

#### **Rain Barrel Guide**



# What is a Rain Barrel?

A rain barrel is a container that collects and stores rainwater from downspouts and rooftops for future use watering lawns, plants, and gardens.

Rain barrels can be constructed in a number of ways, but they all serve the same purpose-to collect rainwater and decrease the amount of stormwater runoff that leaves your property. Using a rain barrel is one way to decrease your household's impact on local waterways and to become a good steward of local watersheds.

## Why You Should Use a Rain Barrel

The average rainfall of one inch within a 24-hour period can produce more than 700 gallons of water that runs off the roof of a typical house. Much of this water runs from gutters onto surfaces that do not allow water to soak into the ground. These are called impervious surfaces and include concrete, asphalt, and compacted soil. Even commonly used sod has a very low infiltration rate and can be a major cause of increased runoff.

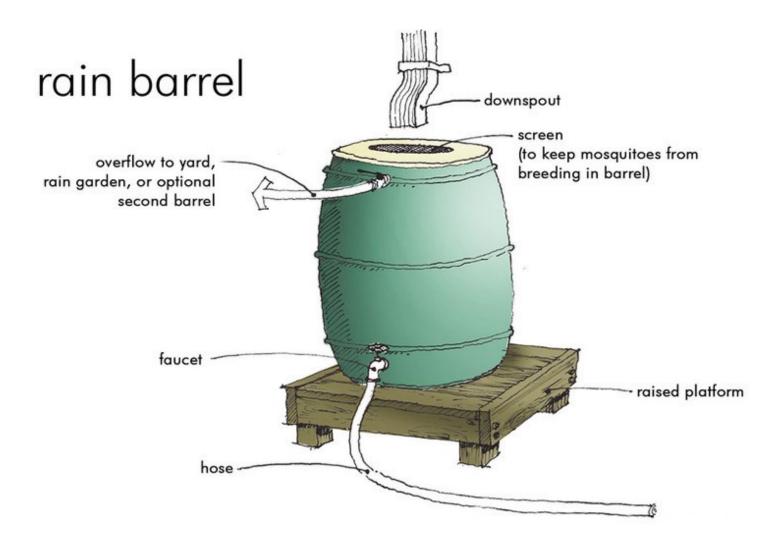
As it flows, runoff collects and transports soil, pet waste, salt, pesticides, fertilizer, oil and grease, litter and other pollutants. This water drains directly into nearby creeks, streams, and rivers, without receiving treatment at sewage plants.

Polluted stormwater contaminates local waterways. It can harm plants, fish and wildlife, while degrading the quality of water.

Using a rain barrel also reduces demand from community water supplies, helps avoid the consequences of overusing local water sources, and helps prolong the life of the homeowner's well and well pump.

# How Does a Rain Barrel Work?

Rain Barrels are containers designed to trap and store rainwater. They can be huge, complex systems that use pumps and linked barrels for storage, or single plastic or wooden drums that catch rainwater traveling along roof gutters and out of downspouts.



# **Benefits of a Rain Barrel**

The best part of having a rain barrel is the many benefits it will create for the environment and your pocketbook. Rain barrels help to:

- **Protect Our Creeks and Streams**—By capturing rainwater that falls on the roof, you are helping to reduce the amount of stormwater that flows into our local waterways.
- Lower Water Bills—By having water saved up during dryer months, you can reduce the amount of water you run through a hose or faucet to water your plants.
- Prevent Runoff— Rain barrels prevent the excess runoff of water, while also improving the vitality of plants, flowers, trees, and lawns. (Rainwater is slightly acidic, and free from chlorine, salts, minerals, disinfectant byproducts and other contaminants.)
- **Reduces Flooding** in your yard and basement.
- Reduces Stress on well pumps and wells for those not having city water, and saves on the electric bill running the pump.
- Extend the life of your septic system by reducing soil saturation, and reducing any pollution due to leaks.
- Multi-Purpose—Use the extra water to water your garden, bathe your pet, or add to a bird bath.



## Where to Get a Rain Barrel

Rain Barrels can be ordered online, purchased at stores like Home Depot or Lowes, or you can build one on your own! You can even set up a network of numerous rain barrels!

Make yours as simple or as fancy as you want!





## How to Build a Rain Barrel

Generally a rain barrel consists of four main components: a barrel, a top hole, and upper drain, and a lower drain.

- **Plastic 55-gallon drums** are the recommended type of barrel to use for safely collecting water with minimal leaking.
- A top hole should be cut in the top of the barrel for collecting water. Insert a skimmer basket like those found in garden ponds and swimming pools to filter out leaves and other debris. It is important to cover the basket with fiberglass window screen to prevent mosquitoes and other disease-carrying insects from entering the barrel.
- The top drain is 1 -1/2 inch PVC pipe which will discharge to a splash block to keep the barrel from overflowing.
- The bottom drain is brass hose bib (or a brass boiler drain) that attaches to a hose for watering lawns and gardens. This faucet should be kept in the "open" position when not in use. If the barrel is allowed to drain into a garden by using a soaker hose that will drain the barrel in 72 hours and water will not be in the barrel long enough to breed mosquitoes. A small portable electric pump can also be used to pump water up a hill if needed.

#### **Tools Needed**

3/4" spade drill bit Electric jigsaw Electric drill Marker Wood Rasp Supplies Needed 1-55 gallon barrel 1-3/4" threaded brass hose bob or boiler drain 1-Skimmer basket-10' square plastic basket 1-roll of Teflon Tape

#### Installation

The rain barrel is placed beneath your downspout to collect rainwater from the roof. You'll probably want to place brick or concrete blocks under the barrel to elevate it, then cut the downspout and direct the water into the barrel.

