# PFAS in Atlantic Canada – A Jurisdictional Review from the Regulators

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October 6, 2025

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# Overview of Presentation

1. ACWWA Government Affairs Committee
2. What is PFAS?
3. Health Canada Guideline Changes
4. Implications of Guideline Changes
5. Regulatory programs in each jurisdictions
6. Conclusions and Questions

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# ACWWA Government Affairs Committee

## Purpose

Act as a liaison between the provincial and municipal levels of government and the ACWWA, to promote cooperation and awareness of government programs and communicate to ACWWA membership

## Committee

- Committee consists of 6 members:
  - One representative from each of the 4 Atlantic Provinces
  - One utility representative
  - One Indigenous representative
  - Also, a Committee Chair and a Director
- Committee meets 3 times per year

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# What is PFAS?

- Per-and polyfluoroalkyl (PFAS) are a large class of human-made substances
- They are known as forever chemicals, as they take a very long time to break down in the environment
- PFAS are used in many industrial and consumer products, and are frequently detected in the environment near sites where fire-fighting foams have been deployed or in landfills containing PFAS products
- Emerging scientific research indicates that exposure to certain PFAS may be linked to adverse health effects

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# Health Canada Guideline Changes

- Health Canada has identified these impacts and continues to work on updating the federal guideline, in the *Guidelines for Canadian Drinking Water Quality*
- In August 2024, Health Canada revised its guidelines by rescinding the maximum acceptable concentrations for PFOA and PFOS, and published a new objective of 30 ng/L for the total sum of 25 PFAS parameters
- Health Canada recommends keeping concentrations as low as reasonably achievable in drinking water to minimize health risks

# Implications of Guideline Changes

- Regulators in Atlantic Canada have had to adapt to this guideline change in their respective jurisdictions, as each jurisdiction applies Health Canada guidelines differently

- The purpose of this presentation is to give a general overview of how each Atlantic province plans to apply this guideline change in their respective regulatory programs

- Caveat:
  - This presentation is given on behalf of the ACWWA GA committee
  - **Purpose is for information sharing only**
  - Cannot answer specific questions on material, but can take down questions for discussion with respective jurisdiction

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# New Brunswick

- Saint John and Moncton participated in Health Canada's (HC) 2023 pilot study involving water treatment plants
  - HC measured PFAS concentrations in source and treated water samples
  - Results were below the HC PFAS objective
  - New Brunswick is not aware of future monitoring by HC
- There are no impacts to provincially regulated drinking water systems as NB has no plans to implement HC's PFAS objective at this time
- Province-wide project focused on sampling and analyzing municipal drinking water for non-regulated parameters, such as PFAS
  - Lead by NB Research and Productivity Council (RPC)
  - Participation is voluntary
  - Currently Underway

# Nova Scotia

**Current Status**

- As of August 2024, PFAS testing is voluntary for municipal drinking water supplies.
- Municipalities are encouraged to test for PFAS and report detections.
- Detections are assessed on a case-by-case basis, considering site-specific factors and potential health risks.
- The Department of Environment and Climate Change (ECC) provides technical guidance, regulatory direction, and ongoing support to municipalities to assist with PFAS monitoring and response.

**Application of Guidelines**

- PFAS testing is not mandatory while Health Canada's Maximum Acceptable Concentration (MAC) is under development.
- The province applies the Health Canada interim objective of 30 ng/L for the sum of 25 PFAS compounds on a voluntary basis.

**Impact of New Health Canada Guidance**

- The withdrawal of MACs for PFOS and PFOA has removed previous regulatory testing requirements.

**Future Direction**

- Under Nova Scotia's current regulatory framework, any MAC established by Health Canada is automatically adopted, and the province will establish appropriate testing requirements for municipal drinking water supplies to ensure compliance.
- Continued alignment with Health Canada guidance will inform future regulatory updates and risk management strategies.

# Newfoundland and Labrador

- PFAS baseline sampling program for public drinking water systems launched in 2025.
- Samples collected by Water Resources Management Division (Department of Environment and Climate Change) and analyzed by Bureau Veritas Laboratories against Health Canada objectives.
- Quality assurance includes blank samples (Lab-provided PFAS-free water) to detect any contamination during sampling, transport, or analysis.
- Multi-year program, phased approach:
  - Year 1: High-risk sites prioritized (e.g., near landfills, firefighting locations, industrial areas).
  - Future years: Expand coverage to low-risk sites.
- Phased design ensures efficient resource use, focusing first on highest-priority areas while supporting long-term protection of public health and water quality.

# Newfoundland and Labrador

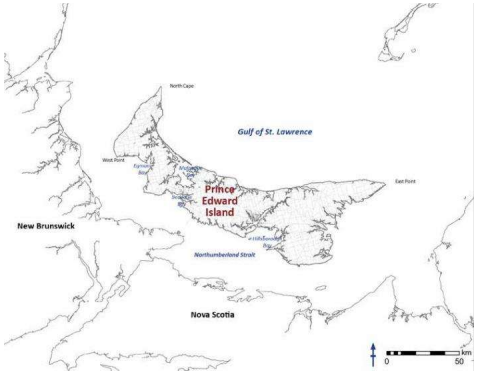
- **Preliminary Results:**
  - Sampling program has just begun – approximately 30 public systems sampled to date.
  - All results so far are below the laboratory's Reportable Detection Limit (RDL).
  - All field blanks were also below the RDL, confirming the sampling protocol is effective and minimizing cross-contamination risks.
  - Program will continue throughout the year, with a target of ~75 public systems sampled in 2025.

- **Expansion of the Program in the Summer of 2025 due to Wildfires:**
  - Following wildfires in summer 2025, concerns were raised about potential PFAS impacts from firefighting activities.
  - Program was expanded to include private wells, semi-public water systems, and public drinking water systems in affected areas.
  - Testing is ongoing, with sampling expected to continue into Fall 2025.

# Prince Edward Island

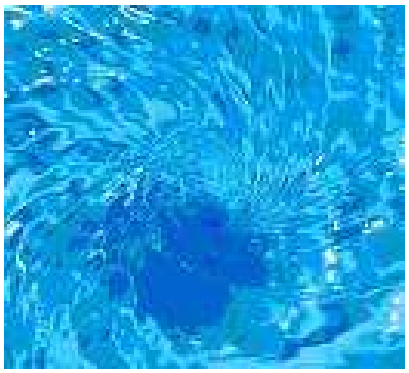
How is the H.C.'s Objective being applied in the provincial regulatory program?

- Started taking stock in 2023 to obtain a baseline
- All results are being shared with the owners
- We are seeing owners wanting to meet H.C. Objective
- We are watching closely H.C. direction
- We will take advice from H.C direction when the new Guideline is established.



# PEI Drinking Water Sampling Locations

- Sampling Started in 2023 and continues
  - Total of 103 sites sampled with a total of 126 samples
- Results:
  - 1 – Municipal System with numbers above Objective
  - Several Homes adjacent to C & D site (Range 66.1 to 716 ng/l
  - 2 Schools (slightly above H.C. objective)
  - 1 Home near airport (100’s ng/l)



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# PEI Industrial Water Sampling Locations

- Industrial groundwater sampling involves the collection of non-potable water from groundwater monitoring wells at industrial sites across Prince Edward Island. Due to the nature of PFAS accumulation, these samples are expected to contain higher concentrations of PFAS compared to baseline drinking water levels in the province.
- Includes:
  - Landfill
  - Construction and Demolition Sites
  - Etc.

Picture from Peicanada.com

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# PEI Industrial Water Sampling Locations

- Sampling Started in 2023 and continues
  - Total of 9 sites sampled with a total of 24 sample locations
- Results
  - Non detect to concentrations in the 1,000's ng/l

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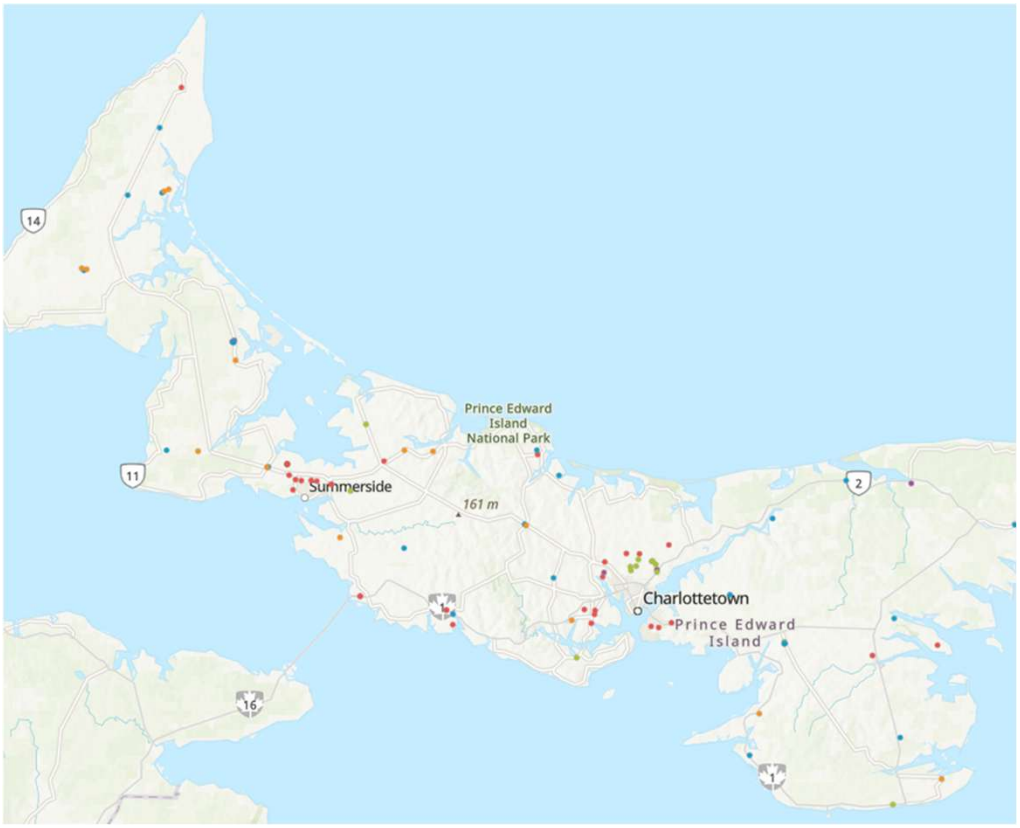
# Results of Baseline Sampling

## Close to 98% sites below objective across PEI

*Excluding Targeted Site Sampling

[PEI Water Registry]

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# Halifax Water

- Halifax Water owns and operates seven (7) municipal public drinking water supplies
- No regulatory requirement currently exists in Nova Scotia to sample for PFAS (voluntary)
- Halifax Water conducts annual PFAS sampling at all seven (7) supplies
  - Bigger facilities (Pockwock and Lake Major) are sampled twice per year
- Preliminary results are all below Health Canada's new guideline of 30 ng/L for the total sum of 25 PFAS parameters

# AFNWA

- The AFNWA does not currently conduct sampling for PFAS
- At present, there is no legislated or enforceable regulatory framework specifically guiding Indigenous water treatment and distribution systems.
- AFNWA operates under a Board-approved Interim Drinking Water Regulatory Guidance and Compliance Standard, which mirrors the Nova Scotia Drinking Water Regulations and aligns with the Guidelines for Canadian Drinking Water Quality.
- These standards are reviewed annually, and the inclusion of PFAS will be discussed and addressed as part of this review process.

# AFNWA

- AFNWA is discussing the best path forward for their communities, including:
  - Conducting a comprehensive risk assessment to determine potential exposures to PFAS.
  - Assessing available treatment options for PFAS.
  - Adding PFAS to the annual paired sampling requirements.
  - Including PFAS in quinquennial (five-year) sampling protocols.

# Conclusion & Summary

- Per-and polyfluoroalkyl (PFAS) are a large class of human-made substances
- Exposure to certain PFAS may be linked to adverse health effects
- In August 2024, Health Canada revised its guidelines by rescinding the maximum acceptable concentrations for PFOA and PFOS, and published a new objective of 30 ng/L for the total sum of 25 PFAS parameters
- Regulators in Atlantic Canada have had to adapt to this guideline change in their respective jurisdictions, as each jurisdiction applies Health Canada guidelines differently
- Overview of how each jurisdiction applies this guideline change in their respective regulatory programs

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# Thank you!

- ACWWA and Government Affairs Committee Members
  - Morley Foy
  - Sylvie Morton
  - Chris Blanchard
  - Greg Cummings
  - James MacKinnon
  - Mike Abbott
  - Clara Shea

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# Questions?