## Rainwater Harvesting and the Environment

The benefits of harvesting rainwater vary widely from climate to climate. Rainwater can be used for outdoor irrigation, indoor non-potable (non-drinking water) uses, or potable uses with treatment.

Portland receives around 37 inches of rainfall annually. However, 90% of this rainfall happens from October to May – a time of year when gardeners aren't looking for supplemental water for their lawns or gardens. Because of this seasonal pattern, it is important to thoughtfully consider what harvested rainwater is to be used for, and determine landscape water needs if planning to use it outdoors.

## Bull Run Watershed – a Large-Scale Rainwater Harvesting System

The majority of Portland's drinking water comes from the Bull Run watershed - an area of land that drains about 102 square miles of forested landscape. Plenty of rain falls on the Bull Run watershed, averaging 130 inches per year. The heaviest rains occur from late fall through spring and are important for filling the two reservoirs in the watershed. Water stored in the reservoirs during the winter is essential for meeting summer water demand.

*Questions?*

**Portland Water Bureau**
WATER EFFICIENCY PROGRAM
503-823-4527
conserve@portlandoregon.gov
www.portlandoregon.gov/water/efficiency

**Portland Water Bureau**
1120 SW Fifth Avenue, Room 600
Portland, OR 97204
Phone: 503-823-7404
www.portlandoregon.gov/water

To help ensure equal access to City programs, services and activities, the City of Portland will reasonably modify policies/procedures and provide auxiliary aids/services to persons with disabilities. Call 503-823-7404 with such requests.

Printed on recycled paper
04/2013

# RESOURCES FOR Rainwater Harvesting

## Using Rainwater Outdoors

Harvested rainwater is often used for outdoor irrigation, such as watering a lawn or garden. In Portland, you are not required to get a city building permit to harvest rainwater and use it outdoors if harvested rainwater is intended for irrigation only and the system is completely separate from the municipal water system. However, other permits, such as an electrical permit for any pumps installed or a grading permit for underground pipe installation, may be necessary depending upon system size and complexity. Before building, consider how much rainwater storage capacity is needed to water the landscape during dry summer months.

## Using Rainwater Indoors

Most rainwater harvesting systems in Portland designed for indoor water use are for nondrinking water uses such as flushing a toilet. If thinking about harvesting rainwater for limited, residential indoor use, follow the relevant **Code Guide** for rainwater harvesting available through the Bureau of Development Services. **Any residential system exceeding Code Guide parameters, such as the use of rainwater for indoor drinking water use, requires prior approval by filing an appeal with the Bureau of Development Services.**

# Rainwater Resources

**The following City of Portland bureaus have resources to help you learn more about collecting rainwater.**

### Bureau of Development Services —

Learn about local plumbing code requirements for harvesting rainwater by visiting **www.portlandoregon.gov/bds** and selecting **Code & Program Guides** from the *Quick Links* column on the left. From there, select **Commercial Plumbing Code** from the left hand column, followed by *Chapter 6: Rainwater Harvesting Systems for Interior Use or Combined Interior and Exterior Use*.

### Bureau of Environmental Services —

Rainwater harvesting systems can play a part in on-site stormwater management. Handling stormwater on your property by disconnecting downspouts, building rain gardens, or installing rain barrels can help reduce combined sewer overflows (CSOs), increase groundwater recharge, and reduce pollutants in surface waters. Rainwater harvesting systems can also be used during new construction or redevelopment to address stormwater management requirements and to help projects meet green building certifications.

The Bureau of Environmental Services has a variety of publications available to help Portlanders manage stormwater. Access them by visiting **www.portlandoregon.gov/bes**, clicking on the **Programs** tab, and selecting **Sustainable Stormwater** from the dropdown menu.

When you manage stormwater runoff on you property you can qualify for a discount of up to 100% of the on-site stormwater charge that appears on your water bill. Learn more about **Clean River Rewards** by visiting **www.cleanriverrewards.com** or by calling 503-823-7740.

### Portland Water Bureau —

The Portland Water Bureau offers information and technical resources to all customers about using water efficiently and cost effectively. Contact the Water Effeciency Program at 503-823-4527 or visit **www.portlandoregon.gov/water/efficiency** for more information.