



Updates on Site work throughout Southern Bennington and Shaftsbury

Contaminated Sites

Project Managers:

Richard Spiese and Malayika Vincent

Outline

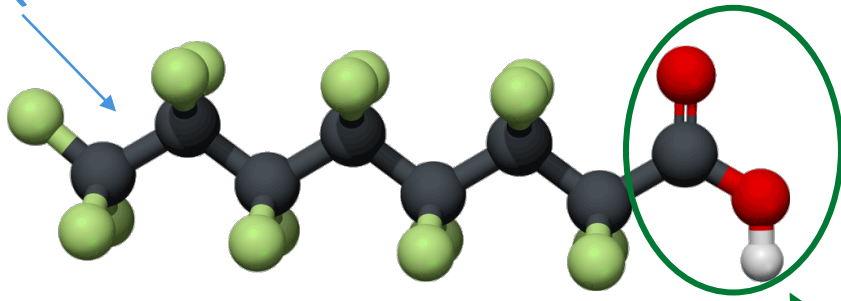
- **PFAS: A General Overview**
- **Extent of Previous work**
- **Recent Work Conducted**
- **Results**
- **Next Steps for VT DEC**
- **Update from MSK Engineers**
- **Update from Vermont Department of Health**
- **Questions**

PFAS: A General Overview



PFAS: A general overview

Tail (Alkyl chain)



● = Carbon
● = Fluorine

Head (ex. $-\text{CO}_2^-$)
Can also be Sulfonate ($-\text{SO}_3^-$)

- **What are PFAS?**
 - PFAS = Per- and Poly-fluoroalkyl substances
 - Man-made compounds used in a wide range of industries since the 1950s
 - Persistent in the environment
 - Harmful to human health
- **Examples of what are PFAS in:**
 - Textile Coating (Chemfab) as Perfluorooctanoic Acid (PFOA)
 - Some fire-fighting foams (AFFF) as Perfluorooctane sulfonic acid (PFOS)
 - Teflon Production
 - Coatings for electronics
 - Scotchgard/GORE-TEX
 - Cosmetics

The Vermont legislature has banned many of these applications

Image of PFAS molecule: <https://swana.org/initiatives/pfas>

Modified from: <https://pfas-1.itrcweb.org/wp-content/uploads/2023/12/Full-PFAS-Guidance-12.11.2023.pdf>

PFAS: A general overview

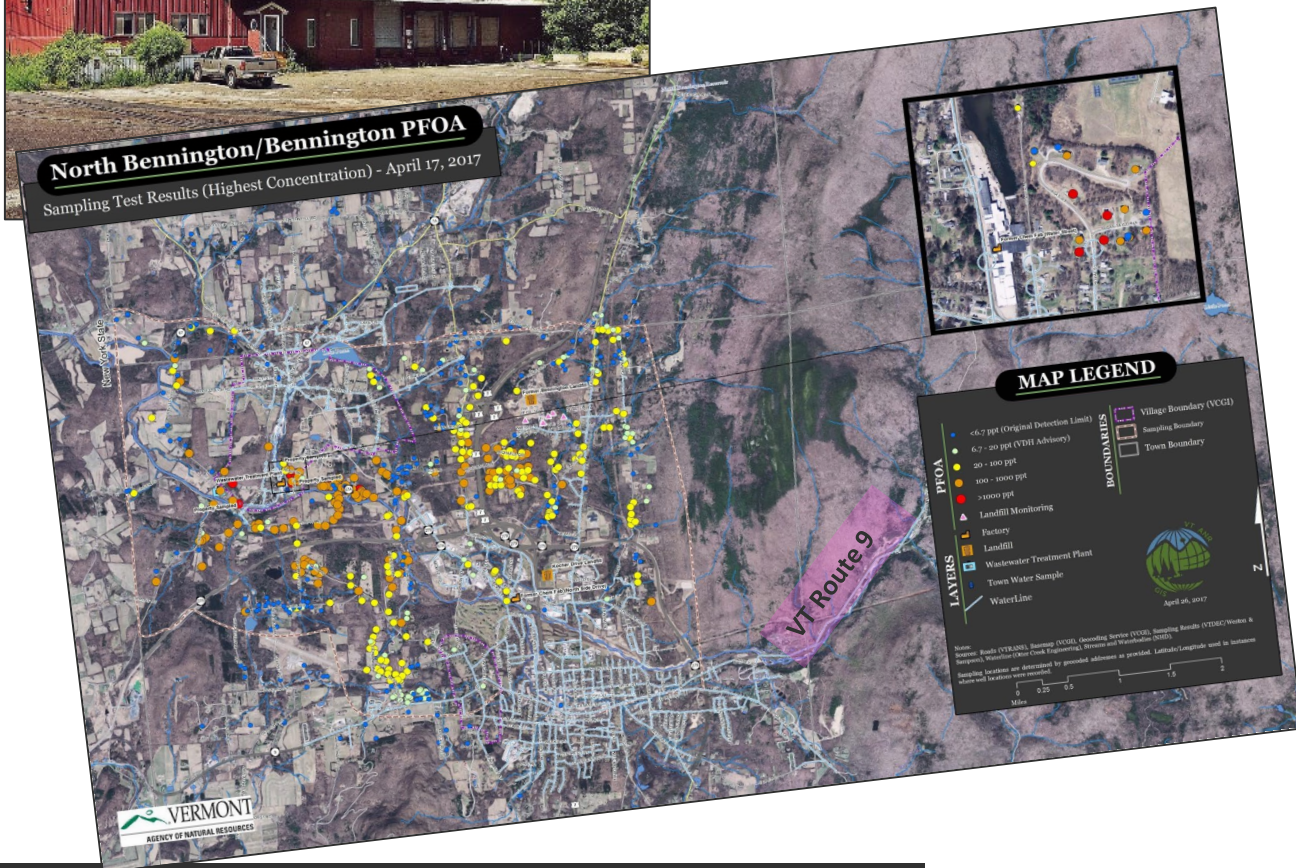
- **PFAS on the move, depending on site-specific conditions**
 - Atmospheric Deposition (dry or wet)
 - Flushed through soil during rain events or snow melt
 - Move through cracks in the subsurface (fractures) that are preferential pathways
 - Surface water
 - Groundwater

- **Current PFAS standard in Vermont (effective 1/31/26):**
 - 4 ppt PFOA (perfluorooctanoic acid)
 - 4 ppt PFOS (perfluorooctane sulfonic acid)
 - 10 ppt PFHxS (perfluorohexane sulfonic acid)
 - 10 ppt PFNA (perfluoronanoic acid)
 - 10 ppt HFPO-DA
 - Hazard Index calculated for a mixture of 2 or compounds

Extent of Previous Work

North of Route 9

North of Route 9 to just inside Shaftsbury (2016 – 2019)



- **Former Chemfab facilities located on Northside Drive and Water Street (North of Route 9)**
- **PFOA emitted through stacks during the drying and curing process**
 - Atmospheric deposition of PFAS in surrounding area
- **Well sampling data**
- **Settlement**
 - Short-term mitigation measures:
 - Impacted homes provided with Bottled water
 - Whole-home water treatment systems
 - Long-term measures:
 - Monitoring
 - Connection to Town Water
 - Well Replacements
 - Whole-home water treatment systems
- **Continued monitoring**

Summer 2023 – to
present

Recent Work Conducted & Results



https://www.mlive.com/news/2018/05/politico_pfas_atcdr_epa_levels.html

Expanded Sampling Area: Southern Vermont



- **State-wide sampling effort approx. 500 wells**
 - 3 Homes in Southern Bennington and Shaftsbury identified above standard at the time

- **Site Investigations occurred around homes in Southern Bennington and Shaftsbury**

- **Additional sampling occurred to capture more data**

- **Reports were submitted**

- **Additional Sampling occurred further extending the study area**
 - Total locations sampled = 131 (includes resampling and new locations)
- **Consultant submitted report in Dec 2025**

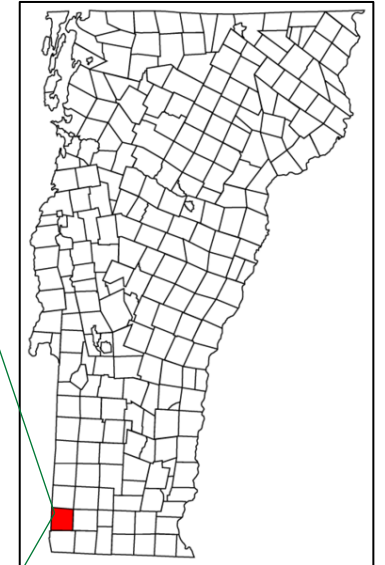
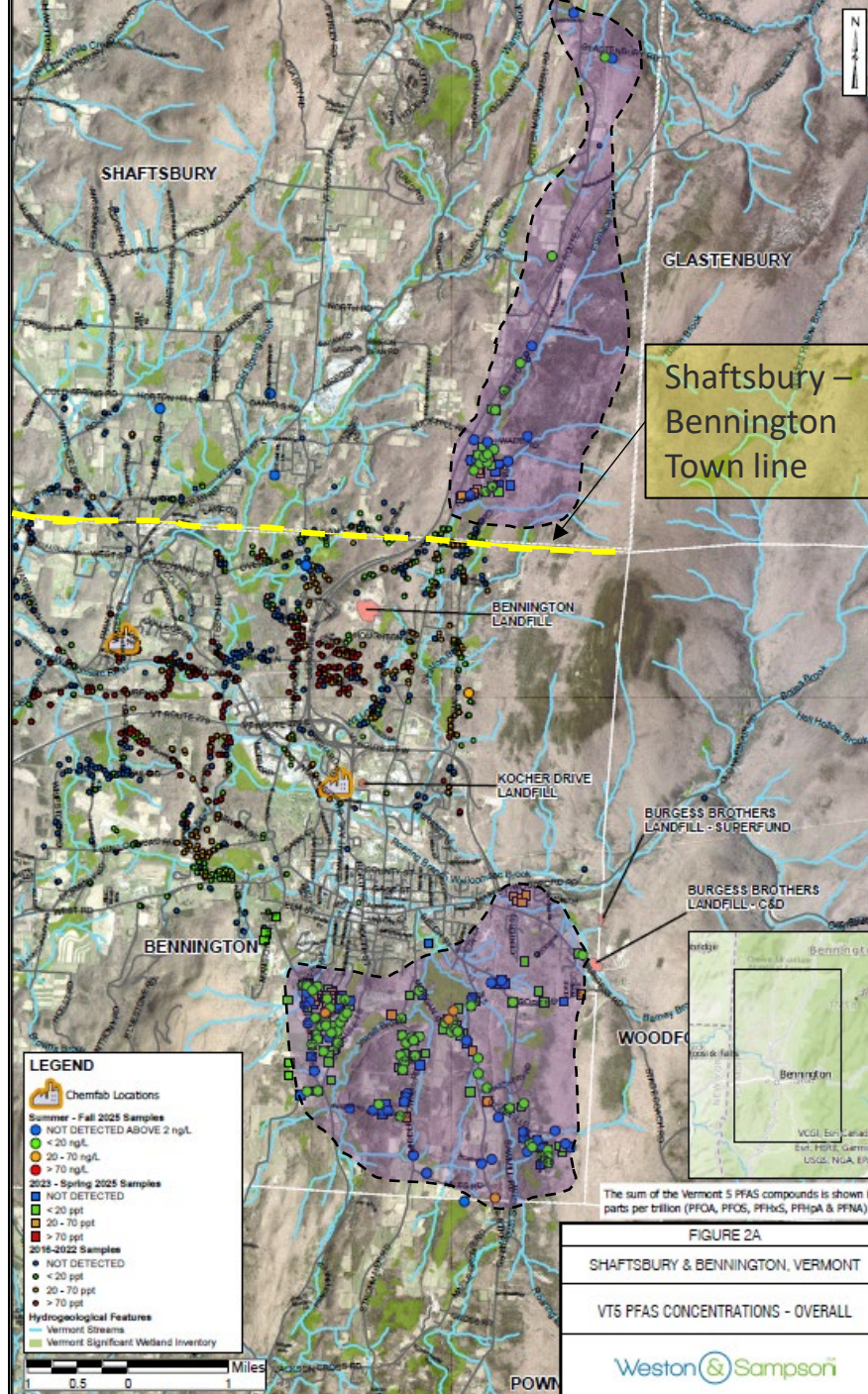
- **Bottled water deliveries to homes with detections between 4 -20 ppt**

- **Additional Sampling in-progress**
 - Homes sampled as of 6/24/26: approx. 90 homes
 - Homes on the list to be sampled: just over 300 homes

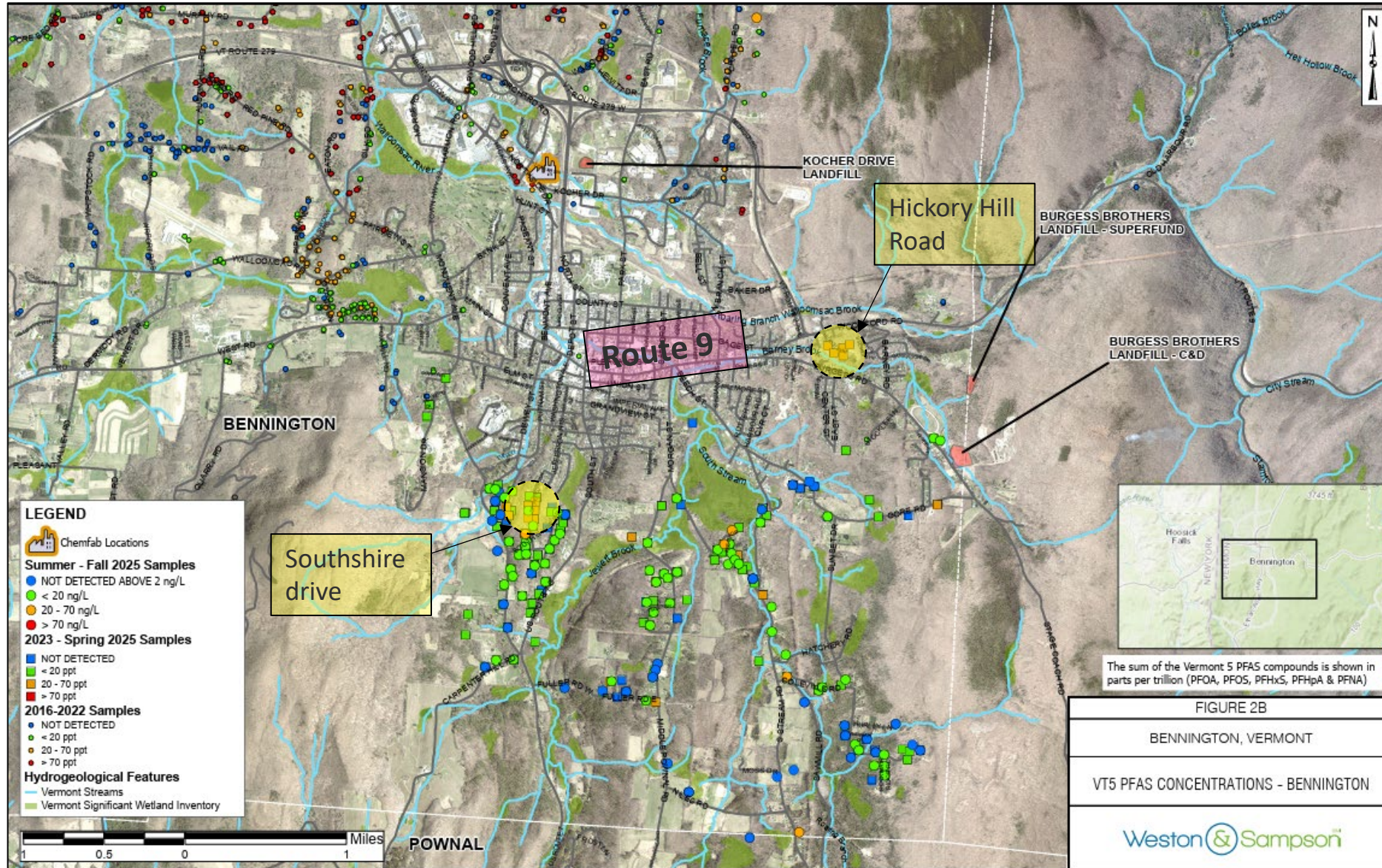
Map of 2025 sampling – full extent

- = Detections *above* 70 ppt
- = Detections between 20 - 70 ppt
- = Detections *below* 20 ppt
- = No Detections

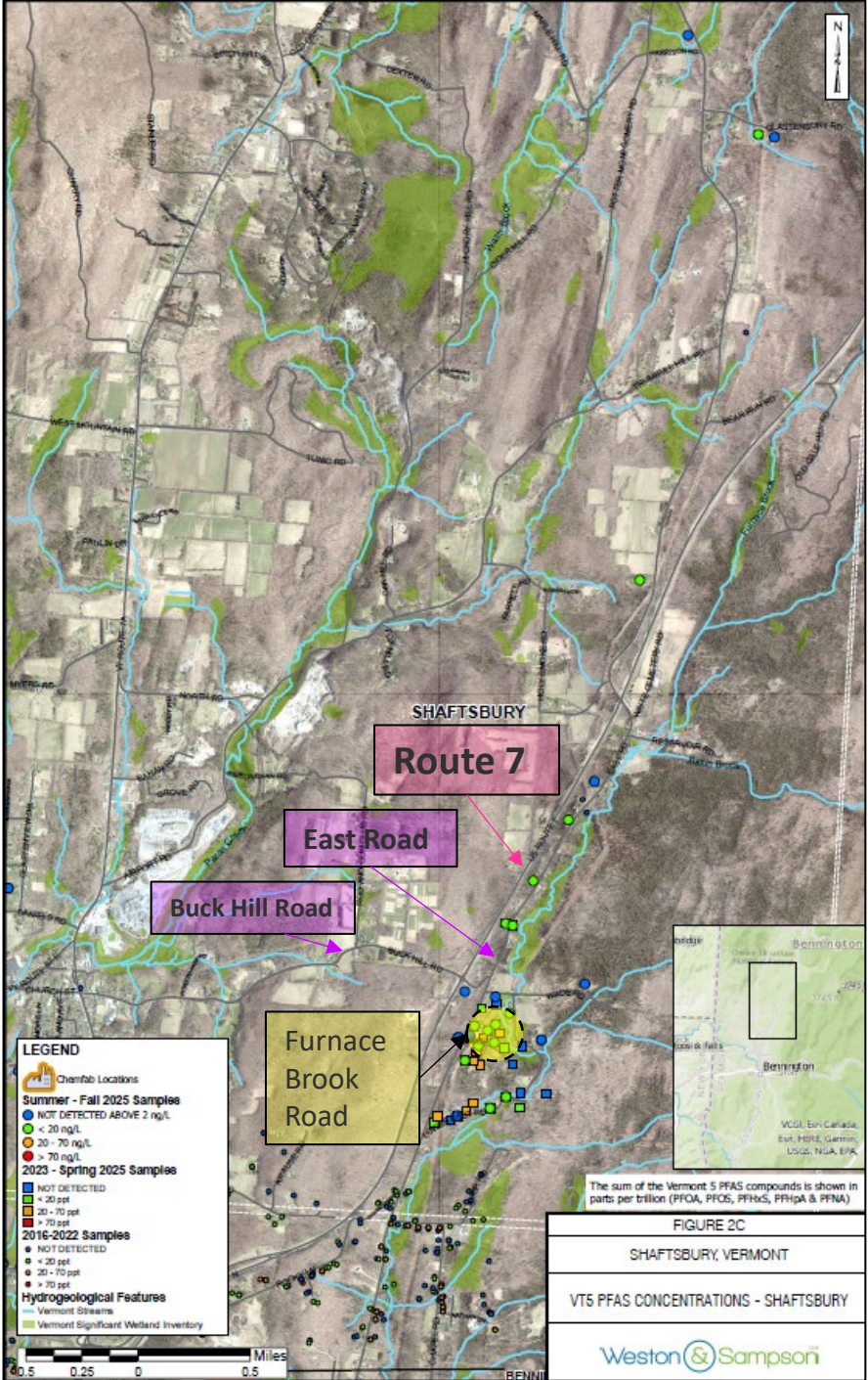
*Report submitted under previous PFAS standard (12/23/25).



Map of 2025 sampling – Southern Bennington



Map of 2025 sampling – Shaftsbury



Current work for 2026:

- Consultant = Weston and Sampson Engineers
- Sampling mid-May through the first full week of July
- If homes are above standard, homeowners will receive a call from either Richard or Malayika on next steps
- At the end of sampling, homeowners will receive letters and lab reports as hardcopies



https://www.mlive.com/news/2018/05/politico_pfas_atcdr_epa_levels.html



Treatment Option Examples:

- Bottled water
- Point-of-Use/Point-of-Entry Treatments
- Connection to Town water (to some locations)



VTDEC process for Water Treatment Options

- **Point-of-Use Treatment*** fixtures will be offered in areas where waterline extension work has been through both the planning and design phases, and have some funding
- **Point-of-Entry Treatment*** systems will be offered in areas where waterline extension work is still in the early planning phase OR where waterline work is not currently planned

*should funds be available.

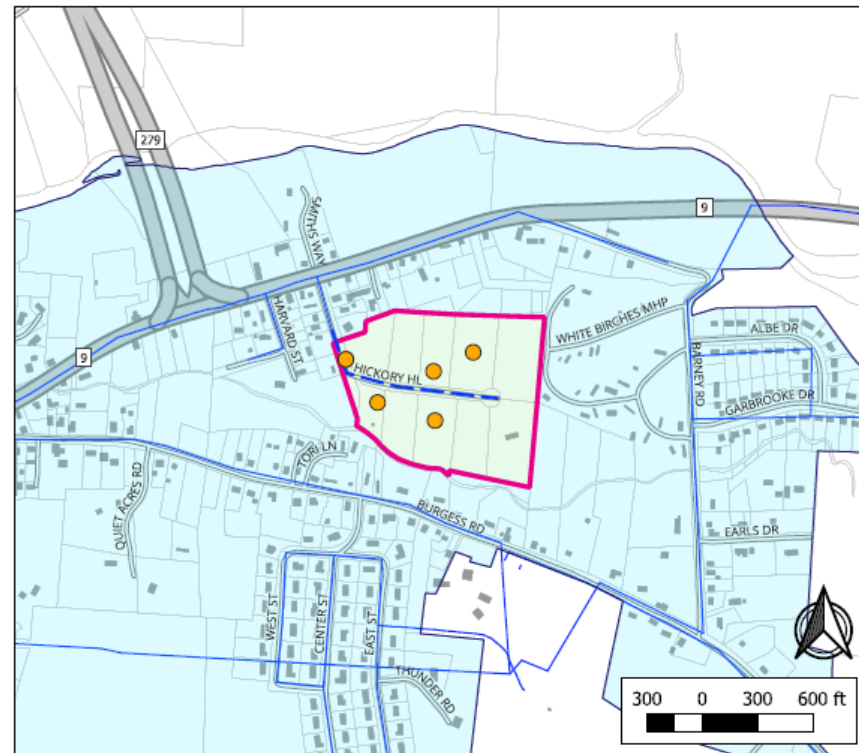
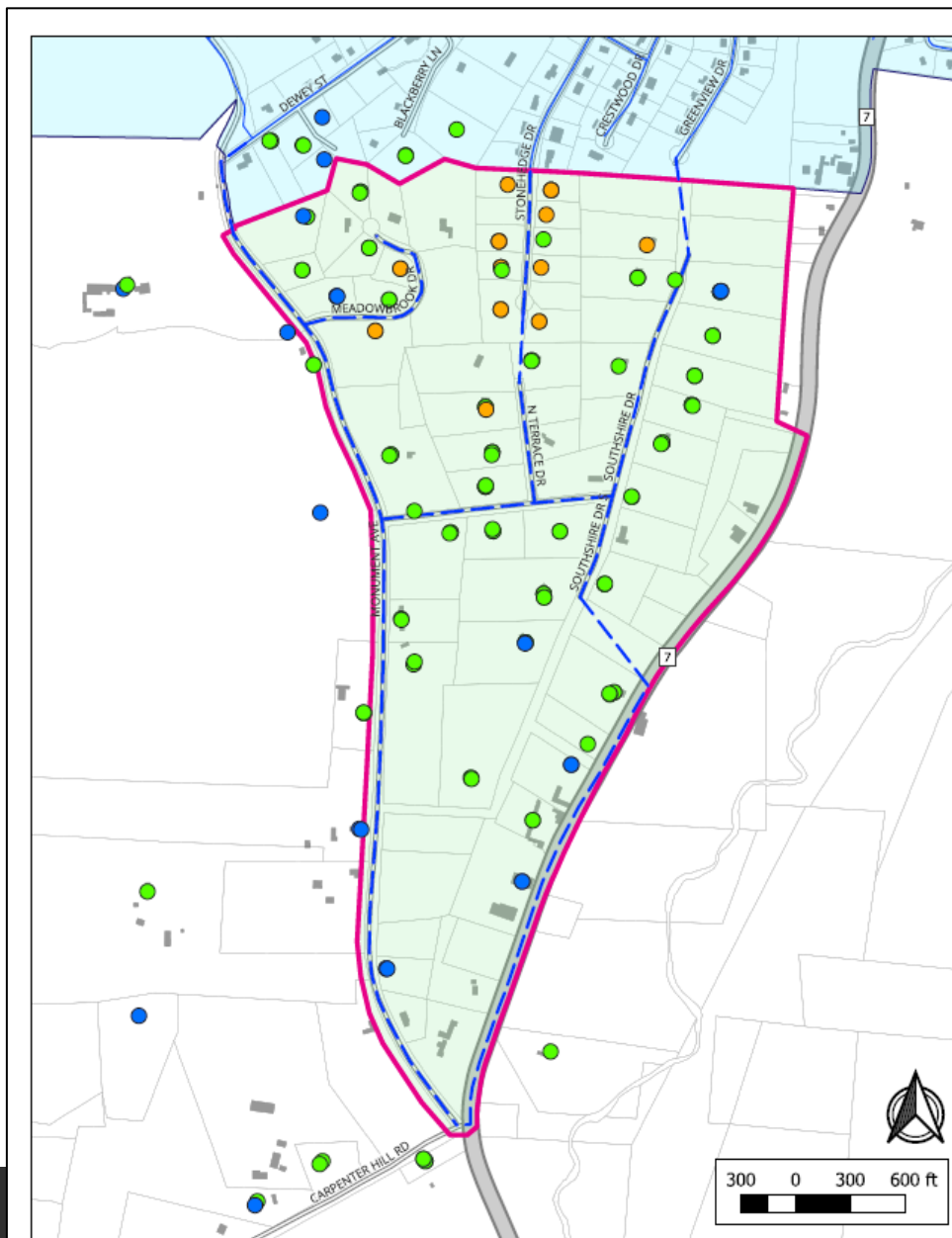
Next Steps for VT DEC

- Sampling – summer 2026
- Share 2026 results with homeowners (*via* phone and letters)
- Provide Bottled water and Treatment options



Update from MSK Engineers

Jason Dolmetsch



PFAS SAMPLING RESULTS

- NOT DETECTED
- < 20 PPT
- 20 - 70 PPT
- > 70 PPT

- ▭ PROJECT AREAS
- - - PROPOSED WATER MAIN
- EXISTING WATER MAIN
- ▭ EXISTING SERVICE AREA
- PROPERTY BOUNDARIES

MONUMENT AVENUE AND HICKORY HILL PFOA REMEDIATION PROJECT AREAS

DWSRF RF3-559

JUNE 23, 2026

MSK
ENGINEERS



Health Impacts of PFAS in Drinking Water

Shaftsbury and Southern Bennington

June 24, 2026

Dr. Rick Hildebrant, Health Commissioner

PFAS health effects

- **Developmental** (decreased birth weight, accelerated puberty, skeletal variations, altered immune function)
- **Cancer** (testicular, kidney)
- **Liver** inflammation
- **Immune** (decreased immune response to infection and vaccination)
- **Thyroid** dysfunction
- Increased **cholesterol**
- Decreased **bone mineral density**

PFAS exposure

- In general, the **lower your exposure to PFAS, the lower your risk** of potential health effects.
- Almost **everyone in the United States** has PFAS in their blood.
- Most people are exposed to PFAS through **water** and **food**.
- Consuming PFAS-contaminated water means PFAS **will be in your body**.
- If you stop consuming PFAS-contaminated water, PFAS levels in your body **will go down** over time.

PFAS testing

Water Testing

- Testing your water is the most important step for identifying ongoing PFAS exposure.
- Reducing exposure is the best way to lower PFAS levels in your body over time.
- If PFAS are found, **stop consuming the contaminated water.**
- If your drinking water has not been tested, contact DEC.

Blood Testing

- A blood test can show how much PFAS is in your body at the time of testing.
- It cannot predict future health problems.
- Results should be interpreted by a healthcare provider in the context of your medical history to determine whether any action is needed.

PFAS testing availability

2016

- The first time Vermont discovered PFAS in drinking water.
- Blood testing was used to understand community exposure and the relationship between drinking water and PFAS levels in the body.
- PFAS testing was not widely available.
- CDC supported the investigation

Today

- We better understand the relationship between PFAS in drinking water and blood levels.
- PFAS blood testing is widely available and may be considered in consultation with a healthcare provider.

PFAS treatment and medical management

- There are currently **no approved medical treatments** to remove PFAS from the body.
- There are **no universal guidelines for screening based on PFAS blood levels.**
- **Stopping or reducing exposure** is the best way you can lower PFAS levels in your body over time and associated health risks.
- Healthcare providers can tailor a medical plan by considering your PFAS exposure, medical history, and overall health.

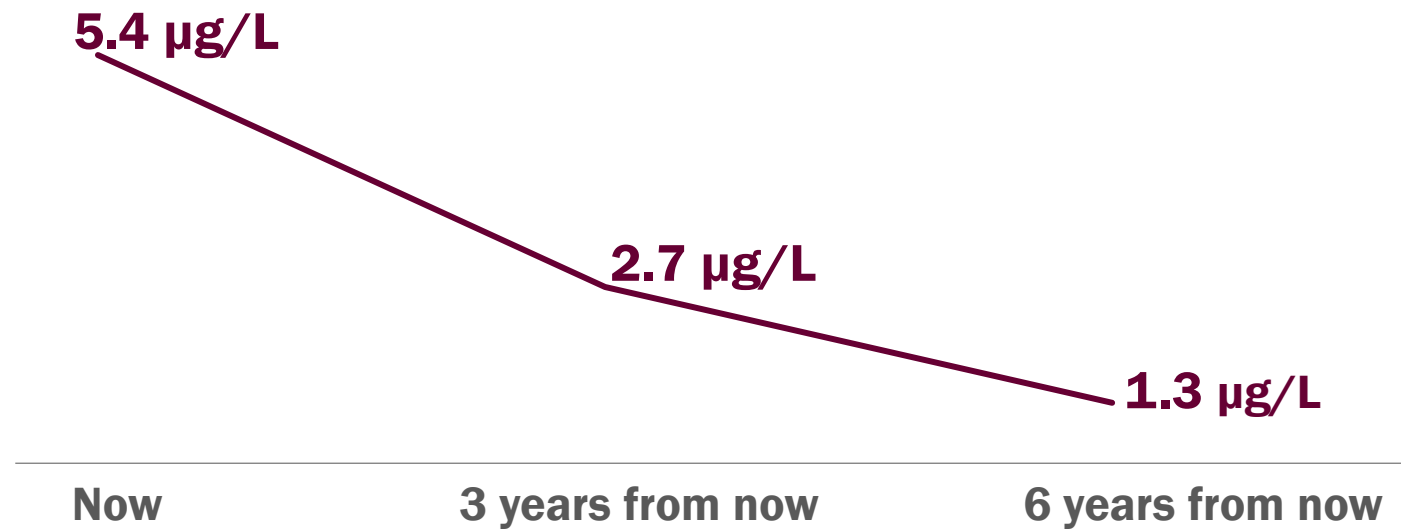
PFAS calculator

To use the [PFAS Blood Level Estimation Tool](#), you need to enter:

- The specific PFAS and levels
- Your birthdate (month and year)
- Your sex
- Your weight
- The percentage of tap water and bottled/filtered water you consume

Example of PFAS levels falling over time.

- This graph shows how the **PFOA blood level** of a 52-year-old man goes down over time “if you stop consuming PFAS-contaminated water (in micrograms per liter ($\mu\text{g/L}$)).
- The PFOA level in his drinking water was 53 parts per trillion (ppt).



What you can do

- 1** Stop consuming water contaminated with PFAS. Take steps to lower your PFAS exposure from other sources.
- 2** Tell your healthcare provider about your exposure so they can add it to your medical record.
- 3** Work with your healthcare provider to understand your personal risk factors and whether additional evaluation is appropriate.

What your healthcare provider can do

- 1** Add PFAS exposure to your medical record.
- 2** Consider whether any additional evaluation, screening, or follow-up is appropriate based on your exposure history, health status, and current clinical guidance.
- 3** Answer your questions about how PFAS exposure may affect your health.



Questions?

Shaftsbury Breakout Session around 7PM with Malayika Vincent (VTDEC), Andrea Kirk (VDH), and Representative Durfee in the back of the room

Contact Information and Helpful Links

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Malayika Vincent (Site Manager - VT DEC)	(802) 505-1351	Malayika.Vincent@vermont.gov
Patricia Coppolino (Senior Program Manager - VT DEC)	(802) 249-5822	Patricia.Coppolino@vermont.gov
Vermont Dept of Health Helpline	(802) 489-7339	DrinkingWaterHealth@vermont.gov

Looking for more information?

Go here for updates and reports: <https://dec.vermont.gov/pfas/vermont-pfoa-contamination-response/information-impacted-communities>