



Harrisonburg, Virginia

General Stormwater Information



October 2024

Stormwater Program Goals and Objectives



- Protect human health, safety, and property
- Protect, restore, and enhance habitat for healthier ecosystems
- Improve quality of life and recreational opportunities
- Conduct restoration efforts with a balanced implementation of BMPs and programmatic actions
- Integrate watershed protection/restoration into policy-making
- Increase awareness and stewardship by the public and policymakers
- Support compliance with regional, state, and federal regulatory requirements

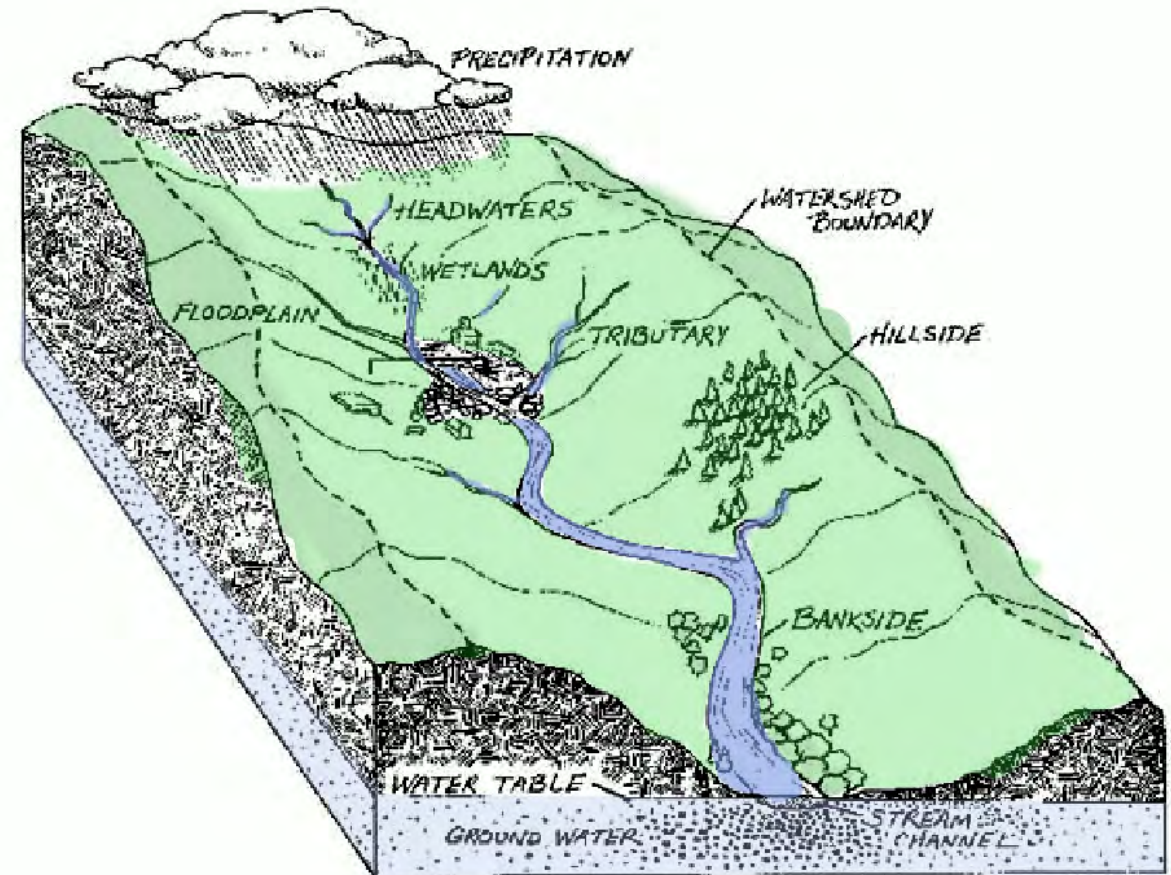


What Is a Watershed?



Watersheds are like sponges and drain like funnels . . .

- Land accumulates pollutants from urban, agricultural, and other areas
- Whatever is on the land washes into the waterways directly or via storm drains during a precipitation event in the form of runoff
- Impervious areas contribute additional runoff and pollutants
- Appropriate land management practices can greatly reduce polluted runoff



Two Regulatory Drivers



- Under the Clean Water Act
 - Municipal Separate Storm Sewer System (MS4) Permit
 - Total Maximum Daily Loads (TMDLs) = Pollution Diet

Commonwealth of Virginia
VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY
1111 E. Main Street, Suite 1400, Richmond, Virginia 23219
P.O. Box 1105, Richmond, Virginia 23218
(800) 592-5482
www.deq.virginia.gov

Travis A. Voyles
Secretary of Natural and Historic Resources

Michael S. Ralband, PE, PWD, PWS Emeritus
Director

November 1, 2023

Alexander Banks VI
City Manager
409 South Main Street
Harrisonburg, VA 22801

Transmitted electronically: ande.banks@harrisonburgva.gov

Re: General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems General Permit Number VAR040075, City of Harrisonburg

The screenshot shows the Virginia Department of Environmental Quality (DEQ) website. The page is titled "Approved TMDLs" and includes a table with the following data:

Name	Title	Phone
Justin Wilkerson	Director, Office of Watersheds and Local Government Assistance Programs	(804) 659-1125
Mark Richard	TMDL Team Lead	(804) 659-1126
Alice Schaefer	San Discharge Zones, Shellfish TMDLs, and TMDL Priorities	(804) 574-9368
Krista Woodall	TMDL Data Coordinator	(276) 628-8633
Rebecca McNamee	Valley Regional Office TMDL Coordinator	(540) 217-7173
Rebecca Spivey	Northern Regional Office TMDL Coordinator	(571) 866-6102
Aaron Covatta	Blue Ridge Regional Office TMDL Coordinator	(540) 988-3658
Denise Stone	Piedmont Regional Office TMDL Coordinator	(804) 712-9138

What is an MS4?

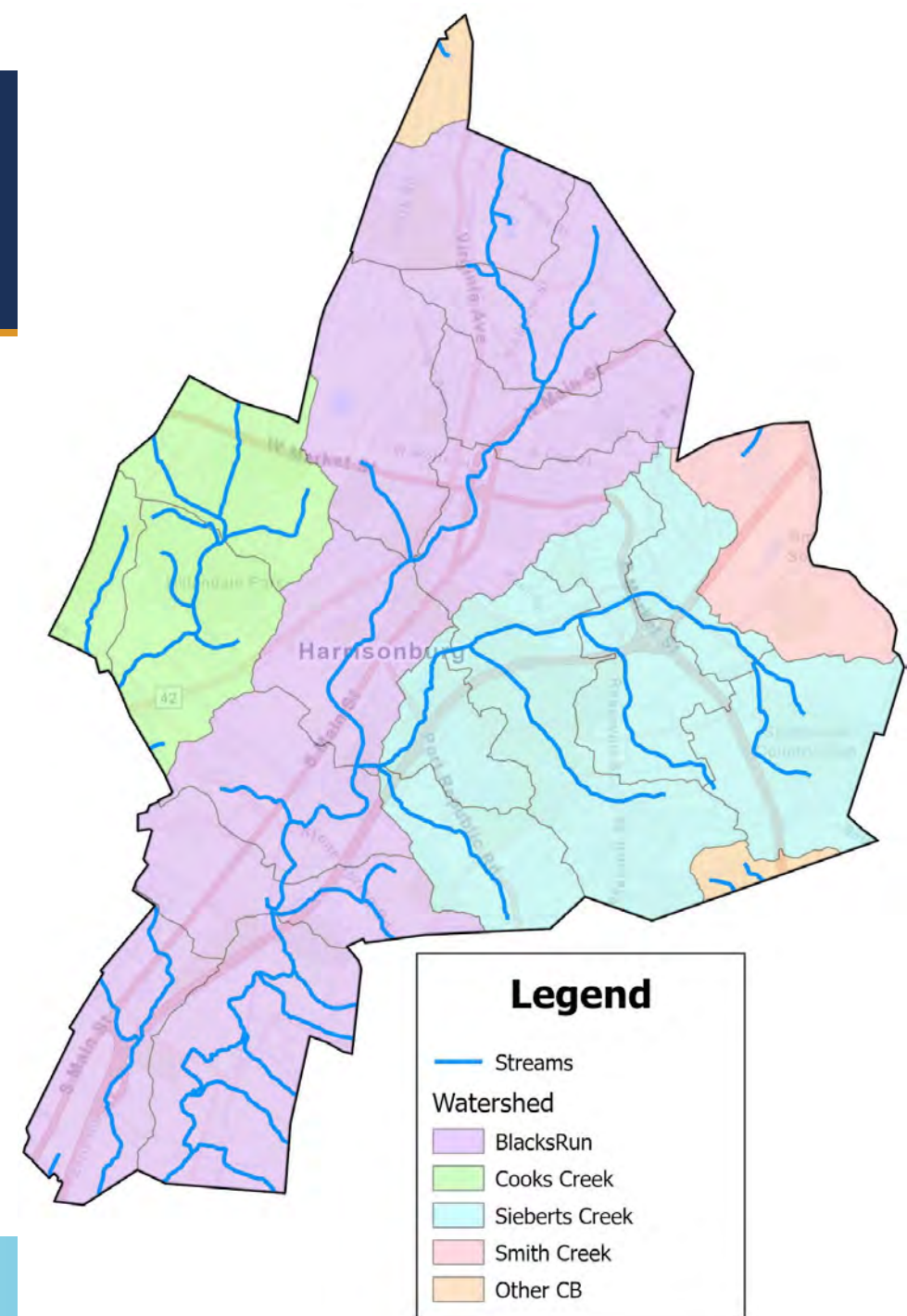


Municipal Separate Storm Sewer System (MS4) = Conveyance system owned by a state, city, town, or other public entity that discharges to waters of the United States.



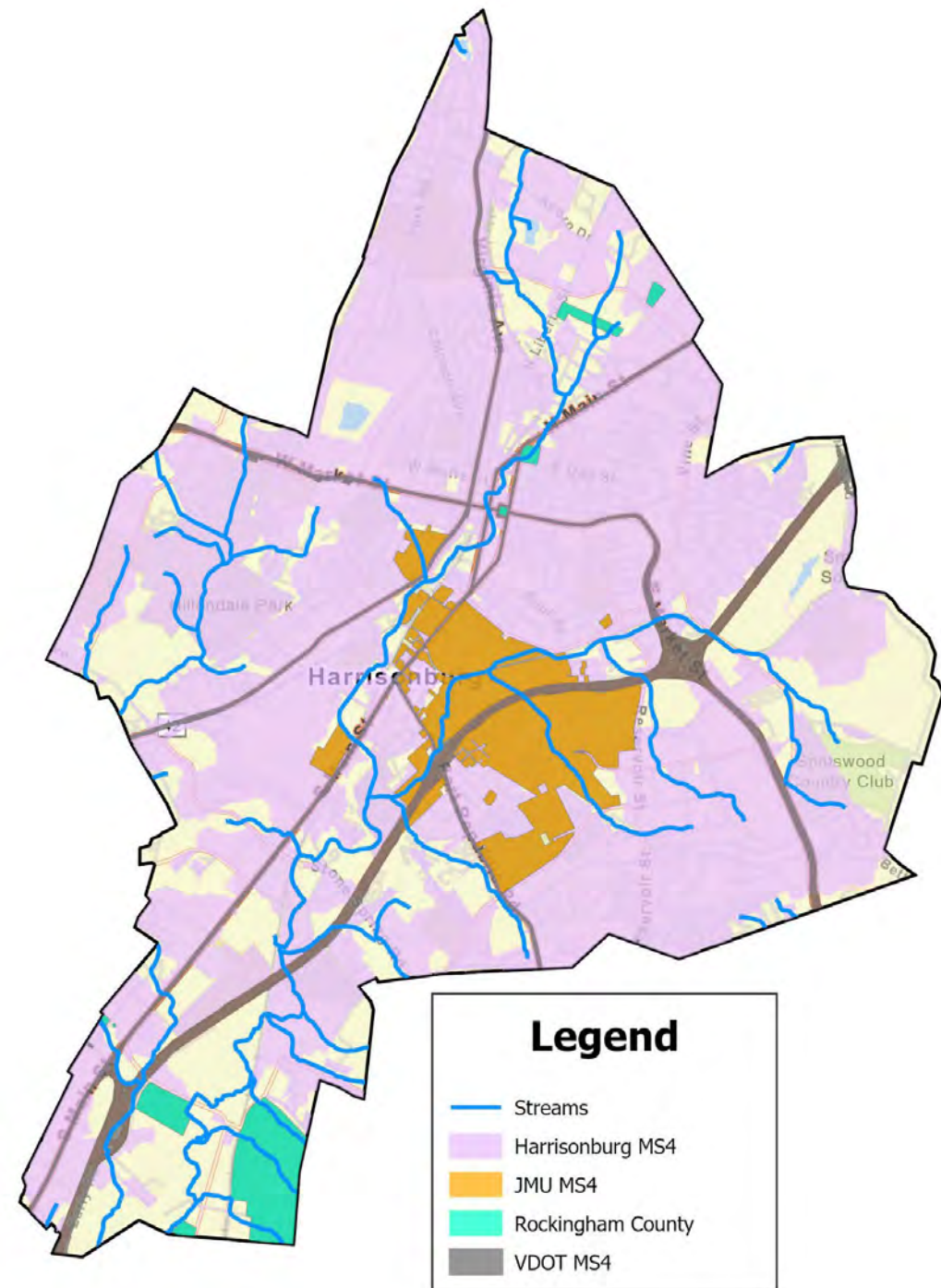
City Watersheds

- Chesapeake Bay
 - Smith Creek
 - Cooks Creek
 - Blacks Run
 - Sieberts Creek
- Other small watersheds
 - Linville Creek
 - Mill Creek



City's MS4 Regulated Lands

- Excluded Properties:
 - JMU
 - VDOT
 - Rockingham County
- Avoided Properties
 - Unregulated MS4 areas



Pollutants and Sources



- **Bacteria** from animal waste and sewer leaks and overflows
- **Nutrients** from sanitary waste, fertilizers, and organic material
- **Sediment** from construction sites, bare soils, and eroding streambanks
- **Trash** from littering
- **ALL** can be contributed from urban stormwater

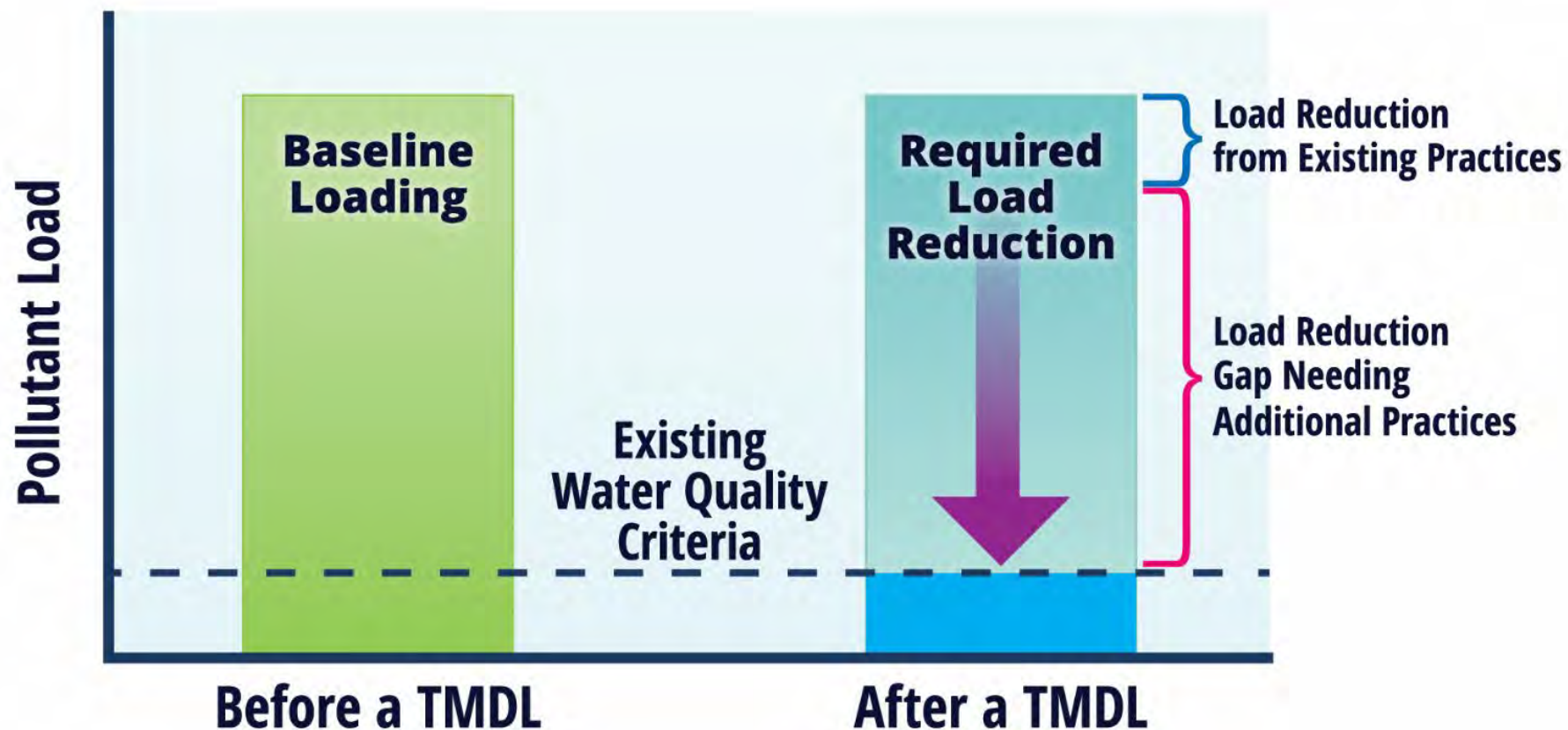


What Is a Pollution Diet/TMDL?



- TMDL = Total Maximum Daily Load (Pollution Diet)
 - Addresses a single pollutant or stressor
 - Allocations issued to natural, point, and nonpoint sources.
- Maximum amount of pollutant that a water body can assimilate & meet water quality standards and designated uses
- If TMDL is met, then the water body should meet water quality criteria for that pollutant

Overview of Load Reductions



Determine Restoration Strategies



- Keep effective current and planned BMPs and programmatic initiatives
- Find restoration opportunities
- Engage the public
- Assess future BMP possibilities
 - New BMPs on City property
 - New right-of-way BMPs
 - Partner with public and private institutions to install BMPs



*Above:
Bioretention
system in a
right-of-way*



*Below:
Permeable
pavement along
parking lot*

Examples of BMPs



Street Sweeping



Storm Drain Cleaning



Bioretention/
Bioswale



Stream Restoration



Bioretention/Bioswale



Wetlands



Wet Pond



Filter Strip



Bioretention/
Bioswale



Tree Planting



BMPs Co-Benefits

BMPs are not just for load reductions!



- Air quality
- Biodiversity/habitat
- Education
- Energy efficiency
- Flood mitigation
- Groundwater recharge
- Property values
- Recreation



Existing City Programs—Stormwater, Trees, and Public Involvement



- Harrisonburg Conservation Assistance Program (HCAP)
 - Assists private property owners with water quality improvements
- Drainage Improvement Program
 - Assists with drainage concerns on private property
- Stormwater Utility Fee Credits for Residential Property
- Stormwater Advisory Committee (SWAC)
 - Citizen committee appointed by City Council to provide guidance, oversight, and recommendations
- Urban Forestry Program
 - Improve air quality, reduce urban noise, filter water, help control stormwater runoff, provide shade and habitat, and enhance urban landscapes
- CleanStream.org
 - Education, cleanups, local events, workshops
- Annual Blacks Run Cleanup Day



Your Role in Restoration: *Stay Informed*



- Notify Harrisonburg
 - Sign up for notifications for trash collection changes, bicycle and pedestrian subcommittee meetings, and ***stormwater and environmental*** notifications



NOTIFY 
HARRISONBURG

Your Role in Restoration: *Help Prevent Stormwater Pollution!*



- Support implementation by preventing stormwater pollution
- What can you do to prevent fecal coliform from entering waterways?
 - Pick up after your pets
 - Report pollution to the Stormwater Staff!
 - <https://www.harrisonburgva.gov/cleanstream-report-water-pollution>



Your Role in Restoration: *Help Prevent Stormwater Pollution!*





- Pick up after pets
- Plant trees
- Install rain barrels
- Leave grass clippings on lawn
- Don't litter
- Smart use of fertilizers/ herbicides/pesticides, etc.
- Participate in Blacks Run Clean Up Day



Questions and Stay Informed



- City of Harrisonburg Public Works Department
 - <https://www.harrisonburgva.gov/public-works>
 - Phone: 540-434-5928
 - Email: stormwater@harrisonburgva.gov
- Social Media
 - Follow *Harrisonburg Public Works* on Facebook 
 - *@hbpublicworks* on Instagram 
- Signup for Notify Harrisonburg!
 - <https://www.harrisonburgva.gov/notify-harrisonburg>

