

Aquifer & Groundwater Protection Town of Belmont, NH

In reviewing your project application, we determined that <u>your property is located within the Belmont Aquifer & Groundwater Protection District</u> and we've provided this additional information on protecting this very valuable water source within our Community.

What is an aquifer? An aquifer is a geologic formation composed of rock, sand, or gravel that contains significant amounts of potentially recoverable water. A well is drilled into the ground to penetrate an aquifer, and water is then pumped up to the surface for consumption.

What is a stratified drift aquifer? Belmont is over a stratified drift aquifer which is a geologic formation of predominantly well-sorted sediment deposited by or in bodies of glacial meltwater, including gravel, sand silt, or clay which contains sufficient saturated permeable material to yield significant quantities of water to wells. We share this aquifer with the Towns of Tilton & Northfield.

Why are aquifers important? An aquifer acts as a natural filter. As water flows through it, sediment and other particles (like bacteria) are trapped and the water is purified naturally. More than one third of Belmont is located over the aquifer. Belmont's municipal water supply is pumped directly from the aquifer with about 650 connections to schools, businesses, churches, private homes and apartments. Many other public water systems and private wells also pump water directly from the aquifer. New Hampshire legislation makes clear that..."clean groundwater should be considered a matter of public trust." Government, in this case the Town of Belmont, is obligated to preserve that "public trust."

What are some of the dangers to an aquifer? As Belmont grows, commercial and residential changes increase the potential for contaminating the aquifer. As activities increase over the aquifer, contamination from things such as storm drains, fertilizers, agrichemicals, salt, septic tanks and improper disposal of household cleaners, spills of petroleum products, paints, or thinners can all have a detrimental effect on the water quality. Even small, individual spills can accumulate into a serious contamination threat. The more activity, the more chances there are for unintentional contamination.

How can we protect our aquifer? In 2008, Belmont voters adopted the Belmont Aquifer & Groundwater Protection Ordinance which protects our aquifer by prohibiting the most hazardous land uses that present the greatest danger to the aquifer. It also regulates potential contaminating non-residential activities, requiring those potential contaminating activities to follow Best Management Practices (BMPs). Although the Ordinance applies only to non-residential uses, homeowners should be aware of the importance in their handling and disposal of regulated household substances. The Town strives to educate businesses and homeowners about protecting water resources. BMP's are common-sense practices for the use of sensitive materials that reduce potential adverse exposure to a water supply. We also have an inspection program for all non-residential uses administered by the Code Enforcement Officer as part of his regular duties. In situations that are especially complex or where there is a water quality violation, we may also request the assistance of the NH Department of Environmental Services.

Additional Information Resources. Please visit the www.belmontnh.org/dataapplications.asp page for more information about this valuable resource and methods to enhance its protection. Listed under the Aquifer heading you will find Best Management Practices, a sample inspection form for non-residential uses, a map of the aquifer and the Aquifer & Groundwater Protection Ordinance.

If you have any questions, please contact the Belmont Land Use Office at 267-8300 x 119

Provided by the Belmont Conservation Commission

Best Management Practices

Use non/less toxic alternatives to pesticides and household chemicals. Take leftover household chemicals to Household Hazardous Waste Day.

Don't dispose of hazardous chemicals by pouring them down the drain, onto the ground, down the sink or toilet. Don't over use pesticides or household chemicals. More is not necessarily better.

Test soil existing nutrient levels and pH every 2 years before applying fertilizers. Measure the area to be fertilized to determine how much to use. Use slow/controlled release nitrogen sources of fertilizer. Adjust spreader settings to match recommended application rate. Follow package directions on pesticides, fertilizers and other household chemicals.

Don't buy more fertilizer, pesticides or hazardous chemicals than you need. Don't use fertilizers if heavy rains are anticipated as the nutrients will be flushed from the lawn into drain ways and low areas. Don't apply fertilizers within 10 feet of culverts, drainage ditches, wells, roadways and walks or 25 feet of lakes and streams.

Check your underground fuel storage tank frequently for leaks. Replace at 20 years. Use above-ground tank with a concrete slab underneath and secondary containment.

Don't have your underground tank removed by a contractor who is not familiar with State guidelines.

Maintain septic systems. Inspect tank every year. Pump tank every 3-5 years. Avoid damage to leach field.

Don't overload your system with solids from a garbage disposal unless the system is specifically designed for one. Don't use septic system cleaners or additives containing acids or chemical solvents such as trichloroethylene.

Fully drain motor vehicles or power equipment fluids over a drip pan large enough to contain the fluids being replaced or drained. Store filters in leak-proof container until disposal. Most solid waste transfer stations accept used oil filters for recycling. Keep absorbent materials such as rags, pads, Speedi Dri, kitty litter handy to the work area and clean up all spills as soon as they occur. Dispose of used absorbents immediately in leak-proof container. Refuel/repair engines over an impervious surface such as concrete or a tarp. Drain fluids from parts before removing them from the vehicle.

If a Petroleum Spill Occurs

For *any size* spill that is not immediately cleaned up, call the Belmont Fire Department at 911.

Also call the DES emergency petroleum spill number at 603-271-3644 (weekdays 8am-4pm) immediately for instructions. For all other times call the NH State Police at 1-800-346-4009.

Pharmaceuticals

Improper disposal of our unused Prescription and Over-the-Counter Pharmaceuticals can result in the addition of these chemicals into some environmental settings at levels that may contribute to ecological harm. Please take pollution prevention measures, such as buying only the amount you will use, to reduce associated waste. The Belmont Police Department is a one of growing number of police departments across the U.S. that have added a prescription drug drop-off box to allow people to safely and properly dispose of expired or unneeded drugs. Unused prescription medicines may be deposited into the prescription drug drop-off box.



Household Hazardous Waste



Annually in July, Belmont hosts a <u>Waste Collection Site</u> to provide a safe method of disposing of Household Hazardous Waste. The items listed are common hazardous products used in the home. These items are prohibited from being placed in curbside trash, but can be brought to a Household Hazardous Waste Collection Site for safe disposal.

From the house	From the yard & garden	From the workbench	From the garage
drain cleaners	pesticides	rust preventatives	used motor oil
oven cleaners	herbicides	wood preservatives and strippers oil-based paint paint thinner solvents	radiator cleaners
metal polish	insect sprays		<u>antifreeze</u>
supplies	rodent killers		brake fluid
	pool chemicals		old car batteries
photo chemicals	muriatic acid		engine & radiator
floor cleaners	pest control strips	1	flushes
dry cleaning fluids	cesspool cleaners	sealants	gasoline
fluorescent light	eesspool eleaners	old chemistry kits	degreasers
bulbs (including compact bulbs)			transmission fluid

Visit www.belmontnh.org/docs/Planning/Aquifer/AquiferEd1.pdf for a link-friendly version of this document