

# Streamlines

News from the Clackamas County Service District No. 1  
Surface Water Management Program



SUMMER 2003

## Citizens Taking An Active Role In Improving Watershed Health

Citizens who want to participate in improving the health of our watersheds have a variety of opportunities available. Becoming a member of the North Clackamas Surface Water Management Citizens' Advisory Committee (NCSWMCAC) is one of the best ways to help!

Established in 1991, the NCSWMCAC meets six times each year with Water Environment Services' Surface Water Management Division to receive information about projects and programs that are having a positive impact on watershed health and to advise WES and the Board of County Commissioners on a variety of topics that affect our urban watersheds, including water quality, storm sewer system maintenance, endangered species act issues, erosion control and much more.

We are currently seeking citizens who are interested in serving a three-year term on the NCSWMCAC. Interested residents of Clackamas County Service District No. 1 (CCSD#1) and representatives of businesses, associations, non-profit groups, and other organizations that are based within the CCSD#1 service area are encouraged to apply.

Interested individuals will need to complete an application form. Applications may be completed and submitted online via the County's website at <http://www.co.clackamas.or.us/citizenin/abc/abc.asp>. A paper application may also be submitted. To have an application form mailed to your home, please contact the Office of Citizen Involvement at (503) 655-8552. The application deadline is **July 31, 2003**.

Please note that all NCSWMCAC meetings are open to the general public, and all interested citizens are encouraged to attend. Upcoming meeting dates and times are listed on the following web page: <http://www.co.clackamas.or.us/wes/calendar.htm#public>

If you would like more information, please contact Andrew Swanson at (503) 353-4598.



## Update on Stormwater Detention Ponds

Detention ponds are an important part of the stormwater system in your neighborhood from both a water quality and water quantity perspective. They are designed to hold, or detain, water piped to them during rain events and to slowly release it to a downstream system, reducing downstream flooding. While water is in the ponds, sediment and other pollutants settle out of the water before the water is discharged into the downstream stormwater system, which eventually flows into the nearest stream or river. Plants that can tolerate wet conditions are added to further filter pollutants. Most stormwater detention ponds are semi-permanent aquatic systems that dry out only under drought conditions, while during the

rainy season, the water levels in these ponds may remain at or near the outflow structures.

This year, WES is increasing the level of maintenance on stormwater detention ponds within CCSD#1. This means that, for the neighborhoods that have Maintenance Agreements with WES, you can expect to see work crews visiting the sites throughout the spring, summer, and fall. The crews will be working to remove garbage and debris, remove invasive plants (such as blackberry and ivy), and when needed, to install additional plants, shrubs and trees in and around the ponds. If you have any questions about the work, please call Surface Water Management at 503-353-4567.



**You can help!** Many people don't realize that the dumping of yard debris, chemicals, motor oils, and other debris and waste into our stormwater systems is still a common problem. When these wastes are dumped into a stormwater facility, they flow along with stormwater to the nearest stream and ultimately to the Clackamas and Willamette Rivers. One pint of oil can cause an oil slick the size of two football fields on calm water. Debris can clog pipes and other structures and cause flooding, especially during heavy rain events. Yard and household chemicals, pesticides, paints and other wastes pollute our waterways for humans and for wildlife.

Maintenance of stormwater facilities is funded by your monthly surface water management fees. WES customers can assist in keeping maintenance costs low by helping to prevent damage to stormwater systems and the need for more frequent maintenance or repair.

**Mosquitoes** Most of the District's detention ponds must retain about 6 inches of water in them year round to function properly; the water supports a wetland plant population that is vital to cleansing the stormwater. As such, we are looking for ways to control the mosquito population with the least impact on water quality and wildlife, such as the frogs, birds, fish and aquatic insects that feed on mosquitoes and their larvae.

After researching recommendations from other agencies, WES will apply Bacillus BTI pellets in selected detention ponds and will monitor the success of this method. NOAA Fisheries (NMFS), the federal agency that enforces the Endangered Species Act, recommends that the Bacillus is the best option for use in waters that drain to streams because of the low toxicity of this method of mosquito control. BTI settles in the water where it is eaten by mosquito larvae. Alternate drying and wetting does not reduce their effectiveness. BTI does not harm people, pets, birds, fish, or plants.

WES will continue to work with Clackamas County's Health Department and Vector Control on appropriate measures. Vector Control does provide Gambusia fish; however, these fish can become competitive with native fish in natural waterways, and WES staff has found them in some stormwater ponds. According to the Oregon Department of Fish

and Wildlife, *Gambusia* should *not* be placed in bodies of water that receive or drain into natural water systems, as stormwater systems do. Vector Control recommends placing the fish in swimming pools, ornamental ponds and animal troughs.

For additional information on reducing mosquitoes on your property, please refer to our Spring 2003 *Streamlines*, which can be found at <http://www.co.clackamas.or.us/wes/news/sls03.pdf> or you may call us at 503-353-4567 to request a copy.

### Sunnyside Village Green Regional Stormwater Facility

Clackamas County’s Department of Transportation and Development (DTD) is beginning the realignment of SE 147<sup>th</sup> Avenue north of Sunnyside Road this summer. Water Environment Services (WES) will concurrently be constructing subregional surface water detention and treatment facilities in the Sunnyside Village area on the south side of Sunnyside Road.

The facilities will attenuate runoff from the new roadway and approximately 80 acres of future adjacent development, as well as approximately 20 acres of existing development in the Sunnyside Village. The project consists of approximately 1,300 lineal feet of storm sewer, 2 underground water quality devices, and 2 detention basins located on parcels owned by WES and the North Clackamas Parks and Recreation District (NCPRD).

In lieu of purchasing the property from NCPRD, WES has agreed to share the cost of park improvements on the Sunnyside Village Green, located just south of the traffic circle at the intersection of SE 147<sup>th</sup> Avenue and SE Oregon Trail Drive. The total estimated project cost is \$1.5 million, of which approximately \$900,000 will be recovered from new development, \$200,000 will be funded by DTD, and \$100,000 will be funded by NCPRD.

In order to take advantage of economies of scale, NCPRD will also fund the development of nearby Sieben Park located on SE Territory Drive. For more information, call Mike Nacrelli at 503-353-4595.



### Major Storm Outfall Water Quality Retrofits

Many older storm sewers in the North Clackamas County area lack any facilities to remove pollution from surface water runoff. WES has identified 10 major outfalls (those serving industrial areas or pipes ≥36” in diameter and that discharge to a stream or river) to retrofit with stormwater treatment systems. A variety of systems will be considered, including gravity separation devices that mainly capture sediment and oil, as well as some vegetated systems and underground filtration devices that also remove metals and nutrients. These pollutants are all harmful to water quality. The selection of devices at each outfall will depend on site constraints and cost. For example, few sites have land available for natural systems, and filtration devices are cost prohibitive on outfalls serving very large drainage basins.

The 10 outfalls are located in various watersheds, including Cow Creek, Phillips Creek, Mt. Scott Creek, and Johnson Creek. Design is underway, and construction is scheduled for late summer and early fall. For more information, call Mike Nacrelli at 503-353-4595.

#### REPORT PROBLEMS!

Reports from our customers enable us to respond to and correct more maintenance, water pollution, spill, erosion and drainage issues. Call Surface Water Management at 503-353-4567.



Before you reach for that weed and feed, please consider this: insecticides and herbicides can harm people and pets. Rain can wash chemicals off your lawn and into storm drains and streams. This pollutes the water people and wildlife depend on. The good news - it's easy to have a beautiful lawn without chemicals. Build healthy soil. Keep your lawn properly mowed and watered. Aerate, thatch and re-seed with a Northwest grass. A healthy lawn will resist disease and pests.

For information about a chemical-free lawn, visit [www.cleanriversandstreams.org](http://www.cleanriversandstreams.org) , or call 503-234-3000.

#### The Regional Coalition for Clean Rivers and Streams

**Clean Water Partners of Clackamas County:** Cities of Gladstone, Happy Valley, Lake Oswego, Milwaukie, Oregon City, Rivergrove, West Linn and Wilsonville; Oak Lodge Sanitary District and Clackamas County Water Environment Services.