



Badger Creek Opened to Further Fish Passage!

Elizabeth Brosig, JCWC Restoration Project Manager

Johnson Creek is home to a variety of wildlife, including migratory fish that travel from the ocean to the Johnson Creek watershed to spawn. Each year Chinook salmon, Coho salmon, steelhead/rainbow trout, and Pacific lamprey visit Johnson Creek

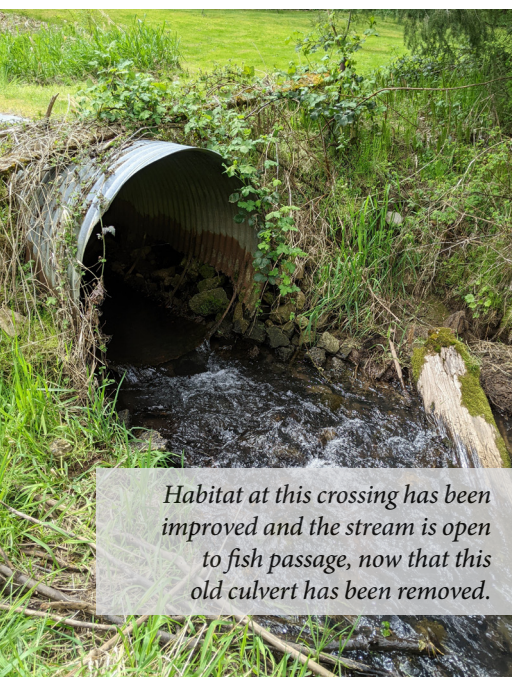
and its tributaries. On multiple occasions since 2010, Coho salmon have been documented spawning over 15 miles up Johnson Creek near Gresham!

Culverts, deteriorating bridges, and other barriers in streams block the movement of fish up Johnson Creek and tributaries. In 2013 and 2014 Johnson Creek Watershed Council (JCWC) surveyed and prioritized 275 fish passage barriers in the Johnson Creek watershed. Since then, the Council has completed nine fish passage projects, including culvert replacements and retrofits, and a dam removal. Fish passage projects often yield immediate results, with salmon observed upstream of former barriers within a few years.

One of those projects was the removal of a full barrier on Badger Creek at the Springwater Trail crossing in 2016, opening Badger Creek to fish passage up to a degraded culvert on private property just 0.7 miles upstream.

Badger Creek is a cold water tributary of Johnson Creek in Boring, Oregon. Cold water tributaries are significantly important to salmon, especially with climate change impacts continuing to increase. Since resolving the barrier at the Springwater Trail crossing, the Council has conducted environmental DNA (eDNA) testing in Badger Creek at that location and found the presence of steelhead/rainbow trout, Coho salmon, and Pacific lamprey. Additionally, in the summer of 2016 during construction at the site, an adult 12" Pacific lamprey and several small lamprey were captured and later released during the fish salvage operation with Oregon Department of Fish and Wildlife (ODFW).

—(Continued on page 3)



Mud, Sweat, and Trash: Another Year of the Johnson Creek Clean-Up

Monica Hescheles, JCWC Volunteer Program Manager



The Johnson Creek Clean-Up is one of the most exciting stewardship events on JCWC's calendar. We've been hosting the Clean-Up since 2008 and each year has been a huge success—due entirely to the amazing volunteers who turn out to clean up their local waterway. This year, over 150 volunteers collected almost 400 bags of trash—yes, you read that right, **FOUR HUNDRED BAGS**—along with many other items too big to fit in a garbage bag, including a dozen shopping carts, seven mattresses, eight tires, and six electric scooters. The total? 5.9 tons of trash!

Our volunteers are what make the Clean-Up a success, but our many partners and funders are what make it possible. Clackamas Water Environment Services, Metro, and the Mintkeski Family Fund of the Oregon Community Foundation all provided generous funding for the event. Portland Parks and Recreation, Lents Youth Initiative, and North Clackamas Parks and Recreation District all helped with planning, site support, and trash hauling. SOLVE provided supplies and outreach. Ground Score provided outreach to the houseless

—(Continued on page 3)

How Can We Impact Riparian Sheltering?

Daniel Newberry, JCWC Executive Director

There are few issues that generate as much passionate discussion in our watershed community than that of impacts caused by people living in greenspaces on the banks of Johnson Creek. For the eight years I've been in my current role, it seems that someone contacts the Council about this every few weeks, usually about garbage at camps by the Creek.

The Johnson Creek Watershed Council Board and Staff have struggled for years to find a response we can agree on that acknowledges both our concern for the humanitarian needs of our houseless neighbors looking for a place to live and also recognizes that there are negative impacts from continuous sheltering in sensitive riparian areas.

We have created a page on our website that outlines our thoughts on this important issue. This page also gives links to government websites and phone numbers for people to call, organized by the city or county in the watershed where the concern rests. That web page is: <https://www.jcwc.org/equity/sheltering-in-riparian-areas/>

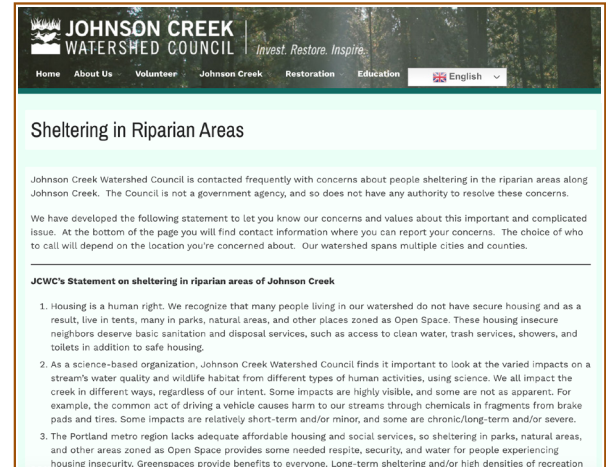
Our message begins with a request to our city and county governments to provide housing and sanitary services to our most vulnerable population. Perhaps then, next to Johnson Creek will not be seen as the best temporary housing option. As permanent housing will take time to secure and/or build, we ask the public sector to allocate spaces for temporary outdoor sheltering areas that are in areas less sensitive than the stream corridors.

As we reflect on these issues, it's important to remember that all of us, through our lifestyle, contribute to negative impacts on Johnson Creek, whether it be the salmon-killing chemicals in tires, the scouring flood flows that are caused by paving over natural areas and piping the runoff, or the erosion and sedimentation caused by intensive development. The impacts made by those sheltering next to the stream are more visible.

As a science-based organization, the Council wants to understand more about these impacts, so we ask our governments to learn more about impacts from all sources. All manner of impacts are attributed to sheltering in riparian areas, but few are backed by scientific studies. Let's learn together.



Daniel Newberry, Executive Director



New Grants & Contracts

East Multnomah SWCD

\$85,000

This helps to support these program areas: Riparian, Instream, Community Science, and Equity and General Support.

Clackamas Water Environment

Services

\$28,620

Partially funds our Watershed Wide Event, Creek Clean-Up, CreekCare, and Educational events like Science in the Park.

City of Portland Bureau of Environmental Services (BES)

This year's amount: \$90,000

Funding for Watershed Protection and Restoration, Volunteer & Community Science, and Diversity and Inclusion program, plus a large wood project nearby Leach Botanical Garden.

The Oregon Department of Fish and Wildlife

\$56,650

Funding for a fish passage culvert removal on Badger Creek.

Clackamas Soil and Water Conservation District

\$5,000

Helps to fund a CreekCare program for residents in the upper Johnson Creek watershed.

City of Milwaukie

This year's amount: \$7,500

Funding for a CreekCare program for residents along Johnson Creek in the City of Milwaukie for a six-year period.

Oregon Watershed Enhancement Board

\$82,732

Second year of funding for general council capacity.

City of Gresham

\$35,000

General funding that supports our volunteer stewardship, Diversity, Equity, and Inclusion (DEI), education, and outreach work, in addition to specific funding for our riparian and community science efforts in the City of Gresham.

Metro

\$56,519

Supports our ongoing Leach Back 5 project which focuses on community involvement to provide a long-term living laboratory for education and environmental workforce development that serves the needs of multiple diverse partners.

Oregon Department of Environmental Quality (DEQ)

\$20,950

Supports riparian restoration in Gresham on four properties.

(Badger Creek... — continued from page 1)

On September 21, 2022 we removed the degraded culvert upstream of the Springwater Trail crossing in Boring Oregon, opening up Badger Creek for another 0.7 miles to fish passage. This corrugated steel round culvert was 67% passable to adult fish and likely a complete barrier to juvenile fish due to a water surface drop at the outlet. The culvert was in very poor condition, the sides had completely rusted out throughout the culvert. The culvert broke into pieces as it was removed because it was in such bad condition. The streambanks were graded at an incline to create a natural channel shape and to allow the stream room to adjust.

Riparian work is underway to remove invasive species along the stream and this winter native shrubs and trees will be planted in their place. Native vegetation is vital to a healthy stream environment, benefiting insects, birds, and other wildlife, while additionally shading the creek to conserve cold water. JCWC is planning on installing a small bridge soon to allow landowner access across the creek, while also allowing the stream to be fully passable for salmonids and lamprey alike.

We want to thank ODFW for their support in funding this project.

A Day with Students in the Back 5

Monica Hescheles, JCWC Volunteer Program Manager

On a cool day in November, the sun shines through the golden changing leaves of fall. Students and staff from The Blueprint Foundation (TBF) meet staff from Leach Garden Friends (LGF) and JCWC to learn about and search for amphibians. JCWC staff had the opportunity to speak with seven students from TBF to hear about their experiences at the Back 5 Project.

We asked students why they think access to an outdoor classroom is important. Ja'Siah, who has been to Leach Botanical Garden (LBG) "too many times to count" explained that, "when you are in person you can enjoy a lot more and see how it actually works." Mariah agreed that it is "important to actually see and feel what you are learning". Ari, a first timer at LBG said, "I feel like it gives you a better chance to explore and get out and do things you haven't done before." Students recognized the benefit of their work in the Back 5. Harmony explained, "you are getting information about the population of what type of species is here and what lets that species thrive here".

What do they like about being at the Back 5 and Leach Botanical Garden? "I love it here because if you listen you can hear birds and nature sounds" (Charles). "If you are quiet enough.. I have seen a deer and a fox" (TC). "I love the garden because it is nice and quiet... and it has beautiful plants and animals" (Treasure). To learn more about the Back 5 project, email monica@jcwc.org and keep an eye out for the Back 5 Project website coming in 2023.



The Blueprint Foundation students discover long-toed and ensatina salamanders in the Back 5 at Leach Botanical Garden.

New Grants & Contracts

City of Portland Bureau of Environmental Services (BES) Percent for Green \$116,342

Funding for a stormwater retrofit project at Stonebridge apartments, a low income seniors housing complex in Lents. Project aims to reduce stormwater flooding and improve runoff water quality through removal of pavement and installation of stormwater facilities such as rain gardens.

Meyer Memorial Trust \$89,650

Funding a large wood habitat enhancement project at the confluence of Johnson Creek at the Willamette River, which aims to enhance stream complexity and improve habitat for migrating salmonids.



Johnson Creek Clean-Up (Cont.)

(Johnson Creek Clean-Up — continued from page 1)

community prior to the event. Central City Concern went above and beyond while helping to collect and haul trash. Hoodview Disposal and Recycling, and Sunset Garbage Collection donated dumpsters and hauling services. Rebel Cricket Screen Prints produced the t-shirts our volunteers got muddy, and Juliet Maggi created the beautiful design that graced those t-shirts. And last but not least, Casa de Tamales provided delicious catering for the after-party at Mill Park. We are incredibly grateful to everyone who contributed to such a fun and impactful event.



The Willamette Upstream team poses with a mountain of trash. Including multiple shopping carts, bike tires, and a lounge chair. The Willamette Upstream reach is often one of the most challenging stretches of the creek. Picture taken by Sharon Klein.

Keep A Keen Eye Out for the Emerald Ash Borer

Sara Volk, JCWC Confluence AmeriCorps Member



Emerald ash borer (Agrilus planipennis) feeding on an ash leaf.

There's been a lot of chatter around the Emerald Ash Borer (EAB) since their arrival in Forest Grove, Oregon this past summer. Previously, the furthest west they had been spotted was Colorado. Native to Asia, the EAB targets stressed ash trees (and a few closely related trees, such as olives) to lay their eggs on.

As a result, the larvae girdle the tree by boring through-out the cambium layer under the bark in "S"-shaped "galleries". Girdling disrupts water and nutrient transportation within the tree, leading to tree mortality. Without its natural predators, the EAB has spread throughout North America since their first sighting in 2002, shifting from only preying on stressed trees in their native range to now targeting over 100 million stressed and healthy trees in North America.

Spotting the EAB is difficult because of its size - smaller than a penny - and similarities to other beetle species.



Emerald ash borer at actual size.

However, the ash tree, including the native Oregon ash (*Fraxinus latifolia*), has distinctive characteristics that are easier to recognize once you become familiar with them. These ecologically important trees are found within the riparian area in addition to their widespread range throughout the Pacific Northwest (PNW).

The compound leaf has 5-7 oval to egg-shaped leaflets positioned opposite to each other, in addition to the leaves being opposite. The fruits/seeds, called samaras, are double winged, 1-2 inches long, and grow in clusters. Mature bark will have a diamond or lattice pattern. There are several copycat trees in our area, such as walnut or tree of heaven, so looking for all the characteristics is important for correct identification.

The metallic-green color of the ½-inch long adult EAB is similar to many beetles that are found in the PNW. If you find a small, metallic green beetle, look for a body that is

slender with a solid color and no lines. Taking a photo can be helpful for verifying identification and needed for reporting.

Unfortunately, tree stress will probably be what you notice before finding any beetles. Tree stress may include thinning crown or topkill, epicormic shoots (shoots/leaves growing from side of trunk), bark splits, and/or woodpecker flecking near the top. After the larvae pupate, their exit tunnel leaves a distinct D-shaped hole in the bark. If you see signs or symptoms of EAB infestation, note the location by longitude and latitude or other specific markers, take pictures, and report potential EAB insects or infestations to the Oregon Invasive Species Online Hotline <https://oregoninvasiveshotline.org/>.



Distinctive D-shaped larvae exit tunnels.

Potential impacts to watershed health include loss of habitat and a decrease in canopy cover in the riparian area. During our 7th Annual Science Symposium, we learned from a City of Portland study that approximately 16% of the studied areas adjacent to Johnson Creek contained ash trees, with areas closest to the creek being the most dense (24-26%). A total ash loss could create a possible 5-10% increase in solar loading to the creek. Johnson Creek Watershed Council has been proactive at protecting the integrity of the creek by altering restoration practices using alternative trees other than ash for current and future plantings and monitoring tree health throughout the watershed.

You can help slow the spread of EAB by monitoring ash trees for health in your yard or other natural areas, avoid planting ash trees, and by not moving firewood more than 10 miles from any destination.

Photo credits clockwise from upper-left: Emerald ash borer by Leah Bauer, USDA FS Northern Research Station, Bugwood.org/CC; Exit tunnels by Daniel Herms, The Ohio State University/CC; Emerald ash borer by Pennsylvania Department of Conservation and Natural Resources - Forestry Archive/CC; Penny from USMint.gov.

Mad Science at Mill Park

Sara Volk, JCWC Confluence AmeriCorps Member

We were lucky to get a sunny day as we closed out summer with a mad day of fun at Mill Park in Clackamas County. Kids and adults gathered near Johnson Creek to learn from the local Science Technology Engineering and Math (STEM) program, Mad Science, about H₂O and how we can use water wisely. Hands-on science allowed for experimenting with mixing oil and water to understand the importance of the message “only rain down the drain” and the life cycles and habitats of fish and insects.

When not interacting at the Mad Science tables, families explored the park trying to find items on the scavenger hunt from North Clackamas Parks & Recreation District, while frisbees from Clackamas County Children’s Commission flew through the air. With their interactive model, Depave demonstrated how green spaces filter pollution from rainwater runoff before entering waterways. To round out the different elements within a watershed, bird and small mammal skulls, pelts, and containers filled with aquatic macroinvertebrates were at the JCWC table.

Many thanks to our partners, including North Clackamas Parks & Recreation District for co-hosting, Clackamas Water Environmental Services for funding this great event, and to those that attended to make this year’s Science in the Park a success.



Restoration Project Updates

Brookside Apartments Revegetation is Underway!

Noah Jenkins, JCWC Riparian Program Manager

It’s rather rare to be able to work on more than 300 meters (1000 ft) of Johnson Creek on a single property, and even rarer for that property to be in an urban area. The Brookside Apartments complex, in Milwaukie, presents just such an opportunity, so when the owner of the complex was willing to engage with JCWC’s CreekCare program to revegetate the banks on their property, you can bet we jumped at the chance!

With funding from both the City of Milwaukie and the Portland General Electric (PGE) Habitat Support Fund (via Confluence Environmental Center), we’re working with residents of the apartments and contract crews to remove non-native English ivy, blackberry, and other problematic weeds. Big swaths of ivy on trees were cut this spring, so the site looks very different already! Planting of native trees, shrubs and ground covers will begin this winter. We look forward to a long, fruitful partnership with the owner and residents at Brookside!





Welcome Monica!

Monica Hescheles, started as the Volunteer Program Manager at JCWC in September 2022. She manages the outreach and volunteer program, including volunteer sign-ups, workforce development, and the implementation of the Equity Action Plan. Since earning her B.A. in Environmental Education from Western Washington University she has been working in outdoor education and volunteer management. Some of her recent positions include a forest school teacher, restoration and garden educator, and administrator for organizations in and around Portland, OR and Bellingham, WA.

Monica is passionate about growing, cooking, and eating local and seasonal food. She enjoys hiking and exploring the lush forest, abundant waters, and diverse ecosystems of the Northwest where the smallest details hint at seasonal changes. She also enjoys bird watching, city walks with her partner Matthew, and supervised outings with her two cats, Haley and Bengy.

Welcome New Board Members!

Please welcome Kathy Dang and Damon Schrosk to the JCWC Board.

Kathy is excited to join the City of Portland Bureau of Environmental Services (BES) Community Engagement Team and support Johnson Creek and Eastside partnerships, community grants, and planning projects. She recently worked with Portland Parks and Recreation (PPR) in their Equity and Inclusion Team, supporting



language access for the Bureau. Her work included developing a translation glossary in collaboration with community liaisons and staff from PPR, Portland Water Bureau, and BES. Outside of work, she enjoys tending her own garden, growing food and flowers, and exploring nature with her family and two kids, ages 7 and 11. Kathy considers herself a plant and people person and is excited to dig into this work!



Damon Schrosk is an International Society of Arboriculture Board Certified Master Arborist, owner of JCWC Riffle Award winning Treecology Inc, and partner in Treecology Consulting Group LLC. He has been actively involved with arboriculture, urban forestry, wildlife biology, and restoration ecology in the Portland area for 25 years. Damon has served on numerous non-profit and advisory boards and has been volunteering with JCWC since 2018.

We're so grateful to have Kathy and Damon join our dedicated board, supporting the Council.

A Warm Farewell From Gwyn



It has been a real pleasure to spend the past year working at the Johnson Creek Watershed Council. When I signed on as JCWC's latest AmeriCorps member I didn't know what to expect, I only knew it would be like nothing I had done before. It was a year of staff changes, and transition for the wider community, which was slowly emerging from the pandemic lockdown. Despite these challenges I found it to be a rewarding twelve months. The staff at JCWC are warm, welcoming, and a delight to work with – as you will know if you have ever had the pleasure of doing so. But the greatest pleasure was working with you – the JCWC community.

From our government partners to our fellow community organizations, to our many volunteers, it was an honor to work with each and every one of you. I was continually humbled by the passion and dedication you brought to the task of caring for your creek and for each other.

As I leave my AmeriCorps term behind, I take with me many fond memories of the wonderful people and places that make Johnson Creek Watershed Council what it is. Thank you!

- Gwyn

Welcome Sara!



Sara Volk will be serving as the Confluence AmeriCorps member for the 2022-23 term.

Living in multiple states from the midwest to the east coast helped foster her love of the outdoors even before finding the beauty of the Pacific Northwest. Her move from New York City to Portland eight years ago opened opportunities to earn an undergraduate degree in Environmental Science from Portland State University. After several years in the education field, she is excited to bring her combined experience into the Riparian and Outreach Specialist role through environmental education and volunteer events.

When not on the trail or in her native garden, Sara enjoys reading, camping, and doing puzzles with her partner, their three kids and two dogs, Stella and Professor Cheese.





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Upcoming Events

See our website at JCWC.org/events-calendar or Facebook for links to the following events!

Amphibian Egg Mass Survey

Sat., February 25th, 9:30AM-12PM
Powell Butte Nature Park

Watershed Wide Event

Sat., March 4th, 8:45AM-12PM
10 projects in 1 day at various locations!

Habitat Enhancement

Wed., March 8th, 9AM-12PM
Leach Botanical Garden

JCWC Board Meeting

Mon., March 13th, 5:30PM-7:00PM
Zoom

Park After Dark

Thu., March 16th, 5:45PM-6:45PM
Scouters Mountain Park

Habitat Enhancement

Sat., April 1st, 9AM-12PM
Tideman Johnson Park

Habitat Enhancement

Wed., April 12th, 9AM-12PM
Leach Botanical Garden

Habitat Enhancement

Wed., April 12th, 9AM-12PM
Leach Botanical Garden

Earth Day

Sat., April 22nd, 9AM-12PM
*Mulching & invasive species
removal in Gresham*

Warbler Walk

Sat., May 6th, 7:30AM-9:00AM
Scouters Mountain Park

Thank you Moda!

We would like to express our gratitude to Moda
for printing our newsletters.



Johnson Creek
Watershed Council

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