

Yehnekutákhwa?

It Holds the Water

What are the advantages of a rain barrel?

Lawn and garden watering make up nearly 40% of total household water use during the summer. A rain barrel collects water and stores it for when you need it most -- during periods of drought -- to water both indoor and outdoor plants, wash your car, or even to wash your hair. It provides an ample supply of free “soft water” to homeowners, containing no chlorine, lime or calcium making it ideal for gardens, flowerpots, and car and window washing.

A rain barrel will save most homeowners about 1,300 gallons of water during the peak summer months. Saving water not only helps protect the environment, it saves you money and energy. Diverting water from storm drains also decreases the impact of runoff to streams.

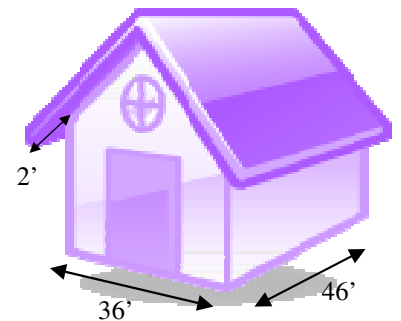
How many barrels can I use?

Your **roof catchment area** is equal to the total square feet of your house plus the extension of your eaves. To calculate the square feet of your house’s catchment area, measure the area of the outside walls and then include the overhang of any eaves.

To get your **total roof catchment area multiply the** total length of the walls plus the eaves (**40 x 50 feet**). = **2,000 sq ft** (total roof catchment area)

Each side of this roof would have a catchment area of 1,000 sq ft.

One inch of rainfall provides approximately **600** gallons of water for a 1,000 square foot catchment area.



You can collect some or all of your roof runoff:

- ◆ Divert rain barrel overflow into a rain garden
- ◆ Connect multiple rain barrels with hose or tubing on overflow outlets



Build Your Own Rain Barrel



Supplies

1. 55 gallon food-grade barrel
2. 1 1/4" pipe/tubing fitting
3. 3/4" Hose bibb (*spigot*) or hot water heater valve (with 1" pipe thread)
4. Fiberglass screen material
5. Mesh plant basket (option 1) or downspout adapter (option 2)
6. 1 1/4" overflow/outlet hose



Option 1 with plant basket



Option 2 with downspout adapter

Tools

- Tape measure
- Drill
- 1" spade bit
- 1 5/8" hole saw
- Silicone sealant
- Teflon tape
- Jigsaw or Rotary Cutout tool

Instructions

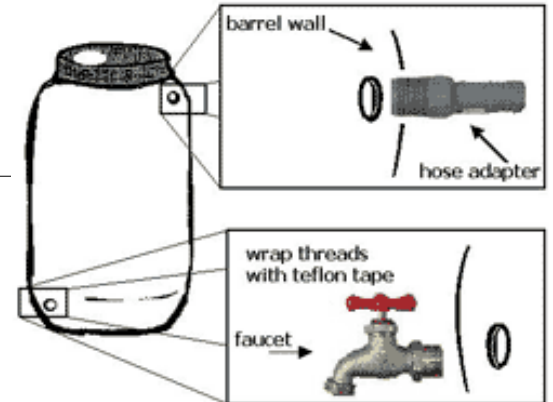
Lower Drain Hole

- Using a 1" drill bit, drill a hole through the barrel a couple of inches from the bottom.
- Wrap valve threads with Teflon tape, and screw in the drain valve (#5).



Upper Overflow Hole

- Mark the upper drain hole according to where you want the overflow located. Using a 1 5/8" hole saw, drill a hole through the barrel.
- Screw in the 1 1/4" pipe/tubing fitting (#2)



Seal both lower and upper drain holes with silicone sealant.

Top Holes and screen—Option 1

- Using a jigsaw or rotary cutout tool, cut hole in top of barrel approximately 1/4-1/2 inch smaller than plastic filter basket
- Glue fiberglass screen to inside of filter basket. Once the glue dries, fit the basket into the hole in the barrel.



Top Holes and screen—Option 2

Place screen material over small end of adapter, and place in existing 2" hole in top of barrel. Insert downspout into top of adapter.



RAIN BARREL INSTALLATION AND CARE

Installation:

If your downspouts are connected to the sewer system, **Check with your municipality to make sure it's legal** to disconnect your downspout.



Put some blocks down where you want to place your barrel. Getting the barrel higher up in the air will help you get more water pressure out of the hose that you connect to the faucet at the bottom of the unit. Put your barrel on the blocks.



Determine where your downspout will connect to the barrel. Don't forget to account for any attachments needed, especially if you have a round downspout going into the barrel insert. **Mark the downspout where you need to cut it.**



CAREFULLY cut your downspout with a hacksaw



You can connect multiple barrels together to collect more water!

Attach your barrel to the downspout. It's that easy!

Connect the overflow hose to the top fitting on the barrel. **Make sure you direct the hose away from the foundation of your home so you don't cause water problems in your basement.**

How to paint your barrel:

1. Wipe down the barrel with a one-to-one mixture of vinegar and water
2. Rough the surface of the barrel with a piece of fine grit sand paper
3. Apply a coat of latex bonding primer
4. Paint your design with "exterior latex paint"



Photo courtesy of Linda Peacock-Landrum



Courtesy of MILWAUKEE METROPOLITAN SEWERAGE DISTRICT



MAINTENANCE, ETC...

The type of barrel you use is important. Make sure it's a food-grade container that was made to hold liquid. You cannot cut corners and simply use a trashcan because a common trashcan will not withstand the pressure of the water for long. The location of your rain barrel is also important. Make sure you place it on level and stable ground. When your rain barrel is at maximum capacity, it will weigh quite a bit and tipping is a risk on uneven ground.

- ◆ Make sure that the barrel is high enough to allow drainage from the spigot.
- ◆ Always monitor the rain barrels for overflow. If for example you leave for vacation for a week and haven't taken precautions to avoid the overflow of water, you may end up with damage to the foundation of your home or other related problems over time.

Never use an open container for rainwater collection. Make sure you have some way to cover the barrel with a screen or a top.

- ◆ Water stored in any kind of container represents a risk for small children. Children can drown in just a few inches of water.
- ◆ Mosquitoes breed in standing water. Use a fine screen over the top of the barrel so the mosquitoes can't reach the water.
- ◆ Both wild and domestic animals may become trapped and drown in your barrels if uncovered.

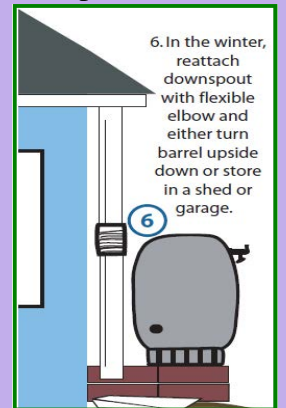
Do Not Drink! Water stored in your Rain Barrel is NOT POTABLE WATER. THIS MEANS IT IS NOT TO BE USED FOR HUMAN CONSUMPTION. Please take precautions when storing water in any outdoor container.

Most people, especially children, think nothing of taking a sip from a hose. Please take measures to secure the hose connected to your rain water collection device. **You must prevent anyone from drinking or bathing with water from this rain barrel as it may contain animal droppings, dust or roof composite.** If your roofing material has been treated with a moss inhibitor it *may not* be suitable for vegetable gardening either. Water from this barrel is for non-potable uses only. Wash the car, the windows, do most anything but do not consume it.

Post a sign on your rain water barrel stating: [DO NOT DRINK.](#)

Deter Theft and Peeping Toms: Do not install a rain barrel where it could be used to allow an intruder to gain access to your home.

Prepare for Freezing Conditions: Empty all the water from the rain barrel at the end of the growing season or after the first frost. There is no value in having a frozen block of ice sitting near your downspout. If you are able to bring the barrel inside, that's great. If it is to remain outside, at a minimum, remove the hose and turn your rain barrel upside-down. Reconnect your downspout to the gutter system and bypass the rain barrel completely. If you purchased a diverter, confirm that it is diverting the water into the alternate downspout not the rain barrel.



DuPage County Stormwater Management 1/2010

STORING WATER IN YOUR BARREL DURING FREEZING CONDITIONS WILL CAUSE IRREPARABLE DAMAGE

Rinse Cycle: Try to cycle the water through the barrel as often as possible. Rinse the inside of the rain barrel occasionally. When the barrel is nearly empty open the shut off valve of the hose assembly and hose down the inside of the tank. You will be able to flush out a significant amount of residual sediment and clean off particulate matter clinging to the walls of the barrel. If there are large pieces of sediment you wish to flush out, consider the removal of the hose assembly before the rinse cycle. A safe cleaning solution is 2 teaspoons of castile soap and 2 teaspoons of vinegar per gallon of water or 2 teaspoons of lemon juice per gallon of water.

