

# WBEZ91.5

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## EcoMyths: Snow and Water Supply

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### The Snow Man Cometh

In the past couple of weeks many of us have seen more snow than we've seen in a lifetime. Since I grew up in Minnesota, however, the 5 foot snowbanks and freezing temps feel just like home to me. When the first snow falls, I immediately yearn to make snow angels and go skating. But for many, snow can be a real nuisance. So what's the bright side for those that view the first snow as time to head to Florida?



WBEZ's Worldview  
EcoMyths: Snow and water supply

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### Snow and Water Supply

On Worldview's EcoMyths segment, Jerome McDonnell and I explore if there is anything redeeming about snow. Our guest was Tim Loftus, PhD, Water Resource Planner for Chicago Metropolitan Agency for Planning (CMAP). He spearheaded CMAP's recent report on Northeastern Illinois water supply issues. Tim's view is that snow is important, at least somewhat, for replenishing the water supply. But in Illinois, snow only replenishes our drinking water when it falls on Lake Michigan and other open water bodies. As climate change proceeds, Tim says snow will become even less important as the proportion of annual precipitation from rain in the Chicago region increases as the amount of snow decreases.

Tim points out that in the mountain West, snowfall is significantly more important for restoring the water supply than in the Midwest. This is because in the mountains, melting snow occurs gradually over many weeks or months and flows down gradually refilling the reservoirs and rivers. While a decrease in snowfall in the Great Lakes region is not likely to have much impact, the same trend in the Mountain states would cause significant drought, straining water supplies needed for irrigation and for drinking.

### Would You Like Salt With That?

Here at home, the key issue regarding snow is actually sodium chloride, a.k.a. salt. The rock salt that we use to ice roads and sidewalks washes away when the snow thaws. It ends up in the

storm sewers and eventually, our drinking water. Salt also dries out the soil and can damage plants. While there are some salt alternatives, it's the most common solution for dealing with ice. Tim points out that the short-term advantage of using salt, namely safety, is vital as we continue to use it as a de-icer. However, he says the long-term cost is the accumulation of salt in our water supply. As a result, our grandchildren may have to de-salinate their water in order to drink it, a very expensive and energy intensive process.

### **One Green Thing**

Tim says the alternative to salt is sand. Although it does not melt ice as efficiently as salt, sand is a more benign solution. Sand does not hurt the garden and does not hurt the plants. But, as with salt, it is possible to overuse sand. If sand washes into the storm sewers, the silt can clog sewer pipes and add sediment to the water. But it is still not as damaging as salt.

The lesser of two evils for making icy winter surfaces safe for walking and driving is to use sand. **The One Green Thing you can do: replace your sidewalk salt with sand to keep chloride out of the water supply -- and to save money for your grandchildren so they don't have to de-salinate their drinking water.**

Listen to today's EcoMyths Worldview podcast (SoundCloud file above) to hear the whole interview on the value of snow!

To learn more about this myth go to the [EcoMyths Alliance website](#) to read more on the importance of snow for replenishing our aquifers.