

Rain Barrels & Water Conservation

What you should know if you live in Tigard's Water Service Area

A rain barrel is a container used to collect rain water as it flows from the roof of a house or building. A downspout from the roof is connected to the rain barrel, and water that would normally flow into streets, ditches, or storm water lines is diverted into the barrel. During periods of dry weather, the stored water can be used to water your landscape.

Since there is no shortage of rain in the Pacific Northwest, installing a rain barrel to collect rain water might seem like a great idea. However, unlike other parts of the country that receive rainfall year-round, our region typically receives the least amount of rainfall during the summer months – the time of year when outdoor water use is at its highest.

The Tigard Water Service Area gets about 37 inches of rainfall annually and about 90 percent of that rainfall occurs between October and May – a time of year when we don't need extra water to irrigate our gardens or lawns. Because of this seasonal rainfall pattern, and their limited storage capacity, rain barrels are not the most effective water conservation device for our region.

A typical rain barrel holds about 55 gallons. This may seem like a lot of water, but you may find watering your landscape will take far more rain barrels than you might think. For example, an established lawn needs about an inch of water per week (a bit more in hot weather). At this rate, a 100-square-foot patch of lawn will need about 62 gallons of water a week. Assuming the lawn requires watering from May through September, you will need to collect at least 1,300 gallons of water, which means you will need to fill about 24 rain barrels!

Rain Barrel FAQs

1. **Will I save money on water by installing a rain barrel?** In short, no. Customers in the Tigard Water Service Area are fortunate to have relatively inexpensive water. The residential rate in 2008 is \$2.51 per 100 cubic feet (ccf) which is equivalent to 748 gallons.

Say you purchase a 55 gallon rain barrel for \$100. You will be saving 18 cents every time it's filled which means you would have to fill it 555 times just to break even. At a rate of emptying and filling 24 times per year - it would take just over 23 years to make your money back.

In addition to cost of the rain barrel, maintenance costs should also be considered.

2. **Is water from the rain barrel safe to use in my vegetable garden?** Since many roofs have been treated with chemicals which could affect water quality, you may not want to use this water in your vegetable, herb or edible plant gardens.
3. **Will I get mosquitoes in my rain barrel?** Rain barrels should be capped with a fiberglass screen that allows water in, but keeps mosquitoes out. However, if you are concerned about mosquitoes laying their eggs in your rain barrel, please ask your local nursery or garden supply store for an appropriate non-toxic solution.

4. **Do I need to contact the city to obtain a permit if I want to install a rain barrel?** The City of Tigard does not have a municipal or building code specifically for rain barrels so if you feel this device is right for you and your situation, you can install one without a permit. If you live outside the city but within the water service boundaries, contact your local jurisdiction for details.
5. **Should I worry about algal growth or unpleasant odors emitting from my rain barrel?** Water that sits for a long period of time is apt to form algae which can cause unpleasant odors. Since rain barrels are typically open on top, water is exposed to sunlight which can promote algal growth. The answer to this problem - use the rainwater in a timely manner. This will empty the rain barrel and prevent algae from forming.

Water Saving Tips

An alternative to rain barrels as a water conservation device is to save water using other methods (also see the online resources section for more information):

- Water before 10 a.m. or after 6 p.m. when temperatures are cooler and the air is calm.
- Adjust your sprinklers so they are directed at your landscaped areas and not the sidewalk or driveway.
- Group plants with similar water needs together. Different plants need different amounts of water, sun and shade to survive.
- Try to keep your grass 2 to 3 inches long. This provides shade to the roots, so your lawn requires less water and mowing. This also allows the root system to become deeper and more efficient at storing water.
- The City of Tigard offers reimbursements on their water bill to customers in the Tigard Water Service Area for purchasing water wise landscape devices. Also, free indoor and/or outdoor water conservation kits are available. Contact the water conservation coordinator at 503.718.2599 for more information or visit the City of Tigard website at www.tigard-or.gov/water.

Online Resources

With a wealth of sites out there, where does one begin? Here are a few to get you started:

Overviews:

www.portlandonline.com (search stormwater management)
www.kingcounty.gov (search rain barrels)
www.cleanwaterservices.org (search rain barrel)
www.savingwater.org/docs/rainbarrels.pdf
www.lcrep.org/fieldguide/examples/rainbarrels.htm
www.demesne.info/Garden-Help/Rain-Barrels.htm

Rain Gardens:

www.tigard-or.gov (search rain garden)
www.pierce.wsu.edu/Water_Quality/LID/Raingarden_handbook.pdf
www.clark.wsu.edu (search rain garden)
www.cleanwaterservices.org (search rain garden)

Water Conservation Websites:

www.conserveh2o.org
www.tigard-or.gov/water
www.harvesth2o.com