

Rainwater Harvesting

People have been collecting rainwater in cisterns and barrels to use during dry months for thousands of years. Even in modern times, collecting rainwater can have some benefits for homeowners who want to supplement their outdoor water usage during dry months. Before you install a rain barrel at a downspout, however, it's important to understand a few basic facts:

- Captured roof runoff can fill your barrels and cisterns quickly. During the wettest winter months, the runoff from an average single family home can exceed 7,000 gallons per month. Multiple rain barrels can be connected to create more storage, and cisterns that are designed for residential rainwater harvesting are available in large volumes. If you are planning to install an underground cistern larger than 5,000 gallons or a cistern taller than six feet, please contact the City of Auburn Permit Center at (253) 931-3020 to find out the required permits and other regulations. See the resources below for more information on sizing a residential rainwater harvesting system.
- Runoff from certain types of roofing materials should not be used to water plants. Wood shingles or shakes that have been chemically treated to resist rot and moss, copper roofs/gutters, or roofs with zinc anti-moss strips all produce toxic chemicals which you don't want in your garden. It is safe to capture runoff from commonly used asphalt shingles.
- Rainwater storage systems should have a few basic parts to help prevent problems. Tight-fitting, light-blocking lids will help keep children and animals out of the water, and prevent the growth of algae. A fine mesh screen will keep leaves, debris, and mosquitos out of the water. An overflow device will direct excess water away from your home's foundation when the tank is full.
- Rainwater harvesting will not make a significant difference to your water bill unless your storage volume is quite large. Over time and combined with other natural yard care techniques, however, even small rain barrels can have a positive impact for the environment by controlling runoff and reducing the pollutants that are carried to streams and rivers.
- Important: Rainwater runoff is not potable unless treated, and should not be used as drinking water.



RAINWATER HARVESTING RESOURCES

For more information about rainwater harvesting, including sizing a system to meet your needs and strategies for using your system to manage roof runoff during the wettest winter months (when the barrels or cisterns are typically full):

WASHINGTON DEPARTMENT OF ECOLOGY rainwater collection page. Includes Rainwater Harvesting Calculator: www.ecy.wa.gov/programs/wr/hq/rwh.html

KING COUNTY, rain barrel information and sources, including FAQs www.kingcounty.gov/environment/stewardship/nw-yard-and-garden/rain-barrels.aspx

SIGHTLINE INSTITUTE, information on roof runoff to irrigate edible plants: www.sightline.org/2015/01/07/a-green-light-for-using-rain-barrel-water-on-garden-edibles/

ECOLOGY ACTION CENTER, Intro to Rain Barrels: <https://ecologyactioncenter.org/clean-water/rain-barrels/>