# Why Rain Barrels?

Lawn and garden watering typically makes up 40% of a household's total summer water usage in the United States (EPA). That's a lot of water and a lot of potential savings for your pocket book! Rain barrels help mitigate that water usage by collecting and storing rainwater for when it's needed.



In addition to reducing water demand, rain barrels help homeowners "slow the flow" and protect the quality of their local waterways. Rain runs off impermeable surfaces such as houses, driveways, parking lots, and streets collecting pollutants like yard clippings, oil, trash, and even salt from winter snow melt! This polluted water empties right to our lakes, rivers, and streams. By installing a rain barrel you can be a part of the solution and allow water to infiltrate naturally back into the ground. Thank you for doing your part this World Water Day!

## TIPS & TRICKS FOR USE

- **Do not drink the water.** Bacteria and other chemicals may still enter from the rooftop making the water unsafe for human or pet consumption.
- **Remember gravity.** When full, your 55 gallon barrel will weigh more than 450lbs! Ensure the barrel is set up on level blocks with a secure and sturdy base.
- **Find the right downspout.** Choose a downspout that is close to the area were you want to use the water. Be sure to direct overflow from the barrel away from your home or garage.
- **Practice safety when configuring downspout.** Before cutting or boring into your downspout, make sure there are no nearby hazards, wear gloves and use eye protection.
- **Keep the barrel lid on**. This will prevent children and debris from falling in and will combat mosquitoes.
- **Prevent mosquitoes**. You can add screen under your barrel lid or inside the downspout adaptor. Adding 3 tablespoons of olive oil to the water or purchasing a larvae tablet (containing Bacillus thuringiensis israelensis) are natural, non-harmful solutions as well.
- **Drain your barrel, use your rain water**. Ideally one to two times a month. This discourages mosquito breeding and gets you ready to collect the next rainfall.
- Winterization. Drain and disconnect your rain barrel before winter. Repeated freezing and thawing can weaken the material and cause cracks. Make sure your downspout will continue to divert runoff away from your house once the barrel has been removed.



## RAIN BARREL PARTS

All parts can be purchased at your local hardware store.

- 55 gallon barrel
- 3/4" MHT x 1/2" MIP Nylon Garden Hose Adaptor
- 1/2" MIP Brass Hose Bibb Valve
- Galvanized MAL Lock Nut (2 needed)
- 3/4" Flat Washer (2 needed)

(Drills will be needed to make holes in the barrel, this may be done by hand but will require more effort. Waterproof caulk will also be needed to secure parts to the barrel and ensure it doesn't leak.)

#### **Additional Parts to Purchase**

- **Downspout adapter** correctly sized to your downspout. These are available for \$2-4 at your local hardware store.
- **Cinder blocks**, at least two to set your barrel on top of. This allows for space underneath your spigot for a watering can and elevating the barrel will help with stronger water flow.



## **PUTTING YOUR BARREL TOGETHER**

- 1. **Drill the holes**. We've done this for you! The 4" hole for the downspout adaptor is located near the edge on the barrel's top to accommodate your downspout and allow the barrel to rest against your home. The 1" hole near the top of the barrel on side is for overflow or additional connections. The 1" hole at the bottom of the barrel will be for your spigot and main drainage connection.
- 2. Attach the overflow adapter. Screw one washer onto the nylon hose adaptor, you may need to you a wrench to pop it on. Place a small amount of caulk along the inside of the washer (side that will be against the barrel) and insert adaptor into hole. Hold washer and adaptor firmly in place while you screw on the lock nut from the inside.
- 3. **Attach the hose bibb.** Slide your second washer onto the brass hose bibb and apply caulk as you did in the previous step. Hold the bibb securely to the barrel and reaching down inside screw on the second lock nut. Be sure to tighten the hose bibb enough to secure it but not so tight it damages the threads.
- 4. **Let your rain barrel dry.** Silicone caulk can take up to 24 hours to cure completely. After that you can use your barrel!

### MORE UPCOMING EVENTS TO GET INVOLVED

- Sustain Winona Water Contest: April to August, sign up online!
- Healthy Lake Winona Meeting: April 9<sup>th</sup>, 5pm at Winona City Hall
- Master Naturalist Course: Mondays & Thursday in April, 6:30-9pm at Whitewater State Park
- Save Our Streams: One day water quality monitoring workshop March 25<sup>th</sup>, 9:30am to 5pm
- Winona Area Pollinators: Pollinator Party, March 24th, 5:30-8:30pm at Blue Heron Coffeehouse
- Creating Prairie & Pollinator Yards seminar: March 26<sup>th</sup>, 6:30-8pm featuring Prairie Restorations at Minnesota State College SE, Room 205
- Landscaping for Erosion Control seminar: April 3<sup>rd</sup>, 6:30-8pm at WSU in Stark Hall, Room 106
- The River Starts Here Teacher Workshop: June 21-22 at Whitewater State Park

Questions or comments?

Contact Allison at whitewatersp.greencorp.dnr@state.mn.us or Lauren at ljensen@co.winona.mn.us