

We All Live on a Watershed



Recently, POP sat down with Randy Walker, President of the Pootatuck Watershed Association, to answer some questions about Newtown's watershed.

POP: What is the mission of the PWA?

RW: Our primary mission is to promote and preserve the Pootatuck River, its drainage basin and underlying aquifer, as well as the other seven watershed areas that fall in the confines of the town of Newtown.

POP: What is a watershed, what are its components and how does a watershed impact an aquifer?

A watershed is an area of land where all the water that is under it or drains off of it collects in the same location. The Pootatuck River watershed is the largest of eight watersheds in Newtown and its aquifer provides over sixty percent of Newtown's drinking water. An aquifer is the water that rests underground and is recharged by water from the land surfaces that are permeable, meaning allowing water to be absorbed.

POP: What are the important streams associated with Newtown's watersheds?

RW: All streams and their aquifers are important to citizens of Newtown. The aquifer associated with the Pootatuck River is a sole source for Newtown's public water supply systems run by Aquarion Water Company and the town of Newtown. Protection of this aquifer water supply is key to Newtown's public health and continued economic viability.

Portions of Deep Brook and the Pootatuck River have a special designation by DEEP as a Class 1 Wild Trout area, but they are not the only streams that have cold water species of aquatic life. Pond Brook and the Halfway River both support trout and have their own aquifers. Other streams whose watersheds extend into Newtown include the Aspetuck River, Limekiln Brook, and the Pequonock River.

POP: Why is it important to protect wetlands and swamps?

RW: Wetlands and swamps help to recharge the ground water and provide important habitat for a large number of insects, birds and mammals. They also capture and help to break down pollutants. As water demands and usage increase, we need to grow, not decrease our wetlands. Since wetlands are key to aquifer recharge, it is even more important that we work to keep them free of pollution and waste.

Our challenge is that we take our water supply for granted and land values place an incentive to develop every acre possible for economic gain. Yet without a stable and healthy water supply the value of the land and the structures sitting on it decline.

It is interesting to know that during a drought it is the ground water that keeps the streams flowing. When ground water is depleted, actual stream flows will decrease, in quantity as well as quality.

POP: Why should property owners maintain a buffer of plantings near watercourses and ponds?

RW: Plantings along stream banks (known as riparian buffers) help trap runoff, reduce erosion, and filter the water before it reaches the stream. Trees also provide canopy to reduce the solar warming effects on the water. These plants also help stabilize the soil during high flow periods and prevent things such as fertilizers from flowing directly into the stream.

POP What are some activities that homeowners can do to protect the watershed? What is the biggest threat?

RW: Many residents have large areas of lawns which usually mean the use of pesticides, herbicides and fertilizers, all major contributors to declining water quality. It is estimated that 60% of lawn chemicals do not stay where they were applied, but move down slope to contaminate above ground as well as underground water resources. Better lawn care management practices could go a long way to reducing stressors to the aquifer and watershed.

The second part of this interview will be published in July's edition of My Backyard Habitat.