

LOCAL PERSPECTIVE

Forest Views

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The vast majority of Minnesotan's drinking water originates from forest land. That's a good thing, because Minnesota's forested watersheds yield the cleanest water in the state! One example of this is the MPCA standards for three regions in the State regarding phosphorus. Phosphorus (P) is a nutrient that is transferred to water bodies via sedimentation and if concentrations are too high it accelerates aquatic plant growth. The northern forested zone has a P standard of 5 parts-per-billion (ppb). The central zone standard is 10 ppb and the southern zone 15 ppb. So, as you move into less forested areas the expectation is increased phosphorus loading, due to changes in land use.

Why are forests so good for water quality? Forests act like umbrellas capturing rainfall before it hits the ground thus slowing runoff, they serve as sponges soaking up the rainfall in the soil as it hits the ground, and as filters that trap sediment and pollutants before they can enter a water body. A diversity of forest types and ages within a watershed can desynchronize spring snowmelt, thus reducing flooding. Typically, around 10% of rain falling in a forest runs off into water courses which is significantly less than agriculture or urban areas. Maintaining and managing forests can greatly reduce water treatment costs in municipalities within a watershed. It seems that if you look at all the facts, water is an extremely important "product of the forest"!

Forestry and associated timber harvesting (logging) often get a "bad rap" regarding pollution of waterways, primarily due to old images of eroded areas in mountainous regions. Minnesota has been monitoring timber harvest areas for decades and the results are good regarding

the implementation of practices to protect water quality, such as stream buffers, etc. The fact that only around 1% of the forest is harvested each year and most harvesting takes place in winter (when soil is frozen and less likely to erode); forestry further reduces potential impacts.

In my view, clean water is perhaps our most valuable forest product and forestry has demonstrated that, if done responsibly, it is a favorable land use relative to water quality. But there is a general lack of public awareness. In 2018, to address that phenomenon, my colleagues at Dovetail Partners started an initiative called "Forest to Tap" working with end users of clean water in our region... Craft Breweries! Breweries in the Mississippi River Headwaters Watershed from Bemidji to Baxter have stepped up to promote responsible forestry for clean water, and great beer! In celebration of Arbor Day (the last Friday of April) the Forest to Tap Breweries host a tree seedling giveaway ("Buy one get one tree") to highlight the forest's important role in providing high quality water resources. Craft Breweries in Bemidji, Walker, Grand Rapids, Aitkin, Crosby, Baxter, and Nisswa hosted the event this year on April 25th.



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