

Green Streetscape

#### How do you get started?

- You can use this brochure to learn about and share with your community information about stormwater management.
- Volunteer with your local homeowners association, or watershed association to implement some of these management strategies.
- Encourage your municipal government to pass stormwater management ordinances for new development projects.
- Work with churches, rotary clubs, boy scouts or other volunteer groups to create rain gardens in parks and open spaces.

### Local Watershed Organizations

**Blue Ridge Watershed Coalition**. BRW is primarily focused on water quality monitoring in Jefferson County. <u>blueridgewatershed.org</u>.

**Cacapon Institute**. CI monitors water quality along the full length of the Cacapon. <u>cacaponinstitute.org</u>.

Elks Run Watershed Group. Volunteer monitor at sites on Elks Run and Elks Branch. Elks Run is the drinking water supply for Harpers Ferry and Bolivar. elksrunwatershed.org.

**Friends of Cacapon River**. FCR uses a bio-survey approach to stream study, which includes the collection and evaluation of aquatic invertebrates. <u>cacaponriver.org</u>.

**Sleepy Creek Watershed Association**. SCWA volunteers sample water quality within the Sleepy Creek watershed. <u>sleepycreekwatershed.org</u>

Warm Springs Watershed Association. WSWA monitors locations along Warm Springs Run, one of the few "urban" watersheds in the Eastern Panhandle. warmspringswatershed.webs.com.





Stormwater draining in the street

# **Stormwater and You**

How stormwater affects you, your community, and what you can do to help.



## A Program of WV Rivers

<u>WVRivers.org</u>; (304) 637-7201 3501 MacCorkle Ave SE #129 Charleston, WV 25304



Stormwater entering the street

### What is stormwater?

Stormwater is rain or melted snow that flows onto the ground. In more urban or developed areas this water flows through streets and parking lots, collecting pollutants like oil, trash and debris before depositing it into streams and rivers. In areas like forests, fields, and wetlands, stormwater is absorbed into the ground more easily, then it is stored and filtered.

Impervious surfaces, like roofs, roads and parking lots, associated with more developed areas, significantly impact the natural flow of rivers and underground water supplies.

Due to the material of these surfaces, stormwater cannot soak into them, leading to low groundwater supply. Water also moves faster on these surfaces, altering the rivers and other bodies of water the water is flowing into. As a result, there is a greater amount of flooding, destruction and displacement.

### How does stormwater impact me?

Large amounts of stormwater can cause flooding, leading to a multitude of issues. Washed-out driveways, flooded parking lots and roads, and standing water in our downtowns are issues that we all deal with when heavy rain comes – and we're motived to fix these problems with your help.

"Previously there was no stormwater control on this 29-acre hill. Now 90% of the stormwater is slowed, captured, filtered, and stored." ~ Warm Springs Watershed Association

### How do we manage stormwater?

With traditional infrastructure, like culverts and drains, stormwater is treated as something that needs to be disposed of rather than something that needs to be protected. This lack of recharged groundwater is what leads to flooding and lower water quality. By transitioning to natural stormwater management practices, we can solve the issue of flooding and increase the level of natural groundwater.





Rain garden by Warm Springs Watershed

### Natural Stormwater Management

There are a few ways to naturally manage stormwater:

- Mimic the natural hydrologic processes through rain gardens or green roofs.
- Minimize the use of impervious surfaces and try to disconnect them. This can be done by using rain barrels, narrowing streets and using permeable pavement.
- Reroute rooftop drainage pipes from draining rainwater into the storm sewer to draining it into rain barrels, cisterns, or permeable areas.
- Use natural vegetation buffers along streams and rivers so it can filter, store and slow down stormwater.
- Protect open spaces and sensitive natural areas with conservation easements.

\* Information gathered from American Rivers and Environmental Protection Agency