

# Why Rain Barrels?

Rain Barrels are a multifunctional tool that almost anyone can make themselves!



A one-inch rain storm can result in over 700 gallons of stormwater off the roof of an average home! Often that water flows across lawns and onto impervious surfaces, picking up pollutants like fertilizers, pesticides, pet waste, and sediment as it goes, ultimately ending up in our waterways. Additionally, all that runoff can increase the rate of erosion on a property and can potentially congregate into flood zones.

However, with a proper rain barrel installed, you can reduce the number of pollutants entering our streams, prevent erosion from ruining your land, and save money! Rain barrels can be crucial during drought seasons by providing people with an alternative source of water for their non-potable uses!



\*\*Chesapeake Bay Foundation

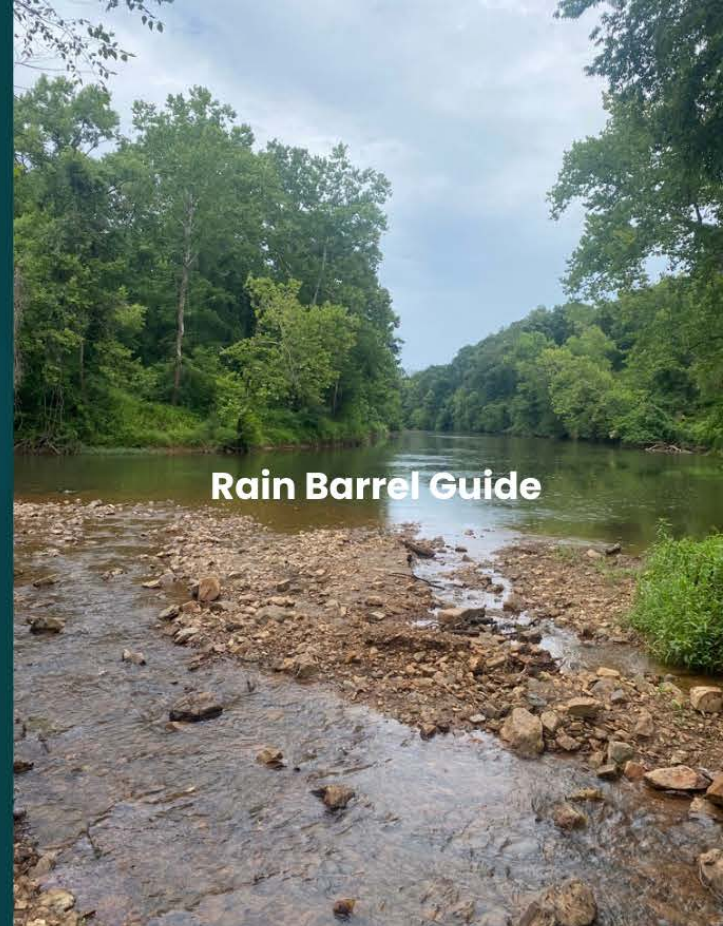
# What is the Rivanna Stormwater Education Partnership?

RSEP works to educate the community and engage individuals in actions that will protect and improve the waters of the Rivanna River Watershed. Since 2003, RSEP has produced effective and far-reaching education programs that have benefited from the variety of expertise and resources each partner offers. By planning and working together, RSEP will continue to provide watershed-focused projects to the community

## Stay informed on water quality and watershed news!

Check out the Rivanna River Basin Commission's Facebook page to stay up to date on RSEP news!

#loveyourwatershed



## Rain Barrel Guide

## Make Your Own Rain Barrel!

Help reduce pollutants in our waterways and save money!



# What Will You Need?

There are a few things you'll need before getting started...

- A Rain Barrel of course! The average size usually tends to be around 50-60 gallons. \*
- A mesh or screen filter to install on top to keep insects out.
- A 3/4" spigot and 3/4" hose adapter. You can often find these together in a kit at your local hardware store.
- 3/4" nut, washer, an O-ring. Make sure they match your spigot and O-ring!
- An overflow outlet or pipe. We recommend using a 3/4" sump pump hose.
- 1/2" screws to install the mesh screen. Brass, stainless steel, or exterior grade should work great!
- Silicone non-toxic caulk.

## A Few Tools...

- A drill.
- 3/4" spade drill bit. (Technically optional but it will make the process much easier!)
- A bit or screwdriver that matches your screws.
- A caulk gun.
- A utility knife or scissors.
- A wrench or pliers.

**Affordable rain barrels are sometimes tricky to find.**

**The City of Charlottesville and Albemarle County**

**Service Authority offers a \$30 rebate when you purchase and install a rain barrel (up to 2, no homemade barrels).**

**Some large bottling companies will often donate large barrels for a reduced cost or for free that you can use to make your own. There are lots of resources online that may donate or offer barrels at a reduced price!**

## Now that you have everything...

### 1) Find the best location and prep the area!

- Locate the preferred downspout next to your house (The downspout is where the water pours down from the roof). Make sure to consider ease of access and how and where you will use the water!
- Prep the ground under where the barrel will go to make sure it is level and secure. Be careful! Don't underestimate the weight of a water-filled barrel! Elevate the barrel so it is higher than ground level. The higher the barrel the higher the water pressure!

### 2) Clean the barrels!

- Any debris or plastic residue should be cleared to prevent clogging. A little water and soap will do the trick!

### 3) Mark the locations for your spigot and overflow holes!

- Spigots are normally located three inches from the bottom of the barrel. If your barrel is curved, place the mark right above the curve.
- The overflow hole, used to direct water out of a full barrel, should be three inches from the top and on the back of the barrel.

### 4) Drill the holes for the spigot and overflow!

- Try to use a drill bit that is slightly undersized to allow the spigot's metal threads to bite into the plastic. Make sure all holes you make match the size of the spigot or hose you plan to use!

### 5) Install the spigot!

- Make sure you can reach into the barrel, and if not cut a 6" hole on top for your downspout to enter and big enough to reach into the barrel. With a little muscle, screw the spigot into the bottom hole. Reach inside and place the rubber O-ring over the spigot. Then place the washer over the O-ring and the nut to tighten the piece. Use caulk to close any openings. Watertight!

### 6) Install the mesh covering!

- If needed, cut the gutter and position the barrel below the downspout. Measure the length and width of the hole and cut an equally sized mesh square. Place it over the top and screw the 1/2" screws around the mesh filter. You can also use caulk to secure it in place.

### 7) Install the overflow hose!

- The hose should direct water away from the house's foundation. You can use gravel, stones, or bricks as a splash block to prevent erosion. You can use the overflow hose to also connect multiple barrels! Use your utility knife to scrape the hole and make it just big enough to install the hose. Make sure to caulk any gaps to prevent insects from entering.

### 8) Wait for the rain!

- Once the barrel is positioned and secured under the downspout, you are all set! Don't forget you should empty out your rain barrel after every rain event to keep it working properly!