

PA HB 1275 Testimony – Ryan Davis

My name is Ryan Davis, I am a natural resources professional who has worked on riparian forest buffers for multiple conservation organizations since 2014. This testimony is mine personally and I am not speaking as a representative of any of my employers, current or former.

Over the past 9 years riparian reforestation has been a primary focus of my career. I have conducted education and outreach to increase awareness on the importance of riparian forests, implemented federal and state programs to assist private landowners in installing them, created new funding programs with grants that I applied for and received, and planted over 600 acres of riparian forest across over 200 properties in Pennsylvania, all of which I am tending to as the trees mature.

I can speak personally to the effectiveness of riparian forest buffers as a conservation investment. Within months of planting the trees and managing the riparian area for native vegetation we see more wildlife, from game species like deer and turkeys to critically important pollinators. Within months the vegetation also begins to slow and filter runoff that is washing towards the stream, limiting pollutants that reach the water, and within a few years the roots of the trees and shrubs reduce streambank erosion, which damages not only the stream but properties and infrastructure. Riparian forests also create the right conditions for a robust aquatic ecosystem full of native organisms which clean the water for us, much like a diverse microbiome in our human bodies is key to our physical health. Due to flood risk and wet soils, riparian areas are typically not great places to develop or manage the land for anything other than a natural ecosystem anyway. By leaving or restoring a relatively small amount of land adjacent to streams undisturbed, we can provide immense environmental benefits across the landscape without sacrificing land that is prime for other uses.

Some of the landowners I have worked with over the years were skeptical about riparian buffers at first, but nearly all of them become enthusiasts as their trees grow and they begin to see these tremendous benefits develop. I have had many landowners, including those from Plain Sect and other conservative communities, recommend my programs to friends and family members, and many call me a few years after a riparian buffer planting to sign up for even more trees on their property. This is quite a testament to landowner satisfaction over what can sometimes be a dramatic change to their property. There was a time when riparian forest buffers were not very popular among landowners, but over the past few years that has shifted and the conservation community is largely met with openness, if not interest and enthusiasm.

Though this voluntary participation is increasing each year, my landowners are current occupants who own riparian areas which have already been developed or otherwise disturbed. Their plantings are funded by grant dollars, much of which is from public sources. We can restore riparian forest ecosystems by planting native trees and shrubs, but it is much more efficient and cost-effective to protect them in the first place so that they do not need to be replanted.

On the note of cost-effectiveness, I also served on the Forestry Workgroup for the Pennsylvania Phase 3 Chesapeake Bay Watershed Implementation Plan (Phase 3 WIP), which is PA DEP's blueprint for meeting the pollution reductions required by the US Environmental Protection Agency under the 2010 Chesapeake Bay Total Maximum Daily Load. The EPA is requiring Pennsylvania to meet pollutant reduction targets by 2025, now only 2 years away, and we are making progress but are very far behind. Riparian forest buffers were a top practice recommended by the Forestry, Agriculture, and Stormwater Workgroups because they have the ability to reduce more nitrogen pollution loading per dollar than nearly any other conservation practice, while also providing additional environmental benefits like wildlife habitat and flood damage mitigation. In the Phase 3 WIP document last amended in July 2022, an *annual* funding shortfall of \$324 million is estimated. Thus, cost-effectiveness to make progress towards these important goals is imperative, as are regulatory changes which accelerate implementation of cost-effective practices like riparian forest buffers.

I have worked in many municipalities which already have riparian buffer ordinances, providing guidance to the municipal officials, surveyors and engineers, developers, and landowners alike. I acknowledge that I am likely mostly receiving calls from more engaged and proactive stakeholders, but still have been impressed by how smoothly and amicably new buffer ordinances have been adopted. Tree plantings are highly regarded by the public, and at this point many Pennsylvanians involved in land use and development have at least a passing understanding of riparian buffer considerations and their importance. They are also accustomed to complying with stormwater regulations.

Beyond being the most cost-effective stormwater Best Management Practice, relative to other practices riparian forest buffers have the longest lifespan, have the most environmental benefits besides water quality, and are easiest to establish. It does take time for the trees to grow and managing the vegetation to ensure success is critical, but after the trees become established they only get stronger and better at protecting our streams, housing wildlife, sequestering carbon, and all of the other environmental benefits that they provide. Technical assistance regarding effective riparian forest buffer establishment is abundant and freely available, and there is growing acumen around buffer management in the stormwater, agriculture, and engineering sectors, in addition to a strong specialized industry of reforestation professionals. Requiring the protection and enhancement of riparian buffers would be minimally onerous while providing maximum benefits to the Commonwealth.

Thank you very much for your time!