Water at Risk: A Free, Zero-Labor Way Your Municipality Can Protect Water

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CAPTION: Bioretainment" is the fifty-cent word for using trees to retain water on a site, reducing runoff and pollutants in creeks and groundwater. Every healthy tree, not just old-growth beauties like this white pine in Canadensis, can reduce stormwater runoff by thousands of gallons annually.

Sometimes the best thing local government can do to protect your drinking water is…. nothing. Here's why.

About a century ago all the trees in the Brodhead watershed were timbered — clearcut — for tanneries, buildings, railroads. Some trees survived, just overlooked or in creek valleys too hard to reach. You may meet one of these rare specimens if you walk our woods today. Some are nearly as old as America — oaks with enormous dense canopies and white pines that soar to the sky.

If you stood under one of these trees in the rain, you'd hardly get wet. Leaves and needles intercept falling rain, and so do twigs, branches, boughs, and trunk. Soaking up water and holding it back, trees — not just these behemoths, but also their new-growth neighbors — slow runoff and reduce erosion, allowing water to sink into the ground in the natural way. Decades of fallen leaves and needles create a natural sponge that draws the water deep. Today's healthy forested land may have 100 or more trees per acre, and their underground root networks literally hold earth's surface in place.

Though it took all these years, the trees did grow back, and today their value to humans is incalculable: protection from floods, clean and pure drinking water, and cooler summer temperatures. Trees also capture and store carbon, mitigating climate change. Forests speak to our need for natural beauty in our lives, while supporting a web of life from earthworms and beetles to trout, birds, and bears. Tourists like them, too.

We all know recent local examples where trees were clearcut for short-term financial gain. The barren, unsightly result puts water quality at risk and drives tourism dollars away.

Does your municipality have a tree ordinance? You can find examples that "enhance a community's beauty, reduce air pollution, lower air conditioning costs, and increase biodiversity" at https://library.weconservepa.org/guides/37-tree-ordinance/

Tree ordinances are not a new-fangled idea: William Penn thought trees were important enough that he established standards for tree-planting near Philadelphia more than 300 years ago. Your elected officials are duty-bound to protect air and water — for you, your grandkids, and their grandkids, too. And trees are a good place to start.

For more information: According to the Forest Service, one tree can reduce stormwater runoff by over 4,000 gallons per year. Visit https://www.fs.usda.gov/psw/topics/urban_forestry/products/cufr_392_rain_down_the_drain.pdf

Brodhead Watershed Association protects water quality and quantity throughout our area. Get involved! Become a member! www.brodheadwatershed.org