

Per- and Polyfluoroalkyl Substances in New Hampshire & Funding



Team Presentation



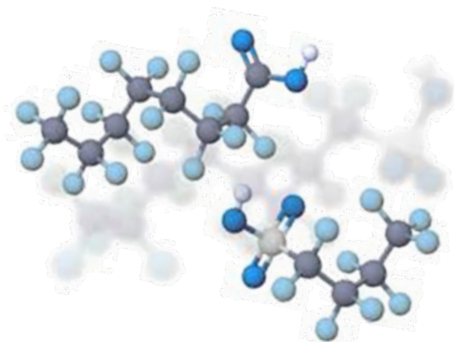
Amy Rousseau
PFAS Response Administrator
MtBE Remediation Bureau



Jeff Marts, P.G.
Hazardous Waste Remediation
Bureau Administrator



Per- and Polyfluoroalkyl Substances (PFAS)



- Family of man - made chemicals
- Resistant to grease, oil, water and heat
- AFFF, fabrics, carpets, cosmetics, food packaging.....
- Persistent in the environment

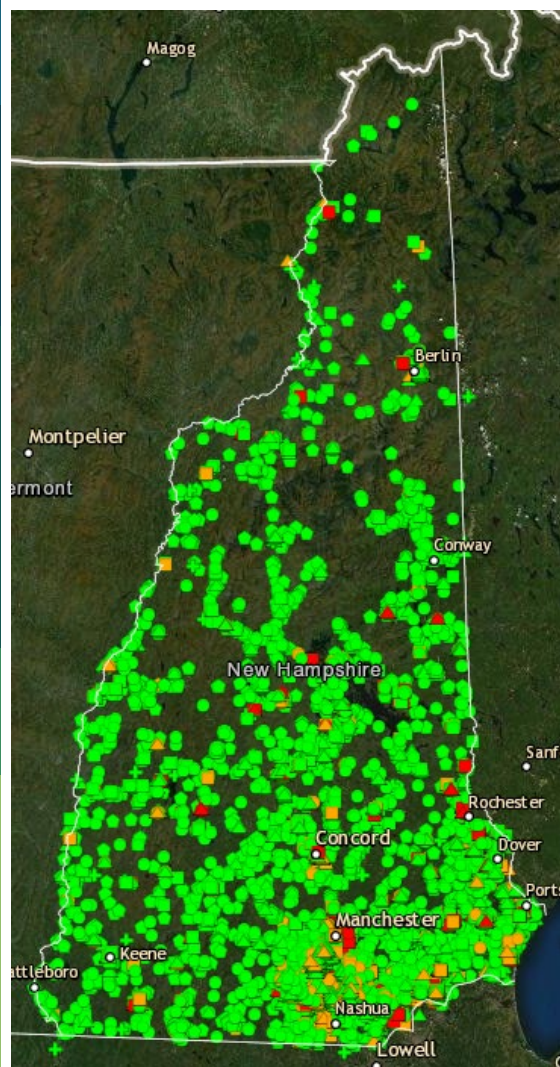


Welcome

Technical Resources for Addressing
Environmental Releases of Per- and
Polyfluoroalkyl Substances (PFAS)



PFAS in New Hampshire



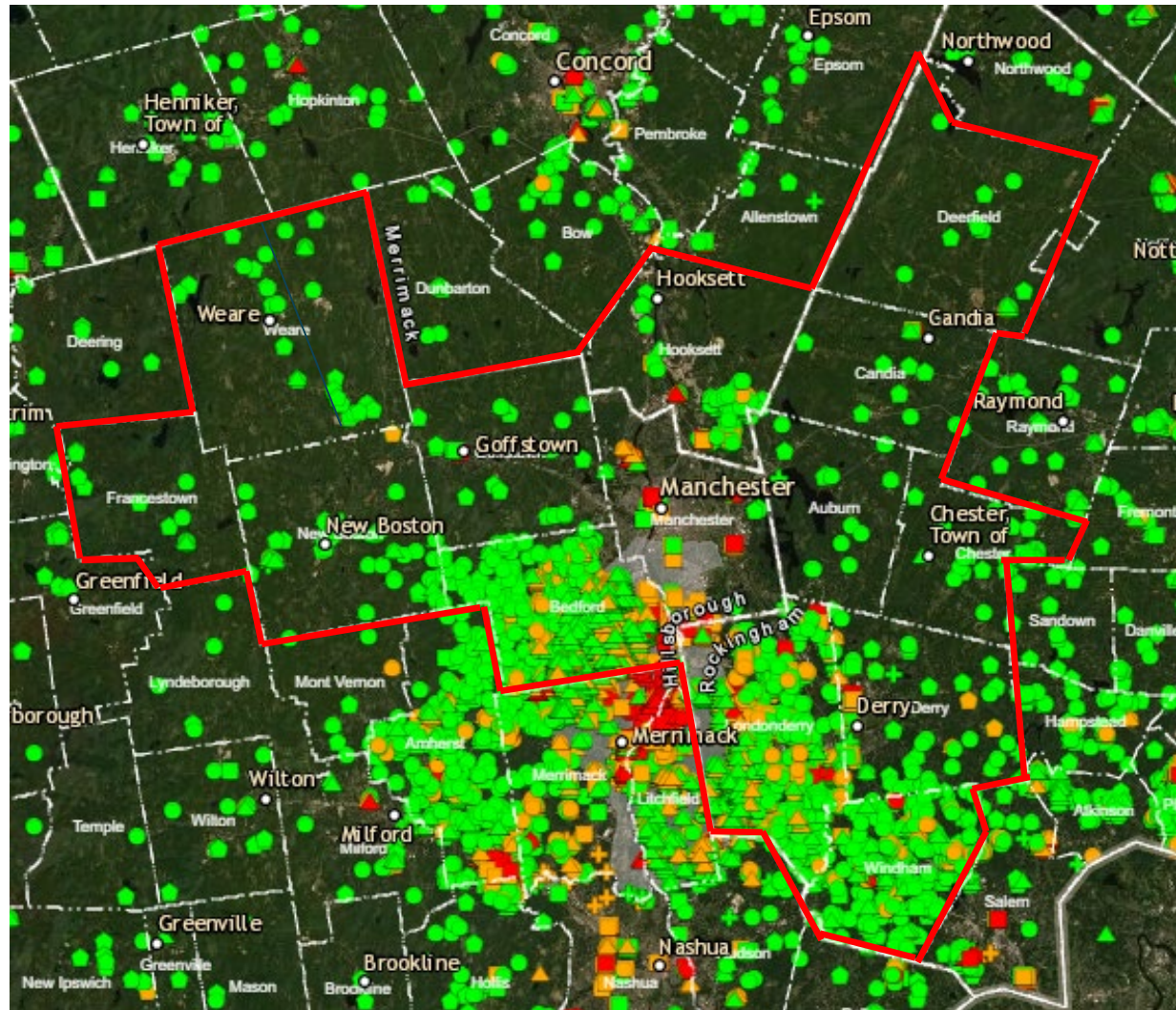
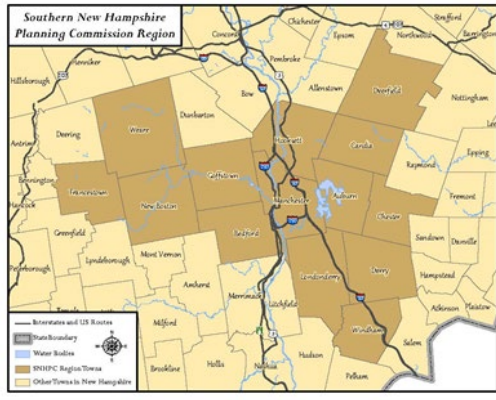
Perfluorochemical	Maximum Contaminant Level (MCL) / Ambient Groundwater Quality Standards (AGQS) (parts per trillion – ppt)
Perfluorooctanoic Acid (PFOA)	12
Perfluorooctanesulfonic Acid (PFOS)	15
Perfluorohexanesulfonic Acid (PFHxS)	18
Perfluorononanoic Acid (PFNA)	11

* Passed into law July 28, 2020

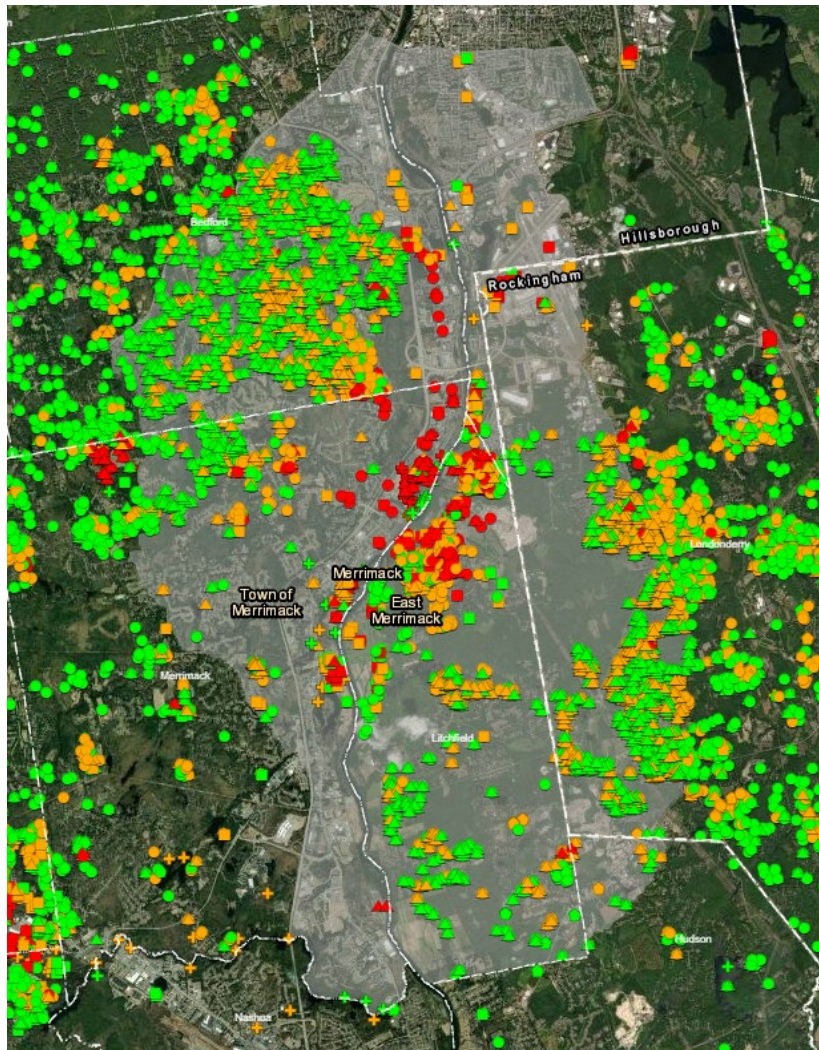
- ▲ PFOA+PFOS >70 ppt
- ▲ PFAS > AGQS / MCL
- ▲ PFAS ≤ AGQS / MCL

PFAS Sampling Map:
[NHDES PFAS SAMPLING \(arcgis.com\)](https://www.nhdes.gov/pfas-sampling-map)

Southern New Hampshire Planning Commission Region



Private Well-Testing Request Form –
NH PFAS Investigation (state.nh.us)

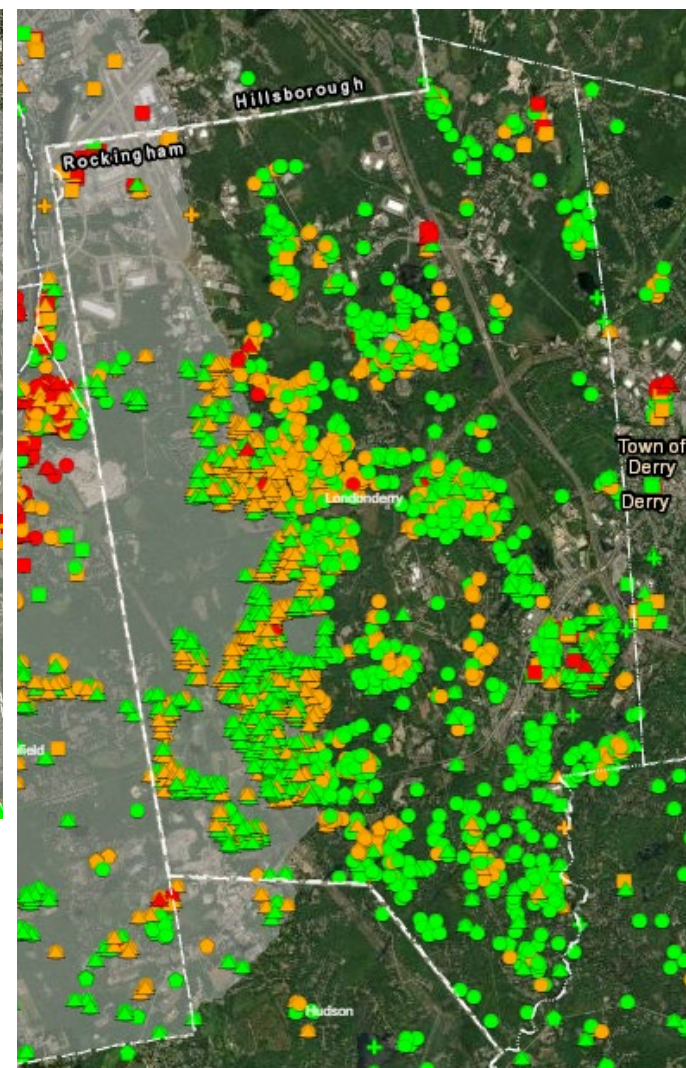
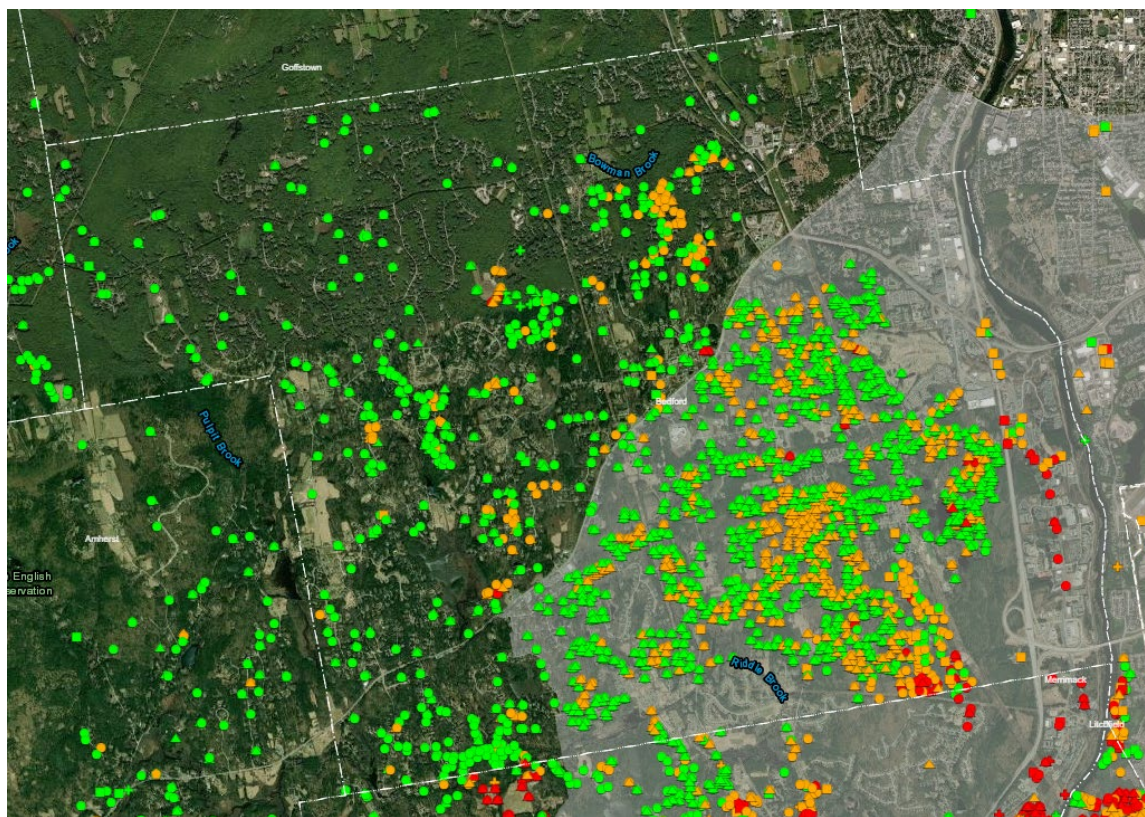


Saint Gobain 2018 Consent Decree Area

- Includes Bedford, Manchester
and Londonderry

- ▲ PFOA+PFOS > 70 ppt
- ▲ PFAS > AGQS / MCL
- ▲ PFAS ≤ AGQS / MCL

NHDES and Saint-Gobain Consent Decree
– NH PFAS Investigation (state.nh.us)



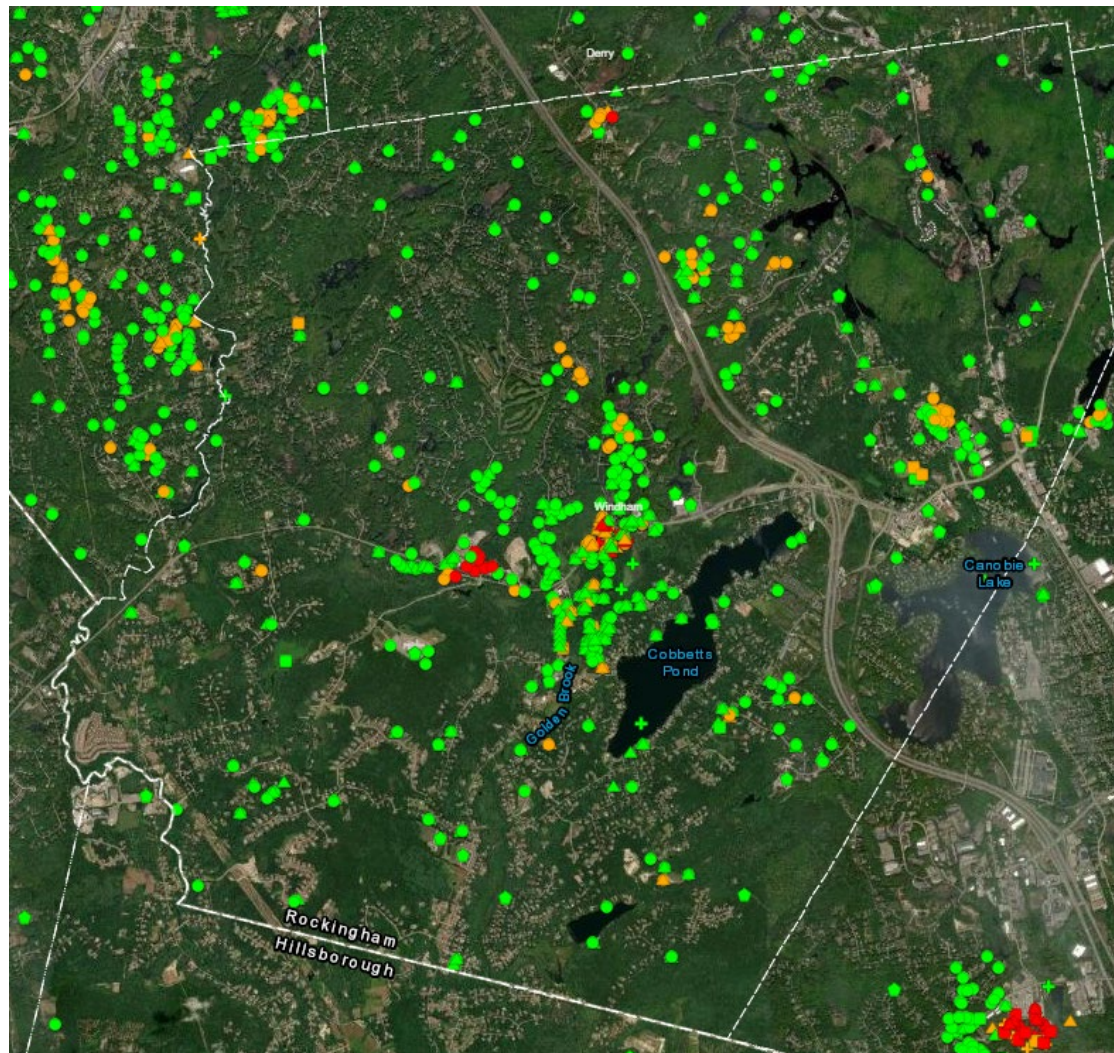
Bedford and Londonderry

2022 Saint Gobain Agreements:

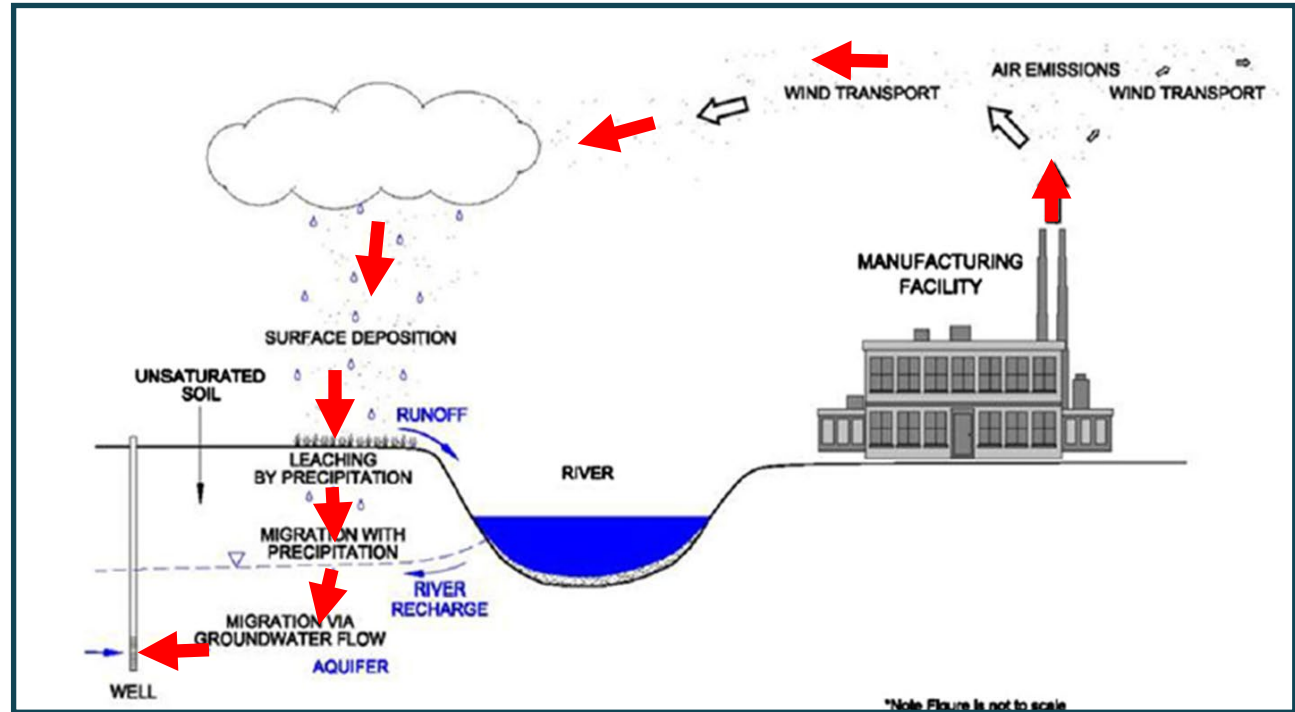
- [NHDES and Saint-Gobain Performance Plastics Alternate Water Agreement, April 2022](#)
- [June 2022 List of Alternate Water Remedies](#)

Town of Windham

- ▲ PFOA+PFOS >70 ppt
- ▲ PFAS > AGQS / MCL
- ▲ PFAS ≤ AGQS / MCL



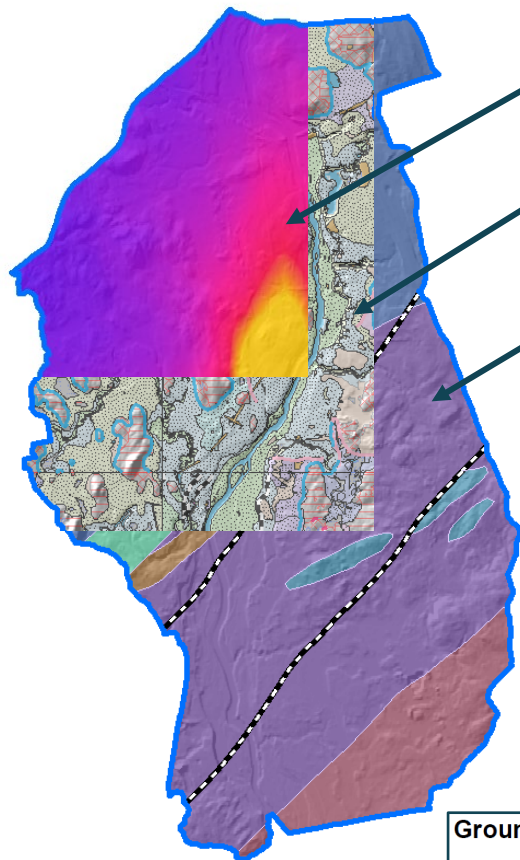
Air Emissions Impacting Soil and Groundwater



After Davis et al., 2007,
Chemosphere

NH STATE STATUTE RSA 125-C:10-e Requirements
for Air Emissions of Perfluorinated Compounds
Impacting Soil and Water

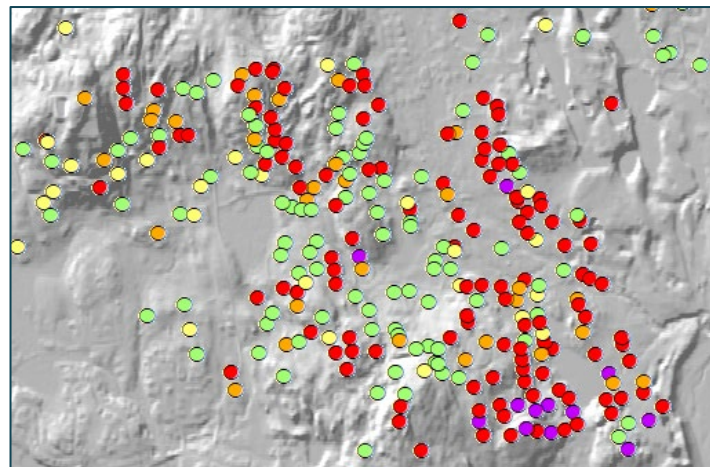
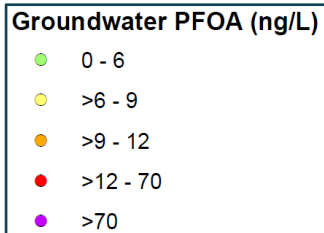




*Air Deposition +
Surficial Geology +
Bedrock Geology +
Time - related Factors =*

*(e.g., changes in chemicals released, precursor transformations,
seasonal variation, etc.)*

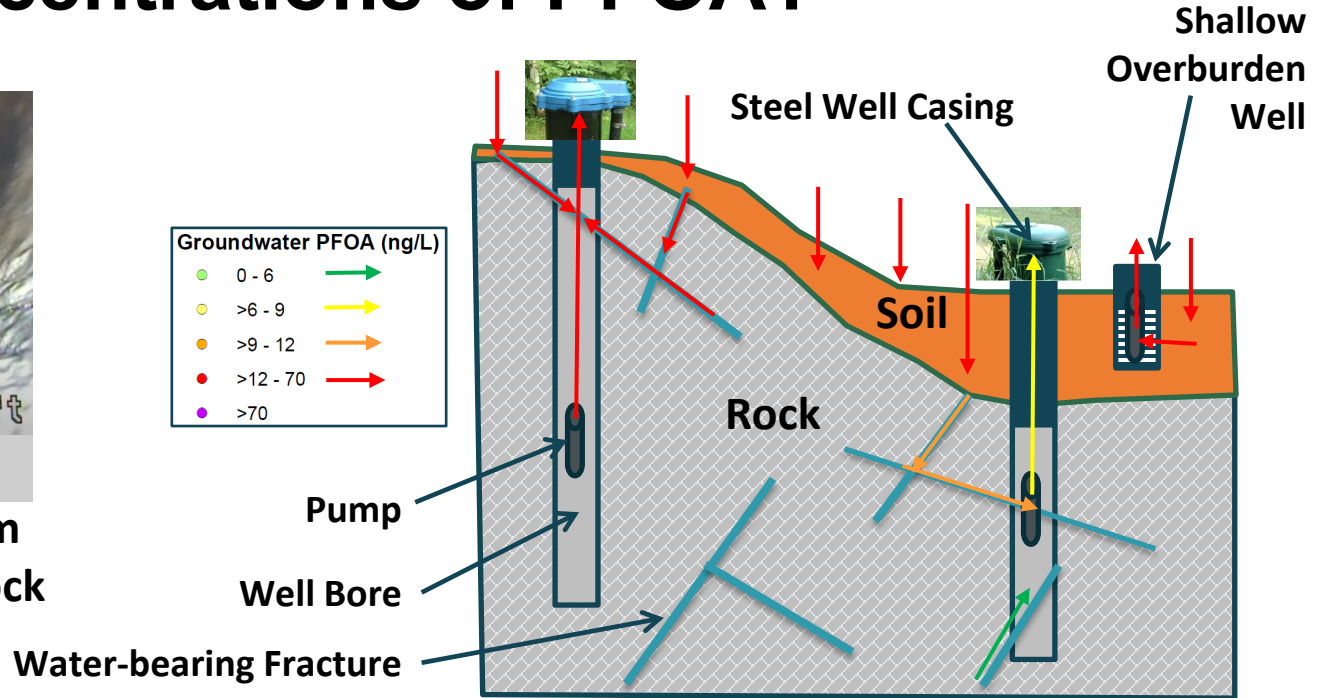
*Complex Spatial Distribution of PFAS in
Groundwater*



Why do neighboring wells have different concentrations of PFOA?



Water entering a well from fractures (cracks) in the rock



Cross Section (Profile) View

This diagram illustrates a hypothetical cross section showing potential groundwater flow pathways to water supply wells that are depicted by color-coded arrows that correspond to PFOA concentration. The downward red arrows into the soil layer represent aerial deposition of PFOA that infiltrates into the soil above bedrock.

April 2022 Settlement Agreement to Remedy Contaminated Wells

Key Provisions

- PROVIDES A SPECIFIC REMEDY FOR APPROXIMATELY 33% OF WELLS THAT EXCEED AGQS
 - 74 PROPERTIES RECEIVE CONNECTION TO EXISTING WATER LINES
 - 98 PROPERTIES RECEIVE CONNECTIONS TO NEW WATER LINES
 - 181 PROPERTIES RECEIVE POINT-OF-ENTRY TREATMENT (POET) SYSTEM
- SGPP PROPOSED A REMEDY FOR THE REMAINING 67% OF WELLS THAT EXCEED AGQS ON APRIL 29, 2022 – THIS INCLUDES A COMBINATION OF POET SYSTEMS AND WATER LINE CONNECTIONS.

Per- & Polyfluorinated Alkyl Substances (PFAS) Funding



PFAS Specific Funding

1. PFAS Removal Rebate Program for Private Wells

PFAS Removal Rebate Program for Private Wells – NH PFAS Investigation
(state.nh.us)

P

2. PFAS Remediation Grant and Loan Fund (PFAS RLF)

PFAS Remediation Loan Fund – NH PFAS Investigation
(state.nh.us)

F

PFAS Design Services Reimbursement/PFAS Consolidation Study Program – NH PFAS Investigation
(state.nh.us)

A

PFAS Design Services Reimbursement/PFAS Consolidation Study Program – NH PFAS Investigation
(state.nh.us)

S

3. PFAS Consolidation Study Program

4. PFAS Treatment Design Services Reimbursement

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PFAS Removal Rebate Program for Private Wells

Overview and Eligibility



PFAS Removal Rebate for Private Wells



- Up to \$5,000 per household for treatment
- Up to \$10,000 per household for a service connection
- Exceedance of a PFAS AGQS/MCL
- Working on accepting applications by the end of August
- Retroactive back to September 30, 2019

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PFAS Remediation Grant & Loan Fund

Overview and Eligibility Updates

\$75,000,000

Another \$25,000,000 pending!



PFAS Remediation Grant & Loan Fund Overview

- **\$50M for Low - Interest Loan**
 - Established in Statue (RSA 485 - H)
 - Potential for Principal Forgiveness
 - Contingent Reimbursement
- **\$25M in Grant Funds**
 - ARPA funding
 - \$1.5M or 30% of total project costs, whichever is greater
- **Covers 100% Cost for PFAS Remediation**



PFAS Remediation Grant & Loan Fund – Eligible Entities

- Community Water Systems
 - Existing system
 - Expand system to assist private well users
- NNT/NC owned by a non - profit (i.e., schools)
- Municipalities
 - Municipal use
 - To assist private well users



PFAS Remediation Grant & Loan Fund – Additional Eligibility Requirements

- Exceedance of a PFAS AGQS/MCL
- Demonstrate remedy is most cost effective
- Liable third - party consideration
- Costs incurred after:
 - Loan - September 30, 2019
 - Grant – March 3, 2021

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PFAS-Focused Consolidation Study Assistance Program

Reimbursement program



PFAS-Focused Consolidation Study Assistance Program

- 100% reimbursement with prior approval
- Eligibility Requirements
 - Community Water Systems
 - NT/NC owned by a non - profit (i.e., schools)
 - Municipalities
 - Source(s) exceed a PFAS AGQS/MCL
- Open Enrollment - 1st Come, 1st Served

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PFAS Treatment Design Services

Reimbursement program



PFAS Treatment Design Services

- Up to 26% of total cost of the project
- Eligibility Requirements
 - All schools and childcare centers
 - Transient and non - transient,
non - community water systems
 - Source(s) exceed a PFAS AGQS/MCL
- Open Enrollment - 1st Come, 1st Served

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Other Available Funding

Non - PFAS Specific



Non-PFAS Specific Funding

- **Federal Emerging Contaminant Funding**
 - Bipartisan Infrastructure Bill (BIL) - DWSRF Emerging Contaminants Funding
 - Water Infrastructure Improvements for the Nation (WIIN) Small and Underserved Communities Emerging Contaminants Grant Program
- Drinking Water State Revolving Loan Fund
- Drinking Water & Groundwater Trust Fund



Call me!!

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THANK YOU!

Any questions?

https://www4.des.state.nh.us/nh_investigation/ - pfas -