

Testimony – ZTA 22-12 Clarksburg East & West Environmental Overlay - Exemptions  
David Blockstein  
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Good afternoon and thank you for the opportunity to express my opposition to the ZTA 22-12 Clarksburg East & West Environmental Overlay – Exemptions.

I am David Blockstein, Ph.D., of 7016 Sycamore Ave., Takoma Park, MD 20912. I hold a doctorate in ecology and behavioral biology from the University of Minnesota. My testimony is as an ecological scientist on behalf of the Takoma Park Mobilization Environment Committee.

But really, my testimony is on behalf of this very small (less than an inch long) creature that you can see behind me. It is a free-living caddis fly larva of the family Rhyacophilidae and it lives in 10 Mile Creek. (Don't worry; I'm not going to spring an endangered species on you in a bid to stop development). This little insect spends the first part of its life in the water, and then metamorphoses into an adult caddisfly. The insect and I are testifying in opposition to the proposed ZTA. We testified together to the County Council in opposition to the proposed Clarksburg/Ten Mile Creek Sector Plan in December 2013.



<http://midge.cfans.umn.edu/vsmivp/trichoptera/rhyacophilidae/>

If you are a trout fisherman, you probably know this animal. According to Troutnut.com, Rhyacophila (known as Green Sedges) is an extremely important trout food. The larvae are relatively large, usually green, and always plump. They roam freely about the fast water and they often drift loose, where they are captured by trout.

Water quality monitoring conducted by my wife Debra Prybyla and others from Nature Forward, formerly the Audubon Naturalist Society (ANS), has shown that in Montgomery County this creature is only found in streams of high quality.

This insect is what we scientists call an Indicator Species – it only lives where the water is clean. It probably once lived in most of Montgomery County, back before human development had spoiled many of our waterways.

Now it has its last stand in the 10 Mile Creek watershed – our last best Creek. According to the Montgomery County Department of Environmental Protection, the Ten Mile Creek watershed has an incredibly diverse and sensitive benthic macroinvertebrate community. The DEP regarded the condition of the upper creek as excellent in 2013 [http://www6.montgomerycountymd.gov/dectmpl.asp?url=/content/dep/water/sub\\_littlese necacreek.asp](http://www6.montgomerycountymd.gov/dectmpl.asp?url=/content/dep/water/sub_littlese necacreek.asp) - I hope it is still excellent.

Ten Mile Creek is not only important in its own right, but it is the water source for Little Seneca Lake, one of the best water bird and wildlife habitats in the county. This lake is the focal point of the Black Hill Regional Park. It provides a rich fishery, including largemouth bass, bluegill and channel catfish. Downstream of the dam fed by Ten Mile Creek, the cold waters support a trout fishery.

The 6% limit on impervious surface in this part of the 10 Mile Creek watershed was unanimously agreed to by the Council in 2014. But it was a political compromise. Only time will tell whether this level of protection is sufficient to prevent impairment of the Creek and our drinking water, but it is certainly NOT too little protection. Now this Council is debating whether to exceed this limit for a good cause – bike paths.

The Rhyacophilids don't participate in the debates. They can't testify before the County Council. They can't calculate the amount of impervious surface.

But in a way they can. Because when there is too much pavement and too much sediment going into the streams, and when the stream temperature rises due to lack of shade, these little creatures cannot survive. These larvae rely on absorbing oxygen from the water through their skin. Only cold water and fast flows can meet these needs, just like for the trout that feed on them. Their scientific name Rhyacophilidae means “torrent loving”.

The caddisfly larvae don't understand politics or compromise. **They don't know whether the paved surfaces are used for bikes, cars, buildings or anything else.** They just “know” that if the water conditions deteriorate, they can't live. So whatever decision you make in this Council, the consequences will be felt by the “torrent-loving caddis flies”.

Some of you – maybe all of you – may be asking – who cares? Why does a little invertebrate with a difficult-to-pronounce name matter when we are talking about something popular like bike paths?

There are several reasons we ought to care –  
First, as I noted, this creature is an indicator of the quality of the clean drinking water supply and wildlife habitat that is Ten Mile Creek and that supports the richness of Little Seneca Lake. It's the canary in the Coal Mine.

We delude ourselves if we think that we can develop and develop without consequences. There comes a point where we stress the system too much, species can no longer persist, and the creatures that depend on them for food are diminished, biodiversity declines, and the stream is less able to support life. This is true even if the tipping point is caused by bike paths.

Second, Rhyacophilids and other insects like them are the “little things that run the world”. They are important part of the food webs that support the trout, the bass, the herons and waterfowl and other wild creatures that we enjoy.

The loss of species diversity is a loss in our human quality of life, and a loss of the wildness that makes Montgomery County such a desirable place to live.

Third, the economic impact of clean water and wildlife habitat is important. Any impairment of Ten Mile Creek and Little Seneca Lake is an economic loss to the County and our citizens. Montgomery County and most counties in the US spend significant dollars trying to rectify our past actions. We try to put up barriers to keep silt out of our waterways. We spend public funds to restore waterways. It is always cheaper and more effective to protect what nature has provided.

There is no question that the proposed exemption to the caps on impervious surfaces is environmentally damaging. It is not acceptable to the Rhyacophilids and it should not be acceptable to the County Council.

As scientists, we are used to thinking in the long term. I am well aware that this is not the approach that is fostered by our system of electoral and interest group politics.

However, I encourage the Council to take the big picture perspective and think in the long term. How will the interests of the County as a whole be served by adding more pavement and further damage one of our last wild places in the County? **If you really need more pavement for bike paths, keep it within the existing 6% cap.**

When future Councils and citizens look back at this Council 20, 40, 60, 80, 100 years from now, will they say, “I am thankful that because of the action of the County Council in 2023, we still have a place in Montgomery County where we can fish for trout, get clean water for drinking when we need it, and even allow the Rhyacophilids to persist?”

I hope so.

Thank you very much for your consideration.