

Rain Barrels

By Jane Billinghamurst
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Roll out the barrel ...of rain for your garden

Rain barrels are popping up around downspouts all over town, and, it seems, the rain barrel workshops run by the Skagit Public Utility District are the place to be. For \$50, you can attend a workshop and bring home a rain barrel kit. (See InfoBox.)

Need help deciding if a rain barrel is for you and how many you might need? Here are some things to consider.

The Benefits of Rain Barrels

- **Spoil your plants.** Rainwater is not as shockingly cold as water from the hosepipe, it is soft (no calcium or lime), and it does not contain chemical additives such as chlorine or fluoride.
- **Reduce pollution and erosion.** Run-off from downspouts during a rainstorm can flush pollutants (oil on your driveway or excess fertilizers in your planting beds) from your yard into storm drains. If you slow this run-off by diverting some of the rainwater into a rain barrel, you reduce the potential for pollutants entering local water bodies. Slowing the water down also helps reduce erosion.
- **Reduce your water bill.** Most of the rain in the Skagit Valley falls in the winter, so if you compare your winter water bill with your summer water bill, you will get a rough idea of how much water you are using for irrigation.

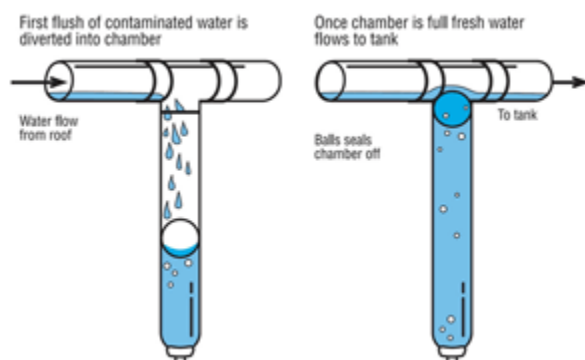


An attractive rain chain replaces the downspout to fill this rain barrel in Linda Zielinski's garden in Anacortes. Plants decorate the top and keep out debris. Photo by Skagit County Master Gardeners

Rain Barrel Features

- **Dealing with overflow.** In a rainstorm, your barrel will fill quickly. Your rain barrel should have either a downspout diverter or an overflow system directing excess water into the downspout drainage system, or somewhere in your yard well away from the house foundation.
- **Diverting the first flush.** Your rain barrel could also have a "first-flush" system. If it hasn't rained for a while debris and contaminants such as decaying plant matter, bird droppings, or mold spores might have accumulated on your roof. First-flush systems divert the first flush of water off the roof, allowing the rain barrel to fill once most of the debris and contaminants have been washed away.

- **Getting help from gravity.** Your rain barrel should be raised high enough that you can get a watering can under the spigot to fill. The higher the barrel, the more gravity will work for you when you want to get water out of the barrel and into your garden.



A first-flush diverter keeps the initial flush of water off the roof from entering the rain barrel. / Illustration courtesy of Rain Harvesting Pty. Ltd.



An example of a downspout diverter for a rain barrel. / Photo courtesy of Gardener's Supply Company.

Rain Barrel Cautions

- **Keep it safe.** Your rain barrel should be kid and pet proof.
- **Keep it dark.** Your rain barrel should be made of an opaque material to discourage the growth of bacteria or algae.
- **Keep it closed.** Your rain barrel should have a lid or screen top to stop mosquitoes laying eggs in the water, and to stop debris from being blown into the barrel.
- **Keep it toxic-chemical free.** Do not catch water from your roof if you have recently applied a moss killer or other toxic chemical, if you have lead, copper, or galvanized flashings, or if your roof is made of treated shingles or of roofing materials that contain zinc or asphalt.
- **Keep it for ornamental plantings.** Water from a rain barrel is not fit for humans or animals to drink, and WSU Extension Horticulturist Dr. Carol Miles recommends it not be used to irrigate vegetable gardens.

Calculating Water Use

- **How much water can you collect?** One inch of rain falling on one square foot of surface yields approximately 0.6 gallons of water. If $\frac{1}{4}$ inch of rain falls, and 1000 square feet of your roof drains into your rain barrel, you will collect $\frac{1}{4} \times 0.6 \times 1000 = 150$ gallons of water.
- **How much water do you need?** You'll need about half a gallon of water per week per square foot of garden. For 100 square feet of garden, you will need $0.5 \times 100 = 50$ gallons a week. A drip irrigation system or soaker hose gets the water right to the roots, much more effective than using a watering can or other 'overhead' system.
- **How much water can you store?** A single rain barrel will hold from 30 to 75 gallons. Joining a series of barrels together with linking kits will increase your storage capacity.

**Make Rain Barrel Water Go Further:
Drip Irrigation, mulch and more**

- **Shrink your lawn.** Lawns are thirsty. Consider reducing the amount of lawn you have or letting lightly traveled portions of the lawn brown gracefully over the summer. The grass will green up again in the fall when the rains return.
- **Choose water-wise plants.** Perennials and shrubs need less water than annuals. Spring-flowering bulbs thrive on our winter and spring rains without supplemental watering. Nurseries are well stocked with a beautiful array of plants and shrubs that actually prefer a low- or no-water diet.
- **Mulch.** Mulch keeps down weeds that compete with plants for water and slows evaporation of water from the soil surface. Organic mulches increase the water-holding capacity of your soil.
- **Water Well.** Bury soaker hoses under mulch or use drip systems to get water to the root zone. Use sprinklers early in the morning while it is still cool. In our climate, you do not want wet leaves on cool nights as this encourages disease.



**Water-wise plants at the Master Gardener
Discovery Garden in July**

Even if your rain barrel will not fill all your watering needs, every little bit helps. By installing a rain barrel, you will be helping to keep storm water percolating down into the water table on your property instead of whooshing off down storm drains to increase pollution and erosion in our increasingly hardscaped urban landscapes. Your favorite plants will also enjoy being pampered with rain water from time to time.

Skagit PUD Rain Barrel Workshop

- What:** 'Storing Rainwater...Build Your Own Rain Barrel' led by Kevin Tate of Skagit PUD
- When:** 1:00 - 2:30 PM, Tuesday, June 15
- Where:** WSU Mount Vernon Northwestern Research and Extension Center, 16650 Memorial Highway (State Route 536)

Presentation is free. To build your own rain barrel there is a \$50 materials fee. To reserve a rain barrel kit, call 336-8958 and leave your name and phone number. Space is limited and available on a first-come, first-served basis.

Resources

- See water-wise plantings, mulch, and soaker hoses at the Water-Wise Garden in the Master Gardener Discovery Garden, 16650 Memorial Highway 536, Mount Vernon.
- Water-wise gardening: www.savingwater.org
- “Hardy Plants for Waterwise Landscapes” at www.wsu.edu/~lohr/wcl/
- Rain barrel set-up: skagit.wsu.edu/MG/rainbarrel.htm or skagitpud.org/index.php/resources/repositories/build-your-own_rain_barrel_instructions/