

WATER POLLUTION

When many people think of water pollution, they are probably picturing pollution discharging directly into the stream or river from a sewer plant or factory. This type of pollution, known as point source pollution, has been greatly reduced over the past 40 years due to The Clean Water Act. Unlike point source pollution, non-point source (NPS) pollution comes from many sources and is caused by rainfall moving over and through the ground. Impervious surfaces such as roads, driveways, parking lots, and roofs increase the amount of stormwater running off directly into creeks. This stormwater carries human-made and natural pollutants. Eventually this stormwater goes into our streams, rivers, lakes, and even into the groundwater which is our drinking water supply. This extra water increases erosion and can cause creek levels to rise sharply.

WHAT CAN I DO?

You can play an important role by practicing conservation and by looking at everyday habits:

- Dispose of used oil, antifreeze, paints, and other household chemicals properly See www.ButlerCountyRecycles.org.
- Keep litter, pet waste, leaves, and debris out of street gutters and storm drains.
- Do not apply more than recommended amount of fertilizers and pesticides to your lawn and garden, and we always recommend the use of a soil test kit.
- Use rain collection devices, like rain barrels or rain gardens.

CONNECT WITH US

-  513-887-3720
-  BUTLESWCD@BCOHIO.GOV
-  WWW.BUTLESWCD.ORG
-  1802 PRINCETON ROAD, SUITE 300, HAMILTON, OH 45011

You can also contact the Butler Soil & Water Conservation District for technical assistance with:

- Ponds
- Rain gardens
- Trees
- Erosion problems
- Drainage
- And much more



Rain Barrels



**WHAT IS A RAIN BARREL?
WHY USE ONE?
HOW CAN I BUILD MY OWN?**

WHAT IS A RAIN BARREL?

Rain barrels are containers or systems which collect and store rain water from rooftops for later use, such as watering plants, cleaning garden tools, or washing cars.

A rain barrel is relatively simple, inexpensive to construct, and can sit conveniently under any residential gutter downspout.

WHY HARVEST RAINWATER?

Rain barrels do more than catch rainwater from the downspout, these barrels also:

- Provide oxygenated, un-chlorinated water which is ideal for plants
- Direct overflow water to where you want it
- Lower your water bill
- Divert water from the municipal storm drain system, reducing the impact on our streams
- Protect our rivers from polluted runoff
- Control moisture levels around your foundation

Please remember, rain barrel water is not fit for human consumption. Do not drink.

HOW MUCH CAN YOUR RAIN BARREL COLLECT ?

For 1 inch of rainfall on a 1,000 square foot roof, expect about 600 gallons of rainwater.

$$V = A \times R \times 0.90 \times 7.5 \text{ gals/ft}^3$$

V= volume of rain barrel (gallons)

A= surface area roof (square feet)

R= rainfall (feet)

0.90 = losses to system (no units)

7.5 = conversion factor (gallons/cubic ft)

INSTALLATION

- Before you start, make sure that your roof is clean and your gutter is clear of debris.
- Select a place for your rain barrel under a downspout on level, solid ground free of any rocks, roots or debris that can make your rain barrel unstable.
- Remove leaves and organic material that will make your base soft and unsecure.
- We recommend raising your barrel a few inches. This will give you more water pressure and make it easier to reach a watering can under the faucet.
- Consider linking barrels for extra capacity.

MAINTENANCE

- Make sure to clean your gutters and downspouts to see if any mosquito screen is free of debris.
- Periodically check the connections, fittings, and screen to be sure that they are working properly, free of debris, and fit snugly.
- Clean the inside of your rain barrel by spraying it out with a hose.
- Keep the lid on to keep mosquitoes from laying eggs. Make sure you have a secure fit. Mosquito dunks can be used in rain barrels if desired. Mosquito dunks are a larvicide and not harmful to pets, people or plants.
- Disconnect from downspout and open the faucet during the winter.

Caution: Do not install a rain barrel if you apply toxic chemicals such as moss killer to your roof or if your roof is made with treated cedar shakes.

BUILD YOUR OWN

It's easy to turn a barrel into a rain barrel. All you need is a barrel and connection materials. You can also purchase a DIY kit. The kit includes everything that is required to turn either a food grade barrel, strong garbage can, or other large container into a rain barrel.

If you decide to do it alone, there are directions showing you how to construct your barrel on our blog page: ButlerSWCD.org/blog

If you do make your own, please make sure that any opening into the barrel is covered by a screen to avoid mosquitoes breeding.

