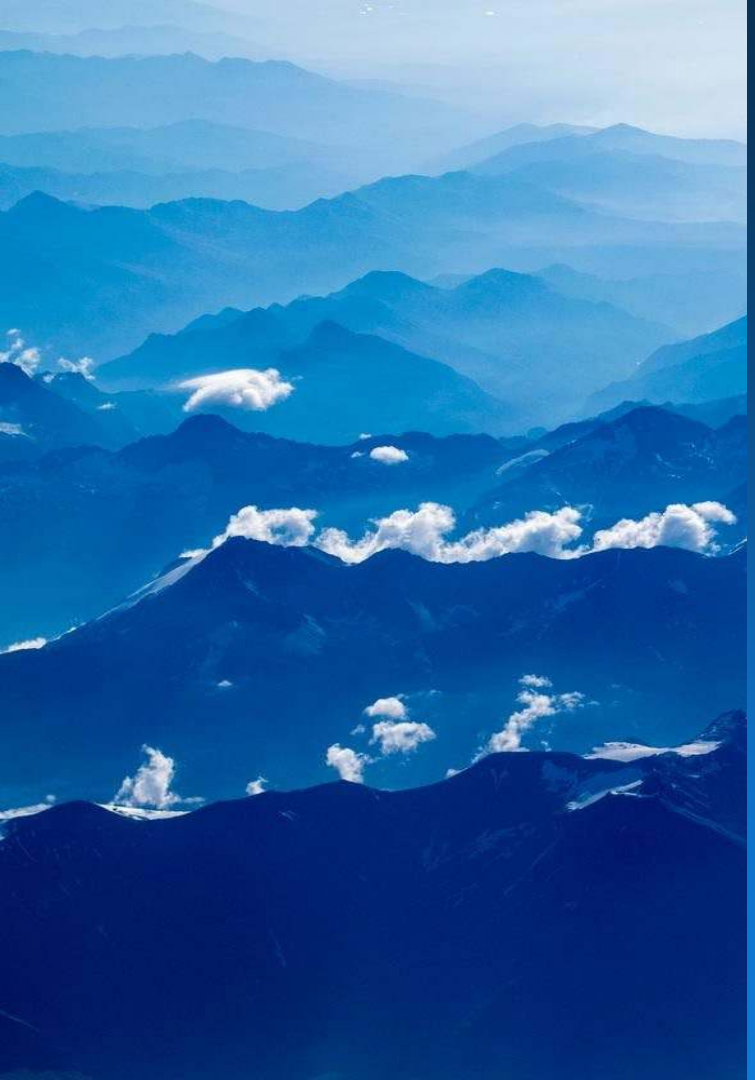
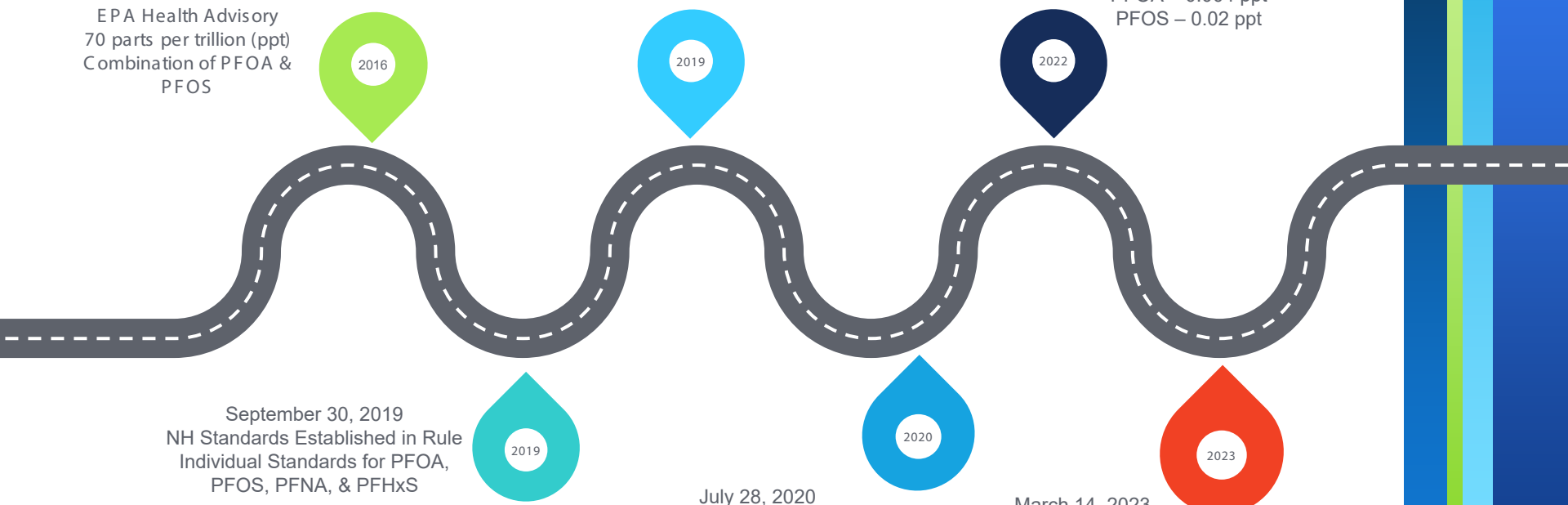


US EPA Proposed Per- and Polyfluoroalkyl Substances Maximum Contaminant Levels

BIA NH Environmental Regulatory Conference
September 12, 2023

NH PFAS Standards



EPA Health Advisory
70 parts per trillion (ppt)
Combination of PFOA & PFOS

ROAD BLOCK
December 2019
Court injunction suspended enforcement of NH Standards

June 15, 2022
EPA Interim Health Advisories
PFOA – 0.004 ppt
PFOS – 0.02 ppt

September 30, 2019
NH Standards Established in Rule
Individual Standards for PFOA, PFOS, PFNA, & PFHxS

July 28, 2020
NH Standards passed into law under HB 1246

March 14, 2023
EPA proposed drinking water MCLS for PFOA, PFOS, PFNA, PFHxS, PFBS & HFPO-DA (GenX)

Current NH PFAS Standards

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

* Enforced beginning September 30,2019. Passed into law July 28, 2020

Definitions as defined in RSA 485:

MCL = the maximum permissible level of a contaminant in water which is delivered to the free-flowing outlet of the ultimate user of a public water system, except in the case of turbidity where the maximum permissible level is measured at the point of entry to the distribution system.

AGQS = the maximum concentration levels for regulated contaminants in groundwater which result from human operations or activities.

US EPA Proposed PFAS MCLGs & MCLs

PFAS Compound	Proposed MCLG	Proposed MCL
PFOA	0	4.0 ppt
PFOS	0	4.0 ppt
PFNA	1.0 (unitless) Hazard Index	1.0 (unitless) Hazard Index
PFHxS		
HFPO-DA (Gen-X)		
PFBS		

Source: Per- and Polyfluoroalkyl Substances (PFAS) | US EPA

What is a Hazard Index?

- A tool used to evaluate health risks of exposure to chemical mixtures
- Typically used by CERCLA - first time as a drinking water standard
- Compares measured levels in drinking water to Health-Based Water Concentrations
- EPA is developing an online calculator

Equation

$$\text{Hazard Index} = \left(\frac{[\text{GenX}_{\text{water}}]}{[10\text{ ppt}]}\right) + \left(\frac{[\text{PFBS}_{\text{water}}]}{[2000\text{ ppt}]}\right) + \left(\frac{[\text{PFNA}_{\text{water}}]}{[10\text{ ppt}]}\right) + \left(\frac{[\text{PFHxS}_{\text{water}}]}{[9.0\text{ ppt}]}\right)$$

EPA's Fact Sheet: Understanding the PFAS National Primary Drinking Water Proposal Hazard Index

NH Public Water Systems (PWS) – ≥25 people served

COMMUNITY ★

Primary water source – year-round residence

NON-COMMUNITY

Secondary water source – includes non-transient & transient water systems

Same, non-residential population - ≥ 6 months (schools, office buildings)

NON-TRANSIENT ★

Transitory non-residential population - < 6 months (hotels, restaurants)

TRANSIENT

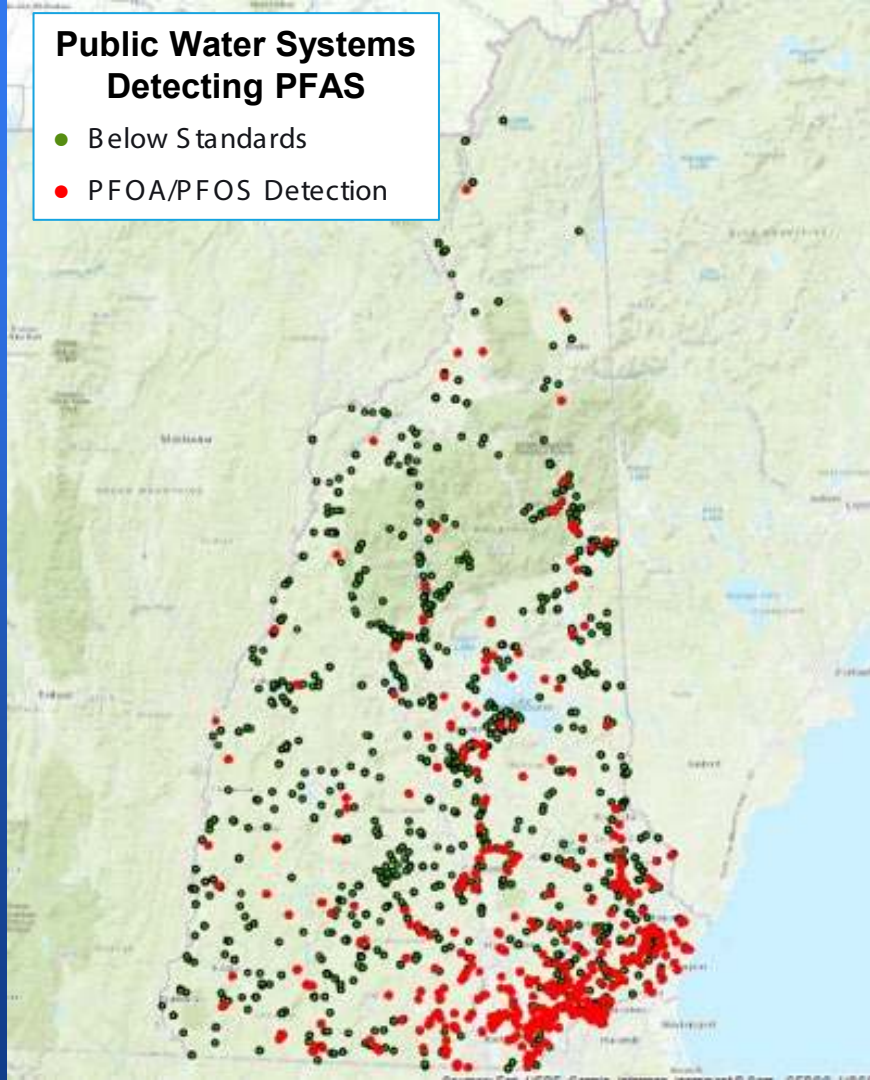
★ Required to sample for PFAS

PFOA & PFOS in NH

- 1/3 of all sources associated with PWS' detect PFOA & PFOS

Sources Sampled	Sources with PFAS Detections	Sources Exceeding NH PFAS MCL
1500	511	Approx. 150
	30%	10%

- Proposed MCLs will double # of PWS' in exceedance
- 2-3 years to implement



Drinking Water Remedial Response

Remedial Solution	# of PWS'
Granular Activated Carbon	**52**
Adsorptive Resin	**10**
Reverse Osmosis (Point of Use)	**8**
Flow Mix	**2**
Interconnection	**dozens**

Contact Information

Brandon Kernen
Drinking Water & Groundwater Bureau
Administrator
Brandon.M.Kernen@des.nh.gov
(603) 271-1168

Amy Rousseau
PFAS Response Coordinator
Amy.E.Rousseau@des.nh.gov
(603) 271-8801