

Legislative Action for Vermont

An Act Regulating Certain Chemicals and Chemical Classes

- Public Health and Safety
- Environmental Protection



PFAS- the “Forever Chemicals”, so called because:

- **Bonds do not dissolve in water or break down easily**
 - **PFAS travel through water, soil and air**
- **PFAS accumulate and persist in the environment and in the organisms exposed to contaminated food and water**
- **Many PFAS are difficult if not impossible to filter, capture and contain**

In humans and animals, they are responsible for severe health problems, including:

- **Cancers- Liver, Kidney and Testicular**
 - **Hormone disruption leading to**

reproductive problems

birth defects

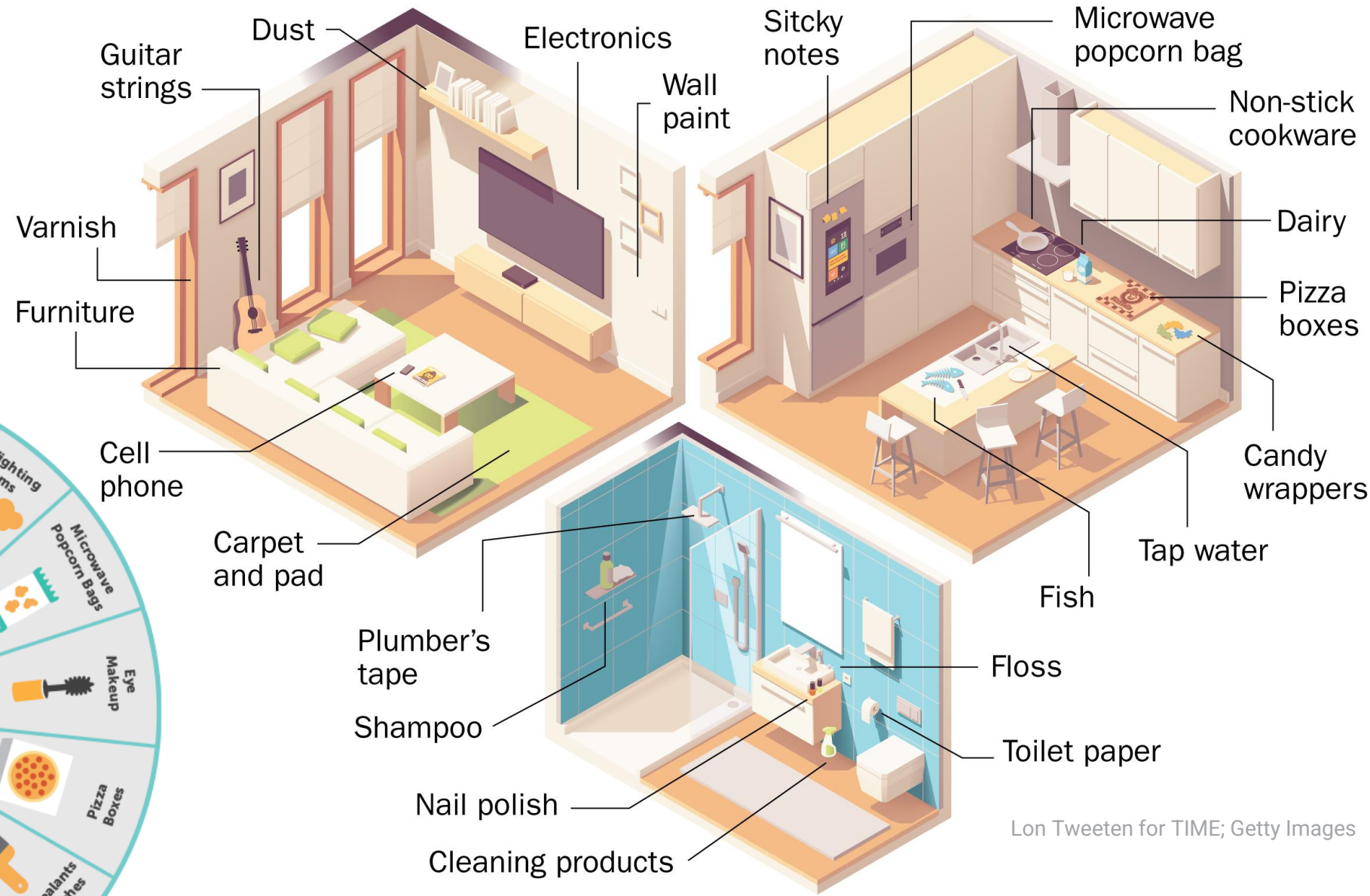
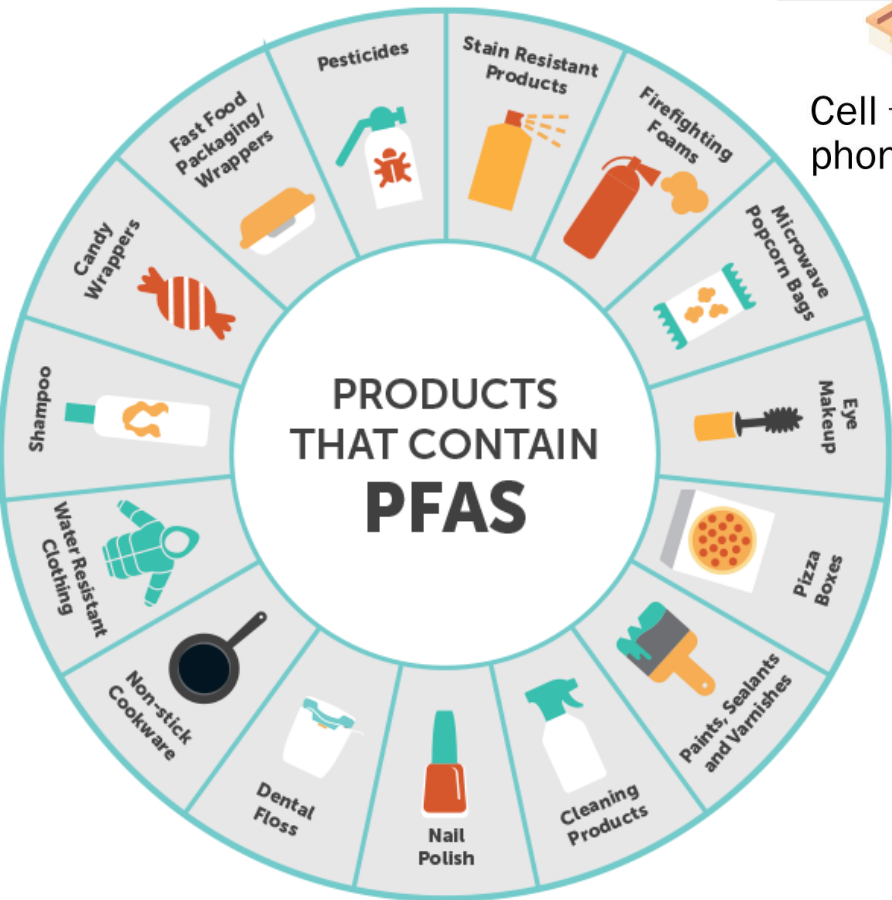
developmental delays

diabetes

obesity

high cholesterol

vaccine resistance

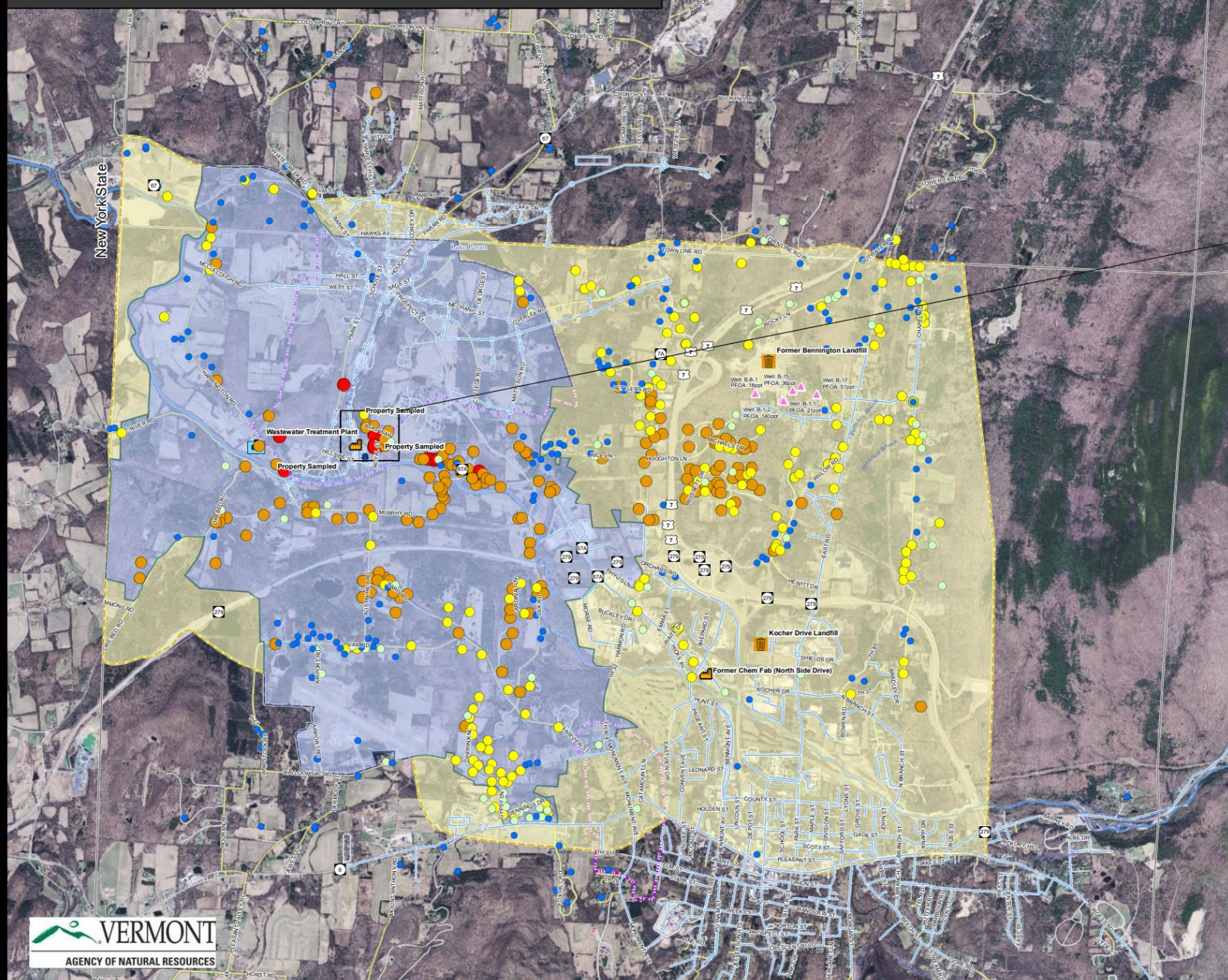
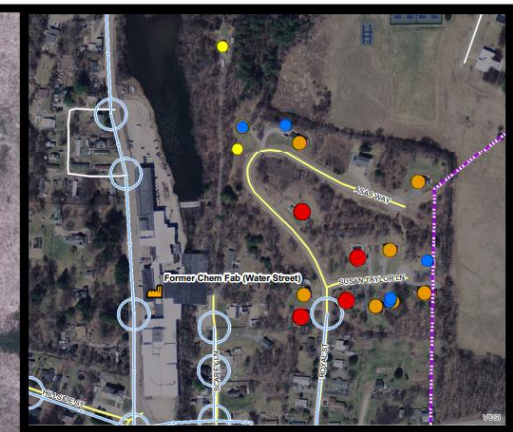


Lon Tweeten for TIME; Getty Images




North Bennington/Bennington PFOA

Sampling Test Results (Highest Concentration) - May 30, 2018



MAP LEGEND

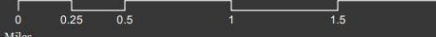
PFOA	● <6.7 ppt (Original Detection Limit)	 Corrective Action Area 1
	● 6.7 - 20 ppt (VDH Advisory)	 Corrective Action Area 2
BOUNDARIES	● 20 - 100 ppt	 Village Boundary (VCGI)
	● 100 - 1000 ppt	 Sampling Boundary
LAYERS	● >1000 ppt	 Town Boundary
	▲ Landfill Monitoring	
	■ Factory	
	■ Landfill	
	■ Wastewater Treatment Plant	
● Town Water Sample		
— WaterLine		



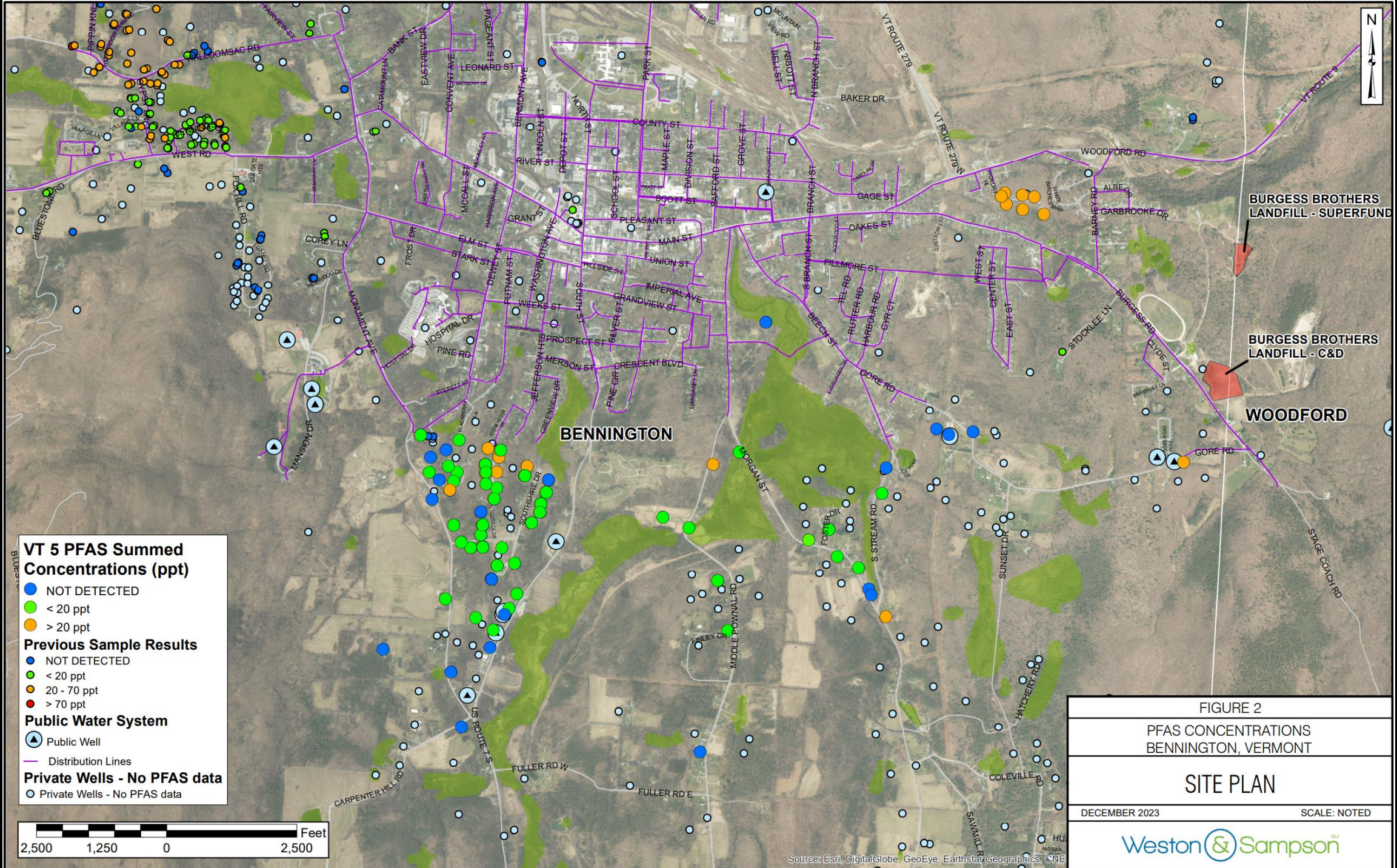
June 26, 2018

Notes:
Sources: Roads (VTRANS), Basemap (VCGI), Geocoding Service (VCGI), Sampling Results (VTDEC/Weston & Sampson), Waterline (Otter Creek Engineering), Streams and Waterbodies (NHD).

Sampling locations are determined by geocoded addresses as provided. Latitude/Longitude used in instances where sampling locations were recorded.



Miles



VT 5 PFAS Summed Concentrations (ppt)

- NOT DETECTED
- < 20 ppt
- > 20 ppt

Previous Sample Results

- NOT DETECTED
- < 20 ppt
- 20 - 70 ppt
- > 70 ppt

Public Water System

- ▲ Public Well
- Distribution Lines

Private Wells - No PFAS data

- Private Wells - No PFAS data

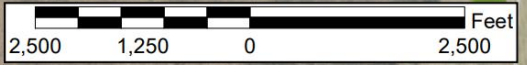


FIGURE 2
 PFAS CONCENTRATIONS
 BENNINGTON, VERMONT
 SITE PLAN
 DECEMBER 2023 SCALE: NOTED

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CN

There are nearly 15,000 individual PFAS chemicals

The Vermont Drinking Water Standard of 20 ppt is limited to only 5 .

4 of the 5 are **LONG-CHAIN molecules, proven to harm human health, but also, being larger, can be more easily filtered.**

**SHORT-CHAIN PFAS,
now known to be as or more harmful, can escape filtration:**

“Short-chain PFASs have a high mobility in soil and water.... This results in a fast distribution to water resources, and consequently, also to a contamination of drinking water resources. Once emitted, short-chain PFASs remain in the environment.” <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5834591/>

PFAS Precursors are also likely to escape filtration and transform into PFOA and PFOS in the environment.

***David Burns, lead scientist EPOC Enviro,
SAFF creators:***

***"Of course, there is no suggestion
that the treated landfill leachate
should be used directly as potable
water or allowed to discharge or
otherwise migrate into receiving
waters reserved for drinking
water."***

<https://onlinelibrary.wiley.com/doi/10.1002/rem.21720?af=R>



Henryj Coe