## **Air Force Civil Engineer Center**



Fire Training Area—
1 (FTA-1) PFAS
Groundwater
Interim Remedial
Action

Joint Base Cape Cod
Cleanup Team Meeting
27 Aug 2025



#### **Overview**



- Background
  - Ashumet Valley (AV) Legacy Groundwater Remedy
  - Ashumet Valley/FTA-1 PFAS
- Proposed FTA-1 PFAS Groundwater Interim Remedial Action



### **AV Legacy Groundwater Remedy**

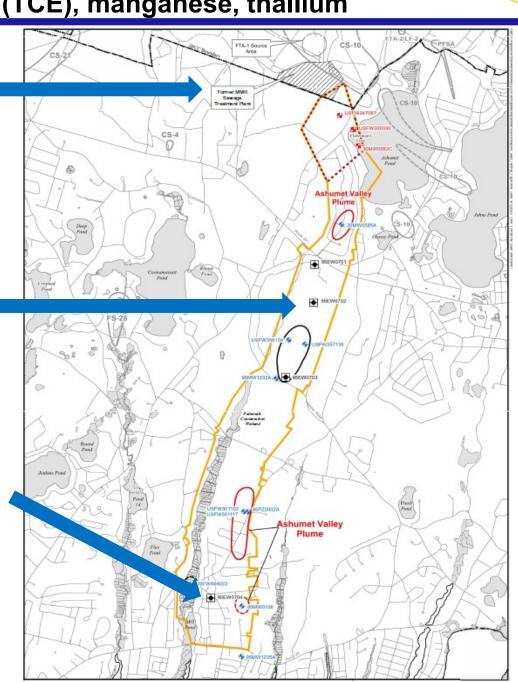


Contaminants of Concern: tetrachloroethylene (PCE), trichloroethylene (TCE), manganese, thallium

 Source Areas: Fire Training Area-1 (FTA-1) and Former Sewage
 Treatment Plant

Interim AV Remedy: 3 Extraction
 Wells started in 1999

- Record of Decision issued in 2009 required a 4<sup>th</sup> Extraction Well
- All extraction wells are now turned off – 3 remaining PCE areas in red outline.







- The primary source of per- and polyfluoroalkyl substances (PFAS) to Ashumet Valley is from FTA-1
  - PFAS plume called "FTA-1" to distinguish it from AV Legacy
- FTA-1 operated from 1958 1985
  - Use of aqueous film forming foam (AFFF or "A Triple F") with PFAS began in 1970
- Additional AFFF release in 1997
  - AFFF used to suppress a fire during thermal treatment of the FTA-1 soils to remove volatile organic compound contamination

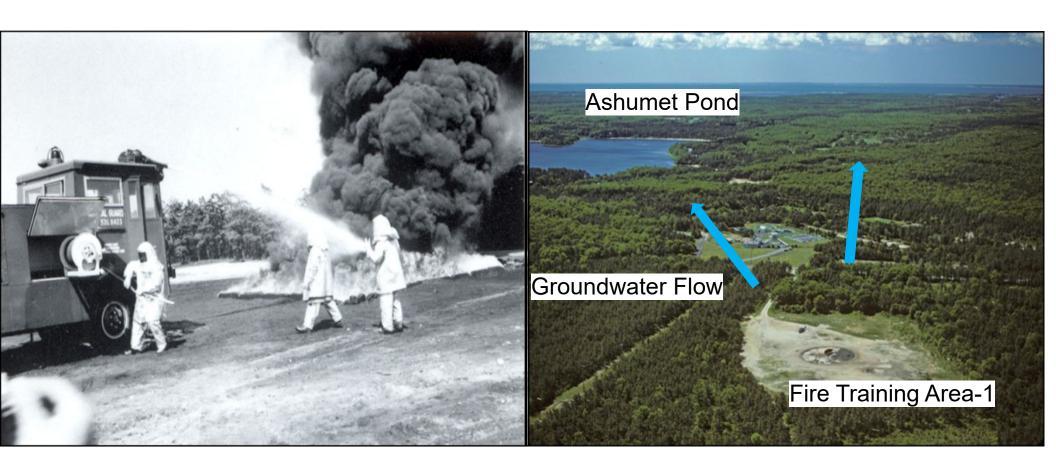




- AV (FTA-1) PFAS Supplemental Remedial Investigation (RI) completed Mar 2024
  - Addressed Groundwater and Soil
- AV (FTA-1) PFAS Revised Draft Supplemental Feasibility
   Study (FS) for Groundwater planned to be issued in late 2026
- FTA-1 PFAS Soil being combined with other on-base PFAS source areas in future FS (post-2026)









## **FTA-1 PFAS Extent**



#### **PFAS Detections in Groundwater**

- Above PFAS MCL\* or MassDEP PFAS6 MMCL\*\*
- Below PFAS MCL and MassDEP PFAS6 MMCL
- No Detection

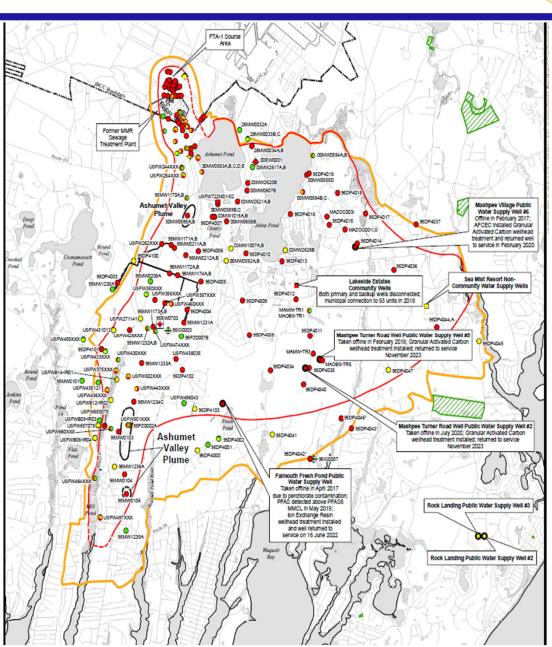
FTA-1 PFAS Plume Boundary

FTA-1 Land Use Control Area

Exposure to PFAS-contaminated groundwater addressed with bottled water, in-house treatment systems, connections to public water supply, and treatment systems on municipal wells.

\*MCL = maximum contaminant level

\*\*MMCL = Massachusetts maximum contaminant level







- PFAS is impacting Ashumet Pond and Johns Pond
- Do not eat any fish
- Safe for swimming
  - Avoid swallowing water and contact with foam



# PER STATE POR SWIMMING OR CONTACT PUBLIC HEALTH NOTIFICATION ASHUMET POND Falmouth / Mashpee PFAS\* DETECTED AT PUBLIC BEACH SWIMMING NOT A HEALTH RISK AVOID SWALLOWING WATER AVOID CONTACT WITH FOAM (if present) PROF. and Polyfluoroalkyl Substances (PFAS) SCAN THE QR CODE FOR MORE INFORMATION ON PFAS AND SWIMMING OR CONTACT

Environmental Toxicology Program Massachusetts Department of Public Health 617-624-5757



# Proposed FTA-1 PFAS Groundwater (GW) Interim Remedial Action



- Issue an Explanation of Significant Differences (ESD) to modify current Ashumet Valley (FTA-1) Groundwater (GW) remedy
- Use Memorandum to the File which evaluates remedial alternatives for PFAS as basis of interim remedial action
- ESD will:
  - Add four PFAS as GW Contaminants of Concern: PFOS, PFOA, PFHxS, and PFNA\*
  - Add Remedial Action Objectives to prevent residential exposure to PFAS in GW/Fish and to manage migration of PFAS plume
  - Implement active treatment in two plume areas as an <u>interim</u> remedy
  - Establish a formal Land Use Control (LUC) Program for FTA-1 PFAS in GW and Fish
- Estimated total cost for FTA-1 PFAS Interim Remedy: \$81.4M

<sup>\*</sup> PFOS = perfluorooctane sulfonic acid, PFOA = perfluorooctanoic acid, PFHxS = perfluorohexane sulfonic acid, PFNA = Perfluorononanoic acid

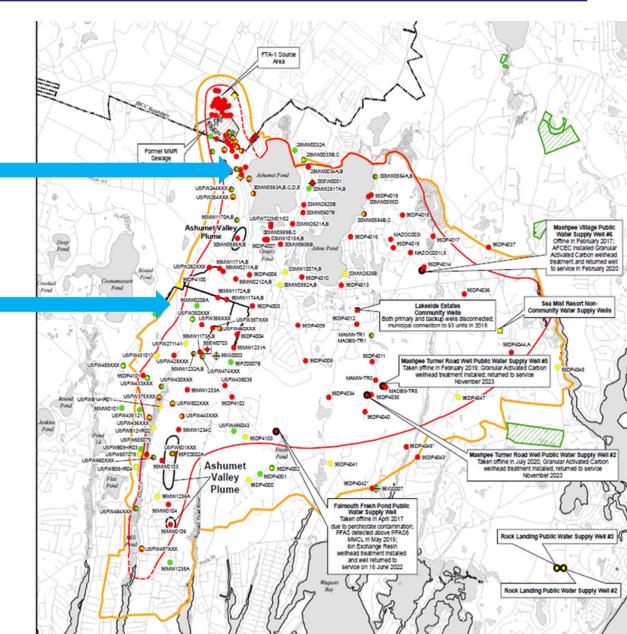


# FTA-1 PFAS Interim Remedial Action Locations



New Sandwich Rd Extraction Fence

Restart Ashumet Valley Treatment System

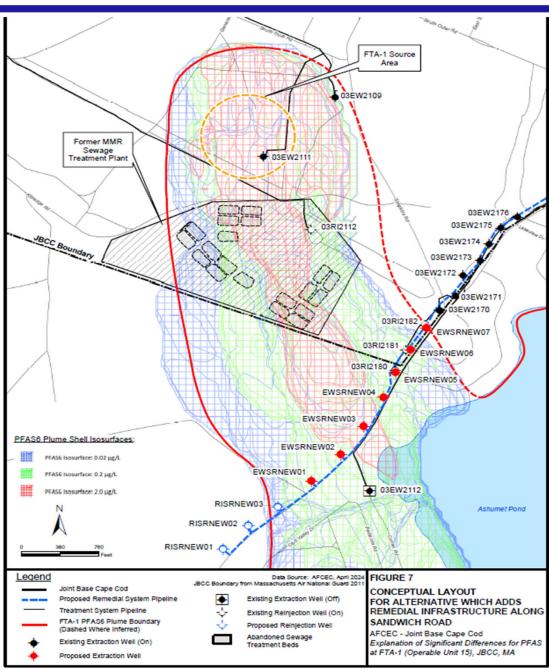




# FTA-1 PFAS Sandwich Rd Extraction Fence



- Install 7 new extraction wells and 3 new reinjection wells
- Total flow rate estimated at 1,350 gallons per minute (gpm)
- Water to be treated at Sandwich Road Treatment Facility (Granular Activated Carbon [GAC])

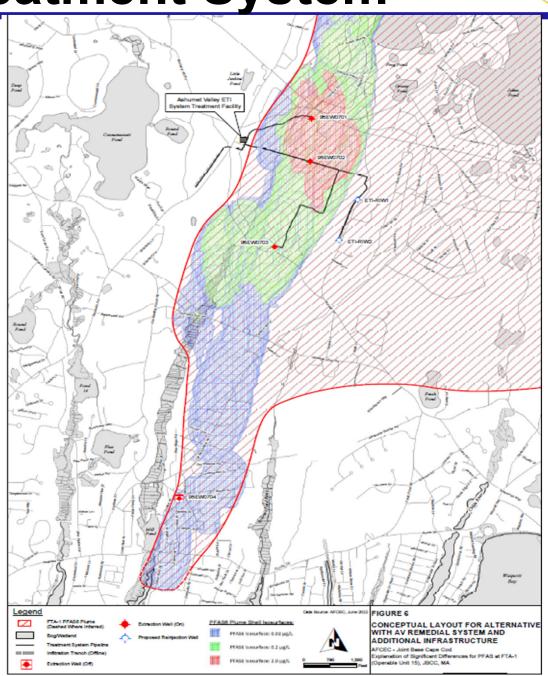




# FTA-1 PFAS Restart Ashumet Valley Treatment System

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- Restart existing 3 extraction wells
- Install 2 new reinjection wells
- Total flow rate estimated at 1,400 gpm
- Treatment at existing Ashumet Valley system (GAC)





# Proposed FTA-1 PFAS GW Interim Remedial Action Status



#### **ESD Status**

- Sep 2025: Estimated Completion of Draft Final FTA-1 ESD
  - To be followed by 30-day public comment period
  - Issue Final ESD with response to public comments

#### **Design/Construction Status**

- Sep 2024: Awarded contract for design of FTA-1 PFAS Interim Remedy
- Aug 2025: Awarded contract modification for construction
  - Aug 2025: Draft Design/Remedial Action Workplan due to AFCEC
  - Construction schedule pending
- AFCEC will continue to update the JBCCCT regarding the design/construction of interim remedial action





## **Ashumet Valley Groundwater**



#### **Temporal Cleanup Progress**

