Winter 2014 Volume XXII, No. 1



Join JCWC Saturday, March 1

16th Annual Watershed Wide Event

By Tim Cooper, JCWC Board Member

I'm sure there are many of you who have been participating in the annual Watershed Wide Event for longer than I have, and you know what a great event it is. But if you've not participated before, let me share my experiences with you and encourage you to join us on Saturday, March 1st for a wonderful day of hands-on restoration throughout the watershed. Participating in this event will give you a sense of accomplishment, enable you to see the restoration efforts first hand, connect you with new people who may be nearby residents or members of partner organizations from further afield, and make a difference for the future of Johnson Creek.

So what happens at a Watershed Wide Event? First, a lot of preparation is done in advance by Johnson Creek Watershed Council staff, partners and other volunteers, well before you arrive at the site on the day. From site selection, to work plan, to the provisioning of tools and plants and equally important coffee and treats, everything has been made ready for planting, pulling and whatever else needs to be done.

Each site has a leader who will give you the plan of action for the morning. For example on my first Watershed Wide Event in 2007, I was at Powell Butte with many other volunteers including a large contingent from the Oregon Hunters Association. We tackled invasive trees, especially holly. In 2009, I was at Clatsop Butte, this time planting native plants after the invasives had been removed by an earlier project. The diverse group of volunteers included a team from a Portland tech company, a metro councilor, and local residents. Some of the children played a key role - interpreting instructions for their non English-speaking parents.

Each site has unique opportunities for improving the health of Johnson Creek, whether it is on one of the buttes in the upper watershed or right on the banks of the creek in Portland. My favorite recent site was Tideman Johnson Park in 2012, where we were right down on the creek. It was an unusually bright day for early March, and in addition to planting I was able to get some great photographs of volunteers in action.

Afterwards, there's free pizza, made possible by the sponsors.

So what are your plans for March 1? Bring yourself, or bring the family, and help make a difference for this wonderful jewel that is Johnson Creek.



Year-End Matching Campaign a Success!

A heartfelt thanks to all of you whose recent contributions made our year-end fundraising campaign a success. As of January 6th, with donations still arriving in the mail, JCWC had reached its \$15,000 yearend fundraising goal. And thanks to our matching donors*, all those funds will be matched dollar for dollar, bringing the total to \$30,000.

A recent inquiry from a long-term supporter has prompted JCWC to set up an account that enables us to accept donations of stock, bonds or mutual funds. It is a great way to support JCWC's work and is easy to do. If you hold securities that have risen in value and have held them long-term (more than one year and one day) you can consider using them to make a gift. In a nutshell, here's how it works: You transfer securities to JCWC. JCWC sells them and uses the proceeds for restoration, monitoring, volunteer stewardship, and other important activities that benefit Johnson Creek. And the tax benefits for you, as the donor, can be significant.

To discuss a donation of stock, bonds, or mutual funds to JCWC, please contact Executive Director, Matt Clark (503-652-7477 or matt@jcwc.org).

*Jim Cooke, Jameson Partners dba Freeway Lands II, Mintkeski Family Fund of the Oregon Community Foundation, Janet Roberts and Ed Clark, and Mary Ann and Bob Schmidt.

Wells Fargo Supports Community Engagement in Johnson Creek Watershed

This past fall, Wells Fargo donated \$8,245 to JCWC to support our volunteer program, specifically to focus on recruiting culturally, ethnically, and socio-economically diverse volunteers to participate in our stewardship events like tree planting and weed pulling. Modeling on successful projects such as the bioswale planting at Saint Mary Ethiopian Church, the Council will use the Wells Fargo funds to recruit more volunteers from among minorities in the watershed, including those for whom English may be a second language. JCWC Executive Director, Matt Clark speaks Spanish and Riparian Program Manager, Noah Jenkins speaks Russian. 2010 US census data shows that a significant portion of residents in the Johnson Creek Watershed are non-native English speakers.

Our goal is to diversify our organization at all levels, including our volunteer base so that we reflect the demographics of the watershed, which is increasingly diverse.

Thank you Wells Fargo for supporting JCWC's volunteer program! Stay tuned for more details.

► Advisory Circle member and Wells Fargo employee Gary Klein delivered grant funds to JCWC.



Looking Forward:

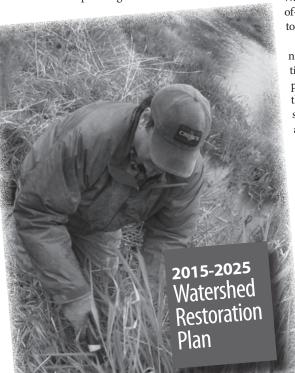
2015-25 Watershed Restoration Plan

By Robin Jenkinson, JCWC Restoration Coordinator

This fall, the Council received funding from the Meyer Memorial Trust to kick-off the update of our 2002 Watershed Restoration Action Plan for 2015 to 2025. While the 2002 Plan has served us well (90% of the projects listed then have now been achieved, see jcwc.conservationregistry.org for project details), we've also learned a lot since then. For example, monitoring efforts by JCWC and its partners have produced new data about the health of the watershed. Major efforts have included the establishment of water quality parameters and standards (temperature, toxics and total suspended sediment, and bacteria) under DEQ's Total Maximum Daily Load (TMDL) program, a major expansion of fish distribution surveys led by Multnomah County, two USGS analyses and reports on hydrology and suspended sediment, LIDAR-based topography and stream mapping, and a fish passage assessment by JCWC (currently underway).

Secondly, over the past decade, changes in regional politics and policy have altered the conservation landscape in this rapidly urbanizing watershed, shifting the assumptions underlying the previous action plan. Significant changes include the incorporation of the city of Damascus, the development of three comprehensive development plans (Damascus, Springwater Area, and Pleasant Valley; though Damascus' plan has not yet been adopted), and regional adoption of progressive zoning policies that protect riparian areas, trees, and water quality resource areas. In addition, thanks to 1995 and 2006 bond measures, Metro now maintains over 1,400 acres of natural areas in the Johnson Creek watershed, which is a Metro priority conservation area.

Third, advances in watershed science and adaptive restoration studies have led to new frameworks for watershed planning that focus on restoring ecological functions and processes at multiple spatial scales and emphasize three-dimensional connectivity over in-stream habitat enhancements. And, our predictions of the effects of climate change are better refined, offering opportunities for mitigating the effects of climate change through watershed action planning.



As part of updating the Watershed Restoration Action Plan, JCWC staff will complete detailed assessments of the Badger Creek, Butler Creek, and Mitchell Creek sub-basins, selected for the diversity of land uses (urban, suburban, and rural) and potential restoration options (i.e. streamside reforestation, fish passage barrier removal) they represent. These sub-basin assessments will be modeled on the 2012 State of the

> Watershed Report (jcwc.org/2012-stateof-the-watershed-report). They will help to prioritize restoration actions.

In order to incorporate local community values into the restoration prioritization process, in the spring of 2014, we plan to host a series of coffee klatches in the Badger, Butler and Mitchell sub-basins. We will meet with local landowners and residents, seeking their knowledge about their local environment and their input about various restoration options.

Visit jcwc.org/restoration/ for more details or email robin@jcwc.org to learn more.

Prioritizing Riparian Restoration Efforts through Effective Shade Modeling

By Brittany Sahatjian, Master's Degree Candidate at Portland State University

Elevated water temperatures, generally those higher than 18°C lasting from hours to months, are harmful to all life stages of salmonid species, causing weight loss, disease, competitive displacement by other species or death.

Enhancing the height and density of near stream, or riparian vegetation is widely accepted as one of the most effective strategies for reducing stream temperatures, while also providing numerous ancillary benefits such as erosion control and flood mitigation. In an effort to reduce stream temperatures and restore salmon runs in the Johnson Creek Watershed, numerous riparian restoration projects have taken place already. However, more efforts are needed to bring stream temperatures down to Oregon standards that fully support salmon and trout.

In June 2012, the Johnson Creek Watershed Council recruited PSU graduate student, Brittany Sahatjian, to provide critical data to inform where to prioritize their riparian restoration efforts. Her

master's thesis utilized a shade simulating model to identify riparian areas throughout the watershed that would greatly reduce the amount of incoming solar radiation to the stream surface if they were restored. In a sense, she was looking for areas that, when restored, produced the biggest bang for the buck in terms of shading and stream temperature

Priority rankings of high, medium, low, or maintain were assigned to individual taxlots; restoration efforts are often planned and implemented

Brittany's modeling work is now complete.

To learn more about restoration efforts currently underway in the Johnson Creek Watershed, visit jcwc.conservationregistry.org/.

Modeling Results

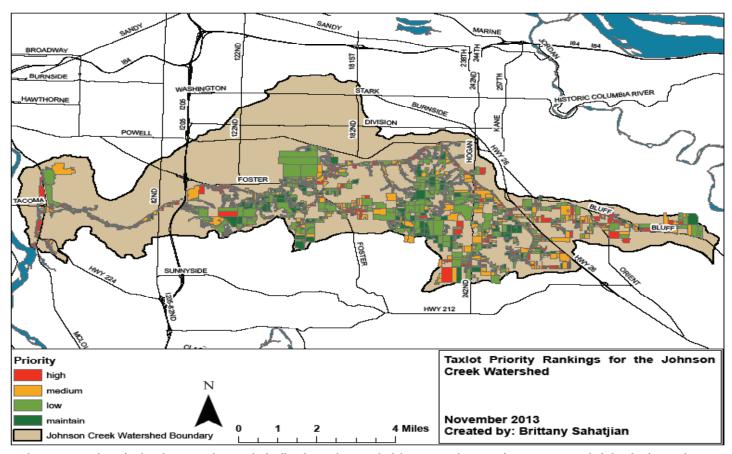
High, medium, and low priority taxlots are distributed relatively uniformly throughout the watershed, with a few exceptions.

If the entire watershed were restored with sufficient riparian vegetation, it could prevent 200,000 watts/m2/day from reaching the stream surface. This is called the solar reduc-

Restoring only 22% of all taxlots that come within 15m of a stream could achieve 50% of the solar reduction goal.

Restoring only 38% of all taxlots could achieve 90% of the solar reduction goal.

These results show that carefully choosing where to focus restoration efforts can greatly increase the ecological returns from our investments in riparian restoration.



Taxlot Priority Rankings for the Johnson Creek Watershed. All taxlots in the watershed that come within 15m of any stream are included in this figure. These results will be used to help the Johnson Creek Watershed Council prioritize areas for riparian restoration and focus their landowner outreach efforts more efficiently.

A Winning Combination



Volunteers came out in force to remove asphalt at St. Mary Ethiopian Orthodox Church this fall.

On September 28th, more than 50 volunteers from St. Mary Ethiopian Orthodox Church, Depave, Green Lents, and Johnson Creek Watershed Council (JCWC) broke up part of the Church's parking lot near SE 92nd and Flavel. We removed 2,400 square feet of asphalt, filling four and a half ten-yard bins with an estimated 30 tons of material. Halfway through the work, volunteers ate a delicious lunch of lentils, chicken, and injera bread, cooked by Church members. Our youngest volunteer, four-year-old Quillan dragged his dad (JCWC Director Matt Clark) away from lunch, saying he wanted to "keep breaking". Such is the seduction of smashing pavement.

The following week, Church members excavated additional materials where the pavement used to be, replacing it with high quality soil suitable for a rain garden. Then, on October 26th, 45 volunteers reconvened at the Church to plant more than 500 mostly native plants, ranging from rushes and camas to Oregon Grape and Mock Orange. The rain garden will soak up storm water from the parking lot. It should reduce flooding in the church, which has been a perennial problem in winter months. It will also collect and filter stormwater, improving water quality in nearby Johnson Creek.

The project was funded by a City of Portland Community Watershed Stewardship Grant. Additional funds were raised at a traditional Ethiopian dinner at the Church last June. Project partners are planning to co-host an inaugural ceremony and community celebration on Saturday, May 10th.

JCWC and TriMet Partner to Create Salmon Habitat

In July and August 2013, 23 logs and 60 boulders were installed in a 400 foot stretch of Johnson Creek next to the future Tacoma Street/Johnson Creek MAX station, opening in 2015 on the Portland – Milwaukie Light Rail Line. The logs and boulders add channel complexity and provide cover and shelter for three species of threatened salmon present in Johnson Creek as well as other native fish like lamprey. In addition to the new habitat in the main channel, a side channel was excavated in the south bank to create refuge for salmon during high winter flows. About 2,400 cubic yards of fill were removed to create the side channel. 3/5th of an acre of native streamside forest will be planted at the station site next winter.

In the summer of 2010, JCWC and TriMet co-hosted a series of community design workshops for the Tacoma MAX station. It was at those workshops, attended by an estimated 100 people, that salmon habitat enhancements were first proposed for the station site. "After three years, it's exciting to see the community vision come to fruition," said JCWC's Executive Director, Matt Clark.

The habitat work has been jointly funded by JCWC and TriMet. A portion of the habitat work was required of TriMet as mitigation for environmental impacts during light rail construction.

Funders for JCWC's cost share include: East Multnomah Soil and Water Conservation District, National Fish and Wildlife Foundation, Oregon Wildlife, PGE Habitat Fund, and Soil Solutions.

An interpretive boardwalk celebrating Johnson Creek is scheduled to be built at the project site next summer. The boardwalk project is a partnership between JCWC, TriMet, Ardenwald Johnson Creek Neighborhood, and Sellwood



Re-creating channel complexity required major earthmoving equipment to install logs and boulders instream at the Tacoma Street / Johnson Creek MAX station, scheduled to open in 2015.

Moreland Improvement League (SMILE), with input from numerous other entities and individuals, including the SMILE History Committee and the Confederated Tribes of Grand Ronde. There will be five interpretive signs highlighting Johnson Creek's ecological recovery and the central role the creek has played in the area's development.

JCWC is still fundraising for boardwalk construction.

Donors can have their names engraved in the boardwalk's steel handrail. To support the project and order your name engraving, visit our website at: jcwc.org/engraving. o provided by ESA-Vigil Agri

December Sees Flurry of Coho Activity in Johnson Creek

By Matt Clark, JCWC Executive Director

On November 30th, volunteer surveyors found a coho salmon carcass in Johnson Creek in southeast Gresham. On December 2nd, a creekside landowner photographed a live coho in lower Badger Creek, a tributary of Johnson Creek. Then, between December 12th and December 19th, there were three more live coho sightings and two more carcasses found.

Of the three carcasses found, two were male and one was female, according to Alex Neerman, an Oregon Department of Fish and Wildlife (ODFW) biologist. None had hatchery markings - i.e. a clipped adipose fin or tags - suggesting they were wild fish. There were indications that the female had spawned as she had no eggs inside and her tail showed signs of wear, suggesting she had been digging a redd (a spawning nest). Scale samples from the carcasses sent to Corvallis for analysis will provide more details about the fish, including their ages.

After JCWC's spawning surveys ended on December 21st, the carcasses were brought back to where they were found. Their decomposing bodies will provide important nutrients such as calcium, phosphorous and nitrogen to the

local food web, nutrients that feed algae, aquatic macroinvertebrates and even juvenile salmon that are known to feed directly on salmon carcasses. In future surveys, instead of collecting



JCWC Restoration Technician, Jan Mehaffy with two coho carcasses found in Johnson Creek on December 17, 2013.

the whole fish, scale samples will be taken and the carcasses left in the stream.

Fifty JCWC volunteers, trained this fall, walked one-mile reaches of Johnson Creek in pairs looking for evidence of spawning fish. In a two month period between late October and late December, an estimated 90 surveys were completed on six reaches of Johnson Creek and tributaries. This is the second (the third counting our pilot year in 2011) of a four-year volunteer-based adult coho monitoring program, produced by JCWC in partnership with ODFW and funded by East Multnomah Soil and Water Conservatrion District. By surveying Johnson Creek over a four year period, JCWC will establish baseline date for all spawning cohorts. Coho typically have a four-year cycle. More and better information on key spawning areas will increase the ability of JCWC and other watershed management entities to improve and protect spawning habitat for adult coho throughout the watershed. It will also provide important data informing the comprehensive assessment and prioritization of fish passage barriers that JCWC is currently working on. These barriers are thought to prevent coho, other native salmon and trout, and possibly even other migratory fish like Pacific lamprey from accessing nearly a dozen stream reaches in the watershed with suitable habitat.

If you would like to know more about our assessment or have fish information to share, please contact our office at 503-652-7477, or email Jan Mehaffy at jan@jcwc.org.



Johnson Creek Charity Golf Classic

Friday, August 1 **Eastmoreland Golf Course**

Sponsorship opportunities available! Contact Amy (amy@jcwc.org)

Thanks to our 2013 sponsors













CWC UPDATE

Retirement at Last! Farewell to Outreach Associate Marty Urman



Marty with husband Perry Rikli, former JCWC Board Member.

Marty Urman spent seven years at JCWC. She was well-liked by staff and volunteers alike. Her talents in graphic design and event planning elevated the work of the Council.

Urman was the brains behind our Within Your Reach newsletter, the Annual Meeting and the Johnson Creek Art Show amongst dozens of other small projects. As an artist, Urman brought together elements of beauty and art with

science and research in unique and inspiring ways. Her daily presence in the office will be greatly missed, though we will still see her frequently. Thank you for your years of inspired work!

Thank you to Board Member Celeste Mazzacano



Celeste learned that mussel populations thrive in parts of Johnson Creek.

Celeste Mazzacano first crossed paths with JCWC as she was spearheading new research on freshwater mussels in the Pacific Northwest. Thanks to her support and initiative, we now have a more comprehensive understanding of the distribution and population structure of mussels in Johnson Creek as well as what their presence means for overall

water quality and vice versa. Celeste will be presenting at a Johnson Creek Science Talk on February 13. JCWC staff has enjoyed working with her and we continue to appreciate her expertise on and passion for all creatures without a spine. Thank you for all you contributed to Johnson Creek as a Board Member with your research, expertise and passion.

Honoring our 2013 Volunteer Leaders

Special thanks to our Presidential Service Award winners. These individuals invested at least 100 hours in 2013:



Lucv Carr Jack Halsey **Emily Matson** Brittany Sahatjian Michael DuCharme Anna Leitschuh Melanie McCandless Scott Turner

These individuals served at least 25 hours in 2013:

THESE IHUIVIU	
Nicole Alexander	R
Rachel Aronson	ŀ
Brian Art	K
Michael Babbit	R
Quintin Bauer	H
Jessica Beutler	P
Sergey Bezhinets	(
Courtney Blinkhorn	7
Taylor Bortz	V
Julia Chapman	Λ
Paul Ciri	В
Curtis Cooksey	L
Caitlin Dobson	(
Paul Edison-Lahm	J
Thom Epps	٨

Raquel Granados Horvard Guerrier Kevin Hay Ross Hiatt Helen Hunter Phoebe Johnson Gary Klein Toby Kubler Virail Llewellvn Norbert and Lisa Loske Bruce MacGregor ora Martin Garth Massey Jan Mehaffy Mary Meier

Alivia Mickelson Cindy Moomaw-Nerf Priscilla Nelson Benjamin Proztman **Bailey Reinmiller** Nancy Robrecht Jennifer Rosenberg The Schaeffer Family Ashlev Smithers Katie Sombat Lee Spiker Russ Stoll Jeff Taylor Tony Vingiello Bryan Volk

Northwest Youth Corps Makes an Impact

This past summer, JCWC was lucky to host a crew from Northwest Youth Corps for three weeks. The ten-person crew, consisting of high school seniors and recent graduates and led by two college graduates, provided plenty of muscle in the field. They removed invasive species, such as English ivy and blackberry, picked up trash, and removed protective netting from old plantings at sites throughout the watershed, supporting the Council's riparian program. They were also an integral part of the annual Johnson Creek Clean-Up in August, helping to organize, advertise, and lead crews for the event. Their efforts even attracted the attention of several state officials, including Oregon Senate Majority Leader Diane Rosenbaum, Oregon Senator Jackie Dingfelder (now a policy director for Portland Mayor, Charlie Hales), and Labor Commissioner Brad Avakian, all of whom visited the crew on site to discuss their work and its importance to Oregon's environment. Thanks, NYC!

Americorps National Civilian Community Corps (NCCC) to Join JCWC



Nine young adults on the "Green 4" team will be traveling to Portland to work in the Johnson Creek Watershed this winter between January 16th and March 21st. Under the guidance of Noah Jenkins, JCWC's

Riparian Program Manager, the team will be removing invasive plants and installing thousands of native trees at ten different locations.

This is JCWC's second time hosting a team. We project that the team will contribute over 3,000 person-hours to on-the-ground restoration efforts in the watershed. 'Green 4' will be staying at Camp Namanu throughout their time here. They are looking forward to exploring the area. If you'd like to work with the team or want to learn more about this program, don't hesitate to call the JCWC office at 503-652-7477.

JCWC Welcomes New AmeriCorps Riparian Technician

By Sarah Eastman, JCWC Riparian Technician



Sarah Eastman joined the JCWC team in September

Hello Community Members, I'm so excited to be working with the amazing staff and volunteers at the Council. I started an 11 month position with JCWC this September, working with the restoration team on a variety of projects that support our recently-completed Riparian Restoration Strategy. Before that, I earned my Master's of Environmental Management at Portland State University, where my focus was on water quality and policy. I've lived in Portland for almost 10 years, and I am passionate about facilitating sustainable practices, healthy environments and engaged neighbors in my

So far I've been working with Riparian Program Manager Noah Jenkins, planning the work on our new Creek Care sites in Clackamas County. We've met with the landowners, assessed the current plant communities on site, and come up with plans to remove invasive vegetation and plant native species. Right now, we are controlling invasive plants and putting in orders

to local nurseries for native riparian plants. Starting in January, we'll be busy getting all of those plants into the ground. We have a lot of fun volunteer planting events this winter and spring, including our Watershed Wide Event on March 1st. If you don't mind getting a little dirty, it's a great way to contribute to the restoration and health of our streams.

JCWC and the City of Gresham's Natural Resources Program are partnering with 3rd grade teachers and students at Butler Creek Elementary to provide hands-on learning opportunities out in the field. I'm excited to share my love and respect for nature with the next generation of stewards to the land. I'm also working on compiling a Riparian Revegetation Guide for the Council, which will outline best practices for the work we do within the riparian program. When I need to get away from my desk, there's always work to be done outside of the office, along Johnson Creek - mostly removing blackberry (ouch!).

I'm looking forward to seeing how our projects develop over the course of my time here, and to working with the awesome volunteers that help make these projects thrive.

Restoration at Johnson Creek Park

The photos below, showing the dramatic changes that take place when riparian areas are replanted, highlight the importance of Sarah's work.



In 1980, before restoration, the banks of Johnson Creek were exposed, leading to creek warming.



Thirty years later, in 2012, streamside plantings provide shade to help cool Johnson Creek.



The Perfect Gift for the Nature Lover

"Songs for Johnson Creek," a benefit album for Johnson Creek Watershed Council, features children's songs written by twelve Portland artists, including Laura Veirs, Aaron Nigel Smith, and Mo Phillips. It also features JCWC Executive Director, Matt Clark and his six-year-old son, Rowan singing together. Most of the songs are previously unreleased. Half of them were written specifically for the album, treating such themes as the need for clean water, the importance of connecting children with the outdoors, and the joy of nature discoveries. As nationally-renowned kids' music blogger, Zooglobble writes, "The album will be especially appropriate for those in an outdoors-y mood."

Originally released as a digital-only album (johnsoncreek.bandcamp.com), we recently had physical CDs made. They are available for purchase for \$15 per CD, plus \$1 for shipping. \$14 of every CD sold directly supports JCWC's work.

How to order:

- 1. Visit our website at: jcwc.org/cd. You can order by credit card through the site.
- 2. Mail a check (\$16 per CD, shipping included) made out to JCWC. Our address is: 1900 SE Milport Road, Milwaukie, OR, 97222
- 3. Purchase at our office or at one of these local stores: Milagros Baby Boutique, Portland Audubon Nature Store, Portland Children's Museum, Thinker Toys, and Tidee Didee Diaper Service.
- 4. E-mail Matt (matt@jcwc.org) about discounts for purchases of five CDs or more or if you are interested in selling the CDs at your retail outlet.





1900 SE Milport Rd., Suite B Milwaukie, OR 97222

Change Service Requested

Calendar of Events

For details visit our website: jcwc.org or call 503-652-7477. Please RSVP to Amy (amy@jcwc.org).

Green Streets Stewards Orientation

Thursday, January 16
JCWC Headquarters
5:30pm-7:30pm
Do you live near a bioswale?
If so, contact Amy (amy@jcwc.org)
Participants may register at any time.

Martin Luther King Jr. Day

Monday, January 20 Eastmoreland Golf Course Streamside planting event 10am-12pm

Park Stewards Orientation

Thursday, January 23 JCWC headquarters 5:30 - 7:30 pm

Tideman Johnson Park Neighbors Planting event

Saturday, February 8 Tideman Johnson Park 10am-1pm

Science Talk

Dwellers of the Deep: Freshwater Mussels of Johnson Creek Thursday, February 13 Sellwood Public House 6pm-8pm A presentation by Dr. Celeste Mazzacano of the Xerces Society

Volunteer Restoration Event

Saturday, February 15 Location to be determined 10am-1pm

16th Annual Watershed Wide Event

Saturday, March 1 10 locations 9am-12 noon

Volunteer Restoration Event

Friday, March 7 The Courts, Eastmoreland 10am - 1pm

Naturescaping Workshop

Saturday, March 15 Gresham Greater Baptist Church 9:30am-1:30pm, hosted by JCWC Register at www.emswcd.org

Save the Dates!

Annual Meeting: Thursday, May 22 Golf Tournament: Friday, August 1