County Council Of Howard County, Maryland

2019 Legislative Session

Legislative Day No.

Resolution No. 123 -2019

Introduced by: The Chairperson at the request of the County Executive

A RESOLUTION amending Volume I (Storm Drainage) of the Design Manual; providing that development within the Tiber Branch and Plumtree watersheds provide adequate management and conveyance of runoff for the 24-hour, 100-year and 3.55-hour, 6.6 inch storm event to a stormwater management facility; and generally relating to the adoption of revised standards for storm drainage systems.

Introduced and read first time September 3, 2019.	By order Diane Schwartz Jones, Administrator
Read for a second time at a public hearing on September 16	By order Diane Schwartz Jones, Administrator
This Resolution was read the third time and was Adopted, Adopted with an on October, 2019.	nendments, Failed, Withdrawn, by the County Council
	Certified By June A June 1 Diane Schwartz Jones, Administrator

NOTE: [[text in brackets]] indicates deletions from existing law; TEXT IN SMALL CAPITALS indicates additions to existing law; Strike-out indicates material deleted by amendment; <u>Underlining</u> indicates material added by amendment.

1	WHEREAS, in accordance with Section 18.903 of the Howard County Code, the
2	Design Manual sets forth Howard County's technical standards for the design,
3	construction, and inspection of stormwater management systems; and
4	
5	WHEREAS, the County has proposed changes to Volume I (Storm Drainage) of
6	the Design Manual to require development within the Tiber Branch and Plumtree
7	watersheds to provide adequate management and conveyance of runoff for the 24-hour,
8	100-year and 3.55-hour, 6.6 inch storm event to a stormwater management facility.
9	
10	NOW, THEREFORE, BE IT RESOLVED by the County Council of Howard
11	County, Maryland this 7th day of October, 2019 that the following sections of
12	Volume I (Storm Drainage) of the Design Manual are amended as shown in the pages
13	attached as Exhibit A:
14	1. Section 4.1.1, Storm Drain Design Criteria
15	Subsection A, Design Storm Criteria
16	2. Section 5.2.1, Stormwater Control Requirements

, ,

Exhibit A

CHAPTER 4 HYDRAULICS

1			HYDRAULICS		
2 3	4.1	CLOSED CONDUIT SYSTEMS			
4	7. 1	CLOSED CONDUIT STSTEMS			
5	4.1.1	Storm Drain I	Design Criteria		
6					
7		A. Design	n Storm Criteria		
8		1.	Closed conduit drainage systems shall be designed for the 10-		
9			year storm. For drains in sumps, within public rights-of-way or		
10			public easements, there shall be modifications of the "cA" and		
11			"I" computations to account for the 25-year storm event, as set		
12			forth in the sample computations at the end of this chapter. For		
13			privately owned and maintained storm drain systems, the "cA" and		
14			"I" modifications shall not be required.		
15					
16		2.	When a closed conduit system is installed to replace an open		
17			swale drainage system serving drainage areas of 30 acres or		
18			more and/or having a 10-year discharge of 100 cfs or more, the		
19			system shall be designed for the 100-year storm.		
20		2			
21		3.	Inlet design shall be based on the 2-year ultimate condition storm.		
22		A	Design of the second of the se		
23		4.	DEVELOPMENT WITHIN THE TIBER BRANCH AND PLUMTREE		
24			WATERSHEDS, SHALL PROVIDE ADEQUATE CONVEYANCE OF		
25			RUNOFF FOR THE 24-HOUR, 100-YEAR STORM EVENT AND THE 3.55		
26			HOUR, 6.6 INCH STORM EVENT TO A STORMWATER MANAGEMENT		
27			FACILITY.		
28		CE 477 C	Decidential let during a nottone shall be in accordance with the		
29		[[4]]5.	Residential lot drainage patterns shall be in accordance with the		
30			requirements of Section 4.6 of this Design Manual.		
31					

CHAPTER 5 STORMWATER MANAGEMENT

1 2

5.2

s

STORMWATER MANAGEMENT CRITERIA

The regulatory definition for MEP consists of two parts. The first is subjective and requires that all reasonable opportunities for using ESD planning techniques and practices are exhausted. Like the definition, the threshold for meeting the MEP standard consists of two parts. First, MEP is met if channel stability and predevelopment groundwater recharge rates are maintained and nonpoint source pollution is minimized. In both the definition and performance threshold, the second condition is the same; structural stormwater practices may be used only if determined to be absolutely necessary. While some flexibility and best professional judgment will be needed to determine when these first conditions are met, the second condition is straightforward. Local plans review and approval agencies should not approve structural BMPs if ESD options are available.

In addition to the State regulations, section 5.2 of the latest edition of the MDE Design Manual also includes standards for MEP compliance. The primary MEP standard is to use ESD to reduce post development runoff to levels found in natural, forested conditions. This requires capturing and treating from 1 to 2.6 inches of rainfall depending on site and design conditions (e.g., soils, proposed imperviousness). When this goal is met, the Cpv, WQv, and Rev requirements are addressed. Designers will be responsible for determining specific rainfall targets for their projects using the methods outlined in section 5.2.

There is a secondary standard that must be considered when assessing MEP compliance. ESD must be used to treat runoff from 1 inch of rainfall to address both WQv and Rev requirements. This is a minimum level of compliance, not a contingency standard that is used when specific rainfall targets cannot be met. Designers must capture and treat at least 1 inch of rainfall while using ESD to reduce runoff and achieve specified goals.

5.2.1 Stormwater Control Requirements

A. The minimum stormwater control requirements shall require that the planning techniques, nonstructural practices, and design methods specified in the MDE Design Manual be used to implement ESD to the MEP. The use of ESD planning techniques and treatment practices must be exhausted before any structural BMP is implemented. Stormwater Management for development projects shall be designed in accordance with the Howard County Code, Title 18, Subtitle 9. Information found in this design manual is supplemental to the requirements found in the code and MDE Design Manual referenced above.

The county reserves the right, on a case-by-case basis, to require that management measures be provided as necessary to maintain the post-development peak discharges for [[a]] 24-hour, 1-year, 10-year, [[25-year and/or 100-year]] 25-YEAR, 100-YEAR STORM EVENTS, AND 3.55-HOUR, 6.6 INCH storm events at a level that is equal to or less than the respective 24-hour, 1-year, 10-year, [[25-year and/or 100-year]] 25-YEAR, 100-YEAR STORM EVENTS, AND 3.55-HOUR, 6.6 INCH STORM EVENTS predevelopment peak discharge rates, through stormwater management practices that control volume, timing and rate of runoff. Except within in-fill development, storage volume and RCN reductions by the use of Alternative Surfaces and Nonstructural Practices may be considered for only the 1- year event.

The 10-year design storm event shall be employed when there is no control over infrastructure and the conveyance system is at design capacity, or it is determined that downstream flooding (based on recorded historical flooding problems) will occur as the result of the proposed development. The 100-year design storm event is to be employed to prevent flood damage from large frequency storm events, to maintain the boundaries of the 100-year floodplain and protect the physical integrity of BMP structures. Storage volume and RCN reductions by the use of non-structural credit practices shall not be considered when designing for the Overbank or Extreme Flood Protection.

The upstream drainage areas to the Cabin Branch crossing Shaffers Mill Road, a tributary to the Dorsey Branch crossing Dorsey Mill Road and the drainage area associated with Bonnie Branch, which parallels Bonnie Branch Road, shall be required to provide10-year peak management control. Additional stream systems may be included at the sole discretion of Howard County.

Development within the Tiber Branch and Plumtree Watershed shall be required to provide peak management control for 24-hour, 10-year storm events and 24-hour, 100-year storm events, as well as 3.55-hour, 6.6-inch storm events. Management is defined as the reduction of the peak runoff for the proposed design condition to be equal or less than the predeveloped site conditions modeled as Woods in Good Conditions. Management will be addressed for any disturbance greater than 5,000 square feet that creates impervious area.

WITHIN THE TIBER BRANCH AND PLUMTREE WATERSHEDS, THE REQUIRED ORDER OF ALTERNATIVE MANAGEMENT STRATEGIES SHALL BE LIMITED TO THE FOLLOWING:

1. Provide Stormwater management for all storm events described in Section 5.2.1.A.

1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		•
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
12		
43		
14		
45		
16		

IF BASED ON A GEOTECHNICAL ENGINEERING REPORT THAT CONCLUDES AN ADEQUATELY SIZED STORMWATER FACILITY CANNOT BE CONSTRUCTED ON-SITE DUE TO EITHER THE LOCATION OF GROUNDWATER, THE PRESENCE OF A ROCK STRATA THAT CANNOT BE REMOVED, ON-SITE TOPOGRAPHY THAT DOES NOT ALLOW FOR A GRAVITY OUTFALL, OR OTHER UNANTICIPATED GEOTECHNICAL CONSTRAINTS NOT OTHERWISE SPECIFIED ABOVE, THEN 2. SHALL APPLY.

2. Provide up to and including management for the 24-hour, 100-year storm on-site. Provide an equivalent reduction in peak runoff rate for the 3.55-hour, 6.6-inch storm events peak management control in an offsite facility within the same watershed. Such an offsite facility shall be constructed under a developer agreement at the same time as the on-site improvements are constructed.

IF THE DEVELOPER CANNOT CERTIFY THAT THEY OWN PROPERTIES, OR THAT THERE ARE OFFSITE PROPERTIES AVAILABLE FOR PURCHASE THAT ARE OF ADEQUATE SIZE AND CAN SUPPORT THE REQUIRED HYDRAULICS TO CONSTRUCT A MANAGEMENT FACILITY WITHIN THE SAME WATERSHED THEN 3. SHALL APPLY;

- 3. Provide up to and including management for the 24-hour, 100-year storm events on-site. Provide a fee in Lieu into an established flood mitigation capital project within the same watershed for the cost per acre-foot of storage to provide equivalent peak management control for the 3.55-hour, 6.6-inch storm events. In order to be granted relief from the third alternative management strategy, the developer must satisfy the requirements for relief from the first and second alternative management strategies AND prove that there is no capital project in the watershed available to pay into.
- 4. Provide up to and including management for the 24-hour, 100-year storm events on-site. Pay a fee in Lieu into an established stormwater bank located within the same watershed based on the required peak runoff rate reduction to manage the 3.55-hour, 6.6-inch storm events.

ALL PROJECTS WITHIN THE TIBER BRANCH AND PLUMTREE WATERSHEDS ARE SUBJECT TO THESE REQUIREMENTS, REGARDLESS OF WHEN THEY RECEIVED SUBDIVISION OR SITE DEVELOPMENT PLAN APPROVAL, AND SHALL PROVIDE STORMWATER MANAGEMENT, AS OUTLINED IN THIS SECTION.

[[The upstream drainage areas to the Tiber Branch above the Patapsco River and the Hudson Branch above the Tiber Branch and tributary]] TRIBUTARY drainage areas to the Deep Run above any railroad crossings

shall be required to provide 10-year and 100-year peak management control. Additional stream systems may be included at the sole discretion of Howard County.

B. The use of ESD planning techniques and treatment practices shall not conflict with existing State law or local ordinances, regulations, or policies. Howard County shall modify planning and zoning ordinances and public works codes to eliminate any impediments to implementing ESD to the MEP according to the MDE Design Manual.

C. Redevelopment

The goal of the current redevelopment regulations is to gain water quality treatment on existing developed lands while supporting County initiatives to improve urban communities. Redevelopment projects offer unique challenges and stormwater management ordinances need to be tailored to consider County goals, available resources, and application of stormwater practices within Howard County. Management shall be in Accordance with current MDE requirements for the disturbed Area, except as noted below for additional requirements within the Tiber Branch and Plumtree Watersheds.

Redevelopment Planning Process:

The design and review processes for any redevelopment project need to consider the many constraints that limit effective implementation of stormwater practices. Factors such as underground infrastructure may restrict available facility options, while existing storm drain elevations may dictate how runoff flows through and off a site. This information and other existing conditions should be evaluated during the concept phase of project planning in order to assess all options for ESD implementation and other possible stormwater solutions.

Alternative Management Strategies:

Alternative management strategies may be considered after all opportunities for using ESD have been exhausted during the planning process. Alternative strategies and policies for meeting stormwater requirements may include, on-site and off-site structural BMPs, retrofitting existing structural BMPs, stream restoration, trading policies with other pollution control programs, watershed management plans, and fees-in-lieu. On a case by case basis, MDE and Howard County Department of Planning and Zoning will determine the conditions, criteria, and program directives dedicated to implementing stormwater management when an alternative or other policy is used to meet redevelopment requirements.

WITHIN THE TIBER AND PLUMTREE WATERSHEDS, THE REQUIRED ORDER OF ALTERNATIVE MANAGEMENT STRATEGIES TO ACHIEVE QUANTITY

1 2	MANAGEMENT WITHIN THE PROPOSED LIMIT OF DISTURBANCE SHALL BE LIMITED TO THE FOLLOWING:
3	1. PROVIDE STORMWATER MANAGEMENT FOR ALL STORM EVENTS
4	DESCRIBED IN SECTION 5.2.1.A.
5	IF BASED ON A GEOTECHNICAL ENGINEERING REPORT THAT
6	CONCLUDES AN ADEQUATELY SIZED STORMWATER FACILITY CANNOT
7	BE CONSTRUCTED ON-SITE DUE TO EITHER THE LOCATION OF
8	GROUNDWATER, THE PRESENCE OF A ROCK STRATA THAT CANNOT BE
9	REMOVED, ON-SITE TOPOGRAPHY THAT DOES NOT ALLOW FOR A
10	GRAVITY OUTFALL, OR OTHER UNANTICIPATED GEOTECHNICAL
11	CONSTRAINTS NOT OTHERWISE SPECIFIED ABOVE, THEN 2. SHALL
12	APPLY.
13	
14	2. Provide up to and including management for the 24-hour, 100-
15	YEAR STORM EVENTS ON-SITE. PROVIDE AN EQUIVALENT REDUCTION
16	IN PEAK RUNOFF RATE FOR THE 3.55-HOUR, 6.6-INCH STORM EVENTS
17	PEAK MANAGEMENT CONTROL IN AN OFFSITE FACILITY WITHIN THE
18	SAME WATERSHED. SUCH AN OFFSITE FACILITY SHALL BE
19	CONSTRUCTED UNDER A DEVELOPER AGREEMENT AT THE SAME TIME
20	AS THE ON-SITE IMPROVEMENTS ARE CONSTRUCTED.
21	
22	IF THE DEVELOPER CANNOT CERTIFY THAT THEY OWN PROPERTIES, OR
23	THAT THERE ARE OFFSITE PROPERTIES AVAILABLE FOR PURCHASE THAT
24	ARE OF ADEQUATE SIZE AND CAN SUPPORT THE REQUIRED HYDRAULICS
25	TO CONSTRUCT A MANAGEMENT FACILITY WITHIN THE SAME
26	WATERSHED THEN 3 SHALL APPLY;
27	
28	3. Provide up to and including management for the 24-hour, 100-
29	YEAR STORM EVENTS ON-SITE. PROVIDE A FEE IN LIEU INTO AN
30	ESTABLISHED FLOOD MITIGATION CAPITAL PROJECT WITHIN THE SAME
31	WATERSHED FOR THE COST PER ACRE-FOOT OF STORAGE TO PROVIDE
32	EQUIVALENT PEAK MANAGEMENT CONTROL FOR THE 3.55-HOUR, 6.6-
33	INCH STORM EVENTS. IN ORDER TO BE GRANTED RELIEF FROM THE
34	THIRD ALTERNATIVE MANAGEMENT STRATEGY, THE DEVELOPER MUST
35	SATISFY THE REQUIREMENTS FOR RELIEF FROM THE FIRST AND SECOND
36	ALTERNATIVE MANAGEMENT STRATEGIES AND PROVE THAT THERE IS
37	NO CAPITAL PROJECT IN THE WATERSHED AVAILABLE TO PAY INTO.
38	4. Provide up to and including management for the 24-hour, 100-
39	YEAR STORM EVENTS ON-SITE. PAY A FEE IN LIEU INTO AN ESTABLISHED
40	STORMWATER BANK LOCATED WITHIN THE SAME WATERSHED BASED ON
41	THE REQUIRED PEAK RUNOFF RATE REDUCTION TO MANAGE THE 3.55-
42	HOUR, 6.6-INCH STORM EVENTS.

Amendment \(\frac{1}{2}\) to Council Resolution No. 123-2019

(This amendment:

5

14

18

- 1. Clarifies that the offsite facility shall be constructed pursuant to a developer agreement and at the same time as on-site improvements;
- 2. Provides criteria to set forth when a subsequent alternative strategy would apply; and
- 3. Corrects punctuation.)
- 1 In Chapter 4 of Volume 1 of the Design Manual, included as part of Exhibit A to the Resolution:
- On page 1, in line 9, after "sumps" insert a comma
- On page 1, in line 11, after "event" insert a comma
- On page 1, in line 24, after "WATERSHEDS", strike the comma
- 6 In Chapter 5 of Volume 1 of the Design Manual, included as part of Exhibit A to the Resolution:
- On page 3, after line 46, insert:
- 8 "IF BASED ON A GEOTECHNICAL ENGINEERING REPORT THAT CONCLUDES AN ADEQUATELY
- 9 SIZED STORMWATER FACILITY CANNOT BE CONSTRUCTED ON-SITE DUE TO EITHER THE
- 10 LOCATION OF GROUNDWATER, THE PRESENCE OF A ROCK STRATA THAT CANNOT BE
- 11 REMOVED, ON-SITE TOPOGRAPHY THAT DOES NOT ALLOW FOR A GRAVITY OUTFALL, OR
- 12 OTHER UNANTICIPATED GEOTECHNICAL CONSTRAINTS NOT OTHERWISE SPECIFIED ABOVE,
- 13 <u>THEN 2. SHALL APPLY.</u>"

On page 4, in line 5, after "WATERSHED." insert "Such an Offsite Facility Shall BE
 CONSTRUCTED UNDER A DEVELOPER AGREEMENT AT THE SAME TIME AS THE ON-SITE

17 <u>IMPROVEMENTS ARE CONSTRUCTED.</u>

19 <u>IF THE DEVELOPER CANNOT CERTIFY THAT THEY OWN PROPERTIES, OR THAT THERE ARE</u> 20 OFFSITE PROPERTIES AVAILABLE FOR PURCHASE THAT ARE OF ADEQUATE SIZE AND CAN

FAILED SIGNATURE DIAME A POS

1

1	SUPPORT THE REQUIRED HYDRAULICS TO CONSTRUCT A MANAGEMENT FACILITY WITHIN
2	THE SAME WATERSHED THEN 3. SHALL APPLY;"
3	
4	On page 4, in line 11, after "EVENTS." Insert "IN ORDER TO BE GRANTED RELIEF FROM THE
5	THIRD ALTERNATIVE MANAGEMENT STRATEGY, THE DEVELOPER MUST SATISFY THE
6	REQUIREMENTS FOR RELIEF FROM THE FIRST AND SECOND ALTERNATIVE MANAGEMENT
7	STRATEGIES AND PROVE THAT THERE IS NO CAPITAL PROJECT IN THE WATERSHED
8	AVAILABLE TO PAY INTO."
9	
LO •	On page 4, in line 13, after "FEE" insert "IN LIEU".
11	
12 •	On page 4, in line 42, after "County." insert "MANAGEMENT SHALL BE IN ACCORDANCE
13	WITH CURRENT MDE REQUIREMENTS FOR THE DISTURBED AREA, EXCEPT AS NOTED BELOW
L4	FOR ADDITIONAL REQUIREMENTS WITHIN THE TIBER BRANCH AND PLUMTREE
L5	Watersheds."
16	
•	On page 5, after line 26, insert:
18	"If based on a geotechnical engineering report that concludes an adequately
19	SIZED STORMWATER FACILITY CANNOT BE CONSTRUCTED ON-SITE DUE TO EITHER THE
20	LOCATION OF GROUNDWATER, THE PRESENCE OF A ROCK STRATA THAT CANNOT BE
21	REMOVED, ON-SITE TOPOGRAPHY THAT DOES NOT ALLOW FOR A GRAVITY OUTFALL, OR
22	OTHER UNANTICIPATED GEOTECHNICAL CONSTRAINTS NOT OTHERWISE SPECIFIED ABOVE,
23	THEN 2, SHALL APPLY."
24	
25 •	On page 5, in line 31, after "WATERSHED." insert: "Such an offsite facility shall be
26	CONSTRUCTED UNDER A DEVELOPER AGREEMENT AT THE SAME TIME AS THE ON-SITE
27	IMPROVEMENTS ARE CONSTRUCTED.
28	
29	IF THE DEVELOPER CANNOT CERTIFY THAT THEY OWN PROPERTIES, OR THAT THERE ARE
30	OFFSITE PROPERTIES AVAILABLE FOR PURCHASE THAT ARE OF ADEQUATE SIZE AND CAN

1		SUPPORT THE REQUIRED HYDRAULICS TO CONSTRUCT A MANAGEMENT FACILITY WITHIN
2		THE SAME WATERSHED THEN 3 SHALL APPLY;".
3		
4	•	On page 5, in line 37, after "EVENTS.", insert:
5		"IN ORDER TO BE GRANTED RELIEF FROM THE THIRD ALTERNATIVE MANAGEMENT
6		STRATEGY, THE DEVELOPER MUST SATISFY THE REQUIREMENTS FOR RELIEF FROM THE FIRST
7		AND SECOND ALTERNATIVE MANAGEMENT STRATEGIES AND PROVE THAT THERE IS NO
8		CAPITAL PROJECT IN THE WATERSHED AVAILABLE TO PAY INTO."
9		
10	•	On page 5, in line 39, after "FEE" insert "IN LIEU".
11		

1)

. <u>y</u>

Amendment 1 to Council Resolution No. 123-2019

BY: The Chairperson at the request of the County Executive

Legislative Day 12
Date: October 7, 2019

Amendment No.

(This amendment:

1. Clarifies that the offsite facility shall be constructed pursuant to a developer agreement and at the same time as on-site improvements;

- 2. Provides criteria to set forth when a subsequent alternative strategy would apply; and
- 3. Corrects punctuation.)
- 1 In Chapter 4 of Volume 1 of the Design Manual, included as part of Exhibit A to the Resolution:
- On page 1, in line 9, after "sumps" insert a comma
- On page 1, in line 11, after "event" insert a comma
- On page 1, in line 24, after "WATERSHEDS", strike the comma
- 6 In Chapter 5 of Volume 1 of the Design Manual, included as part of Exhibit A to the Resolution:
- On page 3, after line 46, insert:

5

14

18

- 8 "IF BASED ON A GEOTECHNICAL ENGINEERING REPORT THAT CONCLUDES AN ADEQUATELY
- 9 SIZED STORMWATER FACILITY CANNOT BE CONSTRUCTED ON-SITE DUE TO EITHER THE
- 10 LOCATION OF GROUNDWATER, THE PRESENCE OF A ROCK STRATA THAT CANNOT BE
- 11 REMOVED, ON-SITE TOPOGRAPHY THAT DOES NOT ALLOW FOR A GRAVITY OUTFALL, OR
- 12 OTHER UNANTICIPATED GEOTECHNICAL CONSTRAINTS NOT OTHERWISE SPECIFIED ABOVE,
- 13 <u>THEN 2. SHALL APPLY.</u>"
- On page 4, in line 5, after "WATERSHED." insert "SUCH AN OFFSITE FACILITY SHALL BE

 CONSTRUCTED UNDER A DEVELOPER AGREEMENT AT THE SAME TIME AS THE ON-SITE
- 17 <u>IMPROVEMENTS ARE CONSTRUCTED.</u>
- 19 <u>IF THE DEVELOPER CANNOT CERTIFY THAT THEY OWN PROPERTIES, OR THAT THERE ARE</u> 20 OFFSITE PROPERTIES AVAILABLE FOR PURCHASE THAT ARE OF ADEQUATE SIZE AND CAN

1		SUPPORT THE REQUIRED HYDRAULICS TO CONSTRUCT A MANAGEMENT FACILITY WITHIN
2		THE SAME WATERSHED THEN 3. SHALL APPLY;"
3		
4	•	On page 4, in line 11, after "EVENTS." Insert "IN ORDER TO BE GRANTED RELIEF FROM THE
5		THIRD ALTERNATIVE MANAGEMENT STRATEGY, THE DEVELOPER MUST SATISFY THE
6		REQUIREMENTS FOR RELIEF FROM THE FIRST AND SECOND ALTERNATIVE MANAGEMENT
7		STRATEGIES AND PROVE THAT THERE IS NO CAPITAL PROJECT IN THE WATERSHED
8		AVAILABLE TO PAY INTO."
9		
10	•	On page 4, in line 13, after "FEE" insert "IN LIEU".
11		
12	•	On page 4, in line 42, after "County." insert "MANAGEMENT SHALL BE IN ACCORDANCE
13		WITH CURRENT MDE REQUIREMENTS FOR THE DISTURBED AREA, EXCEPT AS NOTED BELOW
14		FOR ADDITIONAL REQUIREMENTS WITHIN THE TIBER BRANCH AND PLUMTREE
15		Watersheds."
16		
17	•	On page 5, after line 26, insert:
18		"If based on a geotechnical engineering report that concludes an adequately
19		SIZED STORMWATER FACILITY CANNOT BE CONSTRUCTED ON-SITE DUE TO EITHER THE
20		LOCATION OF GROUNDWATER, THE PRESENCE OF A ROCK STRATA THAT CANNOT BE
21		REMOVED, ON-SITE TOPOGRAPHY THAT DOES NOT ALLOW FOR A GRAVITY OUTFALL, OR
22		OTHER UNANTICIPATED GEOTECHNICAL CONSTRAINTS NOT OTHERWISE SPECIFIED ABOVE,
23		THEN 2. SHALL APPLY."
24		
25	•	On page 5, in line 31, after "WATERSHED." insert: "SUCH AN OFFSITE FACILITY SHALL BE
26		CONSTRUCTED UNDER A DEVELOPER AGREEMENT AT THE SAME TIME AS THE ON-SITE
27		IMPROVEMENTS ARE CONSTRUCTED.
28		
29		IF THE DEVELOPER CANNOT CERTIFY THAT THEY OWN PROPERTIES, OR THAT THERE ARE
30		OFFSITE PROPERTIES AVAILABLE FOR PURCHASE THAT ARE OF ADEQUATE SIZE AND CAN

1		SUPPORT THE REQUIRED HYDRAULICS TO CONSTRUCT A MANAGEMENT FACILITY WITHIN
2		THE SAME WATERSHED THEN 3 SHALL APPLY;".
3		
4	•	On page 5, in line 37, after "EVENTS.", insert:
5		"IN ORDER TO BE GRANTED RELIEF FROM THE THIRD ALTERNATIVE MANAGEMENT
6		STRATEGY, THE DEVELOPER MUST SATISFY THE REQUIREMENTS FOR RELIEF FROM THE FIRST
7		AND SECOND ALTERNATIVE MANAGEMENT STRATEGIES AND PROVE THAT THERE IS NO
8		CAPITAL PROJECT IN THE WATERSHED AVAILABLE TO PAY INTO."
9		
10	•	On page 5, in line 39, after "FEE" insert "IN LIEU".
11		

Sayers, Margery

From:

Michael Thompson < thompson624@gmail.com>

Sent:

Monday, September 30, 2019 1:10 PM

То:

CouncilMail

Subject:

CR123-2019 support

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Dear Council Members

I am writing to express my support for CR123-2019. As someone who works for an environmental restoration consulting firm, we often have conversations regarding the fact that the current "standards" regarding flood flow frequencies need to be revised. Based upon current climatic conditions, we have seen increases in short duration/heavy precipitation events and have had to adjust our stream restoration and storm water management projects accordingly in an effort to achieve additional environmental benefits. In order to do so, we often find ourselves designing to our own revised criteria that currently do not match NOAA or USGS standards. This resolutions is a step in the right direction. There will of course be a cost for this to be borne by developers and their subsequent home buyers which will need to be taken into consideration, however I feel that these measures are desperately needed. I hope that other jurisdictions will follow the sensible path that Howard County is setting by being good stewards of the environment and its residents.

Thank you for your consideration

Michael Thompson 9806 Michaels Way Ellicott City, MD 21042

Sayers, Margery

From:

Hiruy Hadgu <hadguhiruy@gmail.com>

Sent:

Monday, September 23, 2019 10:24 AM

To:

CouncilMail

Subject:

Testimony on CR122 and CR123

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Councilmembers,

The proposed CR122-2019 (fee-in-lieu) and CR123-2019 are designed to be an end-run around the proposed moratorium by CB40-2019.

They are designed to give cover to those who're inclined to vote against the moratorium.

For CR122-2019, it is not clear how the fee-in-lieu is calculated. Does it account for the cost of the tunnel or the clean up cost after the two historic floods, as well as the destruction property, not to mention the lives lost?

If CR123-2019 is intended to modify the design manual to deal with future flooding, the modification can take place while the moratorium is in effect.

The moratorium is the only leverage the county has to ensure meaningful action is taken on storm-water mitigation.

Hiruy.

CR 123.209

Sayers, Margery

From:

Melissa Metz < melissametz 725@gmail.com>

Sent:

Monday, September 16, 2019 9:03 PM

To: Subject: CouncilMail CR123 Testimony

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Dear Members of the County Council,

I support the intent behind CR-123, to require development in the Tiber-Hudson and Plumtree (which I understand also includes Little Plumtree) watersheds to manage stormwater quantity to the standard of a 24-hour 100-year event and a 3.55-hour, 6.6-inch storm event (equivalent to the 2016 flood). However, it should be adjusted as stated below.

The largest scope for improvement in stormwater management in the relevant watersheds is to adjust existing stormwater management facilities to accommodate volumes of water seen in the recent Ellicott City flood events (2011, 2014, 2016, 2018). CR-123 should go further and include options for the county government to work with property owners to carry out such works through easements, funding, and any other required elements. Stormwater infrastructure is a public good, and as such we should expect the government to fund it.

The Resolution should apply to re-development as well as new development. It is not clear that it does. The fact that redevelopment must meet lower standards for stormwater quantity management than new development is a loophole that should be closed. It only benefits the developers and increases safety risk to the community.

I am concerned about the option to pay fees in lieu of building the stormwater management facilities that would comply with the requirements in the bill. Specifically:

- The option to provide a fee in lieu into an established flood mitigation capital project will only displace funding that the county government would get through other means (taxes, state government, local government). This would not address the additional infrastructure required to mitigate flood risk that the developer's project would add to the area. This is an important loophole that should be closed. Cash contribution to a capital project could be considered only if that cash contribution increases the capacity of the capital project to deal with the increased risk of flooding from the proposed development. The best option would be to remove fees-in-lieu altogether.
- The option to provide a fee in lieu into an "established stormwater bank" is unclear. What is this "bank"? Is it a fund managed by the county government? This option should be removed. It does not guarantee any of the following: i) that the funding would go to fund stormwater management infrastructure that would address the incremental flood risk added by the development; or ii) that it would not displace funding that the county government was going to make available for projects anyway. This option should be removed from CR-123.

Some in County government may worry that more stringent requirements would result in lawsuits that the County would lose, in which these requirements would be considered a "taking" of the developer's private property. The county government's fear of "takings" seems to be exaggerated. In the Supreme Court case Murr v. Wisconsin, the Court applied a standard that a taking would exist *only* if the government has taken all economic value from the property, *not* that it reduced the property's value below its maximum value. This leaves much more room for Howard County to apply higher standards to developers that would improve the quality of life in our county. Furthermore, Howard County government allows waivers when a developer shows a financial hardship, but legal precedent shows that financial issues do not qualify as "hardship".

В	e	s	t.

Melissa Metz

Woodstock, MD

Resident of/Permanent address in Ellicott City 1985-2005 and 2016-2019

District 5



11825 West Market Place | Fulton, MD 20759 | 301-776-6242

September 16, 2019

Re: OPPOSITION OF Increasing Fee in Lieu and Stormwater Management Standards in Ellicott City (CR122-2019 and CR123-2019)

Dear Chairwoman Mercer Rigby and Members of the Howard County Council:

The Howard County Chapter of the Maryland Building Industry Association (MBIA) writes to oppose Council Resolutions 122 and 123, which increases the fee that developers pay when land cannot accommodate stormwater management facilities on-site, and escalates the standards for stormwater management facilities in the Tiber Branch and Plumtree watersheds.

This package, though narrowly tailored to affect only Ellicott City and its immediate surrounding landscape, are burdensome and expensive. Providing runoff for 24-hour, 100-year and 3.55-hour, 6.6 inch storm events will be difficult and expensive. Furthermore, with several hurdles already in place, and a high cost of \$72,000 per acrefoot of water storage, paying a fee in lieu of any amount is already difficult. Additional legislation is unnecessary.

While we oppose these resolutions as currently drafted, we support the Administration's attempt to alleviate flooding in Ellicott City and look forward to continuing to work together towards an effective solution. We respectfully request the Council to vote no on Council Resolutions 122 and 123.

If you have any questions about these comments and would like to discuss MBIA's position further, please do not hesitate to contact me at abailey@marylandbuilders.org or (202) 815-4445.

Best regards,

Angelica Bailey, Esq., Vice President of Government Affairs

Cc:

Councilman David Yungmann Councilman Opel Jones Councilmember Elizabeth Waish Councilmember Deb Jung County Executive Calvin Ball Sameer Sidh, Chief of Staff to the County Executive Valdis Lazdins, Director of Planning James Irvin, Director of Public Works

Testimony against CR122 & CR 123

Bruce T. Taylor, M.D., Taylor Service Company, 4100 College Ave., Ellicott City, MD 21043

While CR 122 & CR123 are overly burdensome to developers, asking new projects to do more than their fair share, they do get us back on track to answer the questions posed by CB56 and provide a framework for solutions making CB 38 and CB40 totally unnecessary. CR 122 & CR 123 should be amended in some less restrictive form to allow the moratorium to end and development which will benefit Ellicott City and the County to proceed.

More than doubling the fees for offsite projects seems too steep under CR 122.

Asking new projects in the watershed to increase their retention by about one third also seems a bit much.

The facts of the County water or hydrology study published in June 2017 recognized development as only a minor contributor to flooding of Old Ellicott City (OEC), pointing out that even if all the 3.7 square miles of the OEC watershed were undeveloped forest, about 80% of the floodwaters would still have occurred in 2016. The study notes that even if all the remaining undeveloped property were fully developed it would not have made the flooding worse. It didn't, however, point out an important fact, which is that any new development, with existing or even more stringent standards, will help. Even if all the remaining undeveloped land and all the re-development currently planned were to retain all the rainfall hitting the property, it would not stop Old Ellicott City from flooding as it is only a few percent of the entire 3.7 square miles of the watershed.

In order to stop flooding we need as a community to concentrate on large scale projects as the Administration is doing in its flood mitigation plan. We also need to work more on reducing our footprint on the environment while fostering development in order to reduce climate change.

Each new development under current standards will provide quality and quantity controls which do not exist today; many of these SWM benefits will be on line at no cost to the County before all the features of the excellent flood mitigation plan of County Executive Ball can be completed. The more area that is developed or re-developed the more SWM that will be provided. New and redeveloped sites often feature green building aspects which are not part of older construction, helping the environment.

Raising the cost of new housing, when and if it can happen, may eliminate projects that would provide Moderate Income Housing Units (MIHUs) and thereby reduce needed housing for workers in the County.

With no grandfathering, property owners with projects in line for years may need to abandon or completely re-design their projects, leaving the County with less revenue.

In summary, we urge you to amend and pass CR 122 & CR 123 to reduce the increase in cost of new projects, possibly putting off or cancelling projects which would benefit Ellicott City and Howard County

Sayers, Margery

From:

Home <thetersiguels@gmail.com>

Sent:

Monday, September 16, 2019 2:57 PM

To:

CouncilMail

Subject:

CB38/CR122/CR123

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Dear Council Members -

It would be really fair to suggest that those of us directly impacted in the Tiber and Plumtree Watersheds, have been very demanding on your time. Even more fair to say, that we have asked a lot of questions and made a lot of requests regarding legislation that would further protect us. The bill (CB-38) and resolutions (CB-122, CB-123) currently presented before the council have their own strengths and weaknesses. I, for one will be the first to admit, I do not know how to go about legislating for our greater, more detrimental problem, climate change.

A strength of CB-38 is it's protecting the last of the last. It's weakness, it has diminished private land use in the entire watershed and seems to be way too little, way too late. It also limits its scope of protection. If natural resources is the number one concern, why is this legislation not for all of Howard County?

CR-122's strength is that it's a long overdue increase in fees, and is in line with surrounding districts. It's weakness, is it enough to address the challenges and cost of SWM in these two watersheds? I would further recommend these fees be dedicated solely for the purpose of SWM in these watersheds.

CR-123's strength is it is by far the most comprehensive in addressing multiple issues across the board regarding land use, development, and SWM to protect all of our assets. It's weakness, there certainly could be room to increase and streamline legislation that would incentivize, support and encourage communities to upgrade SWM and in some areas of the watersheds, implement if for the first time.

I cannot support CB-38 as it stands, and I do support CR-122, CR-123 along with these suggestions.

Thank you and sincerely,

Angela Tersiguel
3113 The Oaks Rd
Ellicott City, MD 21043

Sayers, Margery

From:

Rigby, Christiana

Sent:

Monday, September 16, 2019 1:14 PM

To:

Sayers, Margery

Subject:

FW: My support for the Ball resolutions 122, and 123 and disapproval of CB 38

From: Cindi Ryland <taylorscollective@gmail.com> Sent: Thursday, September 12, 2019 11:46 AM

To: Jones, Opel <ojones@howardcountymd.gov>; Yungmann, David <dyungmann@howardcountymd.gov>; Rigby,

Christiana <crigby@howardcountymd.gov>; Jung, Deb <djung@howardcountymd.gov> **Subject:** Fwd: My support for the Ball resolutions 122, and 123 and disapproval of CB 38

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Dear Dr Ball and Howard County Council Members:

I am writing to you as a Howard County resident and business owner in Old Ellicott City. I believe that we can fix the flooding issues and continue to grow; we need more people living, working and shopping on Main Street and its surrounds - we cannot allow our wonderful historic gem to become stagnant and die!

Walsh bill CB 38, designed to stop development in the whole Patapsco watershed, will do nothing to reduce or manage flooding and it would certainly not allow our glorious county or our wonderful town to thrive or prosper.

Respectfully submitted,

Cindi K. Ryland Howard County Resident 10212 Queen's Camel Ct. Ellicott City, MD 21042

and

President Retropolitan Ltd 8197 Main St. Ellicott City, MD 21043

Good evening, and thank you for the opportunity to testify in support of CR 123-2019, to increase protection of the Tiber Branch and Plumtree watersheds by requiring revised standards for storm water management facilities.

t j

We appreciate the acknowledgment that these storm and heavy rain events have become stronger and produce more water runoff than in past years, and that they require a strengthening of the requirements for developers to manage the drainage and runoff that increases from paving over pervious surfaces.

There is no denying that the areas affected by these storms fall within these 2 watersheds, primarily Old Ellicott City, which has sustained perilous damage and loss of life from recent and more frequently occurring storms. But we believe that this resolution should include the Patapsco and Patuxent watersheds as well, whose flooding incidents from inadequate storm water management coupled with rapidly increasing residential development cannot go unnoticed.

During these heavy, previously unprecedented rain events, flooding regularly occurs in lower Elkridge and the Route 1 Corridor that traps cars on flooded roads and overwhelms storm drains, leading to flooded residential streets and basements. Impending developments in these areas are going to make the problem worse; the Gables in Elkridge, which currently borders treed land marked for development of 17 new homes; Harwood Park, which borders the Roberts property, marked for development of 360 new apartments and townhomes; RiverWatch in lower Elkridge, which not only floods but now sits on the precipice of the Patapsco River due to erosion of the adjacent parcel it borders and, to add insult to injury, is marked for a second apartment development called RiverWatch II in the same spot. The south end of the Route 1 corridor is the target of 2 huge impending residential developments at the Milk CoOp property and at the Mission Road quarry. Mission road already floods regularly, blocking access to it from commuters on Route 1. The existing storm water management there is wholly inadequate, so developers must be held to higher standards to protect it from regular flooding.

We commend this effort to enforce stronger storm water management requirements on development in the Tiber and Plumtree watersheds. We urge you to include the Patapsco and Patuxent watersheds in Howard County to adequately protect the rest of our county from the increased double threat of more frequent heavy rain and rapid development paving over pervious surfaces.

The People's Voice, LLC

Barbara Kapiarz



HOWARD COUNTY COUNCIL AFFIDAVIT OF AUTHORIZATION TO TESTIFY ON BEHALF OF AN ORGANIZATION

I, Barbara Krupiarz, have been duly authorized by (name of individual)
The People's Voice, LLC to deliver testimony to the (name of nonprofit organization or government board, commission, or task force)
County Council regarding <u>CR 123-2019</u> to express the organization's (bill or resolution number)
support for / opposition to / request to amend this legislation. (Please circle one.)
Printed Name: Barbara Krupiarz
Signature: Barbara Krupiary
Date: 9/16/19
Organization: The People's Voice
Organization Address: 3600 St. John's Lane
Ellizott City, MD 21042
Number of Members: 3,251
Name of Chair/President: Lisa Markovitz

This form can be submitted electronically via email to <u>councilmail@howardcountymd.gov</u> no later than 5pm the day of the Public Hearing or delivered in person the night of the Public Hearing before testifying.

Testimony to amend CR122 & CR 123

Bruce T. Taylor, M.D., Taylor Service Company, 4100 College Ave., Ellicott City, MD 21043

While CR 122 & CR123 are overly burdensome to developers, asking new projects to do more than their fair share, they do get us back on track to answer the questions posed by CB56 and provide a framework for solutions making CB 38 and CB40 totally unnecessary. CR 122 & CR 123 should be amended in some less restrictive form to allow the moratorium to end and development which will benefit Ellicott City and the County to proceed.

More than doubling the fees for offsite projects seems too steep under CR 122.

Asking new projects in the watershed to increase their retention by about one third also seems a bit much.

The facts of the County water or hydrology study published in June 2017 recognized development as only a minor contributor to flooding of Old Ellicott City (OEC), pointing out that even if all the 3.7 square miles of the OEC watershed were undeveloped forest, about 80% of the floodwaters would still have occurred in 2016. The study notes that even if all the remaining undeveloped property were fully developed it would not have made the flooding worse. It didn't, however, point out an important fact, which is that any new development, with existing or even more stringent standards, will help. Even if all the remaining undeveloped land and all the re-development currently planned were to retain all the rainfall hitting the property, it would not stop Old Ellicott City from flooding as it is only a few percent of the entire 3.7 square miles of the watershed.

In order to stop flooding we need as a community to concentrate on large scale projects as the Administration is doing in its flood mitigation plan. We also need to work more on reducing our footprint on the environment while fostering development in order to reduce climate change.

Each new development under current standards will provide quality and quantity controls which do not exist today; many of these SWM benefits will be on line at no cost to the County before all the features of the excellent flood mitigation plan of County Executive Ball can be completed. The more area that is developed or re-developed the more SWM that will be provided. New and redeveloped sites often feature green building aspects which are not part of older construction, helping the environment.

Raising the cost of new housing, when and if it can happen, may eliminate projects that would provide Moderate Income Housing Units (MIHUs) and thereby reduce needed housing for workers in the County.

With no grandfathering, property owners with projects in line for years may need to abandon or completely re-design their projects, leaving the County with less revenue.

In summary, we urge you to amend and pass CR 122 & CR 123 to reduce the increase in cost of new projects, possibly putting off or cancelling projects which would benefit Ellicott City and Howard County



HOWARD COUNTY COUNCIL AFFIDAVIT OF AUTHORIZATION TO TESTIFY ON BEHALF OF AN ORGANIZATION

_{I,} Emily Ranson	, have been duly authorized by
(name of individual)	,
Clean Water Action	to deliver testimony to the
(name of nonprofit organization or government board, commission,	
County Council regarding CR123-2019	to express the organization's
(bill or resolution number)	w express the digamization a
support for / opposition to / request to amend this legislation. (Please circle one.)	informational
Printed Name: Emlly Ranson	
Signature:	
Date: 9/12/19	
Organization: Clean Water Action	•
Organization Address: Baltimore, MD 21202	
Baltimore, MD 21202	
Number of Members: 7000 (Howard Co	ounty)
Name of Chair/President: Bob Wendelgass	And Annual Annua
Name of Chair/President:	

This form can be submitted electronically via email to <u>councilmail@howardcountymd,gov</u> no later than 5pm the day of the Public Hearing or delivered in person the night of the Public Hearing before testifying.



The state of the s

in the first of the state of the The state of the state o

en de la composition La composition de la

Company of the second of the s

And the second of the second o

and the second of the second o



HOWARD COUNTY COUNCIL AFFIDAVIT OF AUTHORIZATION TO TESTIFY ON BEHALF OF AN ORGANIZATION

I, ALAW Schricher, have been duly authorized by (name of individual)
HOWAD Courty (Hizews Asserting to deliver testimony to the (name of nonprofit organization or government board, commission, or task force)
County Council regarding CR123 to express the organization's (bill or resolution number)
support for / opposition to / request to amend this legislation, (Please circle one.)
Printed Name: ALAN Solvicle v Signature: May Amica
Date: 16 of 19
Organization: HCCA
Organization Address: CLCICOTT City, MAD
Number of Members:
Name of Chair/President: 5th Kohw

This form can be submitted electronically via email to <u>councilmail@howardcountymd.gov</u> no later than 5pm the day of the Public Hearing or delivered in person the night of the Public Hearing before testifying.



HOWARD COUNTY COUNCIL AFFIDAVIT OF AUTHORIZATION TO TESTIFY ON BEHALF OF AN ORGANIZATION

ɪ,Angelica Bailey	, have been duly authorized by
(name of individual)	_ ,
Maryland Building Industry Association	to deliver testimony to the
(name of nonprofit organization or government board, commission, or task	
County Council regarding CR123-2019	to express the organization's
(bill or resolution number)	
support for / opposition to / request to amend this legislation. (Please circle one.)	
Printed Name: Angelica Bailey	
Signature:	
Date: September 16, 2019	
Organization: Maryland Building Industry Association	
Organization Address: 11825 West Market Place, Fulton, MD	20759
Number of Members: 1,000+	
Name of Chair/President: Lori Graf, CEO	
This form can be submitted electronically via email to <u>councilmail@howat</u> the day of the Public Hearing or delivered in person the night of the Publi	

Sayers, Margery

From:

Jones, Diane

Sent:

Friday, September 13, 2019 4:44 PM

To:

Sayers, Margery

Subject:

FW: Testimony for CB38, CR122 and CR123

Attachments:

CB38 CR122 CR123_Lilly.pdf

Margery, can you please remove Ms. Lilly from the testifying list and include her testimony?

Thank you,

Diane

From: Lori Lilly <lorililly@gmail.com>

Sent: Friday, September 13, 2019 4:34 PM

To: Walsh, Elizabeth <ewalsh@howardcountymd.gov>; Jones, Opel <ojones@howardcountymd.gov>; Rigby, Christiana

<crigby@howardcountymd.gov>; Jung, Deb <djung@howardcountymd.gov>; Yungmann, David

<dyungmann@howardcountymd.gov>

Cc: Jones, Diane <dijones@howardcountymd.gov>
Subject: Testimony for CB38, CR122 and CR123

[Note: This email originated from outside of the organization. Please only click on links or attachments if you know the sender.]

Good afternoon,

I was not able to submit written testimony through the online sign-up (and accidentally signed up to testify in person though I will not be able to attend. Diane, can you remove me and include this written testimony below?).

Thank you very much.

9/13/2019

Dear Members of the Howard County Council,

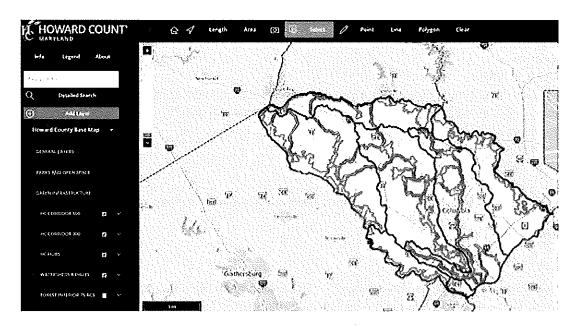
Thank you for considering these comments in your review of CB38, CR122 and CR123. Please note that these comments are from myself as an individual and resident of Howard County and do not represent the organization or Board Members of Howard EcoWorks.

With regards to CB38, first, thank you to Council Member Walsh for putting forth this legislation to protect the Lower North Branch Patapsco Watershed. It is heartening to have a council representative with so much dedication to protecting our natural resources.

I do have some reservations with regards to this legislation. While I know it was put forward with the best of intentions, the geographic scope seems arbitrary. If the legislation had been limited to the Tiber Hudson or Plumtree, I would have had no question. I do not understand the justification for the legislation to the entire

Lower North Branch Patapsco as compared to other areas in the County. I feel these protections should be applied to all of our sensitive resources and, to that end, my recommendation would be to apply this legislation to the entirety of Howard County's Green Infrastructure Network (GIN).

The GIN represents our County's most important ecological areas. The County has done extensive planning and GIS analysis to identify and map these special areas yet there is no regulatory protection, and every year the GIN becomes more and more fragmented. Ecosystem services function best when they are connected and what we need, with threats of climate change looming right in front of us, is resilient natural infrastructure, that is, a functional network of hubs and corridors that is maximized for benefits to people and wildlife. If you are not familiar with the GIN, below is a screenshot from Howard County's interactive map noting the location throughout all of your districts.



Recently I attended the County Executive's announcement about Howard County becoming a Bee City. I applaud this initiative but the irony was not lost on me that, as we all stood in the meadow at the Howard County Conservancy to extol an effort to benefit ecosystem services, the sounds of bulldozers rumbled in the background as areas directly adjacent to the Conservancy and Patapsco Park were (and still are) being plowed under for a new development. That particular parcel is, strangely, not in the GIN even though it sits between two protected pieces of land. Part of the Conservancy is not in the GIN either. In discussions with the Office of Community Sustainability about why a portion of the Conservancy or this area under development are not identified for inclusion in the GIN, the answer is that the mapping was a high level planning exercise and it is not perfect. And I get that, which is why I think that we need to protect both the GIN and a buffered area around its perimeter, have triggers in place when development is occurring within or adjacent to the GIN, and then regulatory legislation as outlined in CB38 to provide protection for these exceptional resources. In addition, restoration of the GIN is needed as so much has already been fragmented. Just one example of the affects of this fragmentation, is the number of car collisions with deer. Deer thrive on "edge" habitat and every year we make more and more of that such that the wildlife do not have safe places to travel and therefore endanger our own travel-ways. What is the rate of deer collisions over the past couple of

decades? I did not have time to look it up, but my best guess is that it has increased significantly over the years.

In conclusion with regards to CB38, I hope that the Council will consider **bold** action to extend Council Member's Walsh's legislation to the entirety of Howard County's Green Infrastructure Network. That truly would be an incredible act that would provide benefits to many future generations while preparing our County and its people for the uncertainties that we face with climate change.

With regards to CR122 and CR123 — while my preference would be for a complete and indefinite moratorium on development in the Tiber Hudson and Plumtree watersheds, I support these resolution and modifications to the Howard County Design Manual as a positive step that will help to limit and dissuade development in the watershed. I hope that you will pass these resolutions as a next step in protecting Ellicott City.

Thank you for your consideration of this testimony.

Sincerely,

Lori Lilly 10520 Old Frederick Rd. Woodstock, MD 21163

Lori A. Lilly, CEP, CBLP

9/13/2019

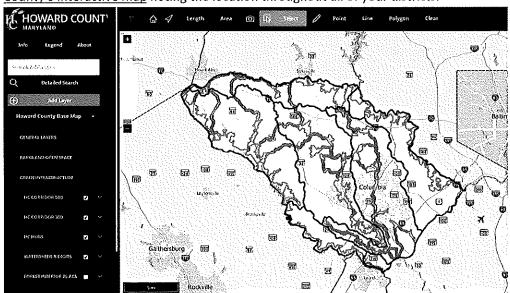
Dear Members of the Howard County Council,

Thank you for considering these comments in your review of CB38, CR122 and CR123. Please note that these comments are from myself as an individual and resident of Howard County and do not represent the organization or Board Members of Howard EcoWorks.

With regards to CB38, first, thank you to Council Member Walsh for putting forth this legislation to protect the Lower North Branch Patapsco Watershed. It is heartening to have a council representative with so much dedication to protecting our natural resources.

I do have some reservations with regards to this legislation. While I know it was put forward with the best of intentions, the geographic scope seems arbitrary. If the legislation had been limited to the Tiber Hudson or Plumtree, I would have had no question. I do not understand the justification for the legislation to the entire Lower North Branch Patapsco as compared to other areas in the County. I feel these protections should be applied to all of our sensitive resources and, to that end, my recommendation would be to apply this legislation to the entirety of Howard County's Green Infrastructure Network (GIN).

The GIN represents our County's most important ecological areas. The County has done extensive planning and GIS analysis to identify and map these special areas yet there is no regulatory protection, and every year the GIN becomes more and more fragmented. Ecosystem services function best when they are connected and what we need, with threats of climate change looming right in front of us, is resilient natural infrastructure, that is, a functional network of hubs and corridors that is maximized for benefits to people and wildlife. If you are not familiar with the GIN, below is a screenshot from Howard County's interactive map noting the location throughout all of your districts.



Recently I attended the County Executive's announcement about Howard County becoming a Bee City. I applaud this initiative but the irony was not lost on me that, as we all stood in the meadow at the Howard County Conservancy to extol an effort to benefit ecosystem services, the sounds of bulldozers rumbled in the background as areas directly adjacent to the Conservancy and Patapsco Park were (and still are) being plowed under for a new development. That particular parcel is, strangely, not in the GIN even though it sits between two protected pieces of land. Part of the Conservancy is not in the GIN either. In discussions with the Office of Community Sustainability about why a portion of the Conservancy or this area under development are not identified for inclusion in the GIN, the answer is that the mapping was a high level planning exercise and it is not perfect. And I get that, which is why I think that we need to protect both the GIN and a buffered area around its perimeter, have triggers in place when development is occurring within or adjacent to the GIN, and then regulatory legislation as outlined in CB38 to provide protection for these exceptional resources. In addition, restoration of the GIN is needed as so much has already been fragmented. Just one example of the affects of this fragmentation, is the number of car collisions with deer. Deer thrive on "edge" habitat and every year we make more and more of that such that the wildlife do not have safe places to travel and therefore endanger our own travel-ways. What is the rate of deer collisions over the past couple of decades? I did not have time to look it up, but my best guess is that it has increased significantly over the years.

In conclusion with regards to CB38, I hope that the Council will consider **bold** action to extend Council Member's Walsh's legislation to the entirety of Howard County's Green Infrastructure Network. That truly would be an incredible act that would provide benefits to many future generations while preparing our County and its people for the uncertainties that we face with climate change.

With regards to CR122 and CR123 – while my preference would be for a complete and indefinite moratorium on development in the Tiber Hudson and Plumtree watersheds, I support these resolution and modifications to the Howard County Design Manual as a positive step that will help to limit and dissuade development in the watershed. I hope that you will pass these resolutions as a next step in protecting Ellicott City.

Thank you for your consideration of this testimony.

Sincerely,

Lori Lilly 10520 Old Frederick Rd. Woodstock, MD 21163