

Forests and Water Health

An Activity Guide by Hanford Mills Museum



The Catskill Mountains. The billions of trees in both the Catskills and Adirondacks help keep water in New York State clean. Image courtesy of Wikimedia Commons.

How Do Trees Keep Our Water Clean?



Roots are a big part of why trees are so important to water health.
Image courtesy of Wikimedia Commons.

Trees do a lot to help keep water clean!

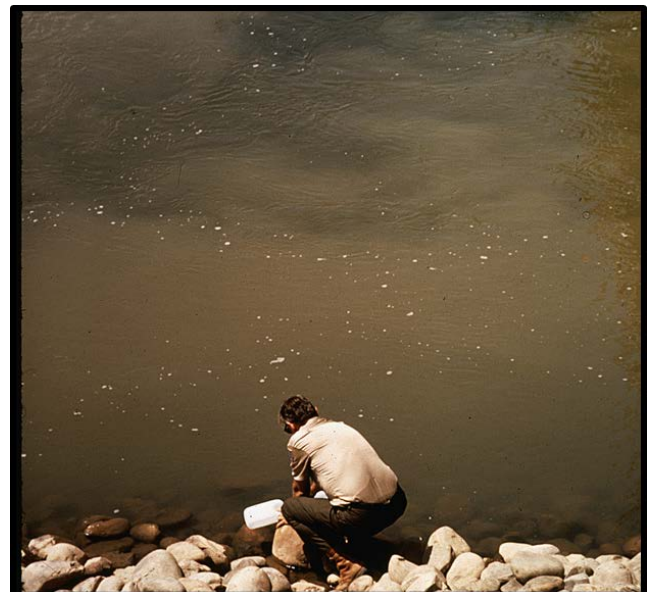
1. They help slow the speed of storm water traveling to rivers and lakes. This helps prevent flooding
2. Tree roots help prevent erosion. Too much erosion, or breaking down, of soil can destroy habits, make water dirty, and even lead to mudslides!
3. Roots act like filters. These can catch really bad pollutants, like oil and pesticides! ¹

What Does Pollution and Erosion Look Like?



Cutting down trees will lead to fast rates of erosion, which is bad for both plants and water. It can even lead to mudslides. Image courtesy of Wikimedia Commons.

Without trees to help filter out pollutants, those pollutants would get into our water. Image courtesy of Wikimedia Commons.



Reservoirs in Our Community

Much of Delaware, Greene, and Schoharie counties, lie within the West of Hudson watershed. The trees do such a good job at keeping the water clean that the much of it gets shared with people in New York City. Over nine million people drink the water from the Catskills! The image below is of the Ashokan Reservoir, one of the many bodies of water that supply clean water to New Yorkers. Image courtesy of Wikimedia Commons.



Supplies for a Tree Filter Experiment



- Glass of clean water
- Bits of paper towel
- Coffee filter
- Crunched up cereal
- A sponge
- 2-liter bottle cut in half
- Spoon
- Basin to catch water in
- Small towel

Instructions

1. Mix the syrup, paper towel bits, and crushed up cereal into the glass of water.
2. Place coffee filter in the 2-liter bottle and place a sponge on top of that.
3. Carefully and slowly pour the glass of water into the filter system.
NOTE: Make sure you have an empty basin and a towel to collect the water that drips from the 2-liter bottle.
4. As the water drips down, note how it looks compared to the original mixture.

For a video on the topic, check out our website!

<https://www.hanfordmills.org/what-i-learned-wednesdays/>

Bibliography

Kleinke, Beth, "How do trees help improve water quality?," *Hibbing Daily Tribune*, March 28, 2018. https://www.hibbingmn.com/special_editorial/how-do-trees-improve-water-quality/article_561ce544-3107-11e8-930e-234147624a78.html.