Giada Tiani National Forest Products Week Essay

We all know that trees help us by providing oxygen, but did you know that they also clean and protect our water? When it rains, trees slow rainfall with their branches and leaves. They also hold the soil in place, and filter runoff.

Slowing rainfall is important, because rain can displace the soil and cause erosion. This leads to Non-Point Source Pollution. Non-Point Source Pollution (NPSP) is caused by runoff that carries materials like mud, oil, toxic chemicals, and fertilizers. They then enter lakes and rivers that are used for drinking water. The forest prevents NPSP by slowing the rainfall with their branches, and the ground cover made of dead organic material acts like a sponge to allow the water to infiltrate the ground slowly.

Another way that trees clean and protect our water is by filtering the runoff. Trees do this using a combination of their root systems and the ground cover. This combination filters the pollution out of the runoff before it flows into lakes, rivers, and ponds. Leaving a barrier of trees and ground cover filters out NPSP so it remains in the ground cover.

Finally, trees hold the soil in place. Large root systems will hold the soil in place to prevent erosion. In Western North Carolina, where it is very steep and mountainous, good forests are necessary to protect the water. The roots still hold the soil in place even when a tree gets cut down. The roots stay in place for long enough so that the tree sapling roots can become well established.

In conclusion, trees help us in more ways than just providing oxygen. They slow rainfall, filter runoff, and hold the soil in place. They clean and protect our water that we use for drinking, bathing, cooking, and recreation. Healthy forests are essential for clean water as well as oxygen. They do so much more for us than we realize, and we should appreciate all trees do for us.

Cleaning our water
Holding the soil in place
Trees are amazing