APPENDIX H: OUTREACH TOOLKIT

This appendix contains all outreach materials developed and used throughout the BGI project. Please note that some items are printed in large format (A0 and A1 sizes).

1. **Informational Materials:**
    a. BGI Project Fact Sheet
    b. BGI Digital Booklet
    c. BGI Project Types Booklet

2. **Outreach Materials:**
    a. Watershed Workshop Series 1 Flyer
    b. Watershed Workshop Series 2 Flyers
        a. General Flyer
        b. Arundel Canal Flyer
        c. Oxon Run Flyer
        d. Watts Branch Flyer
    c. Watershed Workshop Series 3 Flyer
    d. Regional Open House Flyer

3. **BGI Watershed Communities_reference list_Map**

<u>Other deliverables in the Appendix H folder:</u>

4. **BGI Prioritization Game** (Print files for Game Board and Tiles)

5. **Presentation Boards:**
    a. BGI Project Types (A1)
    b. BGI Strategies (A1)

6. **Outreach Large format Maps:**
    c. RGBI Study Area (A0)
    d. Arundel Canal (A0)
    e. Oxon Run (A0)
    f. Watts Branch (A0)

7. **Engagement Photos Folder**
8. **Stakeholder list Excel file**

1. Informational Materials:

1.a.

BGI Project Fact Sheet

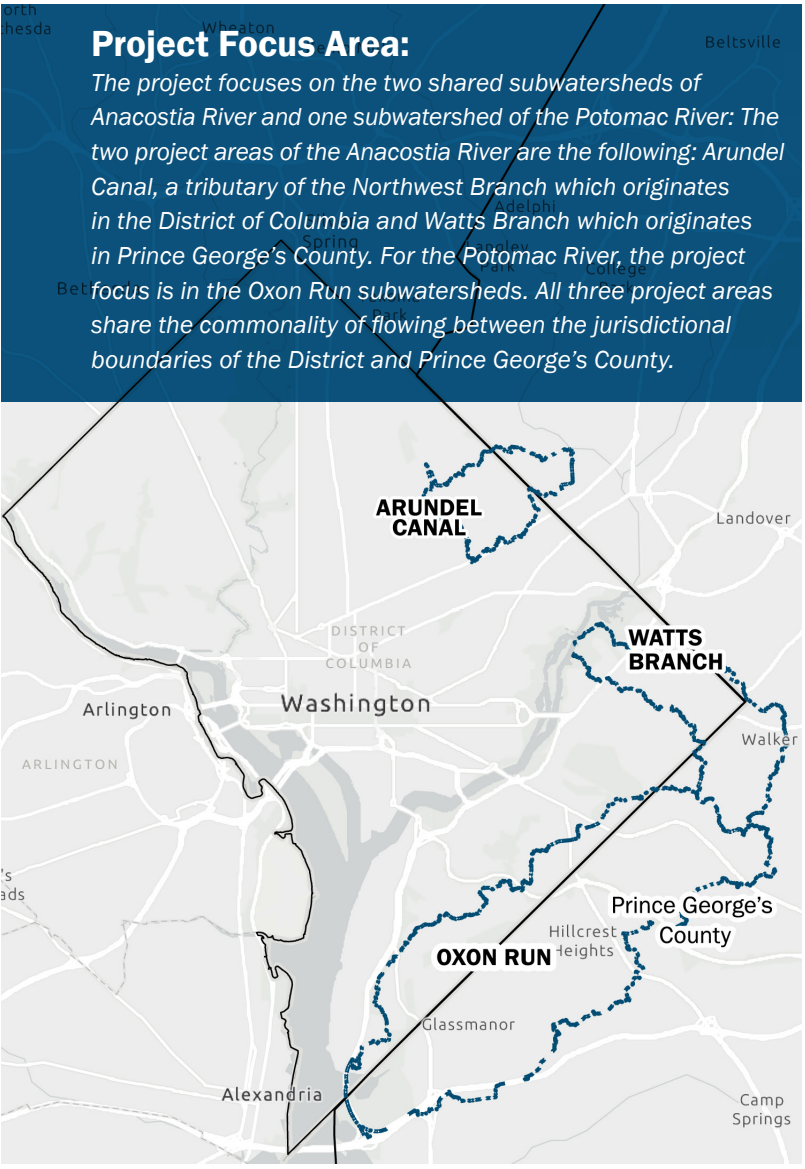
Regional Blue-Green Infrastructure Project Overview

Overview

The Metropolitan Washington Council of Governments (COG) is working with the District of Columbia and Prince George's County on a project to address flood concerns across jurisdictional boundaries. This **Regional Blue-Green Infrastructure Community Engagement and Planning Project** looks to increase resilience in three subwatersheds that span between the District of Columbia and Prince George's County—**Watts Branch** and **Arundel Canal (part of the Northwest Branch)** of the Anacostia River, and **Oxon Run which is part of the Potomac River watershed**. This **collaborative project** will prioritize areas vulnerable to flooding and other social, economic, and environmental stresses. The project takes a regional approach to strengthen community resilience by designing blue-green infrastructure (BGI) based on a watershed-wide holistic assessment to deliver improved flood resilience and environmental sustainability for residents of both jurisdictions. Through community engagement and flood analyses, the project will identify potential BGI projects and establish partnerships to seek funding for future implementation. This community engagement and planning project will be completed in June 2025.

Project Focus Area:

The project focuses on the two shared subwatersheds of Anacostia River and one subwatershed of the Potomac River: The two project areas of the Anacostia River are the following: Arundel Canal, a tributary of the Northwest Branch which originates in the District of Columbia and Watts Branch which originates in Prince George's County. For the Potomac River, the project focus is in the Oxon Run subwatersheds. All three project areas share the commonality of flowing between the jurisdictional boundaries of the District and Prince George's County.



Metropolitan Washington Council of Governments

Goals and Objectives

The planning study will identify potential BGI projects intended to reduce flood risk, improve water quality, reduce stormwater volume, add to recreational spaces, and promote environmental sustainability. The planning study will also create partnerships for implementation of proposed projects in collaboration with the District and Prince George's County.

The BGI Project Aims To

- **Reduce Flooding**
  Identify strategies that improve flood resilience and protect communities and critical infrastructure.
- **Foster Collaboration**
  Engage residents, community-based organizations (CBOs), and local municipalities to gather input, shape strategies, and encourage participation in environmental solutions.
- **Enhance Community Co-Benefits**
  Develop project concepts with social, environmental, and economic benefits for residents including green space, air and water quality improvement, and recreational opportunities.

Call to Action

We invite you to participate in our upcoming workshops and engagement opportunities. **Help spread the word in your communities**! These workshops will:

- Share information about ongoing and upcoming flood resilience projects
- Provide educational resources on flood preparedness and BGI solutions
- Offer community members a chance to share their experiences and shape future strategies
- Highlight collaboration opportunities between local municipalities, community organizations, and residents

Blue-Green Infrastructure

"Blue-Green Infrastructure" (BGI) combines nature-based solutions for storm and floodwater management. Blue elements like ponds and rivers handle water above ground, while green infrastructure uses plants to reduce runoff. Gray infrastructure—like drains, pipes, and storage basins—supports both systems to prevent flooding.

Common BGI Strategies

The following are examples of standard BGI practices and strategies. These definitions are intentionally inclusive. BGI projects use multiple strategies in tandem across the watershed to maximize benefits.

List of Common BGI Strategies

- Multi-Purpose Floodable Recreational Spaces
- Stream, Wetland, and Floodplain Restoration
- Stream Daylighting
- Pond Retrofits
- Stormwater Reuse and Stormwater Storage
- Storm Drain Outfall Retrofits
- Bridge and Culvert Modifications
- Impervious Reductions
- Green Stormwater Infrastructure (GSI)
- Blue-Green Streets
- Tree Plantings

Key Partners

The project is a collaboration between COG, the District, and Prince George's County. The project is funded through a $1.4M grant received from the District of Columbia's Homeland Security and Emergency Management Agency through the Federal Emergency and Management Agency's Regional Catastrophic Preparedness Grant Program. Consultant support is provided by ICF, Straughan Environmental Inc., and CHPlanning.

Lansburgh Park Floodable Play Lawn Visualization (Top: Dry Condition / Bottom: Wet Conditions)

Source: DOEE and Ramboll/Moody Graham Southwest and Buzzard Point Flood Resilience Strategy

Delaware Avenue Pilot Project (BRIDGE OVER BIORETENTION)

Source: DOEE and Ramboll/Moody Graham Southwest and Buzzard Point Flood Resilience Strategy

CONTACT INFORMATION

EMAIL: BGI@MWCOG.ORG

FIND OUT MORE ABOUT THE PROJECT AND WORKSHOPS

WWW.MWCOG.ORG/BGI

1.b.

BGI Digital Booklet

Metropolitan Washington
Council of Governments

FLOOD RESILIENCE, ACTION, AND PREPAREDNESS

A Community Guide to Blue-Green Infrastructure

Explore this guide made for your community! Discover how Blue-Green Infrastructure (BGI) can reduce flooding risks, enhance resilience, and create greener, more sustainable neighborhoods.

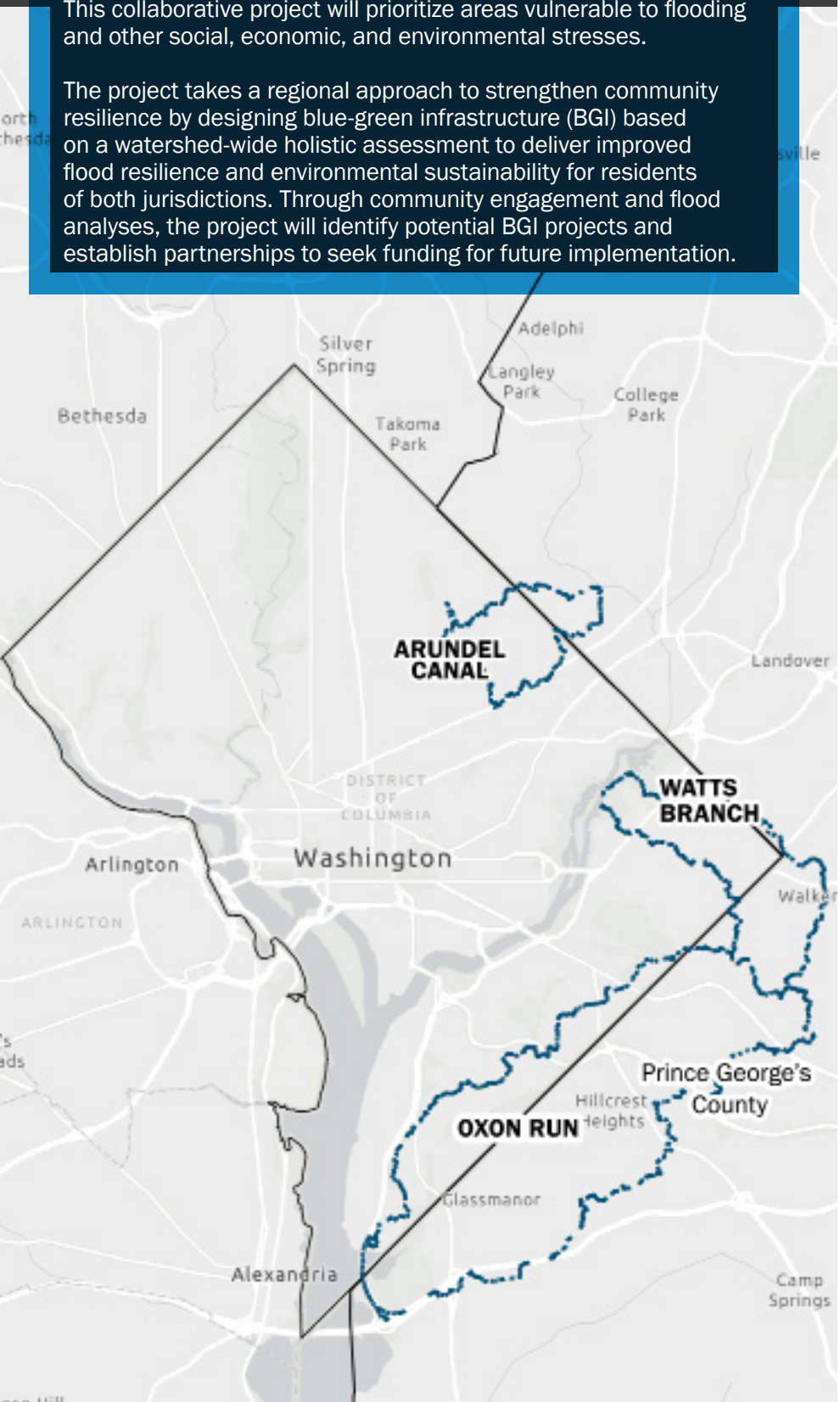
MWCOG.ORG/BGI

2024–25

WHAT IS THE REGIONAL BLUE-GREEN INFRASTRUCTURE (BGI) PROJECT?

The Metropolitan Washington Council of Governments (COG), with funding from the Homeland Security and Emergency Management Agency (HSEMA), is working with the District of Columbia and Prince George's County on a project to address flood concerns across jurisdictional boundaries. This Regional Blue-Green Infrastructure Community Engagement and Planning Project looks to increase resilience in three subwatersheds that span between the District of Columbia and Prince George's County—**Watts Branch** and **Arundel Canal** (part of the Northwest Branch) of the Anacostia River, and **Oxon Run** which is part of the Potomac River watershed. This collaborative project will prioritize areas vulnerable to flooding and other social, economic, and environmental stresses.

The project takes a regional approach to strengthen community resilience by designing blue-green infrastructure (BGI) based on a watershed-wide holistic assessment to deliver improved flood resilience and environmental sustainability for residents of both jurisdictions. Through community engagement and flood analyses, the project will identify potential BGI projects and establish partnerships to seek funding for future implementation.



How to use this Booklet

This booklet is a practical guide for individuals, community groups, and residents. Together, we can build a resilient future where our neighborhoods thrive alongside nature. Here's how you can get the most out of it:

Learn
Start by reading through the Blue and Green Infrastructure (BGI) sections to understand what BGI is, and how BGI can benefit your community.

Explore
See real-life examples of BGI projects that have been successful in local communities.

Prepare
Participate in local workshops and community meetings to learn more about BGI solutions and share your own ideas.

Engage
Implement the strategies and tips provided in your own home and community to help mitigate flooding and improve resilience.

Act
Take action by adopting the suggested strategies in your neighborhood and supporting BGI initiatives to enhance flood preparedness.

Flooding, the problem

Flooding is one of the most common climate hazards Washington, D.C. and Prince George's County faces. Increases in extreme weather events, precipitation, and rising sea levels have shown that the consequences of flooding are far-reaching. Floods can strike suddenly, leaving little time for preparation, and their aftermath can be catastrophic, affecting homes, businesses, and human health. As the frequency and severity of flooding increases, so too does the urgency to understand its causes, impacts, and steps to mitigate the damage.

Flooding in urban areas like DC and Prince George's County isn't just water—it's a rising challenge that demands **resilient solutions**.

Types and Causes:

Flooding can occur for various reasons, including heavy rainfall, river overflow, coastal storms, and storm drain failures. Common types of flooding include riverine, coastal, and urban inland flooding.

Impact on Communities:

Flooding can devastate communities, causing property damage, displacement, health risks, and economic loss. It also disrupts essential services and infrastructure.

Introduction & Overview

Welcome to the Community Guide to Blue-Green Infrastructure. This booklet aims to equip you with the knowledge and tools necessary to understand and implement Blue-Green Infrastructure (BGI) solutions in your community. BGI represents nature-based solutions that blend natural and engineered systems, integrating water and green elements into our environments. By doing so, we can create safer, greener, and more resilient spaces that mitigate flood risks and enhance urban living.

Purpose and Goals

The primary purpose of this booklet is to raise awareness about the benefits and applications of Blue-Green Infrastructure. Our goals are to:

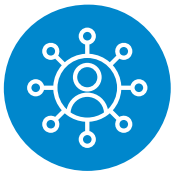
EDUCATE

Educate community members on the significance of BGI in managing stormwater and reducing flood impacts.

INFORM

Provide practical examples that showcase successful BGI projects.

PARTICIPATE

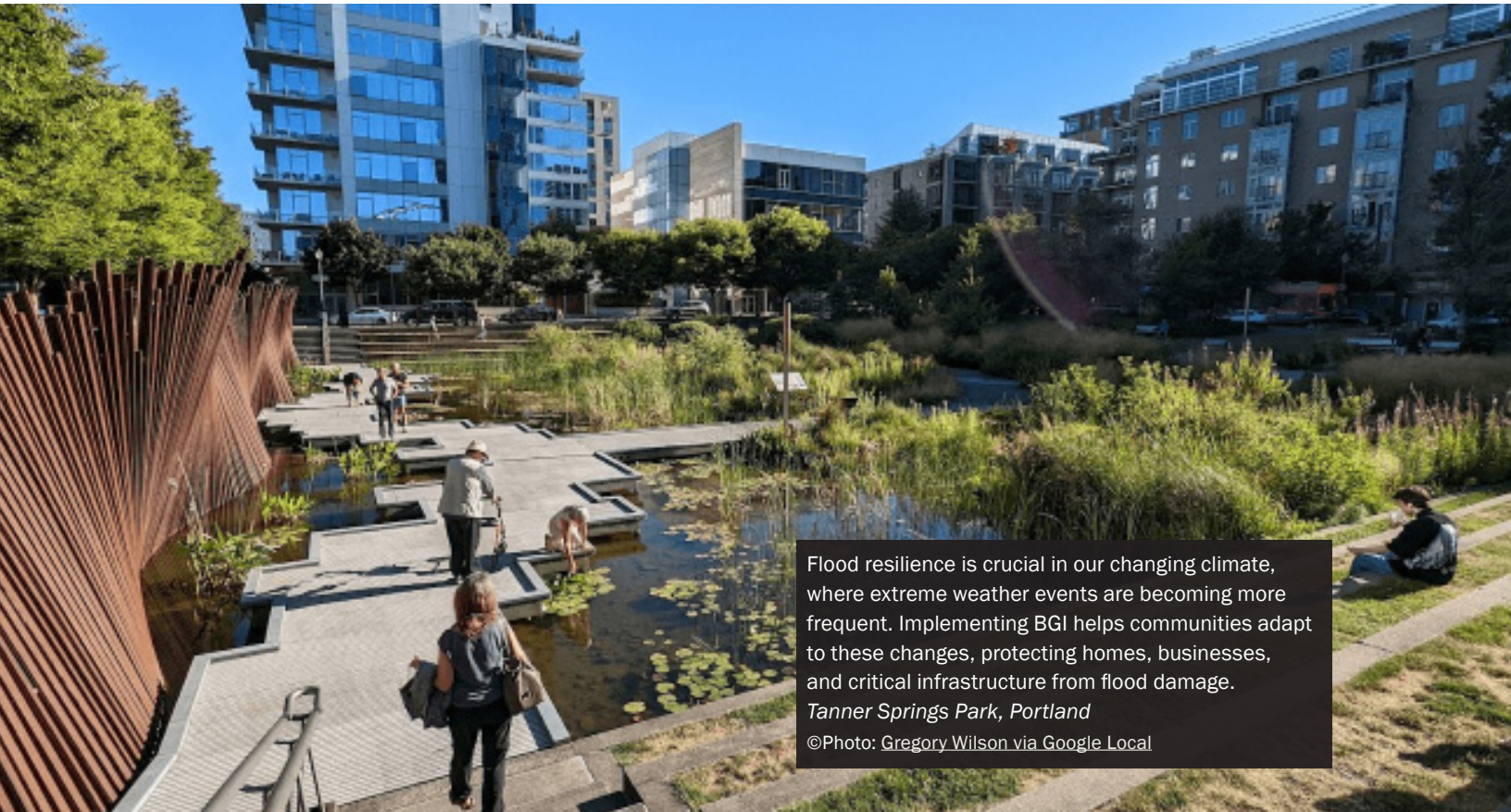


Strengthen community involvement in adopting and promoting BGI practices.

Importance of Blue-Green Infrastructure in Enhancing Flood Resilience & Community Co-benefits

Blue-Green Infrastructure (BGI) integrates natural landscapes and innovative engineering to manage water sustainably. It includes solutions like green roofs, rain gardens, wetlands, and multi-functional public amenities like floodable parks, playgrounds, public plazas, permeable hard surfaces such as sidewalks and parking areas. These and other types of BGI solutions provide co-benefits to the community like:

- Reducing flood risks by absorbing and slowing down stormwater runoff
- Improving air and water quality by filtering pollutants
- Enhancing urban biodiversity for vegetated and aquatic habitats
- Increasing community assets by expanding green spaces for both active and passive recreation
- Mitigating urban heat island effects, making cities more livable by reducing the risk of extreme heat
- Capturing rainwater for reuse as water features, to power heat pumps, or for floating solar farm



Flood resilience is crucial in our changing climate, where extreme weather events are becoming more frequent. Implementing BGI helps communities adapt to these changes, protecting homes, businesses, and critical infrastructure from flood damage.
Tanner Springs Park, Portland

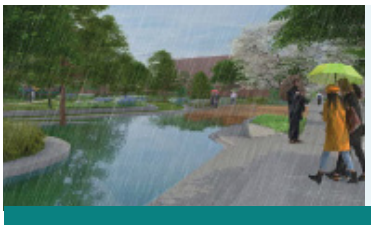
Blue-Green Infrastructure

"Blue-Green Infrastructure" (BGI) combines nature-based solutions for storm and floodwater management. Blue elements like ponds and rivers handle water above ground, while green infrastructure uses plants to reduce runoff. Gray infrastructure—like drains, pipes, and storage basins—supports both systems to prevent flooding.

Common BGI Strategies

The following are examples of standard BGI practices and strategies. These definitions are intentionally inclusive. BGI projects use multiple strategies in tandem across the watershed to maximize benefits.

WATER MANAGEMENT & RESILIENCE (WMR)



Multi-Purpose Floodable Recreational Spaces

Floodable public spaces, like parks, plazas, and athletic fields can store and release floodwater during extreme events, while serving as community areas when dry. Athletic fields, for example, can improve drainage for regular use and provide overflow storage during floods, reducing downstream risks. © Photo: Lansburgh Park Floodable Play Lawn Render, DOEE & Ramboll/ Moody Graham

Pond Retrofits

Stormwater ponds store and treat stormwater runoff. Existing facilities can often be modified to improve performance, function, and beauty. Depending on location and preference, ponds can take many forms, including dry, wet, and wetland ponds.
© Photo: Straughan Environmental, Inc.

Storm Drain Outfall Retrofits

In urban areas, stormwater exits drainage systems at "outfalls," which flow into ditches or streams near property boundaries. These outfalls are ideal for stormwater storage before reaching floodplains. Projects could include ponds, step-pool systems, or LID practices to slow and store runoff. © Photo: Straughan Environmental, Inc.

Bridge and Culvert Modifications

Bridges and culverts create "pinch-points" in floodplains, increasing flood risks. Many were built before watersheds expanded and may now be undersized. Modifying them can improve flood timing, storage, and flow. © Photo: Straughan Environmental, Inc.

Stormwater Reuse and Storage

Stormwater reuse and storage involve capturing and storing rainwater runoff for uses like irrigation, cooling, and replenishing groundwater. This method reduces strain on stormwater systems, mitigates flooding, and conserves water resources through techniques like rainwater harvesting, and retention basins. © Photo: Straughan Environmental, Inc.

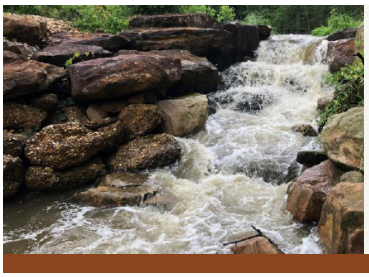
NATURAL SYSTEMS & ECOLOGICAL RESTORATION

Tree Planting

Trees serve an important role in flood management. Their branches and leaves intercept and hold rain, allowing it to evaporate. Their roots absorb water and reduce erosion during storms. In forested areas, decomposing leaves generate high-quality soils that absorb water. Tree planting impacts communities on small and large scales, such as street trees or establishing new forests. © Photo: Straughan Environmental, Inc.

Stream, Wetland, and Floodplain Restoration

Water runoff concentrates in valleys and streams, increasing the flood risk in low-lying areas near rivers, known as the "floodplain." In developed regions, infrastructure often lies within floodplains. Reconfiguring floodplains improves water storage and flow, typically involving resilient, native landscaping like wetlands and forests. © Photo: Straughan Environmental, Inc.



Stream Daylighting

Gray infrastructure systems are often limited by the capacity of underground pipes, causing upstream flooding. Stream Daylighting refers to restoring underground pipe networks to the surface as "blue" drainage amenities or streams. The daylighting of surface streams in floodable areas increases the drainage network's capacity to store and convey water.
© Photo: Stream and Habitat Restoration (DOEE)

URBAN GREEN INFRASTRUCTURE & SUSTAINABLE DESIGN

Impervious Reduction

Impervious surfaces, such as roads, sidewalks, and parking lots, allow minimal water absorption, leading to more runoff and flooding. During rain, pollutants, trash, and waste on these surfaces often end up in water bodies. Replacing impervious surfaces with vegetation and underground storage reduces runoff. © Photo: City of Portland,OR

Green Stormwater Infrastructure (GSI)

GSI uses nature-based methods to store and treat stormwater close to where it falls. Examples include rain gardens, green roofs, bioswales, and permeable pavement. It's also called Low Impact Development (LID) or Best Management Practice (BMP).
© Photo: Straughan Environmental, Inc.

Blue-Green Streets

Green Streets divert stormwater from streets and parking lots into GSI practices, like bioretention areas and permeable pavement, to control floods and support native plants. Roads can also be redesigned to convey and detain larger amounts of water.
© Photo: District Department of Transportation

Flood Preparedness for Residents/Community

Non-Structural Solutions

Non-structural solutions complement structural measures, offering a cost-effective and immediate way to manage flood risk. These solutions don't require major construction, they can be quickly implemented, providing benefits while long-term structural projects are developed. BGI projects to address flooding in your area are still in the planning phase and will need additional funding and time to install. This makes your personal preparedness for flooding essential to staying safe and reducing risk. Simple planning and preparedness measures can help lower flood risks without major construction and preparedness measures. This section provides key resources and contacts. A more complete list of options is available on the FEMA website, along with local resources from the District and Prince George's County.

Sandbags

Sandbags create temporary barriers that block or divert water, reducing the risk of water entering your home during heavy rain or flood events.

Flood Insurance

Protect your property against flood damage. Check if you qualify for flood insurance through your insurance provider or the National Flood Insurance Program (NFIP).

Flood Warnings

Stay informed with systems that alert your community about potential flooding, giving you time to prepare and evacuate if necessary.

Evacuation Plans

Ensure you have pre-arranged plans for safe evacuation during a flood. Know your routes and gather essential supplies in advance.

Emergency Kits

Prepare an emergency kit with essential items like water, non-perishable food, medications, flashlights, batteries, and important documents in case you need to evacuate quickly.

Insurance & Personal Preparedness Checklist(s)

Insurance Checklist

Flood insurance helps mitigate damages to your property and assets from flood-related incidents, which are often not covered by standard homeowners' insurance policies.

VERIFY COVERAGE

- Confirm if your property is covered by flood insurance (not included in standard homeowner policies

EXPLORE FLOOD INSURANCE OPTIONS

- Contact the National Flood Insurance Program (NFIP) or your local insurance agent.
- Visit: FloodSmart.gov for details

UNDERSTAND COVERAGE

- Covers structural damage and personal property loss.Prepare for Claims

PREPARE FOR CLAIMS

- Keep a list of valuables and document any flood damage.

Personal Preparedness

BUILD AN EMERGENCY KIT

- Pack water, non-perishable food, medications, flashlights, and batteries.
- Store important documents in waterproof bags.

PRACTICE YOUR EVACUATION PLAN

- Identify safe routes and practice with your family.
- Keep emergency contact numbers accessible.

STAY INFORMED

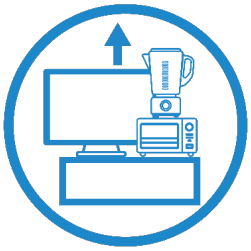
- Sign up for local alerts about flooding and severe weather.
  - » Sign Up: AlertDC Registration
  - » Sign Up: Alert Prince George's Registration

Home Preparation Tips

Prepare your home for potential flooding with these low-cost strategies, such as installing flood barriers or shields, keeping gutters clean of debris, using sandbags, elevating electrical appliances, and sealing cracks in foundations—all effective ways to minimize damage without breaking the bank.

Install flood barriers or shields.

Keep gutters and drains clear and install backflow preventers



Elevate electrical appliances and utilities in flood-prone areas of the home.

Agencies & Support Resources

Federal Agency/Service

UNDERSTANDING FLOOD RISK AND PREPARING FOR FLOODS
READY.GOV - FLOODS

FLOOD RISK MAPS AND ZONES
FEMA FLOOD MAP SERVICE CENTER
CUSTOMER CARE: +1 (877) 336-2627

FEMA DISASTER ASSISTANCE (APPLY FOR AID POST-FLOODING)
DISASTER ASSISTANCE - FEMA
HELPLINE: +1 (800) 621-3362
INQUIRIES: ASKIA@FEMA.DHS.GOV

NATIONAL FLOOD INSURANCE PROGRAM (NFIP)
EMAIL: FEMA-FMIX@FEMA.DHS.GOV
PHONE: +1 (877) 336-2627
NFIP (FEMA)

Maryland/Prince George's County

FLOOD PREPAREDNESS & ALERTS
MD READY - FLOOD PREPAREDNESS & ALERTS

FLOOD RISK MAPS
MARYLAND FLOOD RISK MAPS (MDEM)

EMERGENCY MANAGEMENT
MARYLAND DEPARTMENT OF EMERGENCY MANAGEMENT (MDEM)
EMAIL: MJOC.MDEM@MARYLAND.GOV
GENERAL: +1 (410) 517-3600
TOLL-FREE: +1 (877) 636-2872

LOCAL FLOOD INFORMATION
PRINCE GEORGE'S COUNTY DEPARTMENT OF THE ENVIRONMENT (DOE)
EMAIL: DOECARES@CO.PG.MD.US
+1 (301) 883-5810

FLOOD MANAGEMENT AND OUTREACH
FLOOD MANAGEMENT & SUSTAINABILITY
PUBLIC OUTREACH: +1 (301) 883-6211

FLOOD INSURANCE (NFIP FOR MARYLAND RESIDENTS)
MARYLAND FLOOD INSURANCE INFORMATION

EMERGENCY RESPONSE
FLOOD RESPONSE SERVICES
FOR OUTSIDE OR INSIDE FLOOD EMERGENCY, DIAL 911

FOR NON-EMERGENCY INSIDE FLOODING,
HELPLINE: +1 (301) 325-1200 OR
REPORT HERE: ON-LINE NON-EMERGENCY DISPATCH REPORTING | PRINCE GEORGE'S COUNTY

District of Columbia (DC) Agency/Service

FLOOD PREPAREDNESS & EMERGENCY ALERTS
READY DC - FLOOD PREPAREDNESS

FLOOD RISK MAPS
DC FLOOD RISK MAP

DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY AND ENVIRONMENT (DOEE)
FLOOD RISK MANAGEMENT
EMAIL: FLOOD.RISK@DC.GOV

FLOOD INSURANCE INFO FOR DC RESIDENTS NFIP:
FLOOD INSURANCE AND COVERAGE - DOEE

DISTRICT DEPARTMENT OF INSURANCE, SECURITIES AND BANKING (DISB):
DISB WEBSITE
FLOOD COMPLAINTS: FLOODCOMPLAINTS@DC.GOV
LICENSED AGENTS: +1 (202) 727-8000
INSURANCE TIPS: +1 (202) 442-7828

DRAINAGE & WATER MANAGEMENT
REPORT A PROBLEM - DC WATER
STORM DRAIN CLEANING: +1 (202) 612-3400
GENERAL ASSISTANCE FOR FLOODING: CALL 311

Key Partners

The project is a collaboration between COG, the District, and Prince George's County. The project is funded through a $1.4M grant received from the District of Columbia's Homeland Security and Emergency Management Agency through the Federal Emergency and Management Agency's Regional Catastrophic Preparedness Grant Program. Consultant support is provided by ICF, Straughan Environmental Inc., and CHPlanning.

Metropolitan Washington
Council of Governments

777 North Capitol Street NE, Suite 300
Washington, DC 20002

mwcog.org

FIND OUT MORE ABOUT THE PROJECT AND WORKSHOPS

WWW.MWCOG.ORG/BGI

EMAIL: BGI@MWCOG.ORG

1.c.

BGI Project Types Booklet

Metropolitan Washington
Council of Governments

BGI PROJECT TYPES - CO-BENEFITS & RELATIVE FEASIBILITY

WWW.MWCOG.ORG/BGI

March 2025

BGI Project Types

PROJECT TYPE

Definition and purpose of the project type.

	LOW	MED	HIGH
TIMELINE	●	●	●
COST	●	●	●
FOOTPRINT	●	●	●
HAZARD REDUCTION	●	●	●

Note: Project details refer to one installment of the solution.

Co-Benefits

This box details the major co-benefits associated with each resilience solution. Each solution is targeted at addressing a specific hazard (i.e., flooding, heat, or extreme storms). But these solutions also can lead to good outcomes beyond the specific climate hazard it targets. These additional good outcomes are known as co-benefits.

For example, planting trees can help prevent flooding. Their roots reach deep into the soil and make it easier for water to absorb more quickly into the ground. But trees also purify the air, and this benefits the health of the whole community. Therefore, we say that public health is a co-benefit of tree planting.

Relative Project Details

The dark blue box to the left provides a quick, high-level guide to understanding the relative level of effort (low, medium, or high) required for each of these resilience solutions.

- TIMELINE: The relative time it may take to implement this solution.
- COST: The relative cost of implementing of this solution.
- FOOTPRINT: The relative amount of space the solution takes up.
- HAZARD REDUCTION: How effective the solution might be at addressing the climate hazard of interest, relative to the other solution types.

The specific values associated with each of these metrics (actual cost, timeline, etc.) will be project, circumstance, and community dependent.

TREE PLANTING

Trees serve an important role in flood management. Their branches and leaves intercept and hold rain, allowing it to evaporate. Their roots absorb water and reduce erosion during storms. In forested areas, decomposing leaves generate high-quality soils that absorb water. Tree planting impacts communities on small and large scales, such as street trees or establishing new forests.

	LOW	MED	HIGH
TIMELINE	○	●	●
COST	○	●	●
FOOTPRINT	○	●	●
HAZARD REDUCTION	○	○	●

Note: Project details refer to one installment of the solution.

Flood Mitigation

Reduce runoff rates by capturing some rainfall in tree canopy, which slows down rain as it falls to the surface, and by providing green space where water can infiltrate.

Social Equity

Provide shade to reduce extreme heat, the financial burden of cooling homes, and the potential health risks associated with heat waves.

Public Health

Provide air quality benefits and shade to reduce health risks associated with extreme heat (i.e., cardiovascular and respiratory illness).

Sustainable Development

Encourage growth that balances economic, social and environmental well-being for existing and new residents.

BGI Project Types

IMPERVIOUS REDUCTION

Impervious surfaces, such as roads, sidewalks, and parking lots, allow minimal water absorption, leading to more runoff and flooding. During rain, pollutants, trash, and waste on these surfaces often end up in water bodies. Replacing impervious surfaces with vegetation and underground storage reduces runoff.

	LOW	MED	HIGH
TIMELINE	●	○	○
COST	●	○	○
FOOTPRINT	●	○	○
HAZARD REDUCTION	●	●	○

Note: Project details refer to one installment of the solution.

Flood Mitigation
Reduce urban flooding by providing a porous surface for water to infiltrate, strategically placed in low-lying areas where runoff accumulates.

Sustainable Development
Encourage growth that balances economic, social, and environmental well-being for existing and new residents.

Public Health
Decrease concrete surfaces that absorb and retain heat, reducing extreme temperatures in urban heat islands.

Soil Stabilization
Reduce peak runoff rate to preserve the local landscape and minimize soil accumulation that clogs stormwater infrastructure.

STORMWATER REUSE & STORAGE

Stormwater reuse and storage involve capturing and storing rainwater runoff for uses like irrigation, cooling, and replenishing groundwater. This method reduces strain on stormwater systems, mitigates flooding, and conserves water resources through techniques like rainwater harvesting, and retention basins.

	LOW	MED	HIGH
TIMELINE	●	○	○
COST	●	○	○
FOOTPRINT	●	○	○
HAZARD REDUCTION	●	○	○

Note: Project details refer to one installment of the solution.

Flood Mitigation
Reduce runoff rates or temporarily store stormwater during very heavy rainfall periods. This water slowly drains to prevent flooding.

Water Quality
Filter pollutants and sediment from stormwater runoff. This improves water quality, benefiting the ecosystem and community as a whole.

Public Health
Improve water quality to reduce exposure to pollutants and support public health as a result. Retention basins also can beautify community spaces which can benefit residents' mental health.

Biodiversity
Enhance water quality and provide habitats that support a wide array of native plant and animal species.

BGI Project Types

GREEN STORMWATER INFRASTRUCTURE

GSI uses nature-based methods to store and treat stormwater close to where it falls. Examples include rain gardens, green roofs, bioswales, and permeable pavement. It's also called Low Impact Development (LID) or Best Management Practice (BMP).

	LOW	MED	HIGH
TIMELINE	○	●	●
COST	○	●	●
FOOTPRINT	○	●	●
HAZARD REDUCTION	○	●	●

Note: Project details refer to one installment of the solution.

Flood Mitigation
Reduce urban flooding by providing a porous surface for water to infiltrate, strategically placed in low-lying areas where runoff accumulates.

Sustainable Development
Encourage growth that balances economic, social, and environmental well-being for existing and new residents.

Public Health
Improve water quality to reduce exposure to pollutants and support public health as a result. Green infrastructure also can beautify community spaces which can benefit residents' mental health.

Soil Stabilization
Reduce peak runoff rate to preserve the local landscape and minimize soil accumulation that clogs stormwater infrastructure.

STREAM, WETLAND, & FLOODPLAIN RESTORATION

Water runoff concentrates in valleys and streams, increasing the flood risk in low-lying areas near rivers, known as the "floodplain." In developed regions, infrastructure often lies within floodplains. Reconfiguring floodplains improves water storage and flow, typically involving resilient, native landscaping like wetlands and forests.

	LOW	MED	HIGH
TIMELINE	○	●	●
COST	○	●	●
FOOTPRINT	○	○	●
HAZARD REDUCTION	○	○	○

Note: Project details refer to one installment of the solution.

Flood Mitigation
Reduce urban flooding by providing surface areas for storage, strategically placed in low-lying areas where runoff accumulates.

Biodiversity
By enhancing water quality and vegetation, these detention areas provide habitats that can support a wide array of native plant and animal species to improve local biodiversity.

Public Health
Improve water quality to reduce exposure to pollutants and support public health as a result. Stream, wetland, and floodplain restoration also can beautify community spaces which can benefit residents' mental health.

Water Quality
Filter pollutants and sediment from stormwater runoff. This improves water quality, benefiting the ecosystem and community as a whole.

BGI Project Types

STORM DRAIN OUTFALL RETROFITS

In urban areas, stormwater exits drainage systems at "outfalls," which flow into ditches or streams near property boundaries. These outfalls are ideal for stormwater storage before reaching floodplains. Projects could include ponds, step-pool systems, or LID practices to slow and store runoff.

	LOW	MED	HIGH
TIMELINE	●	○	○
COST	●	●	○
FOOTPRINT	●	○	○
HAZARD REDUCTION	●	●	○

Note: Project details refer to one installment of the solution.

Flood Mitigation
Outfalls temporarily store stormwater during very heavy rainfall periods. This water slowly drains following the intense storm event to prevent flooding.

Water Quality
Outfalls filter pollutants and sediment from stormwater runoff. This improves water quality, benefiting the ecosystem and community as a whole.

Public Health
Improve water quality to reduce exposure to pollutants and support public health as a result. Beautify community spaces which benefits resident mental health.

Biodiversity
By enhancing water quality, provide habitats that can support a wide array of native plant and animal species to improve local biodiversity.

POND RETROFIT

Stormwater ponds store and treat stormwater runoff. Existing facilities can often be modified to improve performance, function, and beauty. Depending on location and preference, ponds can take many forms, including dry, wet, and wetland ponds.

	LOW	MED	HIGH
TIMELINE	●	●	○
COST	●	○	○
FOOTPRINT	●	○	○
HAZARD REDUCTION	●	●	○

Note: Project details refer to one installment of the solution.

Flood Mitigation
Detention ponds temporarily store storm water during very heavy rainfall periods. This water slowly drains following the intense storm event to prevent flooding.

Water Quality
Filter pollutants and sediment from stormwater runoff. This improves water quality, benefiting the ecosystem and community as a whole.

Public Health
Improve water quality to reduce exposure to pollutants and support public health as a result. These ponds also beautify community spaces and can benefit resident mental health.

Soil Stabilization
Reduce peak runoff rate to preserve the local landscape and minimize soil accumulation that clogs infrastructure.

BGI Project Types

STREAM DAYLIGHTING

Gray infrastructure systems are often limited by the capacity of underground pipes, causing upstream flooding. Stream Daylighting refers to restoring underground pipe networks to the surface as "blue" drainage amenities or streams. The daylighting of surface streams in floodable areas increases the drainage network's capacity to store and convey water.

	LOW	MED	HIGH
TIMELINE	○	○	●
COST	○	○	●
FOOTPRINT	○	●	●
HAZARD REDUCTION	○	○	●

Note: Project details refer to one installment of the solution.

Flood Mitigation
Upgrade existing infrastructure to improve local conveyance capacity, mitigate bottlenecks, and reduce flooding.

Sustainable Development
Reduce flooding and the financial, health, and lifestyle burden it can have, particularly for vulnerable populations.

Public Health
Improve water quality to reduce exposure to pollutants and supports public health as a result. It also beautifies community spaces, benefiting residents' mental health.

Soil Stabilization
Reduce peak discharges at pipe outlets to preserve the local landscape and minimize soil accumulation that clogs stormwater infrastructure.

BLUE-GREEN STREETS

Blue-Green Streets divert stormwater from streets and parking lots into GSI practices, like bioretention areas and permeable pavement, to control floods and support native plants. Roads can also be redesigned to convey and detain larger amounts of water.

	LOW	MED	HIGH
TIMELINE	○	○	●
COST	○	○	●
FOOTPRINT	○	●	●
HAZARD REDUCTION	○	●	●

Note: Project details refer to one installment of the solution.

Flood Mitigation
Reduce urban flooding by providing a porous surface for water to infiltrate, strategically placed in low-lying areas where runoff accumulates.

Social Equity
Reduce flooding and the financial, health, and lifestyle burden it can have, particularly for vulnerable populations.

Public Health
Decrease concrete surfaces that absorb and retain heat, reducing extreme temperatures in urban heat islands.

Water Quality
Filter pollutants and sediment from stormwater runoff. This improves water quality, benefiting the ecosystem and community as a whole.

BGI Project Types

MULTI-PURPOSE FLOODABLE RECREATIONAL SPACES

Floodable public spaces, like parks, plazas, and athletic fields can store and release floodwater during extreme events, while serving as community areas when dry. Athletic fields, for example, can improve drainage for regular use and provide overflow storage during floods, reducing downstream risks.

	LOW	MED	HIGH
TIMELINE	○	○	●
COST	○	○	●
FOOTPRINT	○	○	○
HAZARD REDUCTION	○	○	●

Note: Project details refer to one installment of the solution.

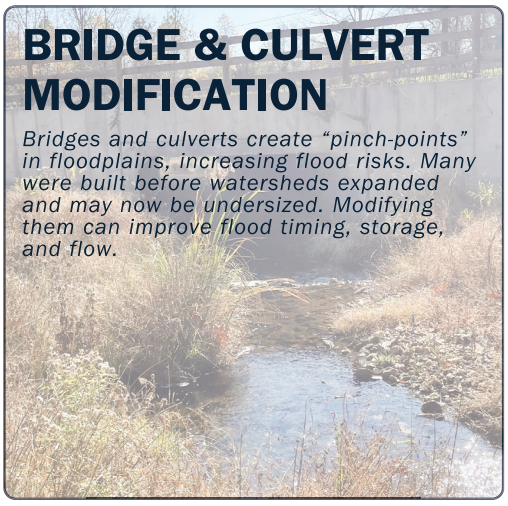
Flood Mitigation
Reduce urban flooding by providing a porous surface for water to infiltrate, strategically placed in low-lying areas where runoff accumulates.

Economic Revitalization
Beautify the community and increase functional green space that attracts visitors and residents alike.

Social Equity
Reduce flooding and the financial, health, and lifestyle burden it can have, particularly for vulnerable populations.

Public Health
Decrease concrete surfaces that absorb and retain heat, reducing extreme temperatures in urban heat islands.

BRIDGE & CULVERT MODIFICATION



Bridges and culverts create "pinch-points" in floodplains, increasing flood risks. Many were built before watersheds expanded and may now be undersized. Modifying them can improve flood timing, storage, and flow.

	LOW	MED	HIGH
TIMELINE	○	○	○
COST	○	○	○
FOOTPRINT	○	○	●
HAZARD REDUCTION	○	○	○

Note: Project details refer to one installment of the solution.

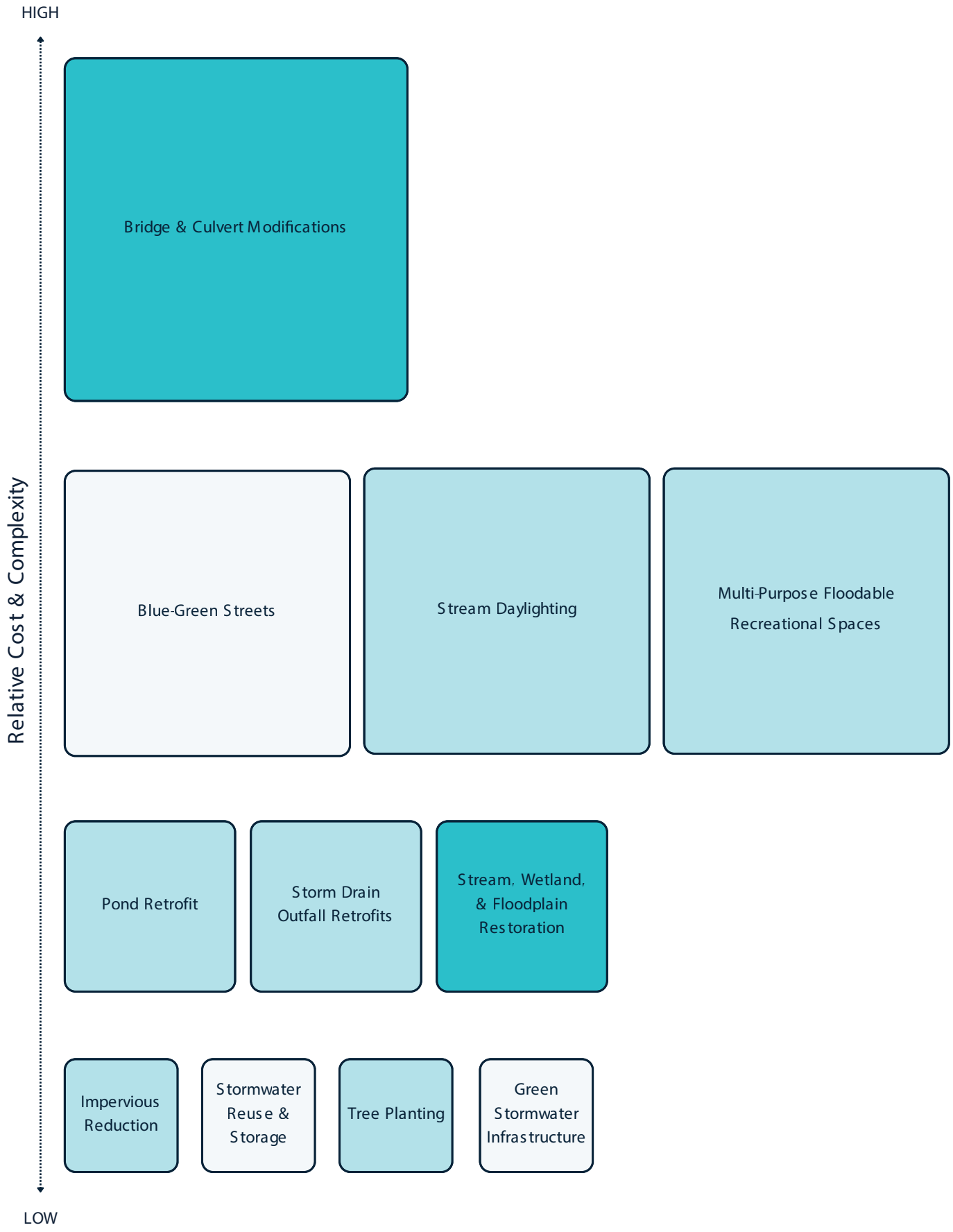
Flood Mitigation
Upgrade existing infrastructure to improve local conveyance capacity, mitigate bottlenecks, and reduce flooding.

Soil Stabilization
Reduce peak discharges at pipe outlets to preserve the local landscape and minimize soil accumulation that clogs stormwater infrastructure.

Public Health
Alleviate exposure to contaminated floodwaters and waterborne illness and reduce mosquito breeding by preventing standing water.

Social Equity
Reduce flooding and the financial, health, and lifestyle burden it can have, particularly for vulnerable populations.

Relative Feasibilty of BGI Projects



2. Outreach Materials:

2.a.

Watershed Workshop

Series 1 Flyer

FLOODREADY COMMUNITIES:

REGIONAL BLUE-GREEN INFRASTRUCTURE (BGI) WATERSHED WORKSHOP

NOV.14

THURSDAY
6:30–8:00 PM

Join Our Virtual Workshop!

Learn how Blue-Green Infrastructure (BGI) can reduce flooding and improve the quality of life in your community: This regional planning project aims to increase resilience in three subwatersheds spanning the District of Columbia and Prince George's County—Watts Branch, Arundel Canal (part of the Northwest Branch) of the Anacostia River, and Oxon Run, which is part of the Potomac River watershed. This collaborative project prioritizes areas vulnerable to flooding and other social, economic, and environmental stresses—aiming to protect homes, create green spaces, and enhance recreation.

Contribute to community-driven solutions. Your input will help shape local strategies and share flood experiences to make your neighborhood safer and greener. **Together, we can make a difference!**

By Attending, You Will:

» **Learn** about the Regional BGI Project.

» **Understand** BGI and Its Role in Strengthening Community Resilience.

» **Explore** Ongoing Flood Resilience Efforts in your Watersheds.

» **Share** Your Experiences with Flooding and Ideas for Environmental Enhancements in your Communities.

How to Sign Up:

Scan the QR code to register.

Questions?

Contact us at: **BGI@MWCOG.ORG**
WWW.MWCOG.ORG/BGI

Metropolitan Washington Council of Governments

CONSULTANTS

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2.b.a

Watershed Workshop Series 2

General Flyer

FLOODREADY COMMUNITIES:

SHAPING THE FUTURE OF YOUR WATERSHEDS

6:00–8:00 PM

Arundel Canal
MONDAY
MARCH 3

WATTS BRANCH
TUESDAY
MARCH 4

OXON RUN
MONDAY
MARCH 10

Join Our In-Person Workshop!

Learn how Blue-Green Infrastructure (BGI) can reduce flooding, create greener spaces, & boost recreation in your community. Discover how Blue-Green Infrastructure (BGI) can help improve your community's flood resilience and environmental health. At this family-friendly workshop, you can have a chance to learn more about your local watershed and how you can get involved.

Whether you're a resident, business owner, or community advocate, your voice is crucial in shaping these projects. Join us to share your ideas and **make an impact on your community's environmental future!**

REFRESHMENTS WILL BE PROVIDED. ATTENDEES WILL RECEIVE A GIFT CARD!

By Attending, You Will:

» **Gain insights** into flood risk management and the role of BGI in your watershed.

» **Connect** with experts and community members who are dedicated to building a resilient future.

» **Take part in shaping solutions** to enhance sustainability and protect local waterways in your community.

How to Sign Up:

Scan the QR code to visit the webpage for registration.

Questions?

Contact us at: BGI@MWCOG.ORG
WWW.MWCOG.ORG/BGI

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2.b.b

Watershed Workshop Series 2

General Flyer

FLOODREADY COMMUNITIES:

SHAPING THE FUTURE OF ARUNDEL CANAL WATERSHED

MARCH 3
MONDAY
6:00–8:00 PM

Join Our In-Person Workshop!

Learn how Blue-Green Infrastructure (BGI) can reduce flooding, create greener spaces, & boost recreation in your community. Discover how Blue-Green Infrastructure (BGI) can help improve your community's flood resilience and environmental health. At this family-friendly workshop, you can have a chance to learn more about your local watershed and how you can get involved.

Whether you're a resident, business owner, or community advocate, your voice is crucial in shaping these projects. Join us to share your ideas and **make an impact on your community's environmental future!**

REFRESHMENTS WILL BE PROVIDED. ATTENDEES WILL RECEIVE A GIFT CARD!

By Attending, You Will:

» **Gain insights** into flood risk management and the role of BGI in your watershed.

» **Connect** with experts and community members who are dedicated to building a resilient future.

» **Take part in shaping solutions** to enhance sustainability and protect local waterways in your community.

Location:

Sis's Tavern
4512 41st Ave, North Brentwood, MD 20722

How to Sign Up:

Scan the QR code to register.
Contact us at: BGI@MWCOG.ORG
WWW.MWCOG.ORG/BGI

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2.b.c

Watershed Workshop Series 2

Oxon Run Flyer

FLOODREADY COMMUNITIES:

SHAPING THE FUTURE OF OXON RUN WATERSHED

MARCH 10
MONDAY
6:00–8:00 PM

Join Our In-Person Workshop!

Learn how Blue-Green Infrastructure (BGI) can reduce flooding, create greener spaces, & boost recreation in your community. Discover how Blue-Green Infrastructure (BGI) can help improve your community's flood resilience and environmental health. At this family-friendly workshop, you can have a chance to learn more about your local watershed and how you can get involved.

Whether you're a resident, business owner, or community advocate, your voice is crucial in shaping these projects. Join us to share your ideas and **make an impact on your community's environmental future!**

REFRESHMENTS WILL BE PROVIDED. ATTENDEES WILL RECEIVE A GIFT CARD!

By Attending, You Will:

» **Gain insights** into flood risk management and the role of BGI in your watershed.

» **Connect** with experts and community members who are dedicated to building a resilient future.

» **Take part in shaping solutions** to enhance sustainability and protect local waterways in your community.

Location:

Hillcrest Heights Community Center
2300 Oxon Run Dr, Oxon Hill, MD 20745

How to Sign Up:

Scan the QR code to register.
Contact us at: BGI@MWCOG.ORG
WWW.MWCOG.ORG/BGI

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2.b.d

Watershed Workshop Series 2

Oxon Run Flyer

FLOODREADY COMMUNITIES:

SHAPING THE FUTURE OF WATTS BRANCH WATERSHED

MARCH 4
TUESDAY
6:00–8:00 PM

Join Our In-Person Workshop!

Learn how Blue-Green Infrastructure (BGI) can reduce flooding, create greener spaces, & boost recreation in your community. Discover how Blue-Green Infrastructure (BGI) can help improve your community's flood resilience and environmental health. At this family-friendly workshop, you can have a chance to learn more about your local watershed and how you can get involved.

Whether you're a resident, business owner, or community advocate, your voice is crucial in shaping these projects. Join us to share your ideas and **make an impact on your community's environmental future!**

REFRESHMENTS WILL BE PROVIDED. ATTENDEES WILL RECEIVE A GIFT CARD!

By Attending, You Will:

» **Gain insights** into flood risk management and the role of BGI in your watershed.

» **Connect** with experts and community members who are dedicated to building a resilient future.

» **Take part in shaping solutions** to enhance sustainability and protect local waterways in your community.

Location:

Oakcrest Community Center
1300 Capitol Heights Blvd, Capitol Heights, MD 20743

How to Sign Up:

Scan the QR code to register.
Contact us at: BGI@MWCOG.ORG
WWW.MWCOG.ORG/BGI

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2.c.

Watershed Workshop

Series 3 Flyer

FLOOD AWARE COMMUNITIES:

MAPPING FUTURE PROJECTS IN YOUR WATERSHEDS

APRIL.10

THURSDAY
6:00–8:00 PM

Join Our Virtual Workshop!

Be part of the process to reduce flooding, and create green spaces in your neighborhood. Learn how a regional planning project to decrease flooding, could have other benefits such as lowering the heat in the summer, and creating recreational areas in **Watts Branch**, **Arundel Canal** (part of the Northwest Branch) of the Anacostia River, and **Oxon Run**, which is part of the Potomac River watershed.

Your input is wanted as we look at options for your neighborhood to reduce flooding. We look forward to seeing you online the evening of April 10!

RESIDENTS WILL RECEIVE A $25 GIFT CARD!

By Attending, You Will:

» **Learn** about flood-reduction projects that could work in your area.

» **Engage with experts and neighbors** working toward a flood-resilient future.

» **Learn** how Blue-Green Infrastructure (BGI) could reduce flooding and provide other benefits in your neighborhood or the surrounding area.

» **Feedback** on the ideas presented.

How to Sign Up:

Scan the QR code to visit the webpage for registration.

Questions?

Contact us at: BGI@MWCOG.ORG
WWW.MWCOG.ORG/BGI

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2.d.

Regional Open House Flyer

REGIONAL OPEN HOUSE

FLOOD READY COMMUNITIES

DISCUSS FUNDING AND IMPLEMENTATION FOR FUTURE PROJECTS.

Join us in-person for the Regional Open House!

May.22
THURS|4:30–7:30 PM
MARVIN GAYE REC CENTER

Be part of the planning process and drive future implementation to shape projects that reduce flooding and create green spaces in your neighborhoods. Learn how a regional planning project to decrease flooding, could have other benefits such as lowering the heat in the summer, and creating recreational areas in **Watts Branch**, **Arundel Canal** (part of the Northwest Branch) of the Anacostia River, and **Oxon Run**, which is part of the Potomac River watershed.

This event marks the final showcase of a yearlong planning effort in your communities—don't miss this opportunity to share your final input and explore ways to stay involved in bringing these projects to life!

We want **your input** on the proposed concepts in your neighborhood **to reduce flooding and build sustainable, resilient solutions**. We look forward to seeing you!

LIGHT REFRESHMENTS WILL BE PROVIDED. RESIDENTS WILL RECEIVE A $25 GIFT CARD!

By Attending, You Will:

- **Learn** about flood-reduction project ideas and funding opportunities that could benefit your area—and how you can help champion these efforts in your community.
- **Share your feedback** on the proposed concept ideas.
- **Discover** how Blue-Green Infrastructure (BGI) can help reduce flooding while providing additional benefits to your neighborhood and surrounding areas.
- **Engage** with experts and connect with neighbors working together toward a flood-resilient future

Location:

Marvin Gaye Recreation Center
15 61st St NE,
Washington, DC 20019

Register Here:

Scan the QR code to register.
Contact us: BGI@MWCOG.ORG
WWW.MWCOG.ORG/BGI

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4. BGI Watershed Communitiesreference list_Map

District			Prince George's County	
DC Arundel Canal			Prince George's County Arundel Canal	
Community	Zipcode		Community	Zipcode
Brookland	20017		Town of Mt. Rainier	20712
University Heights	20017		Town of Brentwood	20712
Michigan Park	20017		Prince George's County Watts Branch	
DC Watts Branch			Community	Zipcode
Community	Zipcode		City of Seat Pleasant	20743
Grant Park	20019		Town of Fairmount Heights	20743
NE Boundary	20019		Town of Capitol Heights	20743
Capitol View	20019		Prince George's County Oxon Run	
Lincoln Heights	20019		Community	Zipcode
Central NE	20019		Glassmanor	20745
Mayfair	20019		Hillcrest Heights	20746, 20748
Eastland Gardens	20019		Forest Heights	20745
DC Oxon Run			Marlow Heights	20746, 20748
Community	Zipcode		Suitland-Silver Hills	20746
Bellevue	20032		Coral Hills	20743
Washington Highlands	20032		Arnold Heights	20743
Congress Heights	20032		City of District Heights	20747
Douglas	20032			
Shipley	20020			
Knox Hill/ Buena Vista	20020			
Naylor Gardens	20020			
Hillcrest	20020			
Fairfax village	20020			
Fort Davis Park	20020			

ANCs
Arundel Canal ANCs
Advisory Neighborhood Commissions 5A
Advisory Neighborhood Commissions 5B
Watts Branch ANCs
Advisory Neighborhood Commissions 7C
Advisory Neighborhood Commissions 7D
Advisory Neighborhood Commissions 7E
Advisory Neighborhood Commissions 7F
Oxon Run ANCs
Advisory Neighborhood Commissions 7B
Advisory Neighborhood Commissions 7F
Advisory Neighborhood Commissions 8B
Advisory Neighborhood Commissions 8C
Advisory Neighborhood Commissions 8D
Advisory Neighborhood Commissions 8E