



# Gunpowder Watershed Forum



**GUNPOWDER  
VALLEY**  
CONSERVANCY

Hosted by the Gunpowder Valley Conservancy

June 15, 2022

## Facilitation and Report



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## Event Overview

The forum brought together organizations within the Gunpowder watershed who are working to meet the Chesapeake Bay and local TMDLs, or who are interested in getting involved in this work, to discuss our progress together over the past 5 years, identify priorities for the next five years, and brainstorm how to expand outcomes for clean water while preparing our communities to mitigate the effects of global climate change on the Gunpowder watershed. The keynote presentation, Integrating Climate Change Into Water Quality Efforts, was given by Jenn Aiosa on the topic of the intersections between our work for clean water and climate change to frame our discussions. The event introduced participants to the upcoming SWAP revisions being undertaken by Baltimore County EPS and set the stage for upcoming engagement.

## Event Goals

GVC and partners are seeking participation from individual watershed stewards, representatives from Clear Creeks Project partners, community leadership, government agency staff, and other partner organizations. Participants are expected to include staff from county and state agencies, Baltimore City staff, staff, board members, and volunteers from the Gunpowder Valley Conservancy and other nonprofits and community groups, unaffiliated residents and property owners interested in learning more about the issue.

Overall, the goal of this event is to support clean water in the Gunpowder watershed. GVC and partners hope to accomplish this goal by supporting a wide range of efforts to work with property owners, faith-based organizations, community associations, renters, and others to enable them to implement BMPs for stormwater management and improve water quality within the Gunpowder watershed.

## Key questions

The event seeks to promote discussion around these key questions:

- How can participants in the Clear Creeks Project, GVC supporters, and other partners more effectively engage residents, businesses and institutions in the Gunpowder

watershed to take action to protect and improve water quality in rural and urban areas?

- How can individual stewards, stewardship organizations, and others participate in a renewed Baltimore County watershed planning process and help make the County plans into effective tools to protect clean water in the Gunpowder watershed?
- How can organizations and individuals working for clean water in the area establish shared priorities, collaborate, share resources, and share knowledge to work to protect clean water in the Gunpowder watershed?

## Objectives

- Connect individual stewards and stewardship organizations in the Gunpowder watershed with one another and share informational and financial resources
- Solicit and collect feedback from event participants on planning - and action committee - geography/scale for public participation in watershed plan revisions and implementation process.
- Identify short and long-term priorities for promoting clean water in the Gunpowder watershed Identify opportunities for collaboration and capacity building that could support expanded outcomes
- Build awareness about the effects of global warming and climate change, and their impacts on clean water in the Gunpowder Valley watershed

## Participants

95 registered, 68 in attendance

## Participating Organizations

Baltimore City Department  
of Public Works  
Baltimore County  
Commission on  
Environmental Quality  
Baltimore County  
Department of  
Environmental Protection  
and Sustainability  
Baltimore County  
Department of Planning  
Baltimore County Game &  
Fish Protective Association  
Baltimore County Land  
Trust Alliance

Baltimore County Master  
Gardeners  
Baltimore Metropolitan  
Council  
Baltimore County Soil  
Conservation District  
Carroll County  
Government  
Cromwell Station HOA  
Delegate Michele Guyton's  
Office  
Environmental Quality  
Resources  
Faith Lutheran Church  
Flies in Disguise

Forever Maryland  
Greater Baltimore  
Wilderness Coalition  
Green Towson Alliance  
Gunpowder Valley  
Conservancy  
Harford Land Trust  
Holly Neck Conservation  
Association  
Interfaith Partners for the  
Chesapeake  
Jennifer Branch  
Conservation Association  
of the GVC

Joppa Development  
Heritage Corp  
Live Green Landscape  
Associates, LLC  
Maryland Chapter Trout  
Unlimited  
Maryland Department of  
the Environment  
Maryland Department of  
Natural Resources –  
Forest Service  
Maryland Waterways  
Foundation

Miramar Landing HOA  
NeighborSpace of  
Baltimore County  
PASA Sustainable  
Agriculture  
Patapsco Heritage  
Greenway  
Ridgeview Farm  
Saint Demetrios Greek  
Orthodox Church  
Science River, LLC  
Towson University

University of Maryland  
Extension  
United States Dept of  
Agriculture/Natural  
Resources Conservation  
Services  
USGS Water Mission Area  
The Valleys Planning  
Council  
Wetland Studies and  
Solutions, Inc.  
WSP  
York County Planning

## Program

Welcome

Future of Watershed Planning in Baltimore County

Rob Hirsch, Erin Watts, Wesley Schmidt

Baltimore County Department of Environmental Protection and Sustainability

Workshop # 1: Gunpowder Watershed in 2050

Dinner

Gunpowder Watershed Lightning Rounds

Susan Bath, Jennifer Branch Conservation Assoc. of the GVC

Barbara Hopkins, NeighborSpace of Baltimore County

Scott Scarfone, Maryland Chapter Trout Unlimited

Sara Tomlinson, Baltimore Metropolitan Council

Ashley Traut, Greater Baltimore Wilderness Coalition

Keynote: Integrating Climate Change Into Water Quality Efforts

Jenn Aiosa, Chief Sustainability Officer, Baltimore County Government

Workshop # 2: Making Plans and Taking Action for Clean Water

Closing Remarks

# Workshop # 1: Gunpowder Watershed in 2050

Participants self-selected their groups based on the nine most popular interest topics recorded at registration: Climate Change and Clean Water Considerations, Agricultural BMPs, Reforestation, Landowner Restoration Projects, Increasing Project Implementation Funding, Stormwater BMPs, City-County Cooperation for Clean Water, Increasing Stakeholder Diversity, Land Preservation. Each small group worked collaboratively to complete a worksheet focused on a shared vision for a healthy Gunpowder Watershed and what it will take to get there.

## Shared Vision: The Gunpowder in 2050

Teams articulated a vision for a Gunpowder Watershed where

### **People feel secure with their water**

It is a place for safe swimming, fishing, and boating. The drinking water is safe. Recreation is used as a way to engage the public and increase investment in watershed health.

### **People feel welcome and connected**

Amenities along the Gunpowder, from trails to recreation opportunities, feel inclusive to a wide range of people. People feel connected to the Gunpowder and engage in community clean ups and other stewardship efforts.

### **The watershed is restored and regenerated**

Invasive species are under control, there is an increase in aquatic life, and a diversity of native species thriving. Native landscaping and robust riparian buffers reduce water temperature and increase habitat for native species. Reforestation efforts contribute to watershed health. Runoff and sediment are controlled.

### **Communication & Adoption**

Landowners understand and adopt practices to improve the health of the Gunpowder, (including runoff management, erosion control), improve agricultural practices (including use of technology, cover crops, and forestry). Messaging is clear, consistent, and makes a connection between a healthy Gunpowder and healthy families.

### **Collaboration**

City and County agencies work together with local groups. They communicate smoothly and effectively across many platforms. Reporting is easy and interconnected and data is shared widely. Local agencies are able to subsidize BMPs and monitor existing riparian buffers.

### **Land Use and Land Access**

Land is zoned to protect the health of the watershed and development is managed with environmental stewardship in mind, including smart growth principles in all new projects.

## Key Successes

- **Increased participation and coordination/collaboration between government municipalities, nonprofits, Cohesive partnerships across jurisdictional boundaries, shared priorities**
- Incentivized green energy and greener transportation options including electric car charging stations, increased public transit, and walkable neighborhoods
- Messaging and education focused on establishing connections with nature and communicating the value of nature. This occurred at an individual and community scale and led to public engagement and public buy-in.
- Better laws were better enforced
- Increased and innovative financing; integrated funding streams from private & government sources

## Biggest Threats

- **Shifting public perception and changing behavior**
- Legacy and tradition, including development current practices
- Complex governmental structures and processes
- Lack of coordination and collaboration across jurisdictions, between organizations, government agencies, and with neighbors
- Funding

## Roles

Individual Stewards have the power to advocate for and support change and to be responsible stewards of their individual property.

Stewardship Organizations are sources of education and information dissemination, the mechanisms for building participation and engaging community, training people stewards

Government Agencies are in a position to coordinate cooperation, share information and data, incentivize and evaluate best practices, fund work, and educate young people on the need for clean and healthy watersheds.

Other groups: private businesses, private foundations, landowners, HOAs and Civic Associations.

Collaboration was identified as a key contributor to success. Closely connected to the idea of working together was communicating well within groups, between groups, and with the broader public.

## Workshop # 2: Making Plans and Taking Action for Clean Water

Participants self-selected their groups based on geographic typologies- Rural Agricultural, Suburbanizing, Developed Urban and Tidal Coastal. Each small group worked collaboratively to prioritize water uses and threats. Individuals also mapped their geographic areas of work (on maps attached in raw data) and outlined their organization's successful actions and barriers to completing their work.

### Part 1. Group Prioritization

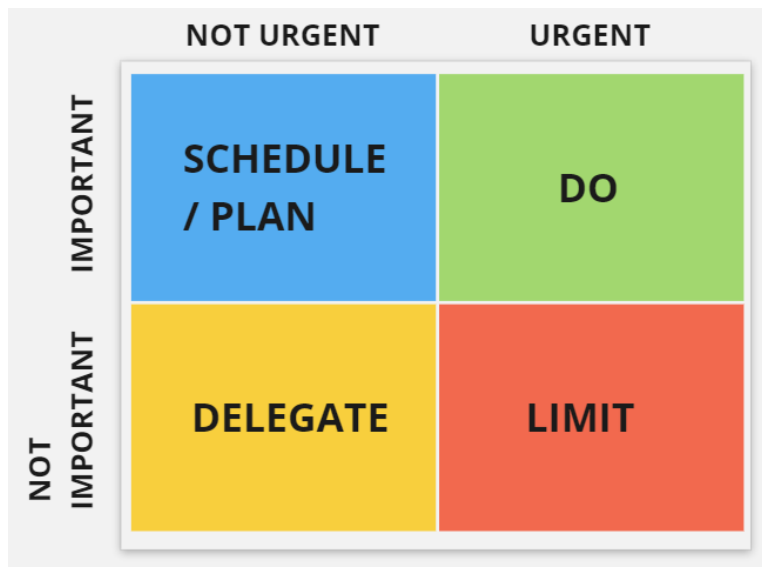
Group	Most important Use	Least important use	Most important threat	Least Important Threat
Tidal Coastal	Public water supply	Capable of supporting put and take trout fishery	Other Toxics	Natural areas converted to agriculture
Developed Urban 1	Industrial water supply	Water contact sports / leisure activities	Severe storms	Litter/dumping
Developed Urban 2	Public water supply	Industrial water supply	Natural areas converted to urban land	Natural areas converted to agriculture
Rural Agricultural Areas 1	Public water supply	Industrial water supply	Natural areas converted to agriculture ; sediment	Litter/dumping ; PCBs
Rural Agricultural Areas 2	Public water supply	Propagation and harvesting of shellfish	Sediment	Litter/dumping
Suburban 1	Public water supply	Water contact sports / leisure activities (w/ dissent!)	Toxins ; Litter / dumping	Severe storms ; Not enough buffer (note on causality)
Suburban 2	Public water supply	Water contact sports / leisure activities	PFAS	Invasive species

*Note: discussion of the connection between PFAs and PCBs was lively*

## INTERPRETING THE RESULTS

In addition to reporting out each group's most and least important threats and uses, it is important to dive deeper into the data.

An Eisenhower matrix is the framework being used to assess the rankings undertaken by participants (see diagram below).



DO - these items are most pressing and should be prioritized  
 SCHEDULE / PLAN - these items can be scheduled ahead, as they are less urgent but still important  
 DELEGATE - who has the expertise / experience / capacity to take on these tasks?  
 LIMIT - these items can be distractions and take away capacity from other work

### Eisenhower Matrix

It will be important to define what the “Delegate” and “Limit” areas mean for the Gunpowder Valley Conservancy, the participants and steering committee, and Baltimore County EPS. Attached to this report are group matrixes. Below is a summary of the overlaps we see in different quadrants as well as contested or outlying threats and uses. Each quadrant was given a multiplier (1=Limit, 2=Delegate, 3=Plan, 4=Do). The number of occurrences of each use / threat were tracked and the multiplier applied to give each use/threat a “score.” Scores for each quadrant were calculated by the maximum # of occurrences x multiplier(0-7=Limit, 8-14=Delegate, 15-21=Plan, 22-28=Do). \* For future analysis, this could be made more granular, but at a high level it shows where priorities lie.

USES	DO	PLAN	DELEGATE	LIMIT	SCORE
Public Water Supply	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	27
Agricultural Water Supply	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20
Industrial Water Supply	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18.5
Migratory fish spawning + nursery use/ Submerged aquatic vegetation/ Open water fish + shellfish	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	22.5



Water contact sports/ Leisure activities involving direct contact with surface water	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13
Capable of supporting put and take trout fishery	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12
Growth and propagation of fish, aquatic life & wildlife	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	23.5
Capable of supporting put and take trout fishery	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	12.5
Propagation and harvesting of shellfish	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16.5
Growth and propagation of self-sustaining trout	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17.5

<b>THREATS</b>	DO	PLAN	DELEGATE	LIMIT	SCORE
Sediment	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24
Nutrients	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	25
Bacteria*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4
PCBs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	22
Other Toxics	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17
Thermal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15.5
Road Salt	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17
Sulfates	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15.5
PFAs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16
Litter / dumping	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15
Severe Storms	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16
Invasive Species	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16
Not enough buffer	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	18
Natural areas converted to urban	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20.5

land					
natural areas converted to agriculture	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17
agriculture converted to urban land	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	21.5

*\*note: facilitators made an error and overlooked this threat on the handout*

## Part 2. Individual/Organizational

Note: Maps attached to this document.

### Time-tested Successful Actions

#### A. DEMONSTRATING & EDUCATING

- Clean-ups and restoration work
- Data collection (water quality testing) and citizen science
- Educating via events, sharing website resources, encouraging better practices for homeowners- recycling, composting, harvesting rainwater, emails, personal consultations, social media
- Implementation: BMPs, tree plantings, recycling programs, rain gardens, micro retention, invasive species control, demonstration projects
- Trainings and workshops
- Hosting events and celebrations
- Speaking at forums, trade shows
- Site visits and consultations

#### B. POLICY AND STANDARDS

- Legislative action
- Set standards and requirements including LEED certification, certifications of private property (Baywise)

#### C. COMMUNITY ENGAGEMENT

- Persistence
- Being in relationship with communities, understanding their needs
- Direct outreach via mailers and postcards and phone calls
- Engage community leaders directly, Support public action
- Engage face to face, socially and build personal connections and relationships

#### D. PARTNERSHIP

- Coordination with and between agencies, other organizations, and the public

- Collaboration and Partnerships, making connections between groups working similarly
- Organizational capacity building through website resources and technology

## Barriers

### A. DEMONSTRATING & EDUCATING

- Lack of public awareness and commitment to large-scale action,
- Need to educate more people about stewardship leading to lack of support or interest
- People feel separated from the watershed and the bay
- Personal attitudes and biases & entrenched beliefs (lawns, etc)

### B. COMMUNITY ENGAGEMENT

- Lack of representation in organizations reaching out to and working with people of color
- Engaged population skews older
- Language barriers
- Need time to build momentum back after covid

### C. ORGANIZATIONAL CAPACITY

- Lack of resources, including funding and volunteers and advocates
- Speed of the work (things happen slowly)
- Technology challenges

### D. PARTNERSHIP

- Lack of willingness to cross or broaden boundaries
- Government Structures and political will
- Lack of coordinated priorities, efforts, and message
- Developers lack of willingness to incorporate optional environmentally friendly elements / strategies

## Attachments

GVC Watershed Forum Data

Maps

Uses and Threats