



# Protecting Drinking Water

New Sustainable Jersey Actions

Anne Heasley, Sustainable Jersey  
Jennifer Feltis – Cortese, NJ DEP



# Announcements

- Certification Timeline Changes

**Municipal** – Samantha, [info@sustainablejersey.com](mailto:info@sustainablejersey.com)

**Schools** - Veronique, [lambertv@tcnj.edu](mailto:lambertv@tcnj.edu)

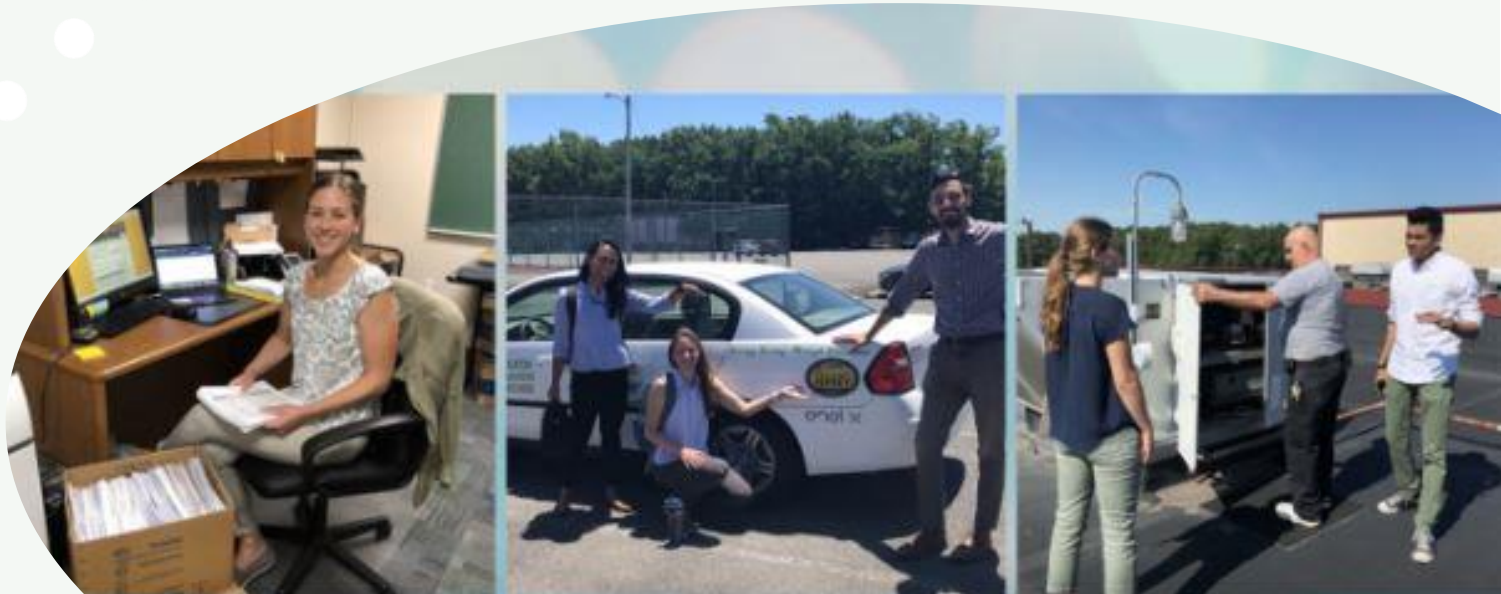


# Announcements

- EDF Fellows:

*Free Technical Assistance for Energy Initiatives*

Nancy, [quirkn@tcnj.edu](mailto:quirkn@tcnj.edu)



Free technical assistance for NJ Municipalities & School Districts  
EDF Fellows

Registration EXTENDED: April 28

# Announcements

- **Free Municipal Tech Coaching –**  
Lauren, [skowronl@tcnj.edu](mailto:skowronl@tcnj.edu)

## Request for Municipal Tech Coaching

COMPLETE THIS FORM TO BE MATCHED FOR REMOTE TECHNOLOGY ADVICE

To respond to the unique challenges of the COVID-19 pandemic, Sustainable Jersey is offering technical assistance to local governments looking to implement on-line strategies for engaging the public, providing critical information, and holding public meetings. Specifically, we are matchmaking tech-savvy coaches (volunteers and staff) with local governments looking for advice on which tool to use, help with specific questions, and help on how to get started with any of these strategies.

Such strategies might include:

- Using Facebook or Twitter to create polls or live chats,
- Setting up an online or teleconferenced public meeting,
- Creating an online sign up process for your municipal email or text notification,
- Creating a database to track your vulnerable populations.

# Announcements

- Census Response  
Samantha, [info@sustainablejersey.com](mailto:info@sustainablejersey.com)



# (speakers)



Jennifer Feltis – Cortese, NJDEP  
Jennifer.Feltis@dep.nj.gov



Anne Heasly, Sustainable Jersey  
heaslya@tcnj.edu

# Protecting Drinking Water

New Sustainable Jersey Actions

## Today's Webinar

- **Status of Water Gold** – entry actions and tips on working towards this new gold star Standard
- **New Actions:**
  - *Removing Lead in Drinking Water* – variable points and resources available for completing this action
  - *Private Well Outreach and Testing* – variable points, how to compile results from testing in your community and other resources for completing this action.
- **Answer your questions**

Water  
Gold

Removing  
Lead

Private  
Well  
Testing





## Algae Bloom Fouls N.J.'s Largest Lake, Indicating Broader Crisis

Lake Hopatcong, normally buzzing with swimmers and water skiers, is filled with cyanobacteria in quantities never before recorded.



## Severe weather spurs flooding, disruption of service in Pa., N.J.

By WHYY Staff, Associated Press - June 20, 2019



## City of Newark's

## Lead Service Line Replacement Program

The City of Newark is committed to provide clean, safe and reliable water to its residents. To support this mission, the city has developed a Lead Service Line Replacement Program. The program consists of a series of actions that Newark will take to replace lead service lines in drinking water at the customer's tap. The program also includes education on the steps they can take to reduce their exposure to lead in drinking water.

# Water Gold Task Force

Jennifer Feltis – Cortese, **NJDEP & Chair**

Andrew Hendry, **New Jersey Utilities Association**

Dan Van Abs, **Rutgers University**

Ed DiFiglia, **New Jersey Future**

Ellen Creveling, **The Nature Conservancy**

John Hasse, **Rowan University**

Jennifer Coffey, **ANJEC**

Kristi MacDonald, **Raritan Headwaters**

Margaret Waldock, **Dodge Foundation**

Swarna Muthukrishnan, **Clean Ocean Action**

Thomas Flynn, **Woodbridge Township**

Michael Furrey, **American Water Works Association**

Jim Waltman, Michael Pisauo, **The Watershed Institute**



# Sustainable Jersey Water Goals

- Drinking water is clean and safe for human consumption.
- Water quality in streams, lakes & wetlands is enough to support species & ecosystems; safe for recreation & fishing.
- Water supply, including streamflow & groundwater, is sufficient for human uses & ecosystems.
- The water system, including infrastructure (drinking, stormwater & wastewater), provides adequate capacity & is resilient to climate changes.
- Access to water resources is universally affordable & fairly distributed.



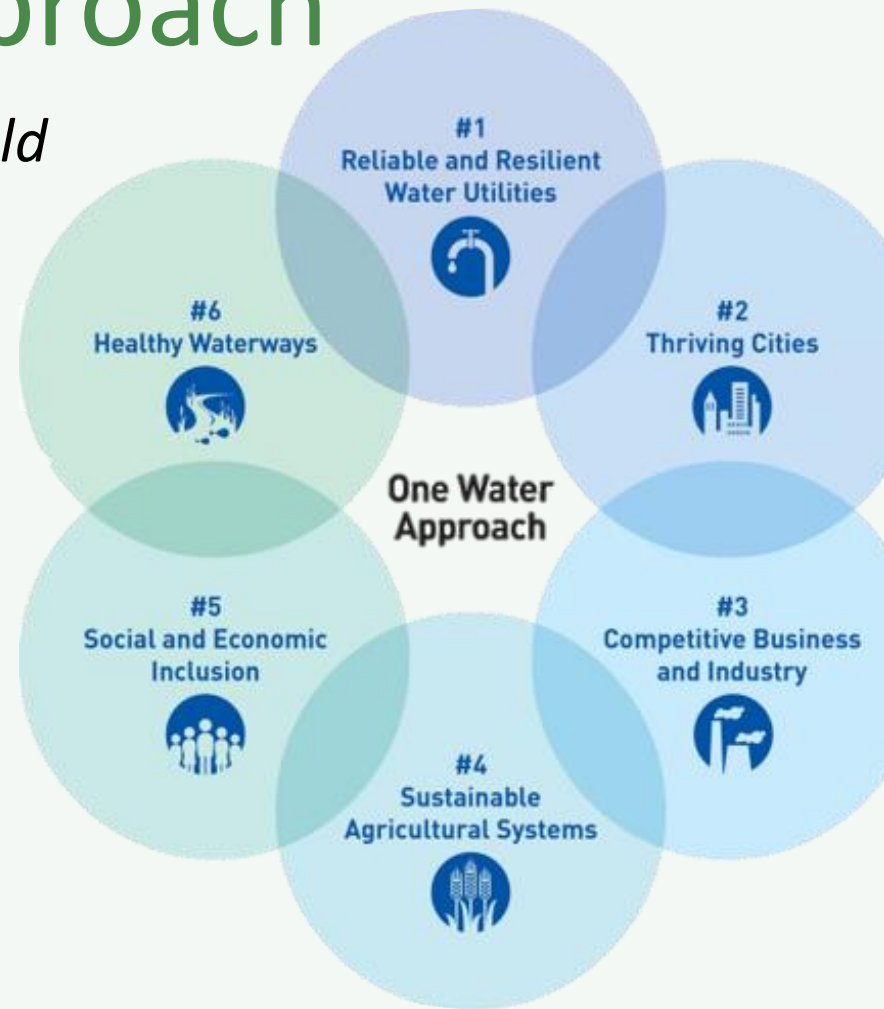
# One Water Approach

*“all water has value and should be managed in a sustainable, inclusive, integrated way”.*

- US Water Alliance on One Water Approach

Stormwater, drinking water, waste water and water resources

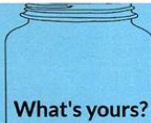
- Update existing actions
- Create new actions



# Municipal Water Story

## The Water Pantry

Every Mason jar in this display contains a water story.



This project sets out to explore connections between people, place, and water through storytelling. Each Mason jar is filled, literally and figuratively, with a New Jersey water story. Just as a kitchen pantry is a collection of separate items related to food, we're creating a "pantry" of water (and stories) from around the Garden State. This Water Pantry display is intended to make sensible the often-unnoticed role of water in our everyday lives.

A South Jersey invention of the nineteenth century glassworks, the Mason jar has persisted for 160 years, inspiring continuous innovation, adaption, and reuse. So much more than an empty vessel, Mason jars contain the products of labor, livelihood, craft, and care. Most importantly, Mason jars preserve what we need for the future. Such a simple glass container invites us to collect, make, remember, and imagine.

In considering our personal connections to New Jersey's water ways, we turn to the Mason jar to guide our thoughts.

What New Jersey water source is most meaningful to you?  
Why do you want to preserve this water for the future?

There are two ways to participate in the Water Pantry:

### Option 1

Pick up a 'Water Pantry Kit', follow the instructions, and return your Mason jar by **Thursday July 19th**. At the end of the display period (Friday July 27th) you may collect and keep your jar.

### Option 2

Join us for a public Water Pantry story telling workshop on **Thursday July 26th, 7:00 pm** at the Library!

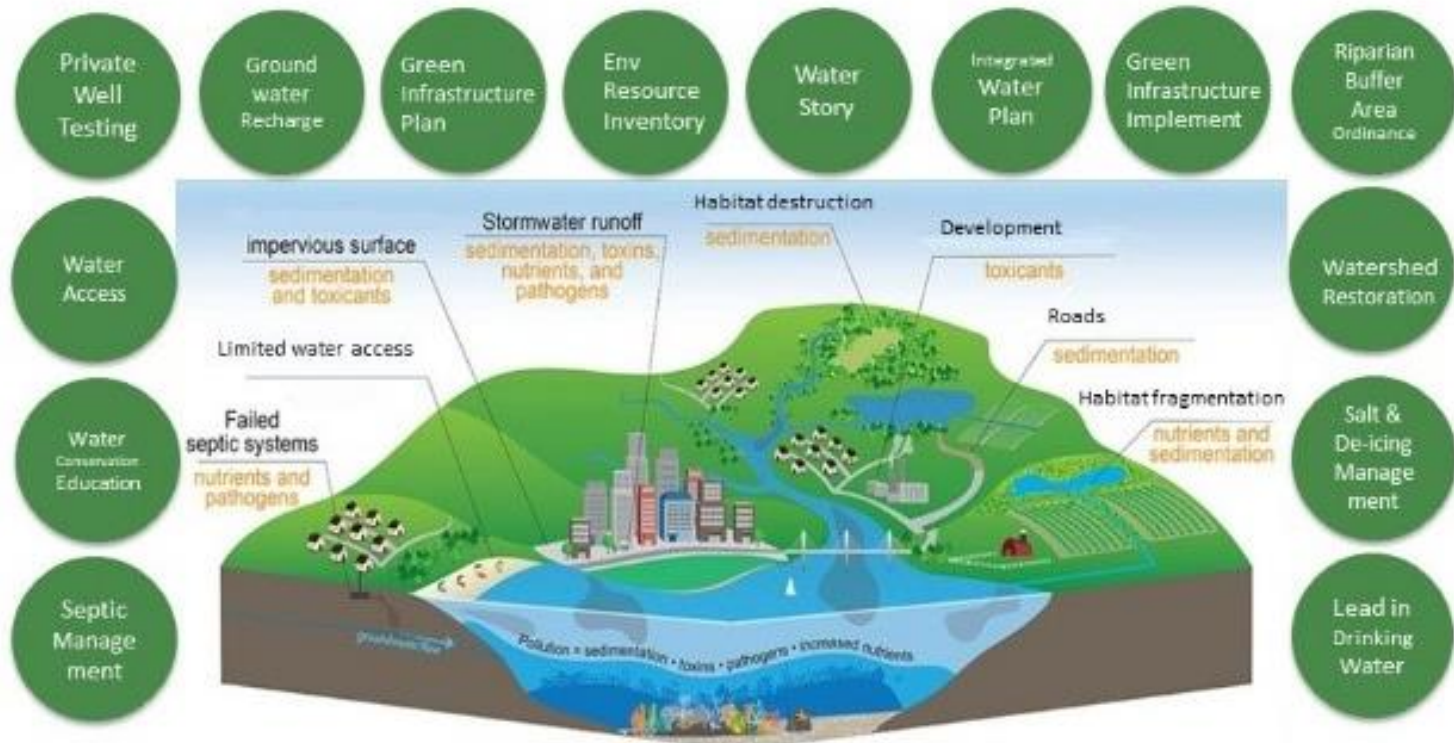


NEW JERSEY COUNCIL  
FOR THE  
HUMANITIES



# Gold Star Standard

## Threats to water from land and Actions to address them



# Navigational Path



# Drinking Water

Its delivery is unique to your municipality as well as your location within your municipality.

- Approximately 10% of New Jersey residents get their drinking water from private wells.
- Remaining 90% are using public water systems:
  - 40% are relying on aquifers for drinking water
  - 60% are relying on surface waters for drinking water




# Sustainable Jersey New Website

- Click on “Actions Tab”

← → ↻ 🏠 sustainablejersey.com/actions/ 🔍 ☆ 📄 | 📄 👤

[f](#) [t](#) [i](#) [in](#) [v](#)

[ABOUT](#) [NEWS](#) [SUPPORT US](#) [CONTACT US](#) [HOME](#) 🔍 [Register](#) [Sign in](#)

 [Certification](#) [Actions](#) [Grants](#) [Events](#) [Resources](#) [Get Involved](#)

**Municipal Dashboard**

> **Action Development**

**Priority & Prerequisite Actions**

**2020 Certification Cycle**

> **Gold Star Standards**

**Program Updates**

**Search Participating Municipalities & Approved Actions**

**Resources**

## Actions

**Search Actions**

Type in a word(s) to identify all actions with that word(s) in the title

☐ Mandatory ☐ Priority [Search Actions](#) [Clear Search](#)

↑ BACK TO TOP EXPAND ALL ⌵ COLLAPSE ALL ⌴

**Animals in the Community** ▾

**Arts & Creative Culture** ▾

**Brownfields** ▾

**Community Partnership & Outreach** ▾

# Action List

- Click on “Health & Wellness” drop down

Download Master  
Action Tracking  
Spreadsheet

↑ BACK TO TOP

EXPAND ALL



COLLAPSE ALL



Community Partnership & Outreach



Diversity & Equity



Emergency Management & Resiliency



Energy



Food



Green Design



Health & Wellness



Innovation Projects



Land Use & Transportation



Local Economies



Rectangular Snip

# Health & Wellness

- Find the two new actions

↑ BACK TO TOP	EXPAND ALL	COLLAPSE ALL
Health & Wellness		
<u>Anti-Idling Education &amp; Enforcement Program</u>		
10 Points		
<u>Building Healthier Communities</u>		
5 Points		
* THIS ACTION HAS VARIABLE POINTS: 6, 10, 16, 20, 26 * COMPETITIVE FUNDING AVAILABLE		
<u>Health in All Policies Professional Development</u>		
10 Points		
<u>Private Well Outreach and Testing</u>		
10 Points		
* THIS ACTION HAS VARIABLE POINTS: 10, 16, 20, 26		
<u>Removing Lead in Drinking Water</u>		
10 Points		
* THIS ACTION HAS VARIABLE POINTS: 10, 30, 40		
<u>Safe Routes to School</u>		
10 Points		



## Removing Lead in Drinking Water

The goal of this action is to reduce exposure to lead by raising awareness of its presence and requiring abatement. Authority for municipalities to address lead is found under the powers granted through the public health code (N.J.S.A. 26:3A-2 et seq and N.J.A.C. Title 8).



# Removing Lead in Drinking Water

10, 30 and 40 points

Tier 1: Education and Testing (10 pts)

Tier 2: Education and Ordinance to require testing in change of residency (20 pts) *OR*

Tier 3: Education and Ordinance to require testing; and remediation before change of residence (30 pts)

## Removing Lead in Drinking Water

10 Points

30 Points

40 Points

New Action March 2020

Lead is a common metal that was once widely used across America in paint, gasoline, and plumbing. However, as lead's toxicity and negative health impacts on humans were discovered by scientists, its use was banned in a number of applications. In 1986, the Federal government prohibited the use of lead in pipes and plumbing, as lead was found to leach into the water supply. While the ban prevented new lead pipes and plumbing from being installed, it did nothing to address the millions of lead service lines that were already buried in the ground and carrying water into homes.

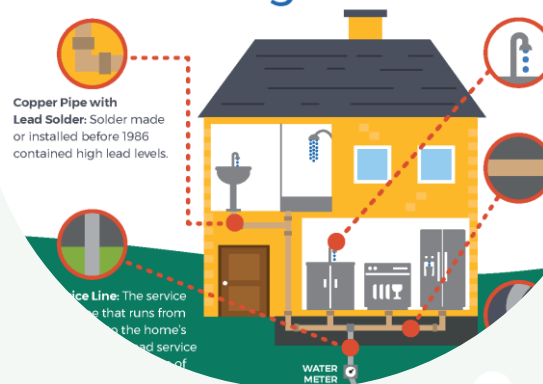
The purpose of this action is to encourage municipalities to reduce their residents' exposure to lead through awareness, education and remediation. The tiered point structure reflects the impact a municipality can have or implement:

- 10 points) - Establish a voluntary testing program to assist residents in determining if there is lead in their drinking water. The testing program must have been active in the current or 2 previous years.
- 30 points) - Implement an ordinance that requires lead testing of all residential units. The ordinance must be granted by the town for a residential unit. The ordinance must require certification.
- 40 points) - Implement an ordinance that requires lead testing of all residential units. The ordinance must be granted by the town for a residential unit. The ordinance must require certification.

EPA

CONCERNED ABOUT LEAD IN YOUR DRINKING WATER

## Sources of LEAD in Drinking Water



# Removing Lead in Drinking Water

## Who should be involved?



Since the presence of lead in drinking water is a public health issue, lead exposure through drinking water can help reduce the lead exposure in the population, and can reduce the negative health effects of lead exposure.

### Who should lead and be involved with this action?

Municipalities that have significant housing stock that was built before 1980 and have known elevated lead levels should consider this action. The following could lead or support this action:

- Green team
- Municipal government representative
- Board of Health
- Environmental Department/Environmental Commission
- Municipal Utility/Water Utility representative

Lead in drinking water is a public health issue, and local health officials should be involved in representing any of the tiers available for this action.



# Removing Lead in Drinking Water

## Education

- In each of the tiers – required component





# Removing Lead in Drinking Water

## Tier 1 – Education and Testing

- Action provides information on organizations – non-profits – that already promote lead testing of drinking water.
- Guidance on how to partner with non-profit organizations or develop your own program.
- Municipalities can organize pick up/drop off of kits and work in some cases to provide a better cost.

JANUARY 1, 2019

## Free Lead Testing

If your house or apartment was built before 1978, you may have lead paint in your home. Lead-based paint, even if hidden under layers of newer lead-free paint, can break down because of age, poor maintenance, or household repairs. Lead can be found in your water from old plumbing pipes, soil, and even in old paint and old pottery. Lead in water has gotten a lot of attention, and old paint can be even more dangerous to young children.



**On public water? Test for lead and copper.**

Public water purveyors test regularly for a variety of contaminants. However, their responsibility for water quality ends at your property line. Since lead and copper contamination often occur as the water travels through pipes in the home, it's important to test your water at the tap, especially if your house was built before 1986.

**Order Kit**



# Removing Lead in Drinking Water

## Tier 2: Education and Require Lead Testing

- Develop and adopt an ordinance that requires lead test of drinking water when there is a change of tenancy in residential units – home sale or rental.



2000/mo

5 bds | 2 ba | 1

St FLOOR 2, Bayonne, NJ 07001

ent





# Removing Lead in Drinking Water

## OR Tier 3 – Education, Testing and Remediation

- Develop and adopt an ordinance that requires lead test of drinking water when there is a change of tenancy in residential units – home sale or rental. And if lead found – must be remediated.

Wednesday, March,  
13, 2019 Ed Murray |  
NJ Advance Media

# Hopewell Township

*There shall be no transfer of real property, change in the use or change in tenancy of a property which utilizes an on-site public or private well water system for its potable water supply until the administrative authority or its authorized representative shall have issued a Letter of Review stating that the water system complies or does not comply with water quality standards specified by the NJ Safe Drinking Water Act N.J.S.A. 58:12A-1 et seq. and implementing rules N.J.A.C. 7:10 and the Private Well Testing Act Regulations N.J.A.C. 7:9E and any other parameters as specified by the health officer based on known contamination in this area.*





# Private Well Outreach and Testing

Roughly 11% of New Jersey's population relies on 400,000 domestic wells for their drinking water.

- New Jersey's Private Well Testing Act (PWTa) requires testing of property if sale of property or every 5 years if the property is leased.

**Protect your health!**

Test your well water for:



- ☒ **Coliform Bacteria**  
(Every year)
- ☒ **Nitrate**  
(Every other year)
- ☒ **Arsenic**  
(At least once)
- ☒ **Lead**  
(At least once)
- ☒ **Manganese**  
(Before a baby drinks the water)

It is even more important if young children drink the water.



You cannot always taste, smell, or see changes in your water quality.

Testing your well water is often the only way to know if your water quality has changed. You cannot taste, smell, or see most water quality changes. Contact (your laboratory name) to learn how to test your well water.



## Private Well Outreach and Testing

10 Points

15 Points

20 Points

25 Points

Print

Get PDF

Why is it important?

Who should lead and be involved with this action?

neframe

st costs and resource

nd how to do it

oints

well water testing and sharing information with the community on known areas of well contamination and corrective actions to reduce or eliminate contaminants, the green team can help reduce the risks to residents caused by drinking unhealthy water. A municipality can earn up to 25 points for this action based on the three tiers outlined below.

**Tier 1 (REQUIRED):** Produce and share with the community a report that includes private well testing data for your municipality available from the New Jersey Department of Environmental Program and information on relevant treatment and remediation methods for various contaminants. The report must have been compiled in the current or previous two calendar years. (10 points)

**Tier 2: (OPTIONAL):** Encourage private well testing by implementing a testing event or program for the community. The event or program must have occurred in the current or previous two calendar years (additional 5 points)

**Tier 3: (OPTIONAL):** Adopt a well testing ordinance that requires testing procedures established by the New Jersey Private Well Testing Act (PWTa) prior to the transfer of property or change in use or tenancy for contaminated wells. (additional 10 points)

# Private Well Outreach and Testing

10, 15, 20 and 25 points

Three Tiers:

Tier 1: Prepare Community Well Test Report (10 points)

Tier 2: Promote well testing (additional 5 pts)

Tier 3: Adopt a well testing ordinance that requires testing procedures established by the New Jersey Private Well Testing Act (PWTa) prior to the transfer of property or change in use or tenancy (additional 10 pts)

# Private Well Outreach and Testing

## Private Well Testing Report – how to

Governor Phil Murphy • Lt. Governor Sheila Oliver  
NJ Home | Services A to Z | Departments/Agencies | FAQs  
Search All of NJ

STATE OF NEW JERSEY  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF WATER SUPPLY AND GEOSCIENCE

DWSG Home | Contact DWSG | A - Z Index | DEP Home

Water Supply Home  
Drinking Water Customers  
Drinking Water Systems  
Wells  
NJ Geological and Water Survey  
Water Allocation  
General Information  
Contact Us  
Open Public Records Act (OPRA)


### Private Well Testing Act (PWTA)

Required when selling or leasing a home or multi-unit dwelling with private well

- [An Overview](#)
- [Frequently Asked Questions](#)
- Statutory and Regulatory Authority
  - [Private Well Testing Act, N.J.S.A. 58:12A-26 et seq.](#)
  - [Private Well Testing Act regulations, N.J.A.C. 7:9E et seq.](#) – Full text of the rules that implement the Act
  - [Regulations Governing the Certification of Laboratories & Environmental Measurements, N.J.A.C. 7:18 et seq.](#)
- [List of New Jersey Certified Laboratories](#)
- [Additional Resources](#): educational, remediation/treatment funding, treatment devices and health effects
- Technical Resources
  - [Required Parameters for Private Well Testing](#)
  - [Global Positioning System \(GPS\) Requirements for Spatial Data Collection](#)
  - [Office of Information Resources Management \(OIRM\), Bureau of Geographic Information Systems \(BGIS\)](#)
  - [US Army Corps of Engineers - Army Geospatial Center](#)
  - [New Jersey Private Well Water Test Reporting Form](#)

[Directory of New Jersey Health Departments](#)

- PWTA data
  - [Initial Well Test Results for September 2002 - March 2003](#)
  - [Well Test Results for September 2002 - April 2007](#)
    - [Addendum to Well Test Results for September 2002 - April 2007](#)
- [Click here to get Detailed Information for PWTA Data](#)
- [Laboratory Reporting Guidelines](#)
- [Contact us](#)

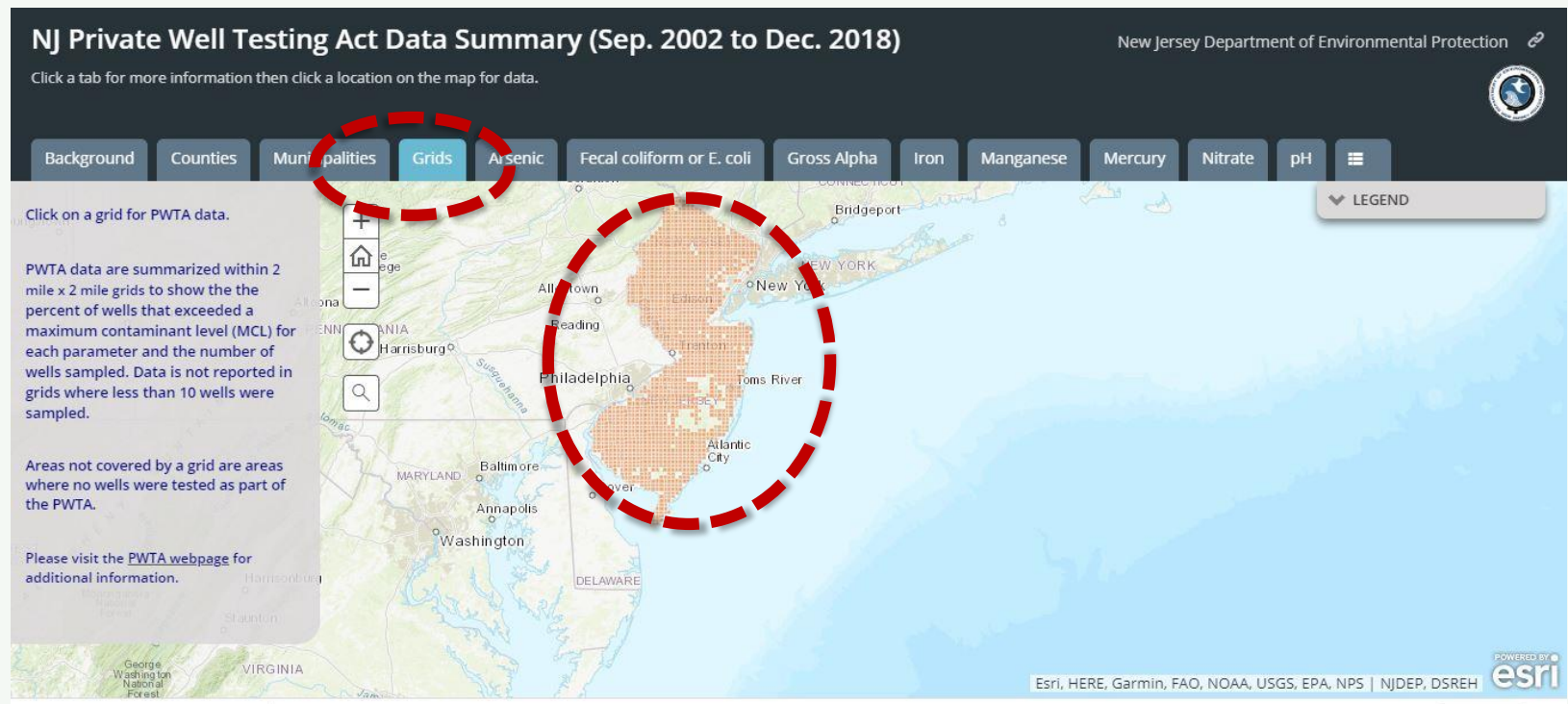


[Http://www.nj.gov/dep/dsr.pwta](http://www.nj.gov/dep/dsr.pwta)



# Private Well Outreach and Testing

## PWTA - Data

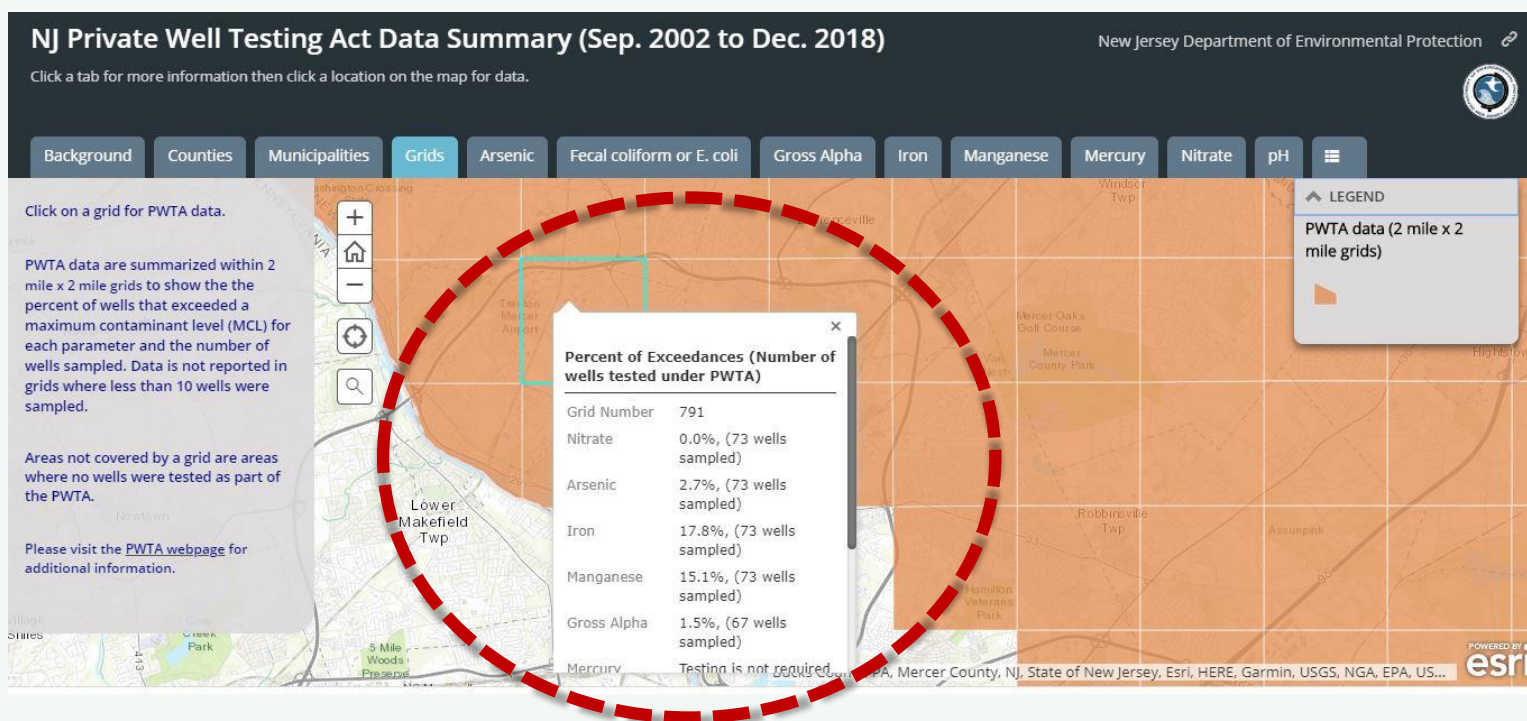


<https://njdep.maps.arcgis.com/apps/MapSeries/index.html?appid=826ec9fae77543caa582a787d5f088e7>



# Private Well Outreach and Testing

PWTA – grids – all contaminants

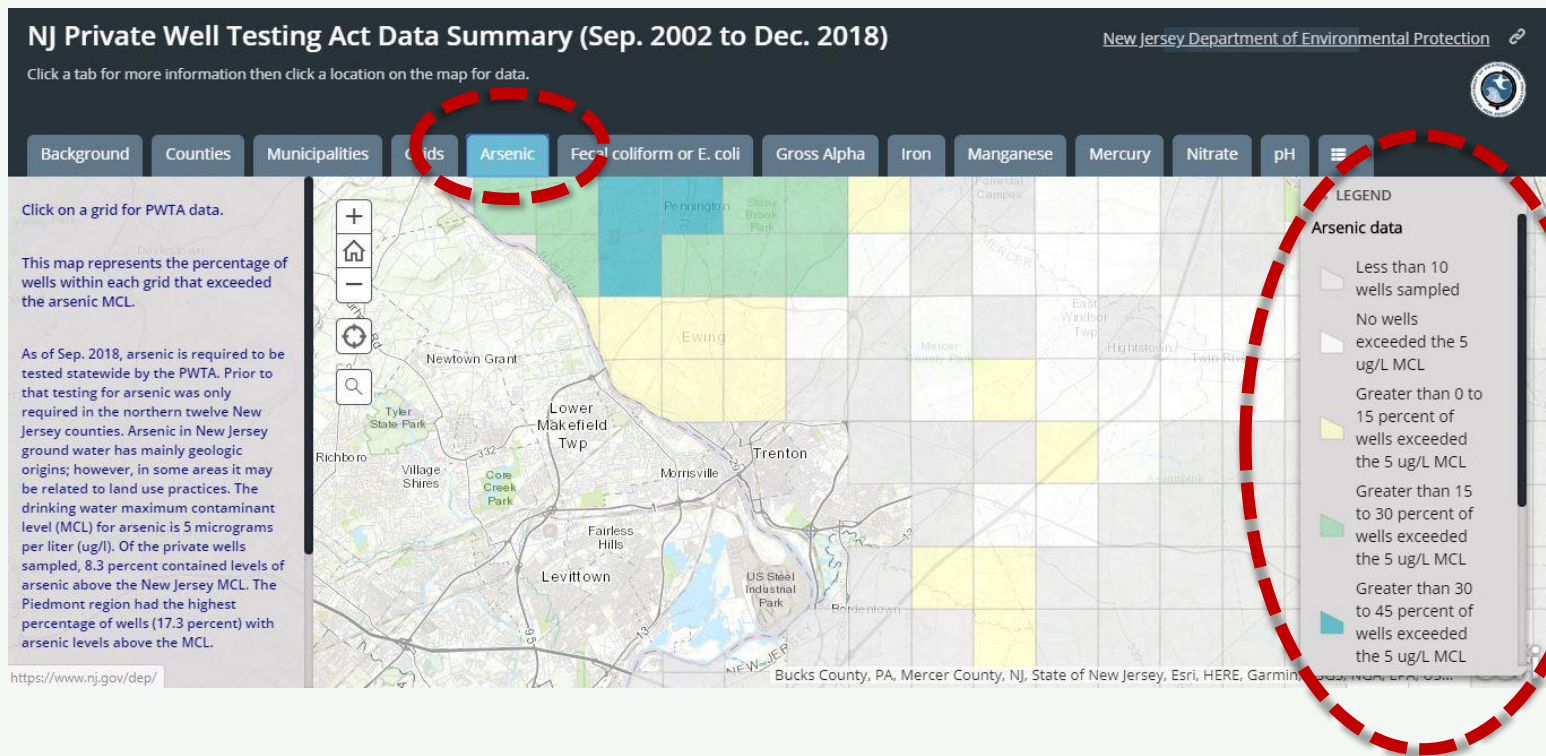


<https://njdep.maps.arcgis.com/apps/MapSeries/index.html?appid=826ec9fae77543caa582a787d5f088e7>



# Private Well Outreach and Testing

PWTA – grids – Arsenic – one contaminant across the grids



<https://njdep.maps.arcgis.com/apps/MapSeries/index.html?appid=826ec9fae77543caa582a787d5f088e7>



# Private Well Outreach and Testing

## Private Well Remediation Options

Contaminate	Remediation Options
Total Coliform	Microbiological Purifiers; Ultraviolet Disinfection <sup>1</sup> ; Chlorinators <sup>3</sup>
E.coli	Microbiological Purifiers; Ultraviolet Disinfection <sup>1</sup> ; Chlorinators <sup>3</sup>
Nitrate	Reverse Osmosis <sup>1</sup>
Iron	Air Stripping (Packed Tower Aeration) with filtration; Ion Exchange <sup>2</sup>
Manganese	Ion Exchange <sup>2</sup>
pH	Acid neutralizing filters; chemical feed pump systems <sup>3</sup>
VOCs	Filtration; Reverse Osmosis <sup>1</sup>
Lead	Distillation; Filtration; Reverse Osmosis <sup>1</sup>
Arsenic	Distillation <sup>1</sup> ; Granular Ferric Adsorption <sup>6</sup>
Mercury	Filtration <sup>1</sup> ; KDF-55 with pH adjustment <sup>3</sup>
Gross Alpha Particle Activity	Reverse Osmosis <sup>1</sup> ; Ion Exchange
Radium	Cation Exchange; Reverse Osmosis <sup>3, 7</sup>
Uranium	Anion Exchange; Reverse Osmosis <sup>3, 8</sup>
1,2,3-Trichloropropane	Granulated activated carbon systems <sup>4</sup>
Ethylene Dibromide	Granulated activated carbon systems; Filtration <sup>1</sup>
1,2-Dibromo- 3-chloropropane	Granulated Activated Carbon systems; pack tower aeration <sup>5</sup>
Perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS)	Granulated activated carbon systems <sup>9</sup>



# Private Well Outreach and Testing

Share Compiled PWTa Report





# Private Well Outreach and Testing

## Tier 2 – Promote Testing

- Most have completed Tier 1 – an additional 5 points.

The screenshot shows the homepage of the TapWatch Drinking Water Tests website. At the top, there is a navigation bar with links for "ABOUT US", "PROTECTING WATER", "OUR CENTER &amp; RESERVE", "PROGRAMS", and "EVENTS". On the right side of the navigation bar, there are buttons for "Membership" and "Donate". The main header features a large image of a young child wearing an orange headband, looking down. Overlaid on this image is the text "TapWatch Drinking Water Tests". Below the header, there is a section with a circular logo that says "TAP WATCH DRINKING WATER TESTS" and the words "CLEAN • SAFE • HEALTHY". To the right of the logo, there is text explaining the importance of testing drinking water. At the bottom of the page, there is a large white circle containing a blue water drop icon. Inside this circle, the text reads "Participate in a Community Well Testing event in your town." and "RHA partners with municipalities throughout the region each spring and fall to offer residents the opportunity to test their well water. This program makes the important practice of regular well testing even easier and more convenient for residents." A green button labeled "Learn More" is located at the bottom right of the white circle.

# Private Well Outreach and Testing

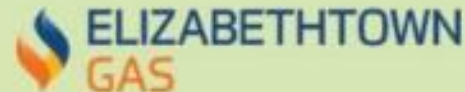
- Tier 3 – : Adopt a well testing ordinance:
- Testing – any change in residency and
- Remediation if state levels exceeded.  
(additional 10 pts)



# PROGRAM UNDERWRITERS



# SUMMIT SPONSORS



# (speakers)



Jennifer Feltis – Cortese, NJDEP  
Jennifer.Feltis@dep.nj.gov



Anne Heasly, Sustainable Jersey  
heaslya@tcnj.edu

# Questions ?



# Upcoming Energy Webinars

## Energy Actions *To Go*

Wednesday, April 29, 1:00pm - 2:30pm

## Tracking GHG Emissions from Municipal Operations

Thursday, May 7, 10:00am - 11:30am

## Community Energy Efficiency Outreach Made Easier with Sustainable Jersey Toolkits!

Tuesday, May 12, 2020, 1:00 PM - 2:30 PM

## Case Studies from New Jersey's Community Solar Energy Pilot Program Year 1

Wednesday, May 20, 2020, 1:00 PM - 2:30 PM

## Energy Efficiency Outreach Green Team Trainings

Virtual trainings for launching commercial/residential energy efficiency outreach campaign. Take survey [here](#) to let us know the best time for trainings.



*Sustainable Jersey will be launching new guidebooks, toolkits, and resources to help make completing energy actions easier.*

