

# The Seattle Rain Barrel



A service of Seattle Conservation Corps



## Thank you for purchasing a Seattle Rain Barrel

Your new rain barrel (or barrels!) will help you use water in your garden wisely. Smart watering is an important part of Natural Yard Care, described in the brochure you received with your barrel. Through Natural Yard Care, including watering from your rain barrel and using other water saving techniques, you'll be making your small piece of the planet a healthier and more environmentally friendly place to live.

## Installing your Seattle Rain Barrel

Position your barrel on level ground in front of a downspout close to the gardens you want to water. (Some people prefer to set their barrels on cinder blocks to provide easier access to the lower valve. If you do this, make sure the ground is firm and the blocks level.) Cut the downspout—*a hacksaw works well for both metal and plastic downspouts*—eight to 12 inches above the top of the barrel. Remove the lower section of downspout and slide the barrel into its permanent place.

Attach a downspout elbow and a short section of downspout to the remaining upper section to direct water onto the screened lid of your rain barrel. (See illustration.) You may already have an elbow if the bottom of your downspout was directed onto a splash block. Otherwise, you'll need to get one at a hardware store. Whether plastic or metal, downspouts come in only a few standard sizes, commonly three-inch and four-inch rectangular, and two-inch round, but it's a good idea to take a section with you to the store.

As an alternative, you may want to invest in a downspout adapter. These are relatively simple hinged downspout sections usually costing less than \$20. The device enables you to direct water flow onto the top of the barrel when you need it but switch back to the downspout carrying water to your drainage system during the winter when heavy rains cause regular overflows. Downspout adapters may not be in stock at your hardware store, so call before making a trip.



## Attach a section of hose to the overflow fitting

Next, attach a section of hose to the threaded overflow fitting. (This is the fitting on the outside of the barrel at the bottom of the internal overflow tube.)

Using an old piece of hose which you can cut to any desired length, direct the overflow where you want it to go. This can be back into the downspout, or away from the foundation of your house — to avoid basement flooding — for example into a low area or rain garden. A rain garden is a low spot in a lawn or planting area, often dug out and refilled with absorbent, compost-amended soils and planted with water-tolerant vegetation. It fills with runoff during heavy rains and dries as the runoff soaks in.

The overflow discharge point should be at least eight feet from your foundation and in an area where it will soak into the ground rather than flowing into the street or onto neighboring properties. Where you need more infiltration due to the nature of the soil around your house, try directing the overflow to a French drain (usually a trench or pit filled with gravel under a garden or lawn). French drains can be built to take water through a pipe directly from your downspout or overflow, or located under a low area to promote rapid absorption of water into the soil.

**Please note:** if your home is on a steep slope or in a landslide-prone area be sure to direct the rain barrel overflow **ONLY** back into your existing drainage system. In most cases, this will carry the water away through your side sewer. It's important to avoid adding to the volume of ground water in steep-slope areas because more water can increase the chance of slides.

### Using water from your Seattle Rain Barrel

Your rain barrel has a spigot (sometimes called a hose bib) attached 12 to 14 inches from the bottom. It's designed to be a handy height for filling your watering can, making it easy to water small plantings of annuals or potted plants on a deck. Using a watering can, it's easy to water carefully, applying just the right amount. You can also attach a soaker hose to the drain valve at the bottom of your rain barrel, using that to water nearby gardens as needed.



### Warning! ¡Peligro!

Remember, the water in your rain barrel is **NOT POTABLE**.

Do not use it for drinking, washing or cooking. The water in your rain barrel likely will contain fecal coliform bacteria from bird droppings, and other potentially harmful microbes.

¡Agua no es potable! No se use para tomar, lavar, ni cocinar.



### About your new barrel

The rain barrel you've purchased has been recycled from the food industry. Most of the barrels sold by Seattle Conservation Corps come from Greece or other Mediterranean countries. They were shipped from the Mediterranean full of olives or peppers for bottling in the U.S. If your barrel is marked 190 liters, it's about 50 gallons; 230-liter barrels hold about 60 gallons.

After the barrels are emptied at packing plants in other parts of the U.S., they are shipped by truck to the Conservation Corps assembly center at Sand Point Magnuson Park. A jobs training program of the Seattle Department of Parks and Recreation, the Corps attaches all the fittings — drain valve, spigot and overflow and mosquito screening for the lid.

Your new barrel is guaranteed not to leak or crack for 90 days or it will be repaired or replaced for free by the Conservation Corps, **206-684-0190**.

Thank you for using water wisely. We hope you enjoy your new rain barrel.



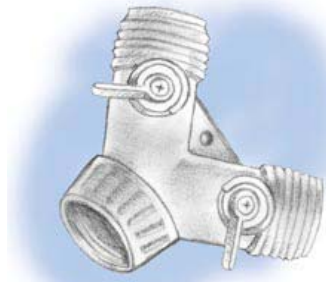
## What about mosquitoes?

Your rain barrel lid is screened to keep out mosquitoes. To keep them from entering through the overflow fitting, be sure you always have an overflow hose attached.



In fact, now that you have a rain barrel, it's a good time to clean your gutters so puddles where mosquitoes can breed don't form behind dams of moss or rotting leaves. You should also adjust the brackets holding your gutters to make sure all gutters slope continuously toward downspouts and quickly drain dry after a rain. Sagging gutters create puddles where mosquitoes can breed.

## Connecting barrels together



You can connect two or more barrels together at any time with a short length of hose and a device called a hose Y. (See illustration.) They're available at most garden stores. You'll also need two female garden hose end fittings—the fittings that screw onto the faucet. Attach these fittings to each end of a length of old hose. Attach the Y to the drain valve on one barrel and fasten the short piece of hose you made to it and to the drain valve on your second barrel. With additional Y's, you can connect as many barrels as you want this way. Connecting barrels lets you draw water from all of them using the same spigot or drain valve, which is handy since you may want to locate additional barrels in hard-to-reach places such as camouflaged behind shrubbery. To prevent mosquitoes from entering, be sure to cap any overflow fittings to which you do not connect a hose.

## When NOT to use a rain barrel for watering

If you have certain kinds of roofing material you shouldn't use rain barrels for watering plants. If your roof is made of wood shingles or shakes that have been treated with any chemical (usually chromated copper arsenate—CCA) to make them resistant to rot and moss, lichen and algae growth, don't water your plants from a rain barrel. Water collected from copper roofs or copper gutters also should not be used. Zinc (galvanized metal) anti-moss strips—usually mounted at the roof peak—also produce toxic chemicals you don't want in your garden. Don't use rain barrels if you have these strips (you may want to remove them), or if you have had your roof treated with moss-, lichen- or algae-killing chemicals within the last several years. Note that nowadays there are asphalt shingles on the market which have zinc particles imbedded in the surface. Check your shingle specifications if you have recently re-roofed.

In addition, general practice is to avoid watering vegetables and other edible plants, such as herbs you plan to use in cooking, with rain barrel water collected from asphalt-shingle roofs. These kinds of roofs may leach various complex hydrocarbon compounds, so most people avoid using water from asphalt-shingle roofs or flat tar roofs on plants meant for human consumption. To date there is no definitive research on the amounts and types of hydrocarbon compounds which may leach from such roofs, though it is common practice to use water collected from asphalt-shingle roofs for watering ornamental plants and shrubs. Enameled steel and glazed tile roofs generate little or no contamination and rainwater harvested from them is commonly used to water vegetables.

## Maintaining your Seattle Rain Barrel

Rain barrels take very little maintenance, but from time to time, particularly in the fall, you'll need to clean leaves and other material off the top to keep the screen from clogging. Also make sure the overflow is not clogged. In the winter when rains are heaviest, you may want to reconnect your downspouts, or use a downspout adapter (described above), to send the heaviest flows back into your drainage system. Keep your gutters clean!

This is also a good time to change your outside hose bibs to use the new, safer atmospheric vacuum breakers which prevent water from flowing backwards into your water pipes in case of a pressure drop in the house or city



mains while you have your hose running to fill a bucket, wading pool, decorative pond and the like. Atmospheric vacuum breakers are required in new construction.

By the way, while it can be done, we don't recommend painting your rain barrel. They are flexible and will expand and contract with the weather, so many paints are likely to chip off, leaving paint flakes in your soil.

## A note on water saving

Rain barrels won't make a noticeable difference in your water bill unless you have quite a few. But over time, using your rain barrel(s) and gardening the Natural Yard Care way will add up to savings — for your pocketbook and the environment. Composting, mulching, using soaker hoses instead of sprinklers and using a watering can instead of a hose even when your rain barrels are empty will conserve even more water.

And while you're thinking about water conservation, remember that if you haven't done so already, changing to modern toilets, energy- and water-efficient clothes washers and low-flow water-saving showerheads are excellent ways to save both money and water.

## Thank you for purchasing a Seattle Rain Barrel

For web pages and links to other information about rain barrels, conservation and Natural Yard Care, go to Seattle Public Utilities' website, [www.seattle.gov/util/services/yard](http://www.seattle.gov/util/services/yard)



To order additional barrels call the Seattle Conservation Corps office at 206-684-0190.

## Natural Yard Care

Rain barrels fit with all the other techniques of Natural Yard Care. Building healthy soil, planting right for your site, practicing smart watering (making every drop count), thinking twice before using pesticides, and practicing natural lawn care are all part of gardening the healthy, natural way. For more information on Natural Yard Care techniques, see the Natural Yard Care booklet you received when you bought your barrel.

If you have any yard questions you can call the Garden Hotline at 206-633-0224 or email [help@gardenhotline.org](mailto:help@gardenhotline.org)



## How much rain water can I catch?

Puget Sound averages about 3 feet of rain per year, but 2/3 of it falls from November to March. Most areas in the region average less than 2 inches total rainfall for July and August. To determine the amount of rain your roof catches, multiply your home's width by its length (in feet) to estimate its footprint. Then estimate the portion of this area that drains to the downspout you'll be using to catch your rain.

**This formula** will give a rough estimate of how much rain you can catch:

$$\text{Rain caught (gallons)} = (\text{inches of rain}) \times 0.6^* \times (\text{portion of building footprint})$$

*\*One inch of rain falling on a square foot of surface yields approximately 0.6 gallons of water.*

**For example**, if your home's footprint is 1,400 square feet, and you want to know the amount of water that comes from a ¼ inch (.25") rain event, you would solve the following:

$$\text{Rain caught (gallons)} = (.25) \times (.6) \times (1,400), \\ = 210 \text{ gallons}$$

*(or less if you're only gathering from part of the roof).*

**Storage, however, is limited to the capacity of your system.** Added capacity helps your system weather dry spells. Practically though, most homeowners don't have room to store the thousands of gallons they use in landscape irrigation through our dry summers, and the large cisterns to do it would take a very long time to pay back. Capacity and cost are directly related: decide how much you want to spend on storage.

Natural Yard Care practices like building soil with compost and mulching, choosing low-water use plants, and Smart Watering practices all have much shorter paybacks, and grow healthier lawns and gardens too. So use all those practices and simple indoor conservation practices too (see [www.SavingWater.org](http://www.SavingWater.org)) first before investing in big rainwater collection systems.

For Seattle monthly average rainfall, see the "Avg. Precip." column at [www.seattle.gov/html/weather\\_averages.htm](http://www.seattle.gov/html/weather_averages.htm)

**You can help solve our winter stormwater runoff problems too** by connecting a hose to the drain valve on your rain barrel or cistern and running it out into a lawn or landscape. Then just open the drain valve in October, and let the barrel slowly drain out between big storms to slow our runoff all winter. In May, close the drain valve and let your barrel fill up to store water for landscape watering during our dry summers.

Learn more at [www.seattle.gov/util/RainWise](http://www.seattle.gov/util/RainWise)