2023 Stormwater Theme: Reduce Your Stormwater Footprint

For 2023 we will be looking at how to **“Reduce Your Stormwater Footprint”**for this year’s MS4 Theme. What is a stormwater or runoff footprint? Wikipedia has the following definition. A **runoff footprint** is the total surface runoff that a site produces over the course of a year. According to the [**United States Environmental Protection Agency**](https://en.wikipedia.org/wiki/United_States_Environmental_Protection_Agency) (EPA) [stormwater](https://en.wikipedia.org/wiki/Stormwater_runoff) is “rainwater and melted snow that runs off streets, lawns, and other sites”. Urbanized areas with high concentrations of [impervious surfaces](https://en.wikipedia.org/wiki/Impervious_surface) like buildings, roads, and driveways produce large volumes of runoff which can lead to flooding, sewer overflows, and poor [water quality](https://en.wikipedia.org/wiki/Water_quality).

Since soil in urban areas can be compacted and have a low [infiltration rate](https://en.wikipedia.org/wiki/Infiltration_(hydrology)), the surface runoff estimated in a runoff footprint is not just from impervious surfaces, but also pervious areas including yards. The total runoff is a measure of the site’s contribution to stormwater issues in an area, especially in urban areas with sewer overflows. Completing a runoff footprint for a site allows a property owner to understand what areas on his or her site are producing the most runoff and what scenarios of stormwater green solutions like [rain barrels](https://en.wikipedia.org/wiki/Rainwater_tank) and [rain gardens](https://en.wikipedia.org/wiki/Rain_gardens) are most effective in mitigating this runoff and its costs to the community. [**Source**](https://en.wikipedia.org/wiki/Runoff_footprint)

If you would like to find out how much of a stormwater footprint you have on a specific area of land, you can go to the National Stormwater Calculator located on the [**EPA website**](https://www.epa.gov/water-research/national-stormwater-calculator). This calculator will assist you in ways to reduce your stormwater footprint and then show you the positive effects Best Management Practices once installed, have on the environment.

In the upcoming months we will be providing some good examples of stormwater best management practices that will help you reduce your stormwater footprint on an area as small as where you live. We can all make a difference as long as we make an effort to reduce our own stormwater footprint.

Additional Tips to Reduce Your Stormwater Footprint:

You can reduce your stormwater footprint by installing a rain barrel. Whenever there is a rain event that produces enough precipitation from gutters and downspouts, the precipitation will fill your rain barrel.

Can you name the positive results that occur within the environment when this water is captured? Let’s get you started:

* The water that would normally go to storm drains or flow on the surface and potentially pick up pollutants that go directly into our waterways would go into the rain barrel instead.
* This helps in slowing possible erosion and picking up water heavy with sediment.
* The rain barrel stores the water for you until you are ready to use it.
* You can use this precipitation to water your plants and garden.
* Your plants will like the naturally soft water.

We sell rain barrels and have them in stock. You may purchase one [online](https://richlandswcd.net/product/rain-barrel/) or [let us know](https://richlandswcd.net/product/rain-barrel/) and we will make arrangements with you to pick one up.

You can reduce your stormwater footprint by disconnecting your downspout. Whenever there is a rain event that would produce enough precipitation for the gutters and downspouts of your roof to be used, you may want to think about disconnecting one or two downspouts from the storm sewer or even the downspout tile. The reason for this is as water goes through your downspout into the storm sewer system it will pick up pollutants and take those pollutants into our waterways. If you disconnect one or two of your downspouts from the downspout tile, it will help reduce erosion where the concentrated flow of water comes out at the end of the tile and not carry as many pollutants to our waterways as the runoff surface flows to the closest waterway. Make sure that you direct the water from the downspout away from your house with an elbow to a splash block or into a short downspout tile above ground to help keep the water away from your foundation. One other way you could direct the water from your downspout would be into a rain garden that you can make yourself. A rain garden is a man-made depression in the ground that collects and stores precipitation runoff and is filled with all kinds of native plants to help absorb the runoff as it percolates into the ground. Richland SWCD can help you with design and native plant selection.

You can reduce your stormwater footprint by installing a vegetated swale. If you are experiencing flooding issues or areas of concentrated runoff that pond in low spots on your property, consider creating a vegetated swale. A swale is a specific drainage path that is used to transport water. Swales help to slow runoff, encourage infiltration, and even filter pollutants as stormwater moves through the swale. A vegetated swale will assist in moving stormwater runoff to a different area. It will help remove ponding and allow infiltration of excessive water in a different part of your property where it can be absorbed and get back into the aquifer.

Learn more about the MS4 program in Richland County by [**contacting Dan**](mailto:herrold.dan@richlandswcd.net).

Related Links

* [Only Rain Down the Drain introduction video](https://www.youtube.com/watch?v=EvvoHy08E3k)
* [Only Rain Down the Drain demonstration video](https://www.youtube.com/watch?v=gkhilHJN7c4)
* [Learn about the Water Cycle, Runoff, and more in this interactive video](http://www.onlyraindownthedrain.com/interactive-model/) from The Eastern Washington Stormwater Outreach project
* [Learn about Rain Barrels](https://www.youtube.com/watch?v=KxXkGOnEqfg)
* [Learn about Impervious Areas](https://richlandswcd.net/stormwater-drainage/impervious-areas/)
* [Learn about EPA Best Practices](https://richlandswcd.net/stormwater-drainage/epa-best-practices/)
* [Learn more about MS4 Programs](https://www.youtube.com/watch?v=JAqV4dPpAT8)