

The Benefits of Trees

The trees that cover our landscape in Clackamas County provide numerous benefits to the community. Not only do they increase the aesthetic appearance of homes, neighborhoods, schools and roadsides, they also function to enhance water quality, air quality, and soil stabilization.

In a report by American Forests¹, it has been stated that the region's trees are removing 178 million pounds of pollutants annually, a savings valued at \$419 million. Sulfur dioxide, carbon monoxide, nitrogen dioxide, ozone, and particulate matter are among the pollutants trees absorb.

This same tree cover is saving communities an estimated \$20.2 billion in stormwater management costs (the amount it would cost to build a facility to handle that same quantity of stormwater runoff). Besides reducing the need for stormwater facilities, trees act as filters that help purify water. Water quality is of particular importance in the Pacific Northwest because many communities are under federal mandate to improve aquatic habitats for threatened and endangered salmon species.

Trees (or green infrastructure) help shade and cool residential homes during hot summer months, thereby reducing the amount of electricity needed to run air conditioners. Trees provide an estimated \$1.86 million in annual energy savings for communities in the Portland area. Reducing energy use also reduces the amount of carbon emissions by utility companies. Direct tree shading prevents approximately 140,000 tons of carbon from being emitted into the atmosphere annually.

Protecting existing trees on a development property enhances the appeal to potential buyers. Real estate companies and developers agree that a lot with trees existing on the site allow the lot to sell for more money than sites with no trees

Any questions call Karen Streeter at 503-353-4597.



Sand Bag Information

Residents wishing sand bags can locate them at Home Depot. Clackamas Co DTD Roads will no longer be giving out sandbags.

¹ 2001. Regional Ecosystem Analysis for the Willamette/Lower Columbia Region of Northwestern Oregon and Southwestern Washington State. American Forests, Washington D.C.

Tree Planting opportunities this spring:

Trillium Creek, Clackamas County March 20, 2004 Planting Natural Area

Information: Individuals do not have to preregister. Groups of 10 or more please contact Rachel Sanchez to sign up.

Description: Nestled in an unassuming suburban housing development, this natural area protects the water quality in Trillium Creek, which flows into nearby Rock Creek. Two years ago, FOT volunteers planted native trees and shrubs where once only Himalayan blackberry grew; this year we will focus on establishing a diverse native understory of snowberry, thimbleberry, swamp rose, indian plum, oceanspray, and black hawthorn.

Directions: Site is located in Clackamas County. From PDX, take I-84 east to I-205 south. Take I-205 to Highway 212 east. Follow Highway 212 east approx. 4 miles to Anderegg Parkway. Turn right onto Anderegg Parkway. Continue down road for about 1/2 mile and look for "Tree Planters at Work" sign. Find on-street Parking.

Contact: Rachel Sanchez, 503-282-8846 ext 12

Committee News

At the summer meeting a plaque was given to Rosalie Morrison for many years of dedicated service on the Committee. Rosalie has worked hard for many years to encourage a cleaner more inviting Tualatin River.

At the February 5, 2004 meeting, the Committee will give letters of recognition to two other faithful servants, Dr. Walter Kuhl who has been serving on the committee since April 18th, 1991 and Janiece Miller who has been on the committee since March 18th, 1997. We really appreciate their unselfish sacrifices to the Committee.

There are current and ongoing discussions on Water Quality Analysis to review the status of water quality in our streams. At the February meeting we will be taking a look at the water quality of the tributaries to the Tualatin with the monitoring results of the last few years.

Also at the meeting there was discussion on partnering with the City of Rivergrove on a Dog Waste Station or "Doggie Scoop Station" at the Rivergrove City Park. Discussions are in progress, look for updates in future newsletters.



“Duck, Geese, and Nutria Population and Damage Study”

Research and Report Completed by
Joseph Coulter
Clean Water Services

This study explains the damage done to riverbanks and lake frontage by nutria with their tunneling and den making activities. It also explains how ducks and geese damage riverbeds, ponds and lakes by the animals entering and exiting the waterway. In addition their feces are deposited directly into the water which causes excessive nutrient and bacteria in the waterway. Nutrients can cause the growth of large amounts of algae, making the water aesthetically displeasing. High bacteria loads are a concern for recreation due to human contact with the bacteria in the water.



If you want a copy of the study call Randy Shierman at 503-353-4596

Septic Owners Informational Brochures

Help for Septic Owners: several resources for septic tank owners are developed by the Small Flows Clearinghouse.

Pumping Your Septic Tank explains why it is necessary to regularly pump your septic tank.

Everything Your Always Wanted to Know About Septic Systems, But Didn't Know Who to Ask! Is an interactive CD ROM that educates homeowners about conventional systems. These CDs are available on loan by calling the number listed below.

Landscaping Your Septic Tanks describes ways to plan a landscape design for optimum septic tank operation.

Septic Systems for Wastewater Disposal provides basic septic system information for homeowners.

If you would like a copy of any of these brochures contact Lana Rulien, Surface Water Management at 503-353-4592.

To learn more, visit NSFC Web Site at www.nesc.wvu.edu/nsfc/nsfc_new_productions.htm. To place your order, call (800) 624-8301 or e-mail nsfc_orders@mail.nesc.wvu.edu.

Grant Information

Looking for Grants Info? A handy website that provides information about all the different grant programs administered by EPA can be found at

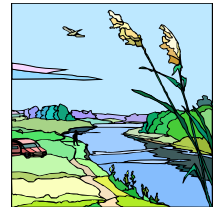
<http://www.epa.gov/epahome/grants.htm>.

HOW IS THE SURFACE WATER MANAGEMENT FEE CALCULATED?

The SWM charge reflects the amount of impervious surface on each site, which is a measure of increased runoff into the storm drainage system.



The monthly surface water management fee is based on the Equivalent Service Unit (ESU). One ESU equals 2,500 square feet of impervious surface. The current SWM rate is \$4 per month per ESU in the SWMACC District. Single family residences are charged for 2500 square feet of impervious service area or 1 ESU (shown as "1.00 unit" on your billing) per month, based on this average measurement. Non-single family properties, including businesses, schools, governments and industrial areas, pay based on their measured impervious area. For example, a business with 10,000 square feet of impervious surface (4 ESUs) would be charged \$16.00 per month ($\$4.00 \times 10,000 \text{ sq. ft.} \div 2,500 \text{ sq. ft.} = \16.00). Through this approach, properties that contribute more to the need for surface water management pay a greater proportion of the program costs.



Residential customers in SWMACC are billed for surface water management service every 6 months.

More information on Surface Water Management is available at <http://www.co.clackamas.or.us/wes>.

IMPROVING WATERSHED HEALTH

The Clackamas County Commissioners and WES staff work with a Citizen's Committee to develop and implement programs and standards that relate to surface water and storm water management in Surface Water Management Agency of Clackamas County.

We send out a warm welcome to new Lower Tualatin Citizens' Advisory Committee members:

Stefan Shearer
 Azizullah Mahar
 Patty Jarrett
 Jeanne Gumusoglu
 Gwenda Olson

