



# MUNICIPAL PFAS RECOVERY UPDATE

*By: John Gallagher and Jim DeMay*

*Milberg, Coleman, Bryson, Phillips Grossman, LLC*





# WHAT ARE PFAS?

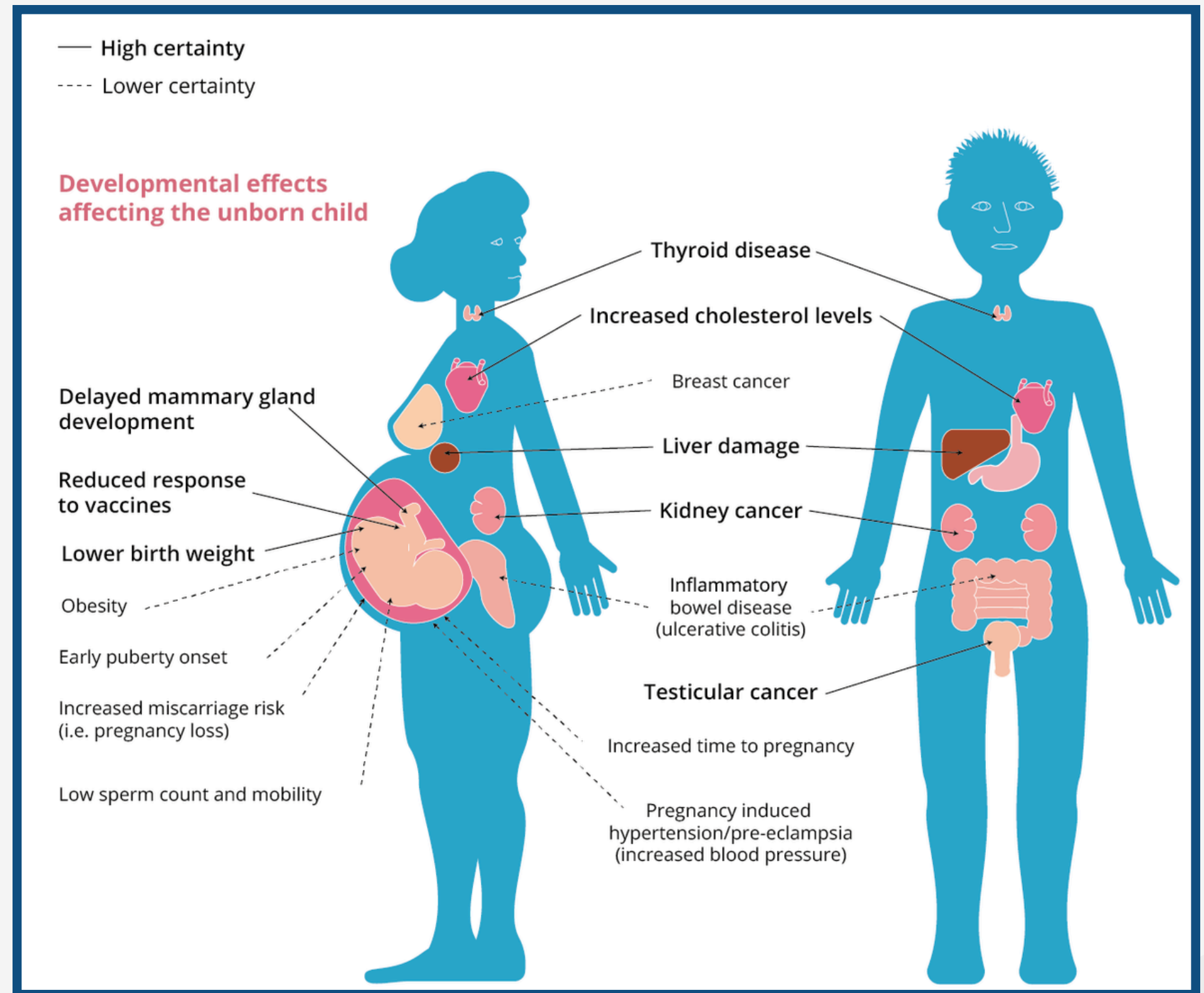
- Per and Polyfluorinated Substances
- AKA “Forever Chemicals”
- Found in a wide range of commercial products



EXAMPLES	
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane Sulfonate
PFHxS	Perfluorohexane Sulfonate
PFBS	Perfluorobutane Sulfonate
PFNA	Perfluorononanoic Acid
PFDA	Perfluorodecanoic Acid
PFHxA	Perfluorohexanoic Acid

# HEALTH COMPLICATIONS

- **Reproductive effects** including;
  - decreased fertility, and
  - increased high blood pressure in pregnant women
- **Developmental effects** or delays in children, including;
  - low birth weight,
  - accelerated puberty,
  - bone variations,
  - behavioral changes,
- **Increased risk of some cancers**, including;
  - prostate,
  - kidney,
  - and testicular cancers.



# WHERE DO PFAS COME FROM?

## Exposure

- Firefighting Foams
- Firefighter turnout gear
- Stain resistant or waterproof clothing
- Fast food packaging
- Makeup and personal care products
- Floor care products
- Cleaning products

More than **200 million Americans** receive water with PFAS concentrations of at least 1 ng/l

*American Chemical Society, 2020*



## PFAS Overview

More than 1500 drinking water systems across the U.S. may be contaminated with PFOA and PFOS.

According to a May 2018 Environmental Working Group (EWG) Report

# PREVALENCE

- 45% of tap water contains detectable PFAS contaminants (USGS, 2023)
- 97% of Americans have PFAS in their bodies (CDC, 2020)



# PFAS WATER CONTAMINATION SOURCES

1. D.O.D. AFFF use
2. Manufacturing
3. Landfills
4. Airport AFFF use
5. FTC AFFF use
6. Refinery AFFF use

## Evaluation and Management Strategies for Per- and Polyfluoroalkyl Substances (PFASs) in Drinking Water Aquifers: Perspectives from Impacted U.S. Northeast Communities

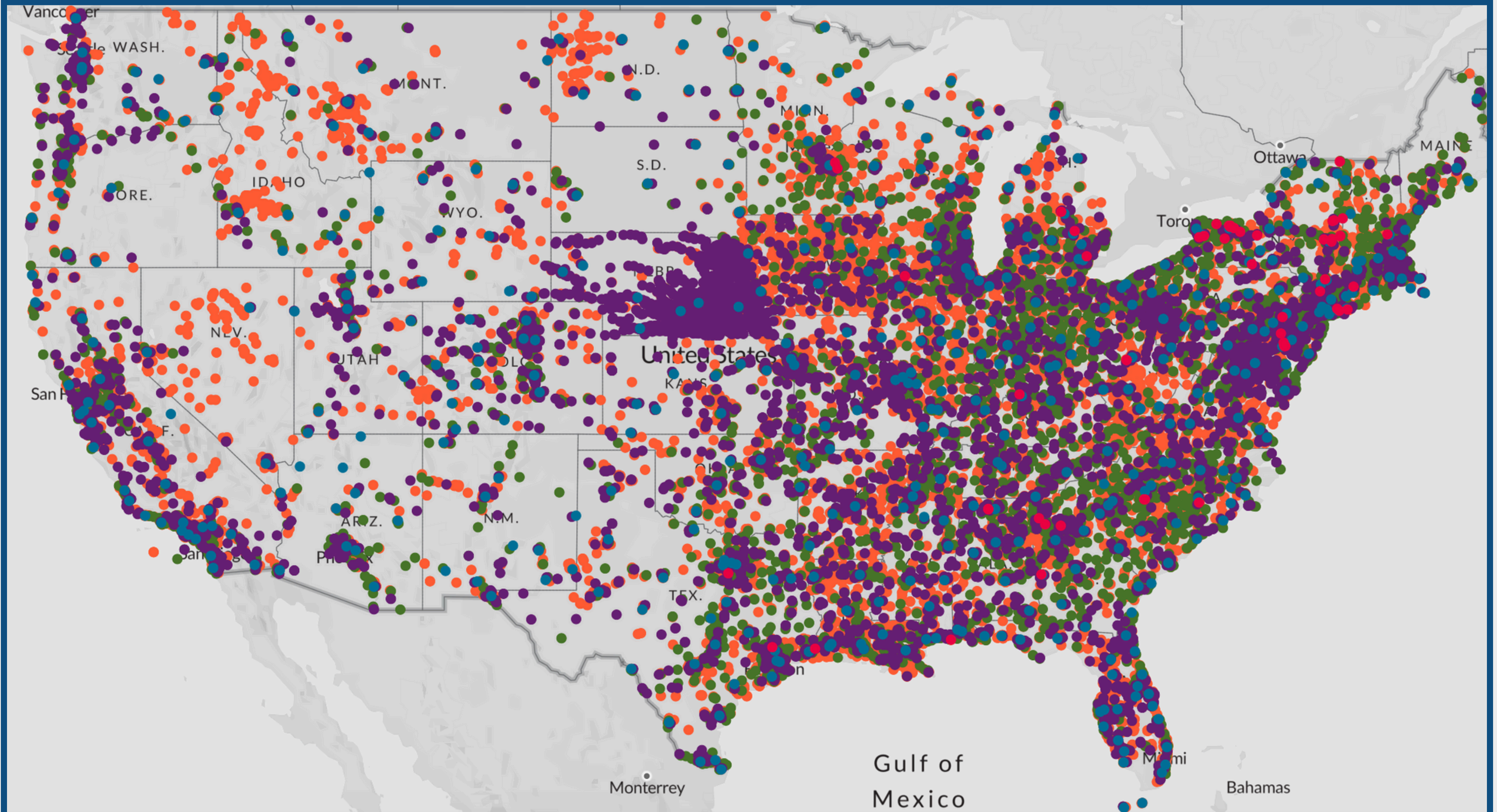
Table 2. Risk scores utilized for calculation of the PFAS source hazard index (HI).

PFAS source	Upper magnitude (µg/L)	No. PFASs	Risk score	Table 1 source type
DoD facilities	10,000	28	100	AFFF use (DoD)
Chemical manufacturing	1,000	13	100	PFAS/FP manufacturing
Landfills	1,000	11	100	Waste streams (landfills)
Airports	100	28	75	AFFF use (Airports) <sup>a</sup>
Fire training areas	100	28	75	AFFF use (fire training areas) <sup>a</sup>
Petroleum refineries	10	28	75	AFFF use (petroleum refineries) <sup>a</sup>
Textiles	10	13	50	FP coating (plastics, textiles, metals)
Furniture	10	13	50	FP coating (plastics, textiles, metals)
Paper	10	13	50	FP coating (plastics, textiles, metals)
Rubber/plastics	10	13	50	FP coating (plastics, textiles, metals)
Fire Stations	N/A	28	25	N/A <sup>a,b</sup>
Fabricated metal	N/A	11	25	N/A <sup>c</sup>

Source: Gualfo et al. Evaluation and Management Strategies for Per- and Polyfluoroalkyl Substances (PFASs) in Drinking Water Aquifers: Perspectives from

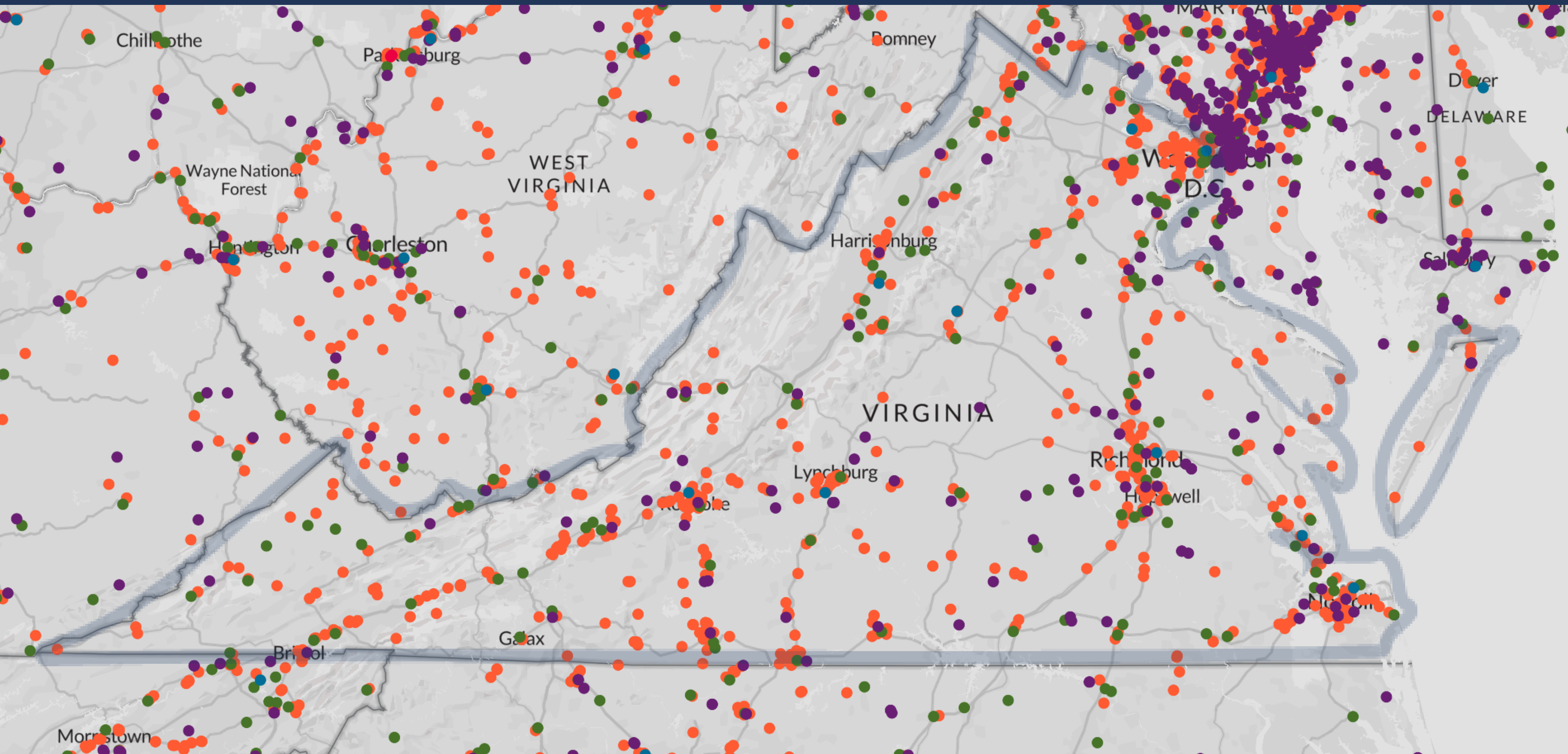


# SUSPECTED INDUSTRIAL DISCHARGERS



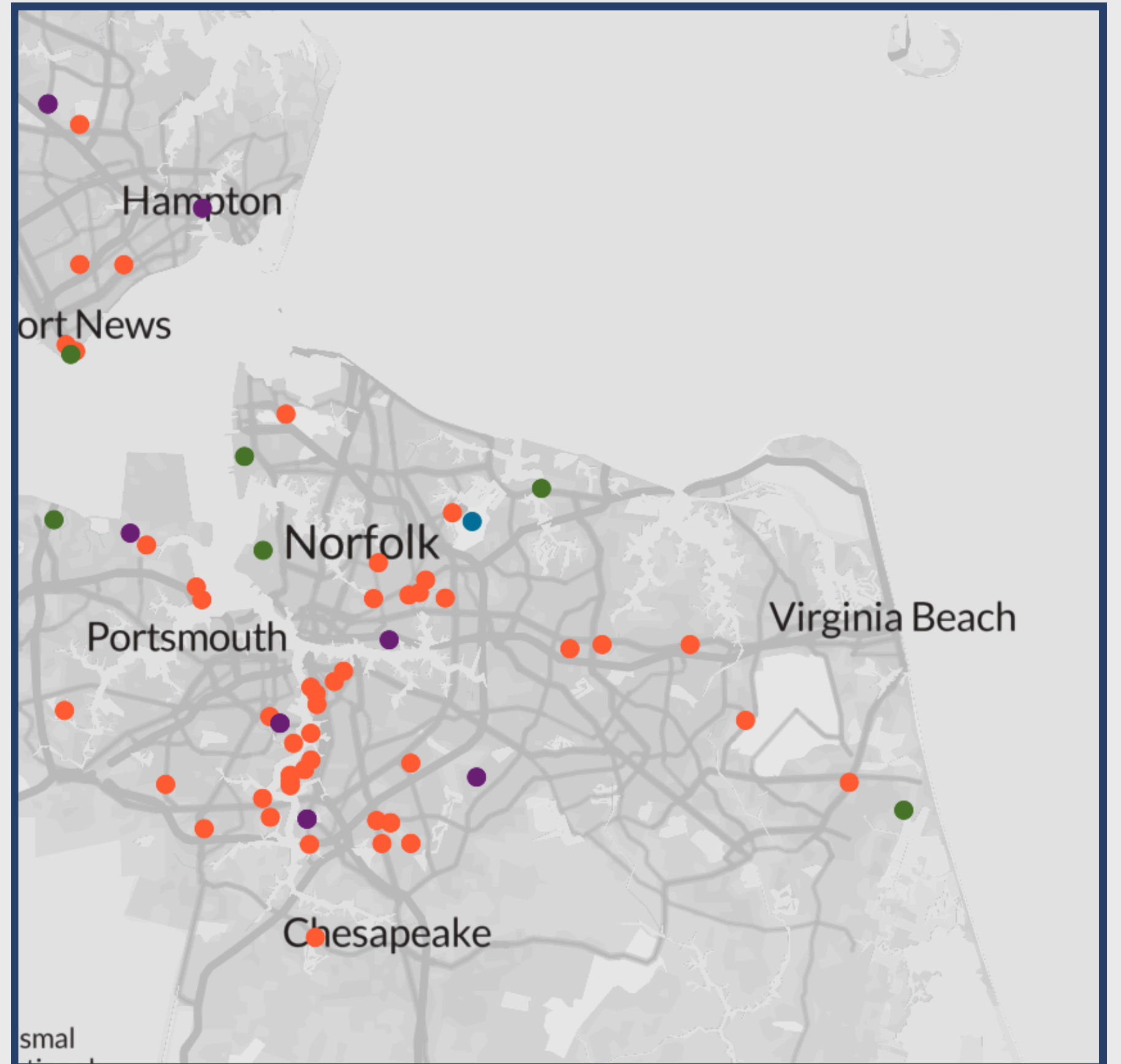


# SUSPECTED INDUSTRIAL DISCHARGERS: VIRGINIA





# SUSPECTED INDUSTRIAL DISCHARGERS: VIRGINIA BEACH



# PFAS REGULATION IN DRINKING WATER

The federal government has imposed strict standards on PFAS in drinking water.

New Maximum Contaminant Level (“MCL”) of 4 ppt for PFOS and PFOA finalized on April 10, 2024.

## 2024: NEW REGULATIONS FOR PFAS

### Maximum Contaminant Levels



Compound	Final MCLG	Final MCL (enforceable levels)
PFOA	Zero	4.0 ppt <small>parts per trillion (ppt) (also expressed as ng/L)</small>
PFOS	Zero	4.0 ppt
PFHxS	10 ppt	10 ppt
PFNA	10 ppt	10 ppt
HFPO-DA <small>(commonly referred to as GenX Chemicals)</small>	10 ppt	10 ppt
Mixtures containing two or more of PFHXS, PFNA, HFPO-DA, and PFBS	1 (unitless) Hazard Index	1 (unitless) Hazard Index

## PFAS DRINKING WATER REGULATIONS, CONT'D

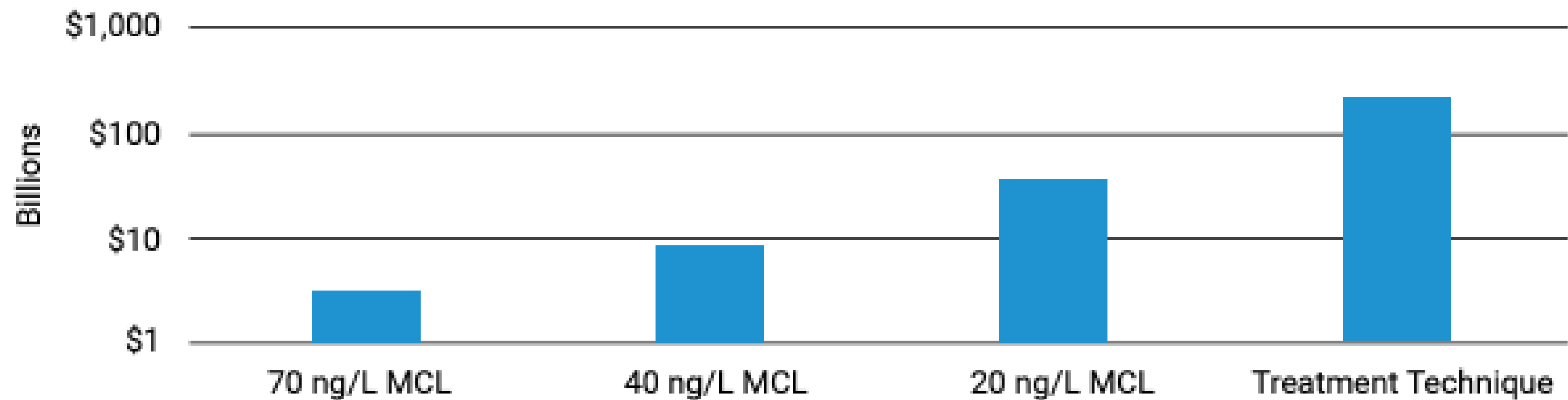
- All PWS's have **3 years** to complete their initial monitoring for PFAS chemicals
  - Within that time: **must inform the public of the level of PFAS** measured in their drinking water.
- Where PFAS is found at levels that **exceed these standards**, systems **must implement solutions to reduce PFAS** in their drinking water **within 5 years**.

# TREATMENT COSTS

- **Treatment is extremely costly** given the fact that conventional water treatments cannot remove PFAS
- Requires PWS to **spend significant funds** to improve treatment facilities
  - Reverse osmosis membranes
  - Granulated Active Carbon Filters
  - Reverse ion exchange
  - Etc.,
- The cost impact of PFAS is estimated to be > **\$100 billion** for PWS's nationwide

# TREATMENT COSTS

## U.S. Cost of Drinking Water Treatment to Remove PFOA and PFOS Using GAC



*Planning level costs are estimated to be conceptual and may be higher (+50%) or lower (-30%).*



# THE PROBLEM

**PWS have or will have to pay millions of dollars to treat a PFAS problem that they did not create...**

***Who should help pay for those costs?***

# AFFF LITIGATION

- **Aqueous Film Fighting Foams (AFFF) Products Liability Litigation, MDL No. 2873**
- **Pending in the U.S. District Court for the District of South Carolina**
- **Hundreds of lawsuits brought by PWS's across the country against AFFF Manufacturers/Distributors**
- **Also contains firefighter lawsuits and injury cases brought by others who have been affected by AFFF**

# AFFF MANUFACTURERS / DISTRIBUTORS

**AGC Chemicals**

**Amerex Co.**

**Arkema Inc.**

**Archroma U.S. Inc.**

**BASF Co.**

**Buckeye Fire Equipment Co.**

**Chemdesign Products Inc.**

**3M Company**

**Dupont**

**Chemguard Inc.**

**Chemicals Inc.**

**Clairiant Co**

**Deepwater Chemicals Inc.**

**Dynax Co.**

**Nation Ford Chemical Co.**

**Tyco Fire Products**

# ***AFFF PWS SETTLEMENTS TO DATE***

**3M**

**\$10.3  
Billion**

**DuPont**

**\$1.185  
Billion**

**Tyco**

**\$750  
Million**

**BASF**

**\$316.5  
Million**

# CONTEXTUALIZING THE SETTLEMENTS

- 3M settlement alone is **the largest drinking water contamination settlement in U.S. history** and represents **nearly a quarter** (22%) of 3M's total value.
- Collectively these settlements are the **largest source of PFAS funding** to date
- **Only covers water supplier claims** for PFAS treatment and remediation costs
- **Does NOT cover** water supplier claims asserted against any other defendant.





# **OBTAINING FUNDING FROM THE SETTLEMENTS**

# “Impacted Water Source”

**Settlement language:** “a Water Source that has a qualifying test result showing a measurable concentration of PFAS.”

**Basically:** If a water source is found to have **any amount** of PFAS, it qualifies as an “impacted water source”

American Chemical Society, 2020

# QUALIFYING FOR DUPONT

(1) PWS that draws/collects from any water source that, on or before June 30, 2023, was...found to contain PFAS at any level

AND

(2) All PWS subject to UCMR-5 or any other PWS that is otherwise required under state/federal law to test for PFAS before the UCMR 5 deadline.

# Phase 1 vs Phase 2

**Phase 1:** PWS's with a known detect prior to the settlements

**Phase 2:** PWS's without a known detect, but which are conducting (or will conduct) PFAS testing

American Chemical Society, 2020

# Supplemental Funding

Funds available to qualifying class members that did not initially exceed a State or Federal MCL when it submitted its class form, but exceed such levels at a later date

American Chemical Society, 2020



# Special Needs Funding

Compensation for a PWS that incurred extraordinary expenses as a result of PFAS contamination,

Includes, for example, purchasing water from alternative sources and/or drilling new PFAS-free wells.

American Chemical Society, 2020



# ***ACTION MUST BE TAKEN TO PRESERVE CLAIMS***

- Phase 2 claims for 3M and DuPont settlements
- Tyco and BASF claims
- Claims against remaining Defendants
- Potential claims against non-AFFF Defendants

# ***“OPT-OUT” SETTLEMENT AGREEMENTS***



The diagram features a central white circle containing the title. Two white arrows originate from the bottom of the circle: one points down and to the right towards a box about the passed opt-out period, and the other points up and to the right towards a box about the opportunity to recover money. A third box in the bottom right corner provides specific dates for the opt-out period.

This is the only chance to recover money that your municipality is entitled to

The opt out period has already passed

## **Final opt-out dates**

- 3M: December 11, 2023
- Dupont: December 4, 2023

# LITIGATION REMAINS ONGOING AGAINST ADDITIONAL DEFENDANTS

AGC Chemicals	✓	<del>Dupont</del>	
Amerex Co.	✓	Chemguard Inc.	✓
Arkema Inc.	✓	Chemicals Inc.	✓
Archroma U.S. Inc.	✓	Clairiant Co	✓
<del>BASF Co.</del>		Deepwater Chemicals Inc.	✓
Buckeye Fire Equipment Co.	✓	Dynax Co.	✓
Chemdesign Products Inc.	✓	Nation Ford Chemical Co.	✓
<del>3M Company</del>		<del>Tyco Fire Products</del>	



# Other Municipal PFAS Recovery Opportunities

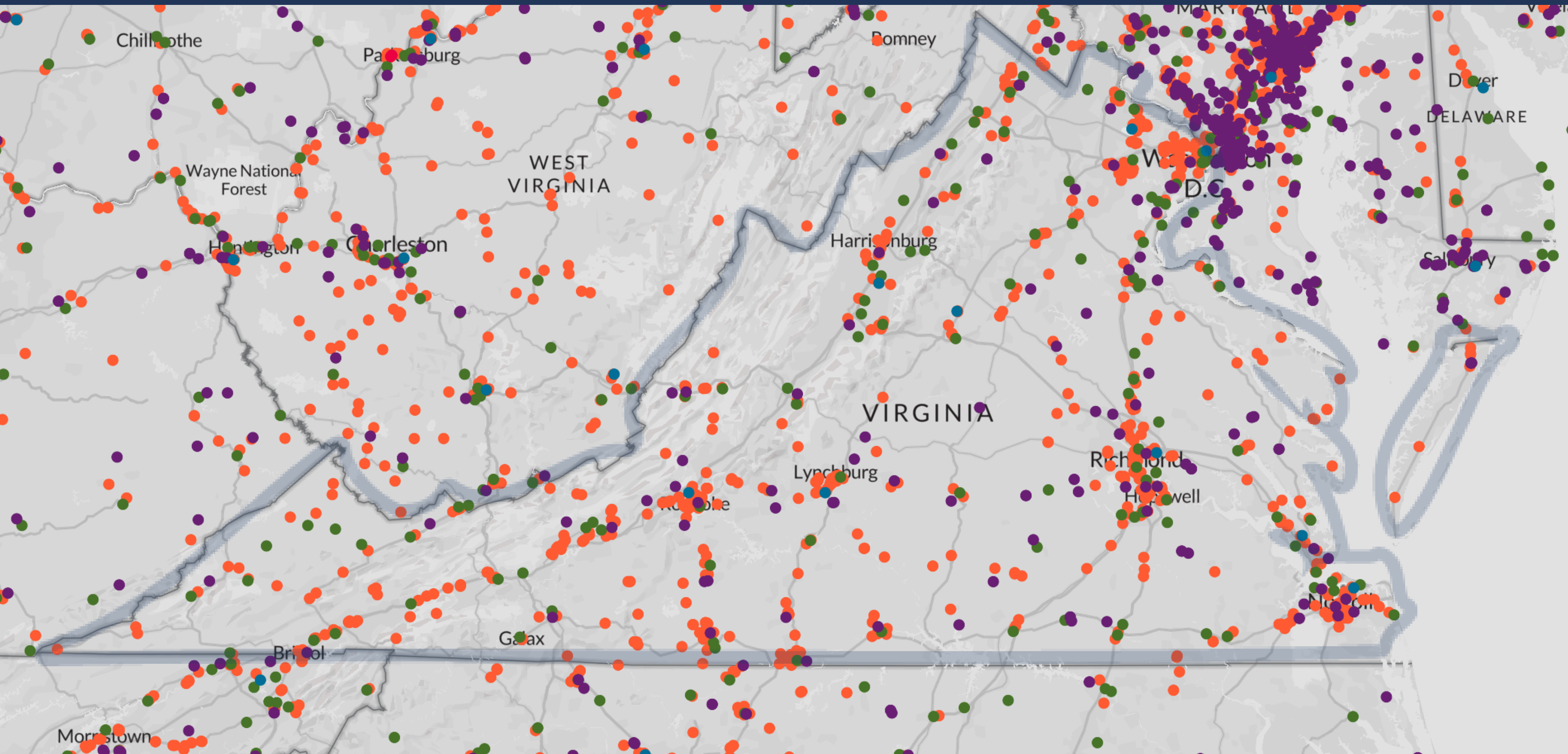
- Airports
- Fire training centers
- Single-source polluters
- Wastewater claims
- Solid waste claims

- Microplastics
- Solid waste claims
- Landfill claims
- Claims for 1,4 dioxane
- Other emerging contaminants





# SUSPECTED INDUSTRIAL DISCHARGERS: VIRGINIA



# ***QUESTIONS?***

***Milberg, Coleman, Bryson, Phillips, Grossman, LLC***

- **John Gallagher: [jgallagher@milberg.com](mailto:jgallagher@milberg.com), (423) 501-4250**
- **Jim DeMay: [jdemay@milberg.com](mailto:jdemay@milberg.com), (704) 941-4648**