#### Testimony for Montgomery County Council Public Hearing

## Fiscal Year 2022 National Pollutant Discharge Elimination System Municipal Separate Storm Sewer System (MS4) Permit Financial Assurance Plan (FAP)

February 28, 2023 By Kenneth Bawer

My comments concern the funds used for so so-called stream "restorations". This report only shows completed stream "restoration" projects, so my comments will address future projects which would be a terrible mis-use of taxpayer money.

The Montgomery Coalition to Stop Stream Destruction copied a past County Council on a letter to Executive Elrich and Parks Director Riley signed by 20 organizations and 141 individuals. That letter, which is attached to my written statement, describes in great detail why these stream "restorations" are a waste of taxpayer money.

The inconvenient truth is that these misguided projects convert our natural stream valleys into engineered stormwater conveyances to temporarily stop erosion without addressing the root cause of the problem which is stormwater fire-hosing into streams from developed areas (i.e., impervious surfaces such as roads, roofs, sidewalks, driveways, etc.). This is like trying to repair water damage while the roof is still leaking, and then not fixing the roof.



(Below: photo by sellmyhouseinnashville.com)

In addition to being only a temporary fix and not addressing the root cause of the stream erosion problem (as I will discuss below), it is far worse than just a waste of our money. These stream "restorations" have destroyed 30,000 linear feet of natural streams <sup>1</sup>, thousands of trees, and dozens of acres of forests including wildflowers, frogs, turtles, and other organisms that are crushed alive. Just look at the pictures in my written testimony and the attached letters or take a drive up to Blohm Park in Gaithersburg to see the results of stream "restoration" - although not a county project, it is an easily

<sup>&</sup>lt;sup>1</sup> (https://www.montgomerycountymd.gov/DEP/Resources/Files/downloads/water-reports/npdes/AnnualReport-FY19-Final.pdf)

accessible location that is similar to those done in the County. It is abundantly clear that the term stream "restoration" is a misnomer. They do not restore streams – quite the opposite. See the photographs below.

Below: Upper left, a "stream restoration" in Upper Watts Branch, Rockville (by City of Rockville). Upper right, a "stream restoration" from a presentation by Dr. Robert Hilderbrand, University of Maryland.
 Lower left, a "stream restoration" in a Montgomery Park. Lower right, Fallsreach Stream Restoration Project. The entire Fallsreach stream forced to run through the black pipe during construction (3/19/2019 photo by K. Bawer). No amount of post-construction planting can reconstitute a destroyed natural forest community.



It has been suggested by some people that it is unfair to show pictures of stream "restoration" projects under construction and not the results after the work is complete, as if no harm has been done if the results look "nice". That criticism rings hollow in the face of these pictures and is a gaslighting deflection from the reality of the damage that construction projects inflict on our natural areas. Only by seeing "how the sausage is made" can one truly appreciate the destructive nature of these practices. It is by seeing photographs of tractors in the mud and muck of a clear-cut forested area that one can appreciate the folly of doing MS4 permit projects without regard for their total environmental impact. No amount of post-construction planting can reconstitute a destroyed natural forest community.

What is the total environmental impact of these stream "restorations"? We don't even know because the full range of ecological factors are currently not even considered much less measured when approving stream "restoration" projects. These factors, that are apparently of no importance to the County include: the full range of flora and fauna loss, lost ecosystem services (e.g., lost CO<sub>2</sub> uptake, lost O<sub>2</sub> production, food web disruption, tree death due to critical root zone damage, lost storm water absorption, etc.) during and after construction, hydrologic disruption due to riparian soil grading and compaction (e.g., destruction of seeps and springs), and the carbon footprint of these large-scale construction activities.

To add insult to injury, the County has asked that their "stream restoration" projects be exempted from existing conservation easements (e.g., the Grosvenor Luxmanor project).

And just when you thought it couldn't get worse, the destruction of forests by stream "restorations" directly contradicts the Climate Action Plan which has a goal of protecting existing forests. (The Montgomery Coalition to Prevent Stream Destruction sent the previous Council a copy of their comments attached below). These so-called stream "restorations" reverse carbon sequestration by clear cutting thousands of trees.

In fact, the new design/build contract, disingenuously called the "Clean Water Montgomery Program", would allow up to 50% of MS4 permit credit to come from stream "restorations" instead of nondestructive practices allowed by the MS4 Permit Accounting Guidance. This contract should more accurately be called the "Destroy Streams Program".

Why does the County permit these stream "restorations" that ravage our forests and natural areas? Apparently, the County thinks it is better to meet the MS4 Impervious Surface Restoration Plan (ISRP) by something other than actually removing impervious surfaces. Apparently, the county thinks it is faster or cheaper or easier to meet the MS4 Permit by running bulldozers and heavy equipment into our natural stream valleys to armor-plate our streams and destroy what little natural areas we have instead of actually controlling stormwater at its source before it enters our streams. Apparently, the County wants to check the MS4 Permit box with no regard either for preserving our natural resources or fixing the problem of stormwater control at its source before it enters our stream valleys.

Dr. Robert Hilderbrand, an aquatic ecologist at the University of Maryland Center for Environmental Sciences (UMCES), Appalachian Laboratory also believes that it would be better to treat the cause rather than the symptom, and that the game is over once the water reaches the stream channel.<sup>2</sup>

Stream "restorations" unsuccessfully try to address the symptoms of the stormwater problem - stream bank erosion caused by stormwater - rather than the root cause of the problem: stormwater runoff that is fire-hosed into streams from impervious surfaces such as roads. These stream "restoration" efforts are ultimately unsuccessful since these projects can be, <u>and are</u>, blown-out by future storms. The photos below show the blow-out of an armor-plated stream section. Such efforts are a waste of taxpayers' money.

Below: Left, downstream from Joseph's Branch "stream restoration", behind 3926 Rickover Rd., showing what happens when stormwater from impervious surfaces is not kept out of stream valleys (9/10/2020 during a rain event, by K. Bawer). Right, the same location showing the temporary nature of engineered

<sup>&</sup>lt;sup>2</sup> Personal communication, 2/24/2021.

# armor-plating. Note the massive boulders, circled in red, that have already been completely dislodged by uncontrolled stormwater (3/3/2021 by K.

Bawer).



Certainly, the proponents of stream "restorations" know full well that these projects are only temporary band-aids that also inflict permanent damage to stream and forest ecology. Research papers, cited in the letter to Executive Elrich (attached), show that while armor-plating streams with boulders may temporarily decrease erosion, the biological health of the area rarely recovers. The County's own reported results<sup>3</sup> confirm this.

The complex web of interactions between fauna, flora, geology, and hydrology that interact in natural areas is irreplaceable and cannot be recreated by engineering projects using bulldozers, backhoes, excavators, and trucked-in material to create artificial structures in our natural areas. Re-planting hundreds or even thousands of trees and shrubs does not magically re-create the complexity of a destroyed forest community. The ecosystem services destroyed by stream "restorations", including the lost carbon sequestration from clear-cut forest areas, are lost forever. Plus, major soil disturbances created by these projects typically lead to the spread of non-native invasive plants which crowd out native plants. Both issues are illustrated by the County's Hawlings River stream "restoration" below.

Below: Hawlings River Stream Restoration 2005; Left, showing an engineered stream bank; Right, showing a dense growth of non-native invasive Japanese Stiltgrass. (photos from <u>DEP</u>)

<sup>&</sup>lt;sup>3</sup> <u>https://montgomerycountymd.gov/water/restoration/monitoring.html</u>



On February 24, 2021 Dr. Robert Hilderbrand, the University of Maryland scientist, gave a presentation to the U.S. Geological Survey (I understand also talked to our Department of Environmental Protection). One of his charts shows the first page of the Montgomery Coalition to Stop Stream Destruction letter to County Executive Elrich. Dr. Hilderbrand used it as an example of the groundswell of citizen opposition to stream "restorations". When I spoke to him afterwards, he said that there is a disconnect between citizens and the billion-dollar stream "restoration" industry. The industry does stream "restorations" as civil engineering projects to stop erosion, nothing more. Citizens are given the faulty impression by our county that stream "restorations" are done to improve the environment. Just consider the name – who wouldn't be in favor of a "stream restoration". But, as far as the whole environment, Hilderbrand says stream "restorations" just don't work – his research<sup>4</sup> shows that while armor-plating streams with boulders and stabilizing banks with geotextile fabric may temporarily decrease erosion (temporary since future storms can and do blow out these structures), the biological health of the area is not improved. He told me that what surprises him is why it has taken so long for citizens to realize the damage done by "stream restorations" and to demand that they be stopped.

Bill Stack, who helped develop the "Recommendations of the Expert Panel to Define Removal Rates for Individual Stream Restoration Projects"<sup>5</sup> which is used by Maryland Department of the Environment (MDE) for MS4 Permit practices, identified "the root causes of stream bank erosion: impervious cover" and said that, "...municipalities are spending enormous amounts of money on [stream restoration] projects that generate the necessary water quality credit but have no real impact on stream function....

<sup>&</sup>lt;sup>4</sup> Hilderbrand, Robert H., et. al., "Quantifying the ecological uplift and effectiveness of differing stream restoration approaches in Maryland," Final Report Submitted to the Chesapeake Bay Trust for Grant #13141, 2020 (<u>https://cbtrust.org/wp-content/uploads/Hilderbrand-et-al\_Quantifying-the-Ecological-Uplift.pdf</u>

<sup>&</sup>lt;sup>5</sup> Berg, J., et.al., (2014), "Recommendations of the Expert Panel to Define Removal Rates for Individual Stream Restoration Projects," Test-Drive Revisions Approved by the [Water Quality Goal Implementation Team]WQGIT: September 8, 2014, Prepared by: Tom Schueler, Chesapeake Stormwater Network and Bill Stack, Center for Watershed Protection (<u>http://chesapeakestormwater.net/wp-</u> <u>content/uploads/dlm\_uploads/2013/10/stream-restoration-short-version.pdf</u>)

...after we spend billions of dollars on these projects and the taxpayers ask 'why can't I catch fish in this stream?'"<sup>6</sup>

I call on the County Council to sign into law legislation to prohibit the use of stream "restorations" that convert our natural stream valleys into engineered stormwater drainage facilities. Instead, we should control stream erosion, whether or not to meet MS4 permit requirements, using any number of other non-destructive practices for upland stormwater control such as road-side bioretentions in already disturbed areas, tree plantings, and conservation landscaping, just to name a few. The County already knows how to do these through DEP's Green Streets and RainScapes programs (see the photos below).



Below: examples of DEP Green Streets bioretentions. (Photos by DEP, Montgomery County, MD)

The County Department of Environmental Protection is forging ahead with past practices that are destroying our few remaining natural areas in the name of meeting our MS4 permit. Therefore, it is up to the Council to pass legislation to prohibit so-called "stream restorations. I suggest it be called the "Prevent Stream Destruction" bill.

Thank-you

Ken Bawer

(Attachments)

<sup>&</sup>lt;sup>6</sup> Stack, B., 2019, "Chesapeake Bay Program Stream Restoration Credits: Moving Toward Functional Lift?", Bill Stack, PE, Deputy Director of Programs, Center for Watershed Protection, September 12th, 2019; (<u>https://www.cwp.org/chesapeake-bay-program-stream-restoration-credits-moving-toward-functional-lift/</u>)

February 17, 2021

County Executive Marc Elrich Executive Office Building, Rockville, MD 20850

Montgomery Parks Director Michael F. Riley Wheaton HQ, Wheaton, MD 20902

#### SUBJECT: "Stream Restoration" Projects

Dear County Executive Elrich and Parks Director Riley:

The 20 organizational and 141 individual signatories to this Montgomery Coalition to Stop Stream Destruction letter represent a diverse cross-section of the county including towns, environmental and faith-based organizations, civic and homeowners' associations, and a broad array of concerned residents. We have an interest in protecting our streams by questioning the practice of stream engineering known as "stream restoration" in Montgomery County and Montgomery Parks. (Note: to be clear, we do not oppose necessary utility or infrastructure protection projects in stream valleys such as those for exposed sewer lines, fiber optic cables, stormwater outfall pipes, bridges, and roads.)

Based on the information in this letter, we call for 1) a common sense, temporary pause in "stream restoration" projects, 2) a temporary pause in the inclusion of "stream restoration" projects in new MS4 Permits and the County's design/build "Clean Water Montgomery Program" RFP, and 3) the initiation of a dialog among all stakeholders to discuss the relevant issues.

Below: Left, a "stream restoration" in Upper Watts Branch, Rockville (by City of Rockville). Right, a "stream restoration" in a Montgomery Park. No amount of post-construction planting can reconstitute a destroyed natural forest community.



Every year, millions of taxpayer dollars are spent on "stream restoration" projects. First and foremost, the term "stream restoration" is misleading since these projects do not actually restore streams as explained below. To see is to believe, and the self-evident, inconvenient truth is that "stream restoration" projects cause irreparable damage to our natural areas – existing irreplaceable natural features in the footprints of "stream restoration" projects are lost forever. Just see the photographs in this letter. You don't need a scientific study to understand that forest communities are being wiped out. Scientific studies are confirming what we already see.

A "stream restoration" (as defined by Maryland Department of the Environment) is a stormwater management engineering practice that uses heavy equipment such as bulldozers and backhoes to modify a stream channel. Typically, this means using heavy boulders from outside sources to armorplate sections of the stream bank, changing a stream's natural meander pattern based on theoretical mathematical formulas (based on some version of the Natural Channel Design methodology), cutting down stream banks, and raising the level of stream channels with fill material brought from off-site. This involves removing tons of stream bank soil along with all the plants and animals residing on and in it. To provide access for the heavy equipment, hundreds or thousands of trees are cut down to build access roads, and then many more trees are cut down during the construction project itself. To add insult to injury, the County and Parks have asked that their "stream restoration" projects be exempted from our forest conservation laws.

"Stream restorations", which clear cut and bulldoze our forested stream valleys, are among the most destructive things we can do, especially in this age of unsustainable forest fragmentation and loss of habitat and native biodiversity. No matter the condition of their channels, these stream valleys are largely our last remaining refuge for wildlife and reservoirs of biodiversity.

Why are "stream restoration" projects done? They are typically used to help meet the requirements of the Municipal Separate Storm Sewer System (MS4) Permit required under the federal Clean Water Act and issued by Maryland Department of the Environment (MDE). The permits require that Montgomery County and Parks decrease the amount certain pollutants (nitrogen, phosphorus, and suspended sediments) entering the Chesapeake Bay. Some "stream restorations" are done as mitigation for environmental destruction done elsewhere (for example, the proposed Beltway expansion). However, while sediment caused by stream bank erosion may be reduced by these projects which armor-plate sections of streams, research by Robert Hilderbrand <sup>(1)</sup> analyzing the results of 40 "stream restorations" in the Baltimore/Washington DC Metropolitan area of Maryland has shown that, "Despite the promise and allure of repairing damaged streams, there is little evidence for ecological uplift after a stream's geomorphic attributes have been repaired." <sup>(1)</sup> In other words, while armor-plating streams with boulders and stabilizing banks with geotextile fabric may temporarily decrease erosion (temporary since future storms can and do blow out these structures), the biological health of the area is not improved. In fact, the devastating biological impact of excavations by bulldozers and backhoes in our stream valleys is obvious to even the most casual observer as seen in the photographs in this letter.

Below, side-by-side photographs from the same location show pre- and during-construction views of a "stream restoration". Note the forest community loss and the engineered armor-plating of the stream bank that was once a natural area.



Below: "Stream restoration" in Blohm Park, Gaithersburg at Watkins Mill Rd. over Whetstone Run at the same location. Note the stream bank armor-plating on the right. (by K. Bawer, 9/3/2020 & 2/6/2021)

Even though "stream restorations" are demonstrably destructive to our relatively few remaining natural areas, the County and Parks are proceeding full speed ahead with these ecologically damaging projects. Consider the impact of "stream restorations" in Montgomery County: "To date, the County has completed stream restoration projects, restoring almost 30,000 linear feet of stream..." \* per the latest report on meeting the MS4 Permit. The truth is that these misguided projects convert our natural stream valleys into engineered stormwater conveyances without addressing the root cause of the problem – stormwater fire-hosing into streams from developed areas (i.e., impervious surfaces such as roads, roofs, sidewalks, driveways, etc.).

Below: Left, downstream from Joseph's Branch "stream restoration" behind 3926 Rickover Rd.
This is what happens downstream from a "stream restoration" project when stormwater from development is not kept out of stream valleys (9/10/2020 during a rain event, by K. Bawer).
Right, a DEP "stream restoration" completely destroyed the forest community in its footprint.
Plus, loss of shade causes stream temperatures to rise impacting fish & amphibians. (by DEP)



"Stream restorations" address the symptoms of the stormwater problem (stream bank erosion) but not the root cause in an effort to check the MS4 Permit box or to do a mitigation project that is paid for by a

private corporation. \*(<u>https://www.montgomerycountymd.gov/DEP/Resources/Files/downloads/water-reports/npdes/AnnualReport-FY19-Final.pdf</u>)

We oppose MS4 Permit practices that degrade the ecological health of local watersheds. The County and Parks should meet their MS4 Permit obligations in a manner that improves the ecological health of both the local watershed and the Chesapeake Bay. The same applies to private company funded mitigation projects such as those from the proposed Beltway expansion. Therefore, we oppose "stream restorations" since they demonstrably harm the local environment. Mitigation projects, MS4 Permit projects, and other projects to protect streams from stormwater runoff should be done in already disturbed upland (out of stream valley) areas such as road rights-of-way and by using non-destructive practices such as riparian plantings which keep stormwater out of streams.

In addition to the visibly destructive nature of "stream restorations", research papers we reviewed concluded the following:

1) that the results of "stream restorations" showed little evidence for ecological uplift (using ecological indicators such as macroinvertebrate taxonomic diversity)<sup>(1,2)</sup>,

2) that the removal of trees during "stream restorations" lead to higher riparian groundwater nutrient concentrations <sup>(3)</sup>, and

3) that recovery of biodiversity was rare for the vast majority of stream restoration projects <sup>(4)</sup>.

Bill Stack, who helped develop the "Recommendations of the Expert Panel to Define Removal Rates for Individual Stream Restoration Projects" <sup>(5)</sup> which is used by MDE for MS4 Permit practices, identified "the root causes of stream bank erosion: impervious cover," and said that, "…municipalities are spending enormous amounts of money on [stream restoration] projects that generate the necessary water quality credit but have no real impact on stream function." <sup>(6)</sup> It is clear that in-stream projects do absolutely nothing to fix the root cause of the problem: keeping stormwater from upland, impervious surfaces out of streams.

Indeed, there are several local ecological factors that are currently not even considered when approving "stream restoration" projects including: the full range of flora and fauna loss, lost ecosystem services (e.g., lost CO<sub>2</sub> uptake, lost O<sub>2</sub> production, food web disruption, tree death due to critical root zone damage, etc.) during and after construction, hydrologic disruption due to riparian soil grading and compaction (e.g., destruction of seeps and springs), and the carbon footprint of large-scale construction activities. And upland alternatives to "stream restorations" are sometimes not even considered - this was the case with the Fallsreach project in the photographs below.

Below: Fallsreach Stormwater Pond Upgrade and Stream Restoration Project | Department of Environmental Protection, Montgomery County, MD. Left: The entire Fallsreach stream, a tributary of Watts Branch (west of I-270), is running through the black pipe during construction; 3/19/2019. Right: Complete removal of large stretches of entire forest communities and engineered structures replacing the natural stream channel; 3/19/2019 (photos by K. Bawer)



Rather than using "stream restorations", which degrade the environmental health of the local area, it is far better to meet MS4 Permit requirements and perform mitigation projects by using 1) upland stormwater control practices in already disturbed areas, and 2) other non-destructive practices such as forest planting and riparian conservation landscaping. The alternatives to "stream restorations" that we support from the June 2020 MS4 Accounting Guidance document include, for example (from Table 1) the "Land Cover Conversion" practices (Forest Planting, Riparian Forest Planting, Conservation Landscaping, Riparian Conservation Landscaping, Forest Conservation, Impervious Surface Reduction, Street Trees, and Urban Tree Canopy Planting) with the caveat that only native plants should be used and "Urban Soil Restoration" practices, and (from Table 2) most of the Runoff Reduction (RR) Practices (for example, bioretentions, rain gardens, green roofs, etc.). Controlling stormwater before it can enter streams using the above practices would eliminate the need for "stream restorations". Since "stream restorations" are done to control stream bank erosion and flooding, keeping stormwater runoff out of streams would result in less flooding and stream bank erosion would drastically decrease to naturally occurring rates.

Upland stormwater practices and other Land Cover Conversion practices as defined in the Accounting Guidance should always be the preferred alternatives to "stream restorations". In cases where a particular "stream restoration" is being considered, and it is determined that the alternative upland stormwater control projects and Cover Conversion practices are not possible (in full or in part) in the watershed, we recommend that as much upland stormwater control and Land Cover Conversion as possible be done. Further, additional locations in different watersheds should also be identified for projects to avoid doing the "stream restoration".

In the event that a "stream restoration" is being considered, it should always require justification versus a proposed set of upland projects by comparing local ecological factors such as:

1) an accounting of the full range of flora and fauna that will be lost by conducting preconstruction field surveys by experts in the fields of botany, herpetology, mycology, ichthyology, etc.,

2) a calculation of projected lost ecosystem services (e.g., lost  $CO_2$  uptake, lost  $O_2$  production, food web disruption, tree death due to critical root zone damage, etc.) during and after construction,

3) the extent of hydrologic disruption due to grading and soil compaction (e.g., destruction of seeps and springs), and

4) a comparison of the projected carbon footprint of construction activities.

All proposed "stream restoration" projects should score higher than the alternative proposed set of upland projects (which could be in the same or different watershed) on all four factors above and be required to demonstrate post-construction biological uplift compared to pre-construction measurements in order to be used for MS4 Permit credit.

In addition, "stream restoration" projects should never be exempted from any state or local forest conservation or forest protection laws. Currently, both the County and Parks are exempted (at their own request) from our forest conservation laws.

The complex web of interactions between fauna, flora, geology, and hydrology that interact in natural areas is irreplaceable and cannot be recreated by engineering projects using bulldozers, backhoes, and trucked-in material to create artificial structures in our natural areas. We should be guided by the principal of "Do No Harm" in stream valleys. Just as the Chesapeake Bay has environmental value, so does the rich environment of our stream valleys. There are better ways to protect the Bay than by using "stream restorations" to destroy our existing streams, streamside forests, and wetlands and replacing them with engineered stormwater drainage facilities.

Just as Montgomery County took a nationally recognized leadership position in banning the use of certain lawn pesticides in the face of intense pushback from industry, the County should also become a leader in questioning the practice of "stream restorations" that supports a billion-dollar industry.

Another concern is that "stream restoration" projects and the County's design/build RFP are proceeding without adequate public input, and without due consideration of upland (out of stream valley) alternatives that would protect our natural areas and streams by controlling stormwater within previously disturbed areas.

Given the <u>mixed results</u> of past "stream restoration" projects in the County and little publicly available results in Parks, scientific evidence questioning the benefits of such projects, and the concept that upland projects can address the problem of stormwater by keeping it out of streams to begin with, a reasonable course of action would be a common sense, temporary pause in "stream restoration" projects (with exceptions for infrastructure protection projects as noted above) and the design/build RFP release, and a robust, respectful, and comprehensive discussion of issues and ideas among all stakeholders.

These temporary pauses and discussions would, for example, allow all interested parties to 1) understand the current and proposed selection process of "stream restorations" versus alternative upland projects, 2) have opportunity to provide input, and 3) evaluate the wisdom of continuing "stream restoration" projects that can cause an unacceptable loss of irreplaceable native forest, wildlife, and landscape memory.

Please let us know if you will agree to 1) a common sense, temporary pause in "stream restoration" projects (with the above exceptions), 2) a temporary pause in the inclusion of "stream restoration" projects in the new MS4 Permits and the County's design/build RFP, and 3) the initiation of a dialog among all stakeholders (including, for example, the County Executive's Office, Departments of Environmental Protection (DEP), Transportation (MCDOT), and Permitting Services (DPS), Water Quality Advisory Group (WQAG), Montgomery Parks, Montgomery County Public Schools, Washington Suburban Sanitation Commission (WSSC), State Highway Administration (SHA), community groups, and environmental groups such as ours) to discuss all the issues, policies (e.g., "de-siloing" to increase coordination and cooperation between County departments and between the County and Parks), decision-making process, etc. related to "stream restorations".

We appreciate your consideration of our requests and hope to begin a dialog on these issues as soon as possible, <u>especially since the county's stormwater control Clean Water Montgomery Program</u> <u>design/build RFP will be finalized shortly</u>. With the utmost appreciation for the myriad of challenges on your plates including the COVID-19 pandemic, <u>we respectfully ask for a meeting with you, your staff, and</u> <u>other stakeholders to further discuss the issues raised in this letter within 10 business days.</u>

Sincerely,

#### **Organizations:**

West Montgomery County Citizens Association (WMCCA): Ken Bawer, President Ashton Pond Community Association: Roy Eliot Glixon, Vice President Cedar Lane Unitarian Universalist Church Environmental Justice Ministry: Nanci Wilkinson, chair Cloverly Civic Association: Quentin Remein, President Coquelin Run Citizens Association: George Baker, President Conservation Montgomery: Ginny Barnes, Vice-Chair Eyes of Paint Branch: David Dunmire & Michael Ellis, Board of Directors Friends of Ten Mile Creek and Little Seneca Reservoir: Anne James, President Friends of the Earth, Erich Pica, Executive Director Glen Echo Heights Citizens' Association: Lisa Esquivel-Griffin, President Glenmont Forest Neighbors Civic Association, Jim Epstein, President Greater Shady Grove Civic Alliance: Carol Kosary, President Maryland Native Plant Society: Christopher F. Puttock, Ph. D., President Montgomery Countryside Alliance (MCA): Caroline Taylor, Executive Director Old-Growth Forest Network, Joan Maloof, PhD, Executive Director, Professor Emeritus, Salisbury Univ. Potomac Chase Estates Citizens' Association, North Potomac: Barbara Andreassen, Treasurer Sugarloaf Citizens' Association: Lauren Greenberger, President Town of Glen Echo: Willem Polak, Mayor West Laurel Civic Association, Montgomery County: Barbara Sollner-Webb, President

# Individuals<sup>7</sup>: Annie Ament, Silver Spring Edd Barrows, Bethesda Nina Bartholme, Rock Creek Woods, Silver Spring Ed Bartholme, Rock Creek Woods, Silver Spring Helen Beachem, Rock Creek Woods, Silver Spring Ceric Beachem, Rock Creek Woods, Silver Spring John Beaudet, Rock Creek Woods, Silver Spring Kathleen Bell, Gaithersburg Betsy Binckes, Rock Creek Woods, Silver Spring Jeff Binckes, Rock Creek Woods, Silver Spring Philip Bogdonoff, Director, Washington DC Chapter, Biodiversity for a Livable Climate Lori Bowes, Takoma Park Tina Thieme Brown, Barnesville Marney Bruce, past president of Maryland Native Plant Society (MNPS), Bethesda Karen Byrne, Silver Spring Cindy Camp, Rock Creek Woods, Silver Spring John Camp, Rock Creek Woods, Silver Spring Val Campbell, Rock Creek Woods, Silver Spring Nina Chace, Kentlands & Montgomery Village Garden Clubs Carol Chew, Rock Creek Woods, Silver Spring Dan Chew, Rock Creek Woods, Silver Spring John Cook, Boyds Neal Cox, Rock Creek Woods, Silver Spring Heather Cox, Rock Creek Woods, Silver Spring Camilla Day, Rockville Benjamin Dennis, Bethesda Peggy Dennis, Potomac Sylvia Diss, Elders Climate Action, Potomac Rachel Dougherty, Rock Creek Woods, Silver Spring Patrick Dougherty, Rock Creek Woods, Silver Spring Susan Dunnell, Kensington, MD Marion Edey, founder of national League of Conservation Voters, Silver Spring Leslie Eiger, Rock Creek Woods, Silver Spring Luis Fermin, Gaithersburg Audrey Fincher, Rock Creek Woods, Silver Spring Dwight Fincher, Rock Creek Woods, Silver Spring Carol Ford, Rock Creek Woods, Silver Spring Kathy Ford, Rock Creek Woods, Silver Spring Marilyn Foster, Montgomery Village Luis Franco, Rock Creek Woods, Silver Spring

<sup>&</sup>lt;sup>7</sup> The views of individuals may not necessarily reflect those of their listed affiliations.

- Mark Frey, Cabin John
- John Freyman, Rock Creek Woods, Silver Spring
- Judy Fulton, EcoPlant Consulting, Board of the Mid-Atlantic Invasive Plant Council
- Stu Gagnon, Takoma Park
- Peggy Gervasi, Silver Spring
- Scott Gillespie, Rock Creek Woods, Silver Spring
- Vicki Giorgi, MV Green member, Gaithersburg
- Rob Gordon, Ph. D, Bethesda
- Carrie Hall, Wheaton
- Jean Hanson, Rock Creek Woods, Silver Spring
- Molly Hauck, Kensington
- Tina Hayman, N. Bethesda
- Chip Heartfield, Bethesda
- Anne Hollander, Bethesda
- Cathleen Horan, Rock Creek Woods, Silver Spring
- Mike Hoyt, Rock Creek Woods, Silver Spring
- Jean Hoyt, Rock Creek Woods, Silver Spring
- Sophia Hu, Rock Creek Woods, Silver Spring
- Lauren Hubbard, Ph.D. Plant Biology, Chesapeake Bay Landscape Professional, Native by Design Marc Imlay, Mattawoman Watershed Society
- Mark Israel, WMCCA member; Montgomery Countryside Alliance member; Query Mill Farm Emily Johnson
- Pat Kassebaum, Rock Creek Woods, Silver Spring
- Linda Keenan, former Board member, Maryland Native Plant Society; Silver Spring
- Holly Ketchel, Rock Creek Woods, Silver Spring
- Karen Kim, Montgomery Parks Weed Warrior, member MD Native Plant Society, Bethesda
- Tom Klein, Rock Creek Woods, Silver Spring
- Lester LaForce, Rock Creek Woods, Silver Spring
- Cathy Lamont, Rock Creek Woods, Silver Spring
- Karen Lange, Takoma Park
- Catherine Lemp, Rockville
- Sarah Lesher, Sierra Club, TPMEC, Silver Spring
- Jenny Letizia, Rock Creek Woods, Silver Spring
- Andrew Letizia, Rock Creek Woods, Silver Spring
- Motoko Lezec, Rock Creek Woods, Silver Spring
- Henri Lezec, Rock Creek Woods, Silver Spring
- Mike Livermore, Silver Spring
- Julie Marcis, Silver Spring
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- Donna McDowell, J.D, M.S. Environmental Biology, Etchison
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- Jonathan McIntyre, Rock Creek Woods, Silver Spring
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- Elizabeth Miller, Cabin John

Dolores Milmoe, former MD Conservation Advocate of Audubon Naturalist Society; Co-founder, MCA H. Morgan, Bethesda Arlene Montemarano, Silver Spring Ionela Morosanu, Silver Spring John Nakamura, Rock Creek Woods, Silver Spring May Nakamura, Rock Creek Woods, Silver Spring Jennifer Nathanson, member of Maryland Native Plant Society, Silver Spring Bruce Nichols, Rock Creek Woods, Silver Spring Deborah O'Leary, Silver Spring Michael Ollinger, Kensington John Parrish Lynn Parsons, Montgomery Parks Weed Warrior (WW), Bethesda Dr. Willo Pequegnat, Bethesda, MD Paolo Pinto, Rock Creek Woods, Silver Spring Willem Polak, Mayor, Town of Glen Echo; President, Montgomery Chapter/ MML Robert Portanova, Green Coalition MV member Thomas E. Quinn, Germantown Evelyn Ralston, Montgomery Bird Club Martha Reeser, Rock Creek Woods, Silver Spring Roger Reeser, Rock Creek Woods, Silver Spring Tim Rinkel, Rock Creek Woods, Silver Spring Sara Robinson, member of Little Falls Watershed Alliance, Bethesda Rita Rumbaugh, Rock Creek Woods, Silver Spring Deborah Sarabia, M. En., President, Seneca Creek Watershed Partners Barbara Schubert, Mo Parks Nursery volunteer, Parks WW, member MNPS, Audubon Naturalist Society Ursula Scott, Rock Creek Woods, Silver Spring Mariann Seriff, Rock Creek Woods, Silver Spring Danila Sheveiko Pastor Kim Shibley, Rock Creek Woods, Silver Spring Kayce Shibley, Rock Creek Woods, Silver Spring Rod Simmons, Emeritus, Maryland Native Plant Society Board of Directors Jeffrey Slavin, Mayor, Town of Somerset Ann Smith, Seneca Creek Lauren Smith, Seneca Creek Merikay Smith, Board member Muddy Branch Alliance, Seneca Creek Watershed Partners; leader, Earth Stewardship East Rob Smith, Rock Creek Woods, Silver Spring Walt Sonneville, Gaithersburg Nick Spencer, Rock Creek Woods, Silver Spring Marianne Starr, Potomac Sam Statland, Kensington Roberta G (rg) Steinman, Silver Spring Jil Swearingen, Invasive Species Biologist, In the Weeds Consulting Rhonda Teranto, Rock Creek Woods, Silver Spring

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- U.S. Congressman John Sarbanes, 3rd District
- U.S. Congressman David Trone, 6th District
- U.S. Congressman Jamie Raskin, 8th District

U.S. Senator Chris Van Hollen

U.S. Senator Ben Cardin

Michael S. Regan, EPA Administrator nominee, Environmental Protection Agency Jane Nishida, Acting Administrator, Environmental Protection Agency

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- (2) Pedersen ML, Kristensen KK, Friberg N (2014), "Re-Meandering of Lowland Streams: Will Disobeying the Laws of Geomorphology Have Ecological Consequences?" (PLoS ONE 9(9): e108558. doi:10.1371/journal.pone.0108558)
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February 28, 2021

Ms. Adriana Hochberg Assistant Chief Administrative Officer and Climate Change Coordinator Executive Office Building Rockville, MD 20850 (Adriana.Hochberg@montgomerycountymd.gov)

### SUBJECT: Comments on the Montgomery County draft Climate Action Plan (CAP)

Dear Ms. Hochberg:

The Montgomery Coalition to Prevent Stream Destruction provides the following comments (attached below) on specific sections of the Climate Action Plan (CAP) primarily relating to "stream restorations". There are admirable aspects of the CAP as noted below. Overall, however, we feel that the CAP does not provide enough explicit protection for stream valleys from 1) the ravages of more intense rain events driven by climate change and 2) the destructive practice of "stream restorations".

In addition, the CAP <u>directly contradicts</u> the current direction of the new MS4 Permit and the County's design/build "Clean Water Montgomery Program" RFP. While the CAP purports to having a goal of protecting existing forests, the MS4 Permit RFP would allow up to 50% of its credit to come from "stream restorations". The Department of Environmental Protection states, "To date, the County has completed stream restoration projects, restoring almost 30,000 linear feet of stream..." per the latest report on meeting the MS4 Permit. It is estimated that this has resulted in the destruction of almost 30 acres of forest, not including the loss due to access road construction (30,000 ft x average 40 ft width cleared along streams). The CAP should strictly prohibit the practice of "stream restorations" until the re-examination of this issue has taken place via a dialog among all stakeholders.

Thank you for consideration of our comments.

Sincerely,

#### **Organizations:**

West Montgomery County Citizens Association (WMCCA): Ken Bawer, President Cloverly Civic Association: Quentin Remein, President, Spencerville EcoPlant Consulting: Judy Fulton Friends of Ten Mile Creek and Little Seneca Reservoir: Anne James, President Glen Echo Heights Citizens' Association: Lisa Esquivel-Griffin, President Greater Shady Grove Civic Alliance: Carol Kosary, President Montgomery Countryside Alliance (MCA): Caroline Taylor, Executive Director West Laurel Civic Association: Barbara Sollner-Webb, President

#### Individuals<sup>8</sup>:

Edd Barrows, Bethesda

<sup>&</sup>lt;sup>8</sup> The views of individuals may not necessarily reflect those of their listed affiliations.

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Jennifer Nathanson, member of MNPS, volunteer with the Alice Ferguson Foundation; Silver Spring

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Martha Reeser, Rock Creek Woods, Silver Spring

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Ursula Scott, Rock Creek Woods, Silver Spring

Mariann Seriff, Rock Creek Woods, Silver Spring

Kayce Shibley, Rock Creek Woods, Silver Spring

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Rod Simmons, Emeritus, Maryland Native Plant Society Board of Directors

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Samuel Stavis, Rockville

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Mary Zack, Rockville

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## **ATTACHMENT: Comments by section**

**Note:** It would be helpful to have a section that specifically addressed "Protecting our Natural Resources from Effects of Climate Change."

- Carbon Sequestration Actions
  - S-1: Retain Forests (p. 140):
    - COMMENT: The county's current policy of allowing the destructive practice of "stream restoration", often to meet MS4 Permits, is diametrically opposed to the goal of protecting existing forests. "Stream restorations" reverse carbon sequestration by destroying thousands of trees.
    - COMMENT: The Department of Environmental Protection states, "To date, the County has completed stream restoration projects, restoring almost 30,000 linear feet of stream..." per the latest <u>report</u> on meeting the MS4 Permit. It is estimated that this has resulted in the destruction of almost 30 acres of forest, not including the loss due to access road construction (30,000 ft x 40 ft width cleared along streams).
  - S-3: Restore Forests, Meadows, and Wetlands Tree Canopy (p. 144)
    - COMMENT: Creating wetlands where none existed before would be a waste of taxpayer revenue. It is the height of human hubris to think that a new ecosystem should (and could) be created where none existed before.
  - o S-5: Restore Soil Fertility, Microbial Activity, and Moisture-Holding Capacity (p. 147)
    - COMMENT: "Stream restorations" defeat the stated goal since they may involve removing tons of stream bank soil along with all the microbes, plants, and animals residing on and in it.

## • Climate Adaptation Actions

- A-1: Water Infrastructure Resilience (p. 153)
  - COMMENT: WSSC sewer lines in stream valleys are under constant attack by upland (out of stream valley) stormwater runoff. Stormwater must be controlled at its source, upland in previously disturbed areas, to prevent in-steam infrastructure protection projects from being periodically blown out.
- A-2: Culvert Repairs (p. 154)
  - COMMENT: This section should include controlling stormwater at its source (out of stream valleys).
- A-3: Temperature Monitoring and Alerts (p. 155)
  - COMMENT: Since temperature is closely tied to air quality, this action should include air quality alerts.
- A-7: Green Streetscape
  - COMMENT: The current Green Streets program is critical for controlling stormwater before it enters streams. This program needs to be expanded as a way of eliminating "stream restoration" projects.
- A-10: Green Infrastructure
  - COMMENT: The existing RainScapes program should receive increased funding it ran out of funds in 2020. However, this is a voluntary program. The County code should be changed to require mandatory stormwater control on existing properties

to new-build standards at the time of property transfer. This mechanism would eliminate any financial burden to existing owners (e.g., for fixed income retirees).

- COMMENT: Re. MS4 Permit, improved water quality (TN, TP, SS) must not come at the expense of total ecosystem health. Currently the new design/build "Clean Water Montgomery Program" RFP will allow up to 50% of MS4 credits to come from "stream restorations". This is an environmentally destructive proposal as stated throughout our comments.
- COMMENT: This section talks about "preserving the quality of stream and river habitats." One good way to start would be to eliminate the use of "stream restorations" which do the exact opposite.
- A-13: Ban Stormwater Management Requirements Waivers
  - COMMENT: Totally support!
- A-15: Water Supply Protection
  - COMMENT: Totally support as long as protection measures do not include "stream restorations".
- A-17: On-Site Water Reuse
  - COMMENT: Totally support a code change to allow grey water use. This is especially important for septic system owners to help avoid hydraulic overloading of septic systems.
  - COMMENT: This action needs to include well-water users, not just WSSC water users.
- A-19: Advocacy for Off-River Water Storage
  - COMMENT: The County should also increase protection for the watersheds of the Little Seneca Lake which is one of our current emergency water sources.