

Rain Barrel Basics

Installing a rain barrel is a great way to save water and learn about sustainable water management. The County of San Diego provides incentives for rain barrels to help reduce stormwater runoff that carries pollution to our waterways. This guide is intended to help participants learn the basics of proper & safe rain barrel installation. Stormwater captured in rain barrels can be used to water plants & landscaping. *Note that stored water is **not potable** and should not be consumed by humans or pets.* Please read this entire guide before starting.

Basic Steps to Success

Step 1



Step 1: Plan your project

Is a rain barrel right for your site? Observe how stormwater drains across the roof and landscape. Estimate the square footage of the roof and identify permeable areas.

- Select a location with a level surface. A full 50-gallon rain barrel weighs over 400 pounds.
- Direct overflow away from structures, slopes, or neighboring properties toward permeable areas or drainage systems.

Step 2



Step 2: Put it on paper

Using a scaled plan drawn on grid paper or an aerial view of the property, draw in the location of the barrel(s) and any identified permeable overflow areas.

Steps 3 & 4



Step 3: Place and elevate

Elevate the rain barrel 6 to 12 inches off the ground to ensure water has enough pressure to be drained from the rain barrel.

Step 4: Install a spigot and diverter or downspout

Whether using a direct downspout connection or diverter kit:

- Install a spigot near the bottom of the rain barrel.
- Diverters must be installed per manufacturer instructions.
- The downspout must be attached to a structure using galvanized or stainless steel support straps and hardware.
- Locate downspouts about 2-1/2 inches above the barrel. Do not extend more than 2 feet without support.

Step 5



Step 5: Provide an overflow area

Ensure overflow drains to landscape areas or other drainage.

Step 6



Step 6: Screen all openings

Use a screening mesh with openings no larger than 1/16 inch to mosquito-proof the water stored in the rain barrel.

Additional Information

- Use rocks or gutter extensions to slow down the overflow water and redirect it to prevent erosion and property damage.
- When connecting more than one rain barrel to a single downspout, use a daisy chain configuration. These connections can be located at the top or the bottom of the rain barrels, which ultimately affects how water is stored inside.



Buried overflow pipe that outlets to a rock dissipation area



Four-barrel system with daisy chain configuration at the bottom



Debris and leaves on screening



Removing built up debris with a brush

Rain Barrel Maintenance Checklist

After Each Storm:

- ☐ Drain your rain barrel. You cannot capture water in the next storm with a full rain barrel.
- ☐ Check screens to make sure they are secure. If you suspect mosquitoes may have gotten into your barrel, use a *Bacillus thuringiensis israelensis* (Bt-i) mosquito dunk, which will kill mosquito larvae but is safe for people and animals.
- ☐ Confirm the overflow is attached and is draining properly without causing erosion.
- ☐ Clear leaves and debris from the screen.

Each Summer & Fall:

- ☐ Rinse out your rain barrel or use a brush or broom to remove built up debris. Drain rinse water to a vegetated area or to a sanitary sewer drain.
- ☐ Check the inlet, spigot, overflow, and base to ensure your system is ready for the next rainy season.
- ☐ Seal any leaks and check that inlets are still watertight.

For more information about the Waterscape Rebate Program, check out the County's website at sandiegocounty.gov/watershedrebates