

Make Your Own!

A plastic or metal garbage can is easily converted to a rain barrel by attaching a spigot and hose. To filter out leaves and debris, install a removable screen at the entrance to the rain barrel. Keep the rain barrel clean to prevent mosquito and algae growth.



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Town of Purcellville

Rain Barrels & Cisterns

A Water Conservation Guide on Using Rain Barrels in Your Home



*Developed by and for use by
Town of Purcellville
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What is a Rain Barrel?

Rain Barrels are a system designed to capture and store rainwater coming off a roof and are usually attached to a downspout. They consist of a storage container, a system for diverting downspout water into the barrel, and an overflow that returns water to the downspout or diverts water safely away from the house. Similarly, a **Cistern** is a larger above or below ground water storage system.

Most rain barrels hold approximately 50 gallons and range in price from \$50 to \$130 or more depending on size. Some are made of plastic, some of metal, and others are even restored Whiskey Barrels.



Estimate Your Roof's "Footprint" to Determine How Much Rain it Catches

Multiply your home's width by its length (in feet).

Then estimate the portion of this area that drains to the downspout you'll be using to catch your rain.



The following formula will give you a rough estimate of how much rain you can catch:

$$\text{Rain caught (gallons)} = (\text{inches of rain}) \times (0.6) \times (\text{portion of building footprint in ft}^2)$$

For example, if your home's footprint is 1,400 ft², and you want to know the amount of water that comes from a 0.25" rainfall, you would solve the following:

$\text{Rain caught (gallons)} = (0.25) \times (0.6) \times (1,400) = 210$ gallons. However, remember that storage is limited to the capacity of your system. If your rain barrel holds 50 gallons, then 160 gallons will be lost.



****Please note:** Make sure your rain barrel is made of an opaque material to prevent bacteria and algae growth. Inspect and remove any debris regularly to discourage mosquito breeding.

Interested In Learning More?

This and More Information, As Well As Rain Barrel Products, Are Online:

- www.savingwater.org/docs/rainbarrels.pdf
- www.rainwatersolutions.com
- www.realgoods.com
- www.rainbarrelsandmore.com
- www.texasmetalcisterns.com
- www.rainsaverusa.com
- www.urbangardencenter.com

Collected rainwater can be used to water plants, gardens, lawns, even the car!