

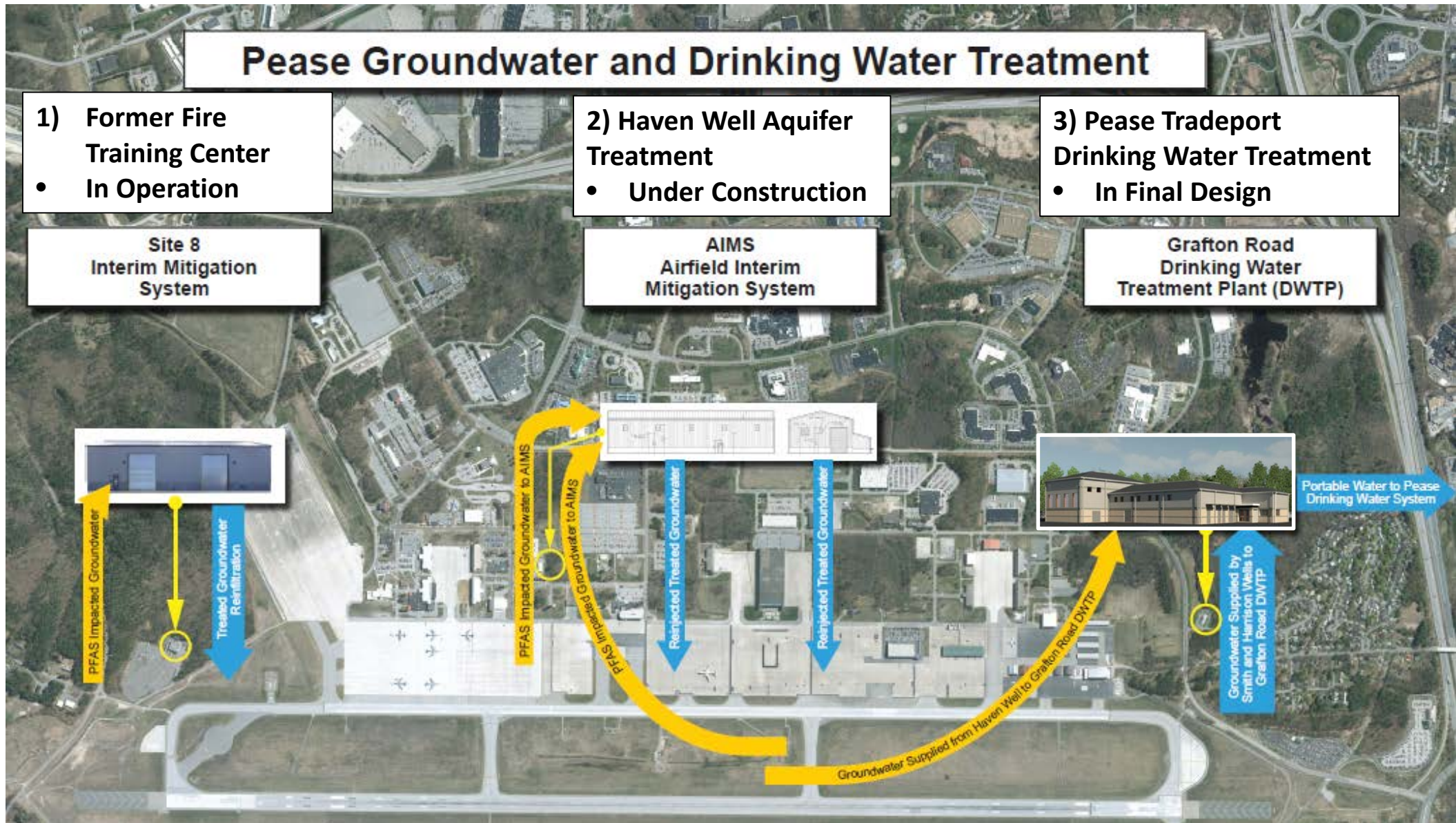
Pease Tradeport Water System Update

October 1, 2018

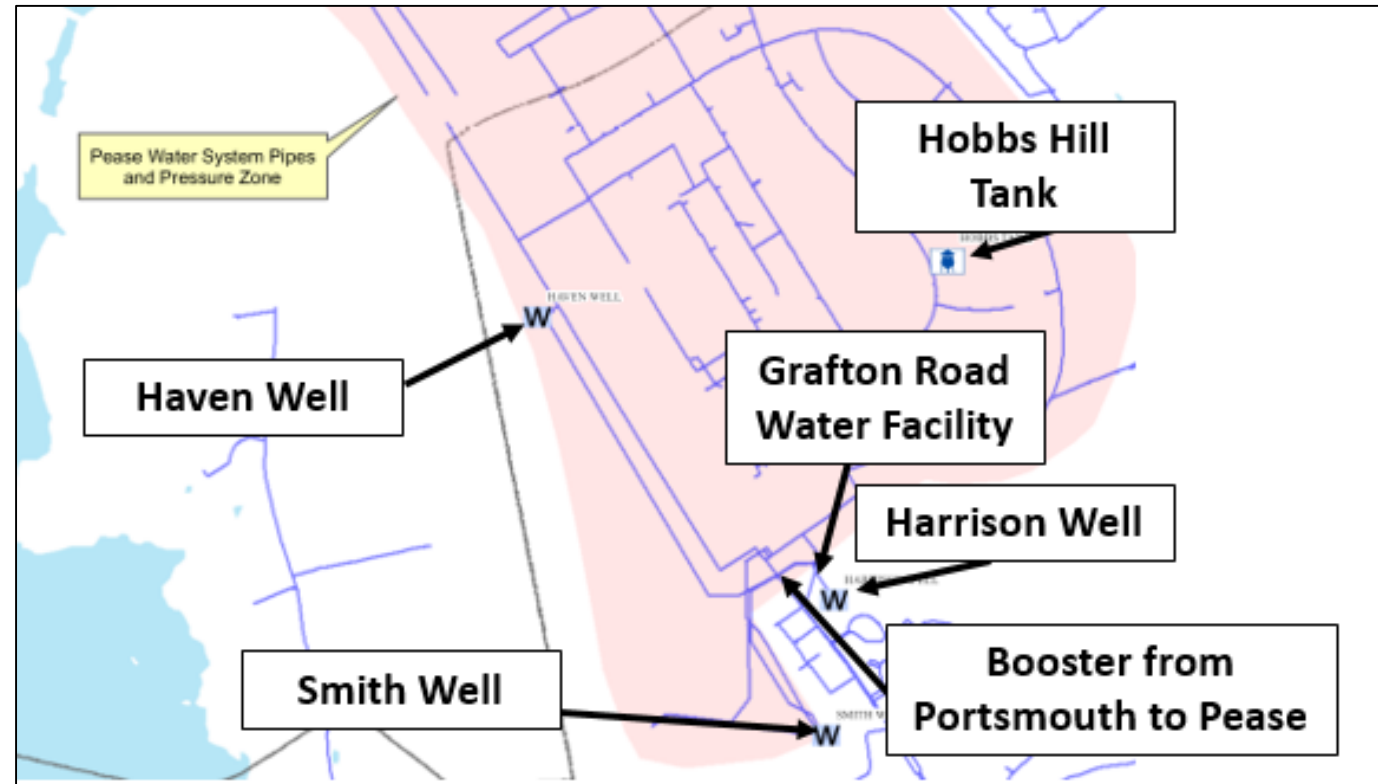
Portsmouth City Council



Pease PFOA/PFOS Treatment Systems:



Current Pease Tradeport Grafton Road Water Facility



Grafton Road Water Facility Process Schematic Prior to PFAS Contamination



Haven
Harrison
Smith
Wells



- Chlorine
- Fluoride
- Orthophosphate



To
Distribution
System

Grafton Road Water Facility Process Schematic

May 2014 to September 2016



~~Haven~~
Harrison
Smith
Wells

Portsmouth
Water
System
Water

- Chlorine
- Fluoride
- Orthophosphate

To
Distribution
System



Pease Well PFOA/PFOS Response – Demonstration Filters in Service Since September 2016



City of
Portsmouth
Department of Public Works

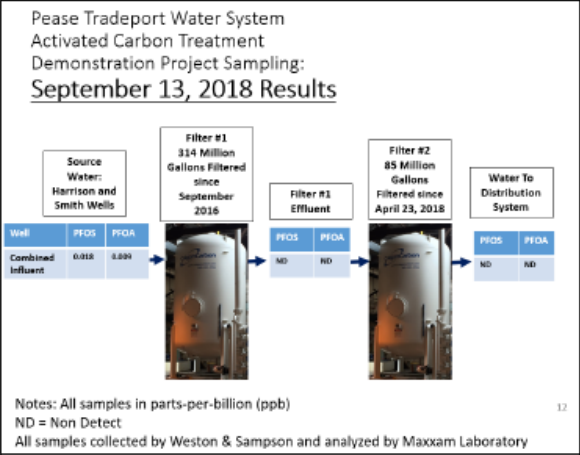


September 28, 2018

PEASE TRADEPORT WATER SUPPLY UPDATE

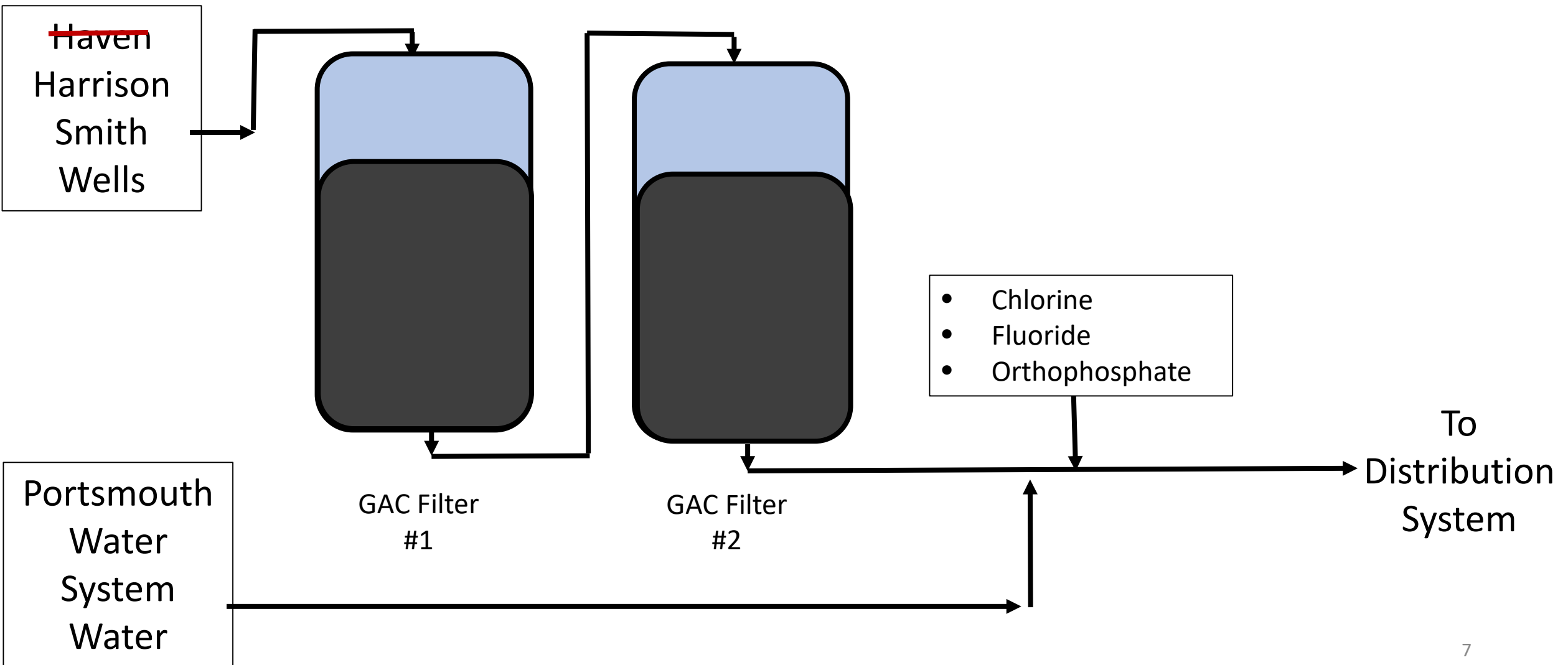
Demonstration Filter Performance

The City's engineering consultant continues to sample the performance of the activated carbon filters based on the amount of water treated. The graphic below shows the most recent source water sampling and treated filter water quality results for the PFOS and PFOA.



Grafton Road Water Facility Process Schematic

Granular Activated Carbon Demonstration Filters



Activated Carbon Filter Media Changeout Filter #2 - March 2018

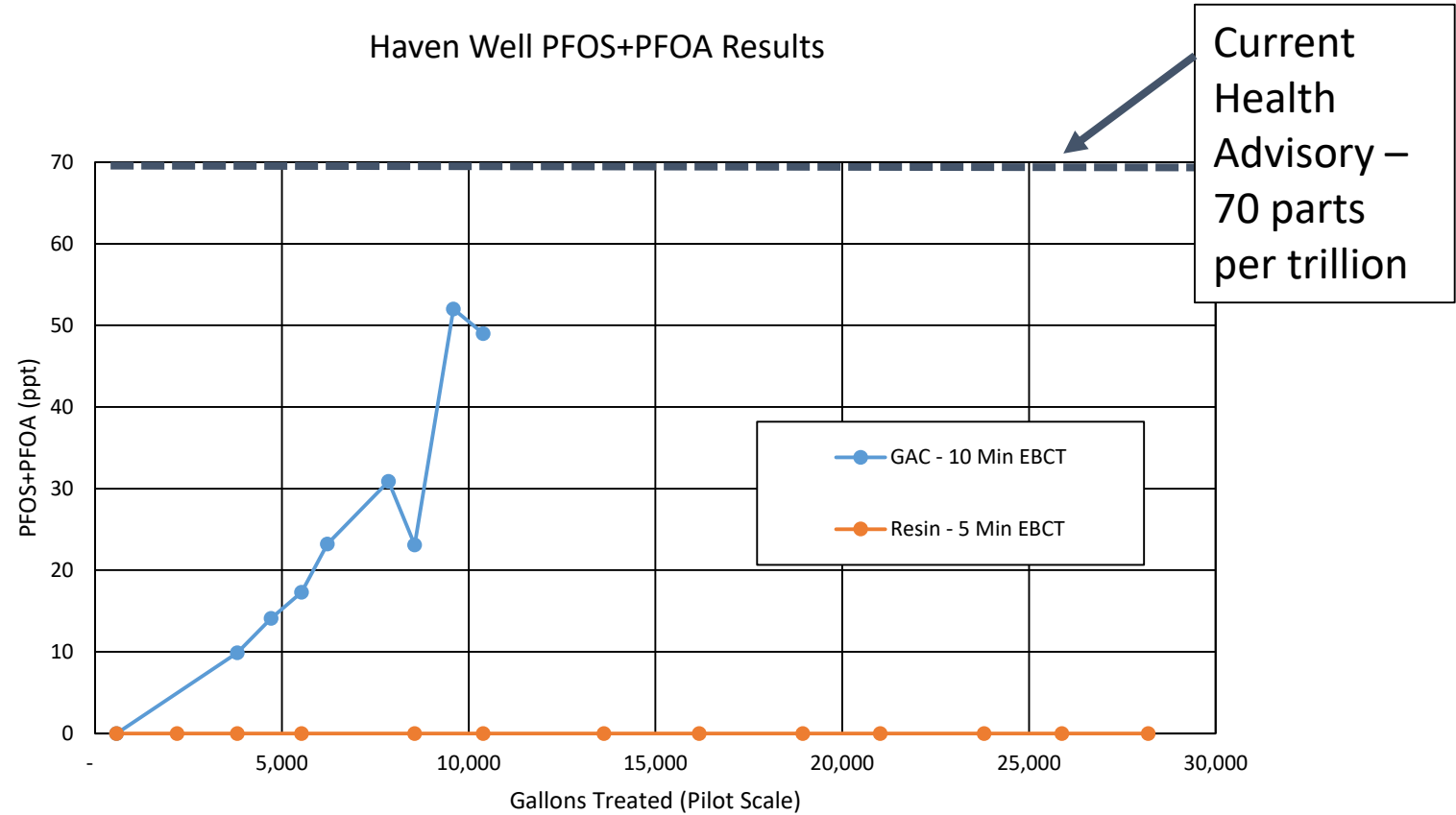


Another Media Changeout will take place in late October/early November 2018. This will include both Filters

Activated Carbon and Resin Piloting – Haven Well

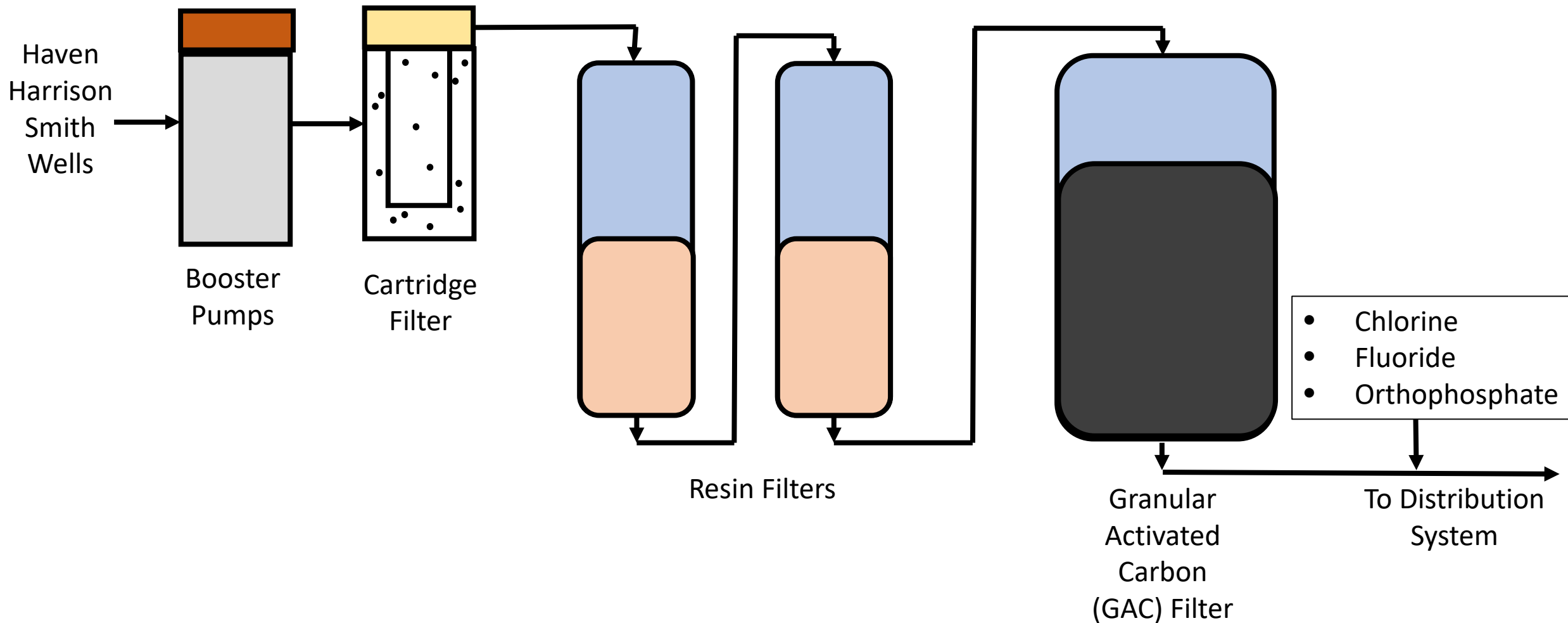


Haven Well PFOS+PFOA Results



Grafton Road Water Facility Process Schematic

Current Proposed Treatment System



Current Rendering – Grafton Road Water Treatment Facility



Anticipated 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

Future Water Quality Monitoring of Haven Well and Pease Tradeport Aquifer

- Ongoing discussions with Air Force and regulators about developing a comprehensive water quality monitoring programs for:
 - Required Compliance Monitoring
 - Filter Performance Monitoring
 - Aquifer Monitoring

Pease Tradeport PFOA/PFOS – City Projects

Air Force Agreements and Reimbursement

- Replacement Well Study - \$179,000 (Sep 2014)
- Preliminary Design Study for Treatment System - \$60,000 (Nov 2015)
- Pilot Testing and Carbon Filter Demonstration Project - \$948,000 (Apr 2016)
- Treatment Facility Comparative Analysis - \$46,623 (Feb 2017)
- Final Treatment Facility Design - \$1,329,000 (Aug 2017)
- Resin Filter Treatment Design - \$138,000 (Sep 2018)
- Construction Starting in FY19 - \$14,300,000 (Sep 2018)
- Long-Term Operations and Maintenance Agreement - TBD

Thank You.

