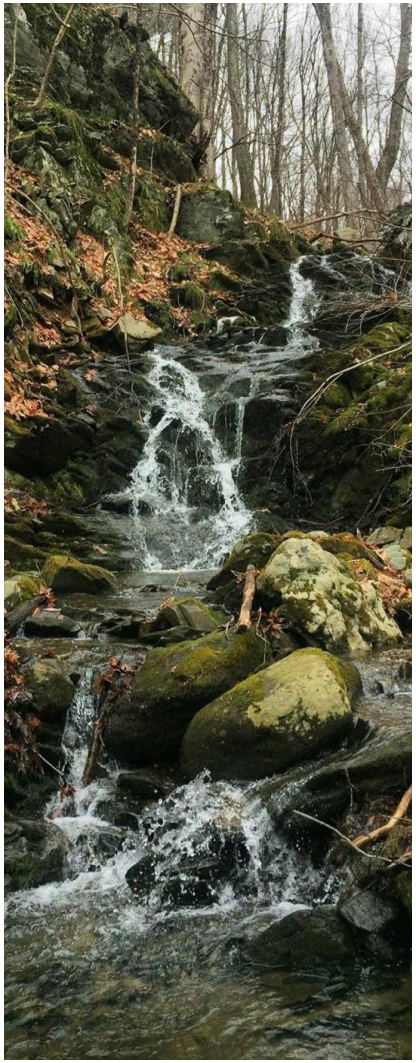
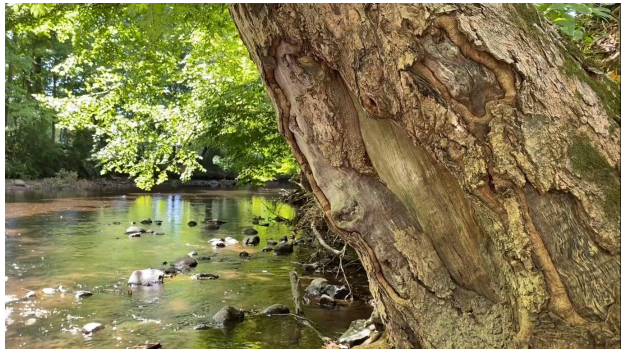


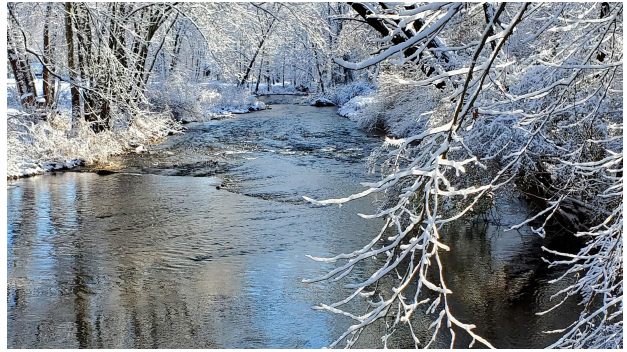
POMPERAUG RIVER WATERSHED COALITION

# Well Water 101

*WaTer You Drinking?*
A World Water Day Event

**March 22, 2026**





# PRWC Mission and Vision

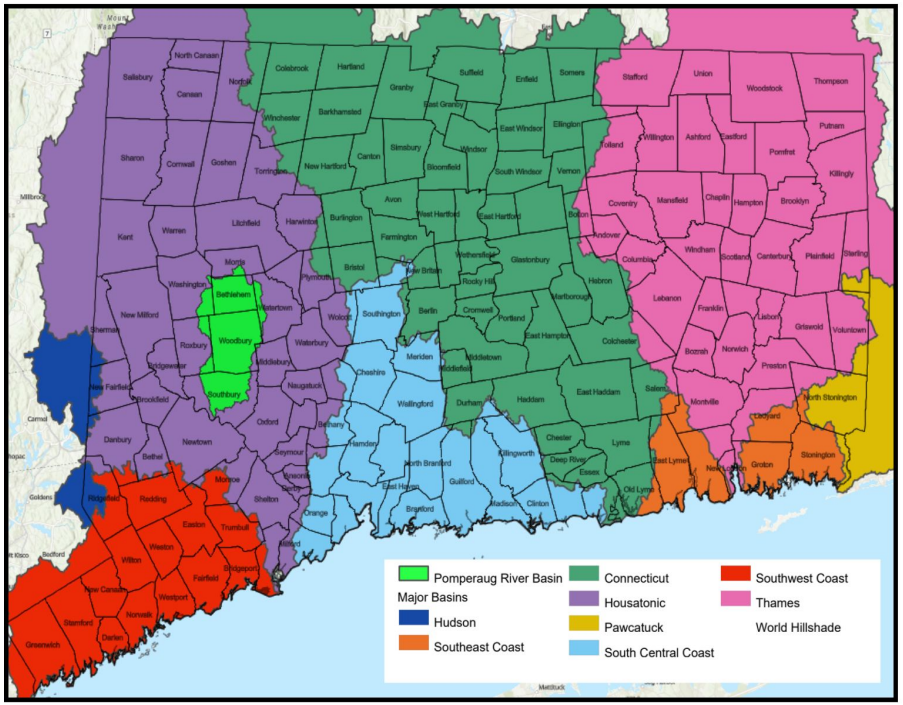
Pomperaug River Watershed Coalition's **mission** is to **protect, sustain, and restore the water resources of the Pomperaug Watershed** through **community engagement, education, advocacy, and science-based action.**

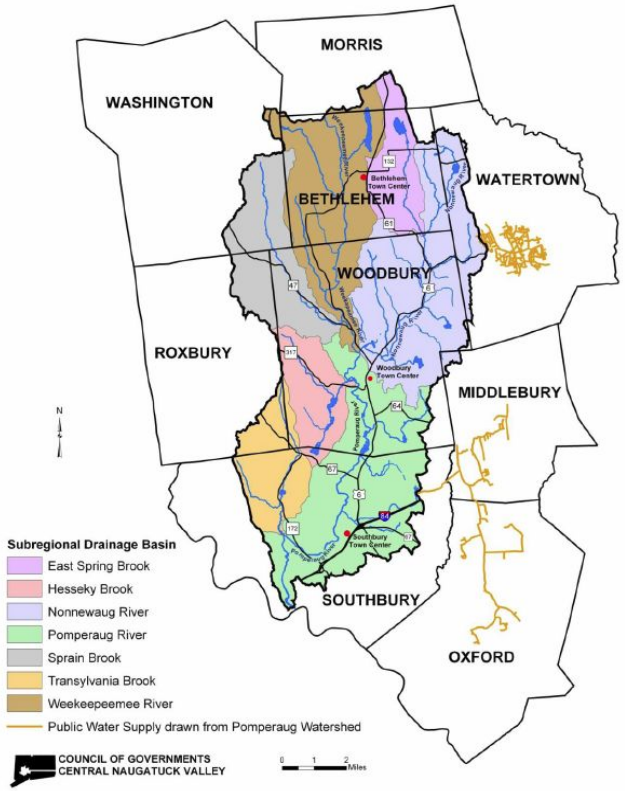
**We envision a thriving and resilient watershed** where our community engages to safeguard clean water and healthy habitats for all.

# Agenda

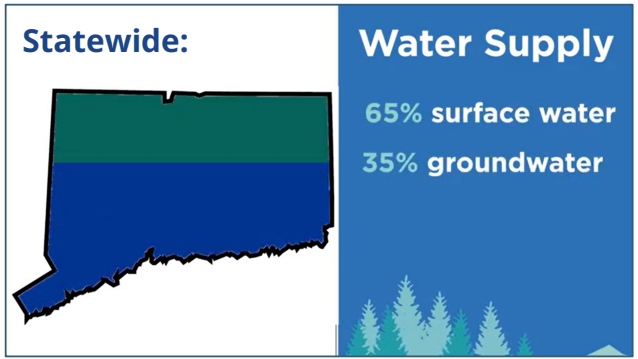
- Overview of Pomperaug Watershed
- Where Your Drinking Water Comes From
- Private Wells vs. Public Drinking Water
- Types of Wells
- How You Can Protect Your Well Water
- Questions

# Pomperaug River Watershed



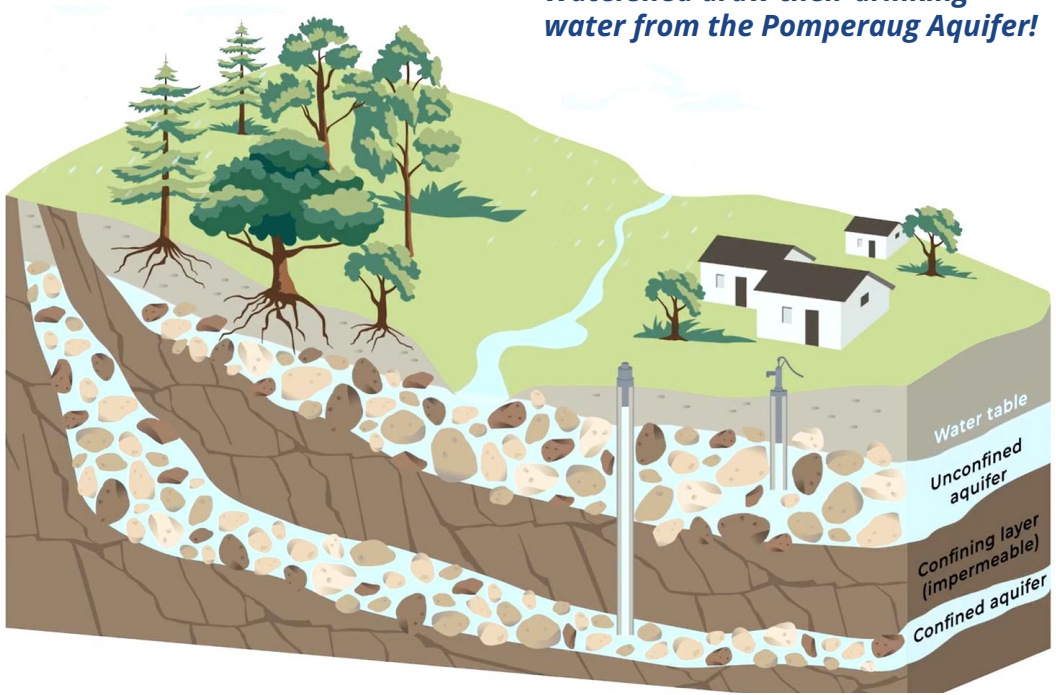



# Where Does Our Drinking Water Come From?



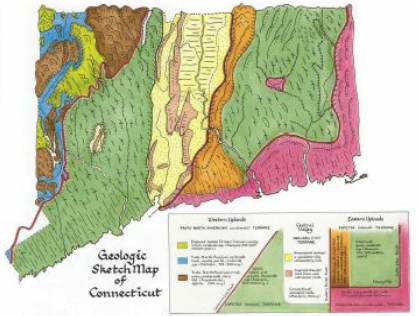

- **Aquifers** are underground rock layers beneath the water table that store and transport groundwater.
- Confined vs. Unconfined Aquifers
- The quicker the recharge, the more vulnerable it is to pollution!

***All residents of the Pomperaug Watershed draw their drinking water from the Pomperaug Aquifer!***

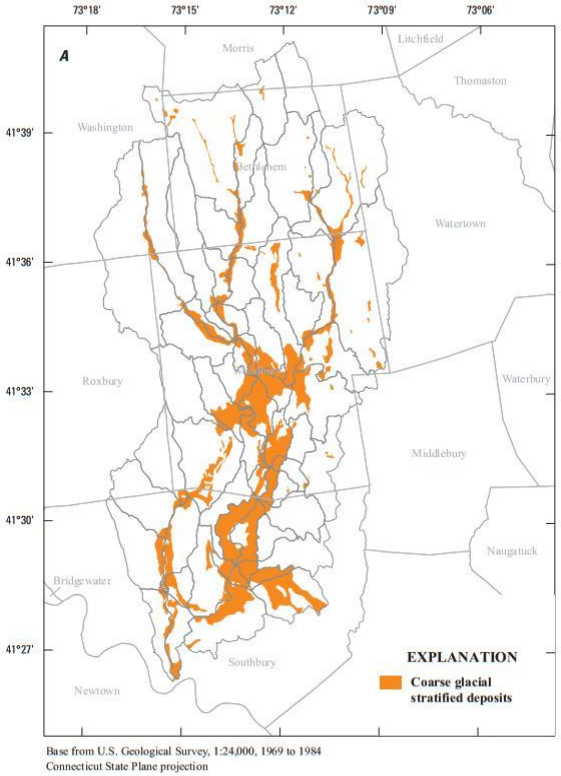


# Pomperaug Aquifer

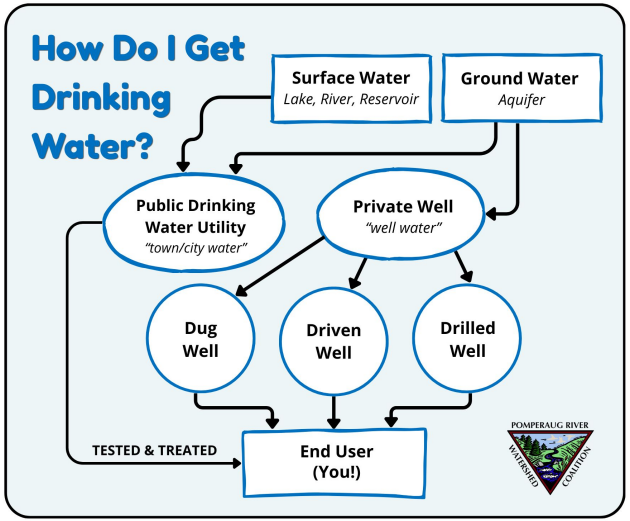
The **Pomperaug Aquifer** is an **unconfined aquifer** made up of **layers of sand and gravel** (once deposited by glaciers).

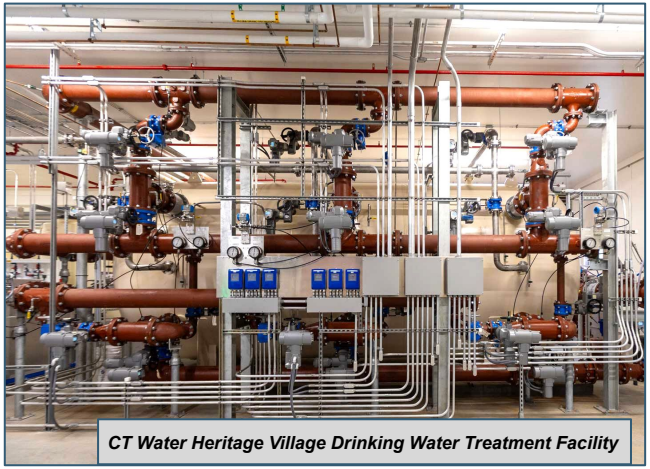



*A 90-square mile watershed that drains to the Housatonic River Watershed in western Connecticut and that has geology mimicking the centrally located Connecticut River Watershed.*




# Private Wells vs. Public Drinking Water



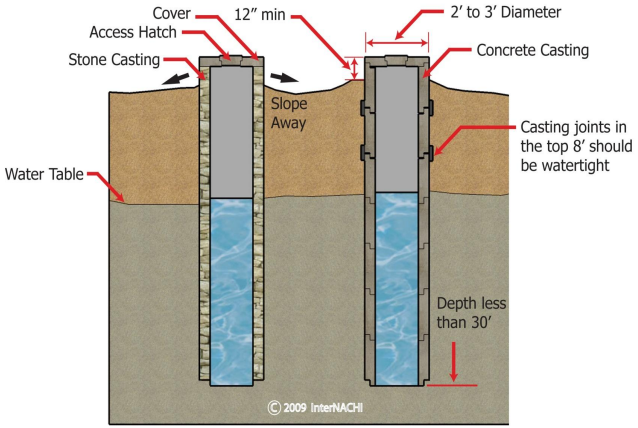


CT Water Heritage Village Drinking Water Treatment Facility

- Households that receive water from **public supply wells**, like those in Woodbury (**Aquarion Water Company**), Southbury (**CT Water**), and Watertown (**Watertown Fire District**), have their drinking water **tested on a regular basis and treated** so that it meets **strict public health criteria established by the Safe Drinking Water Act** (& enforced by EPA).

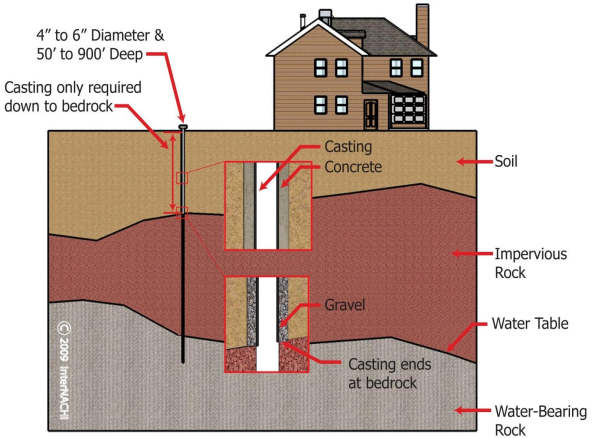
- Under local public health laws, **new private wells must be permitted and pass inspection and potability testing.** After, **private well owners have the sole responsibility for testing their drinking water and maintaining their well.**

# Types of Wells

- **Dug & Driven Wells** – Unconfined Aquifer (requires soft earth & high water table)
- **Drilled Wells** – Unconfined or Confined Aquifer

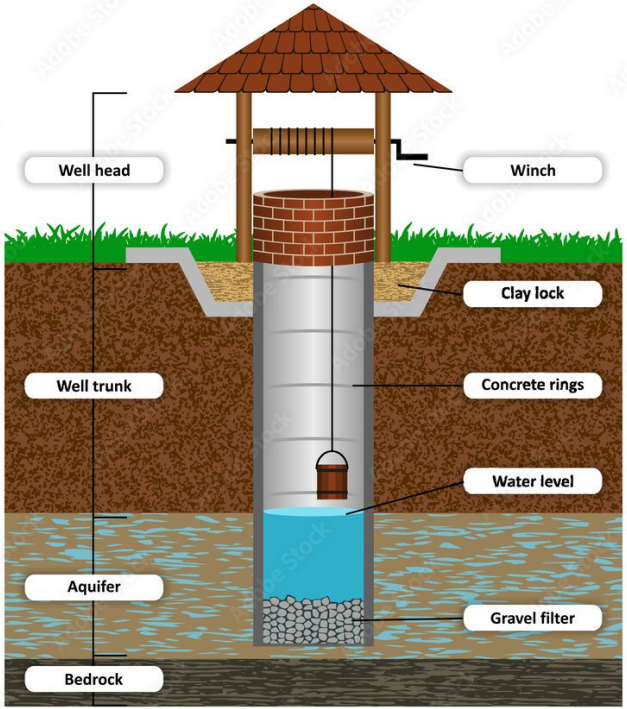



Dug Well

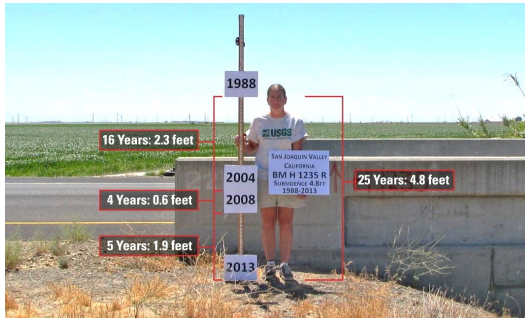



Drilled Well

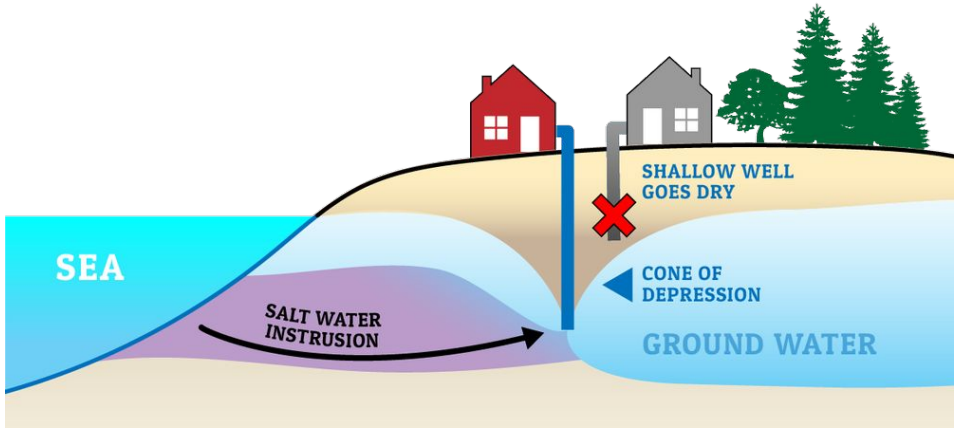
# Anatomy of a Well




# Risks of Over-Pumping




**Groundwater over-pumping** occurs when the **rate of water extraction exceeds natural replenishment.**



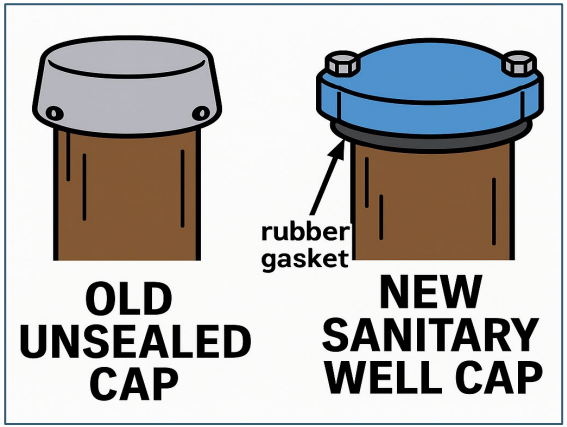

***Can lead to:***

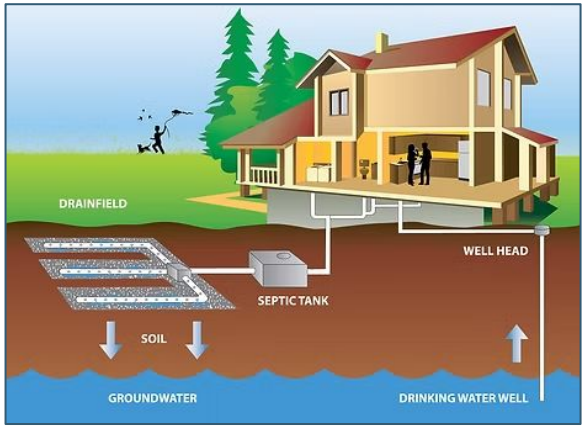
- **Aquifer compaction** - occurs as groundwater is removed and can result in irreversible **subsidence**, or **sinking** of the land above.
- **Saltwater intrusion** - occurs when freshwater levels drop in coastal communities, causing saltwater to migrate inland, contaminating wells and aquifers.
- Increased vulnerability to **drought**

# You Can Protect Your Well Water!

1. **Choose Correct Location** – Follow All Health Codes when siting your well
2. **Ensure Proper Construction** – Hire a registered well driller or pump installer
3. **Keep Contaminants Away** – Limit chemical use on property & maintain septic
4. **Upgrade to Sanitary Well Caps** on Active Wells and **Seal Abandoned Wells**
5. **Test Regularly** – Follow recommended schedule through a state certified lab

**At minimum: septic pumped <u>every 2 to 5 years</u>, well water tested for basic indicators (bacteria, nitrate, hardness, etc.) <u>every year!</u>**




| CT Separation Distance Requirements for Private Wells | |
|---|---|
| **Potential Source of Pollution** | For Wells <10 gpm* |
| System for disposal of sewage (septic system, sewer line) | 75 feet |
| *If sewer is constructed of extra heavy cast iron pipe with leaded joints or equal approved type of tight joint* | 25 feet |
| High water mark of any surface water body | 25 feet |
| Drain carrying surface water | 25 feet |
| Foundation drain | 25 feet |

*Regulations of Connecticut State Agencies, Sec. 19-13-B51d.*

# Thank You!

## Any Questions?