



August 11, 2010

Ms. Tricia Johnson
Councilwoman, District 7
44 Calvert Street, First Floor
Annapolis, MD 21401

Dear Ms. Johnson,

Thank you for the opportunity to testify and submit comments regarding **Bill 59-10, Subdivisions**. To reiterate my statements from the public hearing on 2 August 2010 and elaborate on my points, I submit the following for the record on behalf of the Advocates for Herring Bay.

We take issue with the current draft of **Section 17-6-402, Streams**. Section A of this provision calls for a 100-foot stream buffer, which we strongly support. However, Section B undermines that standard by giving planning and zoning officers broad discretion to reduce it. Allowing “development or redevelopment within the 100-foot non-disturbance buffer” will degrade the water-cleansing abilities and habitat value of the affected stream. The language requiring a developer to show he/she has “provided the buffer to the maximum extent practicable” is too vague and invites abuse. In addition, “mitigation for the encroachment” does nothing to address downstream harm inflicted on the developed stream.

Stream buffers provide essential ecological and economic benefits for Anne Arundel County. For example:

- **Intact riparian corridors are unequivocally recognized as one of the most effective means to manage excess nutrient losses from intensively used watersheds.** *Source: Kuusemets, V. and U. Mander, Ecotechnological measures to control nutrient losses from catchments. Water Science and Technology, 1999. 40(10): p. 195-202.*
- **Vegetated streambanks are up to 20,000 times more resistant to erosion than bare streambanks.** *Source: Ohio Environmental Protection Agency (OEPA), The Benefits of Stream and Riparian Habitat Protection in Ohio. Appendix to Volume I in Ohio Water Resources Inventory, OEPA, Division of Surface Water, Columbus, Ohio. 1994.*

- **Forest vegetation and associated growth adjacent to streams lowered stream flood elevations from 32 feet to 17 feet for a 100-year flood.** *Source: Castelle, A.J., A.W. Johnson, and C. Conolly, Wetland and Stream Buffer Size Requirements - a Review. Journal of Environmental Quality, 1994. 23(5): p. 878-882.*

One of the other speakers at the hearing suggested that a 100-foot stream buffer is unnecessary in many cases and could be reduced without ill effect. We disagree. Consider the following:

- **An 82-foot setback [buffer] is necessary to remove 80% of sediments; a 197-foot setback is necessary to remove 80% of suspended solids and nitrogen; and a 279-foot setback is necessary to remove 80% of phosphorus.** *Source: Desbonnet, A., et al., Vegetated Setbacks in the Coastal Zone. ISBN 0-938 412-37-x. Coastal Resource Center, Rhode Island Coastal Sea Grant, University of Rhode Island. Providence, Rhode Island. 1994.*
- **The minimum core habitat for amphibians and reptiles extends between 466 and 948 feet from the edge of riparian systems.** *Source: Semlitsch, R.D. and J.R. Bodie, Biological criteria for buffer zones around wetlands and riparian habitats for amphibians and reptiles. Conservation Biology, 2003. 17(5): p. 1219-1228.*
- **Seasonally migratory birds are 10 to 14 times more abundant in riparian habitat.** *Source: OEPA, The Benefits of Stream and Riparian Habitat Protection in Ohio. Appendix to Volume I in Ohio Water Resources Inventory, OEPA, Division of Surface Water, Columbus, Ohio. 1994.*

Compromising the integrity of existing stream buffers would be especially short-sighted at a time when new EPA regulations are set to go into effect that will make TMDL (total maximum daily load) levels more restrictive, and more costly to achieve if we continue to chip away at the buffers along our waterways.

Our county has approximately 1,470 miles of headwater streams, 62% of which are already degraded to “poor” or “very poor” quality according to surveys conducted by the Department of Public Works. The remaining 38% are providing a variety of benefits, and all at no cost. The functioning stream buffers are providing terrestrial wildlife habitat and travel corridors, and food and habitat in aquatic ecosystems; they attenuate flooding, stabilize stream banks and prevent erosion of streambanks and streambeds; they protect water quality by removing pollutants and moderating temperatures; and prevent property damage, reduce public investment and enhance property values. Maintaining a 100-foot stream buffer is the most cost-effective way for county taxpayers to protect and improve our water quality and our quality of life. The draft regulations should be strengthened to prohibit reductions in the 100-foot buffer.

We appreciate your time and consideration.

Lindsay Hollister
Master Watershed Steward