

Raritan Headwaters Watershed Tools for Local Leaders

Working Together for Lead-free Drinking Water in Your Community

March 11, 2021



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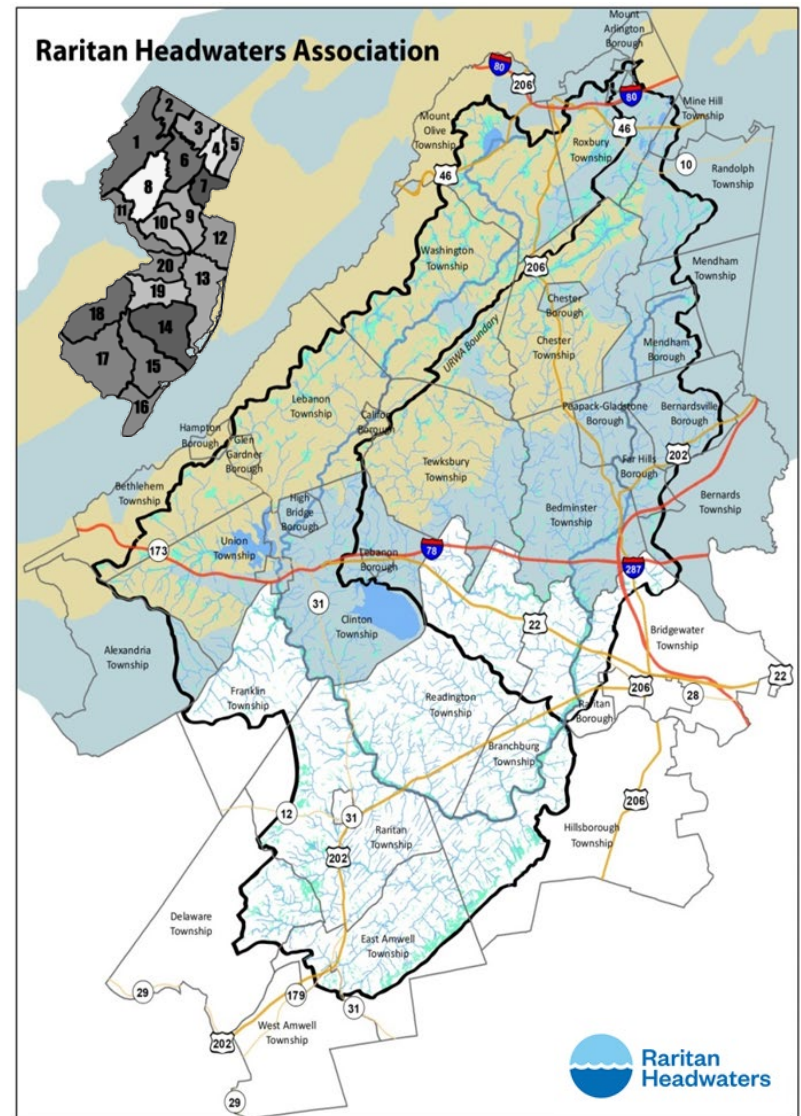
Our Mission

Since 1959, securing clean water for present and future generations. We protect land and water in our watershed and beyond through science, education and advocacy.



North & South Branch Raritan River Region

- 470 square miles: 43% of the Raritan River Basin
- 3 Counties: Hunterdon, Somerset & Morris - includes 38 municipalities
- home to nearly 300,000 people
- 34% Urban, 22% Ag, 45% Forest & Wetland
- our 1,404 miles of rivers and streams provide drinking water to more than 1.5 million citizens living downstream
- part of the Highlands Water Supply
- contains 2 of NJ's largest reservoirs, Spruce Run and Round Valley



Watershed Tools for Local Leaders

- Share and apply key science, planning, and regulatory tools
- Partner on projects to identify, protect, and restore water resources
- For upcoming & archived workshops visit <https://www.raritanheadwaters.org/municipal-tools/>



Watershed Tools for Local Leaders Winter-Spring 2021

April 15, 1-2pm

Watershed planning for municipalities: Control stormwater, improve water quality and save money (Dr. Chris Obropta, Rutgers Water Resources Program)

April 22, 1-2pm Earth Day

Intro to Sustainable Jersey's Gold Star Standard in Water: Pathways for protecting & enhancing community water resources (Anne Heasley, Sustainable Jersey)

April 29, 1-2pm

How healthy are streams in your municipality? An intro to RHA's stream monitoring program (Maria Berezin Dowling, RHA)

May 6, 1-2pm

A guide to incorporating climate vulnerability and adaptation planning into municipal master plans (Kristi MacDonald, RHA)

**April 17th RHA's Annual
Watershed-wide Stream Cleanup!**



LEAD IN THE NEWS



Flint, MI



Newark, NJ



St. Joseph, LA

"Beyond Flint: Excessive lead levels found across all 50 states"

"Public health emergency declared in St. Joseph, Louisiana; water being tested for lead"

"Arsenic, lead levels could crush property values in N.J. town, suit says"




According to the USGS, potential sources of lead in homes can include:

- Lead pipe or fittings used in homes built before 1930
- Lead solder used in copper fittings in homes built before the late 1980s
- Lead-free brass components, which, in all states except for California, may have contained up to 8% lead before 2014
- Galvanized steel that contained 0.5% to 1.4% lead



**GET
THE
LEAD
OUT.**



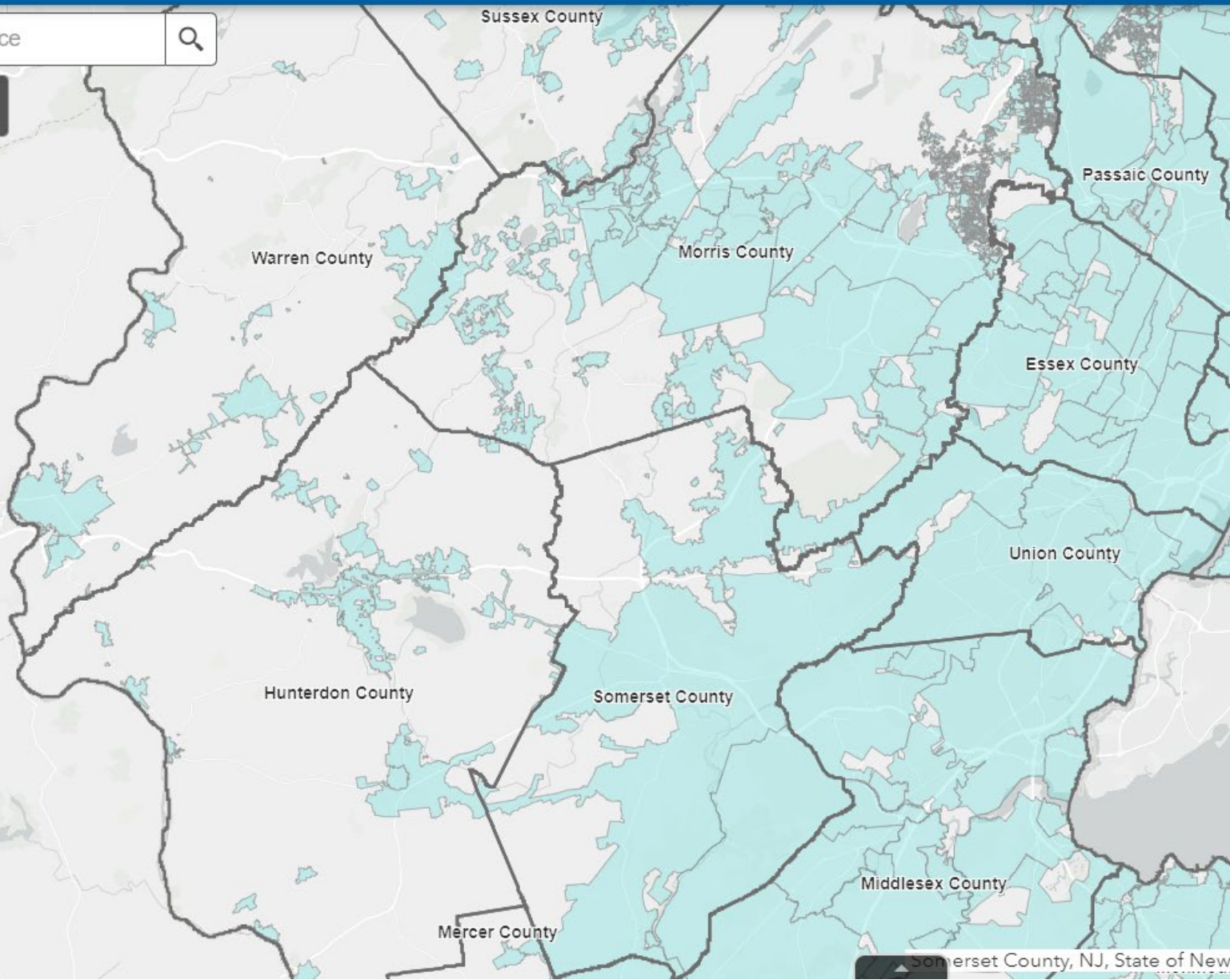
Areas Served by Public Water



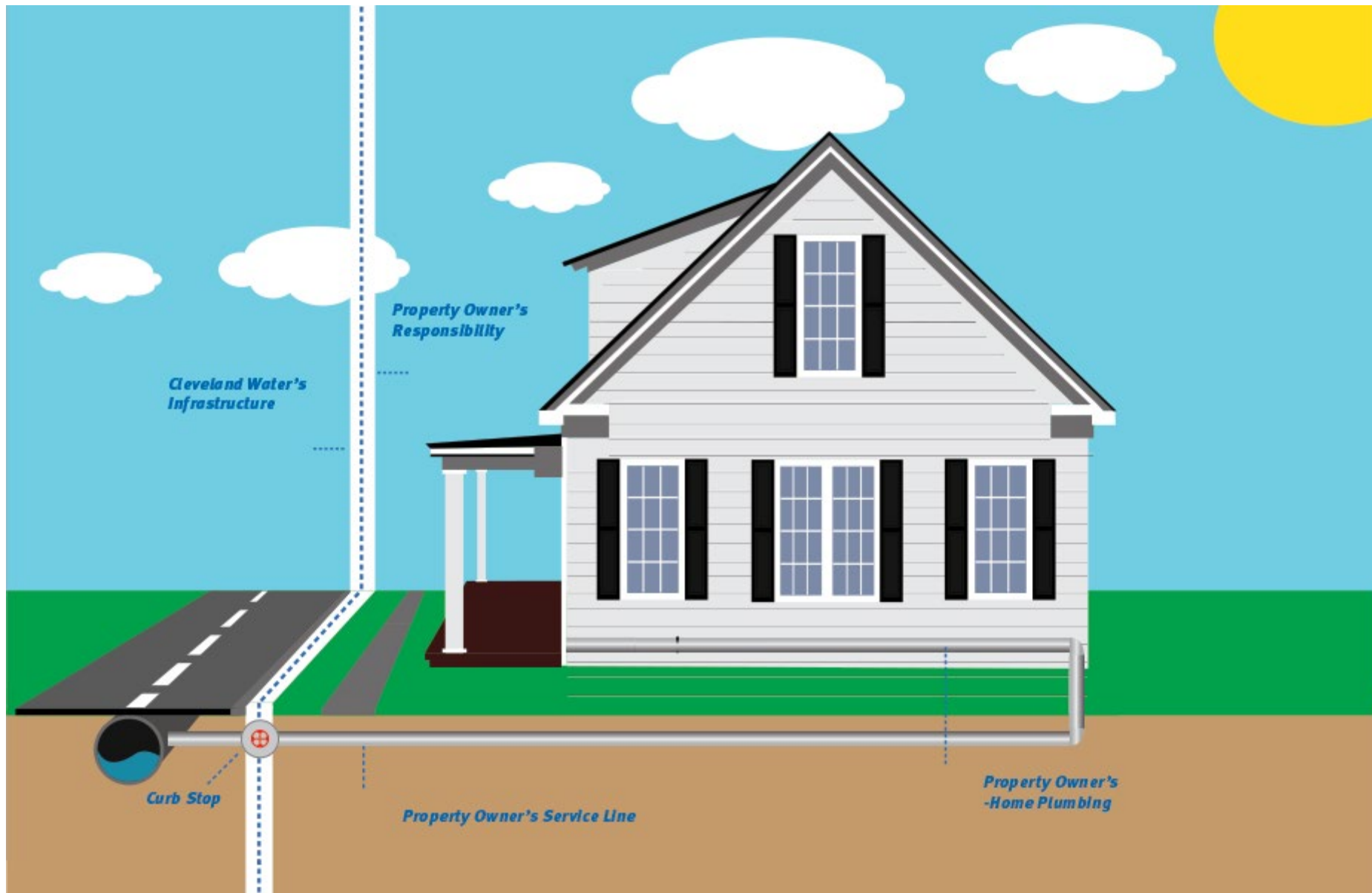
NJ-GeoWeb

New Jersey Department of Environmental Protection BGIS

Find address or place



Somerset County, NJ, State of New



**GET
THE
LEAD
OUT.**



Raritan
Headwaters
TestMyWell.org



WELL TESTING PROGRAM

- RHA partners with municipalities throughout the region to offer residents the opportunity to test their well water.
- Testing is done by a state-certified laboratory for analysis.
- Test results come directly to us, and we share the results directly with residents.

partnership * community service * convenience *
affordability * privacy

East Amwell Township
WELL WATER TESTING

April 5 - April 9, 2021
9:00am to 3:00pm
Evening hours: April 6th from 5:00-7:00pm.
East Amwell Municipal Building 1070 Route 202/31

Pick up a test kit

Basic Kit \$60
Basic kit includes tests for coliform bacteria, E.coli, and nitrate. Test every year.

Arsenic \$35
Testing recommended every 3-5 years.

Lead \$25
All homes built before 1987 should have drinking water tested for lead.

Iron \$15
Iron may cause aesthetic issues such as rust stains or a metallic taste.

Radon \$50
Radon in well water is a common issue. Test at least once.

Gross Alpha \$80
Gross Alpha is a test for uranium and radium. (other testing options are available)

What's in Your Water?
TestMyWell.org

For more information contact the RHA Well Testing Office
908-234-1852 ext. 401

Water samples must then be returned to Municipal Building on April 12 from 7:00 to 9:30am.

Raritan Headwaters
COMMUNITY WELL TESTING PROGRAM

The only way to know your well water is safe is to test it!

Community Well (and Lead!) Testing Events



ON THE ROAD WITH RHA'S

**WELL
TEST
WEDNESDAY**

July 1st 8:00-10:00 AM

Lebanon Twp Memorial Park
67 Bunnvale Road, Califon

Clean, safe drinking water is integral to maintaining good health. Water testing is the only way to determine if well water is safe to drink. On July 1st, residents may drive up*, procure a well test kit, and return samples to us the very same day!

Visit www.testmywell.org for more information.





WHAT WORKS?



Convenience

Residents find the program's accessibility and affordability appealing. This is key to increasing participation rates.



Communication

Township generated messages are an effective means of communicating with the public. Residents need reminders to test!



Community

Health professionals and groundwater professionals can work together to help well owners.



Education

Well owners come from every social, economic and educational class. Many homeowners are new to rural life and the responsibility that comes with a well.

STEPS TO BETTER PARTICIPATION

1

Support

township partners in communication efforts and provide resources for education and outreach

2

Emphasize

convenience, privacy and affordability

3

Disseminate

information to the public regarding local contamination risks and the need to test.
Work with partners in healthcare fields for broader reach

Informational Survey for Private Well Owners

Community Well Test Participant Pilot Study, Fall 2016

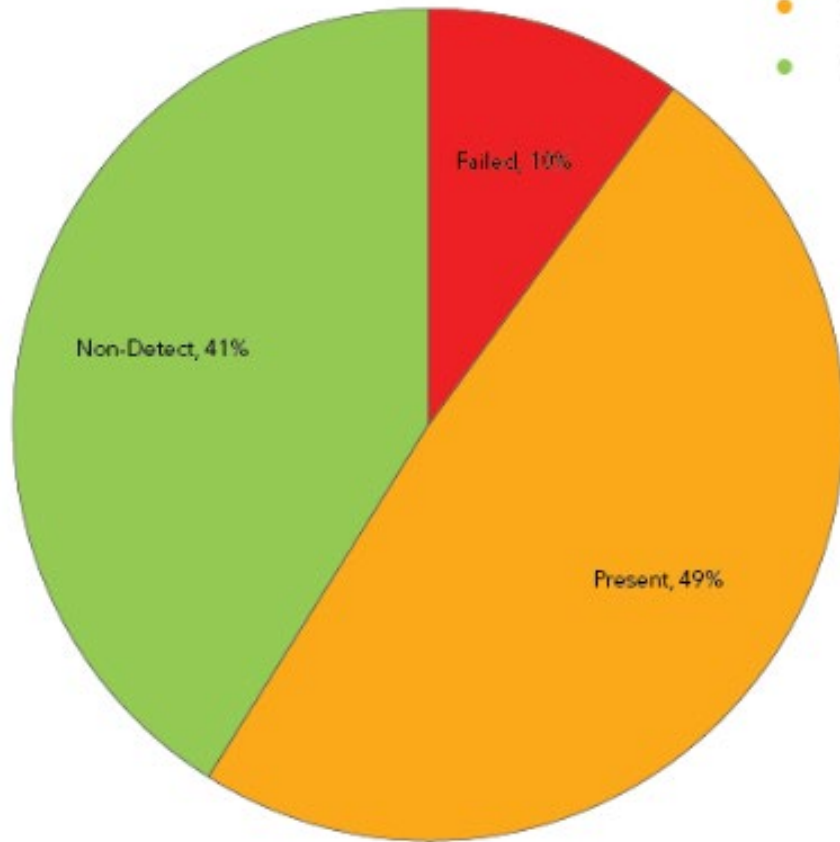
A Joint Project of Raritan Headwaters and
Columbia University Superfund Research Program
(Community Engagement and Research Translation Cores)

- 88% heard about the program through a township communication
- 64% tested through RHA out of convenience

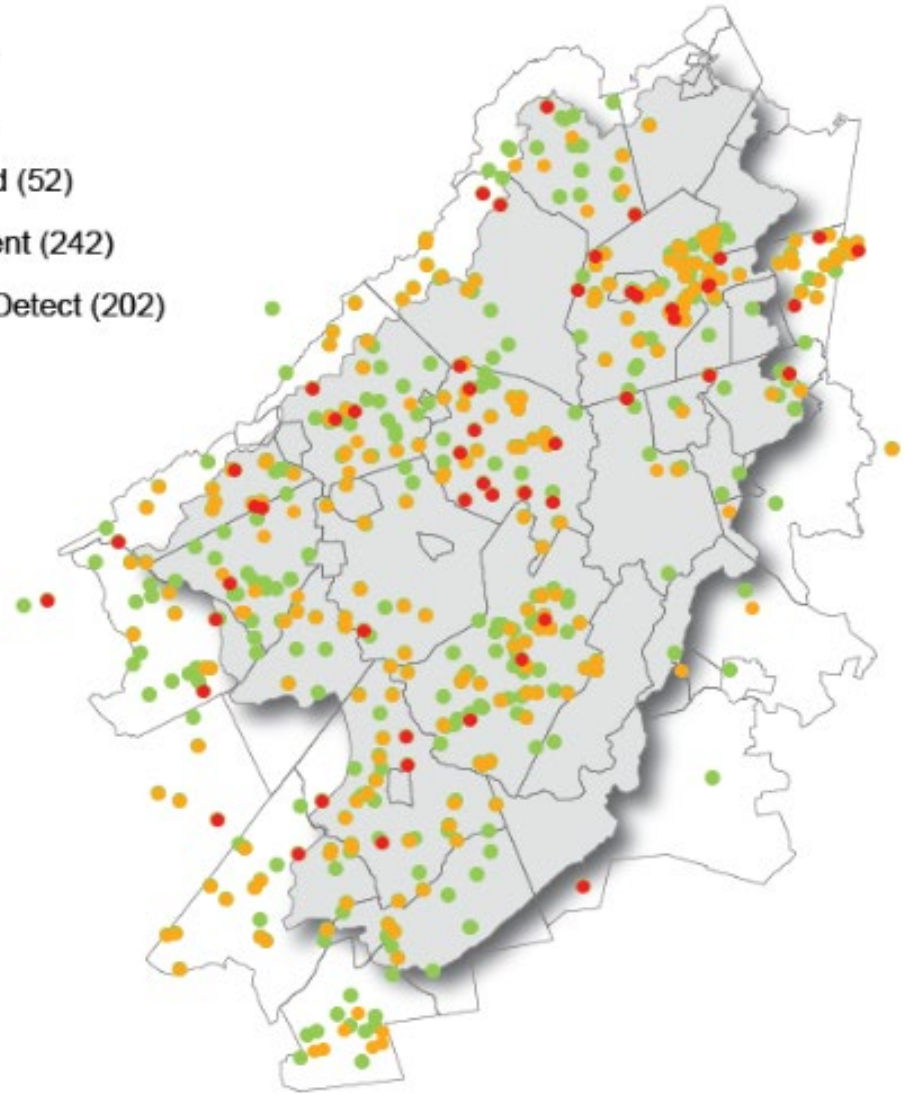


Watershed-Wide Results

Lead



- Failed (52)
- Present (242)
- Non-Detect (202)



Data from Fall 2016-Spring 2017



**LEAD SOLDER ON
COPPER PIPES**



549

HOUSEHOLDS,
in 32 municipalities of the Upper
Raritan Watershed tested for lead in
2019.

5

PARTS PER BILLION,

(ppb) is the maximum amount of lead allowed in
bottled water sold in the U.S. The limit for lead in
public water supplies is 15 ppb.



0

PPB,

is the goal level for lead in
drinking water. There is no
known amount of lead
exposure that is
considered safe.

267

PARTS PER BILLION,

was the highest amount of lead detected
in a home water supply during the 2019
testing period.



51

PERCENT,

of homes tested had some level
of lead contamination.

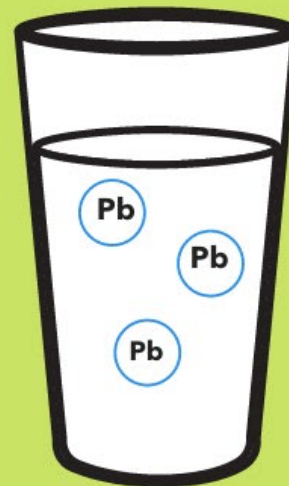
IN THE YEAR,

1986

Safe Drinking Water Act amendments defined
"lead-free" plumbing. Lead solder was banned for
use in potable water systems nationwide but until
2014, products were still allowed to be sold with
up to 8% lead content.



**Lead
by the
numbers**



77

SAMPLES,

out of 549 had lead levels
over 5 ppb.



Making Matters Worse: Road Salt and Lead



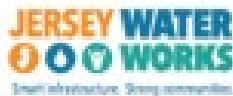
Researchers have found that the consistent use of road salt in the Northeast has heightened salt levels in the water year round because the chloride has penetrated into the groundwater, where it seeps back out into rivers and streams.

New Jersey Lead in Drinking Water Task Force



Lead in Drinking Water: A Permanent Solution for New Jersey

Report of the Jersey Water Works Lead in Drinking Water Task Force



Lead in Drinking Water Task Force Report

- Ten-year goal for replacement of all lead service lines (LSLs)
- Disclosure of LSLs and visible lead indoor plumbing at home sales and rentals
- Mandatory lead service line inventories
- Mandatory LSL replacement by property owners, with no cost share required
- Authorize 100% rate recovery across water systems' entire service area
- State subsidy to assist localities with high lead and fiscal distress
- Strengthen water sampling, corrosion control, and water quality parameters
- Holistic lead inspections across all sources (i.e., paint, water, and soil)
- Accelerate public notification and education
- Research rationalizing a lower action level

Take Home Message to Share with Residents



- **Test your water for lead**
- **Flush** standing water from pipes (if lead detected)
 - Run your water for 15-30 seconds or until it becomes cold before using it for drinking or cooking. This flushes any standing lead from the pipes.
 - Don't cook with or drink water from the hot water tap; lead dissolves more easily into hot water.
 - Do not boil your water to remove lead. Excessive boiling water makes the lead more concentrated – the lead remains when the water evaporates.
- **Install a water filter**
 - To reduce lead in your drinking water, make sure the filtration system you choose is certified by National Sanitation Foundation/American National Standards Institute for lead reduction. NSF-certified systems have been independently verified to be able to reduce lead from 150 ppb to 10 ppb or less.
 - Perform regular maintenance as instructed
- **Test your pH**
 - For homes on private well with high lead levels, the problem could be low pH. When pH levels drop below 7.0, water becomes acidic which can cause lead to leach from pipes and faucets. Acid neutralizing systems are generally used to correct this situation. Water softeners may also make water more corrosive.

Additional Resources

- Raritan Headwaters Lead Toolkit www.raritanheadwaters.org/lead-in-drinking-water/
- Jersey Water Works Lead in Drinking Water Task Force
- <https://www.jerseywaterworks.org/our-work/lead-in-drinking-water-task-force/#members>
- NJ Drinking Water Watch
https://www9.state.nj.us/DEP_WaterWatch_public/NJMap.jsp
- NJDEP information regarding School Lead Testing
<https://www.state.nj.us/dep/watersupply/schools.htm>
- National Sanitation Foundation <https://www.nsf.org/knowledge-library/lead-in-drinking-water> (Consumer guide to NSF-certified lead filtration devices for reduction of lead in drinking water)
- Newark Lead Service Line Replacement Program
<https://www.newarkleadserviceline.com/replacement#material-test>

Thank you for attending today's Watershed Tools for Local Leaders Workshop

For upcoming and archived workshops visit

<https://www.raritanheadwaters.org/municipal-tools/>

For more information contact Kristi MacDonald at
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