

# Groundwater recharge in the home landscape

Once you become an avid gardener it is a challenge to confront most any issue without thinking about how that will impact your garden or landscape. For example I often hear meteorologists giving the nightly weather forecast talk about how our wonderful sunny weather will be giving way to a dreary rainy weekend. My reaction is to cheer when I hear rain is on the way, especially after going nearly seven months from April to November without any moisture recharge.

With our Mediterranean climate along the West Coast we get caught up thinking months of uninterrupted sunshine is great. It can be for crops and gardens as long as rain returns after a few months to recharge our streams, rivers and groundwater. In 2015, our rainy season stopped at the end of March two months early,



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*Extension Spotlight*

and began in November one month late. That long dry spell pushed farmers and cities to pull water from rivers and the ground to irrigate for several extra months. The extra demand for river and ground water took river flows to historical lows and caused many people using wells to shut off or restrict use earlier than usual.

The extended dry spell for the summer of 2015 has raised the importance of getting a good moisture recharge in all the aquifers of Oregon during the

rainy season of 2015-2016. As a gardener or homeowner who loves their landscape and cares about the issue of ample groundwater supplies and healthy river flows, I would encourage you to consider adopting a few ways you can help.

The first way to help is to create a landscape that absorbs the rainfall that falls on your property. This is easily accomplished by creating porous surfaces that are covered primarily by plants. Minimize the impervious surfaces around your home. There are porous forms of pavement that can be used for driveways and patios. Using paver stones allows some moisture infiltration.

In the landscape, trees stabilize the ground and are the first objects to break up the rain, and soften the impact on the soil. Trees also drop needles or leaves that cover the ground to keep the

rain from compacting or eroding the soil. In the fall don't be so quick to throw all your leaves into the street. Mow or shred leaves and reapply them around all your trees, shrubs, and in your perennial flower beds to protect the soil from compaction. As these leaves decompose, their nutrients will go back to the soil over time improving the ability of the soil to absorb rainfall more quickly. When you recycle your own leaves and keep them out of the street, they don't clog up the storm sewers either. Shrubs and grass will also stabilize soil and help to reduce rainfall compaction. Since turf grass is not as deep rooted as trees or shrubs it won't stabilize steep inclines as well.

When you design or modify your landscape, think about creating swales or low spots away from your home foundation that you can run downspouts to from

your roof. These swales if built with subsoil rock and sand allow very rapid infiltration of water to help groundwater recharge. These swales can be landscaped with moisture tolerant plants to improve their function. If you have a well on your property creating swales to hold and stop water runoff should be a high priority for your landscape. If you live in town on a small lot you can create small swales to handle some of your water runoff. For more information on swales and other rainfall recharge topics contact the OSU Extension Service and Master Gardeners.

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