

It's <u>smart</u> to be curious about your well water

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Topics

- Private Well Water <u>Protection</u> What you need to know
- What to <u>Test</u> for, when & where
- Water <u>Treatment</u> Options

Information pertains to RI private well owners. If you live in another state, check with the local Board of Health or your state agency.

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Your well is placed into the groundwater to supply water to your home.

What to do if the well runs dry: https://health.ri.gov/water/for/privatewellowners/ about/care/

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Private wells are installed in:1. Bedrock, or2. Sand & Gravel



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Well water quality is affected by:

- 1. What we do in and around our home.
- 2. What is in the soil and rock that the groundwater moves through.



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Let's look at an example

How can a septic system affect groundwater and well water quality?



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Well Water Protection

Learn:

- Where the well is located on your property.
- ✓ What is going on around the well.
- ✓ What type of well you have.
- ✓ What the water test results mean.

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Where is the well located 1. In the yard?



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Where is the well located 2. In the Neighborhood?



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Minimum private well water set back distances from potential sources of contamination



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Low maintenance grass is best around the well



X Decorative coverings, plants and shrubs will encourage animals to live near the well.



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What type of well do you have?



Drilled Well



Driven Well



Dug Well

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Well Construction - What's Important?

- ✓ Wellhead is at least 18" above the ground.
- ✓ Well cap is on tight and sealed.
- ✓ Well casing (piping) is grouted with a water-tight seal.
- ✓ Well is located away from potential pollution sources.
- ✓ Well driller submits a Well Completion
 Report to RI Dept of Health and homeowner.
 Need yours?
- Contact Grace Clancey at RIDOH 222-6867
- Regulations for new well construction & existing well repair:
- https://rules.sos.ri.gov/regulations/part/440-10-00-6

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New Well Construction – Drilling Depths

Well Yield	Minimum Well Depth	
5 gallons per minute (gpm)	100 ft. or less	
3.5 gpm	150 ft.	
2 gpm	200 ft.	
1 gpm	300 ft.	
0.5 gpm	450 ft.	

https://rules.sos.ri.gov/regulations/part/440-10-00-6

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<u>Drilled Well</u> Captures groundwater flowing through cracks in bedrock



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Hiring a well contractor?

✓ Make sure he/she is licensed and insured.

✓ You can double check on RI
 Contractors' Registration and Licensing
 Board website. (need contractor's
 registration #)



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Follow the Well Testing Schedule

🗧 Every year	Severy 3-5 years		Every 5–10 years
Coliform bacteria (germs)	Cadmium	Lead	Volatile Organic Compounds (VOCs)
Nitr <u>ate</u>	Calcium	Manganese	MtBE
Nitr <u>ite</u>	Copper	Sulfate	
Color	Fluoride	рН	
Turbidity (cloudy water)	Iron	Zinc	
Chloride	Tests for corrosiveness Alkalinity Total Dissolved Solids Hardness Specific Conductance 		
Sodium			

Keep your test results together in a file.
 It will help you track any changes in your well water quality over time.

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Also, test for:

<u>Arsenic</u> if you live near an orchard or where there was one.

2. <u>Beryllium</u> if you live in:

- East Greenwich
- West Greenwich
- Coventry
- Exeter
- western Cranston
- Johnston
- Scituate

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RI HEALTH's Private Well Viewer

https://health.ri.gov/water/for/privatewellowners/about/testing/



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Other Times to Test?

 ✓ If the well flooded
 ✓ If you notice a change in the color, taste or smell of your well water



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Test at a State-Certified Lab

- 1. Call and tell the lab what tests you want.
- 2. They will give you bottles and directions to collect the sample.



- 1. Carefully follow directions when collecting the sample.
- 2. Take the sample to the lab within 24 hours.
- 3. The lab will send you the results. If you have questions about the results, <u>call us</u>.
- 4. For a fee, many labs will come to the home, collect the sample and take it to the lab for testing.

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Where to test: State-certified Water Testing Labs

BAL and ESS Labs (401) 785-0241 185 Frances Avenue Cranston, RI 02910

www.ballaboratory.com

Microbac Laboratories

(800) 334-0103 61 Louisa Viens Drive Dayville, CT 06241 www.microbac.com

New England

Testing Lab, Inc. (401) 353-3420 59 Greenhill Street West Warwick, RI 02893 www.newenglandtesting.com

RI Analytical Labs

(401) 737-8500 41 Illinois Avenue Warwick, RI 02888 www.rianalytical.com

RI State Health Laboratories

(401) 222-5600 50 Orms Street Providence, RI 02904 www.health.ri.gov/programs/ laboratory



TIP: Lab websites give details about standard water testing packages and costs. You can also call the labs for this information. The yearly tests cost about \$100.

These labs are State-certified as of 3/2019. For updates, see: www.health.ri.gov/find/labs/privatewelltesting/index.php

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Estimated Testing Costs

Annual Well Test costs \$95 at the RI State Health Lab.

Testing costs for everything on the Well Testing Schedule is \$410 at the RI State Health Lab

Average annual public water bill is \$600 +

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RI Dept of Health's Private Well Testing Regulations June 2008

1. Requires testing of new wells.

- 2. Requires testing upon sale of existing homes with a well.
- Buyers are responsible for testing.

Sellers are responsible to disclose all previous water test results.

https://health.ri.gov/water/for/privatewellowners/about/care/





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Home Water Treatment Test and Talk before you treat. Call Us!

We can help answer your questions about treatment.

Point-of-use Treatment:

Treats water at a single tap. This is an example of an activated carbon filter.





Whole-house Treatment:

Treats all the water entering the house and is installed in the basement. This is an example of a 1.) sediment filter and 2.) a water softener.

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Take the 4 steps

YOUR HOMEWORK

<u>1. Learn</u> about your well

<u>2. Protect</u>
Keep pollution away
Properly use, store & dispose of household chemicals
Make sure any new well is properly sited
Seal any unused well

<u>3. Test</u> – Follow the Well Testing Schedule

<u>4. Act</u> – Call or email us! We're here to help.

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Eco-Depot Schedule 2022

HOURS OF OPERATION

8 AM to 12 PM Rain or shine*

March 26, 2022 Providence – Clean Earth Facility, 252 Allens Ave. April 9, 2022 Coventry - Town Hall Annex, 1675 Flat River Rd. April 23, 2022 Narragansett – North Pavilion, 77 Boston Neck Rd. May 7, 2022 Cumberland - Monastery, 1464 Diamond Hill Rd. May 21, 2022 Burrillville - DPW, 200 Clear River Drive June 4, 2022 Warren – DPW, 21 Birch Swamp Rd. June 18, 2022 West Warwick - Civic Center, 100 Factory St. July 9, 2022 Westerly - DPW, 35 Larry Hirsh Lane July 23, 2022 Providence - Clean Earth Facility, 252 Allens Ave. August 13, 2022 East Providence - DPW, 60 Commercial Way August 27, 2022 Tiverton – DPW, 50 Industrial Way September 10, 2022 Providence – Clean Earth Facility, 252 Allens Ave. September 24, 2022 North Kingstown - DPW, 2050 Davisville Rd. October 1, 2022 Richmond – DPW, 51 Buttonwoods Rd. October 15, 2022 Newport - Easton's Beach, 175 Memorial Blvd. October 29, 2022 Woonsocket – Recycling Facility, 1117 River St. November 5, 2022 Warwick – DPW, 925 Sandy Lane November 19, 2022 Pawtucket - Agnes Little School, 60 South Bend St. (Behind School, back parking lot) December 3, 2022 Providence – Clean Earth Facility, 252 Allens Ave.



*In the event of severe weather (e.g. blizzards, hurricanes), event cancellations will be posted on www.rirrc.org.

We serve approximately 20-25 vehicles every 15 minutes. Appointments are used to avoid everyone arriving at one time, thus reducing waiting times. To make an appointment please call 401.942.1430 x 3241 or visit our website at www.rirrc.org/ecodepot

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Call or email with your questions

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> "We took the 4 steps. We know our well water is safe for our family."



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URI resources: <u>www.riwelltesting.org</u>

RI Dept. of Health resources: <u>https://health.ri.gov/water/for/privatewell</u> <u>owners/about/testing</u>

RI Dept. of Health testing map http://rihealth.maps.arcgis.com/apps/Vie w/index.html?appid=96595ebffaf848cdb 7707fb141c55880

RI EcoDepot Schedule: <u>https://www.rirrc.org/announcements/e</u> <u>vents</u>

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Big Thank You for joining us!

Test your well water. Contact us with questions.

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