



Impact Area Groundwater Study Program Update

JBCC CT November 13, 2024

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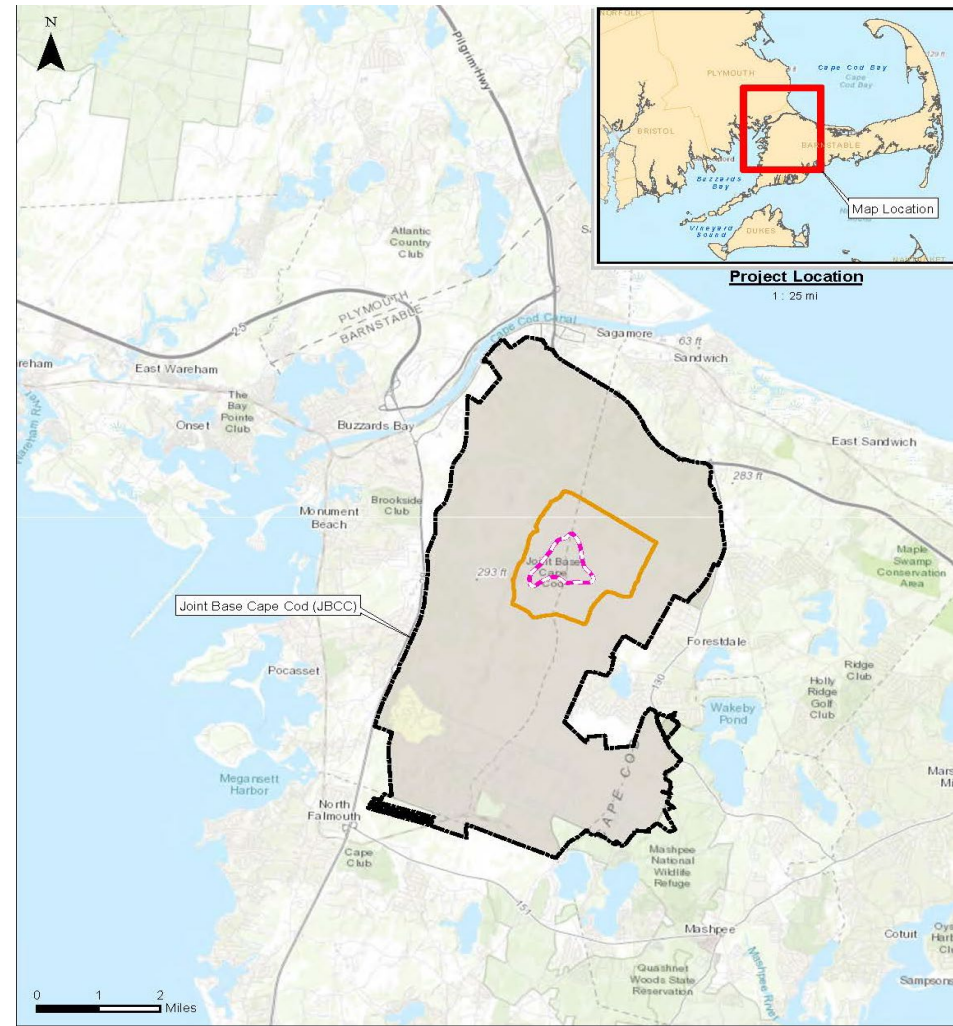
Presentation Overview

- ◆ **Central Impact Area (CIA) Source Work**
- ◆ **PFAS Investigations and Reporting**
- ◆ **Ongoing and Upcoming Projects**



Central Impact Area (CIA)

- ◆ **Decision Document (DD) finalized in 2012.**
- ◆ **Groundwater remedy in place: Three extraction wells operating at a combined 750 gallons per minute.**
 - 3.762 billion gallons of water treated and re-injected to date.
 - Contaminants of concern: RDX and perchlorate.
- ◆ **Decision Document also requires source removal.**
- ◆ **Remove 75 – 95% of unexploded ordnance (UXO).**
 - Maximize removal of net explosive weight.
- ◆ **Approximately 140 total acres completed since 2013.**





CIA UXO Source Removal Work – 2024 and 2025

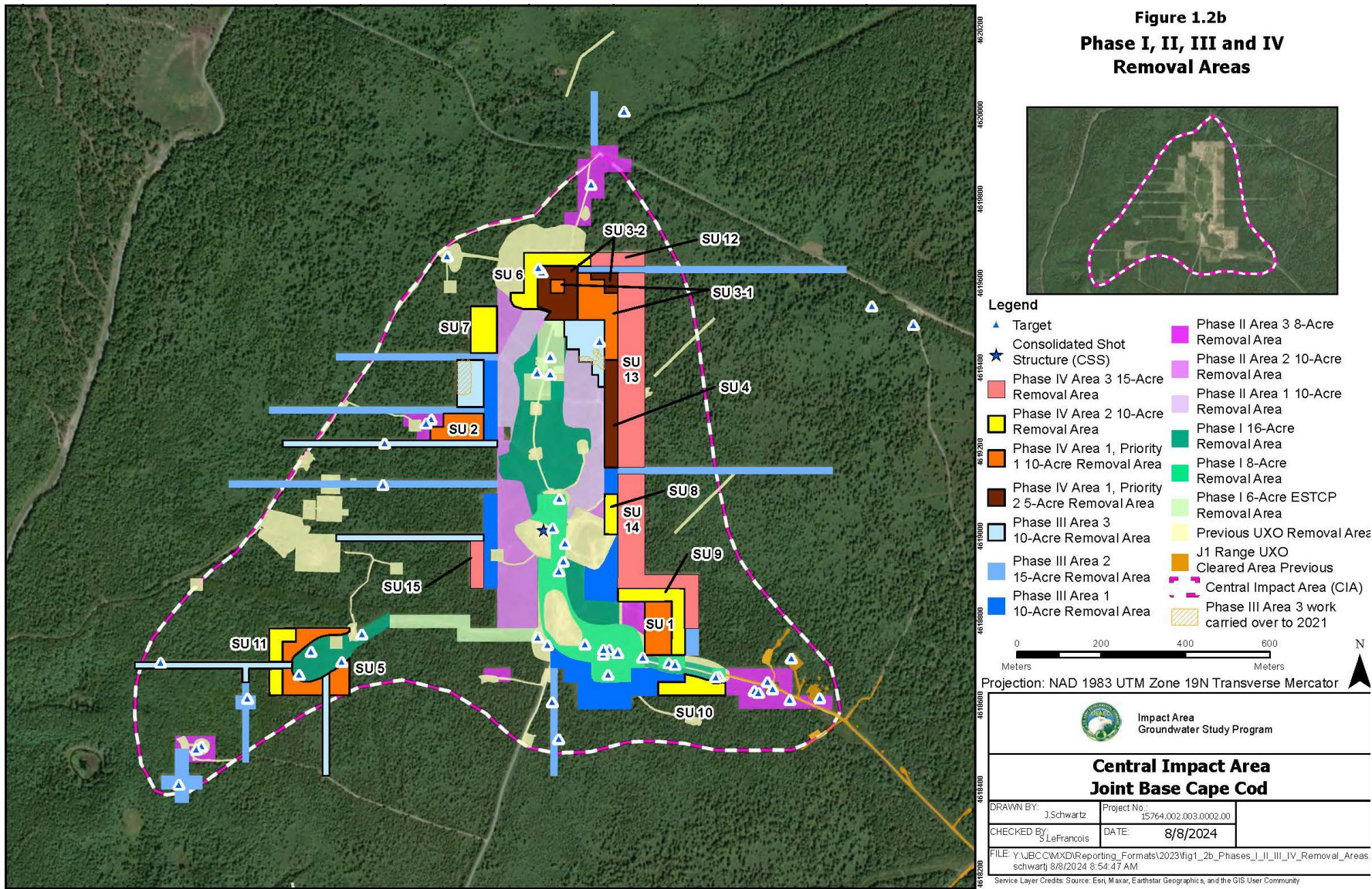
- ◆ **Intrusive investigations completed this field season:**
 - Phase IV Area 3 – 7.39 acres.
 - Phase IV Area 4 – 6.41 acres.
- ◆ **A total of ~13.89 acres total completed in 2024.**
 - Total to date: ~139 acres.
- ◆ **Disposal of 188 consolidated shot structure (CSS) items and 79 blow-in-place (BIPs).**
- ◆ **Approximately 4.15 acres (~3,177 targets of interest) will be investigated during the 2025 field season.**
 - Work will also include carryover of approximately one acre of polygons that were not completed in 2024.





CIA Removal Areas

Figure 1.2b
Phase I, II, III and IV
Removal Areas





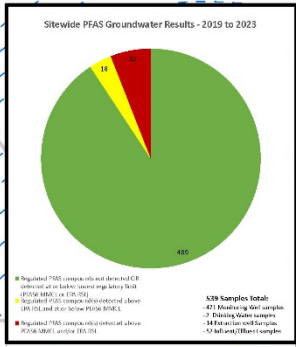
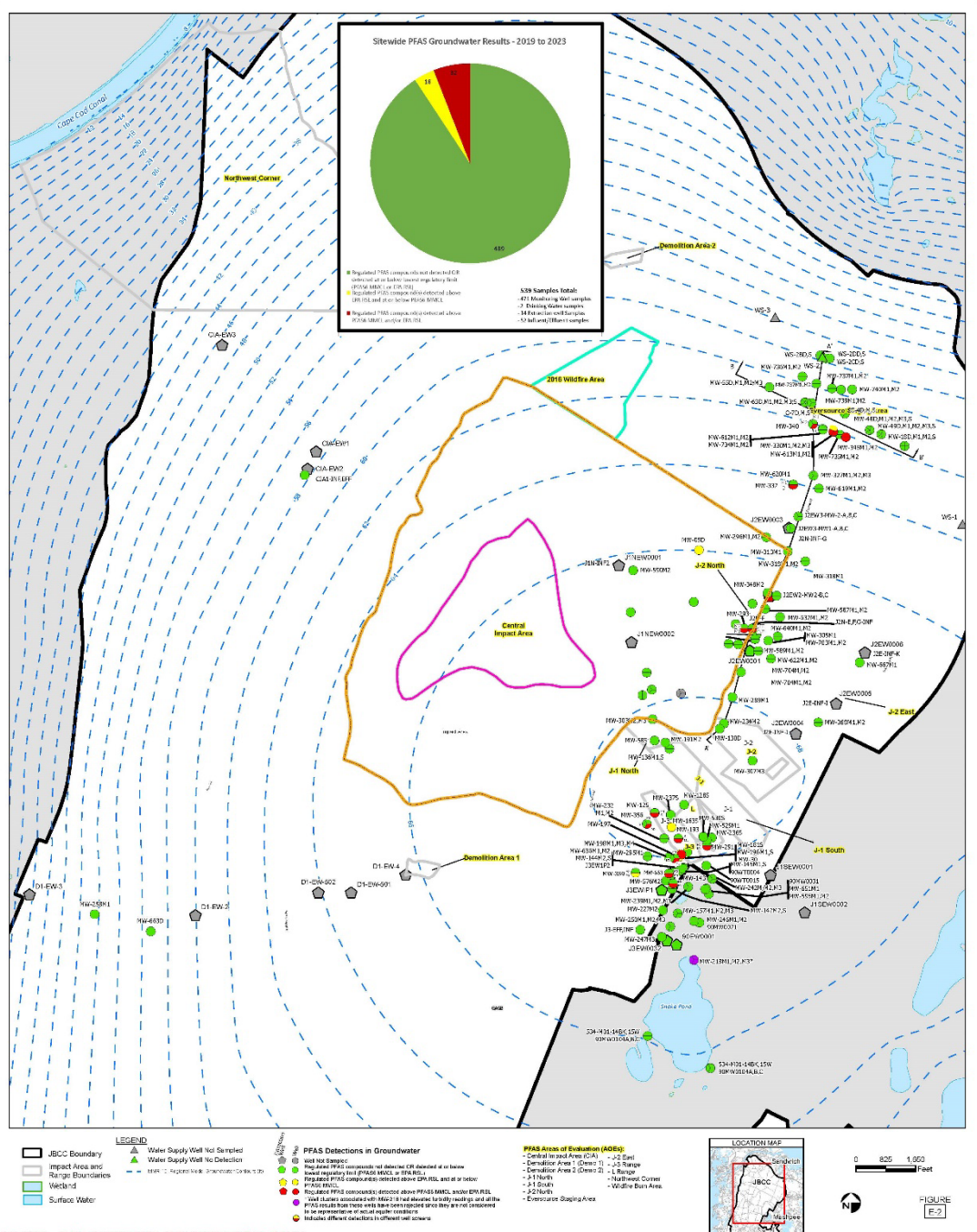
PFAS

- ◆ **Continue evaluating Per- and Polyfluoroalkyl Substances (PFAS) data and preparing comprehensive report.**
- ◆ **IAGWSP began sampling for PFAS in 2019 at Open Burning/Open Detonation (OB/OD) munitions disposal sites: Firefighting foams containing PFAS might have been used in OB/OD areas.**
 - If firefighting foams were used at these sites they likely would have been used in conjunction with the OB/OD activities and, therefore, any PFAS compounds that were released would have been co-released with other contaminants associated with those activities.
 - The administrative record does not indicate that foams were used at these areas, but references to the fire department conducting inspections of government contractors, as well as being present during destruction activities, is mentioned.
- ◆ **No PFAS plume has been identified to date, only isolated detections.**



PFAS

- ◆ **Comprehensive PFAS report evaluates all PFAS investigations conducted on Camp Edwards and suggests next steps.**
- ◆ **Only limited PFAS have been detected in Camp Edwards groundwater.**
 - In 600 groundwater samples at 394 locations, PFAS have been detected above regulatory criteria in 23 sporadic locations with no significant well-defined source area.
 - The greatest frequency and highest detections of PFAS at Camp Edwards were associated with the former DoD contractor testing ranges at J-2 and J-3.
 - There are multiple samples collected from locations where there were initial detections, with most locations showing decreasing concentrations over time.
- ◆ **A detailed briefing will be provided to the team once the agencies have reviewed and commented on the PFAS report.**
 - IAGWSP will work with EPA and MassDEP to develop work plan(s) that will include details regarding the proposed future work to address data gaps identified in the comprehensive report.



LEGEND

- JBCB Boundary
- Impact Area
- Range Boundaries
- Wetland
- Surface Water
- Water Supply Well: Not Sampled
- Water Supply Well: No Detection
- PFAS Detections in Groundwater
 - Not on List
 - Regulated PFAS compounds not detected on list
 - Regulated PFAS compounds detected above MCL
 - Regulated PFAS compounds detected on list
 - Regulated PFAS compounds detected above PFAS MCL, under DMV, RWL
 - Well (Status unknown) with MCL 2/19 not available for study results and all PFAS data for this well was discontinued since there are not considered to be representative of well region (status)
 - Indicates different detection in different well access
- PFAS Areas of Evaluation (AOEs)
 - Demolition Area 1 (Area 1) - J-2 East
 - Demolition Area 2 (Area 2) - J-2 Range
 - Demolition Area 2 (Area 2) - J-1 Range
 - J-1 North
 - J-1 South
 - J-2 North
 - Wildlife Run Area
 - Excavation Staging Area

FIGURE E-2



Ongoing and Upcoming Projects

◆ Operations & Maintenance Activities and System Optimizations

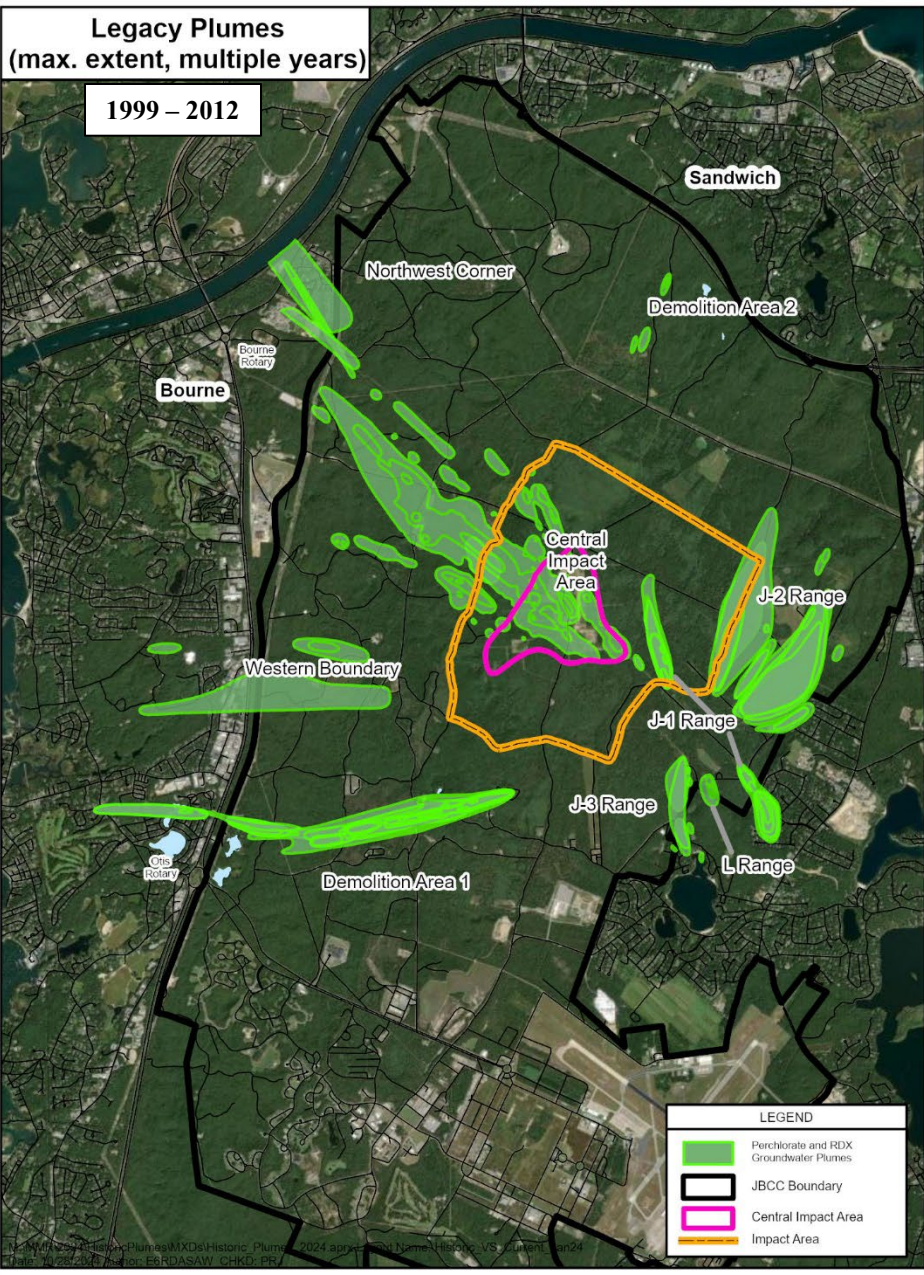
- Sampling crews are continually performing annual groundwater monitoring. Crews rotate through our groundwater sites throughout the year to complete the necessary sampling.
- Annual reports are prepared and presented to EPA and MassDEP throughout the year.
- O&M duties and monthly sampling at all groundwater treatment facilities will continue. This work monitors treatment plant performance to ensure that they are removing contaminants as designed.

◆ Community Involvement Activities

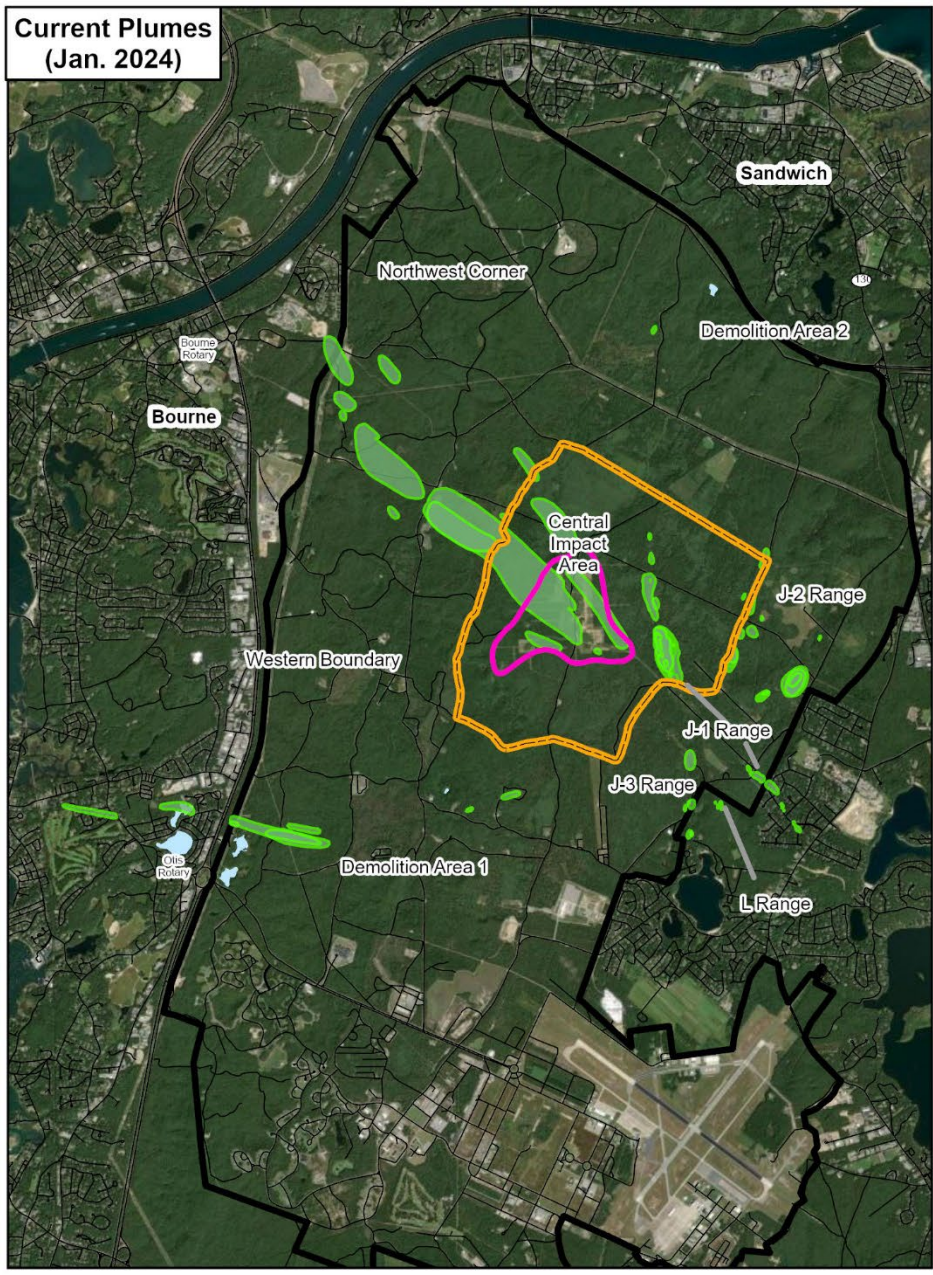
- IAGWSP participated in public tours from May through October.
 - Approximately 250 people toured Camp Edwards.
 - Attendees see and learn firsthand about Camp Edwards' Soldier training venues, Natural Resources Program and habitat conservation work, and the IAGWSP.
- Finalizing the IAGWSP fact sheet for printing and posting on website.
 - Regulator and team member comments are being incorporated and fact sheet is being sent to printer this month.
- Work has begun on a comprehensive joint IAGWSP/IRP fact sheet.
 - Will be sent to team members for review next year.

**Legacy Plumes
(max. extent, multiple years)**

1999 – 2012



**Current Plumes
(Jan. 2024)**



Perchlorate and RDX Groundwater Plumes MIXDs Historic Plumes 2024 approx. and Name Historic VS Current 01/24 Date: 1/25/2024 Author: ERDASAW_CHKD: PR



Questions?