

Summer news from the Conservation District

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District Manager's Message By Jim Cathcart

It is with great pleasure we bring you the Summer 2017 edition of West Multnomah Soil & Water Conservation District's electronic newsletter. Summer is my favorite time of year. If conservation work had a "harvest time", it would be summer. By "harvest", I mean enjoying the fruits of our conservation work. Summer is a pleasant and comfortable time to get out and connect with nature through hiking, wildlife viewing, pollinator monitoring and exploring our sloughs and waterways. The habitats you see – especially those free of invasive weeds and strong in native plant communities – are likely the result of our work in conservation.

Summer, specifically July 1st, marks the start of a new fiscal year for the District and this newsletter features a summary of District's adopted budget. For more detail, see our <u>Adopted Budget</u>. Other articles feature information about: (1) an affordable loan program for replacing or upgrading a failing septic system, (2) financial assistance for maintaining or restoring Oregon white oak trees and habitats, (3) an update of Japanese beetle eradication efforts in the Cedar Mill neighborhood, (4) community science water quality monitoring on the Multnomah Channel, (5) what you can do to control invasive plants on your property, (6) the District's Sturgeon Lake Restoration Project, (7) an exciting find of one of Oregon's sensitive and rare plants – tall bugbane and (8) guidance on how to salvage plants.

Also in this newsletter we introduce you to the Willow Flycatcher; one of my favorites that can be seen this time of year along forest edges where trees line open areas. I liken their song to "whip-

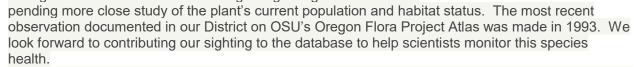
three-beers" and love to watch them dart out and forage for bugs, then return to their perch on the lookout for more.

Finally, summer is the time to stop and "smell the roses". By that I mean, throttle back, look around and appreciate the urban outdoors. Perhaps instead of smelling the roses, you can stop and look for Portland's "three bees of summer". Our conservation technician and education coordinator, Laura Taylor, tells you how.

Supporting habitat for a threatened plant tall bugbane by Laura Taylor, Conservation Technician & Education Coordinator

This spring we made a rare find while conducting a monitoring visit at a West Hills property in the northeast part of our district. Several patches of an uncommon plant, tall bugbane (Cimicifuga elata), were found growing about 50 feet up from a creek in the forest. The plants were just beginning to bloom with tall delicate spires of white flowers atop three- to five-foot tall stems which held large compound leaves up to the filtered forest light. Although the surrounding forest was second-growth, it was very healthy and retained some characteristics of old-growth forest. Clearly the past and present land owners of this property treated the creek and forest with care. The Conservation District is working with the current land owner on a forest health project that will continue to improve forest habitat while not disturbing these plant populations.

Tall bugbane is a candidate for Oregon's state-wide threatened and endangered plant list. This means that the species is uncommon enough that scientists are considering designating it as threatened



Failing septic system? Don't despair! By Kammy Kern-Korot, Senior Conservationist

The Conservation District recently learned about a unique program, called the Clean Water Loan, available from non-profit lender Craft3, and we want to share information about this opportunity with our neighbors. The program started with support from the Bill & Melinda Gates Foundation in Washington State and later expanded to Oregon with a jump-start from the Oregon Department of Environmental Quality (DEQ). DEQ jumped on board due to the negative impacts failing septic systems have on water quality and a desire to offer tools to landowners struggling to budget for repairs or new installation, which can be an expensive proposition.



The Clean Water Loan program is available throughout Oregon and makes replacing your septic system easy and affordable. Loans are offered at a 2%, 4% or 5% interest

rate, depending on annual household income. Those with income under \$35,000-\$55,000 pay the least, and don't need a strong credit rating to qualify. Loans cover the complete cost of design and soil analysis, permitting (by the county), and installation by approved contractors. The failing septic system can even be upgraded to recycle "gray water." Another great advantage of the program is that \$2,000 is reserved to service septic systems once installed - critical to making sure they function over the long-term, and protecting the initial investment (tanks should be inspected and pumped every 3-4 years).

The process for obtaining a loan and making payments is relatively painless. Applications can be submitted <u>online</u> and pre-approval is received within 3 business days. To finalize the loan, documents can be signed electronically or by mail. You can even authorize the non-profit lender to pay your contractor directly once work is completed to your satisfaction and approved by local officials. And, loan payments can be made via automatic bank payments.

Loans are available for a range of properties, including rentals and primary residences, and even marinas, as a commercial loan. Properties do need to have an existing structure to qualify. The primary criteria for eligibility is that your septic system is either: 1) more than 25 years old; 2) under orders to be fixed by the local health authority; or 3) determined to be failing by a qualified contractor. If you see wet spots or water pooling in your drain field, it may be an indication that your system is failing and you should call a professional. Search DEQ's website for qualified installers and pumpers in Multnomah County.

Japanese beetle update from Oregon Department of Agriculture By Carolyn Lindberg, Communications Coordinator This is the peak hatch period of this year's Japanese beetle population. To date, the Oregon Department of Agriculture has caught 1,296 beetles in photo traps, the majority from a single trap located in the Crystal Park neighborhood. The Department's green waste / yard debris protocols are in effect, meaning that all grass clippings, sod, and plant material with soil should be taken to the Northwest Landscaping Services drop-off site located at 1800 NW Cornelius Pass Road. This applies to individual homeowners and landscaping services. See the bilingual flyer that has information for landscapers operating within this area.

Agriculture Department trapping crews will begin replacing the lures and checking traps on July 17th. By mid-August they should have a clear picture of the distribution and extent of this population.

This year's eradication treatments will affect the 2018 Japanese beetle population, so you'll still see many beetles this year. If you see beetles feeding on plants in your yard, put them in a jar of soapy water for a couple of hours before disposing of them in the trash. If you see Japanese beetles outside the treatment area, report your findings.





Native plant salvage By Mary Logalbo, Urban Conservationist

When plants must be removed from sites due to construction or other disturbances, they can often be transplanted elsewhere and provide all the wonderful ecosystem services they offer in another suitable location. It is worth noting that some plants will have a much higher success rate than others. Salvaging native plants provides many benefits:

- Cost Savings
- Promotes use, preservation, knowledge and appreciation of native plants
- Plants are adapted to local conditions
- Provides volunteer engagement opportunities

Please see the following <u>guidelines and tips</u>on how to successfully salvage native plants (adapted from Sound Native Plants website).

Be sure to dig up plants only in areas slated to be cleared and get permission and any necessary permits before entering the site. Look for salvaging opportunities where new developments and roads are going in! Smaller plants



are more likely than larger ones to survive salvaging, and they are easier to dig and transport. Most sites have more plants than you can dig up, so prioritize species and individual plants that are best suited to salvaging.

The best time to transplant is when the plants are dormant, from December to mid-March. Dormant

plants resist the stress of transplanting, and winter's cool, overcast weather provides an ideal environment. Use sharp spades to cleanly sever the plant's roots and keep files handy for periodic sharpening. Pruners and soil knives also come in handy.

After digging up the plants, cover the roots with soil or wet burlap, so they don't dry out. Layer plants and soil in containers for easier transport. If you're traveling a long distance, you might want to use a burlap "gurney" slung between two sturdy poles. Replant the salvaged plants at the new site immediately, or put in containers for longer storage. Keep the plants cool, but always protect the root system from freezing.

If the plants come from a weedy site, try to scout the site before winter so you can identify the weeds growing there. Then, remove the soil from around the root systems of the plants to make sure you get rid of all weed seeds.

Not all species transplant well. Pacific madrone (*Arbutus menziesii*), Oregon white oak (*Quercus garryana*), salal (*Gaultheria shallon*), tall Oregon grape (*Mahonia aquifolium*), low Oregon grape (*Mahonia nervosa*), evergreen huckleberry (*Vaccinium ovatum*) and red huckleberry (*Vaccinium parvifolium*) are difficult to salvage. In general, most of the other common woody



restoration species respond well to salvaging. Target plants shorter than 3 feet tall. Herbaceous populations can be marked prior to the dormant season for salvaging later. Emergent rhizomes respond especially well to salvaging. Clumps can be transplanted into containers and then further divided at the new planting site.

Additional resources:

Grow Your Own Native Landscape (by Michael Leigh, Native Plant Salvage Project), a propagation and landscaping guide for western Washington natives, includes a great <u>summary</u> of the ethics of collecting native plants and salvage tips by species. Also, see the <u>Native Plant Salvage</u> <u>Foundation</u> website and <u>King County's Native Plant Salvage Program</u> website.

Sturgeon Lake update By Scott Gall, Rural Conservationist

A year from now work on the Sturgeon Lake Restoration Project should be underway out on Sauvie Island; specifically where Reeder Road crosses the Dairy Creek channel. The project design calls for a full spanning bridge at the Dairy Creek crossing, which fully allows the high spring flows from the Columbia River to enter and flush out upper Sturgeon Lake. Such hydrological connectivity between upper Sturgeon Lake and the Columbia River will restore important juvenile salmon migration and rearing habitat.

When this work begins, traffic may be delayed at the construction site on NW Reeder Road for drivers headed to the beaches and other NE locations. Summer is a popular time of year on Sauvie Island and visitors should be aware of and plan for possible delays ahead of time. Construction activities will be updated on our website and social networks during this period.

Due to the Bonneville Power Administration (BPA) funding a more significant portion of the project

costs, management of the project has been transferred to BPA from the US Army Corps of Engineers. In turn, BPA is using the Columbia River Estuary Study Taskforce to oversee the final design and construction for the project.

West Multnomah Soil & Water Conservation District will begin some of the site preparation this summer for vegetation work along Dairy Creek. Crews will begin removing thickets of non-native blackberry and false indigo bush on the creek banks. The plan is to replant with native trees and shrubs in the winter of 2018-2019. Eventually the District will restore about 7 acres of riparian habitat along the creek.

Finally, on June 29th the Conservation District conducted a survey of the shoreline of Sturgeon Lake looking for potential invasive plants. While little of significance was found this was part of an effort to get baseline information before Dairy Creek



is reopened providing a tidal link from the lake to the Columbia River. It is expected that once reopened, new weed seeds will be able to float into the lake. Keeping a vigilant eye out for new invaders will help to keep the lake pristine and maximize its value for fish and wildlife.

Stay tuned to the <u>website</u> for future updates and for any questions please email sturgeonlake (at) wmswcd.org.

Three bees to see this summer By Laura Taylor, Conservation Technician & Education Coordinator

Of course you'll see bumble bees and European honey bees all summer, but if you look closely you'll see several other beautiful bees that generally show up once the summer heat kicks in. How can you tell it's a bee? It will have the standard body parts of a bee: head, thorax, abdomen, six legs, two pairs of wings, long antennae (rather than the short stubby ones of a fly), and eyes on the side of its head (rather than big eyes on top of the head like a fly), and will generally be a bit hairy or fuzzy. Beyond this, different bee species

vary greatly in size, color, and life history. Here are a few to keep an

and Chap-legged bees (Svastra)
West, the males of this group have
while the females wear big furry
where they carry pollen. They
other plants in the sunflower
sometimes gather together on
warm summer evenings. They nest

eye out for this summer.

Long-horned (Melissodes)
Conjuring images of the Wild extra-long "horns" or antennae "chaps" on their lower legs especially love sunflowers and family. Groups of males vegetation to camp out on in the ground.

Wool carder bees

(Anthidium)

These bees look similar to yellow jackets with their black and yellow skin stripes, but have a stockier body shape, a fuzzier thorax, and collect pollen on hairs on the underside of their "belly" or abdomen. They're called wool carder bees because females collect the soft hair from fuzzy plants such as lamb's ears to line their nests which are made in hollow stems or holes in wood or soil. Males are quite territorial and can be seen dive-bombing other bees and insects who try to visit the flowers in their territory. They are able to hover in flight like some flower flies and unlike most bees. One species in our area (Anthidium manicatum) was introduced from Europe.

Green sweat bees (Agapostemon & Augochlora)

These bees are a bright metallic green with some having black and yellow striped abdomens. They aren't very hairy and have a fairly narrow body. Their name "sweat bee" was inherited from their cousins who are attracted to the minerals in sweat. They visit a range of small flowers and nest in deep tunnels under ground.

What makes a plant invasive? By Michelle Delepine, Invasive Species Program Coordinator

Invasive plants generally originate from outside the local region and have few natural predators to keep their population numbers in check. Often they grow quickly and crowd out native plants for space, nutrients and water. New infestations may be introduced through the movement of seed, or in some cases, plant material that re-roots in the soil. Invasive species are one of the greatest threats to biodiversity - second only to habitat destruction.

Some local examples of invasive plants include English/Irish ivy (*Hedera hibernica/Hedera helix*), Traveler's Joy (*Clematis vitalba*), and Armenian (also known as Himalayan) blackberry (*Rubus amerniacus*). Where many invasive plants require open sunny conditions to grow quickly, ivy thrives in the shade of our western Oregon forests and woodlands. Both ivy and Traveler's Joy spreads vegetatively as a vine that grows across the ground as well as vertically on trees and shrubs (literally starving them of space and sunlight). Armenian blackberry prefers open, sunnier locations and grows in dense thickets that overtop competing vegetation.

The impacts of invasive plants are far-reaching and include harm to the local ecology, economy and even human health. Invasive plants not only displace native plants, but also impact the native animal and bird species that depend on them for food, habitat and shelter. Since many invasive plants lack the fine root structures of their native plant counterparts. Without fine roots, soil is more susceptible to erosion that causes sedimentation in streams which further lowers water quality and degrades fish habitat. Invasive plants can also harm working lands by interfering with crops, causing economic loss. Lastly, some invasive plants harm livestock and other animals and certain species such as giant hogweed are a known human health hazard.

You can make a difference by familiarizing yourself with invasive plant species and becoming a steward

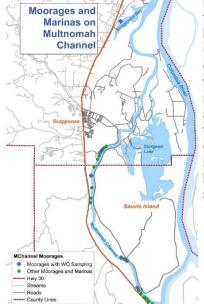
of your property or local natural area. Contact West Multnomah SWCD Invasive Species Coordinator Michelle Delepine (michelle (at) wmswcd.org) if you are interested in taking an upcoming Weed Watchers class. If you live inside the city of Portland, consider having your yard certified by the Backyard Habitat Certification Program. If you live on an acre or more, or own property outside the City of Portland but inside Multnomah County, consider creating a conservation plan for your land. West Multnomah SWCD staff can assist by walking your property with you, identifying invasive plants, and laying out doable steps for controlling priority invasive plant species on your property. Finally, many watershed councils and "Friends of" groups in Portland are actively looking for volunteers to work on invasive plant removal. Find a natural area near you that needs your help.

Community scientists monitor water quality By Kammy Kern-Korot, Senior Conservationist Multnomah Channel flows 21 miles from the Willamette River to the Columbia River along the west side of Sauvie Island, north of Portland. It is a vital waterway for many fish and wildlife species, including juvenile Chinook salmon and other species at risk, as well as a valuable recreation and fishing area. It is also home to over 24 floating home moorages and marinas clustered along its course from Portland to St. Helens.

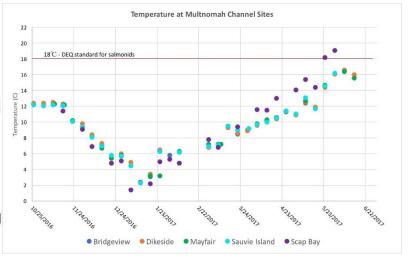
The Scappoose Bay Watershed Council, West Multnomah Soil & Water Conservation District (WMSWCD), and Oregon Department of Environmental Quality (DEQ) began a program working with local floating- homeowners to sample the water at six locations, collecting

information on temperature, clarity,

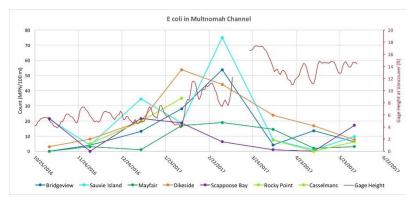
turbidity and bacteria levels. The goal of the project is to establish baseline water quality conditions along the length of the channel, to understand differences across seasons and locations, and to engage community members interested in the quality of the water where they live and recreate. Volunteers take on-site measurements weekly of water clarity, using a simple device called a secchi disk (which is lowered into the water to note depth); and temperature, both at the surface and near the bottom of the channel. In addition, volunteers take physical water samples each month, which go to the watershed council's lab for analysis of E. coli bacteria and turbidity. See the map of moorages where current sampling occurs.



Volunteers began entering data at a DEQ website in late October 2016, and will continue for at least a year. Recorded temperatures, from fall 2016 to June 2017, ranged from zero to over 19° C (or 48.2° F), with the coolest and warmest readings in Scappoose Bay in December and late May. Water temperatures greater than 18° C (or 64.4° F),



which is the DEQ standard, are considered harmful to salmonids, and are expected at more of the sites as we move into summer. See first chart above.



The second chart shows levels of E. coli bacteria in the monthly samples taken along Multnomah Channel. The increase in January and February reflects typical runoff from winter rainfall (note water levels on right axis). Despite the higher levels, all results are well below the DEQ standard (406 mpn/100ml).

Additional data will be reviewed and

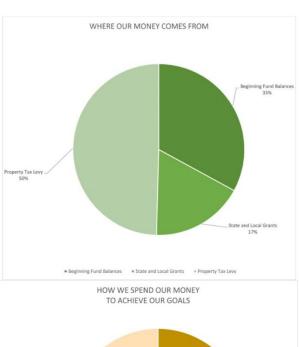
analyzed throughout the next several months. We hope to measure other water quality conditions of concern, such as the toxicity of algal blooms, which have occurred in the Willamette River at Rose Island in previous summers. The data helps determine the health of Multnomah Channel and its recreational safety.

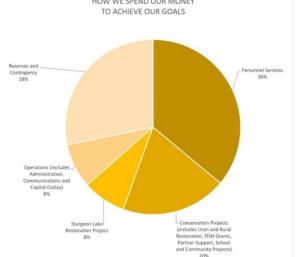
This community science water quality monitoring project is an outgrowth of work with the moorage community over the last several years. That partnership also yielded a new publication, *Living on the Water*, which we released in May 2016 for residents and owners/managers of moorages on the Multnomah Channel and other interested parties. Hard copies are available from WMSWCD or it can bedownloaded online.

Our adopted budget for FY 2017-2018 By Michele Levis, Controller & Budget Officer

By unanimous vote, the West Multnomah Soil & Water Conservation District Board of Directors on June 14, 2017 adopted the District's \$3.1 million operating budget for FY 2017-2018, which runs from July 1, 2017 to June 30, 2018. The budget addresses greater demands placed on the District as it grows by securing more grants, reaching out to new communities and taking on more projects.

Our resources in FY 2017-18 include \$1.5 million in property tax revenues, levied at a rate of \$0.075 per thousand dollars of assessed value. These funds represent 50 percent of our resources for the coming year. The other 50 percent is made up of a healthy beginning fund balance of over \$1 million and over \$500,000 in grants and contributions, of which \$245,000 is from the Oregon Wildlife Heritage Foundation to support our Sturgeon Lake Restoration Project, which connects Sauvie Island's Sturgeon Lake with spring flows from the Columbia River. The budget sustains our capacity to deliver on-the-ground projects such as cover cropping, native plant hedgerows for pollinators, invasive weed control, riparian forest restoration and noncommercial forest thinning to improve the health of private woodlands. The adopted budget recognizes that the District's work cannot be realized if it were not for our partners such as Backyard Habitat Certification Program, Southwest Watershed Resource Center, West Willamette Restoration Partnership, Forest Park Conservancy and Scappoose Bay and Tryon Creek watershed councils. The budget also adopts innovation by funding a formal assessment of our urban programs through Portland State University's Hatfield School of Government. Our pilot Community Engagement Liaison project, Connect SW PDX, continues as an example of how to achieve equity and inclusion in our work.





Have Oregon white oak on your land? By Kammy Kern-Korot, Senior Conservationist

Do you have 10 or more acres of rural land in west Multnomah County that have or could support increasingly rare Oregon white oak trees? The West Multnomah County Soil & Water Conservation District has secured funding to help landowners accomplish two main goals:

- 1. "Release" Oregon white oak trees in woodlands from competing trees, such as Douglas fir, which shade out Oregon oaks
- 2. Create or enhance oak savanna and woodland by planting new oak trees, managing invasive weeds and / or adding native plants that naturally occur in those habitat types.



The geographic target area for this work is Sauvie Island, the bottomlands and east-facing slope of

the West Hills across from Sauvie Island, and rural west Multnomah lands along the stair-step boundary with Washington County, up to the headwaters of Abbey Creek.

Oregon white oak woodlands, savanna and associated prairie exist at less than 10 percent of their prior range in the Willamette Valley. They historically occurred in the target areas for this program, where the soil was either rocky or shallow and not optimal for conifer forest. Native oaks also existed in landscapes actively managed by Native Americans to maintain a diverse habitat of oaks, wildflowers and other food sources. Oak-associated habitats are part of our cultural heritage and support hundreds of wildlife species, including many that are imperiled, such as the slender-billed nuthatch and the western gray squirrel.

For more information about this unique funding opportunity, made possible by the U.S. Department of Agriculture's Natural Resources Conservation Service, contact Kammy Kern-Korot (kammy (at) wmswcd.org).

Native species feature: Willow flycatcher (*Empidonax traillii*) by Carolyn Lindberg, Communications Coordinator

The willow flycatcher, a member of the tyrant flycatcher family, has declined in some areas with loss of streamside habitat. It lives in bushes, willow thickets, brushy fields and upland copses and is usually found near streams or marshes. Willow flycatcher breeds in thickets of deciduous trees and shrubs (especially willows) or along woodland edges.

According to The Audubon Field Guide, this bird and the Alder flycatcher masqueraded as just one species under the name "Traill's Flycatcher" until the 1970s. They look essentially identical, but their voices are different. Either kind may be found in thickets of either willow or alder shrubs, but their ranges are largely separate: alder flycatchers spend the summer mostly in Canada and Alaska, while willow flycatchers nest mostly south of the Canadian border.

They feed on insects, including wasps, bees, winged ants, beetles, flies, caterpillars, moths, true bugs, and others.

They also eat some spiders, a few berries, and possibly some seeds.



Nests are usually found 4-15' above ground in the forks of deciduous shrub or tree branches, especially willows. The nests, built by females, are open cups of grass, strips of bark, and plant fibers, lined with plant down and other soft materials. Nests often have strips of plant material dangling from the bottom. If you looked inside the nest, you'd find typically 3 to 4 pale buff to white eggs with brown spots congregated at the larger end of the egg. You'll find the male usually defending the nest by singing but females may also sing. Brown-headed cowbirds often lay their eggs in nests of this species.

The willow flycatcher migrates north during mid- to late-May and moves south in August and September. The song of the willow flycatcher is a wheezy fitz-bew or pit-speer, while the song of the alder flycatcher is more like a burry fee-bee-o, descending more abruptly in pitch. You can hear both

calls by visiting the Audubon Field Guide website.

Calendar

July

Sunday, July 30, 1:00 – 10:00 pm, Cathedral Park. Willamette River Festival features live music, free kayak tours, dance troupes, bike registration, face painting, a food court, kids' activities and an Environmental Fair-look for our booth!

August

Saturday, August 12, 11:00 am - 4:00 pm, at a private residence in Multnomah Village. This class, Hands-on Laundry-to-Landscape Workshop Installation, is part of the <u>Green Your Garden with</u> <u>Greywater</u> series from Greywater Action, co-sponsored by West Multnomah SWCD. Cost is \$20. <u>Register here</u>.

Saturday, August 19, 8:00 am – 10:00 pm, Multnomah Days at Multnomah Village. Come visit this neighborhood celebration, including our booth featuring all kinds of cool information on invasive weeds, native plants and other conservation activities!

Enjoy your summer!

Prepared by Carolyn Myers Lindberg, Communications Coordinator