NEWS RELEASE

Public Health - Madison & Dane County

What is Groundwater and why is there a National Groundwater Awareness Week?

A Great Resource that is Easy to Take for Granted

Madison WI – March 10, 2014 – What is groundwater, and why should we care about it? Groundwater makes up approximately 95 percent of the fresh water resources of the planet. This valuable resource is created when rain and melted snow soaks into the soil and filters through openings in beds of rock and sand creating underground reservoirs of fresh water. Forty-four percent of the U.S. population relies on groundwater for its supply of drinking water; while the rest rely on surface water sources such as lakes and rivers. Here in Wisconsin, we are water wealthy to the point of taking our riches for granted, unlike much of the American Southwest, where supplies are scarce and threatened by drought conditions.

The question is why do we need to take a week to raise awareness of this abundant natural resource? Whether we get our water from a municipal utility or from a private well, we generally don't think about how many gallons we use on average to take a shower, or water our lawns. We don't often realize that tiny percentages of these amounts have to be hauled long distances by hand in many poorer countries. We don't have to worry about the terrible water borne diseases that are prevalent in the water supplies of these places. Part of our need for awareness is the recognition of how lucky we are. Another part of that awareness lies in recognition of the threats to water quality that come from the many sources of potential contamination that we create to grow our food and manufacture and package our products. We add to those threats when we carelessly dump any kind of liquid waste on the ground without realizing that they will wind up in our groundwater.

If you live in a municipality or city with its own water utility, you can rely on the fact that the water supply is highly regulated and regularly tested for bacterial and chemical contamination. And even if your water bills are a few hundred dollars a year, one penny of that bill will buy you 5 gallons.

If you live in a rural area and rely on a private well, you need to do your own testing to make sure than your water supply is not contaminated by bacteria or chemicals. It is sound advice to make sure that your water is tested once a year, or more often if there has been flooding at the well site. If you are expecting a baby or have a newborn in the house, it is extremely important to have your water tested for nitrates, since high nitrate levels can injure a baby.

On a national level, we use 79.6 billion gallons per day of fresh groundwater for not just to supply the public, but also for irrigation, livestock, manufacturing, mining, thermoelectric power, and other purposes. Some of these larger-scale agricultural and industrial operations can use up groundwater sources faster than nature can replenish them.

While our supply here is abundant, it is not infinite and should not be squandered. Maintaining the quality of that supply requires ongoing attention and effort. To a significant portion of the world's population, turning on a tap, taking a shower (a ten minute shower consumes 35 gallons) or watering a lawn represents activities that would be seen as unimaginable luxuries. Large lawns require thousands of gallons of water to maintain, and here in Wisconsin, that water is the same clean drinking water that comes out of your tap. Just on this basis, it is worthwhile to stop and think about how much we take the abundance and quality of our groundwater resources for granted. That alone is enough to justify the need for having a National Ground Water Awareness Week.

For a clear overview about groundwater and the water cycle http://water.usgs.gov/edu/watercyclegwdischarge.html

For information on how Wisconsin helps protect its groundwater resources

http://dnr.wi.gov/topic/Groundwater/sectionResponsibilities.html

For information on how to keep household chemicals from getting into our groundwater

http://www.danecountycleansweep.com/

For information on how to keep unused medications out of our groundwater and our environment (which means never flushing them) see details on the MedDrop program
http://www.safercommunity.net/meddrop.php

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An online version of this release is available at

 $\underline{\text{http://www.cityofmadison.com/news/what-is-groundwater-and-why-is-there-a-national-groundwater-awareness-week}$