



PUBLIC WORKS
STORMWATER MANAGEMENT

THE INSTALLATION & MAINTENANCE OF YOUR RAIN BARREL

AN ALTERNATIVE FOR
STORM WATER RUNOFF



How to build barrels from 30 or 55 gallon drums in 12 simple steps:

Materials

Plastic Drum (food grade)
2- ½" Bulkhead Tank Fittings
1- Tube Silicone Outdoor Sealant
1- ½: Brass Hose Bibb, Plumber's Tape
Nylon Package Strapping with metal buckle
18" square mosquito netting
Krylon or Plastic Primer and Spray Paint
½" to ¾" Male to Female Adapter

Tools

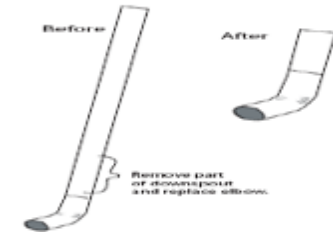
5/8" Hole Saw, Drill, Jig or Reciprocating Saw

Instructions:

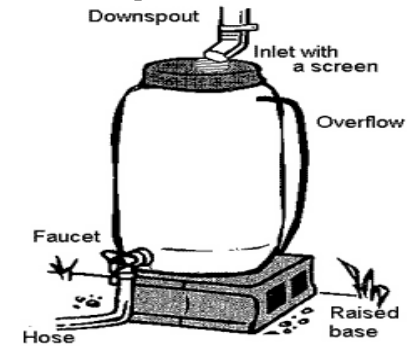
1. Cut the top off of the barrel, leaving the raised lip intact.
2. Rinse the barrel 3 times
3. Determine desired locations for the overflow and spigot holes.
4. Using the hole saw, drill a hole in the barrel wall 3" from the top (overflow) and 3" from the bottom (spigot).
5. If the barrel is not opaque, lightly sand barrel exterior and apply a primer appropriate for use on plastic.
6. Apply one to two coats of spray paint to achieve desired shade and opaqueness
7. Install bulkhead fittings in the spigot and overflow holes.
8. Install hose bibb (use plumber's tape) on lower bulkhead.
9. Install male to female adaptor (use plumber's tape) on upper bulkhead
10. Place a generous bead of silicone just below the rim, (where the barrel is cinched), to seat the strapping.
11. Layer the mosquito netting on top of the barrel and belt it on with the strapping material and metal buckle. Pull tight. (see picture under Mosquito Prevention)
12. Place barrel on a raised, sturdy surface.

Installing your new rain barrel:

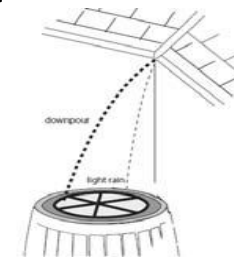
STEP 1: Determine an appropriate, level location for the rain barrel. Shorten the existing downspout so the elbow is above the barrel.



STEP 2: Place the barrel under the downspout. For increased head pressure, raise the barrel on concrete blocks or pavers.



Alternate Installation: If you do not have rain gutters, you may install the barrel where two roof sections meet and form a valley. Position the barrel so that it will catch both soft and heavy rainfall.



To connect two rain barrels:

Step 1: Prepare your next barrel

Step 2: Attach a short hose or pipe between

WHAT IS A RAIN BARREL??

A rain barrel is an alternative way to collect rain water or storm water runoff from rooftops. Barrels come in different shapes and sizes, but all do the same thing: they save water, decrease storm water runoff and reduce soil/sediment erosion. While reducing your environmental impact you may also enjoy savings on your water bill. And don't forget that rainwater is healthy for your plants because it contains no added chemicals



LOCATION

Observe your site and sketch a site plan. Walk your site to identify drainage conditions. Mark the locations of downspouts.

Install where you will use the water in your yard. It may be possible to adjust the gutter and move the downspout to a more desirable location. The barrel must be located at the base of one of the downspouts draining the roof gutter. This way water will overflow to a **safe disposal location** like your lawn, or a flowerbed.

Incorporate the barrel into your landscape. You may choose to place the barrel in a colorful flowerbed or camouflage the barrel with plants or shrubs.

PREVENTING MOSQUITOS

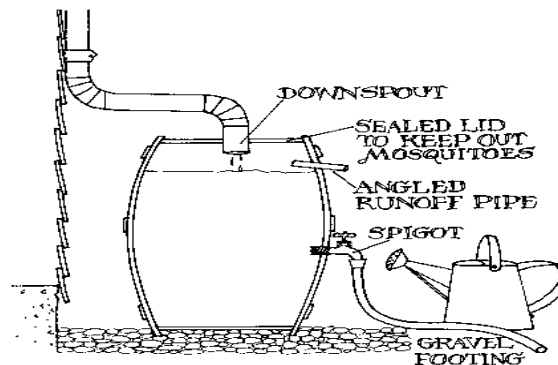
Mosquito-proof screening should be used under the lid and inside the overflow hole to keep mosquitoes and other insects out.



Place barrel on a pervious or landscaped area so that overflow soaks into the ground instead of pooling on paved surfaces.

Keep barrel clean & free of organic material.

During the rainy season, use your hand to splash off any standing water on top of the barrel every 3 – 4 days (It takes 4 days of standing water for mosquitoes to develop as larva). If you believe that mosquitoes are breeding in your barrel, empty the barrel completely. This will kill the larva. As long as the netting is intact, your rain barrel should be mosquito-free.



MAINTAINENANCE

Clean gutters twice a year.

Maintain gutters to make sure that water is always directed towards barrel or safe discharge points. Make sure gutters and rain barrels are securely positioned.

Clean out rain barrel and check for leaks and repair parts/leaks at least twice a year.

Check screening to prevent mosquitoes.

Monitor the overflow area. Grade soil if necessary to prevent storm water runoff, erosion.

SAFETY CONSIDERATIONS

Barrel must be secured on a firm, level surface. A full 55-gallon barrel can weigh 400 lbs. and is a tipping risk.

Barrel must be structurally sound and a food-grade container made to hold liquid.

Barrel must have a lid or a fine mesh covering all openings to prevent mosquitoes, insects and debris from getting inside.

Never use the water for drinking or cooking or other potable uses.

Barrel must overflow to a safe discharge point