



## Preparing Your Well for a Flood

### Before a Flood

1. Store adequate bottled water for drinking and cooking.
2. Fill up the pressure tank as much as possible.
3. Turn off the electricity to the well.
4. If your wellhead does not have a watertight seal, clean the well casing, cover with a heavy-duty trash bag, and secure with waterproof tape.
5. Locate the following:
  - A water testing lab to obtain sample collection bottles and instructions
  - The log/well report completed when the well was established
  - Contact information for local licensed well drillers

### After a Flood

1. Do not turn on electricity to your pump until flood waters recede.
2. If extensive flooding has occurred, do not drink the water. Use your water reserves and bottled water until your well has been tested.
3. Contact a driller before evacuating if you think your well will need service immediately after the flood. You can find a list of certified well contractors at [ncwelldriller.org/web/eh/find-contractor](http://ncwelldriller.org/web/eh/find-contractor).
4. Instructions for shock chlorination can be found at [unioncountync.gov/wells](http://unioncountync.gov/wells)

## Water Treatment Systems

Certified lab test results should be used to determine if treatment is needed. Treatment plans may include filtration, ion exchange, distillation, reverse osmosis, and chlorination.

Visit [unioncountync.gov/wells](http://unioncountync.gov/wells) to select the best treatment plan for your well.

## Selecting a Treatment Plan

1. Test your well to determine what is in your well water.
2. Choose the appropriate treatment based on your lab report results.
3. Determine where to install your water system. Water treatment systems can be installed at the point where the water enters your home or at the point where you use your water.
4. Consider treatment interference. Total hardness, iron, turbidity, and pH can impact the efficiency of the treatment system you select.
5. Get quotes from three different well-water treatment contractors.
6. Look at the fine print in your contract and understand your system.
7. After installation, re-test your water.
8. Maintain and test your treatment system.

Visit [unioncountync.gov/environmental-health](http://unioncountync.gov/environmental-health) for forms, links and additional resources.



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Translation services are provided, free of charge, to agency customers who do not speak English.

#### Non-Discrimination Policy

We do not discriminate services because of sex, race, religion, color, national origin, age or handicap.



# Wells & Water Testing





## Groundwater and Wells

Environmental Health is committed to protecting groundwater resources to ensure a safe and adequate supply of water for well users. **About 25% of Union County's population relies on private wells.** Groundwater protection is accomplished through proper location, construction, permitting, and inspection of wells.

### Well Permitting Process

**A well permit is required for:**

- Private drinking water wells
- Irrigation wells
- Water producing geothermal wells
- Well repairs and abandonments

#### Obtaining a well permit:



Before construction, a well permit application, site plan, and permit fee must be submitted to Environmental Health.



An Environmental Health Specialist will visit the property and check the site.



If site conditions allow, a permit is prepared which will include:

- A scaled drawing of the property
- Identification of all potential sources of contamination and setbacks.

The well may be located anywhere outside of the setback area(s).

Well applications for parcels served by public sewer or water, as well as parcels located within the City of Monroe, require additional approvals.


## Well Maintenance and Testing

A properly constructed & maintained well should provide many years of trouble-free service.

- Protect your well from freezing temperatures.
- Do not allow surface water to pool around the well.
- Conserve water to extend the life of your septic system.
- Do not store hazardous products near wells.

### Routine Well Testing

Private well owners are responsible for maintaining safe drinking water. Regularly check for mechanical problems, cleanliness and contaminants.



**Testing is the only way to know whether well water is safe to drink, as some contaminants cannot be seen, tasted or smelled.**

Schedule	Tests
<b>Every Year</b>	Test for total and fecal coliform bacteria.
<b>Every Two Years</b>	Test for heavy metals, nitrates, and nitrites.
<b>Every Five Years</b>	Test for pesticides and volatile organic compounds* (VOCs). If a pesticide is applied in your area, test yearly.

\* Volatile organic compounds (VOCs) are industrial chemicals used in manufacturing.

## Results and Contamination

Environmental Health offers a variety of common well water tests.

A trained Environmental Health Specialist will collect the sample(s) and send them to be analyzed at the NC Public Health Laboratory.

Visit [unioncountync.gov/wells](http://unioncountync.gov/wells) for list of fees.

### Water Testing Results

Results are mailed or emailed with a "Health Risk Evaluation" for any contaminants that may be present. You will also receive information on specific contaminants and treatment options.

**We encourage you to learn about your well water system.** More information can be found on the [Union County Environmental Health](#) and the [NC Occupational and Environmental Epidemiology Branch](#) web pages.

The following activities near your home can contaminate your well:

- construction
- decomposing waste
- surface run-off
- leaking storage tanks
- flooding
- toxic spills
- agricultural activities
- erosion of mineral deposits
- industrial discharges
- landfills

[unioncountync.gov/wells](http://unioncountync.gov/wells)