

*NORTH CASTLE CONSERVATION BOARD*  
**HIGHLIGHTS ON GROUNDWATER**

Groundwater is a primary water source for water. It is normally found in aquifers. Wells are drilled to extract groundwater for use. All North Castle residents rely on wells for their water, whether it is an individual well or a community system.

*What is groundwater?*

It begins as precipitation (rain or snow) that soaks into the ground, where it is stored between rocks and soil in a geological system called an aquifer. It is part of a hydrologic cycle of evaporation and condensation.

*What is a well?*

A well is a hole drilled into an aquifer. A pipe and pump draw the water for use, with a minimum requirement of five gallons per minute (5gpm). Toxic materials can leech into an aquifer and contaminate a well. An aquifer is not an underground "lake," but more like a sponge, storing water.

*Terminology for wells:*

- Depletion- loss of water from a well at a rate greater than recharge. During droughts wells may go dry.
- Contamination- pollution of a well from the improper function of a septic system, animal waste, pesticides or fertilizers or other toxic substances.
- Consumptive Use- drawing amounts of water from a well, which results in a reduction of supply.

*What you can do to help:*

- Conserve water—don't waste it! Reduce the amount of water used in your home and on your lawn. Repair leaky faucets.
- Avoid contamination of your well by avoiding pesticide use. Control other contaminants, such as automotive fluids and animal waste.
- Protect wetlands and buffers, which act to clean water soaking into soils that recharge aquifers.
- Use xeriscaping, an environmentally friendly landscaping that uses native and drought resistant plants.
- Maintain your septic system, with a regular (every 2 to 3 years) pump-out.
- Do not use salts or chemicals on your driveway during winter, as they pollute groundwater.
- Dispose of household chemicals properly, not down your sink or toilet.
- A properly maintained septic system protects your groundwater source.

*Remember-* You drink groundwater, you shower in it, you wash your clothes and dishes in it. *Protect it.*