

Water at Risk Series: Forests - Nature's Free and Functional Water Protection System

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Riparian Buffer - image taken from: <https://ecosystems.psu.edu/>

If you spend even a little time walking trails in our area, you've probably noticed that every sparkling stream, wetland, and waterway has shrubs, ferns, grasses, and wildflowers — all kinds of native forest undergrowth — growing on and along its banks.

Are you thinking, “well, duh, if you're in the woods, of *course* there will be trees along the water”?

You've got a point. Forestland and clean water go together.

We found that out, not all that long ago, when Pennsylvania's woods were completely clear-cut from east to west. The unshaded, unprotected creeks heated up and sickened. The fish, shellfish, bugs, and other aquatic life died. Sediment choked the water. Birds, mammals and humans that depended on the water

suffered, too. It was only when the Civilian Conservation Corps in the Great Depression planted trees and rebuilt the forest that creeks began to recover, too.

That natural relationship — trees-water-life — hangs in the balance every time a municipality considers a new development.

Protecting streams when the land near them is being developed takes vigilance. Best practices and Pennsylvania state stormwater permits require a naturally forested buffer at least 150 feet deep along our “High Quality” and “Exceptional Value” streams — that’s about the length of two 18-wheelers, end-to-end. This is true for any project that disturbs even an acre of ground or more.

Developers, naturally, want to build as much value out of the land as they can.

Making sure developers obey state standards and protect our water is up to your township or borough government. Those local officials hear from lots of development lawyers, engineers, and others. It’s a lot of pressure.

Having these requirements built in to your municipality’s own ordinances makes it easier to resist that pressure. It allows local officials to counter every argument with “it’s required.” They don’t even have to figure out the language themselves — a model stormwater management ordinance, that puts the forested buffer into the required legal language, is below. And the model ordinance protects not just lakes, creeks and streams, but also our delicate, transient wetlands on which so much life depends.

Now, get on outside and walk in the woods. Early spring is a great time to enjoy those forested buffers!

Did you know?

The 50-cent name for that cushion of vegetation along healthy creeks and wetlands is “riparian buffer” (from “ripa,” the Latin word for “bank”). Riparian buffers filter out all kinds of contaminating gunk from lawns, agriculture, and highways. Their roots hold soil in place, preventing erosion and flooding. Even the leaves that fall into the water become food for tiny water creatures, an important link in a stream’s food chain.

For more information

[https://www.dep.state.pa.us/dep/subject/advcoun/ag/2009/june2009/Riparian Forest Buffer Guidance.pdf](https://www.dep.state.pa.us/dep/subject/advcoun/ag/2009/june2009/Riparian_Forest_Buffer_Guidance.pdf) page 9 - 13 has a great summary of the countless benefits forest buffers deliver, naturally, and free of charge

[Model ordinance info here \(details in the appendix\)](#)

https://www.mcconservation.org/uploads/9/0/3/0/90302089/2022_renewal_brodhead_creek_act_167_stormwater_management_plan.pdf

Riparian buffers — what they are, what the science says, and what Pennsylvania requires:

<https://www.dcnr.pa.gov/Conservation/Water/RiparianBuffers/Pages/default.aspx>