

Taking Root for Clean Water

Did you know that trees provide many services beyond the beauty and curb appeal they lend to streets and communities?

One of the most important benefits is the ability of trees to capture and hold storm water. This leads to a reduction in the volume of water rushing through the gutters and pipes following a storm. The result is less investment in expensive infrastructure (storm sewers) and cleaner water when the runoff reaches rivers and lakes. Polluted urban storm water runoff (non-point source pollution) washes chemicals (oil, gasoline, road salts, fertilizers and other lawn chemicals) from hard surfaces, such as roadways and parking lots, into streams, wetlands, rivers and lakes. Drinking water, aquatic life and the health of our entire ecosystem can be adversely affected by this process.



Trees act as mini-reservoirs, controlling runoff at the source. Trees reduce runoff by:

- Intercepting and holding rain on leaves, branches and bark.
- Increasing infiltration and storage of rainfall before it strikes the soil.
- Tree roots hold the soil in place and prevent sediment (another major component of non-point source pollution) from entering lakes and streams.

Below are just a few examples of tree species and their benefits on storm water!

Tree Species	Trunk Diameter	Annual interception of Storm Water	Annual Monetary Benefits
White Pine	12"-17"	1,067 – 2,015 gallons	\$79.00 - \$128.00
Eastern Redbud	12" – 17"	466 – 836 gallons	\$62.00 - \$100.00
White Flowering Dogwood	12" – 17"	466 – 836 gallons	\$62.00 - \$100.00
Sugar Maple	12" – 17"	957 – 1,734 gallons	\$103.00 - \$161.00
Paw-Paw	6" – 11"	134 – 139 gallons	\$20.00 - \$54.00

Calculate your tree's benefits here: <http://www.treebenefits.com/calculator/>

Plant a tree today and do your part to become the solution to storm water pollution!

For more information on conservation tips, visit our website at www.cuyahogawcd.org

