

Stormy Day Review

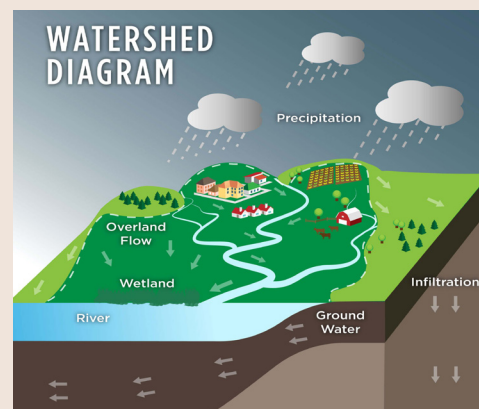
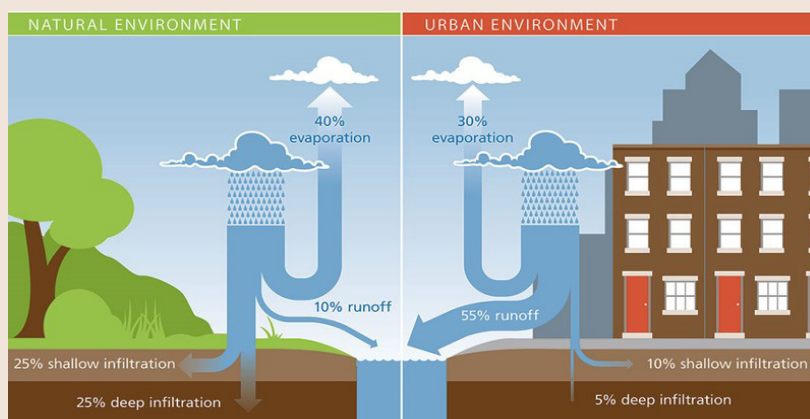


Have you ever walked along a stream and wondered where the water came from and how trash got in the stream?

Streams are formed by gravity and water. When precipitation falls on an area, a portion of the water trickles into the ground forming groundwater. Some of the water lands on tree canopy or in rain barrels, and much of it flows downhill across the surface as runoff and flows into streams.

This water rushing over the landscape picks up, trash, oil, fertilizer, and other pollution in its path. The amount of stormwater runoff that enters storm drain systems and water bodies is directly related to the landscape and ground cover. The speed and quantity of runoff increase in areas with impervious ground cover such as parking lots, buildings, and compacted soil and very few deep-rooted plants.

Nature's hills, valleys, and infrastructure such as culverts and buildings, shape a watershed over areas of land that drain into a particular body of water, such as a stream, river, pond, or lake. The stream stormwater enters is determined by the watershed the precipitation falls on. Smaller bodies of water can flow into larger ones. For example, rainwater that falls onto the Boone County Government Center enters storm drains that are piped to Flat Branch Creek. The water then flows into Hinkson Creek, and Hinkson Creek flows into Perche Creek before the water joins the Missouri River, providing a pathway for litter dropped in downtown Columbia to make its way to the Missouri River and possibly all the way to the Gulf of Mexico.



To support the community in understanding this connection, local artist Wildy Self, Columbia STEM Alliance, and Boone County Stormwater hosted The Art of Streams and Litter summer program, developing students' knowledge of where the water in our streams originates. The program's goal was for students to create connections between positive and negative impacts on waterways and how a negative impact such as litter can be re-imagined into a positive such as art. Students explored Flat Branch Creek, learning about stormwater and the landscape being connected to the stream through water before participating in a stream cleanup, removing countless cigarettes, wrappers, and bottles, while also finding objects to be turned into art. Turning trash into treasure, students redesigned rebar, pans, bottle caps, basketballs, and many other items into litter sculptures. This re-imagination was similar to the restoration of Flat Branch Creek, which in recent years has gone from an eye sore to a vibrant place for community members to engage within the watershed.



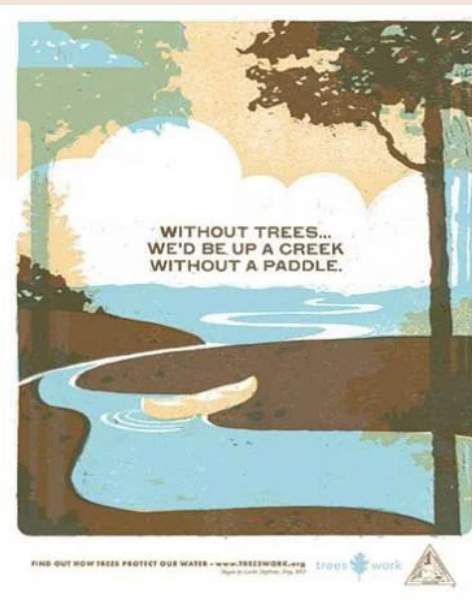
Stormwater Facts from Missouri Department of Conservation - Trees Work and Tree City USA

Trees in our communities provide many services beyond the inherent beauty they lend to streets and properties. One of the most overlooked and under appreciated qualities of trees is their ability to reduce the volume of water rushing through gutters and pipes following a storm. This means less investment in expensive infrastructure and, more importantly, cleaner water

Event Calendar

- September 10th**
6:00-7:30 pm
Columbia Agriculture Park Workshop:
Guided Park Tour
- September 22nd**
6:00-7:30 pm
Cover Crops for the Vegetable Garden
- September 24th**
6:00-8:00 pm
Rock Bridge Memorial State Park
Monitoring Blitz
- September 28th**
6:30 pm
The Nature of Oaks
- October 1st**
10:00am-3:00 pm
Agroforestry Chestnut Festival

runoff reaches rivers and lakes. The next time you experience the umbrella effect, consider the fantastic service each tree provides to the quality of our environment. Aside from keeping you dry, the leaves and bark of a tree retain a huge amount of water, allowing some of it to evaporate and some to more slowly reach the ground. Depending on size and species, a single tree may store 100 gallons or more, at least until it reaches saturation after about one to two inches of rainfall. When multiplied by the number of trees in a community, this interception and redistribution can be significant. Trees give us shade on blistering hot afternoons, make cozy dens for all sorts of woodland creatures, yield wood for baseball bats and golf clubs, and provide the pulp for paper. You might be surprised to learn they can also improve your child's ability to learn, lower your blood pressure, raise the value of your property, and bring more shoppers to your community.



Quick Quiz

Take this quick quiz at <https://forms.gle/AQq3kE8YpZ5NDbos9> or send it to Michele Woolbright in Resource Management, or email them to Stormwater@boonecountymo.org with your answers by September 9th. Participants can win a travel mug!

1. What event is on September 24th?

2. A single tree may store how many gallons of water?
A) Less than 10 gallons B) Between 20 and 90 gallons C) 100 or more gallons
3. What are two things that form streams?
