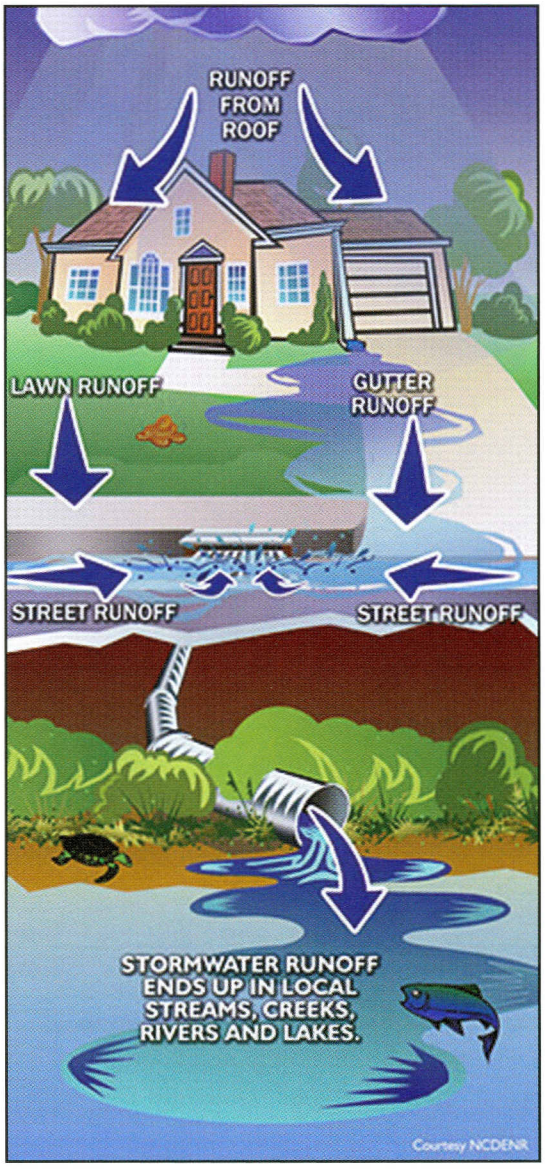
Can you make a difference for cleaner streams?

There was a time when rains that fell near Amity Creek landed on the trees and natural forest litter there, slowly trickling through the soil and downhill to Lake Superior. Today, homeowners have carved neighborhoods into those forests and many have to pump stormwater away from their basements into Amity Creek.

Now when it rains, Amity Creek gets more water than it used to. There are places where the banks are eroding and the dirt is muddying the streams. It's a problem. The City of Duluth realizes that this needs fixing, but they need homeowners to help.

Scientists from UMD's Natural Resources Research Institute have a three-year stormwater research project ready to roll. This spring, they will monitor two similar neighborhoods whose stormwater flows into Amity. They will measure how much water is coming from these neighborhoods. Next year, they'll ask the residents of one neighborhood to participate in efforts to reduce the stormwater coming off their property (See "Beyond rain barrels"). In the study's third year, the scientists will again monitor stormwater flow from the neighborhoods and see if they've successfully reduced the amount of water headed to Amity Creek.

"In new developments, it's easier to build in good stormwater management systems, but this is done less often in established neighborhoods, especially in this climate and with soils like ours," explained Valerie Brady, NRRI aquatic scientist. "It's really important for people to understand their individual impact on our freshwater streams."



How much rain water flows off your roof?

A small house (26 ft x 32 ft, or 832 sq. ft) can produce 516 gallons of water runoff during a one inch rainstorm. That doesn't include the garage roof, driveway, sidewalk, patio or yard!

Beyond Rain Barrels

Catching the rain off your roof and letting it slowly seep into the ground is a great idea, but all roofs collect much more rain than one barrel can hold. How else can you capture and slow down the water from your roof and driveway?

This project will ask homeowners to try solutions such as an underground, bottomless cistern that will collect water runoff and allow it to slowly seep back into the ground. They'll also ask to deepen the swales between the houses so that they can hold more water. If they're not deep enough, the swales simply dump the water into the streets, down the storm drains and into the already-full creek.

And, of course, rain barrels and rain gardens are helpful, too! Anything homeowners can do to reduce the speed and volume of water flowing from their neighborhood will help keep Amity Creek flowing clean and clear into Lake Superior. As an added benefit, extra water will be available to use on lawns and gardens during dry periods.

Can we change our behavior to protect precious water supplies?

The Environmental Protection Agency is funding a pilot project to find out if people are paying attention to the information they get about protecting our fresh water supplies.

During the first year of the stormwater project, folks will be surveyed about their knowledge of water issues. When the project is done, surveys will again be taken to find out if folks learned anything and are making changes.

It all comes down to your water!