

# Air Force Civil Engineer Center

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## Pease RAB Meeting

10 March 2021



# Checklist for Virtual Participation

- ✓ If you joined audio by phone, please make sure that you have entered your participant ID number. **(To see your Participant ID, click the “Join Audio” button on the left of the menu, and select “Phone Call”.) You can add your participant ID number by entering *#[participant ID]#* on your phone keyboard.**
- ✓ RAB members – mute when not speaking and turn on your video camera if you are able.
- ✓ Please open the Zoom Chat and Participant windows.
- ✓ If necessary, rename yourself by hovering over your name in the “Participants” tab and providing your first and last name
- ✓ Use participant tools to raise your hand
- ✓ Enabling closed captions for language support, use toolbar button
- ✓ Contact Maggie Osthues with tech questions: [mosthues@cbi.org](mailto:mosthues@cbi.org)



- **Welcome, Introduction, RAB Business**
- **Remedial Investigation Update**
  - Scoping Activities
  - Next Steps
- **Open Discussion**
- **Public Comments**
- **Meeting recap**
- **Adjourn**



# Introduction & RAB Business



- **Review Technology – Meeting is recorded**
- **Approve meeting summary from December 2020**
- **Public comment procedure**
  - To indicate that you'd like to make public comment, please chat the host or email Linda Geissinger by 5:20pm - [linda.geissinger@us.af.mil](mailto:linda.geissinger@us.af.mil)
  - 3 minutes per person
- **RAB participation**
  - Indicate you'd like to speak by clicking the blue hand icon or speaking up
  - You may mute and unmute yourself
  - Be patient and kind please
- **Contact Maggie Osthues with tech questions:**  
[mosthues@cbi.org](mailto:mosthues@cbi.org)

# Air Force Civil Engineer Center

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**Remedial Investigation  
Scoping Update**

**Former Pease AFB, NH**

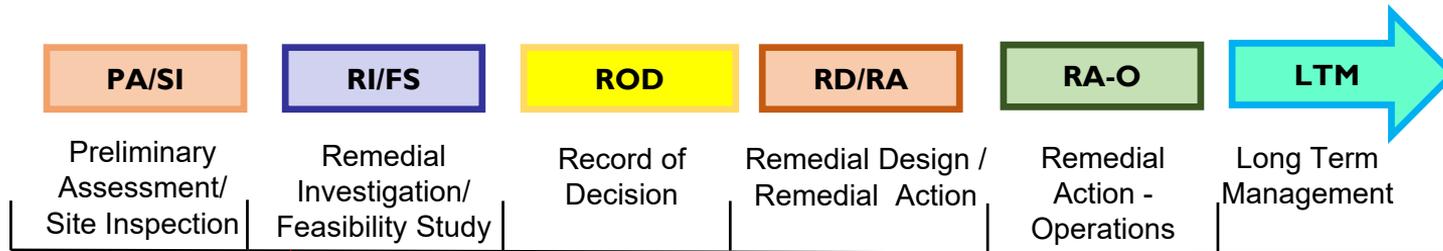
**10 March 2021**



# CERCLA Cleanup Process Refresher



## CERCLA Nomenclature



Began August 2020

*Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)*



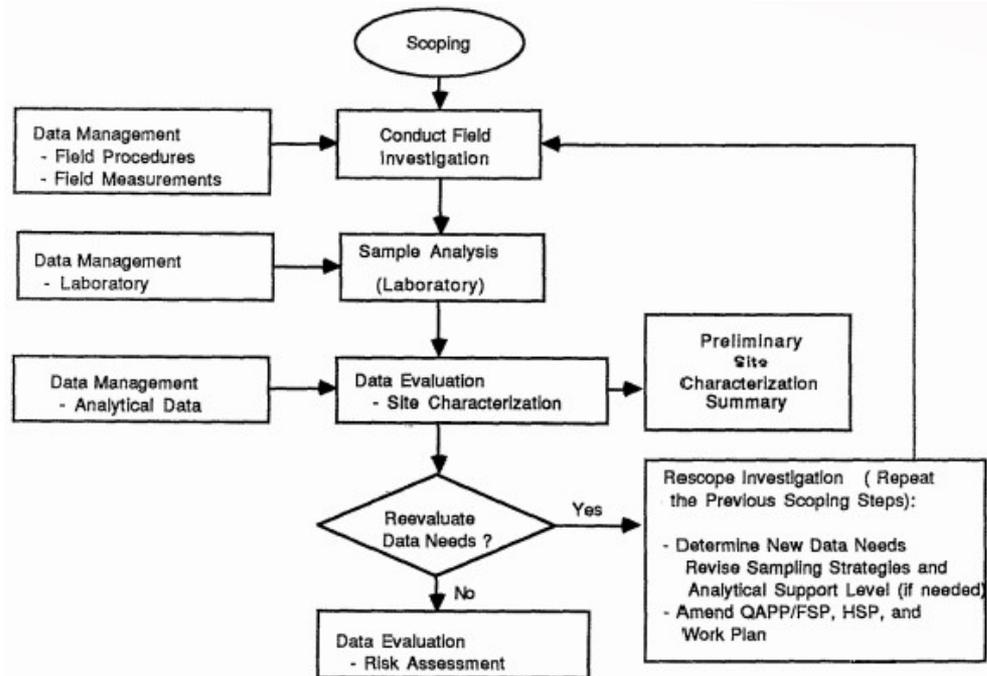
# Remedial Investigation Tasks

## Site Characterization

- Determines *nature & extent* of contamination
- Iterative Process
- Performed in Phases

## Baseline Risk Assessment

- Combines sources, pathways and receptors
- Relies on site characterization information



Site Characterization Process



# Outcomes of pre-RI Scoping – Field Work

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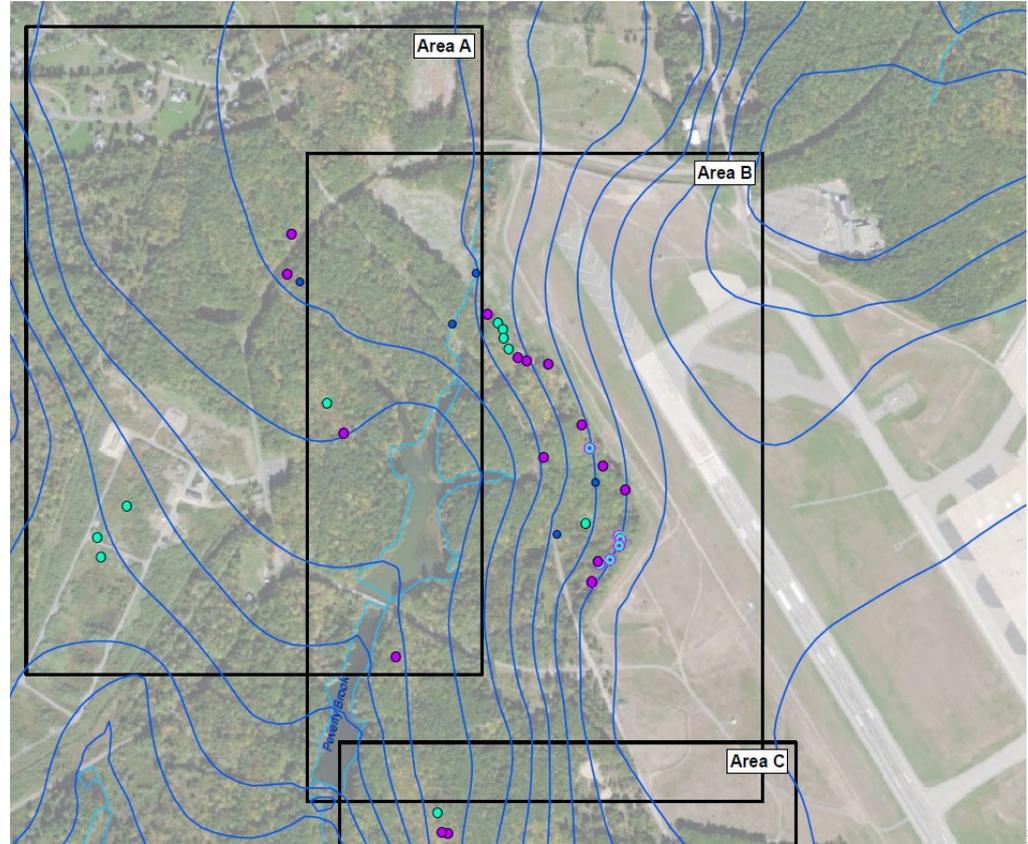
December 2<sup>nd</sup> RAB - Air Force outlined preliminary field work conducted to assist with RI Work Plan development:

- Western Boundary Seep and Spring Survey
  - Field reconnaissance survey November 2020
  - Identify potential seeps and springs along the western boundary of Pease
    - Possible migration pathways for PFAS
    - Possible exposure pathways
  - Multiple seep locations have been identified and sampling is proposed



# Location of Springs/Seeps

## Example Figure of Findings:



### SYMBOL KEY

Observed Location:

-  Seep
-  Drainage/stream
-  Wet/seep

-  Wet/stream
-  Wet/upland
-  Wetland

 Seep Survey Area Figure Extents

 Modeled Groundwater Contours

 Surface Water Bodies



# Outcomes of RI Scoping – Field Work

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Other field work that helped select sampling locations for draft RI Work Plan

- Watering Spring Geochemical Sampling to:
  - determine parent water (i.e., BR or OB groundwater) of spring
  
- PFAS Groundwater Sampling at Site 13 (Bulk Fuels Storage Area)
  
- Geophysical Logging in four bedrock wells to:
  - identify water-bearing fractures
  - understand transport mechanisms and
  - identify zones for subsequent packer sampling



# Outcomes of RI Scoping - Public Outreach

- Public Outreach - Questionnaire Responses

	# Sent	# Received	% Received	Wells In use	SW on Property	SW used for wading or swimming	GW or SW Used to Irrigate Gardens	Type of fruits or vegetables grown for consumption	Poultry Eggs	Meat	Other uses of Groundwater
<u>Questionnaire A:</u> Private Well Inventory	412	101	25%	2	21	0	3 (SW only)	apple tree and pear tree (hay & animal forage also noted)	-	-	car washing, watering yard & gardens
<u>Questionnaire B:</u> Detailed Water Use (known private wells)	92	56	61%	38	22	3	23	apples, basil, beans, beets, blueberries, carrots, cherry, cucumbers, eggplant, elderberry, green beans, herbs, kale, lettuce, pears, plums, peaches, peppers, potatoes, pumpkins, raspberries, strawberries, squash, tomatoes, various vegetables, zucchini, etc	3	2 (Bison, chickens, Galloway beef)	filling pools/kiddie pools/hot tubs, car washing, watering lawn, bathing dog, geothermal heating



# Outcomes of RI Scoping - Public Outreach

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## Public Outreach - Questionnaire Links

- **Outreach continues and responses are encouraged:**
  - [Questionnaire A](#) - If your property has not previously been inventoried.
  - [Questionnaire B](#) - If your property has an existing well and has previously been inventoried.
  - BRAC Website: <https://www.afcec.af.mil/Home/BRAC/Pease.aspx>
  - Newington News: <https://www.newington.nh.us/node/111/news>



# Outcomes of RI Scoping - Public Outreach

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- Public Outreach - CSM Technical Sessions
  - Three sessions held with interested RAB members (1/7, 1/14, 1/28/21)
  - One held with PDA/City (1/27/21)
  - Approximately 8 hours of discussion
  - Provided:
    - Local knowledge
    - Enhancements





# Outcomes of CSM Technical Sessions - Sources

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- **Sources**

- Known source areas (i.e., Site 8, Crash Fire stations, FD equipment test area)
  - Further sampling proposed to evaluate extent
- Other uses of firefighting foams
  - Proposed sampling along runway (foaming)
  - Proposed sampling added to evaluate potential impact of crash near Peverly headwaters
- Landfills; Zone 2, KC-135 fire area
  - Soil and GW sampling to evaluate presence or absence
- Possible other sources such as municipal sludge, solid waste disposal areas, etc.



# Outcomes of CSM Technical Sessions - Pathways

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- **Pathways**

- Groundwater
  - investigation will step-out beyond the current identified extent of contamination with respect to the AGQS
- Wetlands and hydric soil
  - shallow GW and soil sampling added to evaluate exposure pathway
- Storm sewer
  - samples will be collected to evaluate contribution from GW and surface runoff
- Fate & Transport
  - lysimeters installed in source area vadose zone to evaluate leaching to GW



# Outcomes of CSM Technical Sessions - Receptors

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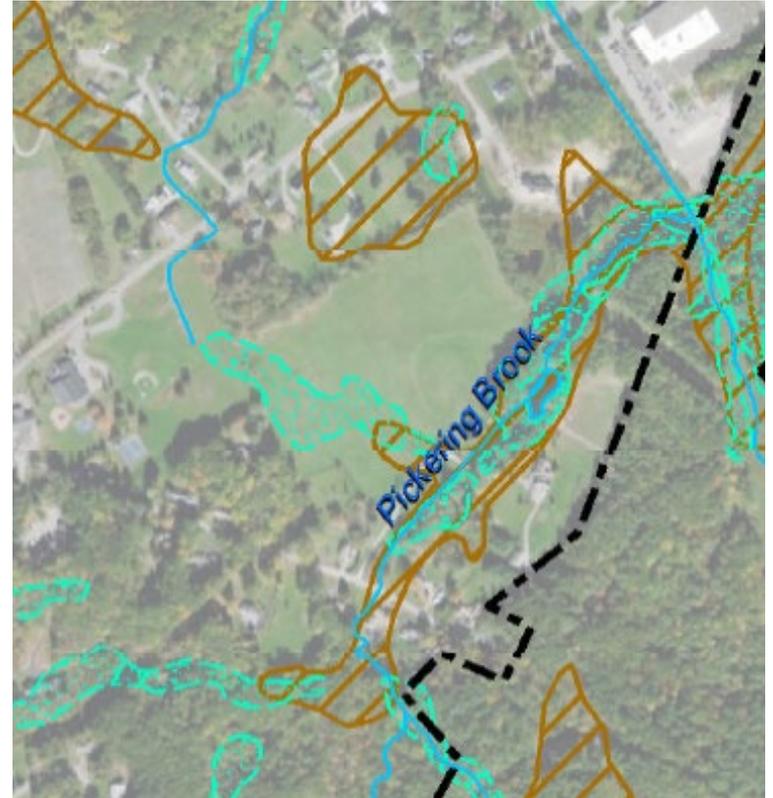
- **Potential Human Receptors**

- Residents, subsistence farmers, industrial/commercial workers, construction workers, recreational waders/fishermen, and hunters
- Deer/Shellfish/Fish consumers – Data will drive whether/where to sample
- Potential risk from low-lying soil/SW has been added to the CSM
- Land uses adjusted to reflect current land ownership versus previous AF “Installation Boundary”



# Outcomes of CSM Technical Sessions

- **Example – hydric soils**
  1. Community members identified numerous areas with shallow groundwater or groundwater at the surface
  2. Concerns expressed about exposure
  3. Discussions identified a GIS hydric soil layer that was available
  4. Exposure route added to CSM
  5. Samples are proposed to evaluate pathway





# Remedial Investigation Scoping - Conclusion

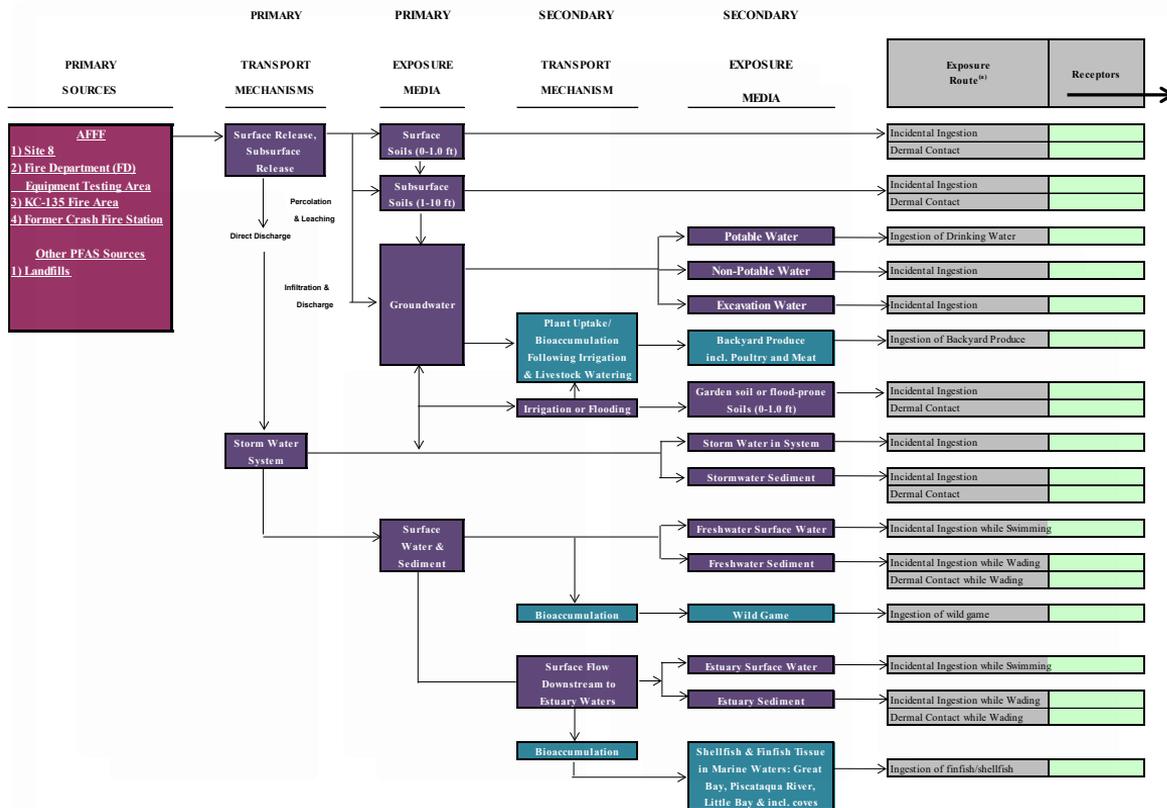
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- The RI scoping helped us with local knowledge
- CSM is highly complex
- The RI data collection will be conducted in phases
  - The initial phase:
    - Nature and extent of contamination in soil, groundwater, surface water, storm water, springs, hydric soils, etc.
    - Data will guide decisions about further sampling
  - Additional phases may include biological/ecological sampling, e.g. home produce, aquatic species



# Remedial Investigation – CSM Matrix

- CSM matrix – purple sources and pathways pertain to Phase 1

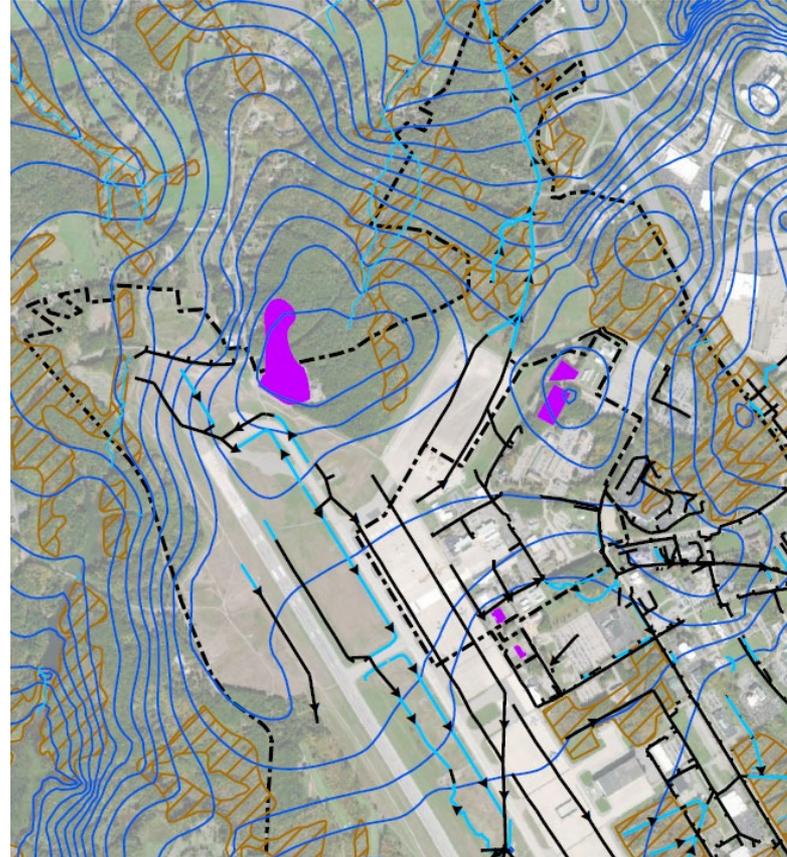




# Remedial Investigation - Nature & Extent

Overview of planned investigation:

- Investigate existing and potential source areas
- Identify and sample migration pathways including springs, surface water, groundwater and storm sewers
- Evaluate potential receptors





# Remedial Investigation Next Steps

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- RI Work Plan Draft to Agencies in March
- First sampling phase focuses on soil, soil-groundwater transport, groundwater, sediment, surface water, and storm water
- Additional work plans in preparation
  - Human Health Risk Assessment Methodology
  - Ecological Risk Assessment Methodology
- Follow-on sampling phase(s):
  - Biota Sampling – will be driven by data collected and analyzed in Phase 1
  - Data gaps from Phase 1



# Remedial Investigation Next Steps

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## ➤ Town Hall

- Scheduled after regulator approval of RI Work Plan
- Content:
  - Brief Pease History Overview (PFAS/site introduction) and CERCLA Process Overview
  - What's been done? (Preliminary Assessment, Site Inspection, Scoping Sampling)
  - What's next?
    - Remedial Investigation Proposed Sampling Approach - Overview of program/media/rounds



# Public comment reminder

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- To indicate that you'd like to make public comment, please chat the host or email Linda Geissinger by 5:20pm

[linda.geissinger@us.af.mil](mailto:linda.geissinger@us.af.mil)



# Open Discussion Time

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- **Opportunity for RAB members to discuss additional topics and share RAB-related updates**

# Pease Tradeport Water Treatment System Update



Pease Restoration Advisory Board

March 10, 2021

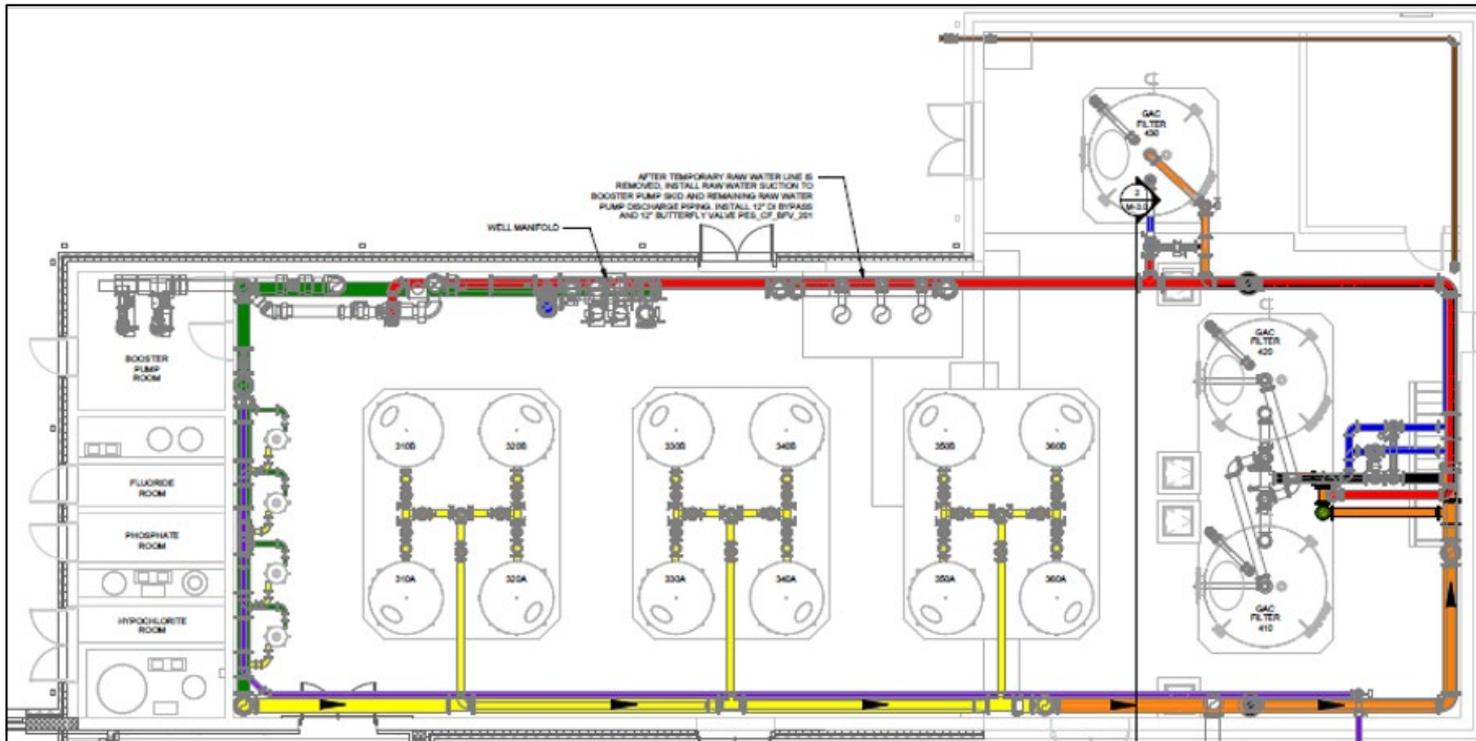
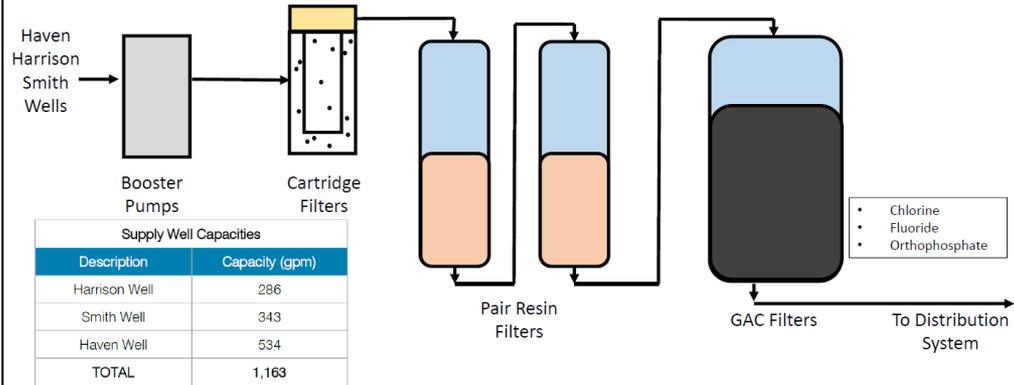
# Grafton Road Well Treatment System:

## Treatment Components

### Dual Filtration System:

- Resin Filters
- Activated Carbon Filters

## Final Design Process Schematic



# Pease Water Treatment Facility – February 25, 2021



# Pease Water Treatment Facility - Construction In Progress:

**Activated Carbon Filters**  
- Currently in Service



**Resin Filters**  
- March/April Startup



# Loading Resins into Resin Filters

March 4, 2021



# Well Manifold Installation

Feb 21, 2021 – Old Manifold



Feb 22, 2021 – New Manifold



# Startup Update

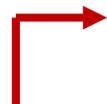
- Will start resin system with Harrison and Smith Wells prior to assure performance of system prior to any use of Haven well water
- Pump testing Haven Well to obtain full suite of water quality data from the well prior to sending that water to Grafton Road Facility – late March/April, 2021
- Additional information and data posted on City of Portsmouth website:
  - <https://www.cityofportsmouth.com/publicworks/water/pease-tradeport-water-system>

# Construction Schedule:

Activity	Duration	Start	Finish	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	
Bidding	61	11/15/2018	1/15/2019	█																															
Contract Award	56	1/15/2019	3/12/2019		█																														
Notice to Proceed	0	3/12/2019	3/12/2019					★																											
Submittals	181	3/13/2019	9/10/2019				█																												
Equipment Procurement	224	6/4/2019	1/14/2020																																
Phase 1 - Building Addition & GAC Filters	379	6/10/2019	6/23/2020																																
GAC Filters On-Line with Smith & Harrison	27	5/27/2020	6/23/2020																																
Phase 2 - Resin Skid, Cartridge Filters, Booster Pumps	279	5/29/2020	3/4/2021																																
Full System Start-Up with Smith & Harrison	48	1/15/2021	3/4/2021																																
Phase 3 - Admin Area, Site Work, Haven Well Online	200	10/15/2020	5/3/2021																																
Full System Start-Up with Haven	42	3/4/2021	4/15/2021																																
Final Completion	4	4/29/2021	5/3/2021																																

## Milestones:

- Spring 2019 – Begin Construction
- June 2020 – New GAC Filters (switchover of Harrison/Smith Wells)
- Spring 2021 – Startup with Resin/GAC filters (Harrison/Smith Wells)
- Summer 2021 – Haven Well Startup



Next Significant Milestone – Resin Filter Startup – Early 2021



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*Battle Ready... Built Right!*