

Many community members have been asking me, “what’s happening to all those trees along the stream on Oregon Street? Is this part of the trail effort?” The answer, “Definitely Not! It’s the exact opposite of what so many volunteers have been working for.” Here’s what has happened:

Last week I was driving along Oregon Street past the old Tannery property and was surprised to see trees and brush being knocked down. I quickly turned the car around and drove to APX across the street to appeal to the landowner about the importance of not cutting down the trees. He explained he was clearing it out to make it easier to mow and maintain. I understood his reasoning, but it failed to take into account the importance of the riparian buffer. (What’s that? See below) There are no regulations requiring owners to preserve trees on the edge of a stream, but there are good reasons for owners to not cut them down. Trees with their deep roots stabilize the stream bank and prevent erosion. They help prevent flooding and protect the stream from run off of fertilizer and other contaminants. The trees shade the Run, important in being able to improve the habitat for trout. The trees and brush are an important wildlife habitat. Just across the stream we’re planning a trail where people can enjoy walking and strolling – trees are an important part of the green way. From an economic viewpoint, towns with greenways experience higher property value.

Later in the week as I drove by the area and knew I had not succeeded in my efforts to educate. How sad - 30 years of growth completely torn down without considering the impact. Unfortunately it takes much more than one emotional conversation. And there are no regulations in Pennsylvania that require preservation of riparian buffers. I spoke to our Conservation District; Tammy Piper noted there are programs to assist landowners with their stream buffer. At DEP (Department of Environmental Protection). Dave Gates noted “it all depends on owner awareness of the impact they can have on environmental health – not just for your area, but also for communities down stream.” “..and for the next generations” I added. Volumes of research, as well as the results in areas that are conscientious about their buffers make it clear that an adequate riparian buffer very much contributes to the health of the stream. 30 to 100 feet are recommended depending on vegetation and stream width.

**What’s a riparian buffer?** It consists of deep-rooted grasses and trees that hold the soil, stabilize the stream bank and help prevent erosion. Fine silt from erosion is seen covering the streambed rocks and pebbles in many areas of Johnston Run; this fills and smothers the rocky habitat needed by fish (such as trout) and the insects they feed on. Along with preventing erosion, a riparian buffer of grass, trees and undergrowth provides a habitat inviting to songbirds (which also enjoy insects found in a healthy stream). Bees enjoy this kind of environment, as does a variety of wildlife. The buffer helps conserve the soil, nutrients and minerals in the land next to it. Storm water run off from our roads, parking lots, lawns and agricultural areas can unintentionally add minerals, chemicals and other pollutants such as fertilizer, weed killer and pesticides to a streambed - making the ducks’ and fishes’ “drinking and bathing” water not so healthy.

Towns, neighborhoods and rural areas can also utilize riparian buffers to help prevent flooding. During floods a strip of trees, shrubs, and deep-rooted grasses surrounding waterways acts like a sponge absorbing rising and falling water. Native plants in these areas help slow flood velocity, store water for future use and slowly release water over a long period of time. It can also help prevent organic fertilizer from fields and pet poop from the gutters from loading the stream with e coli. Our stream bacteria count is very high. Tree foliage helps shade the water, keeping the temperature habitable by fish such

as trout, and increasing the dissolved oxygen (DO) level. Agro forestry is a USDA program – fascinating information on “working trees” and the profitability of integrated farm and trees watershed approaches. [www.unl.edu/nac](http://www.unl.edu/nac)

In 2013 we completed a waterway study of the stream that confirmed the previous DEP rating – Johnston Run is an “impaired” stream. We have high counts of nitrates, phosphates, e coli (bacteria), and silt. All of these have deadened it to being able to support fish such as trout. It is a limestone stream – perfect for trout. But as long as lawns and agriculture drain in phosphates and nitrates, storm drains dump in salts and oil, and trees and shrubs are mowed down from the edge causing the banks to erode and silt fills in the locations where fish eggs would hatch, we won’t have trout; we won’t have a stream where kids can play and it won’t be safe or healthy for any animals (wild or livestock) living down stream. Shortage of riparian buffers is clear on maps of this area. We presented the results at a community forum, we write about them in the newspaper, and they are posted on our website [mpmcproject.org/waterway](http://mpmcproject.org/waterway) revitalization and the county website. We frequently hear about groups planting trees along stream banks and groups such as Trout Unlimited and Pheasants Forever trying to replant stream banks. We just have to count on expanding awareness and understanding.

Landowner awareness and education of the community are the keys if we want a stream like we remember fishing and playing in, with clean clear water, and not on the impaired stream list. It’s important to support environmental programs like TWEP and in schools that teach about ecology. Whitetail and Academy summer programs can also provide education and projects. Groups like MPMC and JRRC (Johnston Run Revitalization Council) and others can work with local government and community members on how to restore our stream, and also do water sampling.

Nobody wants to be told what to do with their property. What does “it’s my land” mean? Does it mean, “I can ignore the environment that my land sits on/in?” Or does it mean, “I’m responsible for stewardship of that land.” Part of owning land on a stream is taking care of the riparian buffer and keeping the water clean. Clean water is a threatened commodity these days. One just has to reflect on what Flint Michigan faces, the chemical spill in West Virginia 2 years ago, and the California droughts to realize we need to value our watershed. One of the easiest ways to avoid contaminating our stream and create a healthy streambed is to have an intact riparian buffer. In our conversations, I’m afraid the owner of APX and the manager received a healthy dose of my passion for revitalizing Johnston Run – but, seeing only stumps remaining on the bank as in the picture shown with this article, I was heartbroken to think of the impact on the stream and wildlife, and the years it will take to recover. There’s an opportunity here for the company, as well as land owners in general, to utilize their land in a way that both serves their purposes and also has a meaningful, positive impact on the environment.