

January 25, 2024

**Testimony to Montgomery County Planning Board regarding its draft of the Takoma Park Minor Master Plan Amendment**

Takoma Stormwater Solutions, which I represent tonight, is an ad hoc group of Takoma Park residents who seek sound and effective stormwater mitigation in an era of Climate Change, and to do so cost-effectively.

Tonight TSS appeals to the Planning Board to make a small but essential revision to the MMPA's draft section 1.1.1 3 on Stormwater Management, in order to clarify the most severe stormwater-related risks that development on Maple Ave in the plan area will have to address.

A bullet point on page 97 states, to our great satisfaction, that the county should "collaborate with the City of Takoma Park on ... stormwater management opportunities within the Brashear's Run drainage area."

We request additional text noting that the Maple Ave stream valley where Brashear's Run is located is the low point of a drainage area of some 550 acres and has a history of stormwater problems. Intense development in the valley was first made possible in the 1950s by a significant addition of underground gray infrastructure (culverts, outfalls, etc.) This information is absent from the MMPA section on Stormwater Management. It is buried instead on page 12 in a section on history of Takoma Park, and deserves much greater visibility. Here it is for the record:

"This area [the Maple Ave portion of the plan area] had long been subject to frequent flooding and drainage issues that made the land less desirable for development. Road improvements and the channelization of Brashears Run [the stream in the valley] prompted a wave of apartment construction beginning in the mid-to-late 1950s that produced the mid- and high-rise apartment buildings that characterize this stretch of Maple Avenue today."

That was 70 years ago, and 59 years later the City's 2009 storm mitigation analysis expressed doubts that this infrastructure could protect the area against intense storm events. I quote from the 2009 document:

The potential flooding along Maple Avenue ... comes from a relic/buried tributary to Sligo Creek [Brashear's Run]. Underneath Maple Avenue is a significant stormwater collection and distribution system that should capture potential flood water from **high frequency events** [that is, the likely 2 or 5 year storms]. However, if the drainage area above Maple Avenue [that is, the 550 acre area] were to experience a significant rainfall event in a very short period of time, the potential for flooding exists. (page 12)

The City's storm mitigation study further notes that

"A commercial property [in the middle of the plan area], at Maple Avenue and Lincoln, would have water depth of 6 feet during a 100-year flood event." (page 23)

TSS believes that verification of the area's gray infrastructure capacity is imperative as an early step of the proposed County-Takoma Park collaboration.

Ignoring stormwater can be costly. Takoma Park paid dearly when the new community center was built in the Maple Ave stream valley with insufficient attention to warnings from numerous local residents. The entire center site ended up being required to be protected by an unplanned flood wall. This and other necessary water retention features resulted in the exclusion from the community center of a gym that was the most popular amenity promised to residents. A feeling of City Hall betrayal prevails to this day.

A recent front page article in the Washington Post on risks of massive building failures on the Mall due to neglect of storm and ground water as well as costly stormwater mitigation covers all the points that Takoma Park and the County should reflect on very seriously. The link to the article is at the end of this document:

TSS also requests that the bullet point in the MMPA section on Stormwater Management include, as a reference, the technical memo on Maple Avenue stormwater mitigation strategies that was authored in 2021 by Paul Chrostowski, PhD, who is TSS's Chief Scientist. This study identifies and clarifies potentially high-stakes storm and ground water risks in the Maple Ave plan area that are vital to consider for all construction. The study is available on the TSS website noted at the end of this document.

How will the stormwater infrastructure in place to protect the Maple Avenue stream valley perform in the future? Qualified experts can provide the necessary insight, enabling us to realize our visions of real development without have to exclude promised amenities.

### **List of References:**

#### **City record stating that the drainage area of the Maple Ave stream valley is 550 acres**

- Center for Watershed Protection, *Maple Avenue Pollution Source Tracking*, Presentation to Takoma Park City Council. February 4, 2013  
Accessed 1/23/2024 at [https://s3.amazonaws.com/citycouncil-takomapark/agenda/items/2013/020413-1\\_cwp\\_pp.pdf](https://s3.amazonaws.com/citycouncil-takomapark/agenda/items/2013/020413-1_cwp_pp.pdf)
- Center for Watershed Protection, *Field Findings Memorandum: Maple Ave. Outfall Pollution Source Tracking, Takoma Park, MD*. November 15, 2012  
Accessed 1/23/2024 at [https://s3.amazonaws.com/citycouncil-takomapark/agenda/items/2013/cwp\\_maple\\_ave\\_11152012.pdf](https://s3.amazonaws.com/citycouncil-takomapark/agenda/items/2013/cwp_maple_ave_11152012.pdf)

#### **Map of the streams feeding into Brashear's Run, clarifying the high volume of water in the Maple Ave plan area and the reasons for troubles before the infrastructure work of the 1950s**

- Pierre Perrolle for the Friends of Sligo Creek. *The Streams of Sligo*, 2020.  
Accessed 1/23/2024 at <https://ftp.fosc.org/SligoStreams.htm>

#### **Takoma Park City record of 2009 describing the capacity insufficiency of the gray infrastructure of Brashear's Run to protect against intense rainstorms**

- Department of Public Works. *City of Takoma Park Flood Mitigation Plan*. May 2009  
Accessed 1/23/2024 at <https://s3.amazonaws.com/publicworks-takomapark/public/stormwater/city-of-takoma-park-flood-mitigation-plan.pdf>

**Washington DC's and National Park Services's construction cost increases due to stormwater. These are due to the same challenges faced by Takoma Park and Montgomery County in development of the Maple Ave stream valley**

- Washington Post. *The nation's capital, built on water, struggles to keep from drowning*. December 18, 2023

Accessed 1/24/2024 at <https://www.washingtonpost.com/climate-environment/interactive/2023/dc-low-lying-city-flood-risks/>

**Montgomery County is on the list of areas in the US the most vulnerable to stormwater in the future**

- Washington Post. *The Places in the U.S. most at risk for Extreme Rainfall*. June 26, 2023

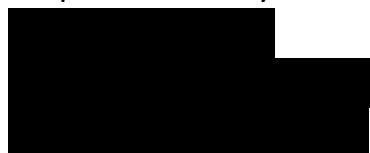
Accessed 1/24/2024 at <https://www.washingtonpost.com/climate-environment/2023/06/26/rain-flooding-us-risk-climate-change/>

**Expert identification of stormwater and groundwater issues for the proposed Takoma Park library site, and commentary on needs to update Takoma Park stormwater management plan due to Climate Change**

- Paul Chrostowski, PhD. *TechMemo: Preliminary Technical Review: Takoma Park Library Project Floodplain and Water Management*. December 14, 2021.

Accessed 1/24/2024 at [https://drive.google.com/file/d/1A2-DWv85ZPGtXy94mqrnsFdL1lgw\\_MP3/view](https://drive.google.com/file/d/1A2-DWv85ZPGtXy94mqrnsFdL1lgw_MP3/view)

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<https://www.takomastormwatersolutions.net/>