

Maine DEP  
PFAS Regulatory Update  
Bureau of Water Quality

ENR  
February 15, 2023


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MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION  
*Protecting Maine's Air, Land and Water*

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## PFAS - Water Program Updates

- Sampling:
  - Fish Tissue
  - Ambient
  - Effluent
- EPA Actions
- DEP Actions
- L.D. 1911 Septage Capacity Report



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## Fish Tissue and Ambient Sampling



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## PFAS in surface water

- Surface Water Ambient Toxics (SWAT) program
  - Sample fish, shellfish, and surface water for toxics
  - For freshwater fish, look to Maine CDC for Fish Tissue Action Level (FTAL) **(3.5 parts per billion – PFOS)**
    - Applies to freshwater and anadromous fish
    - One fish meal per week
  - For surface water, look to Maine's interim drinking water standard **(20 parts per trillion - PFAS 6)**



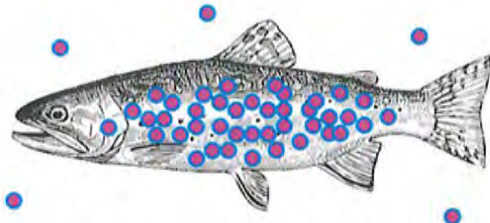
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## PFOS Bioaccumulation

Parts per Trillion in the Water




Parts per Billion in Fish

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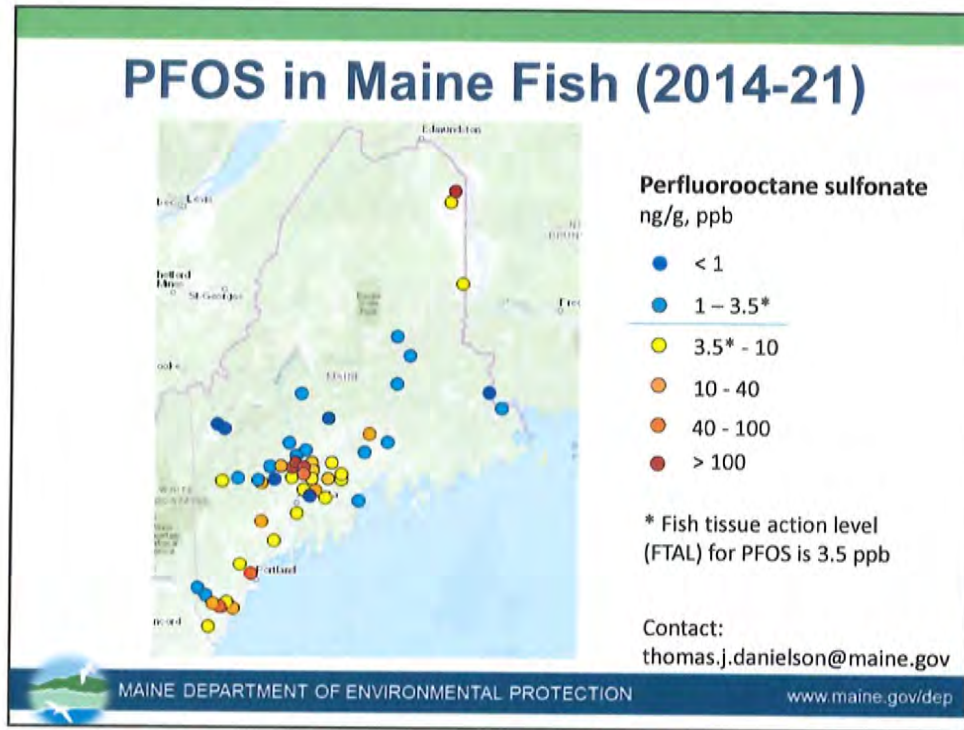
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## Fish Consumptions Advisories

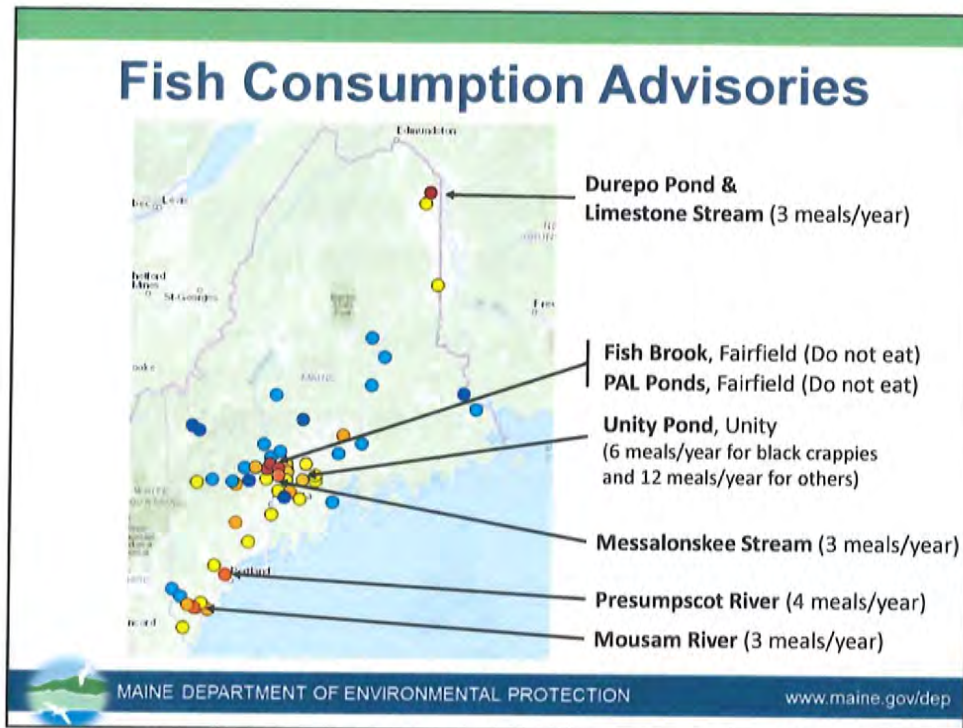
- Maine CDC issues fish consumption advisories for freshwater and anadromous fish
- Statewide mercury guidelines
- Site specific guidelines for **PFOS**, PCBs, Dioxins, and DDT for some waterbodies

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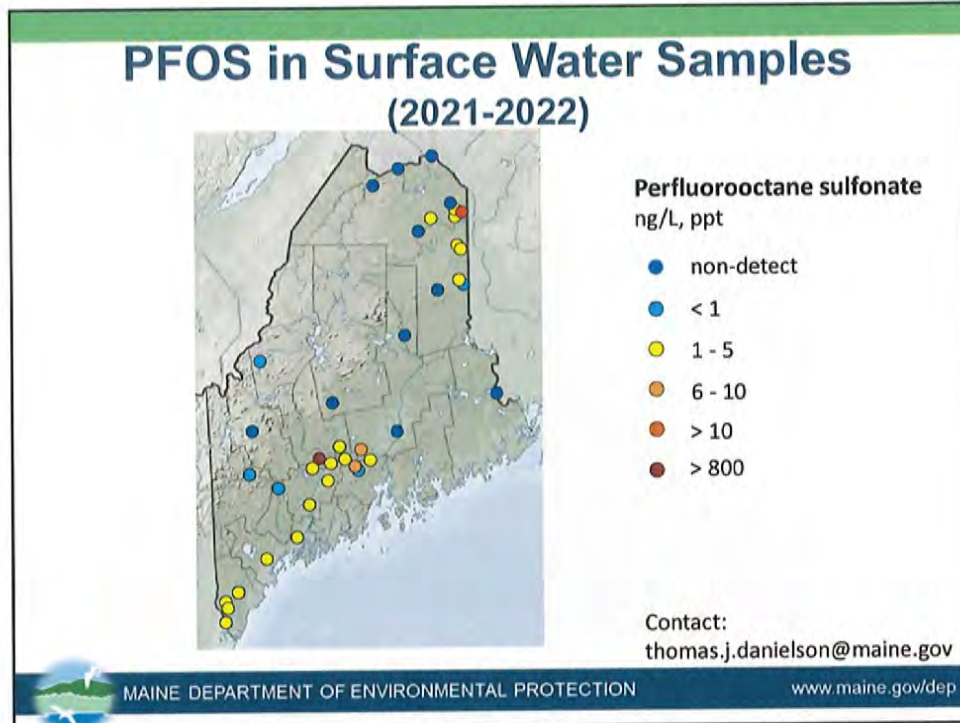
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### Marine Samples - PFOS 2019 - 2021

- Fish, shellfish, lobster
- All samples below 3.5 ppb
  - 3.5 ppb MCDC FTAL does not apply to marine species
  - 2022 data in process

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## Effluent Sampling



Greater Augusta Utilities District

Google earth

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## L.D. 1911

- P.L. 2021, ch. 641 An Act to Prevent the Further Contamination of the Soils and Waters of the State with so-called Forever Chemicals.
- Authorized DEP to require effluent testing for PFAS via written notification.

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## Effluent Sampling

- DEP letter in September 2022
  - First samples in October
  - 1 X month for 10 months
- POTWS: (N = 105) (funded by DEP – MRJP \$)
  - Toxics program
  - Spray irrigation (plus groundwater)
- Certain Industrial/Commercial Facilities:(N = 19)



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## Effluent Sampling - Results

- Initial results are what we expected.
- PFAS present in almost all effluent samples in low to mid ppt range.
- Skewed to low end with some outliers.
- Plan to have report on DEP web site soon.
  - QA review first.
- Groundwater data at POTW spray sites <20ppt.



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# EPA Actions



The logo of the United States Environmental Protection Agency (EPA) is centered on the slide. It features a circular emblem with a blue border containing the text "UNITED STATES ENVIRONMENTAL PROTECTION AGENCY". Inside the circle is a stylized green plant with three leaves and a blue sun or moon above it.

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## EPA Actions

### PFAS and Wastewater Discharges

- Technology based limits (ELGs)
  - Technologically and financially achievable for a category of dischargers
- Water quality-based limits
  - Protect aquatic life and human health
  - Does not consider cost or technology

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## Technology Based Limits (ELGs)

- PFAS formulators/processors (2024)
- Landfills (warranted)
- Textile mills (study)
- Pulp and Paper (study)
- Airports (study)
- POTW influent (study) (to help POTWs assess the need for control measures at the source)



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## Water Quality Criteria (WQC)

- Aquatic Life (draft 2022)
  - Fish & Invertebrates
    - Acute: to prevent death
    - Chronic: to protect growth and reproduction
- Human Health (draft 2024)
  - Conditions in a water body that are not expected to cause adverse effects to human health.
- WQC do not consider treatment technologies or cost.




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## DEP Actions




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## Need for Wastewater Limits? Process

- Once EPA promulgates Human Health Criteria:
  - Rulemaking – Ch. 584 Toxics Rule.
  - Permit renewals/modifications to establish limits if/where needed.
  - Same general approach as other toxic substances.
  - Compliance schedules as needed.
  - Funding for treatment?

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## Need for Wastewater Limits? Approximate Timeline

- 2022 – 2023 - Sample ambient & effluent.
- 2024 late - EPA draft Human Health Criteria.
  - DEP comments based on Maine data
- 2025 late - DEP Rulemaking.
- 2026 – 2027 - Establish permit limits as needed with compliance schedules as needed.
- 2031 – 2032 - End dates for schedules of compliance.



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## P.L. 2021, ch. 641 (L.D. 1911)

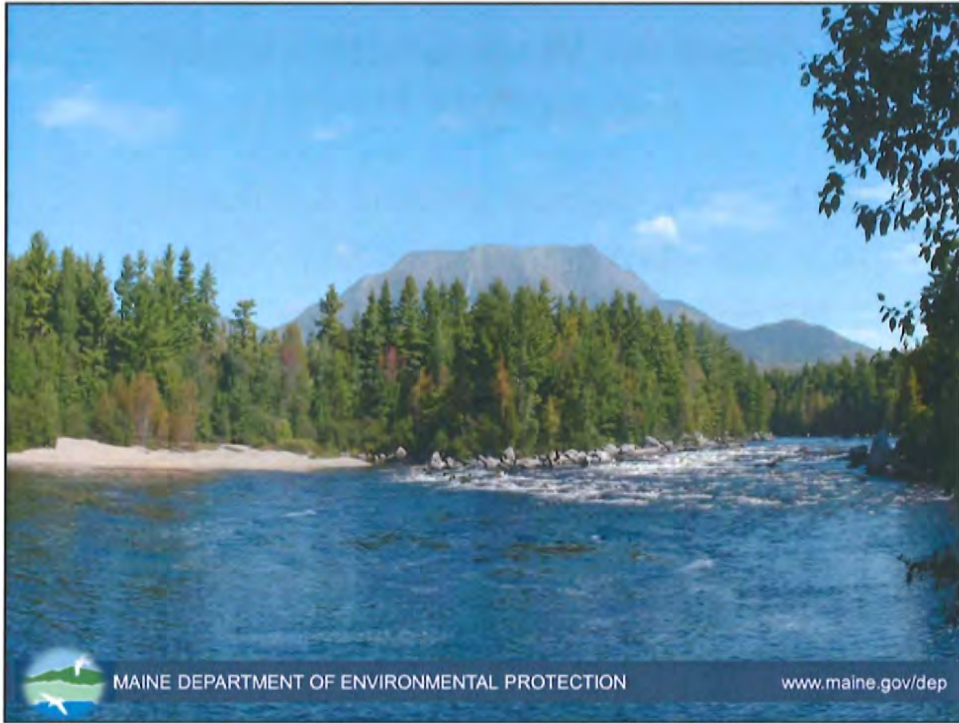
- Report on the Land Application of Septage.
- Capacity for the disposal of septage at POTWs if land spreading of septage was banned.
- Separate briefing.



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