Carroll County Water Resource Coordination Council

Hampstead * Manchester * Mt. Airy * New Windsor
Carroll County Health Department

* Sykesville * Taneytown * Union Bridge * Westminster
Carroll County Government

WRCC Meeting Summary

January 24, 2024

Attendees:

Municipalities:
☒Kevin Hann, Chair, Hampstead
☒Jim Wieprecht, Vice Chair, Taneytown
☐John Dick, Westminster
☐Gary Dye, New Windsor
☐Delbert Green, Manchester
☒Mayor Perry Jones, Union Bridge
☐Rodney Kuhns, Manchester
☒Alex Perricone, Manchester
☒Kevin Rubenstein, Sykesville
☐Kevin Smeak, Taneytown
☒Dick Swanson, Mount Airy

CC PLM:
☒Daphne Daly
☒Brenda Dinne
☒Glenn Edwards
☒Chris Heyn, Director
☒Claire Hirt
☐Byron Madigan
☐Kelly Martin
☒Denise Mathias
☐Zach Neal
☒Janet O'Meara
☐Pat Varga
☐Hannah Weber

Health Department:
☒Richard Brace

CCG Others:
☐Andy Watcher, CC DPW
☐Bryan Bokey, CC DPW
☐Lydia Rogers, CC M&B

Guest Speakers:
☒ Scott Lowe, MDTU
☒ Tom Giannaccini, MDTU
☒Greg Prieur, MDTU

1. **Opening Statement**

Chair – Kevin Hann

Mr. Hann opened the meeting at 2:30 PM. He noted he sat in on the interviews for the NPDES Compliance Specialist position and was happy that they found someone.

Vice Chair – Jim Wieprecht

Nothing additional.

2. **Approval of Meeting Summary – December 21, 2023**

Approval of the December meeting summary was discussed. No changes were made.

APPROVAL OF MINUTES: Motion was made by Mayor Perry Jones and seconded by Jim Wieprecht to approve the December 21, 2023, meeting summary. Motion carried.

3. **Trout Unlimited Trout Conservation Efforts – Scott Lowe**

- Mr. Lowe was accompanied by two other Trout Unlimited colleagues – Tom Giannaccini and Greg Prieur.
- Mr. Lowe shared Trout Unlimited's goals for and purpose of brook trout conservation. He discussed key facts about Maryland brook trout, the needs/requirements of this native species, and their current status in Upper Gunpowder River watershed.
- He reviewed some of Trout Unlimited's current programs and projects and Trout Unlimited partners, including temperature loggers and Trout in the Classroom.

*Reference/**Attachment**:*
- *PowerPoint: Maryland Chapter Trout Unlimited Brook Trout Conservation Effort*

4. Water Resources Element (WRE 2024) Update – Brenda Dinne
- Task 1.2: Automation of Portions of Buildable Land Inventory Model: Hazen anticipates completion of the add-on of details in technical memo soon.
- Task 2: Groundwater Allocability: Task completed.
- Task 3: Emerging Contaminants: Task completed.
- Task 4: MDE TIPP Spreadsheet Comparison: There were issues with the TIPP spreadsheets. Staff will meet with Hazen on February 5 to discuss the issues.
- Task 5: Climate Change Impacts: Task completed.
- Task 6: Update 2010 WRE Supporting Documents: Technical team staff completed a review of the five updated documents. The comments will be sent to Hazen this week. Ms. Dinne requested that the municipalities review their individual wastewater sections to be sure they are accurate once a clean, revised copy has been received from Hazen.

Reference/Attachment:
- *N/A*

5. Municipal Stormwater Projects Update – Janet O'Meara
- Ms. O'Meara provided an update on the municipal stormwater restoration projects.
- Ms. O'Meara shared that they are working on scheduling a date to look at possible projects that aren't currently on the list of planned projects.

*Reference/**Attachment:***
- *Municipal Project Status, January 2024*

6. PFAS Discussion
- Ms. Dinne shared information from Mr. Dye that New Windsor's wells have tested below the proposed limit.
- Hampstead approved two engineering contracts to start engineering and design for construction projects. The Town will use local funds for the design work, and EPA/MDE funding for the construction.
- Mount Airy recently sent to an outreach piece to homeowners to share measures can take.

*Reference/Attachment**:***
- *N/A*

7. Other
- February WRCC Meeting: The next meeting will be held on February 28, 2024. Byron Madigan will be the guest speaker on the topic of stream temperature evaluation data.
- Legislative Update: Ms. Dinne reviewed proposed bills related to water resources or environment in which the municipalities may be interested. She provided a table listing the bills, a link to the bill on the Maryland General Assembly website, and current status.
- Stormwater Tour: Ms. Dinne shared that staff will be working with Maryland Department of the Environment (MDE) to gage their interest in and identify a date to provide MDE with a tour of some of Carroll's surface sand filter facilities.
- EAC Water Conservation Public Outreach: The Environmental Advisory Council will be working on a public outreach piece to provide residents with water conservation measures. Even when the county is not in a drought situation, the municipalities encourage conservation to preserve capacity. Ms. Dinne will request information from the municipalities regarding their voluntary and mandatory restrictions and what the triggers are.

- New Planning & Land Management Deputy Director: Mr. Heyn introduced Daphne Daly, the new Deputy Director.
- NPDES Compliance Specialist: Ms. Hirt shared that Mitch Masser has been hired to fill the NPDES Compliance Specialist position. He starts February 15. After he starts, staff will coordinate with the municipalities to meet the municipal staff and get oriented to their offices and facilities.
- 12 SWS/20SW Facilities: Mr. Edwards will be sending out a reminder about snow melt samples.

*Reference/**Attachment:***

- *WRCC Legislative Update: 2024 General Assembly Proposed Water/Environmental Resource Legislation, January 24, 2024*

8. Adjournment

The meeting adjourned at 3:46 PM.

MEETING ADJOURNMENT: Motion was made by Alex Perricone and seconded by Dick Swanson to adjourn the January 24, 2024, meeting. Motion carried.

Upcoming Meetings:

☐ *Regular Monthly Meeting – Wednesday, February 28, 2024*

Maryland Chapter Trout Unlimited Brook Trout Conservation Effort

Photo by Matt Kline

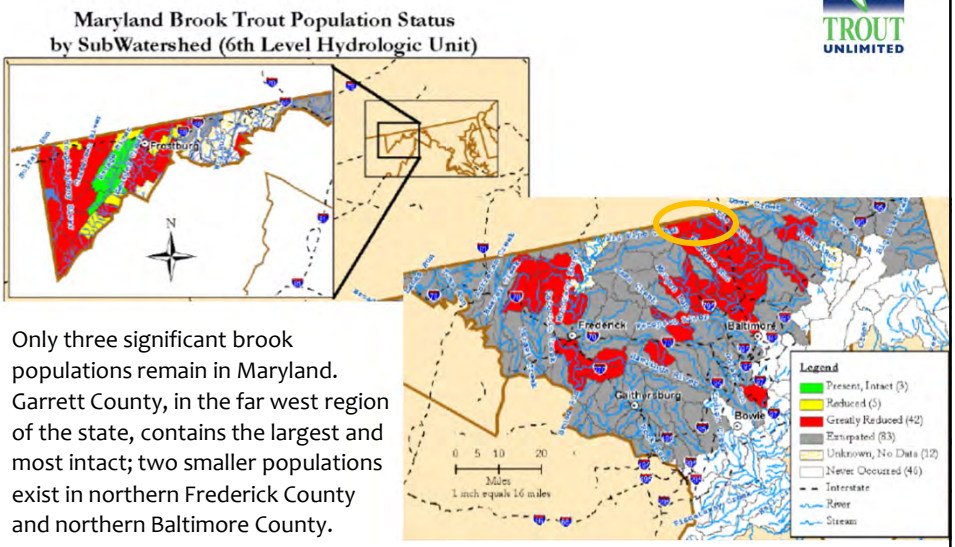
January 2024

MDTU Brook Trout Conservation Co-Coordinator:
Scott Lowe, CC-P
scott@flyfishmend.com

Tom Giannaccini - MDTU Trout In The Classroom Coordinator
Greg Prieur – MDTU TIC Carroll County Coordinator

1

Maryland Brook Trout Population Status



Only three significant brook populations remain in Maryland. Garrett County, in the far west region of the state, contains the largest and most intact; two smaller populations exist in northern Frederick County and northern Baltimore County.

Source: 2006 Maryland Brook Trout Fisheries Management Plan

Upper Gunpowder Falls Watershed Brook Trout Conservation Partnership

2

Key Facts on Maryland Brook Trout

- Maryland's only native freshwater trout species.
- Maryland Department of Natural Resources has listed brook trout as a 'Species of Greatest Need of Conservation' in its federally-mandated Wildlife Diversity Conservation Plan.
- An important indicator species, brook trout require relatively pristine habitat conditions. Survival typically requires water temperatures below 68 degrees F. (cold water), clean water, bugs – macroinvertebrates.
- Human impacts such as deforestation, agricultural land use, and urbanization have resulted in the extirpation of brook trout from 62% of their historic habitat.
- Maryland's Gunpowder basin supports the second-highest number of brook trout in the state, holding 25.2% of the total Maryland population.

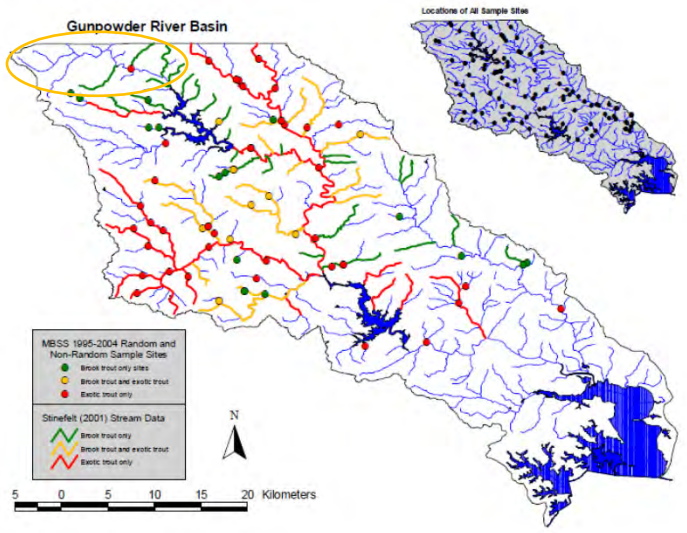
3

Key Environmental Requirements

- Ideal temperature is below 68°F
- Adults can't survive over 77°F, but reproduction slows over 70°F
- Watersheds should have at least 68% forest cover
- Brook trout need less than 4% *impervious surfaces* in watershed
- 80% of stream must be forested – for 1.6 miles

4

Gunpowder River Basin Brook Trout Populations

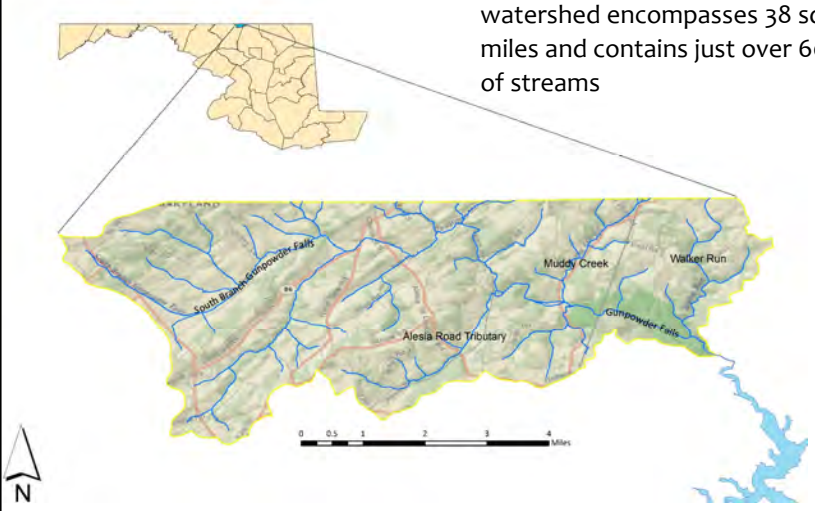


Source: 2006 Maryland Brook Trout Fisheries Management Plan

5

Upper Gunpowder Falls Watershed

The Upper Gunpowder Falls watershed encompasses 38 square miles and contains just over 60 miles of streams



6

Prettyboy Reservoir Watershed

2.4 Goal 2: Restore and Maintain Aquatic Biodiversity
Goal Statement: ***Maintain existing aquatic biodiversity and recreational fishing opportunities in the Prettyboy Reservoir Watershed, while exploring opportunities to expand and restore them in currently unsuitable areas.***

Portions of the Prettyboy Reservoir watershed support populations of brook trout, a watch list species; and generally have good aquatic diversity. Yet three of the five 12-digit watersheds are listed as being biologically impaired. The objectives are related to maintenance and enhancement of the existing aquatic biodiversity and the restoration of aquatic biodiversity in areas where it is impaired. This goal specifically focuses on brook trout habitat and the maintenance and expansion of brook trout populations.

The brook trout is referenced 86 times in this 108 page document !

Source: Prettyboy Reservoir Watershed Restoration Action Strategy

7

Habitat Challenges

- Poor agricultural, forest, and land use practices degrade water quality parameters throughout the Chesapeake Bay watershed, including negative impacts on native brook trout habitat, frequently located in the fragile headwaters of watershed systems.
- Intensive land development and lack of forest cover results in widespread increases in stream temperatures, reducing viable fish habitat.
- Development increases the amount of impervious surface, (pavement) producing runoff that leads to increased sedimentation. Among other negative ecosystem impacts, sediment compromises fish spawning habitat.

8

Brook Trout Conservation Partnership Mission

A group of volunteers, organizations, and governmental agencies, the Partnership works collaboratively to improve water quality and stream habitat, helping to conserve and restore brook trout populations in the Upper Gunpowder Watershed.

Founded Fall of 2014

9

Brook Trout Conservation Partners

Partners

- Maryland Chapter Trout Unlimited
- Maryland Dept. of Natural Resources Inland Fisheries Mgt. Division
- U.S. Fish and Wildlife Service – Chesapeake Bay Workgroup
- Maryland DNR Biological Stream Survey
- Baltimore County
- Carroll County
- Eastern Brook Trout Joint Venture
- Prettyboy Watershed Association
- Gunpowder Valley Conservancy
- Alliance for the Chesapeake Bay
- Maryland Dept. of Natural Resources Forest Service
- U.S. Forest Service
- U.S. Geological Survey – Leetown Science Center
- Potomac Valley Chapter Trout Unlimited

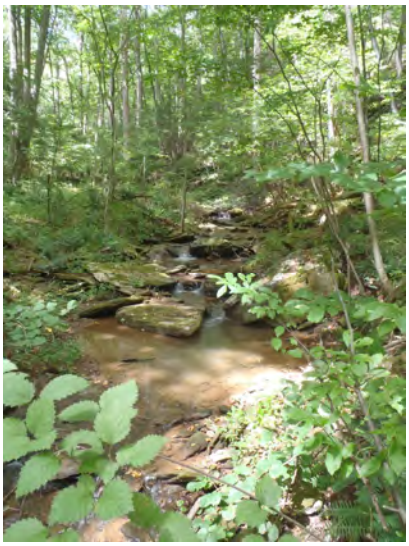
10

Brook Trout Conservation Partnership Objectives

- Ensure the protection and conservation of Maryland's remaining high-quality habitat that supports brook trout populations.
- Return marginal stream habitat to a condition which will support the conservation and where feasible restoration of healthy historic brook trout ranges.
- Educate and engage landowners, emphasizing the importance and value of preserving the limited number of habitats in Maryland that support brook trout populations.
- Help landowners realize the full economic benefit of their property through best practices in conservation, forestry, and land management.
- Collaborate with private and public landowners to implement scientifically proven storm water management techniques that improve water quality in the Chesapeake Bay watershed.
- Connect private landowners with grant opportunities to improve land management practices.
- Promote land use and conservation strategies that respect land use rights while ensuring the protection of our water resources, habitat, and native flora and fauna.

11

Typical Stream Physiography



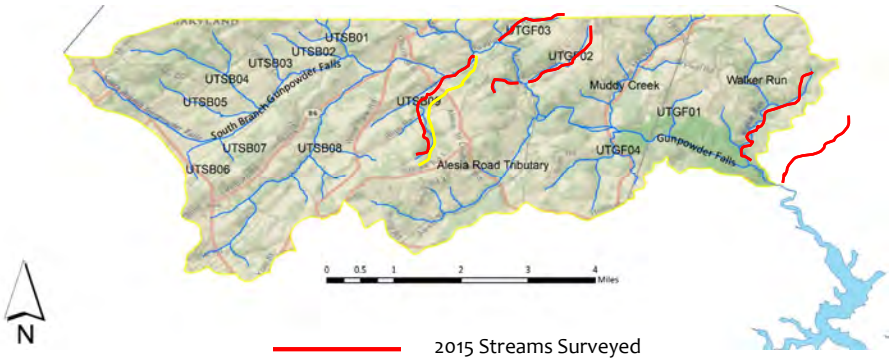
12

Fall 2015 Stream Survey

Upper Gunpowder Falls Watershed Brook Trout Conservation Partnership

13

Fall 2015 Stream Survey



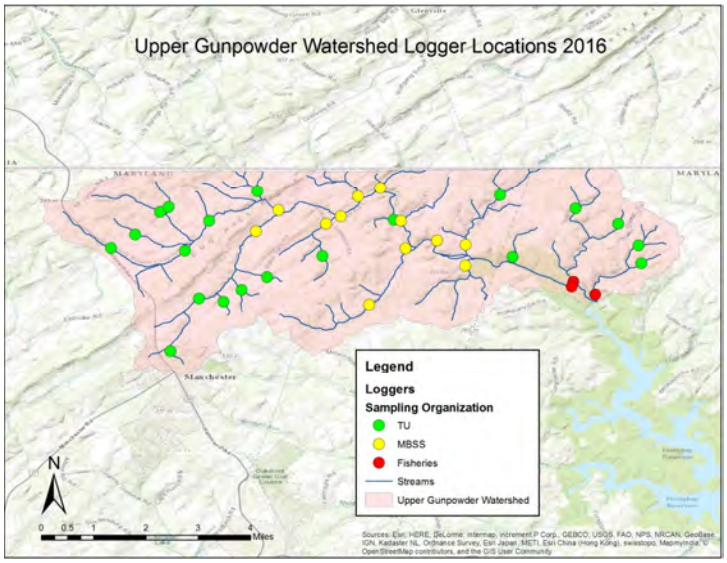
Upper Gunpowder Falls Watershed Brook Trout Conservation Partnership

14

Temperature Logger Deployment

15

Temperature Logger Deployment - Continues



16

Culverts (Road-Stream Crossings)

- Culverts that do not allow for fish passage can isolate populations, which increases the likelihood of *extirpation*
- Fish can not move upstream to spawn or find cooler water

Good passage

Isolated upstream population

17

Road-Stream Crossing Assessments

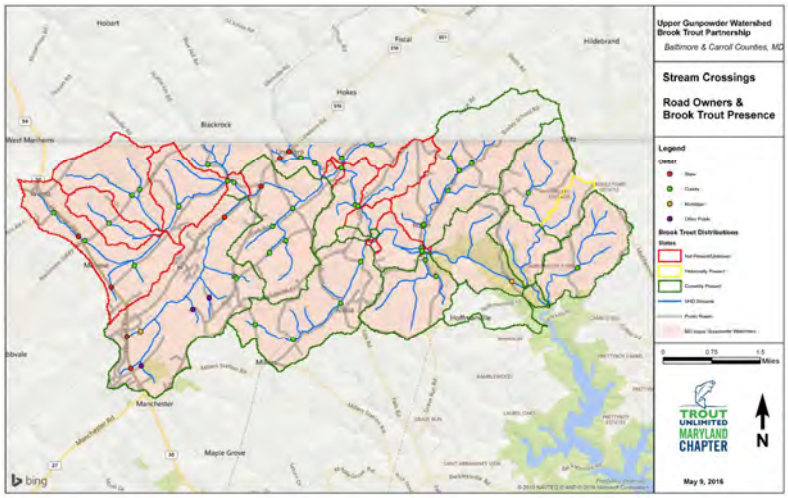
North Atlantic Aquatic Connectivity Collaborative

Julie Devers, Kari Bradberry & Chris Reily
USFWS, Maryland Fish and Wildlife Conservation Office

- Inlet/Outlet dimensions
- Total length
- Inlet/outlet drop
- Substrate/water depth and width
- Crossing Condition
- Bankfull width
- Structures and barriers
- At least 50 descriptors and measurements collected per crossing…

18

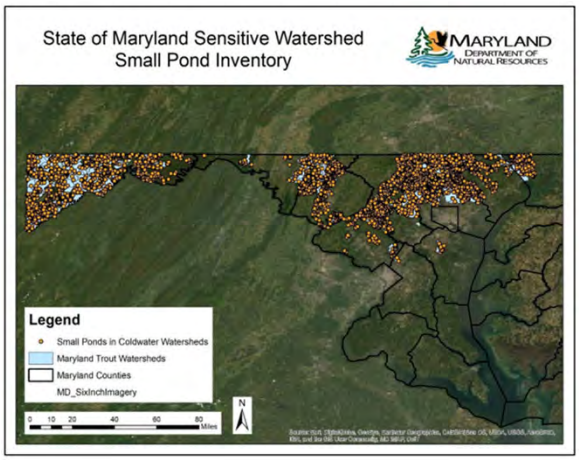
County and State Road Culvert Locations



19

MDNR Sensitive Watershed Assessment

Impacts of Small Ponds on Coldwater Fisheries

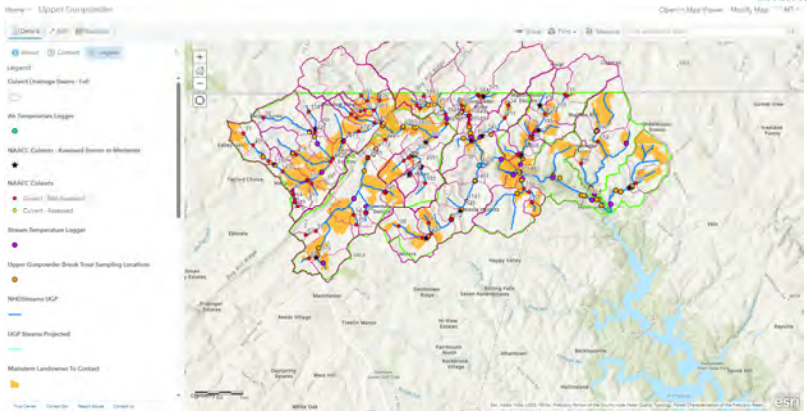


- 30 Ponds per HUC 12 Watershed in Central Maryland (17 in Western Maryland)
- Results indicate the addition of an individual pond corresponds to a **0.3◦ C** increase in average daily stream mean temperature

Eval_Thermal_Impact_SmallPonds_Trout_Watersheds.pdf (maryland.gov)

20

Web Map For Rapid Analysis



- https://mtgis.maps.arcgis.com/home/webmap/viewer.html?webmap=d0ea20b4ab26421098a6c8c9387bc036

21

We Support Thoughtful Stream Restoration – River Valley Ranch Restoration Project

Biohabitats

- 8,022 linear feet of stream restoration
- 9,476 sq.ft. of new wetlands
- 22.2-acres of new stream & floodplain easements
- Minimum of 25-ft protect riparian buffer along the project length
- Addition of stabilized livestock crossings/watering areas
- Stream buffer fencing along all pasture areas
- Significant in-stream habitat features (large woody debris & riffle glides w/ spawning gravels)

22

Trout In The Classroom

23

Trout In The Classroom – Carroll County

- Bear Branch Nature Center
- Century High School
- Elmer Wolfe Elementary
- Gerstell Academy
- Litton Springs Elementary
- Manchester Elementary
- Manchester Valley HS
- Northwest Middle School
- South Carroll High School
- Winfield Elementary

24

Next Steps

- Continue to connect with partner organizations or agencies who have overlapping interests.
- Distribute brochure.
- Working with Gunpowder Valley Conservancy (GVC) to ID Tree Planting Sites with Willing Landowners
- Willing to Assist with Aquatic Barrier Removal Projects
- Searching for Small Ponds to Convert
- Identify possible grant sources to support project needs.
- Facebook page for public communication

25

Maryland Chapter Trout Unlimited Brook Trout Conservation Effort

Photo by Matt Kline

January 2024

Thank You!

26

MUNICIPAL STORMWATER PROJECT STATUS

January 24, 2024

FUTURE PROJECTS:

Michael's Property (Hampstead) – Project is on hold until Town has obtained approval from property owners to move forward.

Meadow Ridge Basin 2 (Westminster) – Retrofit of existing facility to provide water quality through a surface sand filter. This site is adjacent to the pump station at the edge of the City limits.

Hampstead Valley 2/3 (Hampstead) – Hampstead Valley facilities 2 and 3 will be retrofit as a stream restoration project to decommission Sycamore Drive as a roadway embankment. The design will include a stream restoration beginning immediately downstream of the proposed Hampstead Valley 1 facility and continue to Sycamore Drive.

CONCEPT DESIGN:

Hampstead Valley 1 (Hampstead) – Retrofit of existing detention basin to a surface sand filter. Site is located just south of Lower Beckleysville Road near a production well. CLSI submitted a revised concept plan for review on December 7th, the plan is being reviewed.

Manchester East (Manchester) – CLSI is working on the concept design of a new stormwater facility north of Manchester Valley High School, adjacent to the pump station. We sat down to discuss this project with CLSI recently and anticipate a concept plan being submitted in early February.

New Windsor Wetland (New Windsor) - A new wetland facility is proposed adjacent to the Maryland Midland Railroad tracks and Dickenson Run. The proposed improvements include removing the existing inlet adjacent to the intersection of Water St and Church St, replacing it with a diversion structure that will route the 1-year storm discharges to the proposed wetland facility. We are working through the design with the engineer for a structure to balance the facility on both sides of the sewer main. Comments have been provided to the engineer.

Public Safety Training Center (Westminster Well)- A retrofit for the Public Safety Training Center pond is in progress for the facility design and PFAS remediation. WRA is finalizing the concept

plan for the surface sand filter. Soil borings were completed, and test results were provided by Zach with some general guidance provided by Tetra Tech. We will continue to work with Building Construction to coordinate design efforts for erosion and sediment control.

PRELIMINARY DESIGN:

Hampstead Valley 4 (Hampstead) – A new surface sand filter and stream restoration project is proposed between Century Street and Downhill Trail. Culverts at Downhill Trail require realignment into the HOA parcel for dam breach approval. RFP for geotechnical borings is drafted, and will be going to the County geotechnical term contractors to get these completed. The soil boring RFP is drafted and will be sent out to the County's term geotechnical contractors. Anticipate geotechnical selection in early February.

Roberts Field Wet Facility (Hampstead) – Retrofit of wet pond to new hybrid wet pond/submerged gravel wetland. The recent concept submittal was approved with comments from the Town and Stormwater Management. Wallace Montgomery & Associates (WMA) is working on the preliminary plans. A revised grading plan was provided this month to be submitted with the grant application to DNR Grants Gateway. We anticipate resubmission of the preliminary plan in late January. Geotechnical proposals are due January 19th, we will review and move forward with awarding.

FINAL DESIGN:

CONSTRUCTION:

PLANNING PROJECTS:

Little Pipe Creek Restoration Opportunities – The County has been working with CWP on this task over the last year. CWP has developed a spreadsheet to prioritize projects and has identified five potential projects. Final documents were received and are bring reviewed by County staff.

TREE PLANTING PROJECTS:

All the municipal plantings have completed their maintenance period and are now the responsibility of the municipalities. Please make sure that these areas are being mowed at least three (3) times per season.