



23 SOPS

New Boston Space Force Station

Environmental Cleanup Update

Public Meeting

New Boston Town Hall
7 Meetinghouse Hill Road, New Boston, NH
May 25, 2023



May 25, 2023 Meeting Agenda

- Welcome
- Introductions
- Presentations
- Updates
- Next Steps
- Q&A Session

***Thank you for joining us.
The meeting will begin at
6:00 PM***





The 23d Space Operations Squadron provides U.S. Space Command with critical satellite command and control capability to more than 190 Department of Defense, national and civilian satellites performing intelligence, weather, navigation, early-warning and communications operations.

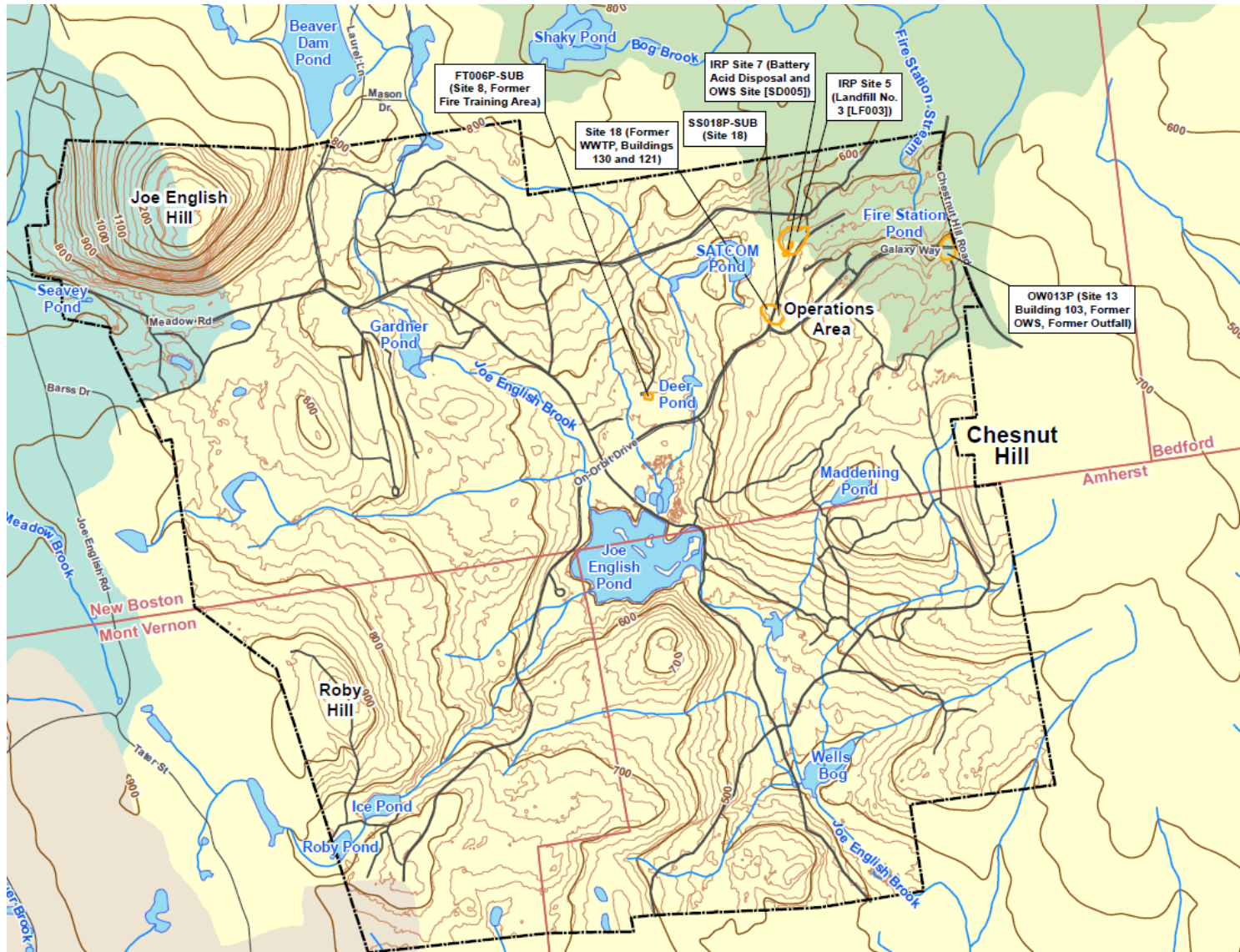




- **U.S. Air Force/Space Force**
 - Lt. Col. David Zesinger, NBSFS Commander
 - Brett Dubner, Restoration Program Manager
 - Jeff Oja, NBSFS Emergency Manager
- **U.S. Army Corps of Engineers**
 - Erin Kirby, Project Manager/Engineering Technical Lead
- **N.H. Department of Environmental Services**
 - Peter Sandin, Remedial Project Manager – Not present
- **Environmental Consultants**
 - Michelle Colón, AECOM
 - Heather Levesque, Seres-Arcadis
 - Josh Millard, AECOM
 - Curt Weeden, AECOM
- **Attendees**



NBSFS Location



Legend

- Installation Boundary
- Town Boundaries
- AFFF Sites
- Water Bodies
- Stream Network
- Road
- Index Contours
- Interval Contours
- Watershed Boundaries**
 - Baboosic Brook
 - Piscataquog River
 - Souhegan River
 - South Branch Piscataquog River

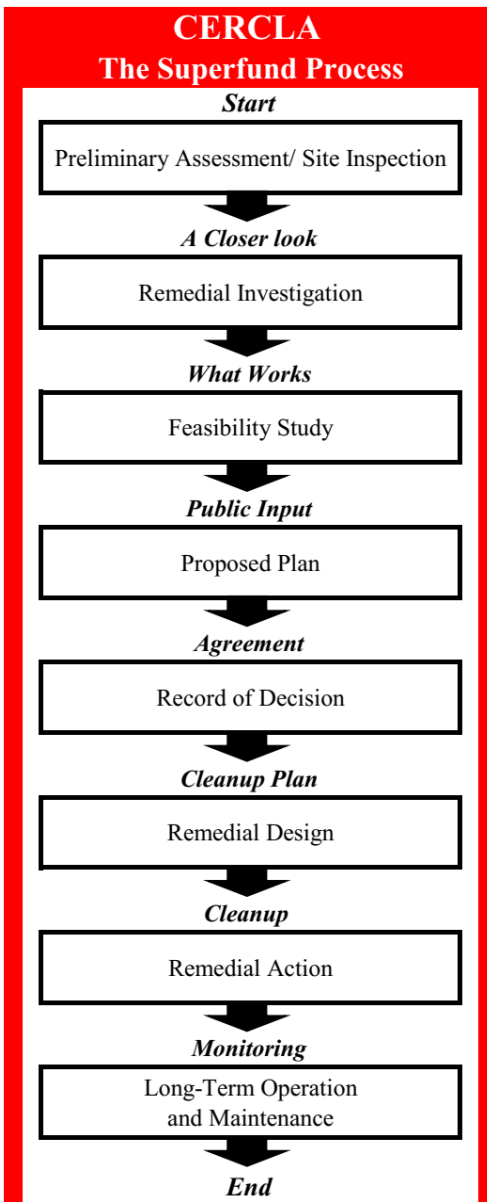


Presentation Overview

- **CERCLA Process**
- **Military Munitions Restoration Program (MMRP)**
 - Joe English Pond
 - Other MMRP Sites Overview
- **Installation Restoration Program (IRP)**
 - IRP Site Overview
- **Aqueous Film Forming Foam (AFFF) and Per- and Polyfluoroalkyl Substances (PFAS)**
 - Former Fire Training Area
 - Fire Station
 - Former Wastewater Treatment Plant



CERCLA Process

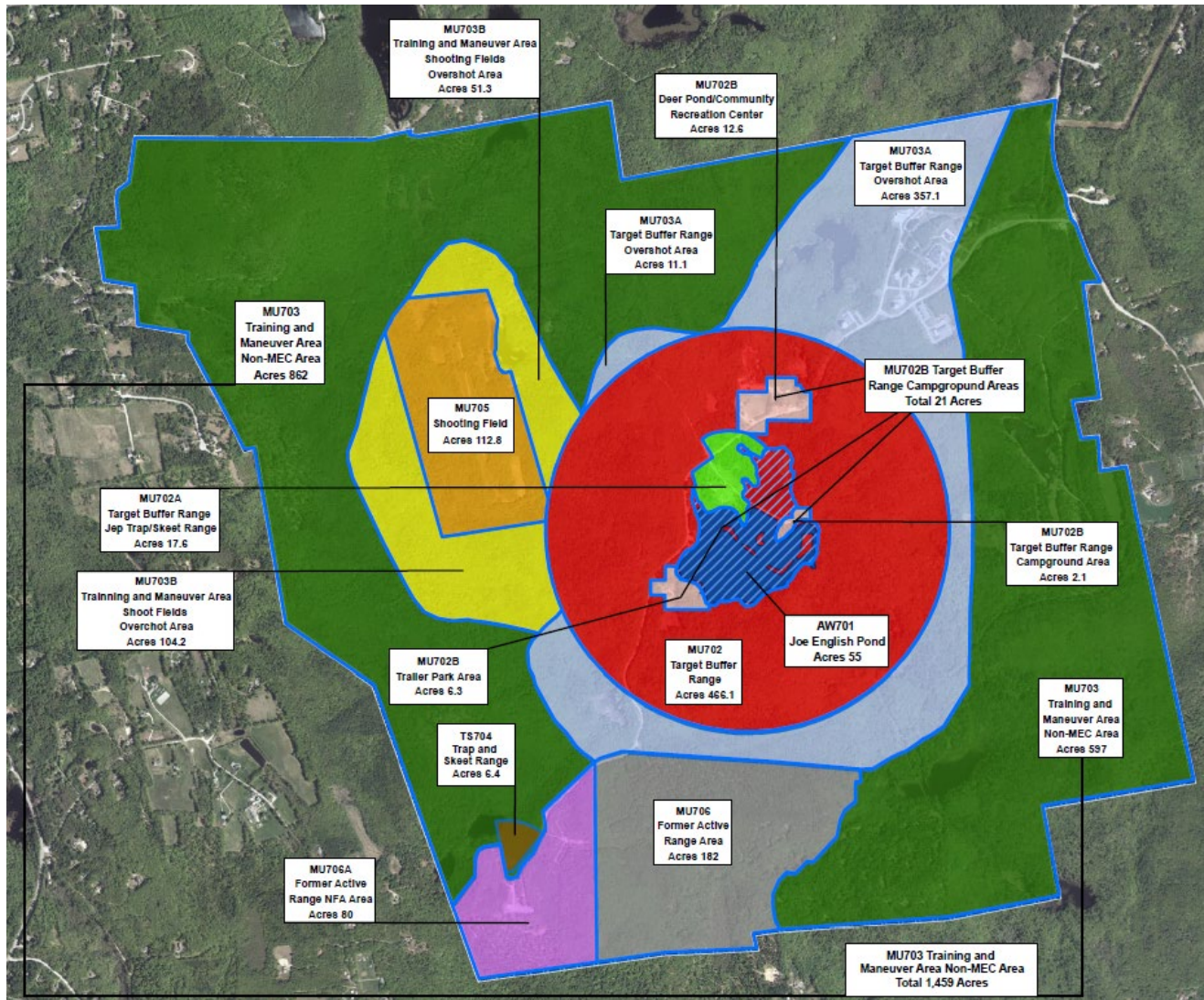


- **CERCLA = Comprehensive Environmental Response, Compensation and Liability Act of 1980 a.k.a “Superfund”**
- **NBSFS is not in the “Superfund” Program, but it follows the CERCLA process**

- **The CERCLA process is followed to identify, define and mitigate potential contamination resulting from Air Force mission activities. Following the CERCLA process makes certain thorough investigative work is done; the process also promotes accountability, community involvement and long-term protectiveness**



MMRP: Site Overview



- MMRP address unexploded ordnance (UXO) and military munitions waste
- Bombing range from 1941 – 1956. The two major target areas were Joe English Pond and the Shooting Fields
- Numerous UXO investigations and removal actions since the 2000s
- Some activities are restricted because of UXO concerns, e.g., no digging
- If you encounter a suspicious object at NBSFS: **Recognize, Retreat, Report**



MMRP: 3Rs, Recognize, Retreat, Report



Bombs (25 lbs - 2000 lbs)



Small arms ammunition (bullets and cartridge cases)



Small, medium, and large caliber projectiles (i.e., 20mm - 155mm)



Mortars (i.e., 60mm and 81mm)





MMRP: Overview

MMRP Site No.	Description	Status
AW701	Joe English Pond	ROD Complete (Versar, 2020); in RD/RA Phase
MU702	Target Buffer Range	A Supplemental RI (URS, 2022) is being finalized. A FS is being prepared based on the potential presence of subsurface MEC.
MU702A	Target Buffer Range Joe English Pond (JEP); Trap/Skeet Range; IRP Site 3 Landfill No.1 (LF001)	A Supplemental RI (URS, 2022) is being finalized. A FS is being prepared based on the potential presence of subsurface MEC and identification of potential risk/hazard to human health under an unrestricted (i.e., residential) use scenario in soil for based on lead and benzo(a)pyrene in soil.
MU702B	Target Buffer Range, Campground Areas	A Supplemental RI is being conducted at a former pistol range, near the NBSFS Community Center.
MU703	Training and Maneuver Area	No Further Action is required (USACE, 2011).
MU703A	Target Buffer Range, Overshot Area	A Supplemental RI (URS, 2022) is being finalized. A FS is being prepared based on the potential presence of subsurface MEC.
MU703B	Training and Maneuver Area, Shooting Field Overshot Area	A Supplemental RI (URS, 2022) is being finalized. A FS is being prepared based on the potential presence of subsurface MEC.
MU705	Shooting Fields	A Supplemental RI (URS, 2022) is being finalized. A FS is being prepared based on the potential presence of subsurface MEC.
MU706	Former Active Range Area	No Further Action is required (Shaw, 2013).
MU706A	Former Active Range, No Further Action Area	No Further Action is required (USACE, 2011).
TS704	Trap and Skeet Range	A Supplemental RI (URS, 2022) is being finalized. A FS is being prepared based on potential MC concerns related to shallow lead concentrations.

Notes:

FS = Feasibility Study

IRP = Installation Restoration Program

JEP = Joe English Pond

MC = munitions constituents

MEC = munitions and explosive of concern

MMRP = Military Munitions Response Program

RA = Remedial Action

RD = Remedial Design

RI = Remedial Investigation

ROD = Record of Decision

Remedial Investigation/ Feasibility Study (RI/FS):

Investigation and analytical studies conducted at an Environmental Restoration Program site. The investigation and study fully define the type and extent of the environmental impacts, establish criteria for remediating the site, identify and screen potential alternative remedies, and analyze the technologies and costs related to each potential alternative remedy.

No Further Action (NFA): NHDES agrees with NFA unless new info becomes available and provided property remains under DoD control.



Joe English Pond, MRS AW701

- **Record of Decision signed December 2020**
- **Components of Selected Remedy**
 - **Access Restrictions**
 - **Warning Signage**
 - **Land Use Restrictions**
 - **Educational Program**
 - **Unexploded Ordnance Construction Support**
 - **Annual Land Use Control Inspections**
 - **Long-Term Monitoring of Surface Water and Sediment**
 - **Compliance Reporting**
 - **Enhanced Visual Surveys**
 - **Five-Year Reviews**
- **Remedial Design/Remedial Action Work Plan finalized December 2022**

Documents available in Administrative Record at <https://ar.afcec-cloud.af.mil/>



Joe English Pond, MRS AW701

Warning Signage



FOR YOUR INFORMATION

Munitions and explosives of concern (MEC) may be present at New Boston Space Force Station and could present a hazard. MEC may be on land or in water, and may not be recognizable.



If you find any MEC or suspicious items, follow the **3Rs of explosives safety:**

Recognize MEC is dangerous.

Retreat Don't touch, move, or disturb MEC. Leave the area.

Report Call Security at (603) 471-2285.

To reduce the risk of injury, please:



No Magnetic Fishing



No Anchors



No Digging



No Motorized Boating

Scan this QR code for more information.



Escanee este código QR para obtener más información.



Joe English Pond, MRS AW701

Long-Term Monitoring (LTM) of Surface Water and Sediment

LTM Approach:

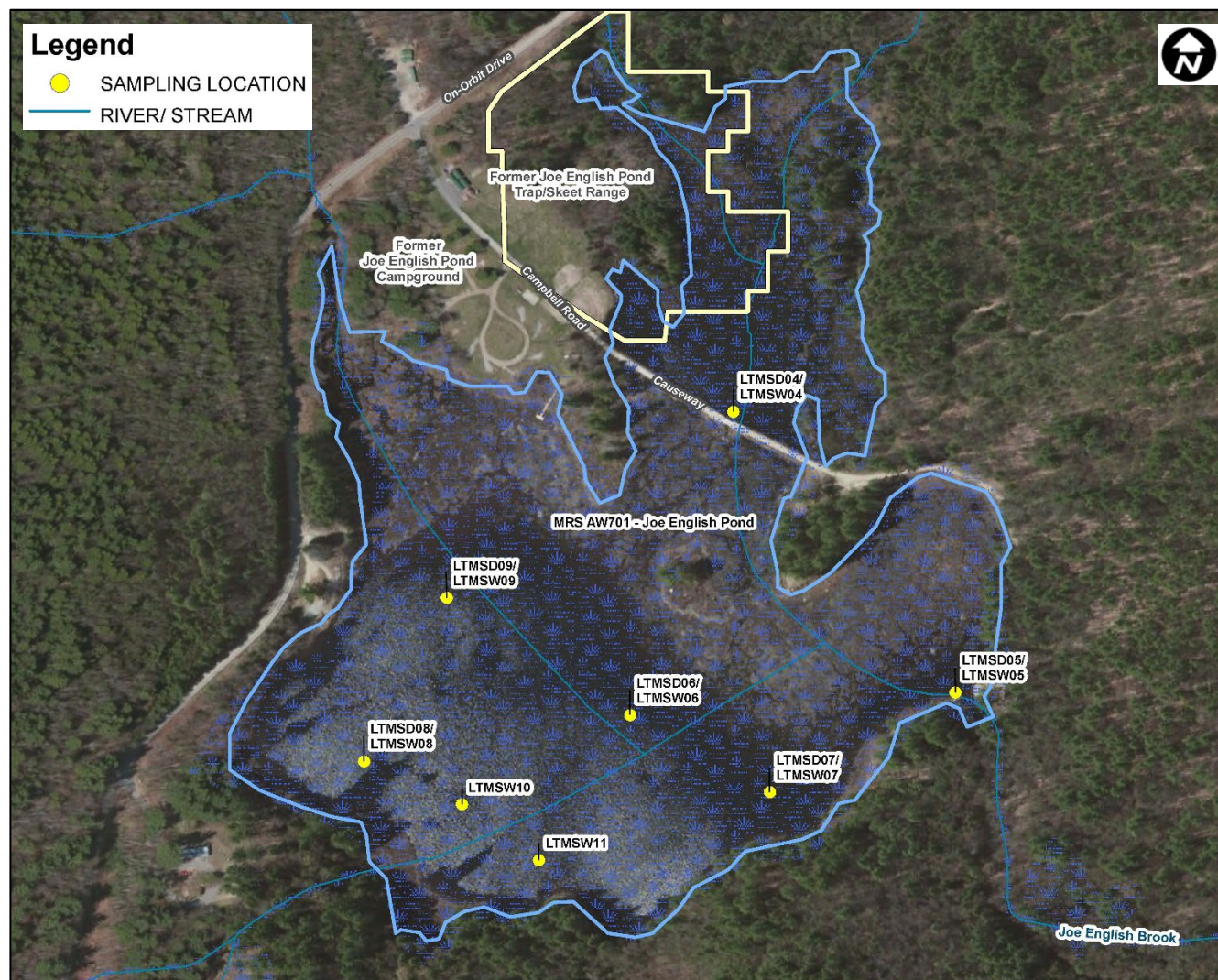
- Annual sampling for 3 years to develop trend analyses
- Evaluate LTM sampling program (frequency, analytical parameters, and sampling network) after 3 years of data collection

2022 Sampling Event:

- 6 sediment samples collected
- 8 surface water samples collected
- Samples analyzed for metals, mercury, explosives, SVOCs, nitrocellulose, and perchlorate

Upcoming Work:

- 2022 LTM and LUC Inspection and Report
- 2023/2024 Winter Sampling Event





IRP: Site Overview



- IRP address the releases of hazardous substances, pollutants, and contaminants from past commonly accepted practices on DoD installations (e.g., oil, solvents, etc.)
- Numerous investigations since the 1980s
- Significant effort since 2020 to move sites along in the CERCLA process



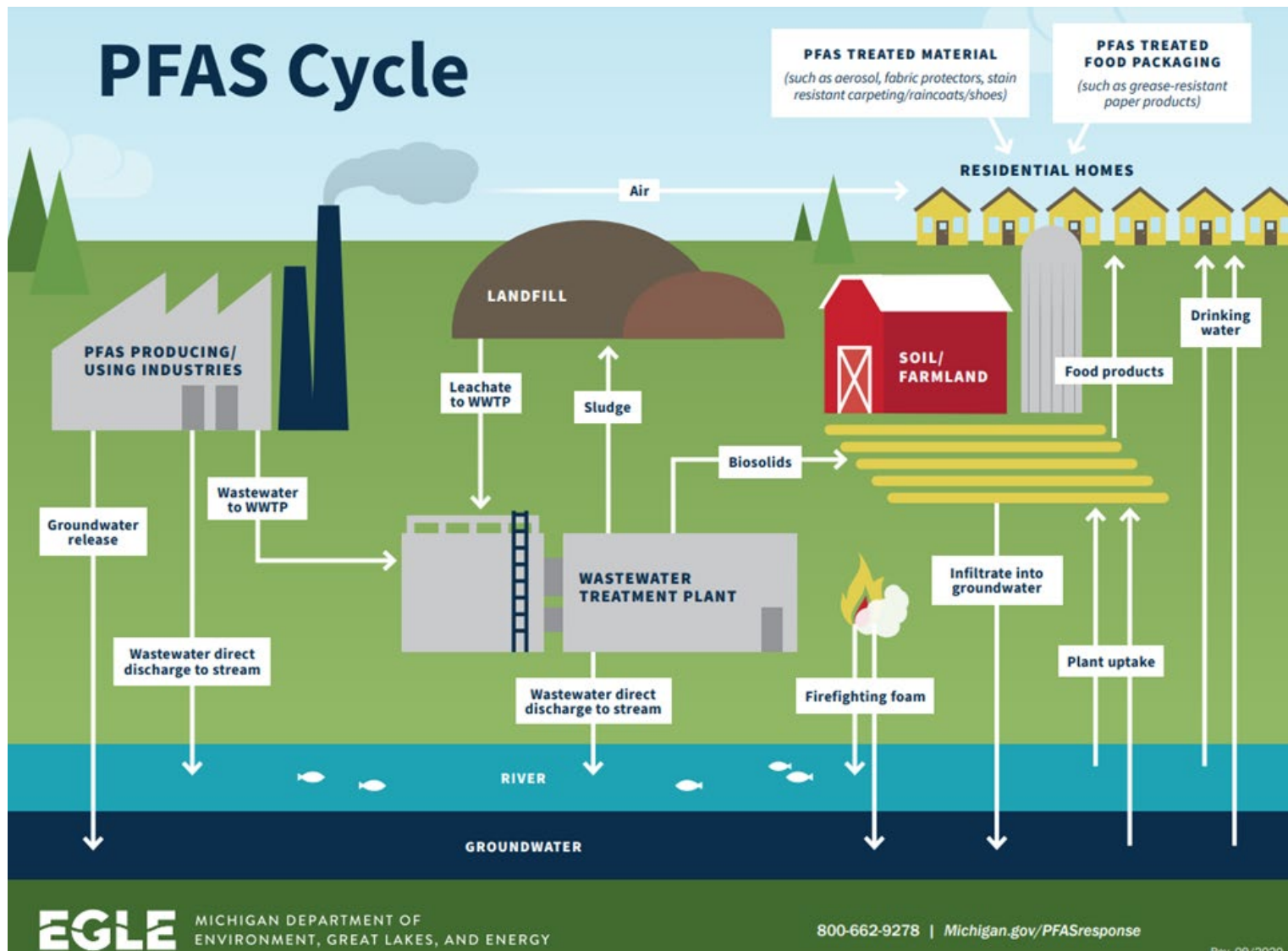
IRP: Overview

IRP Site No.	Description	Status
Site 1 (SS007)	Chemical Spill/Disposal Site, Drum Storage Area	No Further Action is required (Shaw, 2009)
Site 2	Joe English Pond	Moved to MMRP
Site 3 (LF001)	Landfill No. 1	In the RI/FS Phase; this site is being investigated within the MMRP
Site 4 (LF002)	Landfill No. 2	No Further Action is required (Shaw, 2009)
Site 5 (LF003)	Landfill No. 3	A Supplemental RI (URS, 2022a) is being finalized and recommended No Further Action for non-PFAS constituents; however, the site is being investigated in the PFAS Phase I RI under SS018P-SUB.
Site 6 (SD004)	Building 100 Storm Drainage Disposal Site, NPDES Outfall	No Further Action is required (Shaw, 2009)
Site 7 (SD005)	Battery Acid Disposal and OWS Site	A Supplemental RI (URS, 2022a) is being finalized. AFS is being prepared based on human-health risks in soil and groundwater. It is also being investigated in the PFAS Phase I RI under SS018P-SUB.
Site 8 (FT006/FT006P-SUB)	Fire Training Area	A Supplemental RI (URS, 2022a) is being finalized and recommended No Further Action for non-PFAS constituents; however, the site is being investigated in the PFAS Phase I RI.
Site 9 (SS008)	SATCOM Building 105/106, Chemical Spill-Ethylene Glycol #1	A Supplemental RI (URS, 2022a) is being finalized and recommended No Further Action.
Site 10 (SS009)	SATCOM Building 142/143, Chemical Spill-Ethylene Glycol #2	A Supplemental RI (URS, 2022a) is being finalized and recommended No Further Action.
Site 11	Shooting Fields and Undeveloped Impact Areas	Moved to MMRP
Site 12 (SS011)	Building 141 Fuel Spill Site	No Further Action is required (Shaw, 2009)
Site 13 (OW013/OW013P)	Building 103, OWS Site and NPDES Outfall	No Further Action (Shaw, 2009) for non-PFAS constituents; however, the site is being investigated in the PFAS Phase I RI.
Site 14 (SS014)	Main Gate House	No Further Action is required (Shaw, 2009)
Site 15 (OW015)	Building 157, OWS Site	No Further Action is required (Shaw, 2009)
Site 16 (SS016)	Building 100, Former Photo processing and Laboratories	No Further Action is required (Shaw, 2009)
Site 17 (SS017)	Former Buildings 117, 124, and 125, Maintenance Shops and Power Plant	No Further Action is required (Shaw, 2009)
Site 18 (SS018/SS018P-SUB)	Former WWTP	A Supplemental RI (URS, 2022a) is being finalized. AFS is being prepared based on ecological risks to aquatic receptors in surface water. It is also being investigated in the PFAS Phase I RI.
Site 19 (OW019)	Building 133, OWS Site	The SI (URS, 2021) recommended No Further Action. A DD (URS, 2022b) indicating "No Further Response Action Planned" was submitted to NHDES and regulatory concurrence is pending.

Notes:
DD = Decision Document
FS = Feasibility Study
IRP = Installation Restoration Program
MMRP = Military Munitions Response Program
NHDES = New Hampshire Department of Environmental Services
NPDES = National Pollutant Discharge Elimination System
OWS = oil-water separator
PFAS = per-and polyfluoroalkyl substances
RI = Remedial Investigation
SI = Site Inspection
WWTP = wastewater treatment plant



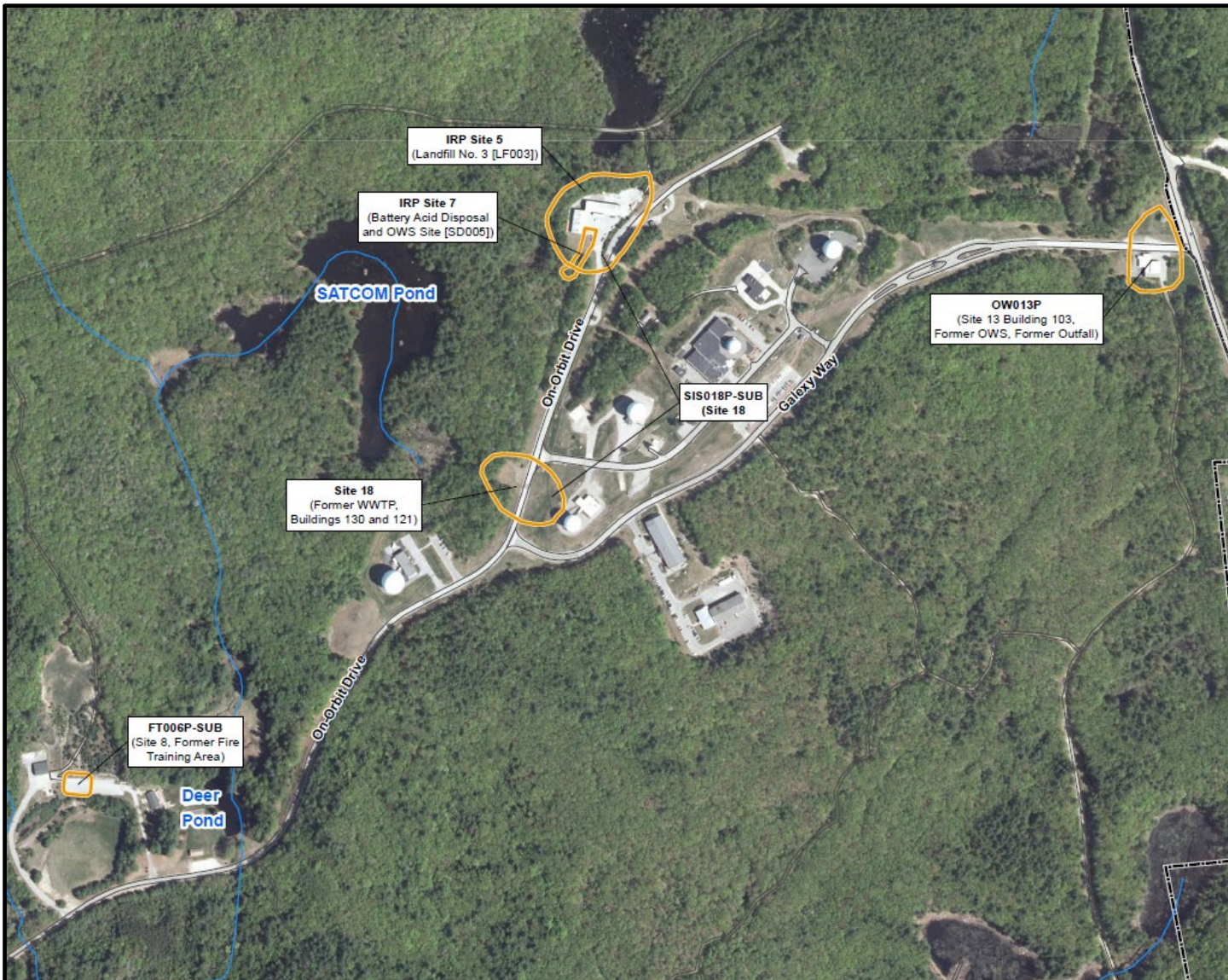
PFAS Overview



- **PFAS are man-made chemicals and have been used since the 1950s in many household and industrial products because of their stain and water repellent properties. PFAS are present virtually everywhere in the world because of the large amounts that have been manufactured and used over the decades.**
- **At NBSFS, investigation will occur at sites where historic activities involving the use or storage of AFFF has been confirmed and AFFF-derived PFAS have been detected in soil, groundwater, surface water and sediment.**



AFFF/PFAS: Site Overview



- PFAS investigations began in 2016.
- Extensive sampling in 2023-2024 under the PFAS Phase I Remedial Investigation (RI). The study sites include:
 - Former Fire Training Area (FT006P-SUB)
 - Fire Station (Home of New Boston's Hilltop Fire Station) (OW013P)
 - Former Wastewater Treatment Plant, includes a subarea to the north (SS018P-SUB)



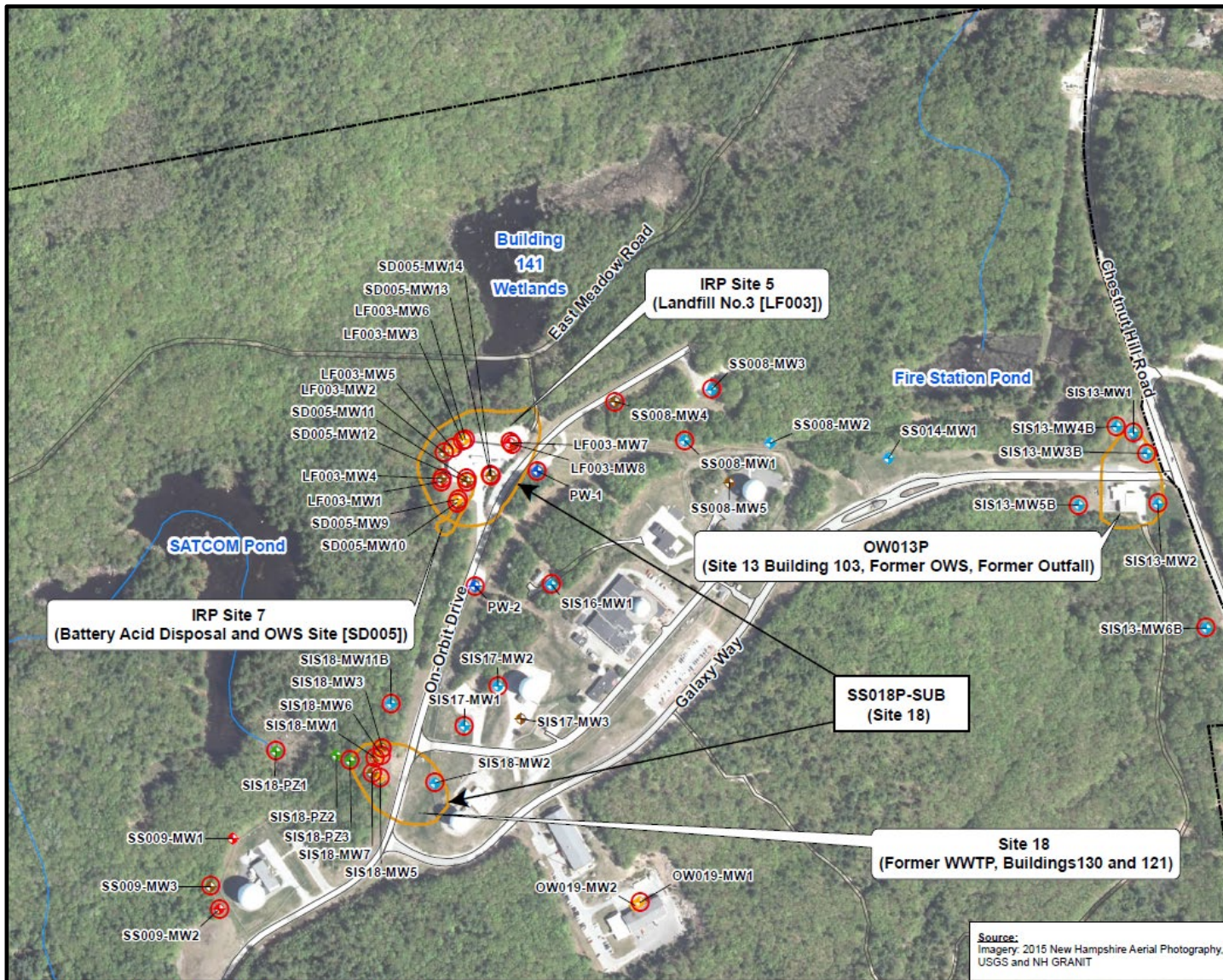
AFFF/PFAS: Former Fire Training Area



- The area of the former FTA has had varying uses over time including bombing range activities, a pistol/rifle range, fire training activities, and use as a recreation area.
- Fire training activities occurred on a monthly basis from 1974 - 1985.
- Gasoline was used to ignite fires. AFFF was used to extinguish the fires in these exercises.
- A water-supply well (PW-3) is also located in the vicinity. PFAS have been detected at this well and a Granulated Activated Carbon treatment system was installed to treat PFAS in 2017.
- PFAS have been detected in soil, groundwater, surface water, and sediment.



AFFF/PFAS: Fire Station



- Building 103 was operated by the NBSFS from 1976 – 1993.
- Presently, Building 103 houses the Hilltop Fire Station associated with the New Boston Fire Department.
- AFFF containing PFAS were stored in the fire station as recently as 2017.
- From 1976 to 1994, vehicle wash water was discharged to the NPDES outfall.
- From 1994 - 2001, vehicle wash water was discharged to an oil-water separator (OWS) and discharge trucked to the WWTP (SS018P-SUB).
- During the OWS removal project in 2001, the floor trenches in the vehicle bay of the building were filled with concrete and the OWS inlet pipe was capped.
- PFAS have been detected in soil, groundwater, surface water, and sediment.



AFFF/PFAS: Former WWTP

WWTP Area

- From 1994 – 2001 OWS from the Fire Station was trucked to the WWTP.
- Discharge from the former WWTP was to a former outfall.
- PFAS have been detected in soil, groundwater, surface water, and sediment.

Building 141 Area

- Location of a former landfill and Building 141 was the location of a former motor pool.
- The motor pool area included fuel tanks, an OWS, and fuel dispenser.
- Presently, Building 141 is used for storage.
- PFAS have been detected in groundwater. Soil, surface water, and sediment have not been sampled for PFAS.
- NBSFS water-supply wells (PW-1 and PW-2) are located in the vicinity of Building 141. PFAS has been detected in these wells below NH drinking water standards.
- The source of PFAS in this area is not known.



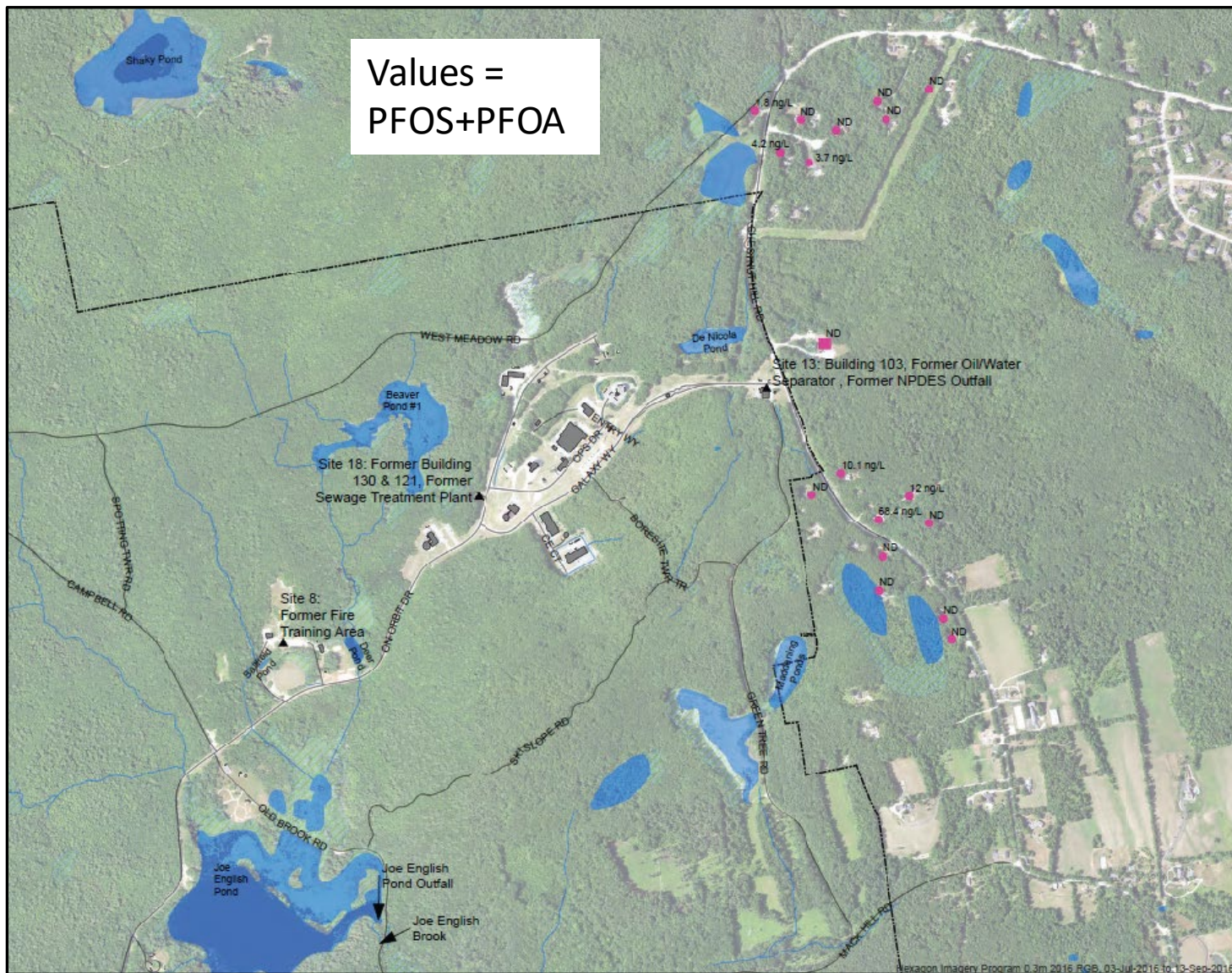
AFFF/PFAS: Potential Next Steps

- **Results from the initial steps of the PFAS Phase I RI are expected in Spring 2024, and results from the complete investigation are expected by 2025.**
- **Air Force and NHDES may modify the sampling program based on the results of the initial steps of the investigation.**
- **Air Force will continue to keep the community informed and provide additional information as warranted. Air Force plans to host Annual Public meetings and there will be opportunities for the public to comment on the cleanup process.**





AFFF/PFAS: Off-Base Residential Well Sampling



- Residential wells were sampled in 2016-2018 by the NHDES for PFAS. Concentrations were below NH PFAS water quality standards at all locations except one residence. The source of that exceedance is unknown but not inferred to be from the NBSFS. NHDES provided a filtration system at that property.
- The Air Force is currently processing NHDES request to update the private well inventory and conduct off-base sampling.



Update: Restoration Advisory Board

- In March/April 2023 ads to determine in interest in forming a Restoration Advisory Board (RAB)
- A RAB is a community group which meets to discuss and receive information on environmental restoration (cleanup) projects at a military base
- A limited number of response were received
- If ever there is additional interest a RAB could be formed



Would you like to learn more about environmental cleanup projects at New Boston Space Force Station?

If yes, then please contact Brett Dubner at (508) 968-4670 ext. 3001 or email brett.dubner.1@us.af.mil to get more information on participating in the startup of a Restoration Advisory Board, also known as a "RAB."

What is a Restoration Advisory Board?

A Restoration Advisory Board, also known as a "RAB," is a community group which meets to discuss and receive information on environmental restoration (cleanup) projects at a military base.

What does a RAB do?

- A RAB facilitates and improves communication, outreach, and transparency between the military base, the public, regulators, local governments, and interest groups for issues related to military cleanup activities. RABs offer a structured, focused, and interactive opportunity for community stakeholders to meaningfully participate in the clean up process. A RAB enables local community members to receive from and exchange information with the base and regulatory agencies managing environmental cleanup projects at New Boston Space Force Station.
- RABs engage in and support DoD's cleanup efforts by reviewing and commenting on cleanup documents and activities; serving as a liaison to and sharing cleanup information with the community; and providing a forum to exchange information about the schedule, type, and status of cleanup activities. RAB meetings allow RAB members and members of the community to receive updates and ask questions on the status of the environmental cleanup program at New Boston Space Force Station.
- Though RABs are not a decision-making body, they do give local community members the opportunity to have their voices heard and provide a forum to provide valuable community insight to base and regulatory agencies.

Are you interested in participating in New Boston Space Force Station's RAB?

New Boston Space Force Station is currently assessing whether there is enough community interest to establish a RAB.

If you are interested in learning more about New Boston Space Force Station's environmental restoration projects and having the opportunity to give your input to base and regulatory agencies on the management of cleanup projects at New Boston Space Force Station, either as a RAB member or by attending RAB meetings, please contact the following individual by **April 30, 2023** to get more information.

Brett Dubner
Restoration Program Manager, New Boston Space Force Station
(508) 968-4670 ext. 3001
brett.dubner.1@us.af.mil

Para obtener esta información en español, visite:
<https://www.spacebasedelta1.spaceforce.mil/New-Boston-SFS-New-Hampshire/>



Update: Community Involvement Plan

The CIP is a “living” document and will be updated or revised as site or community conditions change

- **Community Involvement Plan is being updated, spearheaded by AFFF/PFAS activities at NBSFS**
- **Outreach ongoing, feedback will be incorporated into the CIP**
- **Major CIP sections include:**
 - **Site Information, including details on all environmental sites**
 - **Community background and interview results**
 - **Specific CIP elements, with special emphasis on how best to communicate to the community**
 - **MMRP, IRP, and PFAS Fact Sheets**
- **CIP is posted on the Administrative Record <https://ar.afcec-cloud.af.mil/>**



- **Military Munitions Restoration Program (MMRP)**
 - Continue Long-Term Monitoring at Joe English Pond
 - Finalize MMRP Remedial Investigations
 - Prepare MMRP Feasibility Studies
- **Installation Restoration Program (IRP)**
 - Finalize IRP Remedial Investigations
 - Prepare IRP Feasibility Studies
- **AFFF/PFAS Phase I Remedial Investigation**
 - Finalize Quality Assurance Project Plan (i.e., sampling plan)
 - Install new monitoring wells. Sample soil, groundwater, surface water and sediment.
 - Prepare Phase I RI Report
- **Community Involvement Plan**
 - Seek community input (recent ads and this public meeting)



Questions and Answers

- **Meeting Helpful?**
- **Frequency of Meetings?**
- **Location: In-Person, Virtual?**
- **Communication Methods: Web, Newspapers, Email?**
- **Other?**





Thank you for Attending Tonight's Meeting

Points of Contact:

- **U.S. Air Force:** Brett Dubner, Restoration Program Manager
 - (508) 968-4670 ext. 3001 or brett.dubner.1@us.af.mil.
- **U.S. Army Corps Of Engineers:** Erin Kirby, Project Manager, Engineering Technical Lead
 - (978) 318-8147 or Erin.Kirby@usace.army.mil
- **N.H. Department of Environmental Services:** Peter Sandin, Remedial Project Manager
 - (603) 559-0022 or peter.t.sandin@des.nh.gov

On-Line Information:

- **Administrative Record:** <https://ar.afcec-cloud.af.mil/>
- **General NBSFS Info:** <https://www.spacebasedelta1.spaceforce.mil/New-Boston-SFS-New-Hampshire/>
- **NHDES Onestop:** <https://www.des.nh.gov/onestop-navigation>
- **Townhall Meeting Recording:** <https://townhallstreams.com/towns/newboston>
- **EPA:** <https://www.epa.gov/>
- **Agency for Toxic Substance Disease Registry (ATSDR):** <https://www.atsdr.cdc.gov/>