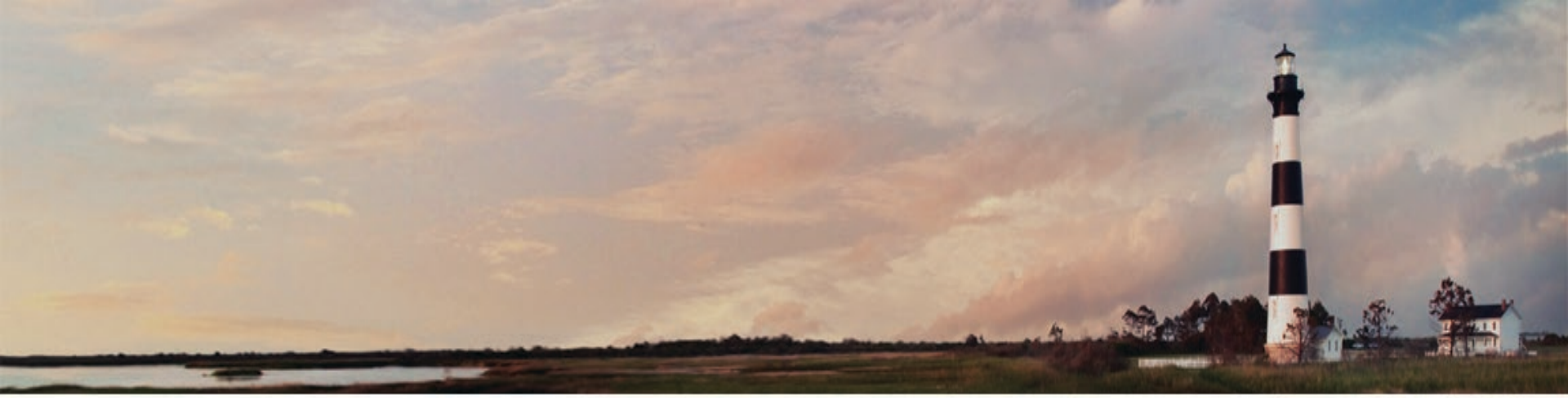

DEQ Actions Regarding EPA's proposed MCLs for PFOS and PFOA

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Deputy Director of the Division of Water Resources

April 5, 2023

Drinking Water Background

- Health advisory levels (HALs): In June 2022, EPA releases Lifetime Drinking Water HALs for PFOA, PFOS, GenX, PFBS.
    - PFOA: .004 ppt (interim)
    - PFOS: .02 ppt (interim)
    - GenX: 10 ppt (final)
    - PFBS: 2,000 ppt (final)
- These levels informed the Maximum Contaminant Level Goals or MCLGs which are not regulatory and are lower than the proposed MCLs.
- MCLs are the Maximum Contaminant Levels and are regulatory values.

Proposed MCLs

March 2023: Proposed Maximum Contaminant Levels (MCLs)
Expected to be finalized in late 2023, in effect in 2026.

Compound	Proposed MCLG	Proposed MCL (enforceable levels)
PFOA	Zero	4.0 (ppt or ng/L)
PFOS	Zero	4.0 ppt
PFNA	1.0 (unitless) Hazard Index	1.0 (unitless) Hazard Index
PFHxS		
PFBS		
HFPO-DA (GenX Chemicals)		

Proposed MCLs

The proposed rule would also require public water systems to:

- Monitor for these PFAS
  - Community and Non-Transient Non-Community
  - Entry Points (similar to SOCs, VOCs)
- Notify the public of the levels of these PFAS
  - *CCR – consumer confidence report, annually*
  - *Tier 2 PN 30-days to notify consumers level > MCL*
- Reduce the levels of these PFAS in drinking water if they exceed the proposed standards.
  - Running Annual Average

Hazard Index Calculation:

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

Water Systems in NC

- Public Water Systems (PWS)
  - Public drinking water utilities
  - Systems serve large areas, many residents
  - >5,000 total Serves >7 Million residents
  - PWS defined as > 15 connections or serves > 25 people

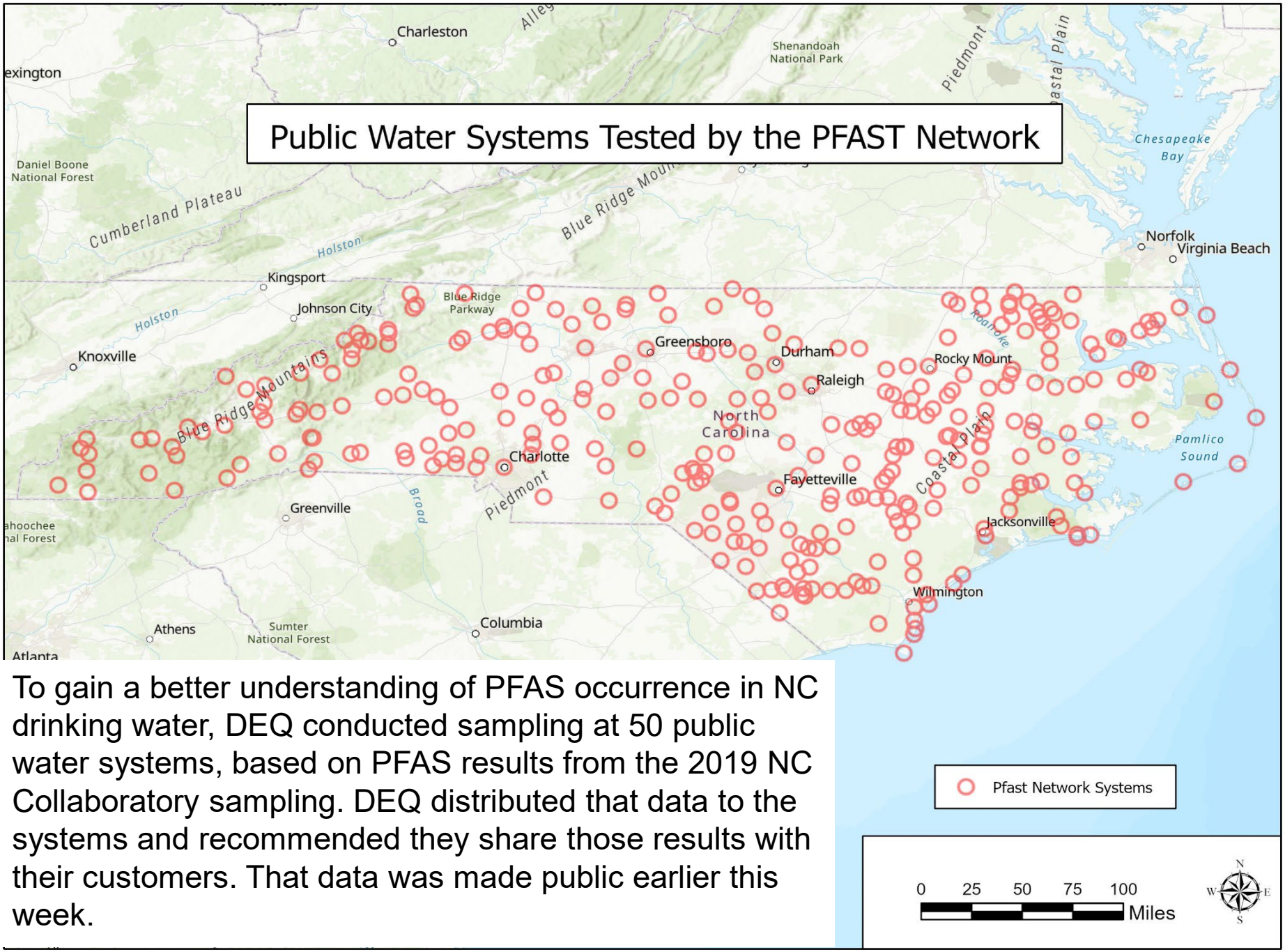
- Community Water Systems (CWS) about 1,900 total in NC

- Non-transient Non-community systems about 325 total in NC

PWS Sampling in NC

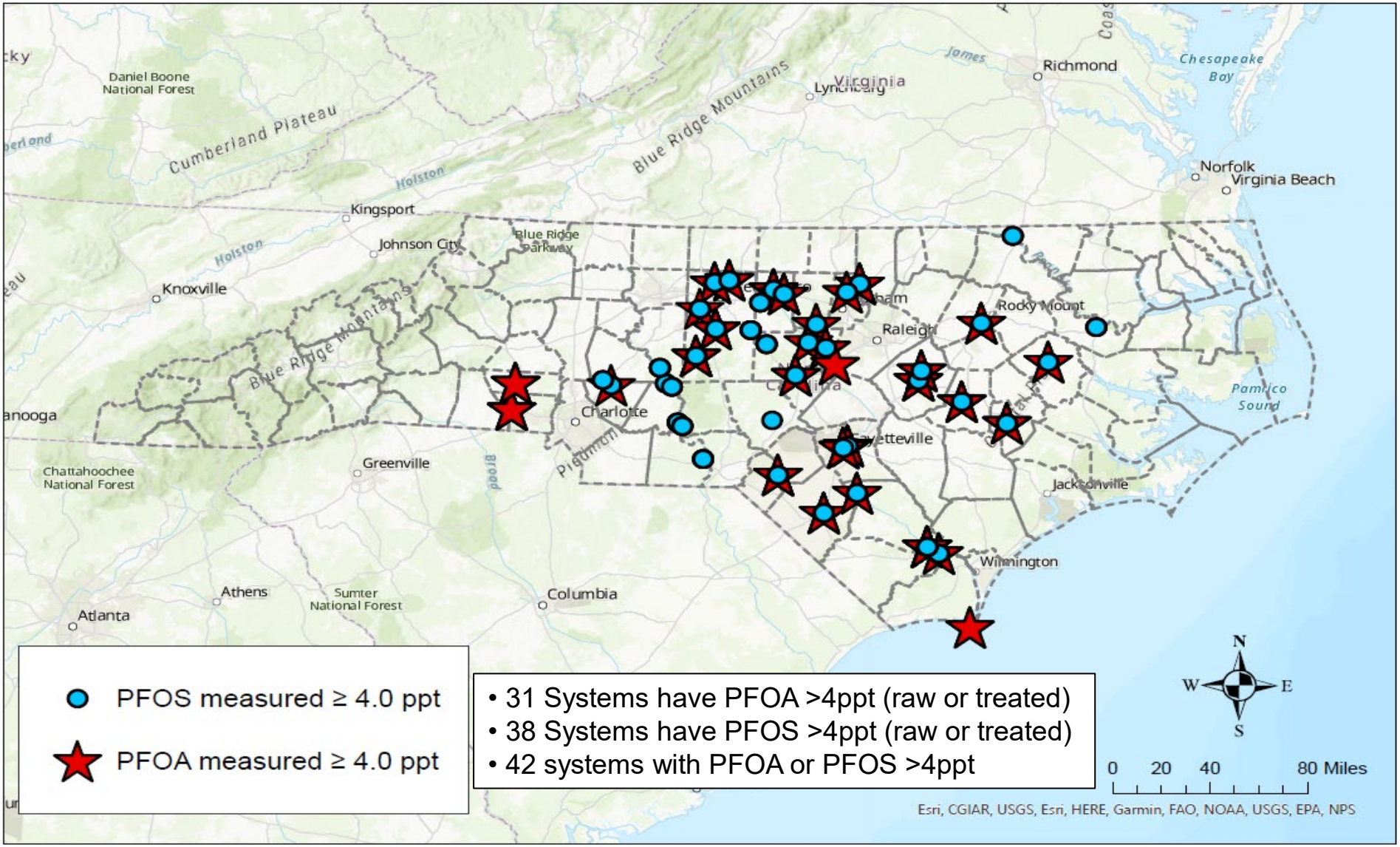
- In 2019 the PFAST Network sampled 326 PWS for PFAS
  - 50 PWS had detections above 4 ppt for PFOA and/or PFOS

- In late 2022, DEQ resampled those 50 PWS for PFOS and PFOA
  - 42 had either PFOS and/or PFOA above 4 ppt
  - 8 had either no detections or PFOA and PFOS below 4 ppt



- To gain a better understanding of PFAS occurrence in NC drinking water, DEQ conducted sampling at 50 public water systems, based on PFAS results from the 2019 NC Collaboratory sampling. DEQ distributed that data to the systems and recommended they share those results with their customers. That data was made public earlier this week.

PWS Sampling in NC



Public Water Supply PFOA/PFOS Sampling in North Carolina

Map Creation Date: 03/13/2023
Map Author: Jared Wilson
Data Sources: North Carolina Department of Environmental Quality

Continued PWS Sampling

- DEQ has developed plans to sample additional water systems to assess the levels of PFAS on a statewide scale. (some small systems are being targeted for PFAS sampling)

- DEQ will continue to provide technical assistance and support to public water systems to help identify and reduce PFAS in drinking water.

MCL process - Regulatory Timeline

- March 2023: Proposed Maximum Contaminant Levels (MCLs)
- Expected to be finalized in late 2023, in effect in 2026.

- PWS's have 3 years to come into compliance
- Compliance point is where finished water enters distribution system
- Sample quarterly and must shown an annual running average < MCL

EPA has several resources, including FAQs, on their website:

https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas or https://bit.ly/3yCGRLh

MCLs and NC

- In NC, many residents are not connected to PWS or CWS, they receive their drinking water from private drinking water wells.

- Private wells are not protected by MCLs and are not tested at the same frequency that PWS or CWS are.
  - DEQ is pursuing funding options to support these residents.

More key points:

- DEQ is working with water systems on meeting all regulatory requirements and sharing data.
- DEQ will continue to collect data from systems across the state.
- Proposed MCLs/rulemaking are a first step in concrete solutions to a problem we have only recently begun to fully understand.

What is available on DEQ website:

- This week DEQ updated its Understanding PFAS page: https://deq.nc.gov/news/key-issues/emerging-compounds/understanding-pfas
- Data gathered from late 2022 is also online: https://deq.nc.gov/news/key-issues/emerging-compounds/understanding-pfas/deq-pfas-sampling-public-water-systems
- We plan to add more sampling data as available.

Options

- DEQ has information on end-user filtration options (via DHHS) on its website. We will provide it and encourage systems to do so as well.

https://epi.dph.ncdhhs.gov/oee/pfas/PFAS_TestingFiltration.pdf

- Funding is available through state/federal government for water system upgrades and filtration.

https://deq.nc.gov/about/divisions/water-infrastructure/i-need-funding