

# **Rain Barrel Guide**

Everything you need to know about building, installing, and maintaining rain barrels



### WHAT ARE RAIN BARRELS?

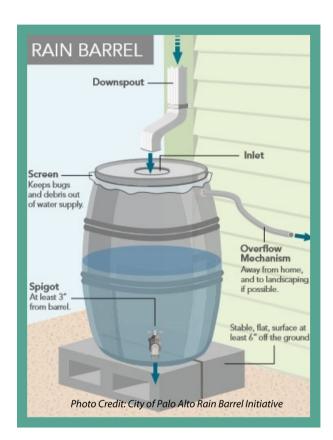
Rain barrels are a tool used in watershed restoration that manages rainwater where it falls. In urban and rural environments, rainwater carries pollution such as fertilizer and sediment into our lakes and streams that negatively impacts water quality. Rain barrels are connected to gutter systems and temporarily hold non-filtered water that drains from rooftops. Instead of rushing immediately into storm drains, the collected water can be used to irrigate landscape plantings. Rain barrels are simple, low-cost, and effective water collecting and conservation devices.

### **CONSIDERATIONS**

Before building and installing, it is important to determine if a rain barrel is appropriate for your property. A rain barrel must be installed at the base of one of the downspouts draining from your roof gutter. The barrel will hold non-potable water which can be used in your yard and flower beds. When considering what the design of your barrel will look like keep in mind where the water enters the barrel, how to keep debris and excess leaves from blocking the water inlet, and how to stop mosquitos from entering the barrel. Barrels can be any color, but a translucent barrel is not ideal as it will promote algae growth. Painting your barrel with resin deck furniture spray paint helps to keep sunlight from entering the barrel. When thinking about where to build your rain barrel, it must be secured on a firm, level surface. For optimum function, a rain barrel must be elevated off the ground for water to flow out. We would recommend using cinder blocks or bricks as a base for a rain barrel.

### **MATERIALS AND SUPPLIES**

- One 55 gallon food grade barrel
- 1" drill bit
- 3/4" spigot with a threaded inlet and 3/4" male hose end
- 3/4" tubing elbow or plastic adaptor
- Teflon tape
- Plumber caulk (clear is recommended)
- Base platform (cinder blocks, pavers, bricks etc.)
- Rain gutter diverter kit (see link below)



## RAINSCAPING SITE ASSESSMENT

ODC and trained volunteers offer a Rainscaping Site Assessment for community members who are interested in installing rain barrels on their property. To request a site assessment, fill out the Google Form that can be accessed from the QR code below.



Visit www.outdoordiscovery.org/rainbarrels/ to learn more about rainscaping



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### BUILDING

- Drill two holes, one near the top of the barrel for overflow, and one near the bottom of the barrel for the spigot. We recommend to have these holes at a 90 degree turn of the barrel from each other.
- Thread the spigot into the hole at the bottom of the barrel. Remove and apply 2-4 layers of Teflon tape to the threads of the spigot then thread it into the bottom hole that was drilled into the barrel.
- Thread the plastic adapter into the hole drilled at the top of the barrel. No tape or goop will be necessary as this is simply an overflow valve.
- Apply a bead of caulk around the seal of the spigot to be sure the spigot will be water tight.
- Finish the top of the barrel according to your personal design. The length of tubing is intended to carry overflow water from your barrel away from the foundation of your home, or perhaps connect to a second rain barrel. Attach the appropriate length for the purpose.

# THINGS TO NOTE BEFORE INSTALLING

- Installing a rain barrel correctly and securely will help the longevity of your barrel.
- A full rain barrel weighs nearly 500 lbs. Building a strong, stable, secure base will help to prevent any tipping or movement of the barrel when it is full of water.
- The higher the barrel, the better the water pressure. Your barrel will drain well if it is full, on a stand, and on higher ground.
- Due to the large roof size on houses, one barrel is simply an extension of the gutter system and overflow may occur. If this happens, open the spigot at the bottom of the barrel and let the water run out or use the water within the barrels for watering plants. There is an overflow mechanism installed on the barrels that will drain the excess water from the barrels.

### MAINTAINING

- Clean gutters at least twice a year, more often if you have trees.
- Make sure gutters are tilted to direct water to downspouts.
- Check and clear down- spout elbows, rain barrel screening, and overflow to prevent clogging. Caulk any gutter, downspout, barrel, and overflow leaks and holes.
- Make sure the rain barrel remains securely screened to prevent mosquito entry.
- If overflow is directed to a grassy area, monitor the area and re-grade soil if necessary to make sure water drains away from structures and does not flow onto pavement, side- walks, or neighboring properties.
- Once your barrel is full, be sure to use the water before the next rain to avoid overflow.
- Disconnect your barrel and store indoors during the winter.
- If algae grows in your barrel, use a non-toxic cleaner (like vinegar) to clean your barrel.

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