

# MANAGING PFAS CONTAMINATION

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ELI WEBINAR SERIES, JUNE 23, 2026



# ABOUT US



## National Sea Grant Law Center

- ☆ Founded in 2002
- ☆ Housed at the University of Mississippi School of Law
- ☆ Conducts legal research, education, and outreach for Sea Grant Network and stakeholders



# BACKGROUND

The National Sea Grant Law Center has been conducting law and policy research on **Per- and Polyfluoroalkyl Substances (PFAS)**

## Federal Level:

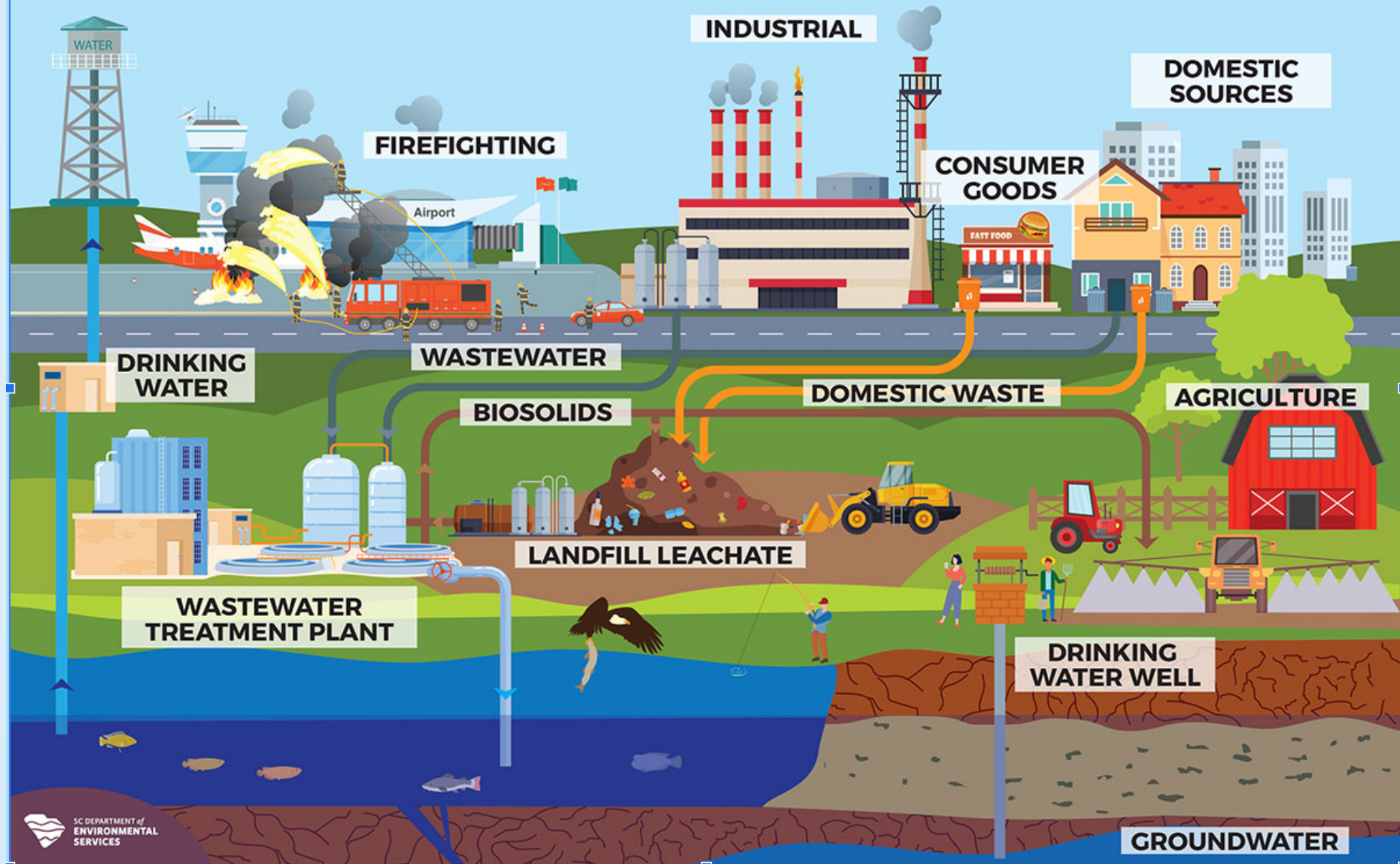
- Tracking major regulatory activities related to PFAS
- Safe Drinking Water Act
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
- Clean Water Act
- Added 12 PFAS to recommendations to states on what contaminants to monitor for in locally caught, freshwater fish

## State Level:

NSGLC has been working region by region

- Great Lakes and Southeast - complete
- Other regions in progress

# PFAS SOURCES IN THE ENVIRONMENT





## PFAS contamination in the U.S. (March 5, 2026)



- Drinking Water**  
ABOVE PROPOSED LIMIT
- Drinking Water**  
BELOW PROPOSED LIMIT
- Military Sites**
- Other Known Sites**

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info

<https://www.ewg.org>



Bahamian Mapbox © OpenStreetMap Improve this map

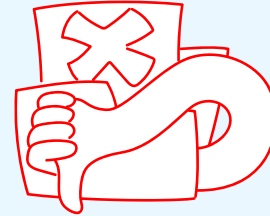
# REGULATORY APPROACHES

- Maximum contaminant levels (regulatory) for drinking water
- Health-based values (guidance) for drinking water
- Hazardous substance designations
- Surface and Groundwater Protections
- Product restrictions (e.g., firefighting foam, packaging)
- Food consumption advisories
- Biosolids

# Chart Attributes



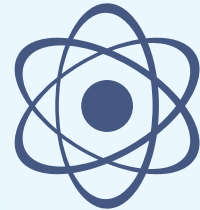
Passed Legislation



Failed Legislation



Pending Legislative



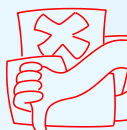
Agency Action

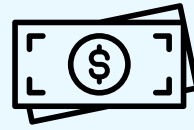
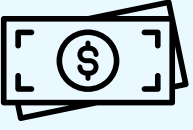
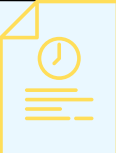
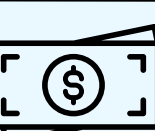
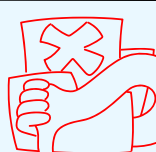
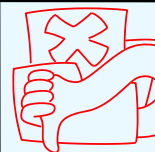
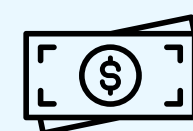
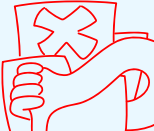


College Partnership



Appropriations

| Key                                                                                   |                     |
|---------------------------------------------------------------------------------------|---------------------|
|    | passed legislation  |
|    | failed legislation  |
|    | pending legislative |
|    | agency action       |
|  | college partnership |
|  | Appropriations      |

|                           | AL                                                                                  | GA                                                                                    | FL                                                                                                                                                                                                                                                                | NC                                                                                                                                                                                                                                                          | SC                                                                                                                                                                                                                                                             |
|---------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Class B Firefighting Foam |                                                                                     |    |                                                                                                                                                                                |    |                                                                                                                                                                             |
| Drinking Water MCL        |                                                                                     |                                                                                       |                                                                                             |                                                                                                                                                                          |                                                                                                                                                                             |
| Drinking water            |    |    |                                                                                                                                                                                |    |                                                                                          |
| Surface Water             |                                                                                     |    |                                                                                             |    |                                                                                                                                                                             |
| Ground Water              |   |   |                                                                                           |                                                                                     |    |
| Fish Advisories           |  |                                                                                       |                                                                                                                                                                                                                                                                   |                                                                                                                                                                        |                                                                                                                                                                           |
| Consumer Products         |                                                                                     |  |                                                                                                                                                                              |                                                                                   |                                                                                                                                                                                                                                                                |
| Hazardous Substance       |                                                                                     |                                                                                       |    |                                                                                                                                                                        |                                                                                                                                                                                                                                                                |

SOUTHEAST



# Southeastern States' Responses to PFAS

An overview of current  
state policies and agency  
actions addressing PFAS

July 16, 2025

[Current State Policies](#)

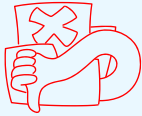
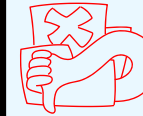
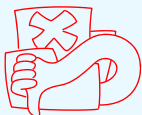
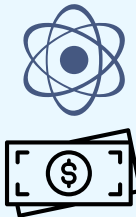
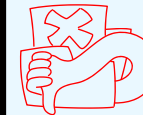
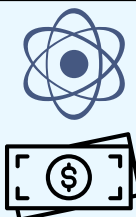
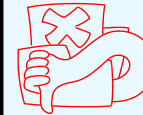
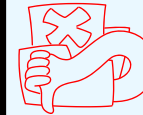
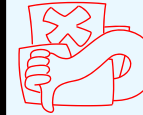
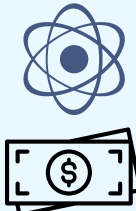
[State Agency Actions](#)

[Proposed Legislation](#)

[Additional Resources](#)

[Key Terms Defined](#)



|                                   | IL                                                                                                                                                                      | IN                                                                                                                                                                                                                                                       | MI                                                                                                                                                                                                                                                          | MN                                                                                                                                                                                                                                                                | NY                                                                                                                                                                                                                                                                                                                                              | OH                                                                                                                                                                      | PA                                                                                                                                                                                                                                                                                                                                              | VT                                                                                                                                                                                                                                                          | WI                                                                                                                                                                          | NSGLC<br>Draft<br>6/16/26 |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Class B<br>Firefighting Foam      |                                                                                        |    |    |                                                                                             |                                                                                        |   |                                                                                                                                                                           |                                                                                       |       |                           |
| Drinking Water MCL                |                                                                                        |                                                                                      |                                                                                       |                                                                                                                                                                                |                                                                                                                                                                           |   |                                                                                                                                                                           |                                                                                       |       |                           |
| Drinking Water                    |       |                                                                                                                                                                       |    |                                                                                             |     |                                                                                      |     |    |       |                           |
| Surface Water                     |                                                                                                                                                                         |                                                                                                                                                                       |                                                                                       |                                                                                             |                                                                                                                                                                                                                                                              |                                                                                      |                                                                                                                                                                                                                                                                                                                                                 |                                                                                       |       |                           |
| Wastewater Facilities             |   |                                                                                                                                                                       |                                                                                                                                                                        |    |                                                                                                                                                                       |                                                                                    |                                                                                                                                                                                                                                                            |                                                                                   |   |                           |
| Public Health<br>or Biomonitoring |                                                                                                                                                                         |                                                                                   |                                                                                   |                                                                                         |                                                                                                                                                                       |                                                                                                                                                                         |                                                                                                                                                                       |                                                                                                                                                                                                                                                             |   |                           |
| Consumer Products                 |   |                                                                                                                                                                                                                                                          |                                                                                                                                                                        |    |                                                                                                                                                                       |                                                                                    |                                                                                                                                                                                                                                                            |                                                                                   |                                                                                        |                           |
| Hazardous<br>Substance/Cleanup    |                                                                                      |                                                                                                                                                                     |                                                                                   |                                                                                         |                                                                                                                                                                       |                                                                                                                                                                         |                                                                                                                                                                       |                                                                                                                                                                                                                                                             |   |                           |

Key

 passed legislation

 failed legislation

 pending legislative

 agency action

 college partnership

 Appropriations

# GREAT LAKES



## Comparative Analysis of State Regulation of PFAS in the Great Lakes and Lake Champlain Regions



- Comparative Analysis
- Legal Scans and Compilations
- Case Studies:
  - Amara's Law: Minnesota's Consumer Products Law
  - Biosolids

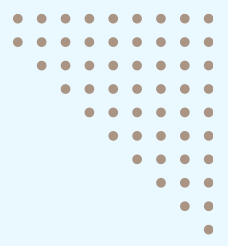
<https://nsglc.olemiss.edu/projects/greatlakespfas/index.html>

# FIREFIGHTING ACTIONS

- All states in GL region except PA and Georgia have provisions related to aqueous film forming foams (AFFF).
- 4 main types of bans: 1) use, 2) training, 3) testing, 4) manufacturing, sale, and distribution.
  - Each of these bans can be with or without exceptions.
- Some states have notification requirements, AFFF collection programs & additional programs.



# GREAT LAKES DRINKING WATER STANDARDS



| State                     | PFOS                          | PFOA              | PFNA                 | PFHxA          | PFHxS             | PFBS    | HFPO-D<br>A | PFHpA            |
|---------------------------|-------------------------------|-------------------|----------------------|----------------|-------------------|---------|-------------|------------------|
| MI<br>(2020)              | 16 ppt                        | 8 ppt             | 6 ppt                | 400,000<br>ppt | 51 ppt            | 420 ppt | 370 ppt     |                  |
| NY<br>(2020)              | 10 ppt                        | 10 ppt            |                      |                |                   |         |             |                  |
| PA <sup>1</sup><br>(2023) | 18 ng/L                       | 14 ng/L           |                      |                |                   |         |             |                  |
| VT <sup>2</sup><br>(2020) | 0.00002<br>0 mg/L<br>(20 ppt) | 0.00002<br>0 mg/L | 0.0000<br>20<br>mg/L |                | 0.00002<br>0 mg/L |         |             | 0.000020<br>mg/L |
| WI <sup>3</sup><br>(2022) | 70 ppt                        | 70 ppt            |                      |                |                   |         |             |                  |
| EPA*<br>(2024)            | 4 ppt                         | 4 ppt             | 10 ppt               |                | 10 ppt            |         | 10 ppt      |                  |

<sup>1</sup>The PA MCL also applies to bottled water.

<sup>2</sup>The VT MCL for any combination of its regulated PFAS is also 0.000020 mg/L or 20 ppt. The standards also apply to Imported Bottled Water Systems.

<sup>3</sup>The WI MCL applies to each contaminant individually and combined.

\*The U.S. EPA has also decided to regulate mixtures containing two or more of PFHxS, PFNA, HFPO-DA, and PFBS by using a hazard index.

# FEDERAL DRINKING WATER STANDARDS UPDATE

- EPA proposed changes to PFAS drinking water rule - May 18, 2026
- #1 - PFOA and PFOS compliance date moved to 2031
  - #2 - Rescission of all other standards.
    - For now, all standards are in place and still part of litigation
  - Public comment on both proposals accepted until July 20, 2026
  - Public hearing on July 7, 2026
  - Details on EPA website

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

# CLEAN WATER ACT

- September 2024- EPA published final science-based water quality concentrations for 10 PFAS.
- Levels represent the highest concentrations of pollutants in surface water that would allow fish and other aquatic species to live, grow, and reproduce.
- The water quality criteria and benchmarks, are not regulatory and are not required.
  - States and Tribes can consider using them to develop water quality standards.

**Table 1. Final Recommended Freshwater Aquatic Life Water Quality Criteria for PFOA and PFOS**

| Criteria Component | Acute Water Column (CMC) <sup>1</sup> (mg/L)                 | Chronic Water Column (CCC) <sup>2</sup> (mg/L)               | Invertebrate Whole-Body (mg/kg ww <sup>3</sup> ) | Fish Whole-Body (mg/kg ww <sup>3</sup> ) | Fish Muscle (mg/kg ww <sup>3</sup> ) |
|--------------------|--------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------|------------------------------------------|--------------------------------------|
| PFOA Magnitude     | 3.1                                                          | 0.10                                                         | 1.18                                             | 6.49                                     | 0.133                                |
| PFOS Magnitude     | 0.071                                                        | 0.00025                                                      | 0.028                                            | 0.201                                    | 0.087                                |
| Duration           | 1-hour average                                               | 4-day average                                                | Instantaneous                                    | Instantaneous                            | Instantaneous                        |
| Frequency          | Not to be exceeded more than once in three years, on average | Not to be exceeded more than once in three years, on average | Not to be exceeded                               | Not to be exceeded                       | Not to be exceeded                   |

<sup>1</sup> Criterion Maximum Concentration.

<sup>2</sup> Criterion Continuous Concentration.

<sup>3</sup> Wet Weight.

# SURFACE WATER

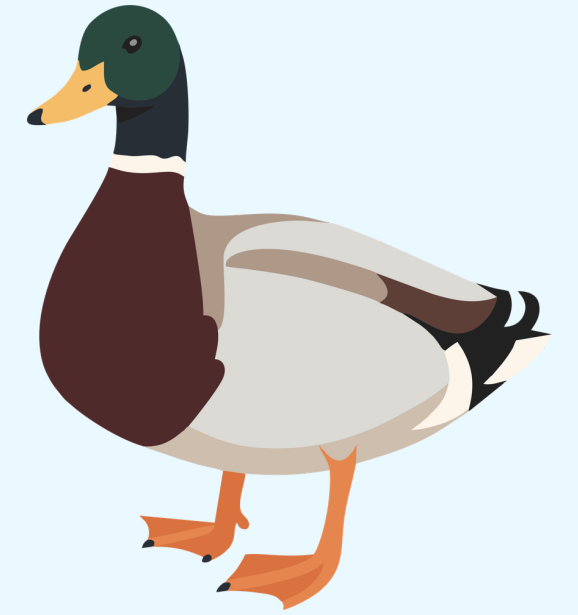
- NPDES Limits: Trump administration withdrew Biden draft effluent limitations in January 2025.
  - Announced intent to draft its own effluent limitation guidelines
- State Standards: 4 in region states have taken steps to regulate PFAS in surface water.
  - MI - water quality values
  - MN - water quality standards
  - NY - water quality guidance values
  - WI - water quality standards
  - VT - draft 2020 standards



# CONTAMINANTS TO MONITOR IN FISH AND SHELLFISH ADVISORY PROGRAMS EPA - JULY 2024

- “Contaminants to Monitor for Advisories” - EPA/other federal agencies have released measures oral toxicity in humans (reference dose, cancer slope factor)
  - Perfluorodecanoic acid (PFDA)
  - Perfluorohexane sulfonic acid (PFHxS)
  - Perfluorononanoic acid (PFNA)
  - Perfluorooctanoic acid (PFOA)
  - Perfluorooctane sulfonic acid (PFOS)
- “Contaminants to Monitor to Watch” - EPA/other federal agencies have not yet released assessments of the effects on human health. States should monitor to see if accumulating in fish in local waters
  - Perfluorodecanesulfonic acid (PFDS)
  - Perfluorododecanoic acid (PFDoA)
  - Perfluoroheptanesulfonic acid (PFHpS)
  - Perfluorooctanesulfonamide (PFOSA)
  - Perfluorotetradecanoic acid (PFTeDA)
  - Perfluorotridecanoic acid (PFTTrDA)
  - Perfluoroundecanoic acid (PFUdA, PFUnA, PFUnDA)

# FOOD - GREAT LAKES



- Fish - Most states in the region are issuing some type of fish advisory related to PFAS.
- Ohio and Vermont are currently only sampling for PFAS and have yet to issue an advisory.
- Deer - Michigan and Wisconsin
- Waterfowl - Wisconsin
- Aquatic & Semi-Aquatic Species - Michigan



# GREAT LAKES FISH CONSORTIUM



- Membership includes 8 U.S. states bordering the Great Lakes and the Ontario Ministry of the Environment and Climate Change and Great Lakes Indian Fish and Wildlife Commission
- Current mandates:
  - Provide the primary forum for Great Lakes Fish Advisory Programs to collaborate on generating data for and guidance on developing fish consumption advisories
  - Share and review data on fish contaminants
  - Identify and share assessment methods, and promote consistency of health risks and benefits assessments utilized by members to develop fish consumption advice
  - Share and coordinate approaches for health education and community engagement

# GREAT LAKES FISH CONSORTIUM

## 2019 Consortium Guidance Levels of PFOS in Fish and Corresponding Meal Advice Categories for all Populations

| PFOS in Fish (µg/kg) | Meal Frequency |
|----------------------|----------------|
| ≤ 10                 | Unrestricted   |
| > 10-20              | 2 meals/week   |
| > 20-50              | 1 meal/week    |
| > 50-200             | 1 meal/month   |
| > 200                | DO NOT EAT     |

## 2025 PFOS Updated Consortium Best Practice Fish Consumption Guidelines for all Populations

| PFOS in Fish Filet (ng/g) | Meal Frequency       |
|---------------------------|----------------------|
| 0 – 2.5                   | 4 or More Meals/Week |
| > 2.5 – 5                 | 2 meals/week         |
| > 5 - 10                  | 1 meal/week          |
| > 10 - 40                 | 1 meal/month         |
| > 40                      | DO NOT EAT           |

# **Danger in the Water: “Forever Chemicals” Have Contaminated Fish in the Cape Fear River**

The North Carolina Department of Health and Human Services has released advisories on limits for the consumption of fish from the middle and lower Cape Fear River due to the presence of PFAS. In some cases, the department recommends no consumption whatsoever.

September 18, 2023 | [Dave Shaw](#) | 3-min. read

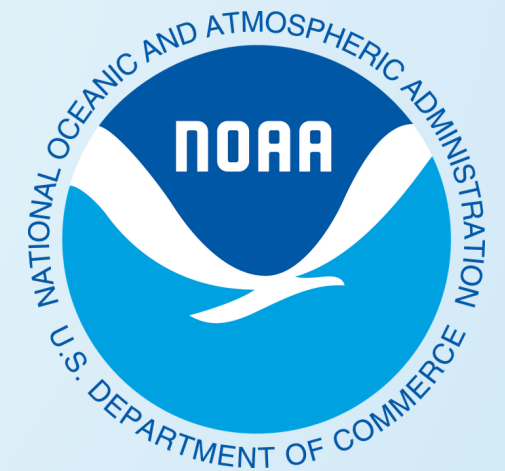
# QUESTIONS?



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**Thanks to our Project Funders!**



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