



DEPARTMENT OF ENVIRONMENTAL PROTECTION

Marc Elrich  
*County Executive*

Adam Ortiz  
*Director*

January 27, 2021

Ms. Elaine Lamirande  
Stormwater Chair  
Friends of Sligo Creek  
PO Box 11572  
Takoma Park, MD 20913

Dear Ms. Lamirande:

This letter is in response to the comments regarding the Wheaton Branch Flood Mitigation project which you sent, on behalf of the Friends of Sligo Creek Stormwater Committee, to Gene Gopenko on January 15, 2021.

As background to our response, I would like to provide some general information on the Project. The Wheaton Branch Flood Mitigation Project was developed and approved by County Council as a stand-alone project to address flooding which occurs north (upstream) of the Dennis Avenue bridge and Wheaton Branch pond under 100-year storm conditions. The back-up of stormwaters has resulted in the past flooding of multiple homes, properties and roads in this area (See photos in Attachment A). As a stand-alone flood mitigation project, it is not part of our overall watershed restoration program to improve water quality.

The Project has been in design for almost two years; design is scheduled to be completed next Winter (2021/2022) with construction starting the Summer of 2022. The current estimated cost of the project is \$3,200,000 and its funding is dependent on getting a large grant from FEMA, for which DEP has recently applied. Any significant change in project scope at this time would significantly delay the project and jeopardize the FEMA grant funding.

Following are responses to your specific comments.

**1. MORE STORMWATER MITIGATION UPSTREAM OF DENNIS AVE BRIDGE**

Your request to add Green Stormwater Infrastructure (GSI) would be a major change to the scope of this project. Notwithstanding the benefits of GSI, its incorporation into the existing project would significantly delay the implementation of this important flood mitigation project. Additional time would be required to: scope and plan the new GSI work; get funding approval from the County Council; add the GSI work to present engineer's contract; and design and permit the new GSI work.

Also, while Green Infrastructure is a great way to enhance water quality in the watershed, it does little to mitigate the stormwater quantities from a 100-year flood event.

Similarly, it is important to reiterate that this project is not a stormwater quality project. It is a flood (stormwater quantity) control project. The project's primary goal is to reduce or eliminate future flooding of upstream residential properties and roads, which resulted partially from the construction of Wheaton pond. Having said that, the project will provide some environmental benefits through the planting of trees within the flood channel upstream from Dennis Avenue. Native tree species will be specified for planting in this area.

The potential impacts of climate change have not been considered. However, the analysis required by the County Floodplain permit was based on a 100-year storm and assumed full development in the watershed (ultimate development) based on the existing zoning.

Per the above reasons, we do not feel that stopping this important project, and starting over at the planning phase, is justified. It is not fair to the homeowners who are living under the risk of their properties flooding again.

However, I have directed both our RainScapes Program and Tree Montgomery Program to target the watershed that drains to the Wheaton Dam, in an effort to increase the number of trees planted and RainScapes projects implemented.

## **2. Replace concrete channel along Bucknell Drive with green infrastructure**

The concrete channel along Bucknell Drive is located north of Evans Park and is well beyond the project limits. As noted above, significantly changing the scope and cost of the project will significantly delay the project and jeopardize the FEMA grant funding – and that is not justified. Additionally, the Evans Park and Pond between the concrete channel and our project belongs to M-NCPPC. Any work on their property would add additional challenges and delays to the project.

## **3. Stabilize stream banks**

The stream bank stabilization and the outfall repairs below Etna Place, and above Dennis Avenue, referred in your correspondence are already included in the flood mitigation project.

## **4. ADDRESS SEDIMENT/DREDGE MATERIAL TOXICITY RISKS**

The sediment in Cell 1 has been tested and was determined to be contaminated with PAHs. The sediment will be disposed off-site to a facility licensed to handle contaminated materials, in accordance with state requirements.

## **5. PROVIDE WATER METRICS TO RESIDENTS**

The flood mitigation project will have no negative impact on the structural integrity of the dam. In fact, the depth of water against the dam during a 100-year storm event will be reduced by this project. The dredging of the Cell 1 will only restore the original wet volume and will have no effect on the available storage above the normal pool level.

Regarding “current and projected flow rates after mitigation along the following sections of Wheaton Branch”:

- General Response: The flow rates (discharge) at any point in the watershed are primarily dependent on the size of contributing drainage area, the imperviousness, and soil

characteristics and the slopes. The project will not significantly change any of these. The existing 100-year release rate immediately below the dam is 2330 cubic feet per second (cfs) and the 100-year release rate from the new design is 2326 cfs. However, there will be a small increase in the flow at Inwood Avenue bridge from 2525 cfs to 2565 cfs, which will cause the minor floodplain increase to several residential properties as currently designed. Every effort is being made to eliminate any floodplain increases on residential properties

Specific responses:

- Concrete channel along Bucknell Drive: Bucknell Drive is located upstream from the project limits; therefore, the project will have no impact on water flow through that channel.
- Proposed lower floodplain area just upstream of the Dennis Avenue bridge: The flow rates will not be affected, but lowering the floodplain in this area will result in the elimination of flooding to multiple homes and properties during a 100-year storm.
- Outflow from the riser in Cell 3: As noted above, the flow rates immediately below the pond will be reduced slightly as a result of the proposed project.

## **6. ADDRESS PROJECT IMPACT ON DOWNSTREAM AREA**

DEP and its engineer have analyzed, and will continue to analyze and address, impacts on the area downstream of the dam. DEP's engineers have previously analyzed the project's impact on the downstream floodplain and determined that it was insignificant (no floodplain increase greater than ½"). Downstream residents whose properties had these minor increases were notified of these impacts.

However, we understand that some downstream residents are not willing to accept these minor increases. Therefore, DEP will perform additional analysis and adjust the design in an effort to eliminate any floodplain increases to the residential properties downstream from the pond. The additional analysis will also help in assessing the flow velocities under the proposed project.

In response to your comment that "If more, faster water is released from the Cell 3 riser, it may damage the streambanks along Woodman Avenue": The flow rates from Cell 3 will not increase; also, the referenced stream banks had been stabilized in the past with gabions and riprap and are currently stable.

Finally, as noted above, this project does not increase the possibility of a dam failure.

## **7. CONCLUSION**

- The addition of GSI to this project would significantly delay its implementation and would provide little or no flood mitigation benefit.
- Sediment toxicity testing has been done and the sediment will be disposed as contaminated material.
- The 100-year flood water volumes and flow rates downstream from the dam for the proposed project are essentially the same as the existing water volumes and flow rates for a 100-year flood.

Ms. Elaine Lamirande  
Friends of Sligo Creek  
Page 4

We thank you for your interest and hope that the preceding responses are satisfactory. If you have any further comments or questions, please contact me at 202-329-5738.

Sincerely,

*Frank Dawson*

Frank Dawson  
Chief  
Watershed Restoration Division

cc: County Executive's office  
Office of Tom Hucker  
James Stiles  
Gene Gopenko  
Greg Hwang

Attachment A – Photos of Upstream Flooding (taken from resident’s house)

