

Think you know everything about water?

Duluth scientists were surprised to learn how many residents living near Amity Creek either don't know they live near it or don't know its name.

"We need to make people aware of the water they live near," said Duluth Scientist Valerie Brady. "How we live our lives affects water quality and understanding that is key to protecting our local streams and Lake Superior."

Brady is leading a team to combat problems with stormwater--flooded basements and stream erosion--and find out if local homeowners can make a difference.

The first step was to understand how residents view stormwater problems and if they are interested in solving them. Minnesota Conservation Corps volunteers surveyed 63 households on three similar streets in Lakeside. They found that people in Duluth care about water-related issues--72 percent of the households contacted agreed to take the survey.

Even better, people are aware of the links between rain and problems from too much stormwater flow. Most know that their sanitary and storm sewer systems are separate and treated differently.

So what don't you know that you should? Stormwater causes big problems for streams--not just Lake Superior. Our buildings, roads, driveways, even lawns, cause stormwater to enter the streams much faster than before our neighborhoods were built. This means higher and quicker flows after rain storms and snowmelt, causing stream banks to erode and creating muddy water. Much of the stormwater from the Lakeside area flows into some part of Amity Creek. It, along with the Lester River, are listed as "impaired" by



The Amity Creek Stormwater Survey partners are UMD's Natural Resources Research Institute and Minnesota Sea Grant, the U of M's Water Resources Center, Minnesota Dept. of Natural Resources, Minnesota Pollution Control Agency, the City of Duluth, and the MN Conservation Corps.

Right: Stormwater draining into the Amity.

the Minnesota Pollution Control Agency and the U.S. EPA because of the high turbidity (muddiness).

"We're glad that there's positive interest by citizens to learn more about stormwater problems and to help reduce run-off," said Brady. "We want to test a variety of measures with local residents, learn which work best, and which solu-

tions homeowners like best."

Slowing and reducing stormwater before it gets to Amity Creek should help reduce erosion and will prove that

Overflow, from page 1

the system. To solve the problem and stop overflows as quickly as possible, the City is doing both.

Four overflow storage basins were built at key overflow points in Duluth, capturing millions of gallons of diluted sewage before it escapes the system. Two more are planned within the next eight years. Although the storage tanks are reasonably effective, they do not solve the problem of too much "clean" water getting into the sanitary system.

Since the 1970's the City has been

everyone can help make a difference in water quality.

"It's like this," said Brady. "A 10 minute shower uses 40 to 50 gallons of water. If someone dumped 50 gallons over your head in 10 seconds, you'd be pretty overwhelmed. And our in-town streams get most of the stormwater runoff all at once--too much, too quickly--leaving too little groundwater to sustain the flow when it's not raining. We'd like to see the runoff more spread out, like the 10-minute shower, not the 10-second shower."

Interested in knowing more about stormwater? Please visit www.LakeSuperiorStreams.org.

fixing problems in our system and disconnecting foundation drains, reducing the base flow to WLSSD by almost 80 percent--from about 20 million gallons per day to about 12.

But, because only about 40 percent of Duluth's sanitary sewer system is publicly owned (60 percent is owned by private homeowners), the City will expand its work with homeowners to reduce I & I from all sources.

Together we can protect Duluth's greatest asset, Lake Superior.

If someone dumped 50 gallons over your head in 10 seconds, you'd be pretty overwhelmed. Same with our streams that get too much water, too quickly, leaving too little groundwater to sustain the flow when it's not raining.