

# Former Fort Devens Army Installation Project Status Update 16 January 2020

Restoration  
Advisory Board  
Meeting



U.S. Army Corps of Engineers  
**BUILDING STRONG.**




## Agenda




- Per- and Polyfluoroalkyl Substances (PFAS) Investigation and Sampling Updates
  - ▶ Community Involvement Plan (CIP)
  - ▶ Sampling results for private drinking water wells and community/non-community systems
  - ▶ Sampling results for municipal water supply wells
  - ▶ Municipal water supply well treatment
  - ▶ Remedial Investigation (RI)
- 2020 Five-Year Review




**BUILDING STRONG.**



## Community Involvement Plan




- Describes the Army's community outreach program regarding the ongoing environmental investigations at Fort Devens
- Draft CIP was submitted for review on Dec 19 to 100 people
  - ▶ Available online (ftdevens.org)
- Schedule
  - ▶ 45-day review period until early February
  - ▶ Draft Final CIP planned for early May
  - ▶ Final CIP planned for mid-June




U.S. ARMY


3



BUILDING STRONG.







US Army Corps of Engineers




Community Involvement Plan  
Investigation of Per- and Poly- Fluoroalkyl Substances (PFAS)  
Environmental Restoration Program  
Former Fort Devens, Massachusetts

DRAFT  
DECEMBER 2019







Prepared by  
KIDMAN Government Solutions, LLC  
and  
Jacobs Engineering Group, Inc.  
CONTRACT NO. W92241-18-C-0011


*public hearing process starting next week*



## Sampling Update for Community/ Non-Community Systems and Private Wells




- Army conducting sampling since 2018
- Regulatory benchmarks
  - ▶ 2016 EPA Lifetime Health Advisory (LHA) guidance value for drinking water
    - 70 ppt (sum of PFOS, PFOA)
  - ▶ 2018 MassDEP Office of Research and Standards Guideline (ORSG) guidance value for drinking water
    - 70 ppt (sum of PFOS, PFOA, PFHpA, PFHxS, PFNA)
  - ▶ Dec. 2019 MassDEP proposed maximum contaminant level (MCL) for drinking water
    - 20 ppt (sum of PFOS, PFOA, PFHpA, PFHxS, PFNA, PFDA)
  - ▶ Dec. 2019 MassDEP GW-1 standard for groundwater
    - 20 ppt (sum of PFOS, PFOA, PFHpA, PFHxS, PFNA, PFDA)




U.S. ARMY

4




BUILDING STRONG.







## Sampling Update for Community/ Non-Community Systems and Private Wells




- 2018 (summer) – Sampled 21 wells in Shirley & Harvard
  - ▶ PFAS detected in some wells, but below EPA's LHA of 70 ppt and Mass ORSG of 70 ppt
  - ▶ Source of PFAS in the wells is uncertain based on hydrogeology
- 2018-2020 – Quarterly sampling of town water supply wells in Ayer and Devens
- 2019 (spring) – Follow-up sampling of 3 locations in Harvard and sampling 1 location quarterly
- 2019 (fall) – Sampling requested by Harvard Board of Health
  - ▶ Army contacted 196 well owners in Harvard
  - ▶ 101 wells were sampled between October 2019 and January 2020

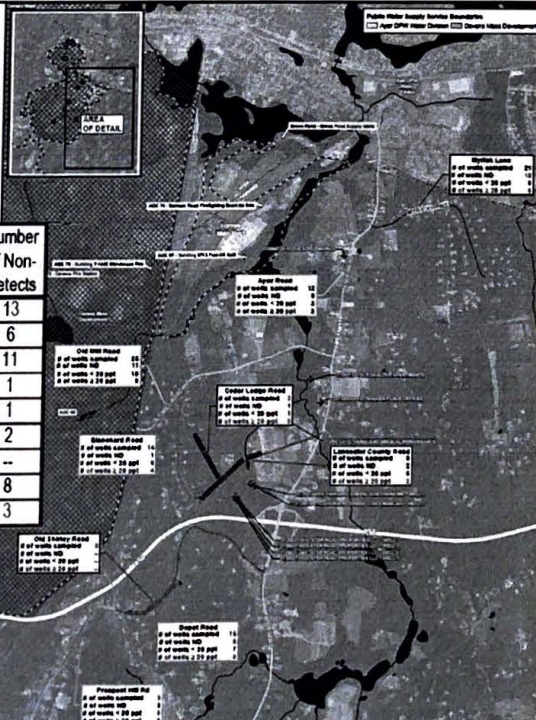


5






## Sampling of Wells in Harvard



Location	Number of Wells Sampled	Number Exceeding 20 ppt	Number Detects <20 ppt	Number of Non-Detects
Myrick Lane	21	0	6	13
Ayer Rd	12	2	3	6
Old Mill Rd	25	0	10	11
Blanchard Rd	14	4	6	1
Cedar Ledge Rd	2	0	1	1
Lancaster City Rd	9	2	5	2
Old Shirley Rd	0	—	—	—
Depot Rd	15	0	7	8
Prospect Hill Rd	3	0	0	3

No results exceeded the EPA LHA of 70 ppt.  
Note: 10 well results are pending.





## Well Sampling Update for Community/ Non-Community Systems and Private Wells

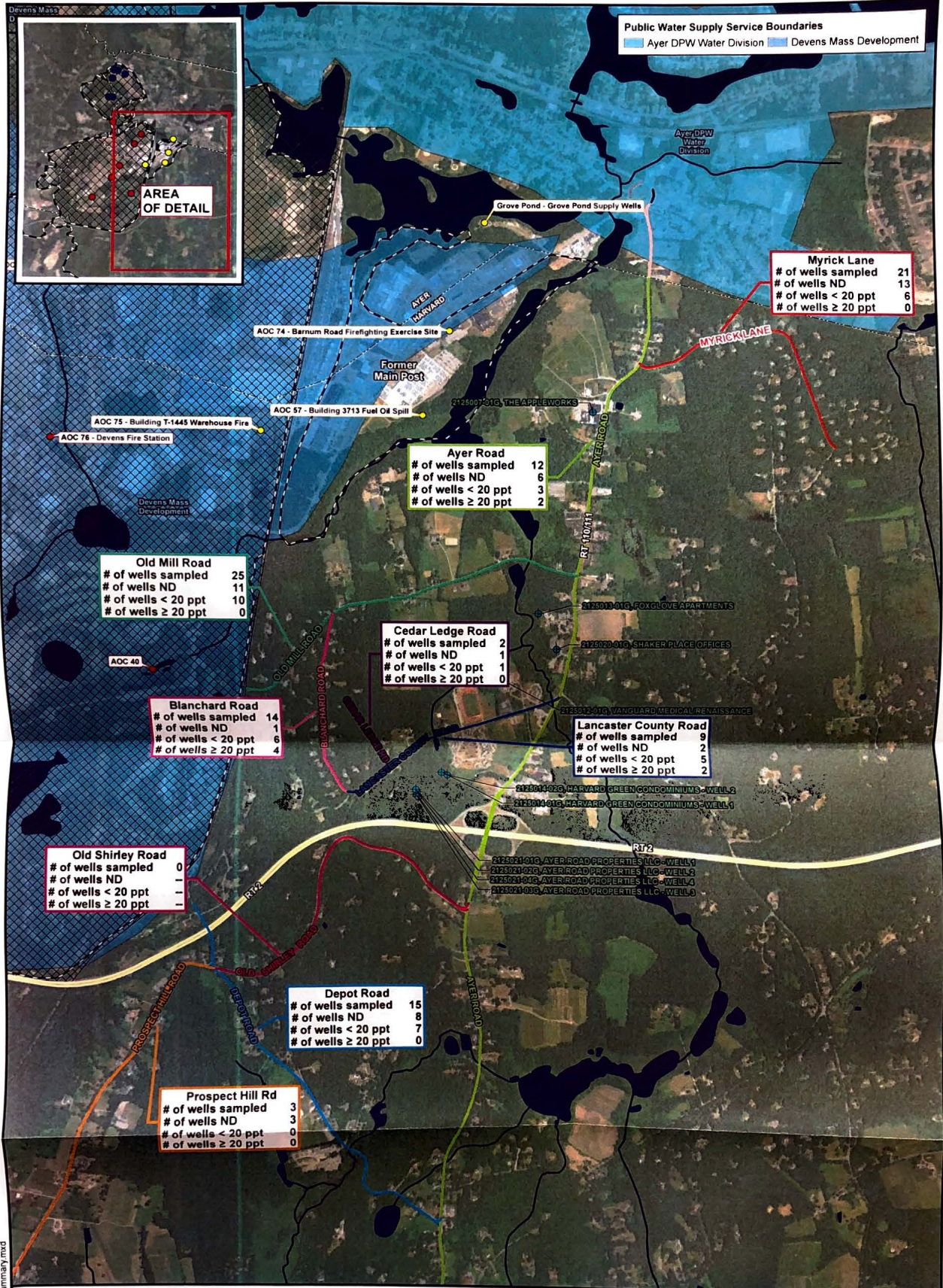


- Ongoing sampling in 2019-2020
  - ▶ Harvard private well sampling
  - ▶ Quarterly sampling of Ayer's town wells *next in mid-Feb 2020*
  - ▶ PFAS Remedial Investigation (RI) to locate possible source areas and define nature and extent of PFAS contamination associated with the former Fort Devens
- Planned additional sampling in 2020
  - ▶ Sampling private wells north and west of the former Army airfield

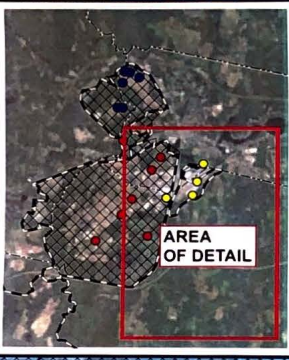


BUILDING STRONG®





Public Water Supply Service Boundaries  
 Ayer DPW Water Division    Devens Mass Development



**Myrick Lane**  
 # of wells sampled 21  
 # of wells ND 13  
 # of wells < 20 ppt 6  
 # of wells ≥ 20 ppt 0

**Ayer Road**  
 # of wells sampled 12  
 # of wells ND 6  
 # of wells < 20 ppt 3  
 # of wells ≥ 20 ppt 2

**Old Mill Road**  
 # of wells sampled 25  
 # of wells ND 11  
 # of wells < 20 ppt 10  
 # of wells ≥ 20 ppt 0

**Cedar Ledge Road**  
 # of wells sampled 2  
 # of wells ND 1  
 # of wells < 20 ppt 1  
 # of wells ≥ 20 ppt 0

**Blanchard Road**  
 # of wells sampled 14  
 # of wells ND 1  
 # of wells < 20 ppt 6  
 # of wells ≥ 20 ppt 4

**Lancaster County Road**  
 # of wells sampled 9  
 # of wells ND 2  
 # of wells < 20 ppt 5  
 # of wells ≥ 20 ppt 2

**Old Shirley Road**  
 # of wells sampled 0  
 # of wells ND 0  
 # of wells < 20 ppt 0  
 # of wells ≥ 20 ppt 0

**Depot Road**  
 # of wells sampled 15  
 # of wells ND 8  
 # of wells < 20 ppt 7  
 # of wells ≥ 20 ppt 0

**Prospect Hill Rd**  
 # of wells sampled 3  
 # of wells ND 3  
 # of wells < 20 ppt 0  
 # of wells ≥ 20 ppt 0

- Legend**
- ◆ Select Public Supply Well
  - Area 1 - Grove Pond Supply Wells, AOCs 57, 74, and 75 to be addressed in the RI
  - Area 2 - MacPherson Water Supply Well, SHL, AOCs 32, 78, 43G and 43J to be addressed in the RI
  - Area 3 - AOCs 20, 21, 30, 31, and 50 to be addressed in the RI
  - ◆ Devens - Census Designated Place
  - ▭ City/Town Boundary
  - 🌊 National Hydrography Dataset Waterbody
  - 🌊 National Hydrography Dataset Stream/River
  - ▭ Former Fort Devens Boundary
- Notes:**  
 - Figure does not include PFAS results after 11/22/19 sample collection event  
 - Proposed MassDEP PFAS (6) MCL is 20 ppt
- ppt parts per trillion  
 ND Not Detected

2019 Summary of PFAS Results for Private Wells Sampled in Harvard, Massachusetts

Former Army Installation Devens  
 Devens, Massachusetts

KOMAN Government Solutions, LLC  
 293 Boston Post Road West, Suite 100, Marlborough, MA 01752

0 750 1,500 Feet

Date: 01/10/2020    Figure 1

File: PFAS2018\_HarvardPrivWells\_PFASSummary.mxd

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Highest concs. of PFAS are on airfield + FF training area








# Proposed Private Well Sampling North of Airfield

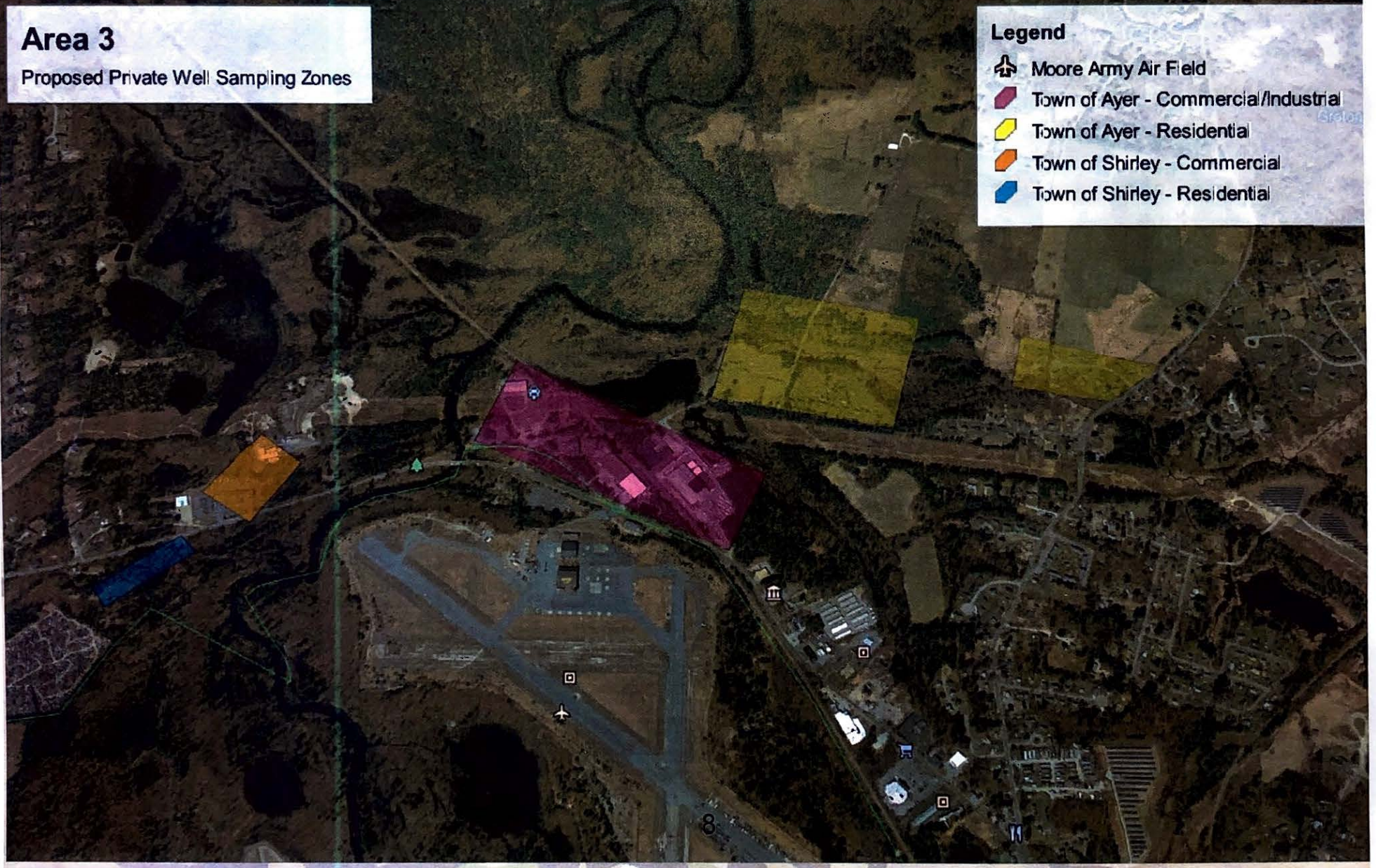


## Area 3

Proposed Private Well Sampling Zones

### Legend

-  Moore Army Air Field
-  Town of Ayer - Commercial/Industrial
-  Town of Ayer - Residential
-  Town of Shirley - Commercial
-  Town of Shirley - Residential



majority of un-shaded areas are on municipal water





# Sampling of Municipal Water Supply Wells - Ayer Detections of PFAS, November 2019



	Grove Pond Wells (ppt)				Spectacle Pond Wells (ppt)		
	Well 6	Well 7	Well 8 (after treatment)	Finished Water (wells 6,7,8)	Well 1A	Well 2A	Finished Water (wells 1A, 2A)
	11/22/2019	11/22/2019	11/18/2019	11/22/2019	11/18/2019	11/18/2019	11/18/2019
NETFOSAA	ND	1.13 J	ND	ND	ND	ND	ND
PFBS	2.22	2.33	ND	1.15 J	1.79 J	1.66 J	1.77 J
PFHxA	16.7	50.9	ND	8.17	2.95	23.4 J	13.4
PFHpA -	10.6	43.7	ND	5.50	1.96	10.1 J	6.19
PFHxS -	6.19	13.7	ND	2.90	4.16	2.34 J	3.48
PFOS $\leq$	3.71	17.5	ND	2.00	6.70 J	6.99 J	7.77 J
PFOA -	12.2	32.7	ND	6.28	7.24	10.0 J	8.91
PFNA -	0.632 J	1.42 J	ND	ND	0.509 J	0.996 J	0.816 J
EPA LHA (70)	15.9	50.2	ND	8.28	13.9	17.0	16.7
Mass ORSG (70)	33.3	109	ND	16.7	20.6	30.4	27.2
Proposed Mass MCL (20)	33.3	109	ND	16.7	20.6	30.4	27.2

Results show the detected PFAS out of 18 analytes tested.

Yellow shading shows concentrations above the EPA LHA (Lifetime Health Advisory) (PFOS, PFOA of 70 ppt) and/or Mass ORSG (Office of Research and Standards Guideline) for drinking water (PFOS, PFOA, PFHpA, PFNA, PFHxS of 70 ppt) and/or proposed Mass maximum contaminant level (MCL) for the sum of PFOS, PFOA, PFHpA, PFNA, PFHxS, PFDA of 20 ppt.

ND = non-detect, J = estimated value

*this was ND in these samples*



U.S. ARMY



BUILDING STRONG



## Update on Grove Pond Wellfield - Time Critical Removal Action (TCRA)



- Ongoing temporary treatment of Well #8 using granular activated carbon (GAC)
  - ▶ On-line since June 2019; pumping ~ 200 to 300 gpm; >100M gallons treated
  - ▶ Winterized in November 2019
  - ▶ Well #8 raw water was 259 ppt for 5 OSRG PFAS compounds
  - ▶ Treated Well #8 water is non-detect (ND) for PFAS compounds

*-this well is pumped continuously, other wells added as needed*

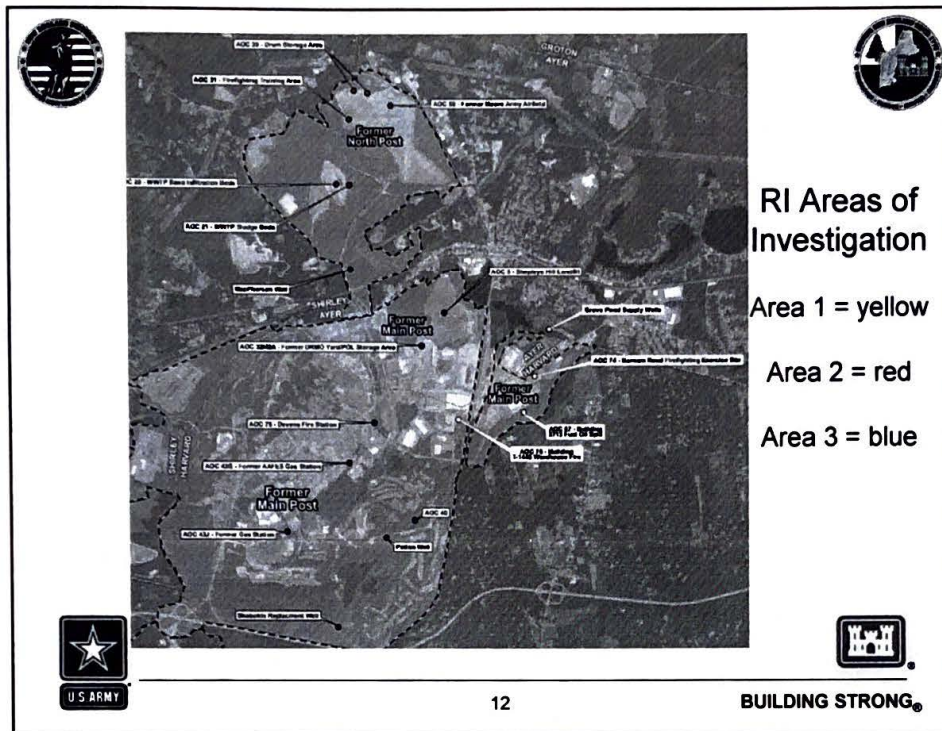
## Update on Grove Pond Wellfield - Environmental Services Cooperative Agreement (ESCA)



- Supported by federal ESCA grant ~ \$4.4M signed 5-Sep-2019
- Permanent upgrade to Grove Pond Water Treatment Plant – New Ion Exchange (IX) System
  - ▶ Installation of IX begun: Sept 2019
  - ▶ Anticipated completion: June 2020
  - ▶ Will treat up to 2M gallons per day

*Env. Services Cooperative Agreement*





## Drilling and Sampling Activities

- Completed Oct 1 – Dec 31, 2019
  - ▶ 9 Vertical profiles conducted
  - ▶ 6 Monitoring wells and 24 piezometers installed
  - ▶ 56 Soil borings conducted
  - ▶ 31 Monitoring wells sampled (existing)
  - ▶ 22 Surface water and sediment samples collected
- Planned in 2020
  - ▶ Vertical profiles (GW grab sampling)
  - ▶ Monitoring well and piezometer installation
  - ▶ Monitoring well sampling
  - ▶ Surface water and sediment sampling
  - ▶ Synoptic water level measurements
  - ▶ Cold Spring Brook investigation (including SW/SED)

U.S. ARMY BUILDING STRONG®

13





## Surface Water and Sediment



- Area 1 – Cold Spring Brook, Grove Pond
- Area 2 – Willow Brook, Plow Shop Pond, Robbins Pond, unnamed tributary, Nonacoicus Brook, Cold Spring Brook Pond, Mirror Lake
- Area 3 – Nashua River, unnamed streams and wetlands
- Proposed background locations – Nashua River, Walker Brook, Mulphus Brook, Bowers Brook, Squannacock River, Balch Pond, Flannagan Pond



U.S. ARMY

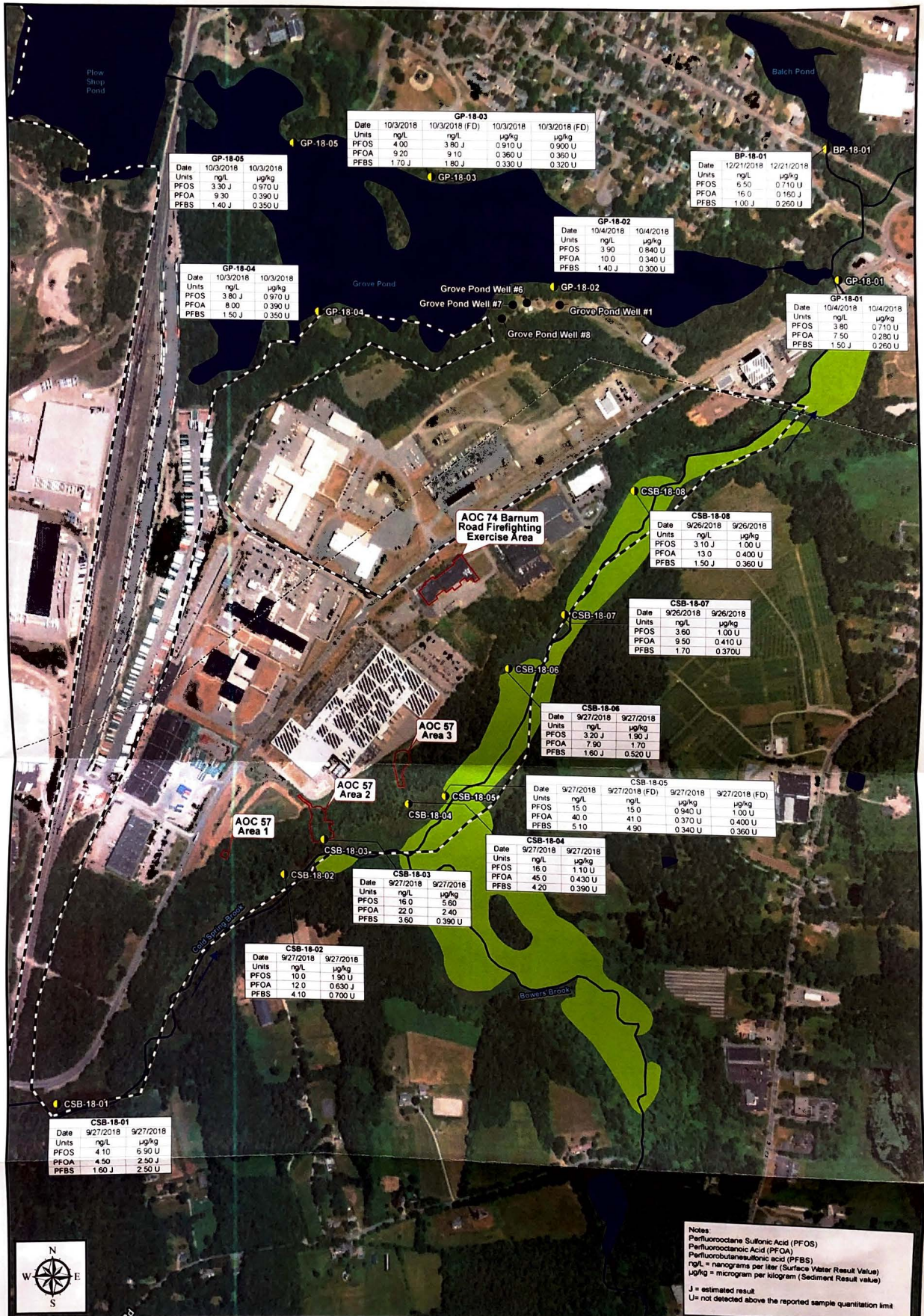


BUILDING STRONG®

14

*= initial efforts are underway to determine ecological risk (fish tissue sampling), will be compared to site-specific screening values*





GP-18-03			
Date	10/3/2018	10/3/2018 (FD)	10/3/2018 (FD)
Units	ng/L	µg/kg	µg/kg
PFOS	4.00	3.80 J	0.900 U
PFOA	9.20	9.10	0.360 U
PFBS	1.70 J	1.80 J	0.320 U

GP-18-05		
Date	10/3/2018	10/3/2018
Units	ng/L	µg/kg
PFOS	3.30 J	0.970 U
PFOA	9.30	0.390 U
PFBS	1.40 J	0.350 U

BP-18-01		
Date	12/21/2018	12/21/2018
Units	ng/L	µg/kg
PFOS	6.50	0.710 U
PFOA	16.0	0.160 J
PFBS	1.00 J	0.260 U

GP-18-02			
Date	10/4/2018	10/4/2018	10/4/2018
Units	ng/L	µg/kg	µg/kg
PFOS	3.90	0.840 U	
PFOA	10.0	0.340 U	
PFBS	1.40 J	0.300 U	

GP-18-04		
Date	10/3/2018	10/3/2018
Units	ng/L	µg/kg
PFOS	3.80 J	0.970 U
PFOA	8.00	0.390 U
PFBS	1.50 J	0.350 U

GP-18-01		
Date	10/4/2018	10/4/2018
Units	ng/L	µg/kg
PFOS	3.90	0.710 U
PFOA	7.50	0.280 U
PFBS	1.50 J	0.260 U

CSB-18-08		
Date	9/26/2018	9/26/2018
Units	ng/L	µg/kg
PFOS	3.10 J	1.00 U
PFOA	13.0	0.400 U
PFBS	1.50 J	0.360 U

CSB-18-07		
Date	9/26/2018	9/26/2018
Units	ng/L	µg/kg
PFOS	3.60	1.00 U
PFOA	9.50	0.410 U
PFBS	1.70	0.370 U

CSB-18-06		
Date	9/27/2018	9/27/2018
Units	ng/L	µg/kg
PFOS	3.20 J	1.90 J
PFOA	7.90	1.70
PFBS	1.60 J	0.520 U

CSB-18-05			
Date	9/27/2018	9/27/2018 (FD)	9/27/2018 (FD)
Units	ng/L	µg/kg	µg/kg
PFOS	15.0	15.0	0.940 U
PFOA	40.0	41.0	0.370 U
PFBS	5.10	4.90	0.340 U

CSB-18-04		
Date	9/27/2018	9/27/2018
Units	ng/L	µg/kg
PFOS	16.0	1.10 U
PFOA	45.0	0.430 U
PFBS	4.20	0.390 U

CSB-18-03		
Date	9/27/2018	9/27/2018
Units	ng/L	µg/kg
PFOS	16.0	5.60
PFOA	22.0	2.40
PFBS	3.60	0.390 U

CSB-18-02		
Date	9/27/2018	9/27/2018
Units	ng/L	µg/kg
PFOS	10.0	1.90 U
PFOA	12.0	0.630 J
PFBS	4.10	0.700 U

CSB-18-01		
Date	9/27/2018	9/27/2018
Units	ng/L	µg/kg
PFOS	4.10	5.90 U
PFOA	4.50	2.50 J
PFBS	1.60 J	2.50 U

Notes:  
 Perfluorooctane Sulfonic Acid (PFOS)  
 Perfluorooctanoic Acid (PFOA)  
 Perfluorobutanesulfonic acid (PFBS)  
 ng/L = nanograms per liter (Surface Water Result Value)  
 µg/kg = microgram per kilogram (Sediment Result Value)  
 J = estimated result  
 U = not detected above the reported sample quantitation limit



**Legend**

- Surface Water and Sediment Sample Location
- Water Supply Well
- Area of Contamination (AOC)
- City/Town Boundary
- Former Fort Devens Boundary
- ← Surface Water Flow Direction
- ~ Stream/River
- Lake/Pond
- Swamp/Marsh

SW screening criteria developed for site by EPA  
 2030 ng/L PFOS/PFOA  
 2.03 million ng/L PFBS  
 most sensitive criteria (child)

**Area 1 Surface Water and Sediment Sampling Results**  
 Devens PFAS RI

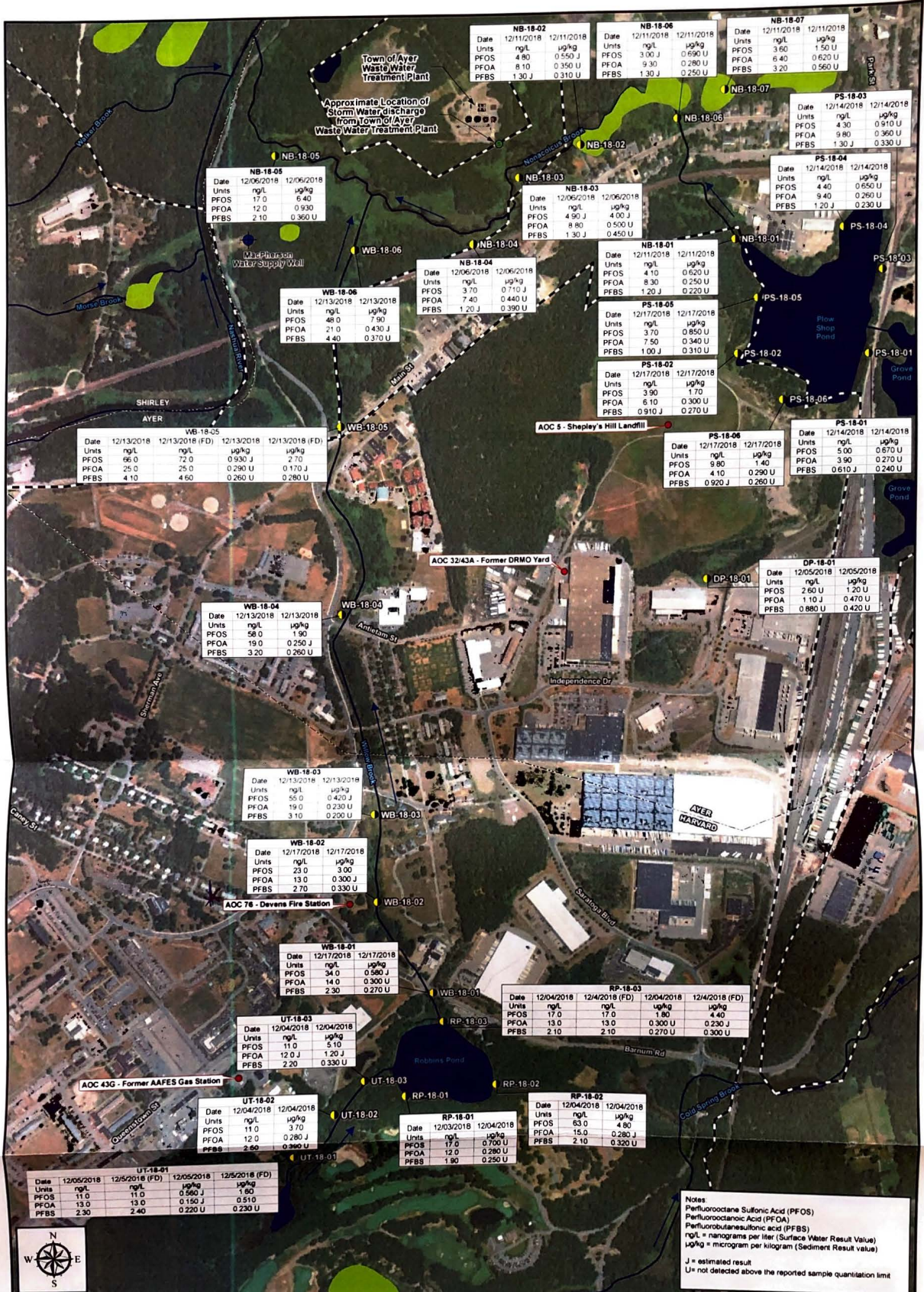
Former Fort Devens Army Installation  
 Devens, Massachusetts

KOMAN Government Solutions, LLC  
 293 Boston Post Road West, Suite 100, Marlborough, MA 01752

0 300 600  
 Feet

Date: 01/10/2020 Figure 1





**Legend**

- Surface Water and Sediment Sample Location
- ▭ City/Town Boundary
- Surface Water Flow Direction
- ~ Stream/River
- Lake/Pond
- Swamp/Marsh
- ▭ Former Fort Devens Boundary

609 mg/kg PFOA/PFS  
609 K µg/kg PFBS

**Area 2 Surface Water and Sediment Sampling Results**  
Devens PFAS RI

Former Fort Devens Army Installation  
Devens, Massachusetts

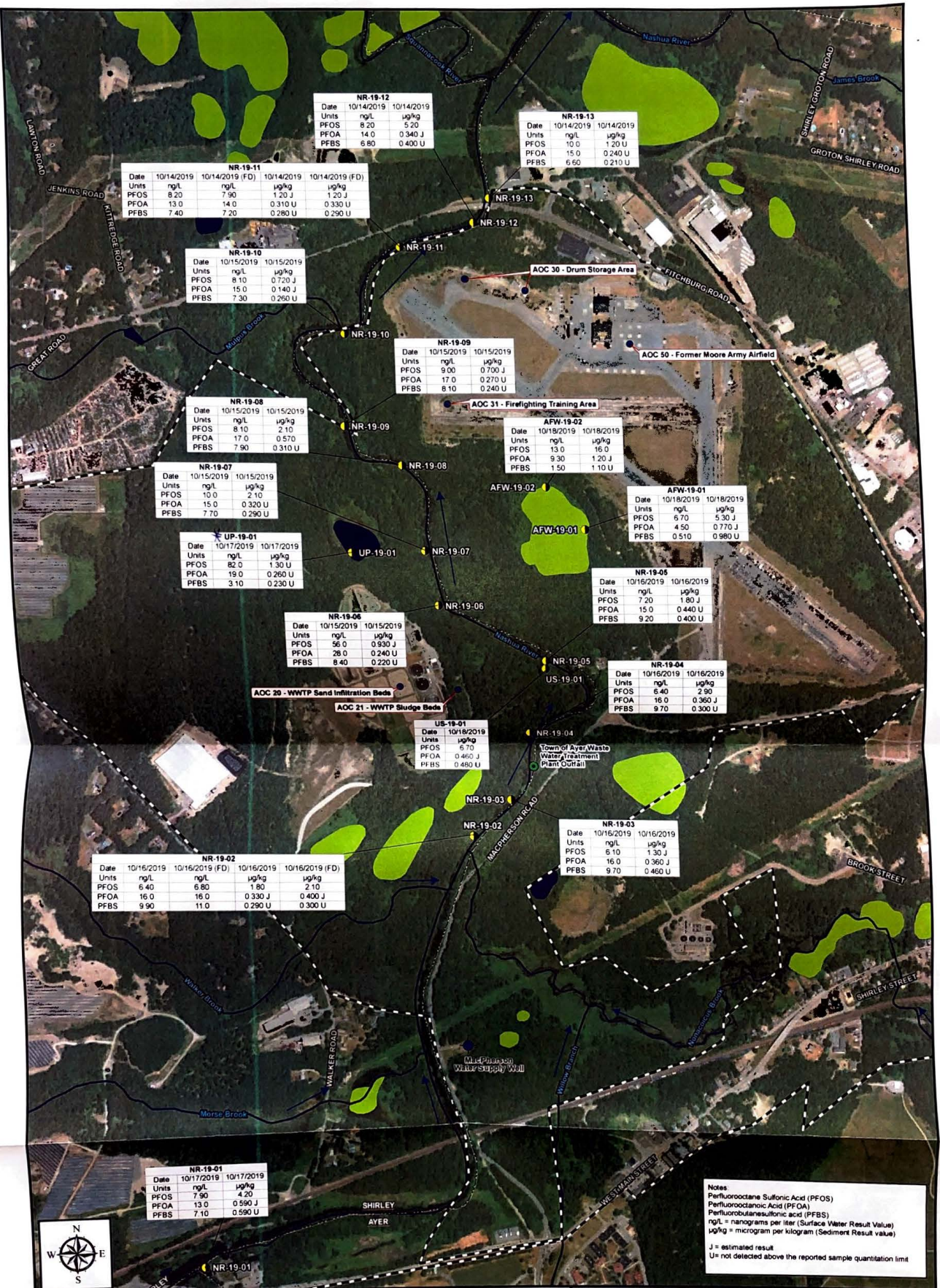
KOMAN Government Solutions, LLC  
293 Boston Post Road West, Suite 100, Marlborough, MA 01752

0 400 800  
Feet

Date: 01/10/2020 Figure 2

File Name: MTD\_Jan20\_A2FSP\_CSB\_GIP\_S1W.mxd  
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community





NR-19-11			
Date	10/14/2019	10/14/2019 (FD)	10/14/2019 (FD)
Units	ng/L	µg/kg	µg/kg
PFOS	8.20	7.90	1.20 J
PFOA	13.0	14.0	0.310 U
PFBS	7.40	7.20	0.330 U

NR-19-12		
Date	10/14/2019	10/14/2019
Units	ng/L	µg/kg
PFOS	8.20	5.20
PFOA	14.0	0.340 J
PFBS	6.60	0.400 U

NR-19-13		
Date	10/14/2019	10/14/2019
Units	ng/L	µg/kg
PFOS	10.0	1.20 U
PFOA	15.0	0.240 U
PFBS	6.60	0.210 U

NR-19-10		
Date	10/15/2019	10/15/2019
Units	ng/L	µg/kg
PFOS	8.10	0.720 J
PFOA	15.0	0.140 J
PFBS	7.30	0.260 U

NR-19-09		
Date	10/15/2019	10/15/2019
Units	ng/L	µg/kg
PFOS	9.00	0.700 J
PFOA	17.0	0.270 U
PFBS	8.10	0.240 U

NR-19-08		
Date	10/15/2019	10/15/2019
Units	ng/L	µg/kg
PFOS	8.10	2.10
PFOA	17.0	0.570
PFBS	7.90	0.310 U

AFW-19-02		
Date	10/18/2019	10/18/2019
Units	ng/L	µg/kg
PFOS	13.0	16.0
PFOA	9.30	1.20 J
PFBS	1.50	1.10 U

NR-19-07		
Date	10/15/2019	10/15/2019
Units	ng/L	µg/kg
PFOS	13.0	2.10
PFOA	15.0	0.320 U
PFBS	7.70	0.290 U

AFW-19-01		
Date	10/18/2019	10/18/2019
Units	ng/L	µg/kg
PFOS	6.70	5.30 J
PFOA	4.50	0.770 J
PFBS	0.510	0.980 U

UP-19-01		
Date	10/17/2019	10/17/2019
Units	ng/L	µg/kg
PFOS	82.0	1.30 U
PFOA	19.0	0.260 U
PFBS	3.10	0.230 U

NR-19-06		
Date	10/15/2019	10/15/2019
Units	ng/L	µg/kg
PFOS	56.0	0.930 J
PFOA	28.0	0.240 U
PFBS	8.40	0.220 U

NR-19-05		
Date	10/16/2019	10/16/2019
Units	ng/L	µg/kg
PFOS	7.20	1.80 J
PFOA	15.0	0.440 U
PFBS	9.20	0.400 U

US-19-01		
Date	10/16/2019	10/16/2019
Units	µg/kg	µg/kg
PFOS	5.70	
PFOA	0.460 J	
PFBS	0.480 U	

NR-19-04		
Date	10/16/2019	10/16/2019
Units	ng/L	µg/kg
PFOS	6.40	2.90
PFOA	16.0	0.360 J
PFBS	9.70	0.300 U

NR-19-02			
Date	10/16/2019	10/16/2019 (FD)	10/16/2019 (FD)
Units	ng/L	µg/kg	µg/kg
PFOS	6.40	6.80	1.80
PFOA	16.0	16.0	0.330 J
PFBS	9.90	11.0	0.290 U

NR-19-03		
Date	10/16/2019	10/16/2019
Units	ng/L	µg/kg
PFOS	6.10	1.30 J
PFOA	16.0	0.360 J
PFBS	9.70	0.460 U

NR-19-01		
Date	10/17/2019	10/17/2019
Units	ng/L	µg/kg
PFOS	7.90	4.20
PFOA	13.0	0.590 J
PFBS	7.10	0.590 U

Notes:  
 Perfluorooctane Sulfonic Acid (PFOS)  
 Perfluorooctanoic Acid (PFOA)  
 Perfluorobutanesulfonic acid (PFBS)  
 ng/L = nanograms per liter (Surface Water Result Value)  
 µg/kg = microgram per kilogram (Sediment Result Value)  
 J = estimated result  
 U = not detected above the reported sample quantitation limit

- Legend**
- Surface Water and Sediment Sample Location
  - ▭ City/Town Boundary
  - ▭ Former Fort Devens Boundary
  - Surface Water Flow Direction
  - ~ Stream/River
  - Lake/Pond
  - Swamp/Marsh

**Area 3 Surface Water and Sediment Sampling Results**  
 Devens PFAS RI

Former Fort Devens Army Installation  
 Devens, Massachusetts

**KOMAN Government Solutions, LLC**  
 293 Boston Post Road West, Suite 100, Marlborough, MA 01752

0 400 800 Feet

Date: 01/16/2020

Figure 3

File: RAB\_MTG\_Jan20\_A3ESP\_CSB\_OP\_SW.mxd





# Soil Sampling



- Area 1
  - ▶ Area of Contamination (AOC) 57 Areas 2 and 3, AOC 74, AOC 75, Grove Pond Area
- Area 2
  - ▶ AOC 32, AOC 43G, AOC 76, Patton Well Area, AOC 40
- Area 3
  - ▶ AOC 20, AOC 21, AOC 30, AOC 31, AOC 50







Massachusetts MCP S-1/GW-1  
 Perfluorooctanoic acid (PFOA) = 0.72 µg/kg,  
 Perfluorooctanesulfonic acid (PFOS) = 2 µg/kg,  
 Perfluorodecanoic acid (PFDA) = 0.3 µg/kg,  
 Perfluorheptanoic acid (PFHpA) = 0.5 µg/kg,  
 Perfluorhexanesulfonic acid (PFHxS) = 0.3 µg/kg,  
 Perfluorononanoic acid (PFNA) = 0.32 µg/kg  
 µg/kg = microgram per kilogram



Legend	
● (Red)	Soil concentrations are equal to or greater than the Mass MCP S-1/GW-1
● (Yellow)	Soil concentrations are less than the MassMCP S1/GW-1 standard.
● (Green)	Soil Concentrations are non-detect
● (Black)	Awaiting Data
○ (White)	Location to be Drilled
● (Black)	Water Supply Well
○ (White)	Soil Boring
➔ (Blue)	Groundwater Flow Direction
- - - (Dashed)	Former Fort Devens Boundary

Area 1 Soil Sampling Results		
Former Fort Devens Army Installation Devens, Massachusetts		
KOMAN Government Solutions, LLC 293 Boston Post Road West, Suite 100, Marlborough, MA 01752		
0 350 700 Feet	Date: 01/10/2020	Figure 

File: 0120\_RAB\_MTG\_A1FSP\_F1\_Area1.mxd





Massachusetts MCP S-1/GW-1  
 Perfluorooctanoic acid (PFOA) = 0.72 µg/kg  
 Perfluorooctanesulfonic acid (PFOS) = 2 µg/kg  
 Perfluorodecanoic acid (PFDA) = 0.3 µg/kg  
 Perfluoroheptanoic acid (PFHpA) = 0.5 µg/kg  
 Perfluorohexanesulfonic acid (PFHxS) = 0.3 µg/kg  
 Perfluorononanoic acid (PFNA) = 0.32 µg/kg  
 µg/kg = microgram per kilogram



Legend	
● (Red)	Soil concentrations are equal to or greater than the Mass MCP S-1/GW-1
● (Yellow)	Soil concentrations are less than the MassMCP S1/GW-1 standard.
● (Green)	Soil Concentrations are non-detect
● (Black)	Awaiting Data
○ (White)	Location to be Drilled
● (Black)	Water Supply Well
○ (White)	Soil Boring
→ (Blue)	Groundwater Flow Direction
- - - (Dashed)	Former Fort Devens Boundary

Area 2 Soil Sampling Results		
Former Fort Devens Army Installation Devens, Massachusetts		
KOMAN Government Solutions, LLC 293 Boston Post Road West, Suite 100, Marlborough, MA 01752		
0 600 1,200 Feet	Date: 01/10/2020	Figure 

File: 0120\_RAB\_MTG\_A2FSP\_F1\_Area2.mxd






Legend	
● Soil concentrations are equal to or greater than the Mass MCP S-1/GW-1	○ Soil Boring
● Soil concentrations are less than the MassMCP S1/GW-1 standard	← Groundwater Flow Direction
● Soil Concentrations are non-detect	□ Area of Contamination (AOC)
● Awaiting Data	⬜ Former Fort. Devens Boundary
○ Location to be Drilled	


<b>Area 3 Soil Sampling Results</b>			
Former Fort Devens Army Installation Devens, Massachusetts			
KOMAN Government Solutions, LLC 293 Boston Post Road West, Suite 100, Marlborough, MA 01752			
0 300 600 Feet	Date: 01/10/2020	Figure 1	

File: 0120\_RAB\_MTG\_AJESF\_F1\_Area3.mxd








## Fifth (2020) Devens Five-Year Review (FYR)




- Required by Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) for sites where hazardous substances, pollutants, or contaminants remain above levels that allow for unlimited use and unrestricted exposure (UU/UE); remedy includes restrictions on land/natural resource use
- Evaluates implementation/performance of selected remedy to determine if remedy is or will be protective of human health and the environment
- Triggered by the signature of the first ROD (with use restriction) (1995 SHL→2000 FYR) and no later than five years following signature date of the previous FYR Report
- If deficiencies are found, FYR Report includes recommendations to address those deficiencies



22



## Five-Year Review Components




- Site inspections
- Community notification/involvement
- Interviews (local officials, community action groups or associations, residents and businesses located near the site, and other pertinent organizations or individuals)
- Data review and analysis
- Document reviews
- Assessment of protectiveness
  - ▶ Are the remedies functioning as intended by the decision document? (i.e., ROD)
  - ▶ Are the exposure assumptions, toxicity data, cleanup levels, and RAOs used at the time of remedy selection still valid?
  - ▶ Is there any new information that may call into question the protectiveness of the remedy?





23







## Five-Year Review Locations




- Former Shepley's Hill Landfill (Areas of Contamination [AOCs] 4,5, and 18)
- Devens Consolidation Landfill and Contributor Sites (AOCs 9, 40, and SA 13)
- South Post Impact Area (AOCs 25, 26, 27, and 41)
- Former Barnum Road Vehicle Maintenance Yards (AOCs 44 and 52)
- Former DRMO Yards and Storage Area (AOCs 32 and 43A)
- Former Historic Gas Stations (AOCs 43G and 43J)
- Former Devens Elementary School Fuel Oil Spill (AOC 69W)
- Former Moore Army Airfield (AOC 50)
- Building 3713 Fuel Oil Spill Site (AOC 57)
- Former Devens Main Post Training Areas (former Grant, Oak, and Maple Housing Areas)
- Railroad Roundhouse (SA 71)





24







## Five-Year Review Locations









25









## Five-Year Review Schedule




- First Five-Year Review was triggered by signature of the ROD in 1995
- Previous Five-Year Reviews completed in 2000, 2005, 2010, and 2015
- Deadline for 5<sup>th</sup> Five-Year Review is September 2020
  - ▶ Site Interviews / Site Inspections – Winter/Spring 2020
  - ▶ Draft to Stakeholders – Late Spring 2020
  - ▶ Draft Final – Summer 2020
  - ▶ Final – to be signed in September 2020





26



BUILDING STRONG®



## Have Questions or Interested in Being Interviewed?





- Contact
  - Robert Simeone
  - Fort Devens BRAC Environmental Office
  - ▶ 978-615-6090
  - ▶ [robert.j.simeone.civ@mail.mil](mailto:robert.j.simeone.civ@mail.mil)

27



BUILDING STRONG®





## Next Steps



- **PFAS RI**
  - ▶ Continue sampling efforts in Areas 1, 2, and 3
  - ▶ Compile and present current Area 1 data
- **PFAS sampling/treatment**
  - ▶ First Quarter 2020 (Feb) sampling of municipal water supply wells
  - ▶ Sampling of private wells north of airfield (Feb./March)
  - ▶ Continued operation of municipal treatment system at Ayer's Grove Pond Well #8
  - ▶ MassDevelopment continuing treatment at MacPherson and Patton water supply wells
- **Community Involvement Plan**
  - ▶ Receive comments by Feb. 3, then prepare Draft Final CIP
- **Five-Year Review**
  - ▶ Draft planned for spring 2020



---



28

BUILDING STRONG<sup>®</sup>



## Former Fort Devens Army Installation Project Status Updates

Questions?



---

29

BUILDING STRONG<sup>®</sup>