Mountains of salt are stored for use on winter roads.

Help Protect the Area's Groundwater by Using Less Salt

PROTECTING THE QUALITY of the area's groundwater for drinking and other uses is an important goal of the Barrington Area Council of Governments (BACOG). Residents in the BACOG area rely almost exclusively on the shallow aquifer system for their water supply. Being so near to the surface, the shallow aquifers are especially vulnerable to contamination.

Salt is a groundwater contaminant and its level is continuing to increase. Salt in the groundwater, which is measured in chloride levels, can be introduced by humans through winter road and driveway salting, synthetic fertilizers, and water softening systems. An over-abundance of salt in water can render it unfit for drinking as well as have detrimental effects on a person's health and nearby ecosystems. The 1970s marked significant expansion in development of the BACOG region, which resulted in more new residential water softening systems and increased winter road and driveway salting. The resulting salt and chloride found its way into the area's groundwater.

Water conditioning equipment uses salt to produce soft water, and nearly all the salt used reenters the environment as chloride. A time clock softening system that automatically regenerates every few days uses approximately 1,750 pounds of salt in just one year. Softeners discharge the salty backwash from regeneration into a septic system or surface drainage system, which do not remove the salt. The salty water is then absorbed into the septic field or directly into the ground and eventually reaches groundwater.

Keep sand handy in winter as an alternative to salt.

WHAT CAN YOU DO TO HELP?

Upgrade your water softening system:

- For residents who still have a time clock-operated water softener, upgrade to an "on demand" unit which only regenerates when the soft water runs out. This equipment can cut chloride output by nearly 50 percent and save you money purchasing salt.
- Install an iron filtration system that uses chemicals other than salt to combat the iron.

Use less salt for snow and ice removal:

- Clear walkways and other areas before snow turns to ice. Shovel or plow instead of salting.
- Reduce the amount of salt used: a 12 oz. coffee cup full of salt is enough to treat an average 20-foot driveway.
- When pavement temperatures drop below 15°F, salt doesn't work. Switch to sand or a different ice melter, such as calcium magnesium acetate, created for lower temperatures.

BACOG is committed to protecting groundwater quality. For more information about the environmental impacts of salt and how to reduce salt pollution, go to www.bacog.org/resources and www.wisaltwise.com.

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