



NORTH
Dakota

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NDDEQ PFAS Workgroup

PFAS Workgroup

ND Dept. of Environmental Quality

Division of Water Quality, Division of Waste Management, and Division of Municipal Facilities

PFAS - The Beginnings at NDDEQ

- 2009
 - EPA issued a Health Advisory Level (HAL)
 - PFOS = 200 ppt
 - PFOA = 400 ppt
- 2013-2015
 - Third Unregulated Contaminant Monitoring Rule (UCMR 3)
 - Monitoring for PFOS, PFOA, PFBS, PFHxS, PFHpA, and PFNA
 - Reporting levels at 30 or 40 ppt depending on the analyte
- 2016
 - EPA issued updated HAL
 - PFOS + PFOA = 70 ppt
- 2018
 - Creation of NDDEQ PFAS Workgroup

PFAS Assessment 2018

- 67 samples from sites including:
 - Drinking Water Systems
 - Fire Training Areas
 - Landfills
 - Wastewater Treatment Systems
- Analysis Method:
 - EPA 537 Rev 1.1 modified
 - 32 compounds
- Commonly detected analytes:
 - PFOA
 - PFOS
 - PFBA
 - PFHpA
 - PFHxA

PFAS Assessment 2020 - Drinking Water Only

- 56 samples
- Analysis Method
 - EPA 531.1 Drinking Water
 - 18 Analytes
- 3 trace detections

Detectable Results Summary				
Client Sample ID:				
Lab Sample ID: 32001921017-A	<u>Parameter</u>	<u>Result</u>	<u>Units</u>	
EPA 537.1	PFHxS	2.14	ng/L	J
Client Sample ID:				
Lab Sample ID: 32001921018-A	<u>Parameter</u>	<u>Result</u>	<u>Units</u>	
EPA 537.1	9CI-PF3ONS	8.33	ng/L	
Client Sample ID:				
Lab Sample ID: 32001921046-A	<u>Parameter</u>	<u>Result</u>	<u>Units</u>	
EPA 537.1	PFuNA	0.485	ng/L	J

PFAS Assessment 2021

- 109 samples from sites including:

- Drinking Water Systems
- Landfills
- Wastewater Facilities
- Industrial Facilities
- Groundwater
- Biosolids

- Analysis Methods:

- EPA Method 537.1 for drinking water samples
- PFAS by ID 36 (Minnesota approved method) for non-drinking water samples and biosolids

- Commonly detected analytes:

- PFBA
- PFHxA
- 6:2 FTS
- PFPeA
- PFOS
- PFBS
- PFOA
- PFHxS
- PFHpA

PFAS Update 2022

- EPA issued updated HAL
 - Interim
 - PFOA = 0.004 ppt
 - PFOS = 0.02 ppt
 - Final
 - PFBS = 2000 ppt
 - GenX = 10 ppt

PFAS Assessment 2023

- 178 samples from sites including:

- Landfills
- Wastewater Facilities
- Industrial Facilities
- Groundwater
- Biosolids
- Surface Water
- Fish Tissue

- Analysis Method

- EPA Draft 1633
 - 40 compounds

- Commonly detected analytes:

- PFHpA
- PFHxA
- PFOS
- PFOA
- PFPeA
- PFBS
- PFBA
- PFDA
- PFNA

Sampling Summary

- 410 samples
- Sampling sites have included:
 - Drinking Water Systems
 - Fire Training Areas
 - Landfills
 - Wastewater Facilities
 - Industrial Facilities
 - Groundwater
 - Biosolids
 - Surface water
 - Fish Tissue
- Key highlights
 - Most source drinking water systems have been tested
 - Trace or no PFAS detections
 - Various media have been sampled
 - water, soil, biosolids, fish tissue
 - Geographic coverage across North Dakota
 - PFAS has been detected in areas expected
 - Fire training areas that used AFFF
 - Landfills
 - Biosolids and wastewater

Next Steps

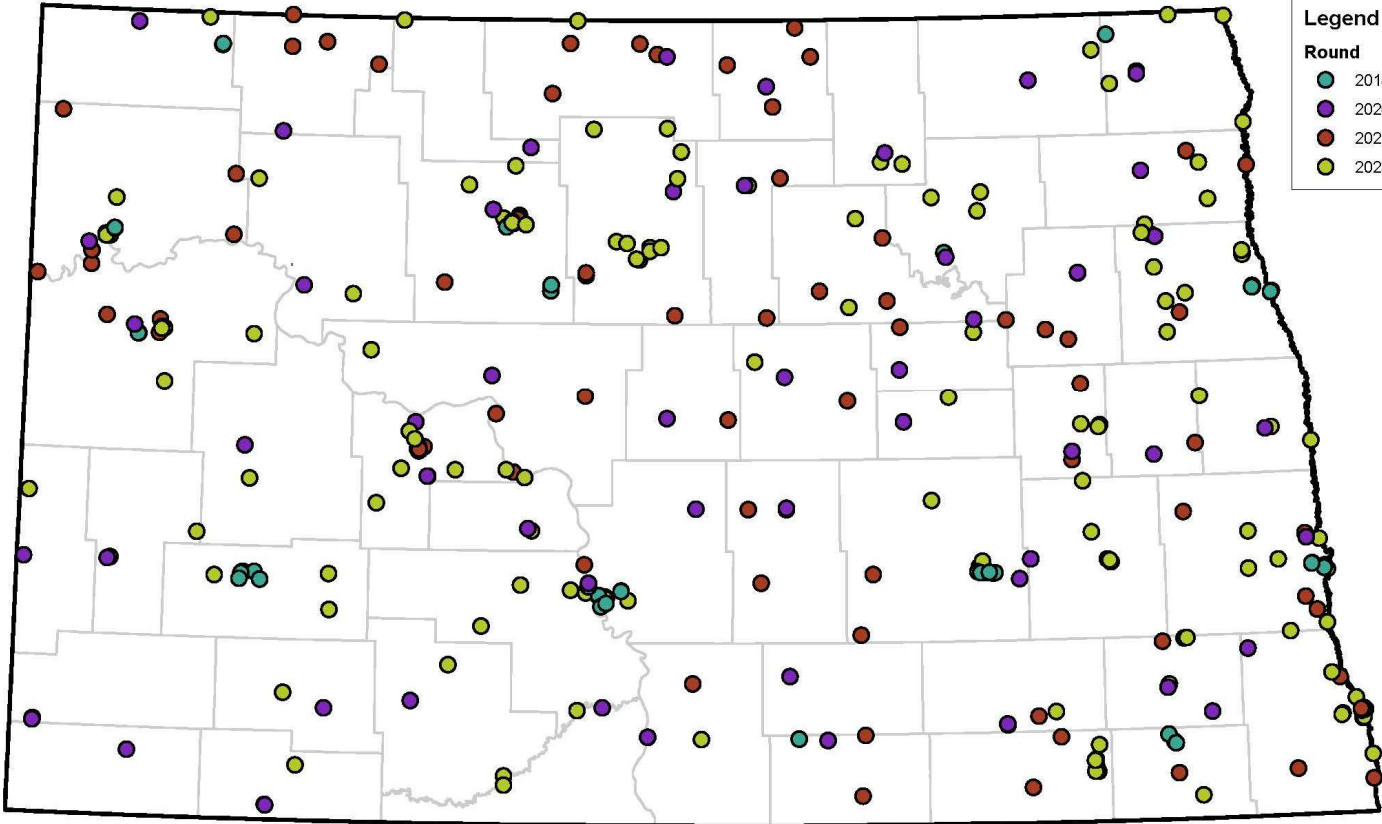
- UCMR 5
 - 2023 - 2025
- Continued Sampling with focus on:
 - Industrial Facilities
 - Biosolids
 - Fish Tissue
- Drinking Water Maximum Contaminant Level (MCL) - Proposed
 - PFOA = 4 ppt
 - PFOS = 4 ppt
 - Hazard Index = 1
 - PFNA
 - PFHxS
 - PFBS
 - GenX
- Under proposed rule, ND would not have any drinking water violations

NDDEQ Sample Sites



Legend
Round

- 2018
- 2020
- 2021
- 2023



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- Surface Water

604(b) Program

- Assessment funding available for general water quality concerns (Nutrients, E. coli, TSS) and emerging contaminants (PFAS, HABs)
 - Can also be used to assess climate resilience, environmental justice and equity concerns to inform workplan development
- Funds available annually
- Average project funding awarded ~\$20,000
- Rolling application – Contact Emilee Novak (ejnovak@nd.gov) directly
 - Best time: January – March (New funding typically available in June)

A night photograph of the Aurora Borealis (Northern Lights) over a body of water. The sky is dark with numerous stars. The aurora displays vibrant green and purple bands. The lights are reflected in the calm water below. The foreground shows the dark silhouettes of trees and bushes.

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QUESTIONS?