



Rain Barrels



Rain barrels capture the water that runs off your roof and stores it for later use. Installing a rain barrel at your home helps reduce the amount of water running off your property, decreasing the amount of water and pollutants that end up in local water bodies.

The stored water can be used for a variety of purposes, including watering your flower beds or potted plants and in an emergency this water could be used to flush your toilet.

Additionally, storing water in a rain barrel allows a homeowner to have access to water on restricted watering days. For example, some cities have chosen to permanently restrict watering to odd/even days.

Ready-to-go rain barrels can be purchased at many stores, or if you want a fun DIY project, you can build and paint your own!



GRDA'S WATERSHED CONSERVATION PROGRAM

Guard the Grand
GRDA's Watershed Conservation Program

Typical Rain Barrel Design

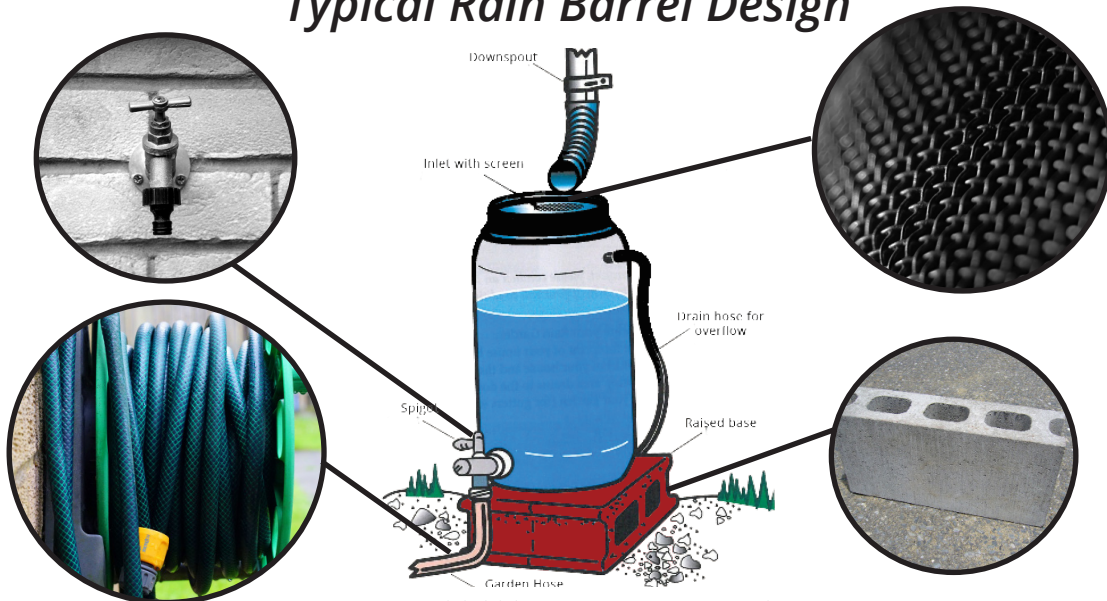


Image: Philadelphia Homeowner BMP Manual

Materials and Tools

Materials

- ◆ Heavy-duty plastic barrel
- ◆ 3/4" copper water spigot
- ◆ 1" galvanized washer
- ◆ 3/4" flat rubber washer
- ◆ 3/4" hose adapter
- ◆ Flat, raised base
- ◆ Teflon tape
- ◆ Screen

Tools

- ◆ 6" Hole saw or saber saw
- ◆ Drill
- ◆ Safety glasses
- ◆ 15/16" paddle bit

Building Your Rain Barrel in 6 Easy Steps

Inspired by Better Homes & Gardens

Step 1: Select the size and location of the barrel

The size of the rain barrel should correspond to its intended use. The barrel is limited to the available space at the selected location.

Also consider the foundation of the selected location. If a 55-gallon drum will weigh almost 400 lbs when full, the foundation will need to handle the weight without deforming.

Step 2: Prepare the hose adapter and spigot

Place the 1" galvanized washer and then a 3/4" rubber washer over the threaded part of the faucet and hose adapter. Wrap the threaded portions with teflon tape, making about five rotations, to ensure it is watertight.

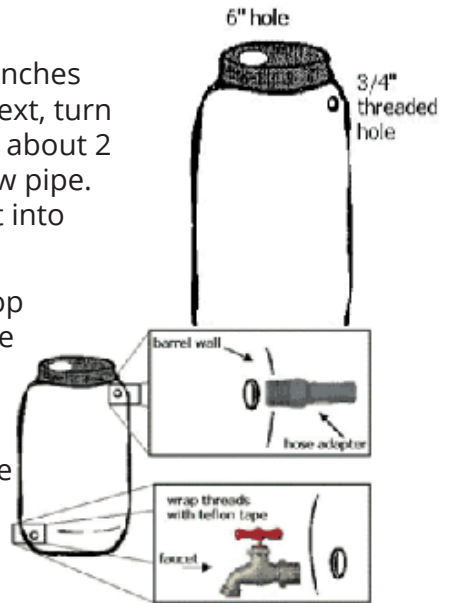
Step 3: Get drilling!

Using the 15/16" paddle bit, drill a hole about 3 inches above the bottom of the barrel for the faucet. Next, turn the barrel 1/3 of the way around and drill a hole about 2 inches from the top of the barrel for the overflow pipe. At each hole, use a 3/4" NPT pipe tap and twist it into place to create threads.

Using a 6" hole or sable saw, drill a hole at the top of the rain barrel for the inflow of water from the gutter system.

Step 4: Add the hose adapter and spigot

At the hole near the top of the barrel, twist in the 3/4" hose adapter into the threads. At the hole near the bottom, twist in the 3/4" faucet into the threads. Secure both the hose adapter and the spigot with a 3/4" lock nut from the inside of the barrel.



<https://pugetsoundstartshere.today/2018/05/01/how-to-make-your-own-rain-barrel/>

Step 5: Secure the top

Cover the hole with a piece of meshed screen (such as landscaping fabric) for mosquito control.

Step 6: Secure placement

Place your rain barrel on a raised base such as a cinder block. A higher base will result in higher water pressure. Periodically maintain and clean your rain barrel. Enjoy!



First Flush Diverter (Optional and Recommended)

The diverter is meant to avoid adding the "first flush" of water from a roof into the barrel's water supply. This water contains most of the contaminants that originate from a rooftop, such as bird droppings.

The water coming from the gutters fill the diverter first. The water is allowed to exit the diverter from a small tube at the end of the PVC pipe, which leads the water away from the barrel's base. Water will begin entering the rain barrel after the diverter is filled.

To install a first flush diverter, you will need additional PVC pipe and small tubing. Please see <https://www.youtube.com/watch?v=FeRO2MnH79M> (3:23-6:30) for detailed installment instructions.

Tips for Using your Rain Barrel

- ◆ Make sure the barrel is set up high enough to fill a watering can or something similar.
- ◆ If you want greater storage capacity, install a series of barrels. In place of the hose at the upper 15/16" hole, place a pipe connecting the water from barrel to barrel. To fill the barrels and use the water at the same rate across barrels, connect them at the bottom of the barrel. You will need to add an overflow to one of the barrels.
- ◆ Run your overflow hose away from your home during heavy rain events to prevent foundation issues.
- ◆ Keep the barrel out of direct sunlight and use a dark-colored rain barrel, or paint it to help reduce algae growth.
- ◆ Keep a tight screen over the top of the barrel to prevent any mosquitoes from emerging.
- ◆ You can paint your rain barrel; make sure you rough it up with sandpaper first and then use a paint suitable for what your barrel is made of. You can find several guides to painting your rain barrel on the internet.
- ◆ ***Unless you treat the water, do not use it for drinking water!***
- ◆ For larger water storage systems visit www.GreatPlainsLID.org

Guard the Grand is an educational program with the goal of fostering an ethic of environmental stewardship in Oklahomans residing in watersheds that flow into Grand Lake O' the Cherokees.

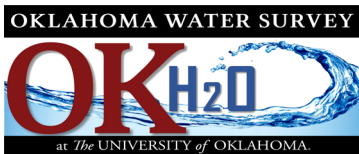
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