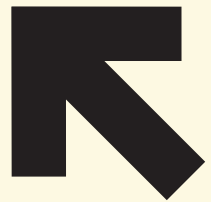


**New Jersey Department of Environmental Protection  
Division of Water Supply & Geoscience's**



# **2023/2024 Safe Drinking Water Act Regulatory Update**



**NEW JERSEY  
DEPARTMENT OF  
ENVIRONMENTAL  
PROTECTION**

# Agenda

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# Agenda (continued)

**Annual Violation Report**

**Funding**

**Licensed Operator Update**

**Monthly Reporting Forms**

**Co-Inspections**



# Agenda (continued)

**Emergencies**

**Northeast Resiliency Project**

**Area Wide Optimization Program**

**New & Upcoming Resources**

**Survey**





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# Introduction

**The Division of Water Supply & Geoscience (DWSG) works to ensure New Jersey's water supply is adequate, reliable, safe, and available for the future, based on sound science.**

## Priorities

- ❖ **Reduce and respond to climate change**
- ❖ **Protect New Jersey's water**
- ❖ **Revitalize our communities and protect public health**
- ❖ **Manage and promote thriving and natural and historic resources**
- ❖ **Strengthen the DEP**



## Principles

- ❖ **Follow the law**
- ❖ **Use the best available science**
- ❖ **Listen to all sides**
- ❖ **Find the best balance**
- ❖ **Be transparent and honest with the public**



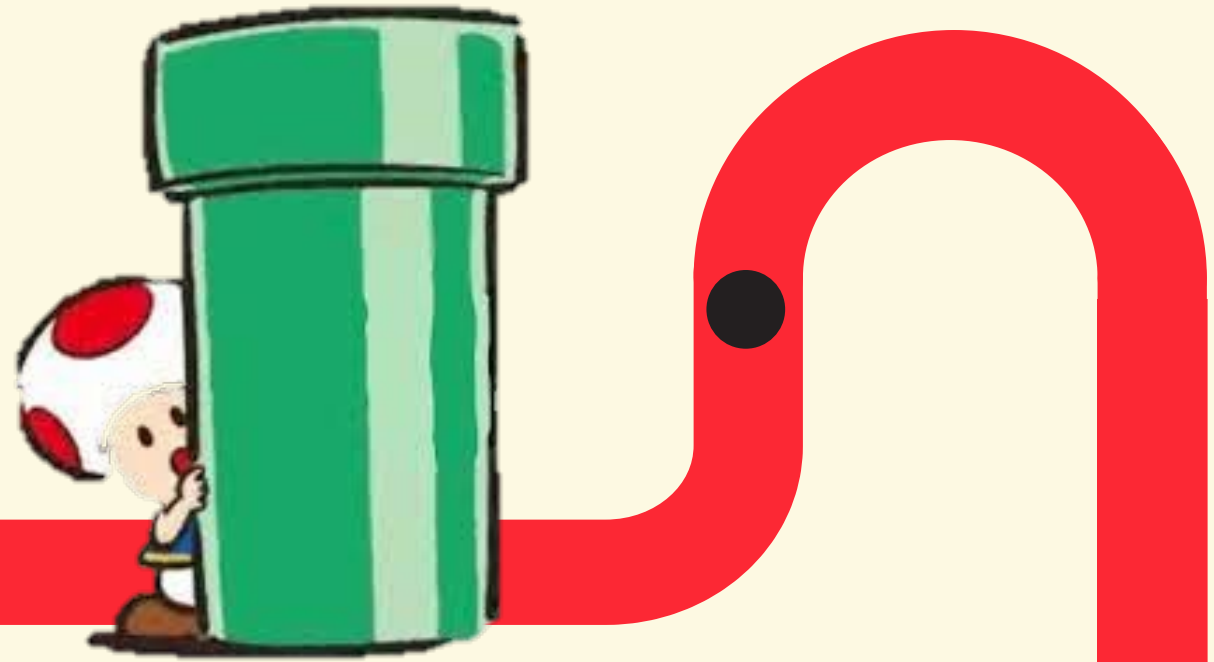


**6**

# Introducing our new staff

## **New Staff:**

- ❖ **John Swenarton**
- ❖ **Allyson Pinnola**
- ❖ **Claudia Barrantes-Kerwin**
- ❖ **Jolie Nerosa**
- ❖ **Leigh Myers**





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## Division of Water Enforcement Realignment

The Division of Water Enforcement (DWE) has recently undergone a realignment to establish a more efficient organization with consistent policies and procedures. As part of the realignment, DWE has reassigned the counties that were previously located in the Central region to the Northern and Southern regions. The breakdown is as follows:

### Northern

- ❖ Bergen
- ❖ Essex
- ❖ Hudson
- ❖ Hunterdon
- ❖ Morris
- ❖ Passaic
- ❖ Somerset
- ❖ Sussex
- ❖ Warren
- ❖ Union

### Southern

- ❖ Atlantic
- ❖ Burlington
- ❖ Camden
- ❖ Cape May
- ❖ Cumberland
- ❖ Gloucester
- ❖ Salem
- ❖ Mercer
- ❖ Middlesex
- ❖ Monmouth
- ❖ Ocean

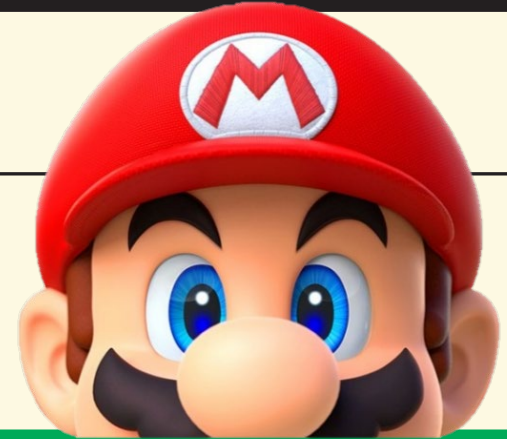
In order to provide better service to our permittees, each of the bureaus now have four specialized units as described below:

- ❖ Safe Drinking Water-Licensed Operator
- ❖ Safe Drinking Water-Water Allocation
- ❖ NJPDES Groundwater and Stormwater
- ❖ NJPDES Wastewater/Collection Systems/SIU



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## Did you know...



**It takes about 364 licks to get to the center of a tootsie pop.**



**The biggest casino winnings (according to a fact in 2021) in AC was \$3,538,562.75.**

**Climate change is making spiders bigger.**



**There are 25,000 ways to order coffee at Dunkin Donuts.**



# Lead & Copper Update



- ❖ **Lead and Copper Rule (LCR) Improvements and NJ LCR**
- ❖ **LCR versus Lead and Copper Rule Revisions (LCRR)**
- ❖ **Lead Service Line (LSL) Requirements – LCRR versus NJ LSL Replacement Law**
- ❖ **New Jersey LSL Replacement Law**

Bureau of Safe Drinking Water  
609-292-5550



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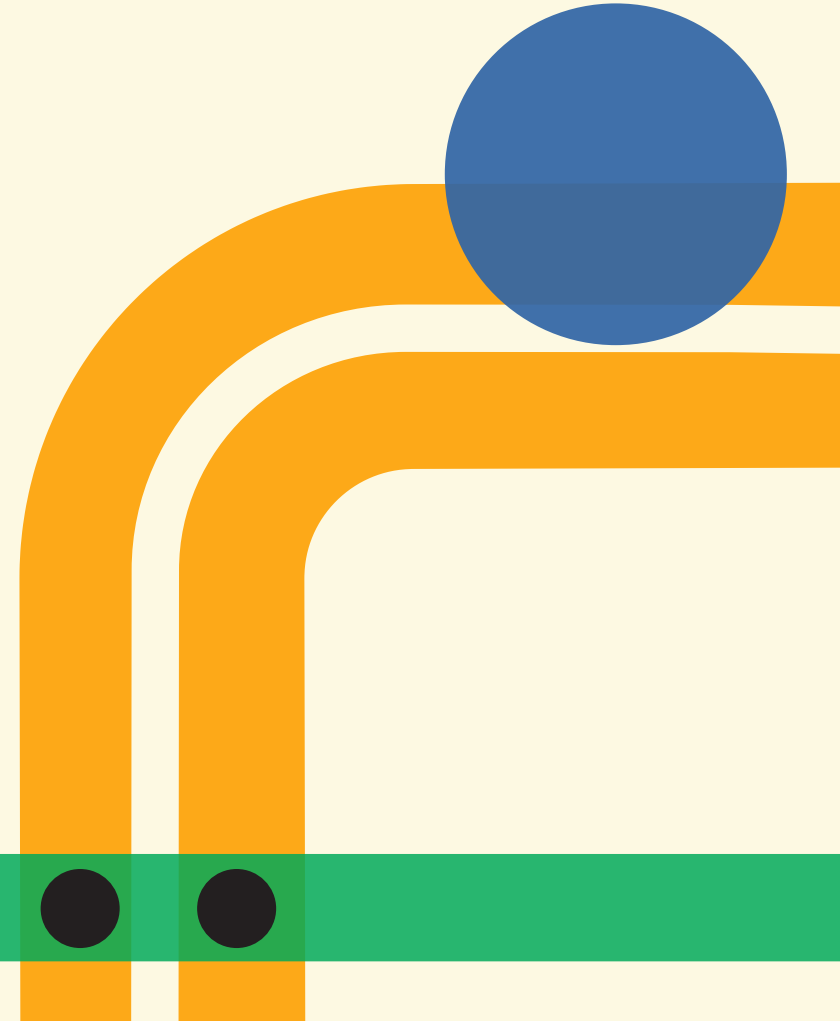
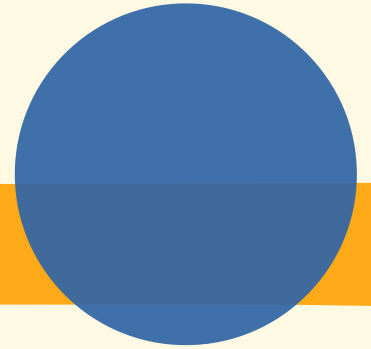
# Lead & Copper Update

## ❖ LCR Improvements

- ❖ This new rule is being developed by EPA.
- ❖ EPA anticipates proposing this rule in 2023 and intends to promulgate it prior to October 16, 2024.

## ❖ NJ LCR

- ❖ NJDEP is actively working on the proposal.





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# Lead & Copper Update

## Existing 1991 LCR

- ❖ Lead 90th percentile (P90) = 0.015 milligrams per liter (15 parts per billion)
- ❖ Copper P90 = 1.3 mg/l (1,300 ppb)

## Lead and Copper Rule Revisions (LCRR) *Effective Date = October 16, 2024*

### Action Levels

- ❖ Lead P90 = 0.015 mg/l (15 ppb)
- ❖ Copper P90 = 1.3 mg/l (1,300 ppb)
- ❖ Lead trigger level = 0.010 mg/l (10 ppb)



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# Lead & Copper Update

## Existing 1991 LCR

## Lead and Copper Rule Revisions (LCRR)

### Lead and Copper Tap Sampling

- ❖ **No sampling plan requirements**
- ❖ **Minimum number of sites**
  - ❖ **5-100**
  - ❖ **Based on 7 categories**
- ❖ **3 Tier classifications for CWS and 2 Tier classifications for NCWS**
- ❖ **Triennial and 9-year reduced monitoring**

- ❖ **Site sample “plan” required**
- ❖ **5 Tier classifications**
  - ❖ **For LSL sites, 5th Liter sampling for lead**
- ❖ **Complex monitoring schedules**
  - ❖ **Divergent lead and copper sampling based on sampling results and lead trigger level**
- ❖ **Various P90 calculations based on LSLs and Tiers**
- ❖ **Publicly available P90**
- ❖ **Sampling procedure criteria expanded upon**



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# Lead & Copper Update

## Find & Fix

**Requires systems to take certain actions for any individual tap sample for which the result is above 15 ppb for lead, even if the system doesn't have an ALE.**

### Monitor WQP Sample Site

**Systems w/CCT: monitor within 5 days**  
**Small systems w/o CCT: monitor within 14 days**

### Follow-up Tap Sample within 30 days

**Not part of the 90<sup>th</sup> percentile**

**Unless already under CCT steps, CCT/Distribution System Action Recommendation within 6 months**

**Perform any necessary corrective action and share the information with local public health officials**

**Certify this to the State annually by July 1<sup>st</sup> for the previous calendar year.**



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# Lead & Copper Update

## Existing 1991 LCR

## Lead and Copper Rule Revisions (LCRR)

### Monitoring Requirements for Schools and Childcares

- ❖ No additional requirements
- ❖ In New Jersey only: NJ Board of Education (public) and NJ Department of Children and Families (licensed)

- ❖ Applies to buildings with plumbing installed prior to January 1, 2014
- ❖ Once within first 5 years (20% per year)
  - ❖ Elementary schools (preschool – 8 grade) and child-cares only
  - ❖ Secondary schools: per request only
- ❖ Number of sites:
  - ❖ 5 samples per school
  - ❖ 2 samples per childcare
- ❖ Different sampling procedures compared to lead tap sampling
- ❖ Provide results to school/facility, local and State health departments, and DEP

**\*By October 16, 2024, each water system must compile a list of schools and childcare facilities served by the system that were constructed prior to January 1, 2014.**



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# Lead & Copper Update

## Existing 1991 LCR

### Water Quality Parameter Monitoring

- ❖ No sampling plan requirements
- ❖ Requires monitoring of specific parameters, differ if CCT installed
- ❖ Minimum number of sites based on population
- ❖ Systems serving > 50,000 conduct regular WQP monitoring
- ❖ Systems serving < 50,000 only if exceedance of ALE
- ❖ Allows for approved parties to perform sampling

## Lead and Copper Rule Revisions (LCRR)

- ❖ Requires sites selected for tap samples to be included in the site sample plan
- ❖ Removes WQPs related to calcium hardness
- ❖ Minimum number of sites based on population
- ❖ Additional criteria for reduced monitoring
- ❖ Monitoring requirements vary



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# Lead & Copper Update

## Existing 1991 LCR

### Corrosion Control Treatment (CCT)

- ❖ Large water systems to install treatment
- ❖ Conduct CCT study, provide CCT recommendation, and install CCT
- ❖ Small/medium system can cease steps
- ❖ Systems must operate CCT to meet state-designated OWQPs
- ❖ Max amount of time to complete CCT: 6.5 years

## Lead and Copper Rule Revisions (LCRR)

- ❖ CCT steps required based on system size and presence of CCT
- ❖ Criteria for being deemed optimized dependent on system size and compliance with lead TL and lead/copper ALs
- ❖ Small CWS and NTNC have alternatives
- ❖ Max amount of time to complete CCT based on TL or AL exceedance and sampling history: 3 and 6.5 years





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# Lead & Copper Update

## Existing 1991 LCR

### Source Water

- ❖ Any system deemed to have optimized CCT: notify State in writing of upcoming long-term addition of new source and obtain approval before implementing
- ❖ Systems have:
  - ❖ 180 days for monitoring and treatment recommendations
  - ❖ 24 months to install approved treatment

## Lead and Copper Rule Revisions (LCRR)

- ❖ Timeframe for SoWT recommendation and installation remain
- ❖ State approval before changing source or treatment
- ❖ P90 > lead or copper AL
- ❖ State can waive source water monitoring under certain conditions
- ❖ Monitor after installation of source water treatment or addition of new source



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# Lead & Copper Update

## Existing 1991 LCR

### Public Education and Public Notification

- ❖ **Systems must provide a lead consumer notice to individuals within 30 days of learning results**
- ❖ **Systems not required to conduct public notification for P90 > AL for lead**

## Lead and Copper Rule Revisions (LCRR)

- ❖ **Updated health effects language**
- ❖ **Individual results > lead AL: Provide lead consumer notice no later than 3 calendar days**
- ❖ **Systems must conduct Tier 1 public notice of P90 > AL for lead within 24 hours**
- ❖ **Systems with LSLs, galvanized requiring replacement\*, or unknowns: Provide detailed notice to affected customers**
- ❖ **Within 30 days of completing inventory; annual thereafter**
- ❖ **Within 30 days of end sampling period that P90 > TL**



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# Lead & Copper Update

## Lead Service Line (LSL) Requirements

### LCRR & NJ LSL Replacement Law

- ❖ All systems with lead or unknowns must develop inventory and LSL replacement plan
- ❖ Replace system portion of LSL within 45 days\* of becoming aware of replacement of customer-side LSL and provide notification within 24 hours
- ❖ Provide a 6-month supply of pitcher filters/cartridges to affected customers before affected service line is placed back in service
- ❖ Offer to collect lead tap samples at replacement locations within 3 to 6 months of the LSL replacement
- ❖ Notification to systems with unknowns

- ❖ Systems > 10,000 persons with P90 > Lead TL: Perform goal based full LSL replacement
- ❖ P90 > Lead AL: 3% replacement annually
- ❖ Certification for notification due annually by July 1st

All galvanized service lines are considered lead.

Partials prohibited except during emergencies or main replacements.





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# Lead & Copper Update

## Key Timeframes & Requirements

### LSL Replacement Plan

- ❖ **By July 31st every year after enactment**
  - ❖ **Annually updated until all lead service lines (LSL) within the system's service area are identified and replaced**
- ❖ **Each annual submission must include:**
  - ❖ **A plan for replacing all lead service lines within the system's service area by July 2031;**
  - ❖ **A plan for notifying consumers with LSLs of health effects and steps they may take to reduce their exposure to lead before and after LSL replacement;**
  - ❖ **Any other information or certifications required by the Department**

### Other Pertinent Timeframes

- ❖ **By July 10th every year after enactment, PCWS must also submit**
  - ❖ **Updated service line Inventory**
  - ❖ **Lead service line replacement Progress Report**
- ❖ **All PCWS are required to identify all service lines by 2031, regardless of material**
- ❖ **By August 20th every year after enactment, PCWS must submit an LSL Notification Form**



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# Lead & Copper Update

## Annual Reporting Requirements

**All submissions are required to ensure systems are replacing service lines per their annual rate and have a plan to move forward each year.**

Required Submission	Due Date	Content	Online Resources
<b>LSL Inventory</b>  N.J.S.A. 58:12A-42	<b>Updated:</b> July 22, 2022	Details the inventory of each service line material within the service area. Annual updates will include supporting information on why a line is determined to contain lead and steps taken to identify unknown lines	<a href="https://www.state.nj.us/dep/watersupply/dws-sampreg.html">https://www.state.nj.us/dep/watersupply/dws-sampreg.html</a>  DEP_10-S_00014.2 Lead Service Line Inventory Form Version 2
	<b>Annual:</b> July 10 <sup>th</sup> of each year thereafter		
<b>LSLR Progress Report</b>  N.J.S.A. 58:12A-46	<b>Initial:</b> July 22, 2022	Details the progress of replacing and identifying LSLs from the previous year (July 1-June 30)	<a href="https://www.state.nj.us/dep/watersupply/dws-sampreg.html">https://www.state.nj.us/dep/watersupply/dws-sampreg.html</a>  DEP_10-S_00027.1 Annual Lead Service Line Replacement Progress Form
	<b>Annual:</b> July 10 <sup>th</sup> of each year thereafter		
<b>LSL Replacement Plan</b>  N.J.S.A. 58:12A-44	<b>Initial:</b> July 22, 2022	Details a PCWS plan to replace all LSLs in the service area.	<a href="https://www.state.nj.us/dep/watersupply/dws-sampreg.html">https://www.state.nj.us/dep/watersupply/dws-sampreg.html</a>  "LSLR Plan Template"
	<b>Annual:</b> July 31 <sup>st</sup> of each year thereafter		
<b>Notice of LSL to Consumers Certification</b>  N.J.S.A. 58:12A-43	<b>Initial:</b> September 1, 2022	Certifies that notice of lead service line materials was provided to consumers served by LSLs	<a href="https://www.state.nj.us/dep/watersupply/dws-sampreg.html">https://www.state.nj.us/dep/watersupply/dws-sampreg.html</a>  DEP_10-S_00028.1 Certification of Lead Service Line Notification
	<b>Annual:</b> August 20 <sup>th</sup> of each year thereafter		



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## Lead & Copper Update

### Online Portal & Future Considerations

- ❖ **BSDW is currently working with a third party to create an online portal**
- ❖ **Anticipate utilization by the 2025 annual submission**
- ❖ **BSDW is considering what is needed to deem water systems as non-lead**

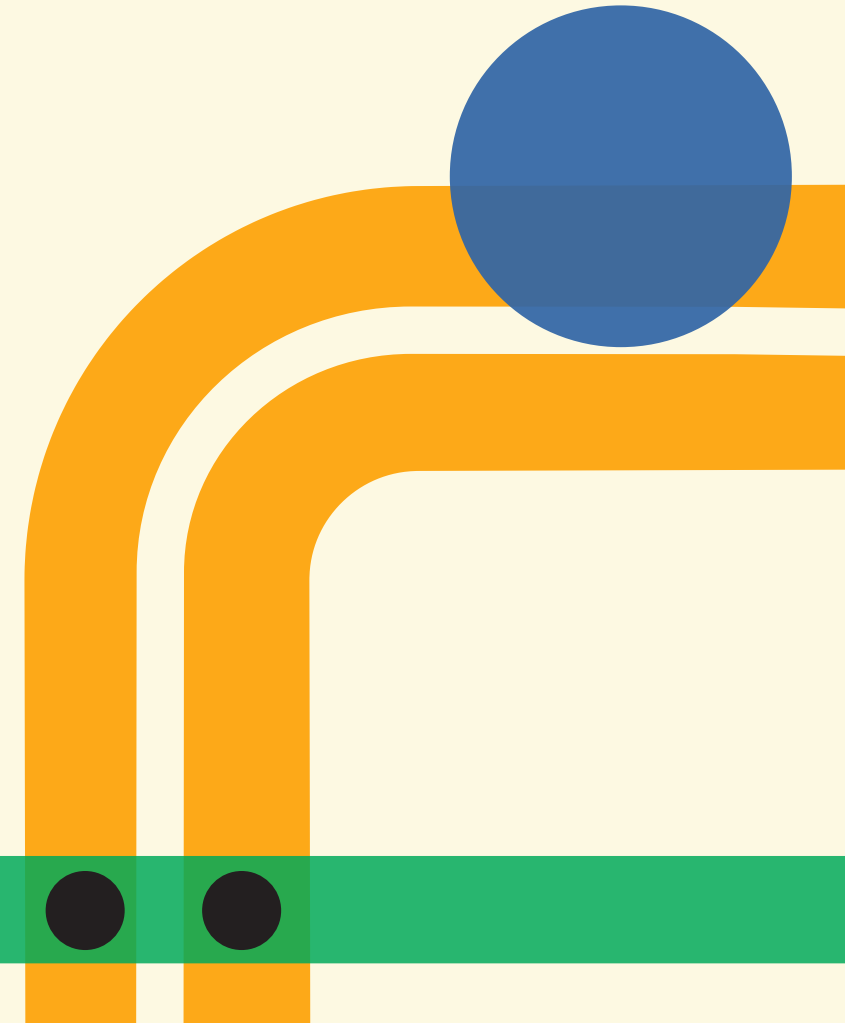


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# Lead & Copper Update

## Notification Requirements

- ❖ **Lead Service Line Replacement (LSLR)**
  - ❖ **PCWS must notify consumers of LSLR in accordance with current rules and regulations**
- ❖ **New LSL Identification**
  - ❖ **In accordance with N.J.S.A. 58:12A-43 PCWS are required to send a certified letter to properties that are serviced by an LSL**
- ❖ **Annual Notification of Service line Materials**
  - ❖ **PCWS must annually notify property owners of LSL annually via letter/ mailing**





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# **Lead & Copper Update**

## **Key Areas to Double Check**

- ❖ **Do not write “None”**
- ❖ **Submit the LSL inventory and Progress Report as Excel spreadsheet**
- ❖ **Ensure all service line counts coincide**
- ❖ **Second tab of the LSL inventory – Include all addresses**
- ❖ **Ensure the most up-to-date form is used**



# Resources

## NJDEP:

- <https://www.state.nj.us/dep/watersupply/dws-sampreg.html>
- <https://www.state.nj.us/dep/watersupply/dwc-lead-public.html>
- [https://www.state.nj.us/dep/watersupply/g\\_reg-wqaa.html](https://www.state.nj.us/dep/watersupply/g_reg-wqaa.html)
- <https://www.nj.gov/dep/wiip/project-lists.html>

## USEPA:

- <https://www.epa.gov/ground-water-and-drinking-water/review-national-primary-drinking-water-regulation-lead-and-copper>
- <https://www.epa.gov/ground-water-and-drinking-water/proposed-revisions-lead-and-copper-rule>
- <https://www.ecfr.gov/current/title-40/chapter-I/subchapter-D/part-141/subpart-I>
- <https://www.epa.gov/ground-water-and-drinking-water/revised-lead-and-copper-rule>

## Other:

- <https://www.jerseywaterworks.org/>

Bureau of Safe Drinking Water  
609-292-5550



# Harmful Algal Bloom (HABs)

Bureau of Water System Engineering  
609-292-2957



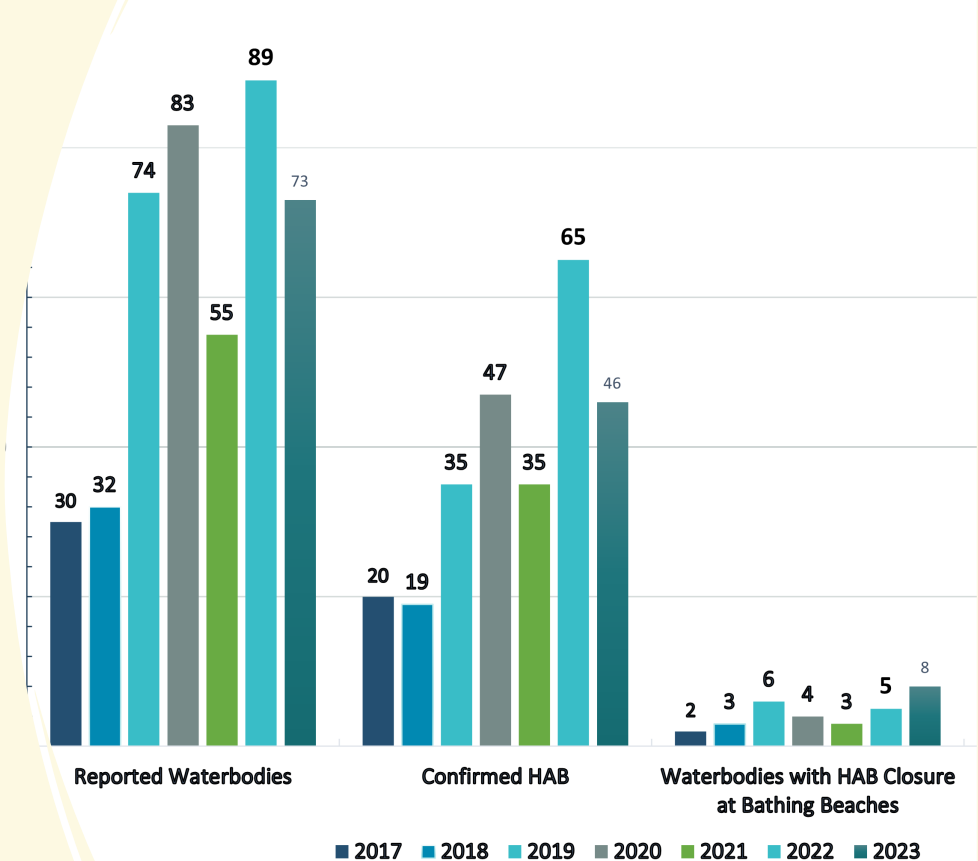
27

HABs

# 2022 Harmful Algal Bloom Summary

- ❖ In 2022, HABs were confirmed in 65 unique water bodies.
- ❖ Cell Counts Performed: 351
- ❖ Toxin Analyses Performed: 1,151
- ❖ Highest Cell Count: 51,000,000 cells/mL (Manasquan Reservoir)
- ❖ Highest Microcystin Concentration: 622 ug/L @ Pembroke Pond in Somerset County

2017-2023(as of 9/20/2023) HAB Event Summary





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**HABs**

# 2023 HABs Status

As of September 20<sup>th</sup>, 2023

- ❖ **46 of 73 reported/investigated water bodies have confirmed HABs (watch, advisory, or warning)**
- ❖ **363 samples collected by the Bureau of Freshwater Biological Monitoring**
- ❖ **Over 380 toxin analyses performed**
- ❖ **First confirmed HAB: April 28th @ Greenwood Lake**
- ❖ **Highest Cell Count: August 2nd @ Cozy Lake (3,000,000 cells/mL)**
- ❖ **Highest Microcystin Concentration: August 2nd @ Cozy Lake (1,511 ug/L)**
- ❖ **Most Dominant Taxa: Dolichospermum, Aphanizomenon, Planktothrix/Phormidium**

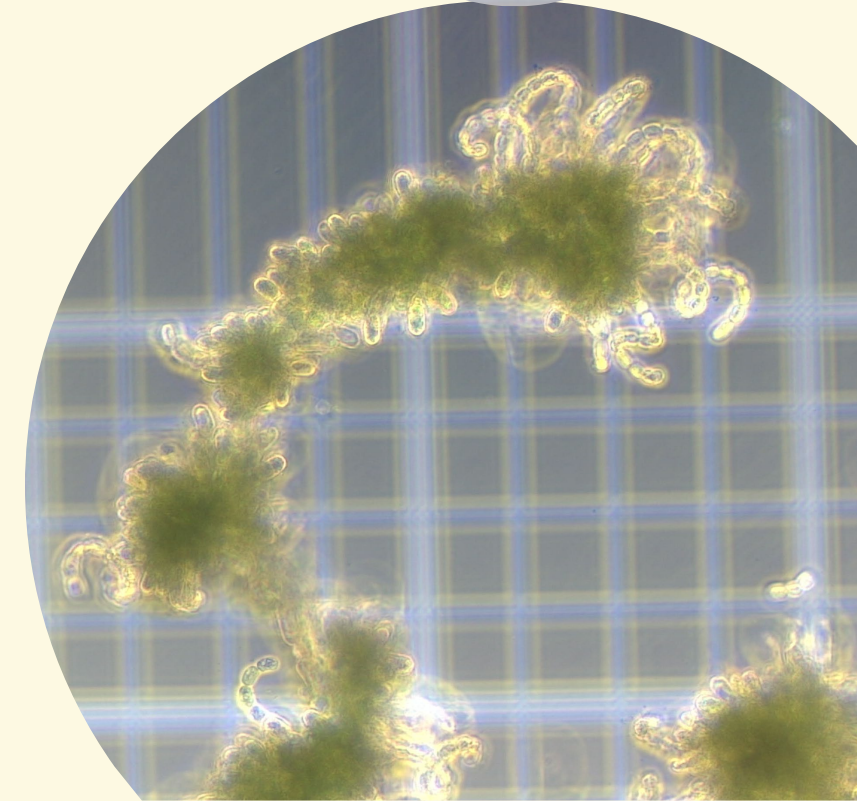
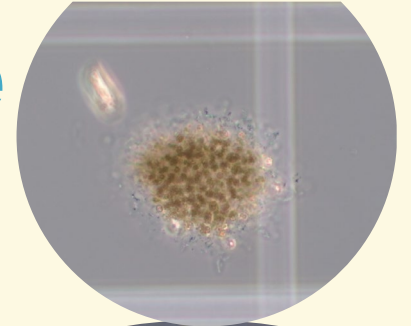


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## HABs

# Drinking Water Quality Institute

- ❖ **The Drinking Water Quality Institute (DWQI) is evaluating a recommendation for cyanotoxins in drinking water**
- ❖ **DWQI consists of three subcommittees: Health Effects Subcommittee, Testing Subcommittee, and Treatment Subcommittee**
- ❖ **A recommendation is forthcoming**
- ❖ **Next public meeting: December 2023**



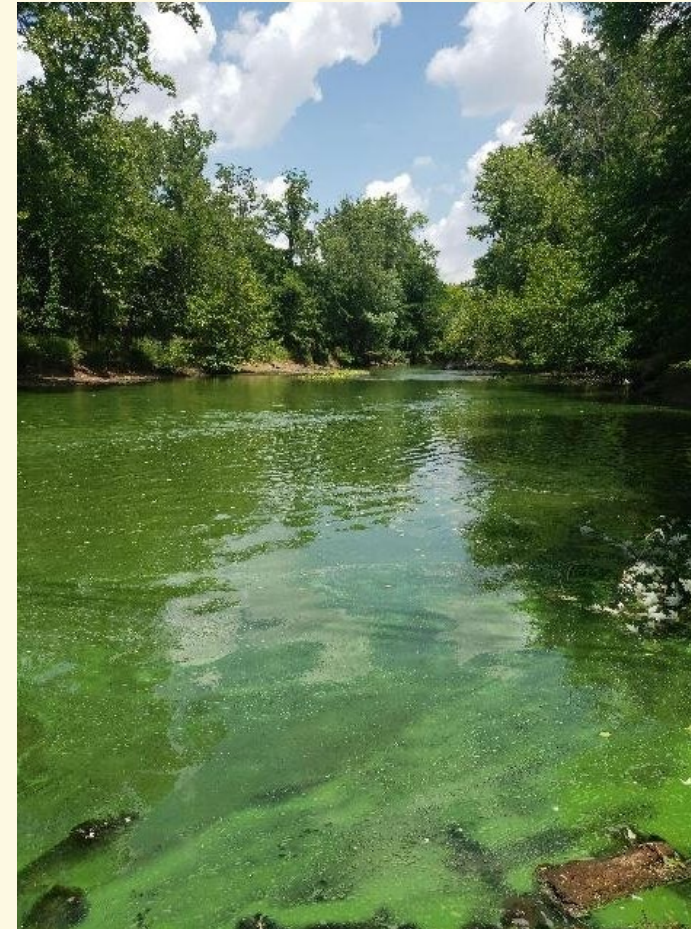


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**HABs**

## **NJDEP HABs/Cyanotoxins Drinking Water Report Tool**

- ❖ **Many drinking water systems across New Jersey have been affected by the increase of HABs.**
- ❖ **Cyanotoxins have the potential for acute health effects and cannot be boiled out from water, so as a result pose the risk of "Do Not Drink" advisories for water systems if finished drinking water detections are above Health Advisory numbers.**
- ❖ **To assist systems and tracking, NJDEP has put together an online reporting tool that allows water systems to submit and keep track of HABs/cyanotoxin data.**





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# HABs

## NJDEP HABs/Cyanotoxins Drinking Water Report Tool & Dashboard

- ❖ Officially launched in July 2023
- ❖ Modeled after the Recreational HAB Reporting Tool & accompanying dashboard.
- ❖ Designed with the input of stakeholders.
- ❖ Allows NJDEP staff and water system staff to see all data in one place and in a uniform format
  - ❖ Data for each system will only be visible to that specific system and NJDEP staff (the snip on the right an example from NJDEP's version including all data submitted)
- ❖ Use of these tools is strongly recommended if you do any monitoring for HABs.

### NJDEP HABs/Cyanotoxins in Drinking Water Report



This Reporting Document allows the submission of all the samples available and the correlating analyte that may be present in each Sample.

Name of System

PWSID

Autopopulated from system above

Treatment Plant Name

(autopopulated)

Treatment Plant Number

(autopopulated)

### NJDEP Harmful Algal Blooms in Drinking Water Dashboard

The dashboard displays a map of New Jersey with red markers indicating the locations of harmful algal blooms (HABs) in drinking water. On the left, there is a list of systems with details such as system name, treatment plant, and the date and type of toxin found. On the right, there is a 'Complete Record Information' panel showing details for a specific sample, including collection method, detection limits, and reporting standards.

Saxitoxin		Microcystin		Total Collections Containing HAB's	Total Collections
0	0	5	0		
Anatoxin-a	Cylindropermpsin	Other			
1	0	0			



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**HABs**

## **NJDEP HABs/Cyanotoxins Drinking Water Report Tool**

- ❖ **Must have an ARCGIS account to access and use the tool**
- ❖ **Letters requesting contact information were sent out to surface water and GUDI systems in July.**
- ❖ **If you did not receive this letter or still need to submit contact information, please contact [Karola.Endara@dep.nj.gov](mailto:Karola.Endara@dep.nj.gov).**
- ❖ **Step-by-step instructions are available.**





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**HABs**

# NJDEP HABs/Cyanotoxins Drinking Water Report Tool

- ❖ **Link to tool:** <https://survey123.arcgis.com/share/a1fac56205824c23a929121180441dc9?portalUrl=https://njdep.maps.arcgis.com>
- ❖ **Systems still must notify the Division of Water Supply and Geoscience (DWSG) by telephone at 609-292-2957 during business hours, or (877)-WARN-DEP during non-business hours, of any exceedances of cyanotoxins in the finished water within 6 hours in accordance with N.J.A.C. 7:10-2.4(b).**



# The 5<sup>th</sup> Unregulated Contaminants Monitoring Rule



Chase.Ballas@dep.nj.gov  
609-292-2957



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# UCMR5: Timeline



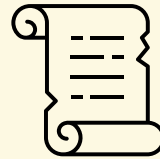
2020

**National  
Defense  
Authorization  
Act (NDAA)**



March  
– April  
2021

**Rule Proposal &  
Stakeholder  
Sessions held**



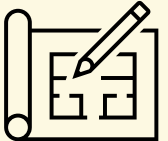
December  
2021

**Rule Published**



March  
2022

**Public Sessions**



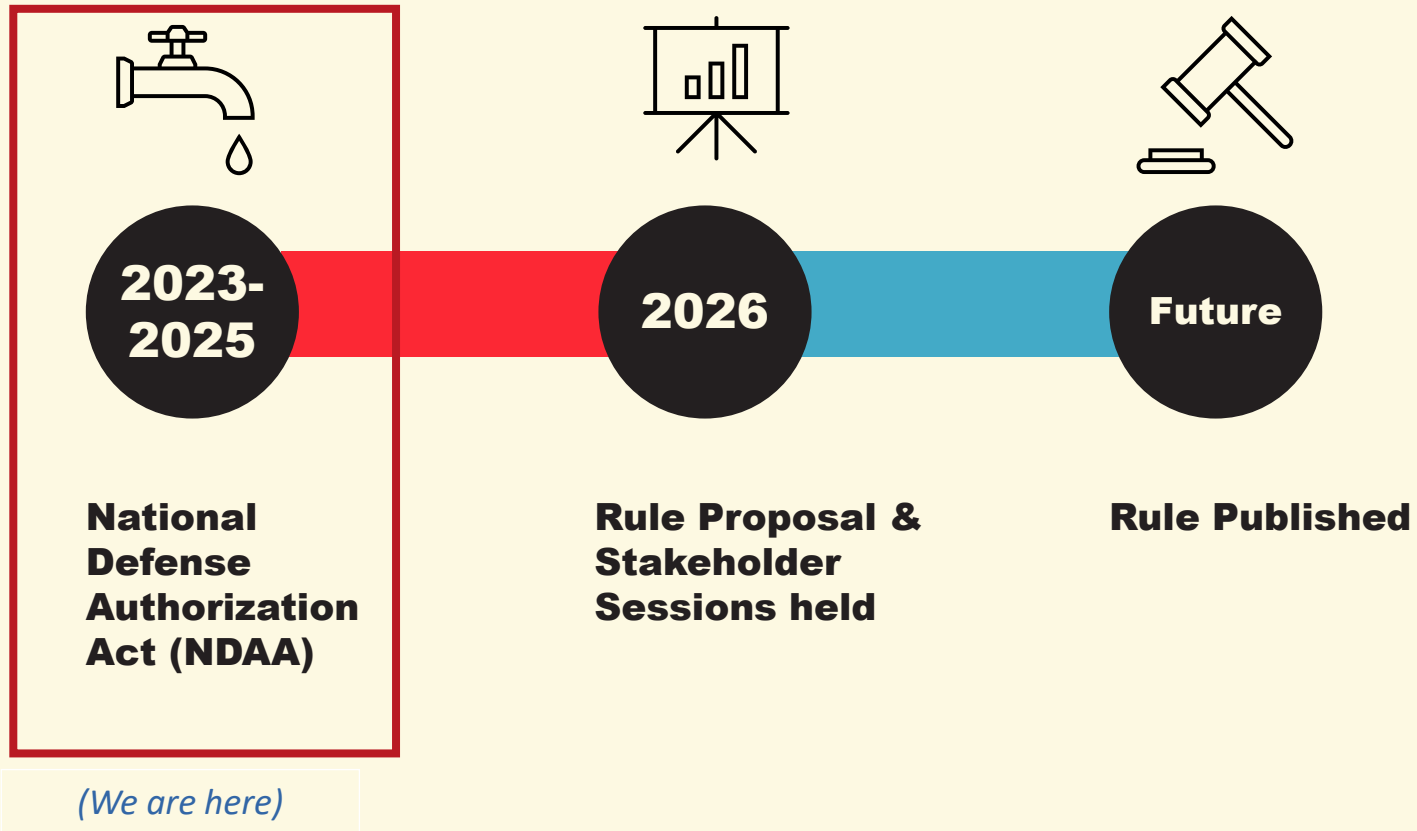
2022

**Preparation**



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# UCMR5: Timeline





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## **UCMR5 Sample Frequency and Locations**

### **Surface Water (SW), GUDI\*, Mixed Sources**

- ❖ **Sample four times (~3 months apart) during their year of sampling**
- ❖ **Entry Point to Distribution System (EPTDS)**

### **Groundwater (GW) Sources**

- ❖ **Sample two times (5-7 months apart) during their year of sampling**
- ❖ **EPTDS**

### ***Representative Locations***

Large GW systems (or large SWS with GW sources) with multiple EPTDS:

- ❖ **Must submit a ground water representative monitoring plan (GWRMP)**
- ❖ **Must get EPA Approval**

Systems that purchase water with multiple connections from the same wholesaler:

- ❖ **Location must represent highest annual volume.**

*\*GUDI = groundwater under direct influence of surface water*



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# **UCMR5 Analytes & Methods**

## **29 PFAS**

**EPA Method 537.1**

**EPA Method 533**

## **Lithium**

**EPA Method 200.7;**

**SM 3120 B (2017);**

**SM 3120 B-99 (1999);**

**ASTM D1976-20**



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# UCMR5 Analyte Information

## 29 PFAS

- ❖ **NDA 2020 = USEPA shall include all PFAS in UCMR5 for which a drinking water method has been validated by USEPA and are not subject to a national regulation**
- ❖ **PFOA, PFOS, PFHxS, HFPO-DA (GenX), PFNA, and PFBS are included in UCMR5**

## Lithium

- ❖ **Naturally occurring metal that may concentrate in brine water**
- ❖ **Used in:**
  - ❖ **Pharmaceuticals**
  - ❖ **Electrochemical cells**
  - ❖ **Batteries**
  - ❖ **Organic syntheses**
- ❖ **Potential adverse human health effects include:**
  - ❖ **Impaired thyroid function**
  - ❖ **Impaired kidney function**



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# UCMR5 July 2023 Public Data Release: Review

## Results for New Jersey Systems

## Results for All Systems Nationally

Contaminant	Total Samples	≥ MRL	≥ Ref Conc	% ≥ Ref Conc	Contaminant	Total Samples	≥ MRL	≥ Ref Conc	% ≥ Ref Conc
<b>lithium</b>	140	26	24	17.1	<b>lithium</b>	5365	1579	1132	21.1
<b>HFPO-DA</b>	134	0	0	0	<b>HFPO-DA</b>	4668	6	1	0.002
<b>PFBS</b>	134	22	0	0	<b>PFBS</b>	4667	316	0	0
<b>PFOS</b>	133	28	28	21.1	<b>PFOS</b>	4665	279	279	6
<b>PFOA</b>	134	62	62	46.3	<b>PFOA</b>	4667	267	267	5.7

To access the latest UCMR5 public dataset, scan the QR code →







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# UCMR5 July 2023 Public Data Release: Review

## Results for New Jersey Systems based on Systems

Contaminant	Total Systems	≥ Ref Conc	% ≥ Ref Conc
<b>lithium</b>	44	15	34.1
<b>HFPO-DA</b>	44	0	0
<b>PFBS</b>	44	0	0
<b>PFOS</b>	43	12	27.9
<b>PFOA</b>	44	25	58.8
<b>all</b>	48	35	72.9

●

Total Systems = number of individual system with at least one sample tested for the analyte

≥ Ref Conc = individual systems with at least one sample above a Ref Con, not considering if a system has multiple samples above a Ref Con



# PFAS Update

Bureau of Safe Drinking Water  
609-292-5550

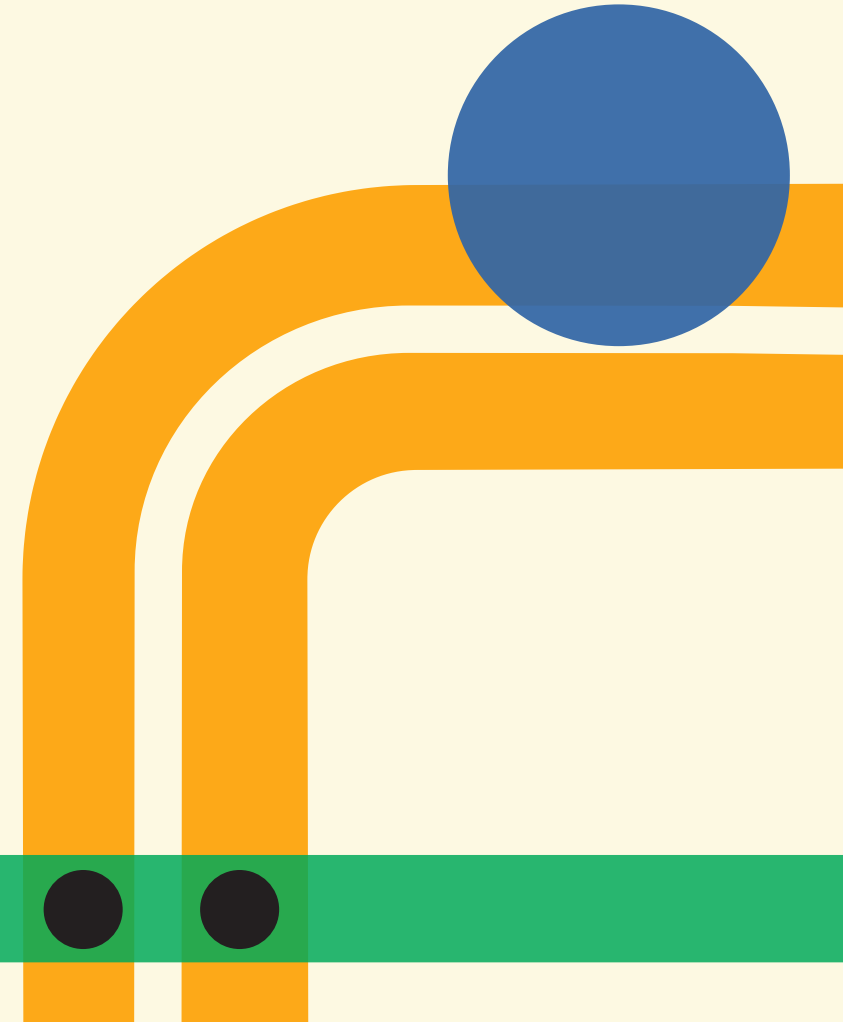


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## Return to Compliance w/ PFAS MCL

**PFAS MCL violations return to compliance when the following has been conducted:**

- 1. Tier 2 Public Notification (must be repeated every 3 months)**
- 2. Completion of remedial measures that ensure the water facility will not continue to incur MCL exceedances (if system is under an ACO, all conditions under the ACO must be met)**
- 3. Corrective Action Completion Certification Form submittal**
- 4. Two consecutive quarters below the MCL**





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# Compliance w/ NJ PFAS MCLs

Approximately 1200 water systems have monitoring requirements for PFAS (PFOA, PFOS, and PFNA) under the current NJDEP MCLs.

As of March 15, 2023	# Systems w/ Violation	# Systems Returned to Compliance
<b>PFOA</b>	62	17
<b>PFOS</b>	50	13
<b>PFNA</b>	18	13



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# EPA's Proposed PFAS Drinking Water Rule

Contaminant	2016 EPA Health Advisory	NJDEP MCL (2019 & 2021)	2022 EPA Interim Health Advisory Level	2023 EPA Proposed Standards
PFOA	70 ppt*	14 ppt*	0.004 ppt	4.0 ppt (MCL)
PFOS	70 ppt*	13 ppt*	0.02 ppt	4.0 ppt (MCL)
PFNA	N/A	13 ppt*	N/A	10 ppt**
PFBS	N/A	N/A	2000 ppt	2000 ppt**
Gen X	N/A	N/A	10 ppt	10 ppt**
PFHxs	N/A	N/A	N/A	9.0 ppt**

\* Combined for both contaminants

\*\* EPA has developed a combined "Hazard Index" for these PFAS, which is unitless based on a formula comparing the concentration of each contaminant

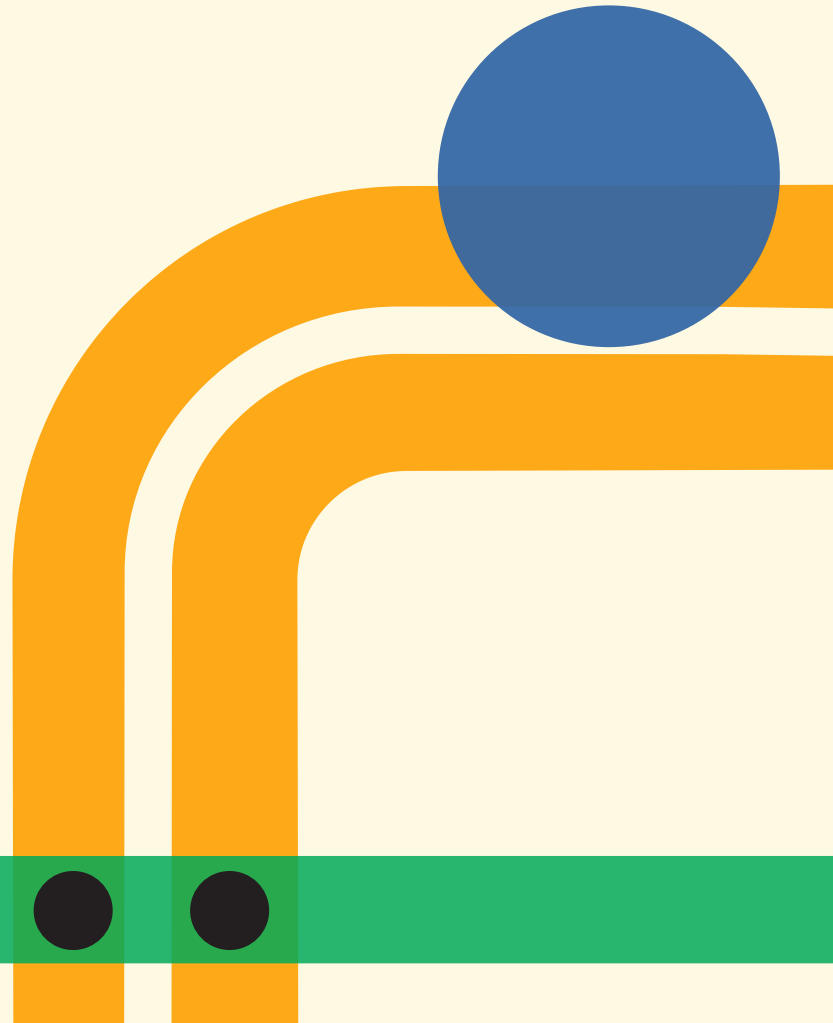


**46**

## **EPA's Proposed PFAS Drinking Water Rule**

**Based on previous New Jersey water system sampling data for PFOA and PFOS, there is anticipated to be an amount of water systems that would potentially have at least one result in exceedance of EPA's proposed MCL of 4.0 ppt for either PFOA or PFOS.**

**NJDEP is still evaluating the potential impact of EPA's proposed Hazard Index which includes 4 additional PFAS**





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## GAO's PFAS Survey

- **The U.S. Government Accountability Office (GAO) is surveying a random sample of public water systems in six states (Illinois, Massachusetts, New Hampshire, New Jersey, Ohio, and Vermont) that have certain per- and polyfluoroalkyl substances (PFAS) in their water exceeding the maximum levels proposed by the U.S. Environmental Protection Agency. If you were notified the week of October 2nd that your system was selected to participate in GAO's survey, we strongly encourage you to do so.**
- **GAO is a non-partisan agency that provides the U.S. Congress with objective, fact-based information to help lawmakers and agency heads improve the performance and accountability of the federal government. GAO's reports often present original data drawn from extensive field work, and this survey offers public water systems an opportunity to share their perspectives with GAO, and ultimately, the Congress. Congress specifically asked GAO about the challenges public water systems face as they work to (1) implement treatment methods for PFAS in drinking water and (2) manage the resulting PFAS-contaminated waste.**

**Your participation in this 15- to 30-minute survey is critical for GAO to be able to provide Congress with meaningful information about the challenges the proposed regulatory limits for PFAS in drinking water pose to public water systems and the ways in which the federal government could better support systems. You may direct questions about the survey to **Bruna Oliveira** at **PFAS\_Survey@gao.gov** or **617-788-0543**.**

# Funding

[Alaina.Ungarini@dep.nj.gov](mailto:Alaina.Ungarini@dep.nj.gov)  
609-292-5550







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# Funding Opportunities

## PFAS Funding Opportunity

The Bipartisan Infrastructure Law (BIL) allots \$13 million to provide principal forgiveness loans for drinking water projects that primarily address emerging contaminants, including PFAS. At least 25% (or approximately \$3M) will be awarded to disadvantaged communities that meet NJ's Affordability Criteria or public water systems serving a population of fewer than 25,000. There is a \$2 million cap of principal forgiveness per applicant in SFY24. Project sponsors are eligible to receive principal forgiveness for up to 100% of the first \$2 million of allowable costs and loan funding at the applicable base rate for the balance of costs up to the \$40 million per applicant/per year cap.

For SFY2024, the BIL provides \$49 million for projects to address lead in drinking water. At least 49% (or approximately \$25M) must be used as principal forgiveness. Loans to eligible water systems will consist of principal forgiveness financing for 50% of project costs (principal forgiveness capped at \$5 million per applicant/per year) and a loan with a Blended Interest Rate of 50% of I-Bank's AAA Market Interest Rate for 50% of project costs.



## Lead Funding Opportunities



Projects are capped at \$10 million of allowable project costs above the project caps may be financed at the affordability rate (blended interest rate of 25% of the I-Bank's Market Rate) for applicants that meet affordability criteria. Project costs between \$20 million and \$40 million may be financed at the base rate (50% of the I Bank's Market Rate). Project costs over \$40 million may be eligible for 100% I-Bank financing, as capacity allows.

Publicly owned and privately (investor)-owned water systems are eligible for principal forgiveness if the project is located in a municipality that meets New Jersey's Affordability Criteria. Priority ranking points will be given to water systems that currently have an open lead action level exceedance and those that meet the Environmental Justice Economic Overburdened Community Criteria. Water systems sponsoring projects in municipalities that meet the affordability criteria and do not exceed the lead action level but want to replace lead pipes are eligible for principal forgiveness in ranked order.





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# Lead Service Line Replacement Funding Opportunities

## Lead Service Line Replacement Package

Only available to water systems who meet disadvantaged community criteria, for up to \$10 million per applicant per year.

Principle Forgiveness (\$5M Cap) 50%	DEP Loan Share (No Interest) 25%	I-Bank Loan Share (AAA Market Rate) 25%
--	--	---

**Example: \$5 million LSLR project serving a disadvantaged community would receive \$2.5 million in PF \$1.25 million interest free loan and \$1.25 million AAA Market Rate loan**

## Nano Funding Package

Available to water systems who serve a year-round population of 10,000 or less. Capped at \$1 million per applicant per year

Principle Forgiveness (\$500k Cap) 50%	DEP Loan Share (No Interest) 25%	I-Bank Loan Share (AAA Market Rate) 25%
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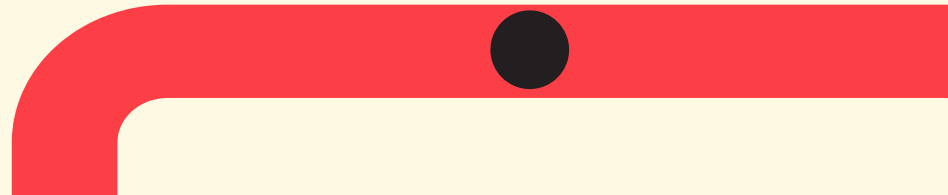
**Example: A qualifying system with a LSLR project totaling \$1 million would receive PF on \$500,000, interest free loan on \$250,000 and AAA Market Rate on \$250,000**

## VSWS Funding Package

Available to water systems who serve a year-round population of 1,000 or less. Capped at \$1 million per applicant per year

Principle Forgiveness (\$1M Cap) 100%	PF Available \$5M
---	----------------------

**Example: A qualifying system with a LSLR project totaling \$750,000 would receive PF on the entire project**





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## LSLR Funding (Continued)

**The following criteria must be met for the LSLR project to be eligible for Water bank loans:**

- **Be able to document the presence of lead service lines and components through historic records that the lines to be replaced are lead. Acceptable records include information on the age of the houses and high probability of lead lines and components being present, line installation records, etc.**
- **Provide an LSL Replacement Plan consistent with the requirements of P.L.2021, Ch. 183, and Capital Improvement Plan to establish a strategy for lead line replacement that complies with all federal and State requirements.**
- **Partial lead line replacements are not eligible for funding and prohibited under the recent legislation P.L.2021, Ch.183. Note that if the replacement of only a portion of the service line results in a full replacement of all lead lines, galvanized lines, or components, it is considered a full replacement eligible for funding through DWSRF.**
- **Principal forgiveness shall be utilized to address the cost-share of the property owner as applicable.**





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# Loan Packages

## Base Funding: Public

Available to all publicly owned community water systems, capped at \$40 million per applicant per year.

System Type	DEP Share	I-Bank Share	Funding Cap (Remainder at I-Bank market rate as capacity allows)
Base DWSRF- Publicly Owned	50% Interest Free Loan	50% AAA Market Interest Rate	\$40M
Base DWSRF- Investor Owned	25% Interest Free Loan	75% Interest Free Loan	\$40M

**Example: A publicly owned CWS with a LSLR project totaling \$10 million would receive \$5 million interest free loan and \$5 million AAA Market Rate loan**

## Base Funding: Private

Available to all privately/investor owned community water systems, capped at \$40 million per applicant per year.

System Type	DEP Share	I-Bank Share	Funding Cap (Remainder at I-Bank market rate as capacity allows)
Base DWSRF- Publicly Owned	50% Interest Free Loan	50% AAA Market Interest Rate	\$40M
Base DWSRF- Investor Owned	25% Interest Free Loan	75% Interest Free Loan	\$40M

**A privately owned community water system with a LSLR project totaling \$10 million would receive \$2.5 million interest free loan and \$7.5 million AAA Market Rate loan**





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# NJ Technical Assistance Program

<https://www.nj.gov/dep/wiip/request.html>

## Apply for No Cost Technical Assistance!

\* indicates required field

First\*  Last\*

Email\*

We'll never share your email with anyone else.

Title/Position\*

Phone\*

Choose Type of System\*

Drinking Water

Clean Water (wastewater/stormwater)

PWSID (Drinking Water Only)

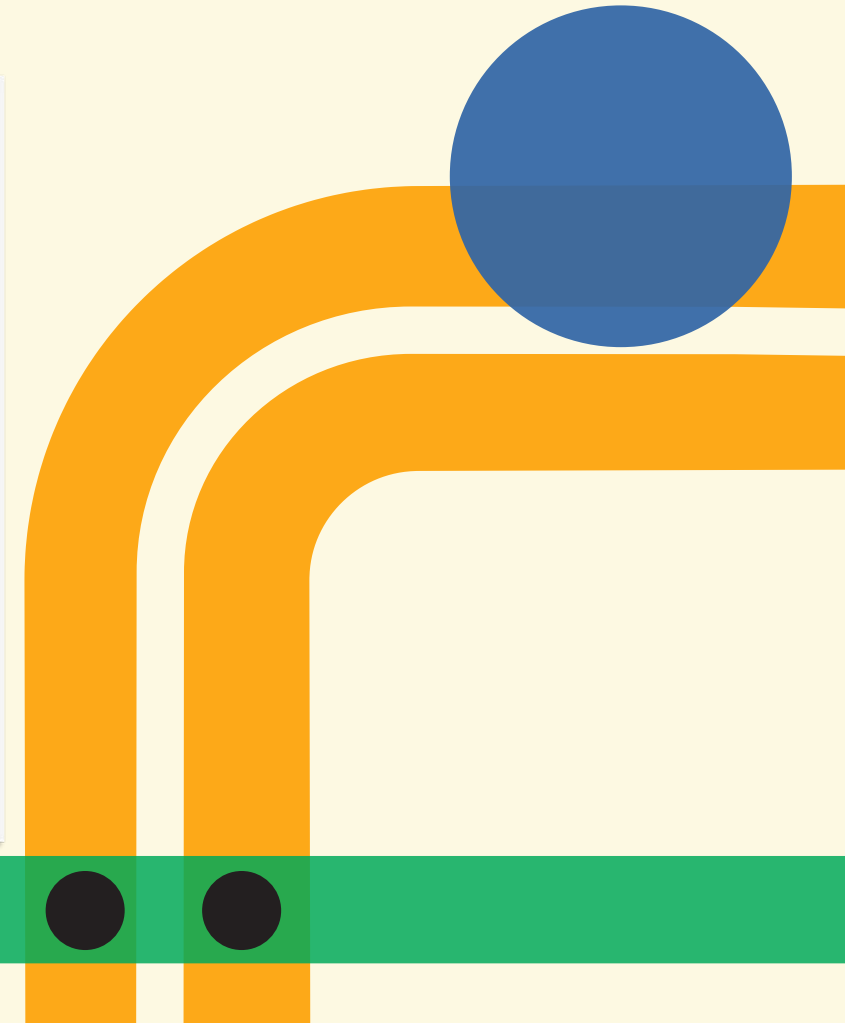
Name of System\*

Type of Assistance Requested\*

- Asset Management Plan Development
- Technical, Managerial, and Financial Capacity Evaluation
- Capital Improvement Plan Development
- Lead Service Line Inventory Development
- Lead Service Line Replacement Law Compliance Assistance
- Lead Service Line Replacement Program Creation and Implementation
- Drinking Water Infrastructure Project Development
- Clean Water Infrastructure Project Development
- State Revolving Fund Loan Application Submittal Assistance
- Preliminary Technical Assistance (needs and fiscal assessments and public outreach)
- Other (Please indicate in comment box below)

Has your system submitted a project through the SRF Program before?\*

**When in doubt if eligible for assistance, still submit a request form.**



# Licensed Operator Update



[Christian.Haviland@dep.nj.gov](mailto:Christian.Haviland@dep.nj.gov)  
609-984-1786



# Monthly Reports

Bureau of Safe Drinking Water  
609-292-5550



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# Monthly Operator Reports

**All CWS must submit a MOR. All T-classified water systems are required to submit MORs by the 10<sup>th</sup> day of the month following the reported month.**

- **Ensure the MORs are be completed to its entirety.**
- **Ensure the data being copied to the MORs is representative.**
- **You can submit the MORs via email to [Watersupply@dep.nj.gov](mailto:Watersupply@dep.nj.gov)**
- **Electronic reporting tool for MORs is in the development.**
- **Participate in the testing phase of this new tool!**





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# Turbidity Forms

## **IESWTR Turbidity Form BSDW – 22 Form**

- **Any exceedance of 1 NTU must be reported to the State.**
- **If any of the individual filter turbidity exceedance check boxes are checked, the Individual Filter Report Form (BSDW – 23) is required.**
- **Ensure it filled out appropriately.**

## **Individual Filter Report Form (BSDW – 23)**

- **Ensure it is filled out appropriately.**
- **Provide description of the exceedance incident, any evaluation conducted as a result of the exceedance, and any identified cause of the exceedance.**

## **Individual Filter Assessment Report (BSDW - 24**

- **When an individual filter assessment is required, this report can be used.**

# 2022 Annual Violation Report

In 2022, BSDW regulated 3,522 active public water systems, and issued 5,190 violations to 1,117 systems.

**Table 3:** Summary of all Safe Drinking Water Act Violations (Maximum Contaminant Level (MCL), Action Level Exceedance (ALE), Maximum Residual Disinfection Level (MRDL) and treatment technique (TT)) by System Type for 2022.

Type of System	Exceedances*			TT Violations	Monitoring & Reporting			Total Violations
	MCL	ALE	MRDL		Monitoring	Reporting	Public Notification	
Community 567 systems	345 (52)	8 (7)	0	74 (55)	1163 (180)	528 (228)	21 (15)	2139
Nontransient Noncommunity 655 systems	113 (45)	39 (32)	0	76 (52)	1203 (180)	172 (137)	23 (18)	1626
Transient Noncommunity 2,300 systems	34 (25)	4 (3)	0	146 (111)	613 (292)	580 (275)	15 (12)	1392
<b>Grand Total Violations</b>	<b>492</b>	<b>51</b>	<b>0</b>	<b>329</b>	<b>2979</b>	<b>1280</b>	<b>59</b>	<b>5190</b>

\* Numbers in parenthesis indicate the count of systems incurring the specified violations.

**There has been an observed increase in the number of M&R violations (82% of violations were M&R violations).**

<https://www.state.nj.us/dep/watersupply/pdf/violations2022.pdf>



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# Co-Inspections

## Scope

Collaborative effort between DWS&G and DWE to conduct prioritized thorough inspections.

---

## Planning

DWE will reach out to the water system to schedule the co-inspection.

---

## Preparation

DWE and DWS&G may request that the water system provide additional operational data or documentation prior to the scheduled co-inspection.

---

## Inspect

There will be direct and continuously communication during the course of the co-inspection.

---

## Follow-Up

Communication with continue following the co-inspection and a formal correspondence will be provided to the water system.

**Bureau of Safe Drinking Water**  
**609-292-5550**





# Emergency Reminders

Bureau of Safe Drinking Water  
609-292-5550



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# General Reporting Requirements

## Outlined in 40 C.F.R. §141.202

### Tier 1 Public Notice Requirement

- Required for violations and situations with significant potential to have serious adverse effects on human health as a result of short-term exposure
  - Confirmed *E. Coli* in Source Water or DS
  - Exceedance of Nitrate or Nitrite MCL
  - Violation of SWTR Treatment Technique
  - Occurrence of Waterborne Disease Outbreak
- **Notify DEP as soon as possible, but no later than six (6) hours** of becoming aware of the incident.  
[N.J.A.C. 7:10-2.4(b)]
- Initial consultation with NJDEP is required **as soon as practical, but no later than 24 hours** after the public water system learns of the violation or situation.  
[40 C.F.R. § 141.202(b)(2)]





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# General Reporting Requirements

## Outlined in N.J.A.C. 7:10-2.4

### Reporting of Changes to Plants and Emergencies

- (a) A supplier of water shall notify in writing the Bureau of Safe Drinking Water at least (5) five working days prior to undertaking any planned change in the treatment plant or its operation that may either temporarily or permanently tend to lessen the quality of water furnished, or increase the likelihood of the delivery of water that does not meet the standards set forth in N.J.A.C. 7:10-5
  
- (b) A supplier of water shall notify the Department by telephone at (609) 292-5550 during business hours, or (877) WARN-DEP during non-business hours, **within six (6) hours of the occurrence** of any emergency that may tend to lessen the quality or pressure of delivered water or increase the likelihood of delivery of water that does not meet the standards set forth in N.J.A.C. 7:10-5.





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# General Reporting Requirements



Uncontrolled Water Main Break

Examples of Emergency Incidents:  
Quantity vs Quality

## QUANTITY

(Related to impacts to production/demand)

- Uncontrolled Water Main Break
- Power Outage
- Well Pump Failure
- Treatment Plant Failure
- Loss of Storage

## QUALITY:

(Related to impacts to quality of the water served)

- Contamination
- MCL Exceedances
- Treatment Malfunction
- Waterborne Pathogen Outbreak
- Harmful Algal Bloom (HAB)



Harmful Algal Bloom in Source Water



Presence of *E.coli* in Distribution System



SCADA Cybersecurity Threat



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# General Reporting Requirements

DEP Hotline?

What should I inform on the call?

Provide the following information:

- Incident Type - “Potable” or “Drinking Water”
- System Name
- Public Water System Identification Number (PWSID No.)
- County and Municipality
- Time/Date of Incident Awareness
- Point of Contact
- Brief Description of the Incident
- Population Impacted
- Water Advisories Issued







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## **Quiz Time**

**Which of the following requires you to notify NJDEP?**

- 1. Uncontrolled Water Main Break**
- 2. Confirmed E.coli in the Distribution System**
- 3. Inadequate Chlorine Contact Time**
- 4. All of the above**



**66**

# Controlled vs Uncontrolled

## Controlled WMB

## Uncontrolled WMB

### Description

Positive pressure is maintained within the system; a section of the water main is isolated and wholly or partially dewatered to facilitate the repair. **The water outage in this scenario is due to implementation of corrective actions and not directly caused by the water main break.**

Loss of positive pressure in the entire drinking water distribution system, or portions of the service area before implementation of corrective action, and/or loss of positive pressure which results in intermittent water service, regardless of the size of the water main and # of service connections affected.

### Notification

The water system is not required to notify the NJDEP. However, if the water system opts to issue a precautionary BWA, NJDEP must be notified within 6 hours as described for an uncontrolled WMB. Additionally, if the media is notified, the outage impacts major roadways, or causes a significant disruption to the community, it is advised to notify the NJDEP.

Within 6 hours of the occurrence of the incident, contact (if during business hours) NJDEP Hotline at 1-877-927-6337 and BSDW at 609-292-5550, (if outside of business hours) NJDEP Hotline at 1-877-927-6337 requesting consultation with NJDEP Enforcement Duty Officer and email [wsemergency@dep.nj.gov](mailto:wsemergency@dep.nj.gov)

### Reporting

If a precautionary BWA is issued, a Water Supply Emergency Incident Report is required to be submitted via email to [wsemergency@dep.nj.gov](mailto:wsemergency@dep.nj.gov) after all repairs are completed and service has returned to normal.

Water Supply Emergency Incident Report is required to be submitted via email to [wsemergency@dep.nj.gov](mailto:wsemergency@dep.nj.gov) after all repairs are completed and service has returned to normal.

### BWA

NO BWA Required; but notify customers affected by the repair to keep them informed and provide guidance regarding appropriate measures to take upon restoration of water service.  
Precautionary BWA issued due to site-specific sanitary concerns or other issues.  
BWA may be required if temporary water services are provided during the water main repair (consult with NJDEP).

Water system is required to issue a BWA to the impacted population, as soon as possible but in no case later than 24 hours after learning of the incident.

### Disinfection

Following the repairs to the water main(s), chlorination and de-chlorination procedures must be followed in accordance with AWWA-C651-14.

Following the repairs to the water main(s), chlorination and de-chlorination procedures must be followed in accordance with AWWA-C651-14.

### Water Quality Testing

Total coliform & chlorine residual testing is necessary to verify the effectiveness of the sanitary repair; the number of samples required depends on the extent of the water outage and is based on the population affected.

Total coliform & chlorine residual testing is necessary to verify the effectiveness of the sanitary repair, and to lift the BWA; the number of samples required depends on the extent of the water outage and is based on the population affected.



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## **Quiz Time (Controlled or Uncontrolled)**

**Scenario A:** During roadwork, a water main is accidentally struck and ruptures. Positive pressure is immediately lost, and multiple service connections are without water. The water main is able to be isolated for repairs.

**Scenario B:** During scheduled valve exercising program, a valve on the water main breaks. Positive pressure is maintained. The water main is able to be isolated for repairs, which causes loss of positive pressure to impacted service connections.





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## Area Wide Optimization Program (AWOP)

**NJ fully adopted AWOP optimization goals and begun implementation of their program in 2023.**

**So far, NJ AWOP has:**

- **attended and participated in AWOP national and regional meetings, conferences, and workshops**
- **conducted a technical workshop onsite at a NJ water system**
- **completed a CPE training onsite at a NJ water system**
- **developed a spreadsheet that captures data to assist in assessing surface water system's filter performance**
- **created an email inbox solely dedicated to the program**
- **begun collecting and evaluating AWOP data from participating NJ water systems**

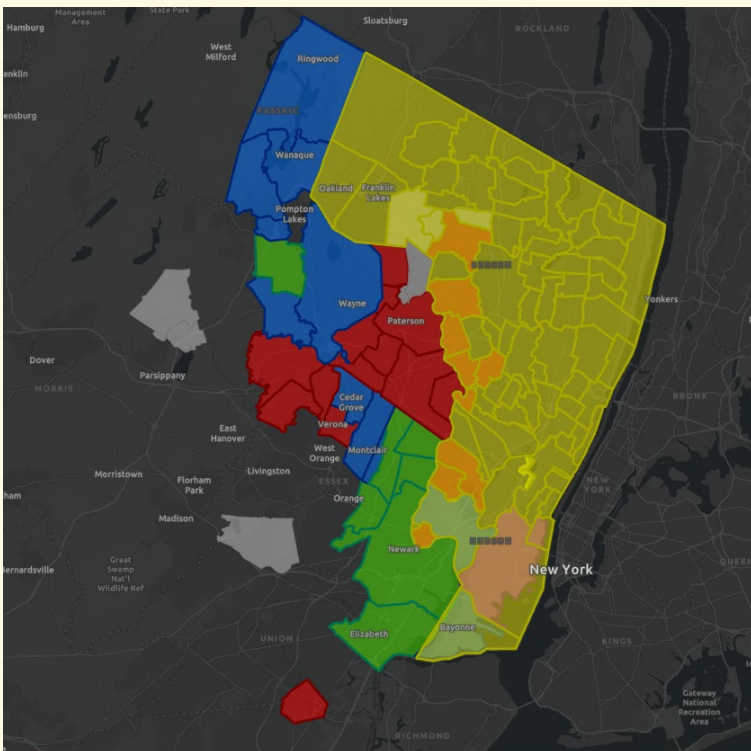


**[AWOP@dep.nj.gov](mailto:AWOP@dep.nj.gov)**



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# Northeast Resiliency Project



Purpose of this project is to ensure that the major community water systems in the NE region have a high level of resiliency through redundant infrastructure, enhanced gravity storage, high-capacity interconnections, and coordinated dynamic reservoir system operations to maintain normal supply demands during water emergencies and scheduled water system maintenance required to ensure water infrastructure functionality.

[Leronda.Aviles@dep.nj.gov](mailto:Leronda.Aviles@dep.nj.gov)  
609-292-5550

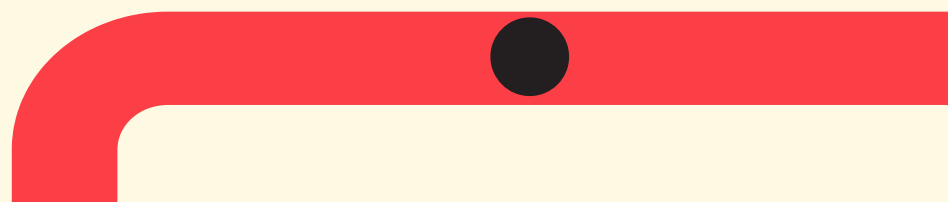
**What is our Emergency Response Plan?**

**What infrastructure is not redundant and/or vulnerable?**

**Inventory**

**GIS Mapping**

**What infrastructure is missing?**





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# New/Upcoming Compliance Resources

Bureau of Safe Drinking Water  
609-292-5550



**GWR Corrective  
Action Plan (NEW)**



**RTCR Level 2  
Assessment Form  
(Updated)**



**LCR Reduced  
Monitoring  
Requirements  
Guidance (NEW)**



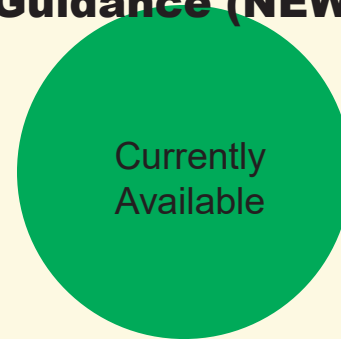
**Facility Out of  
Service Forms  
(Updated)**



**Copper Water Bill  
Notification (NEW)**



**WQP TT Violation  
PN Template**



**Remedial Measures  
Report Form  
(Update)**



**What compliance forms would  
you like to be updated? Or  
guidance to be created?**



NEW JERSEY  
DEPARTMENT OF  
ENVIRONMENTAL  
PROTECTION

# Mini Training Sessions/ Workshops



**Who is interested in attending mini training session?**

**Who is interested in attending workshops that provide hands on assistance?**

**Which topics?**

**Virtual vs In-person?**



**Bureau of Safe Drinking Water  
609-292-5550**



# Questions

**Thank you for your attention and participation.**

**You are appreciated for all that you do for our water community.**

**Leronda Aviles**

**[Leronda.Aviles@dep.nj.gov](mailto:Leronda.Aviles@dep.nj.gov)**

**609-292-5550**

**<https://www.nj.gov/dep/watersupply/index.html>**

**Kristin Tedesco**

**[Kristin.Tedesco@dep.nj.gov](mailto:Kristin.Tedesco@dep.nj.gov)**

**609-292-2957**

**<https://www.nj.gov/dep/watersupply/index.html>**



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PROTECTION**