

Arsenic in well water – making sure your water at home is safe for drinking

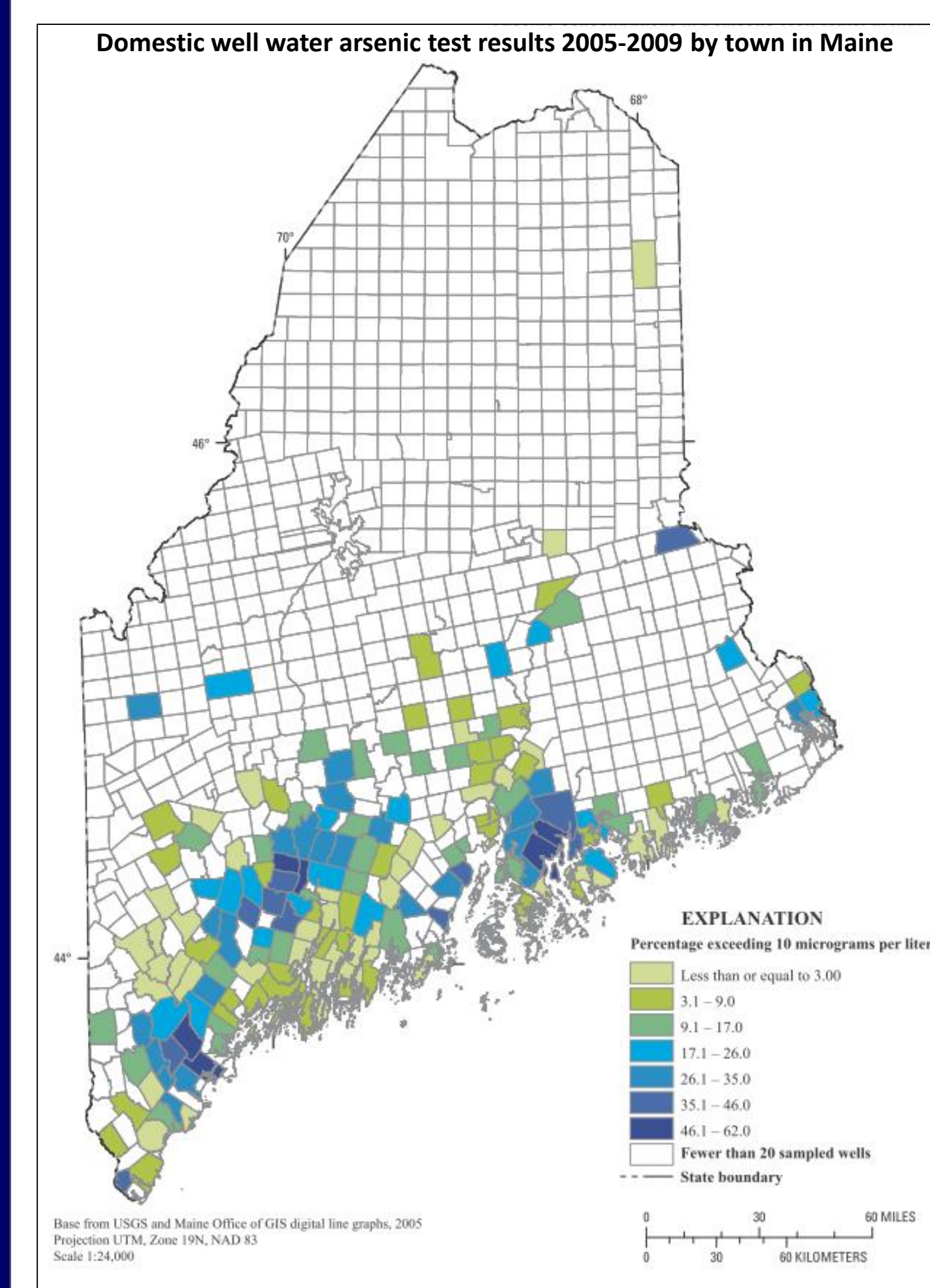
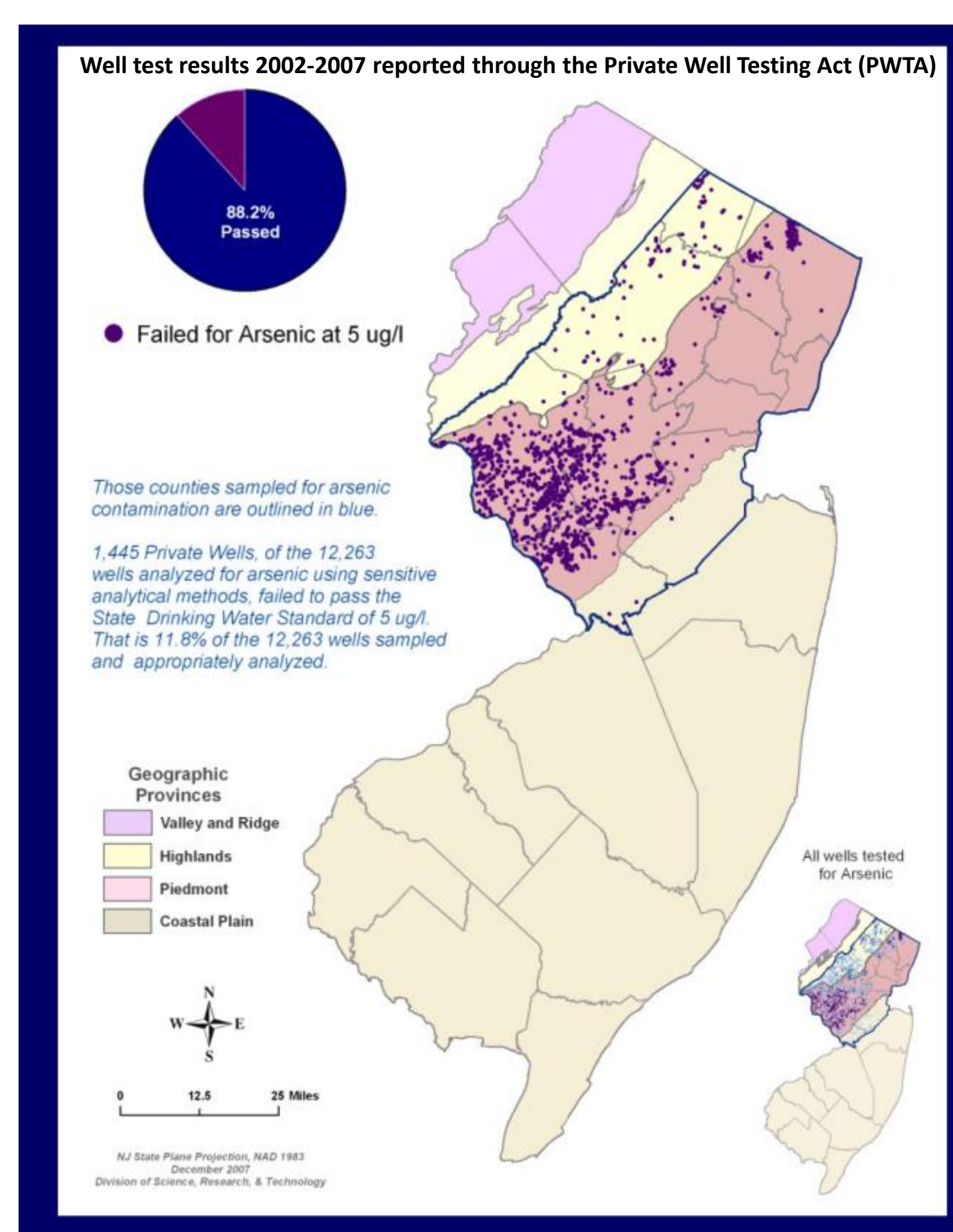
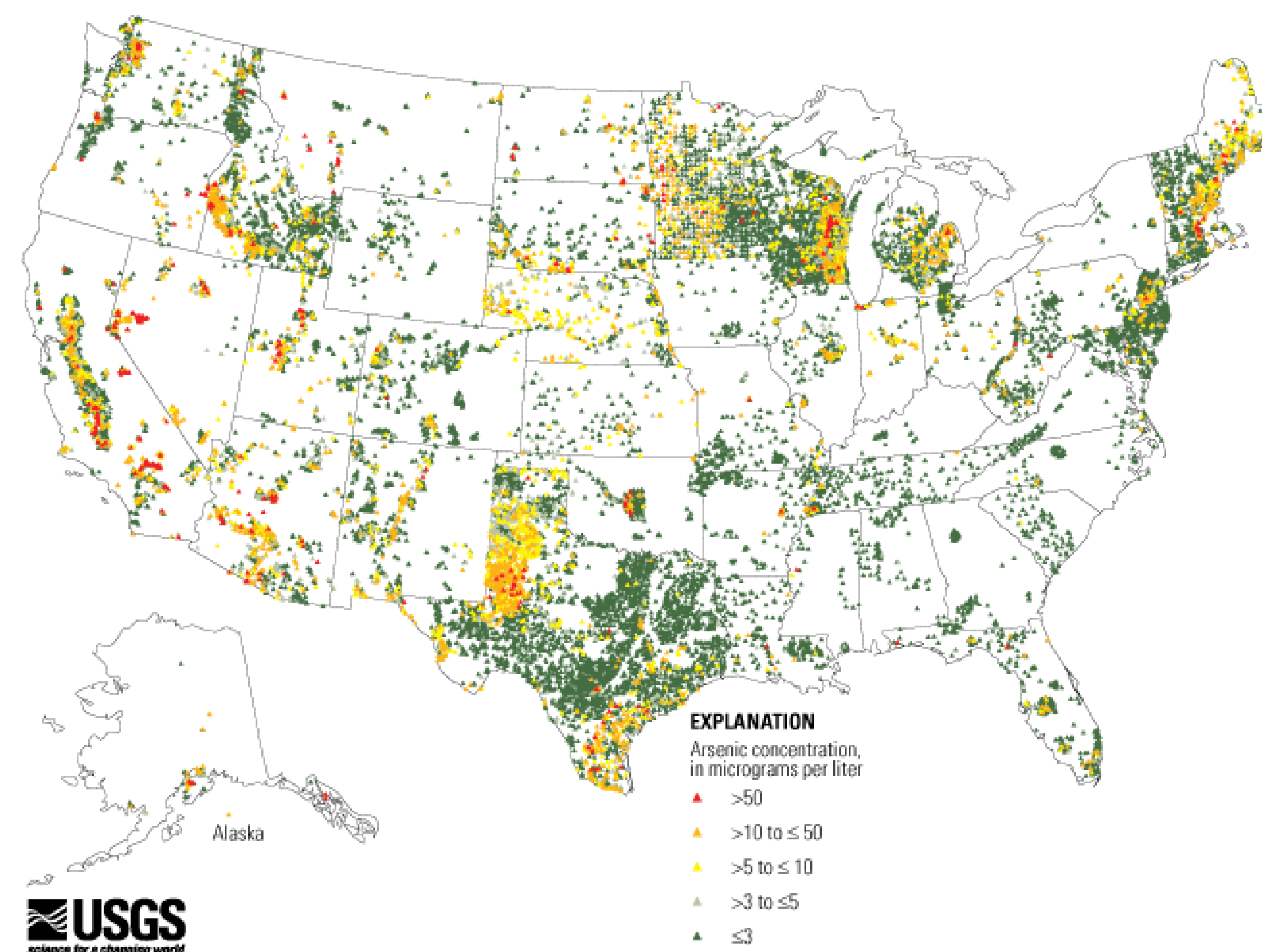
Community Engagement Core – Research Translation Core
Columbia University Superfund Research Program

Why is arsenic a problem?

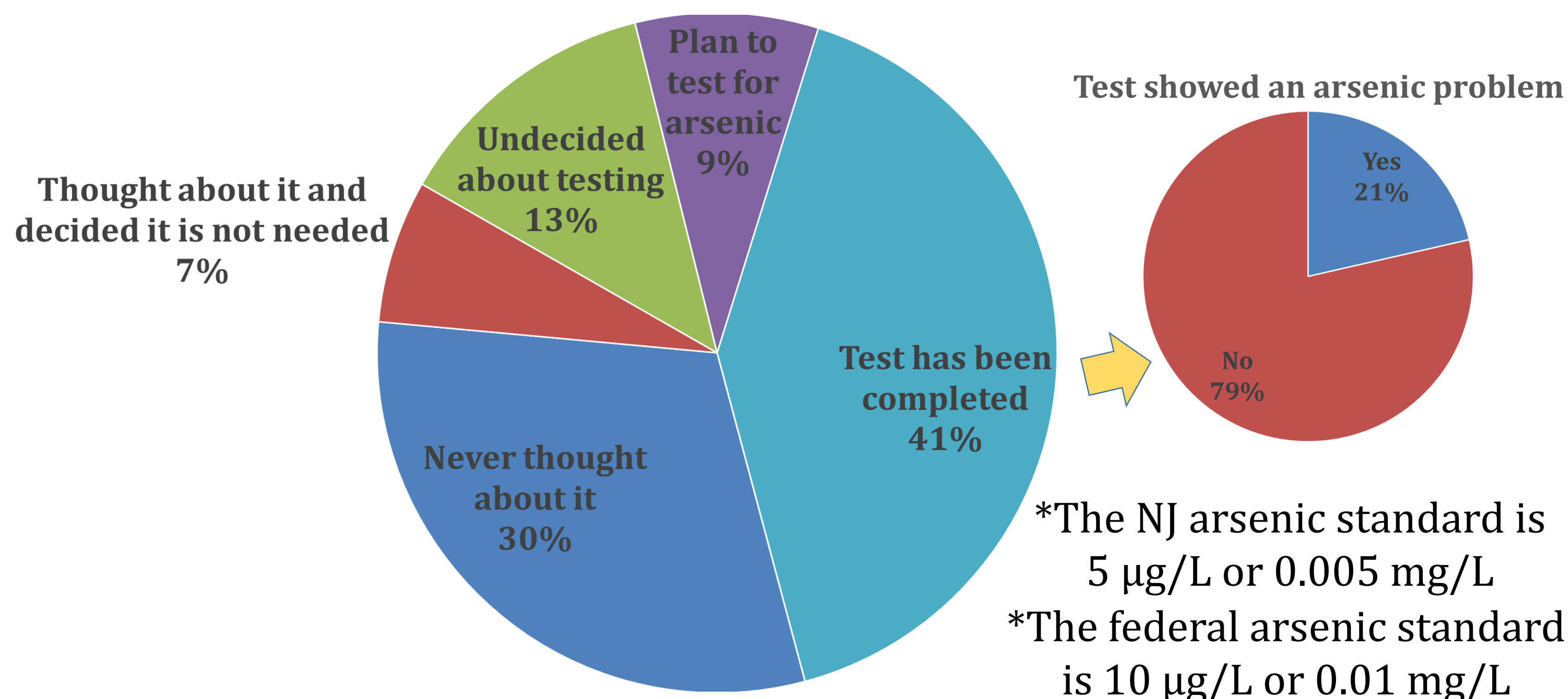
- Arsenic (As) is a naturally occurring element in the groundwater of many parts of the United States.
- Arsenic can cause various cancers, increased risks for cardiovascular disease, and impaired brain development in babies and young children.
- Your risks increase with 1) the level of arsenic in your water, 2) the amount of water you drink, and 3) the time you have been drinking the water.
- Private well water is unregulated by federal drinking water standards and so it is the well owner's responsibility to test their water and install treatment if necessary.
- You will not be able to see or taste arsenic in your well water, the only way to know is to have it tested.

What to do about arsenic?

There are actions you can take to protect your family if a laboratory test shows your water has too much arsenic. First, you can switch to bottled water for drinking and making drinks. This will allow you time to decide if you want to install a water treatment system. If you already treat your water for arsenic it is recommended you continue to test it once a year to ensure the system is working properly.



529 New Jersey households' experiences with arsenic testing reported in 2014 survey



Testing Frequency

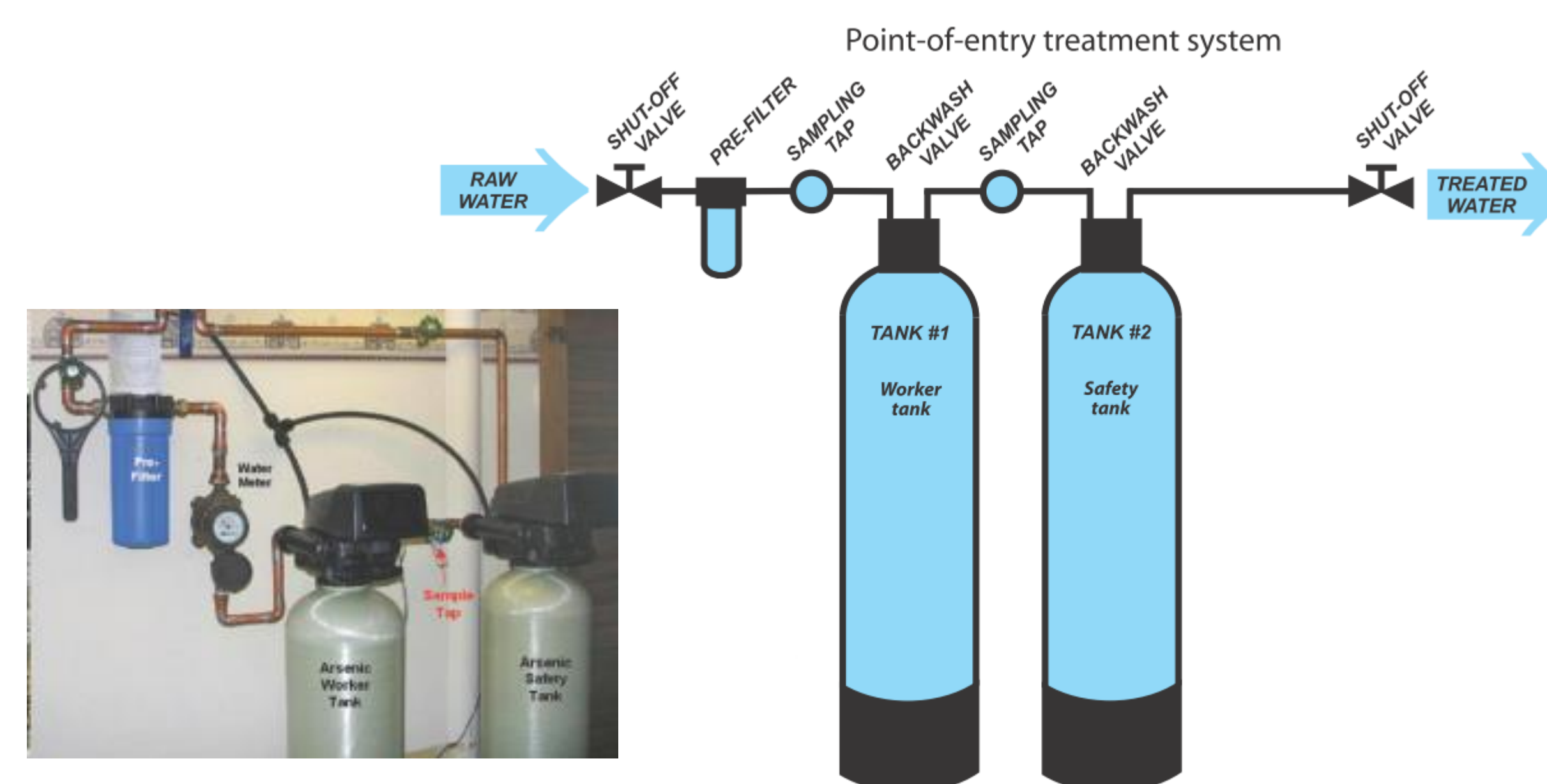
If your well has not been tested within the past 5 years, NJ health officers recommend for the full set of Private Well Testing Act (PWTA) contaminants. If your well has ever exceeded state standards for any of the contaminants it should be tested yearly for those again, including when treatment system is installed.



Water Treatment Options in New Jersey

Preferred by New Jersey Geological Survey: **whole-house granular ferric adsorption system**

- Removes both species of arsenic (As₃ and As₅) from all the water in the home
- Easy to operate and maintain
- Minimal waste generated



Other options: point of use system for water treatment at a single tap to provide water for drinking and cooking only, granular ferric adsorption system still preferred.

**Reverse osmosis and anion exchange systems not recommended unless As₅ is the only type in your water