleum impacts at Ellsworth AFB

Topics:

- 2025 Five-Year Review
- No Further Action at Site OW525
- Update on Cleanup Progress of Trichloroethene in Groundwater



2025 Five-Year Review



- A Five-Year Review is required for EPA National Priorities List sites by the Comprehensive, Environmental Response, Compensation and Liabilities Act (CERCLA) of 1980.
- Completed every five years starting with 5 years after the Record of Decision (ROD) is signed.
- Ellsworth completed the 6th Five-Year Review on 18 Dec 2025.
- The outcome of the FYR is a statement of protectiveness for each OU, as well as a list of issues, recommendations, and follow-up actions that may be needed.



2025 Five-Year Review

Site Protectiveness Determinations:

Operable Unit(s)	Site Name	Remedy Components					Protectiveness Determination
		IRT	MNA	LTM	Soil Cover & Maintenance	ICs	
OU-1	Fire Protection Training Area (FT001)					✓	Protective
OU-2	Landfills No. 1 and No. 6 (LF002)				✓	✓	Protective
OU-3	Landfill No. 2 (LF003)				✓	✓	Protective
OU-4	Landfill No. 3 (LF004)				✓	✓	Protective
OU-5	Landfill No. 4 (LF005)				✓	✓	Protective
OU-6	Landfill No. 5 (LF006)			✓	✓	✓	Short-Term Protective
OU-7	MSA (Low Level Radioactive Waste Burial)					✓	Protective
OU-8	EOD Area and Debris Burial Area (SS011)			✓	✓	✓	Protective
OU-11	Basewide Groundwater (OT020)	✓	✓	✓		✓	Short-term Protective
OU-12	Hardfill No. 1 (LF021)				✓	✓	Protective



2025 Five-Year Review



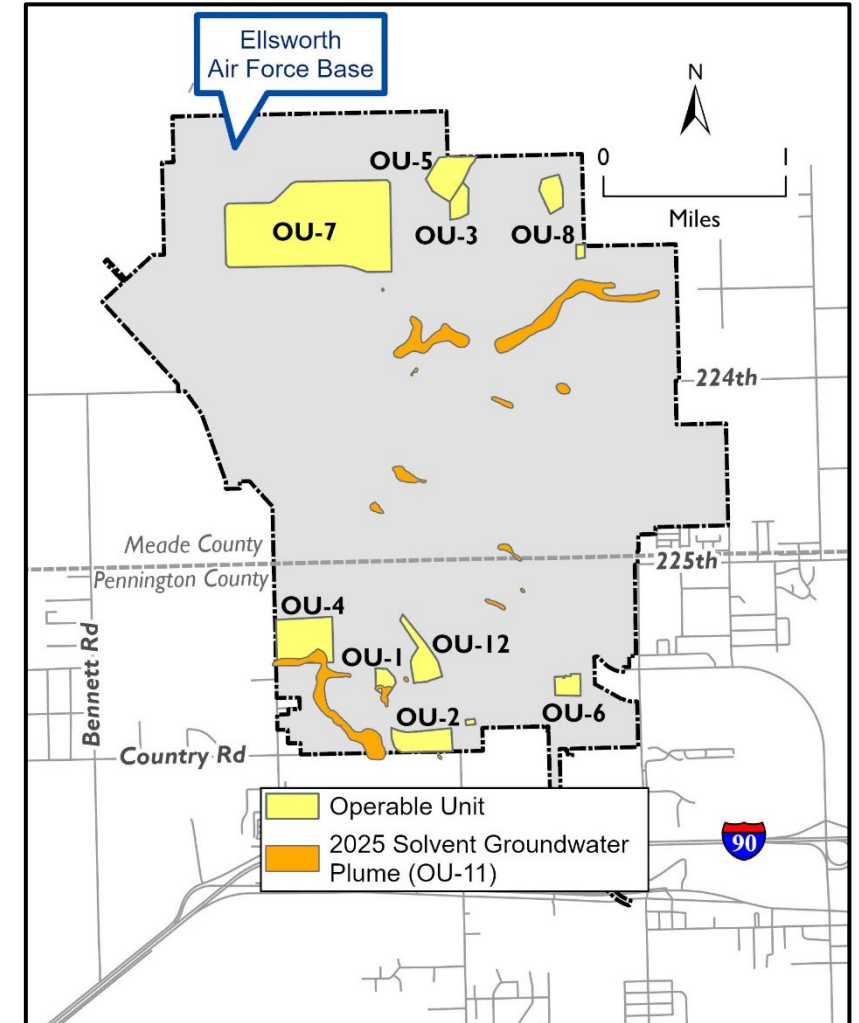
Issues and Recommendations

■ OU-6

- **Issue:** PAH concentrations in sediment and surface water were found in stormwater outfall from the landfill
- **Recommendation:** Collect sediment and surface water samples upstream and away from the golf course.

■ OU-11

- **Issue:** 1,4-Dioxane present in OU-4 groundwater not addressed in OU-11 ROD
 - **Recommendation:** Assess impact of 1,4-D on remedy for TCE at OU-1
- All of the recommendations from the 2020 Fifth FYR have been completed except for Vapor Intrusion (VI) follow-up sampling and amending the OU-11 ROD.





2025 Five-Year Review



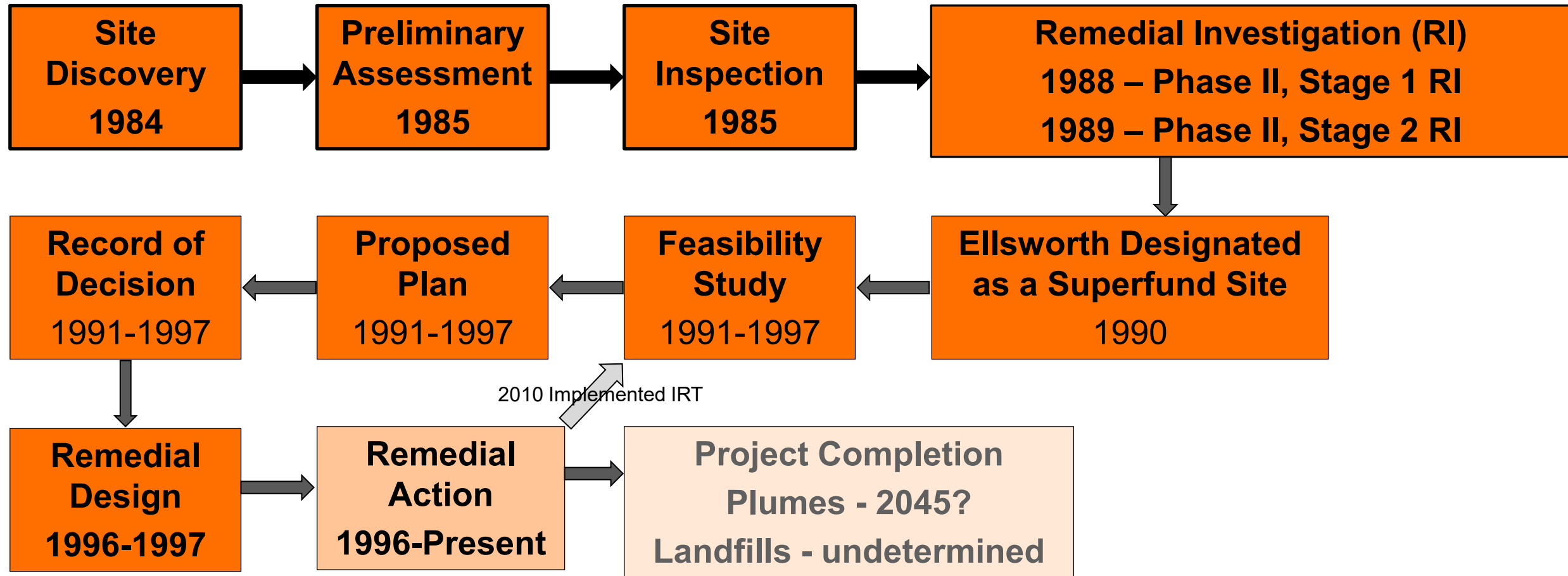
■ Sitewide Protectiveness Determination:

- Due to the establishment of OU-13, for base wide PFAS, a site-wide protectiveness statement was not determined by the Air Force.
- EPA and SD DANR Disagreed and EPA issued their own protectiveness statement of “Protectiveness Deferred” for Ellsworth.
- EPA also issued their own site protectiveness determinations of “Protectiveness Deferred” for OU-1, OU-11 and for the site-wide determination due to PFAS contamination.

*Protectiveness deferred is used when the information available is insufficient to establish protectiveness.



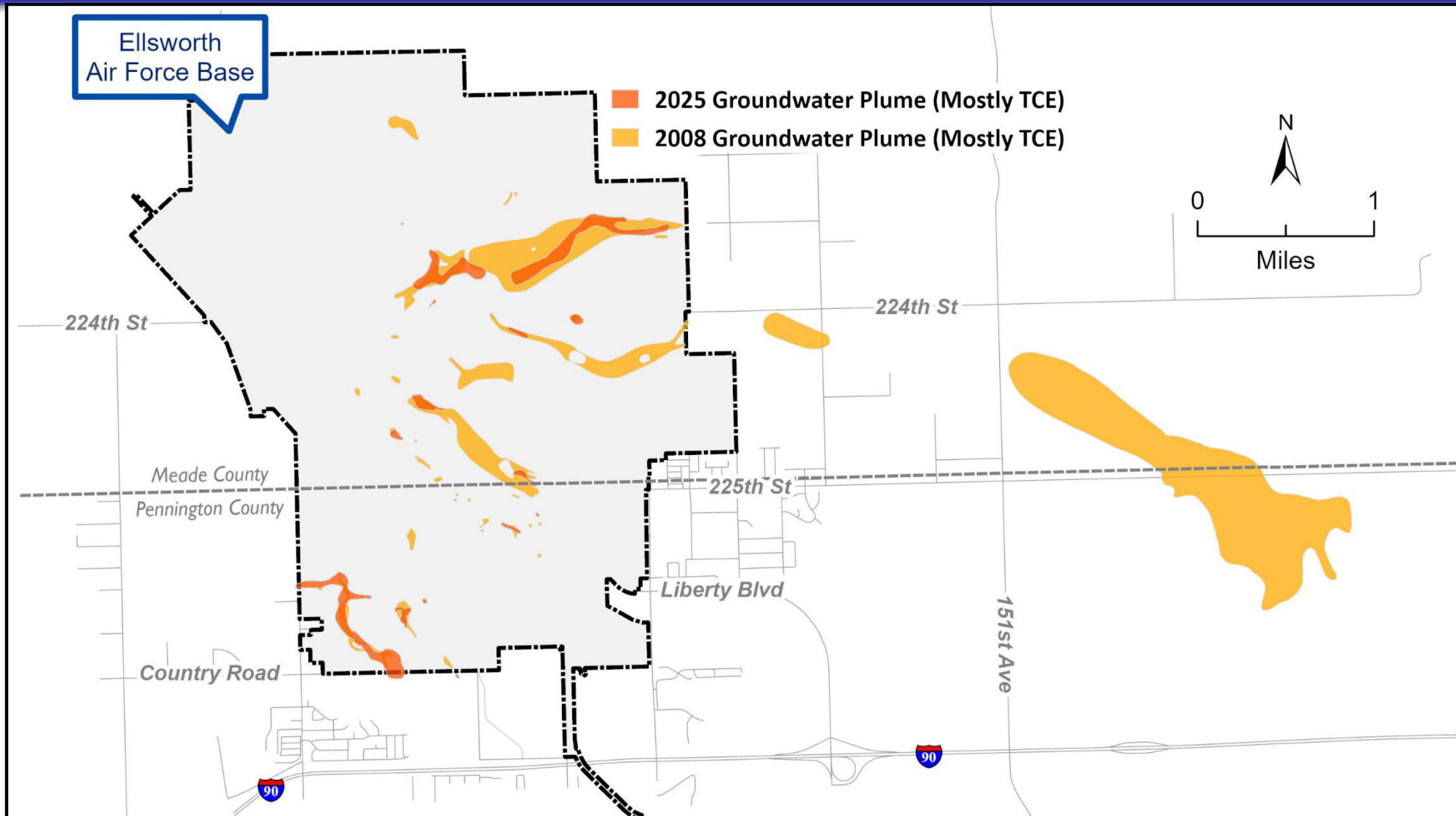
Timeline of Legacy Restoration Projects within the CERCLA Process



Interim actions can be taken at any stage of the CERCLA process.



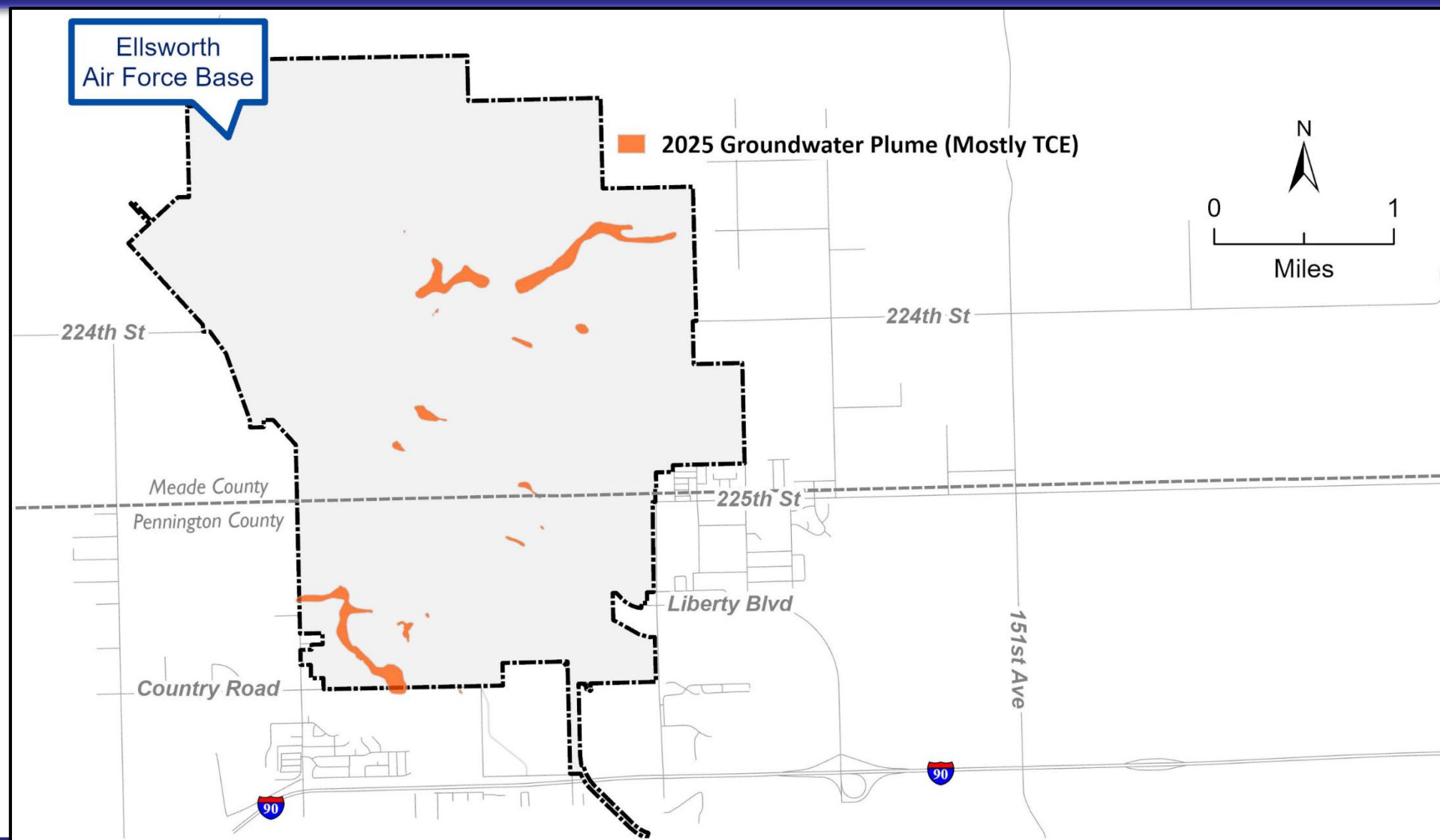
VOC Cleanup Progress



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VOC Cleanup Progress



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