



*rain
barrels
are
containers
that
capture
the roof
runoff
flowing
out
of a
downspout*

RAIN BARRELS

Rain barrels placed at the end of roof downspouts capture and store roof runoff for non-potable water use, like irrigation. Rain barrels come in a wide variety of materials, designs, and colors. Common sizes for residential use are 55 gallons and 90 gallons. They are usually installed on the ground next to buildings.

Commercial or industrial properties are more likely to use cisterns because of their larger capacity and durability.

Benefits

Using rain barrels to temporarily store and reuse rainwater slows and reduces stormwater runoff from the site. They conserve non-potable water and may reduce water use charges. Rain barrels are inexpensive, easy to install and maintain, and readily available.

Maintenance

Inspect periodically for leaks, especially spigots and other connection points. Make sure debris does not clog the system. Screen all vents to prevent mosquito breeding. For maximum stormwater benefits, empty the barrel between rain events in the wet season. Clean the rain barrel interior annually by brushing or disinfecting with vinegar or other non-toxic cleaners. The washout can be disposed of onsite to vegetated areas if disinfecting agents are adequately diluted so they do not harm plants. A rain barrel and its system components have a lifespan of about 20 years.

Cost

Do-it-yourself rain barrels can be constructed for under \$30. Ready-made 55 gallon to 90 gallon rain barrels generally cost from \$50 to \$300 uninstalled. All rain barrels must be mosquito proof, have approved overflow points and meet city standards.



Safety and Siting Requirements

- A typical residential rain barrel design includes an opening in the sealed lid to accept downspout flow, an overflow pipe for when the barrel is full, and a spigot at or near the bottom to attach a hose or faucet. A screen at the opening controls mosquitoes and other insects. Several rain barrels can be connected to store more rainwater.
- Locate rain barrels on a flat surface next to or near roof downspouts.
- In areas with soils that drain well, you can direct overflow from the rain barrels onto the yard or landscape areas. The area must meet the safety requirements listed under downspout disconnect.
- Only collect roof water for reuse. Do not reuse water from parking or pedestrian areas, surface water runoff, or bodies of standing water.
- Refer to Portland's Stormwater Management Manual for detailed sizing, placement, and design information.



Permits

- Rain barrels attached to a downspout that do not connect back into the building's water system do not require permits.

Examples

Friends of Trees,
3117 NE ML King Jr. Blvd.



ENVIRONMENTAL SERVICES
CITY OF PORTLAND
working for clean rivers



www.cleanriverspdx.org or 503-823-7740

For Clean River Rewards information www.CleanRiverRewards.com or 503-823-1371

WS 0603
July 2006