



September 22, 2014

RE: House Bill 1565 (A.4116)

Dear Representatives of the Pennsylvania House:

Trout Unlimited and its Pennsylvania Council of Trout Unlimited (PATU) wish to express its concern regarding House Bill 1565 (A.4116). PATU is comprised of over 13,000 sportsmen, organized in 48 local chapters across Pennsylvania. Our mission is to conserve, protect, restore and sustain Pennsylvania's coldwater fisheries and their watersheds.

In 2010, Chapter 102 (Erosion and Sediment Control) was revised to add riparian buffer requirements as part of the Clean Water Act Phase II NPDES Permit process. The riparian buffer requirements were approved by the Environmental Quality Board after significant public comment and approval by the Independent Regulatory Review Commission. Currently, 25 Pa Code § 102.14 forbids earth disturbance activities within 150 feet of waterways and requires protection of existing riparian buffers when a permit is required for earth disturbance activities in exceptional value and high quality watersheds. In some cases, permittees are required to convert existing riparian buffer to riparian forest buffer or establish new riparian forest buffer. It is our understanding that HB 1565 would amend Section 402 of Pennsylvania's Clean Streams Law (P.L. 1987, No.394) such that riparian buffers and forest riparian buffers would not be required. Instead they may be used as one choice among a suite of unspecified best management practices or design standards.

As amended by A.4116, HB1565 would further require that for projects in special protection watersheds, where an earth disturbance permit is required and where riparian buffers were previously utilized as a best management practice, replacement buffers must be installed elsewhere in the watershed. While this amendment is an improvement over the original bill language, it falls far short of protecting the water quality of special protection watersheds. Rather, the amended bill would allow the "best of the best" streams to be degraded, as long as riparian buffers were installed somewhere else in the watershed—potentially along other streams that are of lesser quality. Additionally, "replacement buffer" is not defined in A.4116, making it difficult to understand what level of protection might be afforded by replacement buffers in other areas within the watershed.

As written, HB1565 (A.4116) would allow riparian buffers along a headwater stream to be destroyed, and the replacement buffer could be installed anywhere in the watershed—potentially leading to fragmentation of contiguous stream corridors. If the buffer is installed downstream, the water quality benefits that a riparian buffer would provide to upstream waters will be lost. Further, the water quality benefits achieved by the downstream replacement buffer could take decades to realize. For example, if a 50-acre project is allowed in a headwater area and the replacement buffer is installed 25 miles downstream, then you lose the ability to control: the thermal impacts to the headwater streams and

their downstream counterparts; the pollutants, including sedimentation and nitrogen, from entering headwater streams and flowing downstream; and the energy input into headwater streams that is critical for sustaining aquatic life.

There are strong technical, political and economic arguments against such action. The technical support in favor of riparian buffers and riparian forest buffers in particular is overwhelming. Across the nation, academic and other research institutions have engaged in research on the function and role of riparian buffers, with amazingly consistent findings. Our own Pennsylvania State University and Stroud Water Research Center have published several fact sheets on the matter.ⁱ Riparian buffer zones of native vegetation prevent accelerated erosion and sedimentation, protect water quality, reduce the severity of flooding and provide important habitat for wildlife.

Riparian buffers (and especially riparian forest buffers) intercept precipitation and retard runoff, slowing the flow of runoff into stream channels. This more stable hydraulic regime results in lower erosive forces acting on the stream bed and banks. In addition, the root systems of native plants stabilize stream banks, thereby reducing bank erosion. Less erosion also means less sediment deposited in the stream channel downstream, when the current slows.

However, the value of riparian buffers goes far beyond amelioration of erosion and sedimentation. They provide several other functions important to maintaining good water quality and healthy biological communities. Vegetative riparian buffers:

- filter sediment and pollutants, such as pesticides and phosphorous, from surface runoff;
- provide shade and thus keep water temperatures cooler;
- provide a significant portion (up to 90%) of the energy input to streams in the form of leaves, twigs, terrestrial insects, etc.;
- contribute large woody debris, creating important habitat for fish and other species; and
- provide bottomland areas, which are critical habitat and provide important travel corridors for deer, wild turkey, and other wildlife.

We know of no other best management measures or practices that would provide all the functions and protections afforded by riparian buffers. Thus, weakening the existing regulatory requirements would have a deleterious impact on water quality and aquatic and terrestrial biological communities. Allowing for “offsets” in the watershed fails to ensure protection of the highest quality waters and may result in the loss of water quality gains realized by existing buffers.

Riparian buffers retard runoff and slow flood waters, reducing the severity of flooding. Research has established that nothing slows runoff like forest canopy cover, elevating the importance of riparian forest buffer. Allowing earth disturbances and development within 150 feet of streams can exacerbate downstream flooding and flood-related damage to developed areas. Flooding and stream clearing have been recurring topics of concern to the General Assembly. Weakening the riparian buffer requirements of 25 Pa Code § 102.14 will likely result in legislators fielding even more flood-related complaints from municipalities and landowners.

Riparian buffers of native vegetation contribute to good aquatic and terrestrial habitats, which in turn support healthy fish and wildlife populations. It is those healthy populations that attract anglers, hunters, and wildlife watchers to the Pennsylvania outdoors. One needs to look no further than

Pennsylvania’s populations of whitetail deer and wild turkey to find good examples of the relationship between habitat, populations, and outdoor activity. Weakening the existing protections afforded to riparian buffers will result in adverse impacts to both fish and wildlife populations, and may lead to a decline in outdoor activity.

In 2011, over three quarters of a million Pennsylvanians purchased fishing licenses. In addition, nearly 800,000 resident hunting licenses were sold. Additionally, almost 300,000 nonresidents purchased fishing and hunting licenses in Pennsylvania in 2011. This is a significant constituency that accounts for a great deal of economic activity. The table below summarizes the data for 2011 (the most recent year for which data have been compiled). Hunters and anglers directly contribute nearly \$1.5 billion annually to Pennsylvania’s economy. When wildlife watchers are considered, that total rises to nearly \$2.75 billion.

Expenditures within Pennsylvania by Sportsmen and Women – 2011

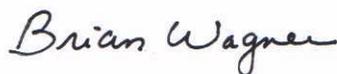
	<u>Anglers</u>	<u>Hunters</u>	<u>Wildlife Watchers</u>
Number of Participants	1,101,000	775,000	3,598,000
Trip-related Expenditures	\$228,510,000	\$172,710,000	\$266,669,000
Equipment and Other	\$256,980,000	\$797,888,000	\$1,004,219,000
Total Expenditures	\$485,410,000	\$970,598,000	\$1,270,888,000

Source:ⁱⁱ

Much of this hunting and angling activity takes place in rural areas of the Commonwealth—the very areas with intact riparian buffers and high quality fish and wildlife habitats. The small business owners in these areas, including motels, restaurants, and sporting goods shops, rely on spending by hunters, anglers, and wildlife watchers, who in turn rely on healthy fish and wildlife habitat. The \$2.75 billion that sportsmen and women spend in Pennsylvania supports a lot of local businesses and the families that own and operate them.

Currently, protection and enhancement of riparian buffers along waterways are required by regulation implementing the Clean Streams Law for the protection of water quality and aquatic biological communities. These regulations were adopted, after significant public input and regulatory review, and weakening the regulations now would take Pennsylvania several steps backward in its efforts to protect the waterways of the commonwealth. Given the value of riparian buffers and the consequences of the loss of intact riparian buffers to property owners, sportsmen, small business owners, and those who rely on good water quality, we urge you not to move forward with House Bill 1565 (A.4116).

Respectfully submitted on behalf of the 13,000+ members of Trout Unlimited residing in Pennsylvania,



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President, Pennsylvania Council of TU



Katy Dunlap
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ⁱ The Role of Trees and Forests in Healthy Watersheds: *Managing Stormwater, Reducing flooding, and Improving Water Quality*. Pennsylvania State University. State College, PA.; “Riparian Buffers: Pennsylvania’s Best Solution for Protecting Its Waters.” Pennsylvania State University. State College, PA. <http://www.extension.psu.edu>; and Sweeney, Bernard W. and J. Denis Newbold, 2014. Streamside Forest Buffer Width Needed to Protect Stream Water Quality, Habitat, and Organisms: A Literature Review. *Journal of the American Water Resources Association (JAWRA)* 50(3): 560-584. DOI: 10.1111/jawr.12203.

ⁱⁱ U.S. Department of the Interior, U.S. Fish and Wildlife Service, and U.S. Department of Commerce, U.S. Census Bureau. 2011 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation.