Per and Polyfluoroalkyl Substances (PFAS)

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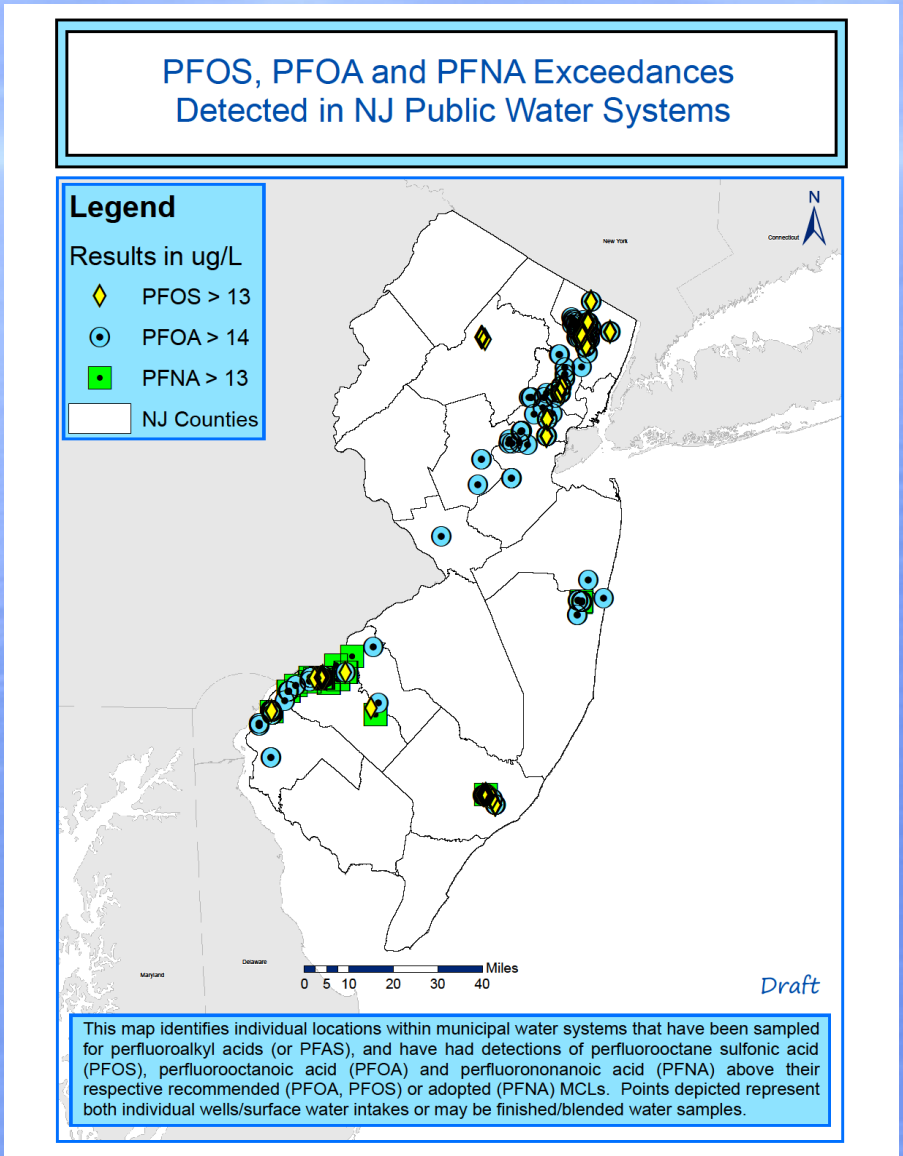
PFAS Distribution in NJ public supplies



Measures taken at many sites to reduce exposure:

- *Treatment*
- *Shutting off source well*
- *Blending*

Standards, Criteria and Regulation

PFNA

- Groundwater Quality Standard (GWQS) of 13 ng/L revised to be consistent with MCL, September 2018.
- PFNA added to the Hazardous Substance List, January 2018.
- MCL of 13 ng/L adopted, September 2018.

Standards, Criteria and Regulation

PFOA

- Drinking Water Quality Institute (DWQI) recommended MCL of 14 ng/L, March 2017.

- NJDEP Commissioner accepted the DWQI recommendation.

PFOS

- DWQI recommended PFOS MCL of 13 ng/L, June 2018

- NJDEP Commissioner accepted the DWQI recommendation.

Additional regulation under active consideration:

PFOA & PFOS

- Ground Water Quality Standards (including Interim Ground Water Quality Standards)
- Maximum Contaminant Levels
- Private Well Testing Act
- Hazardous Substance List

What are the requirements for LSRPs?

NJDEP SRWMP Contaminants of Emerging Concern guidance on SRPWM web site:

"To comply with the Technical Requirements for Site Remediation (N.J.A.C. 7:26E), all contamination, including all discharged hazardous substances, hazardous wastes, and pollutants, must be addressed. Contaminants of emerging concern, if discharged to the waters or onto lands of the State, are pollutants that must be remediated using a Licensed Site Remediation Professional (LSRP). When the remedial objective for a site is an entire site final remediation document and the site is currently or was formerly occupied by facilities that stored, handled, and used contaminants of emerging concern, LSRPs must consider these contaminants of concern during the investigation and remedial action. LSRPs must evaluate the site for potential spills and releases through air, water, and waste discharges."

https://www.nj.gov/dep/srp/emerging-contaminants

General PFAS Challenges for Investigators

- PFAS has had wide-spread historic use in many applications
- Not previously evaluated/investigated at most sites
- Highly water soluble, mobile & resistant to degradation
- Pathways of concern
  - ✓ Ground water
  - ✓ Surface water
  - ✓ Air
- Science is continuing to evolve

Remediation Requirements

- Remediation is required to address all contaminants
  - Hazardous substances
  - Hazardous waste
  - Pollutants (i.e. PFAS)
  - Evaluate/reevaluate operations and use to determine if PFAS are contaminants of concern
  - Conduct SI If a potential for discharge is identified
  - Evaluate receptors – begin immediately after discharge is confirmed
  - Note: Investigators should consider PFAS use/history/ properties when evaluation of off site receptors
  - Conduct Remedial Investigation/Remedial Actions
  - Reevaluate existing NFAs and RAOs

Resources

- NJDEP Contaminants of Emerging Concern - https://www.nj.gov/dep/srp/emerging-contaminants/

- ITRC Fact Sheets - https://pfas-1.itrcweb.org/fact-sheets/
  - Naming Conventions and Physical and Chemical Properties
  - Regulations, Guidance, and Advisories
  - History and Use
  - Environmental Fate and Transport
  - Site Characterization Considerations, Sampling Precautions, and Laboratory Analytical Methods
  - Remediation Technologies and Methods
  - Aqueous Film Forming Foam

NJDEP-SRWMP PFAS Contact

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