Protecting Clean Water Together
Love It or Hate It, Snow Cover Matters
Brodhead Watershed Association

When you were a kid itching to build a snowman, you probably longed for snow days. As a grownup wielding a shovel, probably not so much.

But snow cover is the largest single component of the "cryosphere" —that's the 50-cent word for everywhere on Earth where water is solid. So in addition to snow, that means floating ice, glaciers, icecaps, ice sheets, and ground that is frozen, whether just sometimes or always, like permafrost.

It overlies so much ground, in fact, that snow cover controls Earth's patterns of heating and cooling more than any other surface feature on the planet. Just think how you have to squint when you're in the snow on a sunny day. That's the snow cover reflecting back into the atmosphere as much as 90 percent of the sun's energy — instead of its being absorbed into the ground as heat.

That buildup of snow eventually melts, of course, recharging the groundwater that feeds wells, reservoirs, and the rivers that agriculture and civilization depend on.

How we plow and shovel, and where we dump the snow, can determine whether that melting water headed to your well is clean — or polluted with salt, sand, oil and gasoline, or just plain dirt.

Keeping the gunk out of wetlands, water supply areas, creeks and other waterbodies takes planning. How does your township or borough manage plowing and salting? Does the road crew pile accumulated snow in unpaved places away from waterbodies so

it can gradually sink into the soil as it melts? Are there ways to use less salt to keep roadways — and drinking water — safe after a winter storm? If we allow pollutants to build up over the winter, they'll contaminate creeks all spring and summer long. Talk to your local officials, and show your support for the best winter storm management practices.

Then make the best of winter yourself — go out and play in the snow!

Did you know?
Almost all the world's snow cover is in the Northern Hemisphere, where we live. The Southern Hemisphere is also cold, but according to the National Oceanic and Atmospheric Administration, "snow cover can only be measured over land areas, and not the ocean surface" — and most of the Southern Hemisphere is covered by ocean.

According to the National Snow and Ice Data Center, "changes in climate can affect how much snow falls…Between 1966 and 2010, the amount of snow that covered land and sea ice each year decreased over many Northern Hemisphere regions, especially during the spring snowmelt season." More information at https://nsidc.org/learn/parts-cryosphere/snow/why-snow-matters