



## Stream Buffers Under Attack – Don't Let Them Be Cut

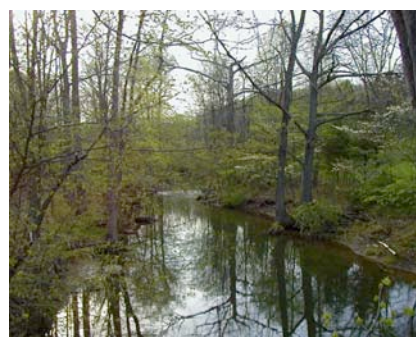
### Clarification and Discussion Points

#### What HB 1565 does.

HB 1565 amends section 402 of the Clean Streams Law in a way that undermines existing Chapter 102 regulatory buffer requirements and replaces it instead with a voluntary choice between installing a 150 foot buffer or using another unspecified and less protective strategy for protecting against water pollution, erosion and sedimentation on EV/HQ streams.

#### Current Chapter 102 regulations

- ☛ only require a 150 foot buffer for Exceptional Value and High Quality streams.
- ☛ only apply to new development/redevelopment projects involving over 1 acre of earth disturbance.
- ☛ exempt agriculture, timber harvesting and a number of other activities from this mandate.
- ☛ provide a number of exceptions such as when existing site conditions make compliance not appropriate or feasible.



#### The fundamental premise of 1565 is wrong.

The allowed trade off of buffers for other management practices presumes that other selected management practices will provide the same level of benefits that buffers do – this presumption is wrong.

- ☛ For example, rather than preserving a buffer to prevent pollution and flood damages, a developer can build a bigger detention basin with a water quality forebay; detention basins are inferior to buffers ... they do not provide the erosion protection, shading, flood protection and flood damage reduction, and or property value enhancement and community tax benefits buffers provide.

Forested riparian buffers provide benefits to streams that cannot be replaced by other best management options. A 150-foot vegetated buffers does not only prevent pollution from entering a stream, but it provides other ecological and community benefits that other best management practices cannot and do not provide. Allowing the selection of another management option ends up, in total, reducing the ecological and water quality benefits that an exceptional value/ high quality stream would otherwise get under existing requirements.

HB1565 replaces the clear and crisp mandate of existing regulations with a voluntary choice of other unspecified and less protective strategies.

## **HB 1565 actually incentivizes buffer destruction.**

- a) The offset requirement of the law does not apply to the first 50 feet of destruction – destroy some or all of that 50 feet there is no offset requirement, so developers might as well cut it all;
- b) The offset requirement for development within the next 100 foot of buffer is only 1 to 1, there is no increased obligation that would incentivize buffer protection and because development design is easier with no buffer limitation there is an inherent incentive to cut rather than save.

💡 Research has shown that just reducing a buffer from 100 feet to 50 feet, increased stream temperatures from 2.9 °F to 4.2 °F while fine sediments increased 11%. While these changes may appear small numerically, they resulted in an 81-88% reduction in young trout populations.<sup>1</sup> Thus, anything that incentivizes taking from the buffer width inflicts irreplaceable harm.

## **The offset requirement in HB 1565 may not benefit the creek or community harmed.**

The offset requirement in HB1565 does not ensure the same creek, or the same stretch of creek, that is damaged by the development project at issue is the recipient of any offset benefits. The offset only has to be “as close as feasible” to the area of disturbance there is no guidance as to what that means, whether it has to be upstream or downstream or whether it has to even be on the same impacted creek only that it has to be within the same basin. A headwater creek damaged by a 50-acre development project without a 150 foot forested buffer gets no benefit from a buffer offset installed 15 miles downstream.

The offset requirement does not ensure there are actual benefits from its use because it does not have to be installed in a location where there is actually a need for pollution protection. H.B. 1565 would allow offsets to happen in areas that may provide marginal or minimal benefits rather than in the proposed development area where there is a known, real and present degradation of water quality.

## **Why Buffers are Better and Should be Preserved in PA Law – How They Save and Make Money While Better Protecting Communities:**

### ***1. Buffers are best at protecting clean water and meeting community legal obligations.***

Forested buffers, according to scientists, are the best way to prevent and remove pollution from streams. No other management practice provides the array of benefits buffers do – they filter, absorb and remove pollution, while preventing erosion and sedimentation. So they help communities avoid the costs of pollution clean up that state and federal laws may require.



### ***2. Buffers prevent flooding and flood damages, and so reduce the cost of flood response.***

When communities build too close to the creek and replace forests and meadows with lawns, parking lots and buildings, they create flooding, flood damages and erosion that the community has to pay to fix. Requiring buffers avoids these harms and saves communities the cost of response and rebuilding as well as the safety hazards and the heartache that flooding can cause.

- ☞ One study showed that “adjacent forest vegetation and litter lowered stream water elevations from 9.9 m (32.3 ft) to 5.3 m (17.3 ft) for a 100-year flood.” Reducing flood elevations, velocities and peaks reduces flooding and flood damages, and so reduces the frequency and cost of emergency services and the costs of damage.

### **3. Buffers save money and make money.**

When developers are required to include forested buffers in their design they both save the community money and make the community money at the same time they save and make money for the developer. Forested buffers included in building designs...

- ✓ save communities the cost of having to respond to the flooding, erosion and pollution inappropriate developments cause, and
- ✓ create housing developments and office complexes that sell for more money and more quickly, creating a greater tax contribution to the town and bigger, faster profits for the developer.



☞ In a survey conducted by the National Association of Home Builders, 43% of home buyers paid a premium of up to \$3,000, 30% paid premiums of \$3,000 to \$5,000, and 27% paid premiums of over \$5,000 for homes with trees.

☞ Regional economic surveys have documented that conserving forests on residential and commercial sites enhanced property values by an average of 6 to 15%; it also increased the rate at which units were sold or leased.

- ☞ Living nearby healthy plant ecosystems also increases property values. One study found that homes within 1,500 feet of a park sold for \$1,600 more than properties further away from naturalized areas.
- ☞ Pennypack Park, a forested park bordering a Creek in Philadelphia, has been credited with a 38% increase in the value of nearby property.

### **4. Buffers can reduce the cost of flood insurance.**

A forested buffer requirement in a community can help residents save money – a forested buffer requirement at the municipal level and the state level can reduce the cost of flood insurance for residents enrolled in the National Flood Insurance Program. This would be particularly true for SB 1465 the Riparian Buffer Protection Act proposed by Senator Rafferty.

### **5. Buffers increase a town's tax base.**

Forested buffers are known to increase the market value of nearby homes, as well as their marketability, thereby increasing the contribution to the town tax base when the homes in the new development projects subject to this mandate are sold.

### **6. HB 1565 allow developers to take the profits and leave towns footing the bill.**

The real costs of destroying effective streamside buffers is borne by the community when erosion undermines roads and bridges, when water pollution increases water treatment costs, and when even small frequent storms cause extensive flood damages that require emergency service response and repairs.

- The root systems of plants in the vegetated buffer zone hold the soils and lands in place preventing erosion of public and private lands, and also preventing the erosion that undermines roads and bridges which are costly to repair and/or replace. Research has found that on average it costs between \$10- \$30 per linear foot to preserve a stream, while it costs almost \$300 per linear foot to restore it.

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<sup>i</sup> Meyer, J. M., et al. 2005. Implications of Changes in Riparian Buffer Protection for Georgia's Trout Streams. Institute of Ecology, The University of Georgia, Athens, GA.