

# The North Fork: Open Migration to a Cold Water Refuge for Salmon! - Chuck Lobdell, JCWC

A survey of stream crossings in the Johnson Creek watershed was conducted between 2012 and 2014 and found nearly 275 barriers to fish passage. The North Fork of Johnson Creek, a small tributary flowing southwest from the northern tip of the watershed, had seven of these barriers. While the North Fork is a small tributary, it has disproportionate value to native salmon due to its consistently cool water temperatures. In 2015 we launched a multi-partner collaboration aimed at eliminating all seven barriers, dubbed the North Fork Open Migration Project.

In 2016, East Multnomah Soil and Water Conservation District replaced or removed three legacy culverts on their Headwaters Farm property that were barriers.



In 2017, JCWC addressed the furthest downstream barrier near the mouth of the North Fork when we replaced the culvert under the Springwater Trail.

In 2018, JCWC made history becoming the first practitioners in the Western U.S. to utilize a "flexibaffle," culvert retrofit technology developed in New Zealand, which we installed inside the culvert under 262nd Avenue, between the Springwater Trail and Highway 26.





With just one week left in our variance for extended in-water work this year, the final permits were issued and work was completed on the culvert under state Highway 26.

—(Continued on page 3)

# Solid Gold



Winter is always an exciting time of year at JCWC. Apart from the sometimes dicey weather, it's "go time" for a lot of our field work (hello, bare root planting season!), our volunteer restoration program kicks into gear (special shout-out to our newly-trained Creek Crew leaders!)...and, for the seventh time in the past nine years, we have the great fortune to welcome a team from AmeriCorps' National Civilian Community Corps (NCCC) program!

The Gold 4 team will be serving with the Council (and at Camp Namanu, where they stay during their time here) for the next nine weeks. Their first impressions of Oregon? "Great scenery nice to be surrounded by nature! Love the energy of the place. Great water! Such interesting weather! So much community involvement!"

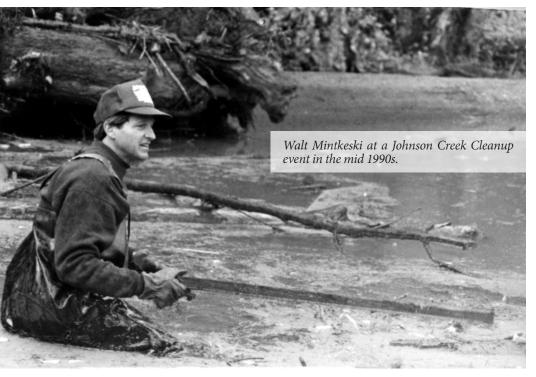
The team is looking forward to learning more about how non-profits work, exploring Portland and its surroundings, and to being able to assist both our riparian restoration efforts and outreach and recruitment for volunteer events. They'll also help lead service learning trips with local schools, and provide leadership assistance at upcoming volunteer events they were already a big part of JCWC's Martin Luther King Day of Service event.

Welcome and thank you, Gold 4!



## What A Difference 25 Years Makes!

- Daniel Newberry, JCWC Executive Director



The first time I heard of Johnson Creek was during the flood of 1996. I was living in the Hood River Valley and read in the Oregonian that "Johnson Creek flooded again." That was my perception of the creek for many years, and I suspect that many other people subscribed to that view as well.

Unlike many urban streams, Johnson Creek has benefitted from the sweat equity of thousands of local residents with well over 100,000 volunteer hours for the past 30+ years. Walt Mintkeski, Council co-founder and past Board Chair, discussed in a 2005 article-reprinted in in this newsletter--how the Council was formed in 1995 in a resident-agency partnership that has been strengthened in each successive year.

I recently sat down with Walt to learn his perceptions of how the creek and Council have evolved since he began working with neighbors to clean up Johnson Creek.

#### When you say the Creek is more accessible today, what do you mean?

Mintkeski: It was very hard to see Johnson Creek from anywhere other than Tideman Johnson Park because of the railroad line. When the railroad was converted to the Springwater Trail in the early 1990s it really opened things up. So gradually the creek has become more accessible, more visible. The community has become more interested in protecting it. The general image of the creek has changed.

You mentioned that the Foster Floodplain project undertaken by Portland Bureau of Environmental Services in 2011/12 is your favorite project on Johnson Creek. This is a project where many dozens of flood-prone house were purchased from willing sellers, removed, and the area was reshaped with heavy equipment to connect Johnson Creek to a broad floodplain. Why is this project vour favorite?

Mintkeski: That area was the first place where the media would flock after a big rainstorm and show flooded roads and houses. Since that project, the river hasn't flooded as much and you rarely hear in the media about Johnson Creek flooding. The media portrays Johnson Creek in a much better light today.

Today the Council has a staff of seven, 2,500 volunteer signups per year. We also manage fish passage and enhancement construction projects, engage volunteers in many community science data gathering efforts, plant more than 20,000 trees & shrubs per year, do service learning with about 1,000 students a year and more. What type of projects did the Council start with?

Mintkeski: We had volunteer tree planting events, which led to the first multi-site Watershed Wide Event in 1999 (ed: the 22nd annual event was this March 7).

In 1998, we held the first Johnson Creek Summit, hosted by Earl Blumenauer. We had a volunteer coordinator the first year, then we hired our first paid coordinator. Our first big project was a fish passage project in the upper watershed on Wheeler Creek (ed: creating a fishway in an inline pond).

It's interesting that we're still working with the same landowners today. We found two years ago that the same pond was heating the creek to temperatures dangerous to salmon. We're now developing a project to remove the pond completely. Any final observations?

Mintkeski: The public's perception of Johnson Creek has changed from a storm sewer to a living wildlife corridor with salmon. We've seen tremendous advances in 25 years.

#### Within Your Reach

# **Origin Story: How Johnson Creek Watershed Council Came To Be**

- An excerpt from an article written by Walt Mintkeski in 2005

In the mid-1980s Vicki my wife and I had two young boys who needed an outdoor place to play and experience nature. We discovered Tideman Johnson Park between SE 32nd and 45th Avenues.

Here Johnson Creek runs through a beautiful canyon where tall Douglas firs and cedar trees shade the creek and quiet the noise of our busy urban lives. We loved to take our sons there and watch them explore the natural wonders of the woods and creek. But during the rainy months, we saw the creek swollen with runoff and polluted by debris thrown in by careless people and washed in from storm sewers.

During the late 1980s, I met Steve Johnson, Ethan Seltzer and Terry Toedtemeier, who had been working to publicize the plight of the Creek for many years. Through my conversations with them and others, I began to realize that the public's perception of Johnson Creek was that of an open storm sewer. However, they also showed me their vision of the Creek as a fish-bearing stream and a wildlife and recreation corridor running along the Clackamas/Multnomah County line from the Sandy River to the Willamette River.

I was hooked by that wonderful vision and decided to begin to make it a reality in Tideman Johnson Park. So with help from Steve Johnson and other concerned neighbors, we organized an April 1990 Earth Day cleanup of the Park. We literally jumped into the Creek and pulled out all kinds of debris including 20 tires, 6 shopping carts, 3 motor cycle bodies and half a Volkswagen bug. What a feeling of accomplishment! That began a series of annual cleanup events under the auspices of an all-volunteer group I chaired called Friends of Johnson Creek Canyon.

#### **NEW GRANTS**

#### AMERICAN RIVERS, INC. (FUNDING PROVIDED BY THE PAUL G. ALLEN FOUNDATION)

\$101,000 Partially funds our Kelley Creek Dam removal project.

#### **CLACKAMAS SOIL AND WATER CONSERVATION DISTRICT**

\$10,000 Annual general support that will partially fund our outreach, watershed education, and volunteer and landowner engagement in Clackamas County.

Winter 2020



left is former Board Chair, Jeff Uebel. To his right is JCWC's first Council Coordinator, Michael Carlson. A CONTRACTOR OF THE OWNER

During the period 1990 to 1995, the old Springwater Railroad line running along Johnson Creek from Sellwood past Gresham was being converted into a walking and bicycling trail, providing 15 miles of public access to the Creek. A citizen's group called Friends of Springwater Corridor oversaw that project which the cities of Portland and Gresham implemented.

Also during 1990, the City of Portland convened the Johnson Creek Corridor Committee, on which I was asked to serve. Over the next 5 years, the Committee advised the City on the development of a Resources Management Plan for the Creek. One of the Plan's recommendations was the formation of the Johnson Creek Watershed Council, which began in June, 1995.

So within a mere five years, the vision for Johnson Creek was launched with an explosion of activity which today has changed tremendously the public's perception of the Creek.

#### **NORTH FORK (Continued)**

(*Continued from page 1*)

The final piece to the Open Migration puzzle is the culvert under 267th avenue North of its intersection with Highway 26. Multnomah County is scheduled to replace this culvert under 267th avenue in 2020, and the entire North Fork of Johnson Creek will once again be open to migratory salmon, steelhead and trout!

The Council would like to thank our many partners for helping restore fish passage to this important cold water tributary! Thank you to East Multnomah Soil and Water Conservation District, Metro, Multnomah County, National Fish and Wildlife Foundation, Oregon Department of Transportation, Oregon Watershed Enhancement Board, Portland Parks and Recreation, and The Nature Conservancy. This multi-partner, multi-year effort was a successful model that we are trying to replicate in the Kelley Creek/Mitchell Creek sub-watershed!

**JOHNSON CREEK SCIENCE 101** 

# What Lies Beneath: What Macroinvertebrates Are Telling Us About Johnson Creek

- Katie Holzer, Watershed Scientist, City of Gresham

Clean cobbles downstream of a beaver dam are a good place for macroinvertebrates to live.

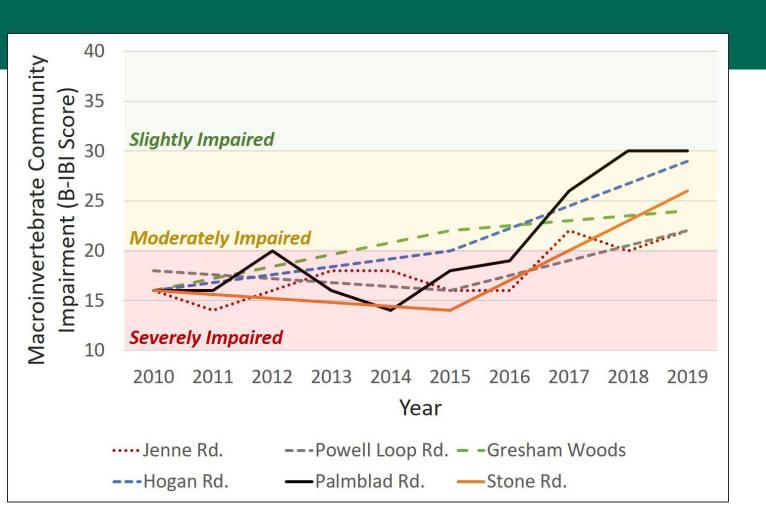
We hear a lot about the fish, beavers, and birds that call Johnson Creek home, but there is a whole other world of tiny critters living in the stream that we rarely see. Snails, mayflies, midges, caddisflies, and many others live under the sediment and between the cobbles in the stream. All together, we call them benthic macroinvertebrates, and they are a critical part of the stream ecosystem. Some eat algae, others shred leaves, some even hunt other macroinvertebrates. All are important food for fish, birds, salamanders, and large animals. We can learn a lot about the health of the creek by studying which macroinvertebrates we find and where. Some species are sensitive to pollutants while others need to live areas with fixed sediment or temperature ranges.

Over the last ten years, the Johnson Creek Interjurisdictional Committee has been studying macroinvertebrate populations throughout the creek. We have found that most places on the mainstem of the creek have populations that have been substantially impacted by activities such as deforestation, urbanization, and agriculture. However, we have also found that there are places in the forested headwaters of some tributaries which have diverse populations similar to those in non-urban streams. This is good news because it means that there are little pockets of species which are holding on and are ready move downstream as stream conditions improve.

Lately, we have seen that these improvements are happening! In the last few years, populations of these critters have been slowly diversifying and looking more like undisturbed sites. We have seen this trend reflected in the Benthic Index of Biotic Integrity (B-IBI) scores throughout the mainstem of Johnson Creek. The site at which has improved the most is at SE 252nd Ave. (a.k.a. SE Palmblad Rd.). The area around this site has been protected by public land, has seen large-scale restoration projects by Metro regional government, and has had beavers move back in and build a series of dams. One small study showed that the beaver dams might be creating great macroinvertebrate habitat immediately downstream of them by trapping sediment and churning up the downstream cobbles.

Over the past 25 years there has been so much good work that has been done to improve conditions in the creek. Thousands of people have played a role in this restoration by planting trees, reducing pollution, creating beaver habitat, treating stormwater, and much more. The tiny creatures that live in the stream have noticed, and they are making a comeback. This is good news for everything else that depends on them. Let's keep it up and imagine what the creek will look like after the next 25 years!

Graph below: Over the last ten years macroinvertebrate communities are becoming less impaired in the Johnson Creek mainstem.



Within Your Reach

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#### **JOHNSON CREEK SCIENCE 101**



2019 was a busy one for the Crystal Springs Partnership (CSP). Since 2011, we've had boots in the creek from the Reed College Canyon to the confluence with Johnson Creek. We focus on 3 main activities: restoration and stewardship, education, and advocacy.

#### **Restoration and Stewardship**

Our focus is several public and private sites on Crystal Springs Creek. Work parties (generally the last Sunday morning of each month) consist of a mix of restoration, comradery, and education.

At the Eastmoreland Golf course, we completed plantings funded by the Salmon Sanctuary grant we and the Johnson Creek Watershed Council (JCWC) received from the City of Portland in 2018. Neighbors, Scout groups, and trusty volunteers made it happen. This was an exposed section of the creek, and we helped provide much needed shade.

At Westmoreland's Union Manor, we continue invasive species removal and native plantings through this property that showcases a quarter-mile long stretch of creek. This was a site for the 2019 Watershed Wide event, attracting dozens of volunteers.

At Westmoreland Park, we continue our work with Portland Parks on the near-stream parts of the park within the split-rail fence. In addition to plant care, we augmented the fencing with wire mesh to help discourage dog access to the creek, while allowing for wildlife movement.

Finally, at the Brannen site (SE 21st Ave and Umatilla) we continue to maintain and improve this natural area. The site is highly visible and accessible to the public and is a great showcase for what can be done for a piece of the creek at a city-block scale.

#### Education

We take the opportunity to spread the word about Crystal Springs Creek whenever we can.

In April, we reported back to the Portland Rotary on our activities since the Environmental Stewardship Award they granted us in 2018. Hopefully we provided Rotarians good reason to continue to pay attention to Crystal Springs Creek.

We hosted summertime "naturalist in the creek" events at Westmoreland Park, where we set up our underwater camera with views of what's below the surface. We provided

#### **VOICES FROM THE CREEK**

maps and answered questions about the plants and animals.

In October, we participated in the Salmon Celebration, providing maps, under-water viewing at the confluence of Crystal Springs and Johnson Creeks, and the ever-popular opportunity for kids and adults to make stamps of the wildlife of Crystal Springs Creek.

#### Advocacy

Our advocacy has focused on our partners within the City: Environmental Services and Portland Parks & Recreation. We have been sharing our observations in Westmoreland Park related to the huge investment made in this half-mile stretch of Crystal Springs Creek. This is a complex site, with the creek running right through the middle of a highly managed suite of recreational sites. Issues revolve around maintenance of the plantings adjacent to the creek, and the challenges of both encouraging and limiting interactions of people with this amazing and fragile natural area.

#### Looking Forward to 2020

In addition to our monthly stewardship activities, the project to address water quality issues at Crystal Springs Lake and the surrounding habitat is an opportunity for continued education and advocacy. We will advocate for what's best for the creek, among the many interests in the area, including native plants and animals, golfing opportunities, and the bucolic lake setting.

We are a proud "tributary" organization in the Johnson Creek basin. Join us at our monthly meeting, and for a stewardship work party. Find out about all things Crystal Springs Creek at https://www.crystalspringspdx.org/



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# Machetes, Vegetation Transects, **Blackberry Grubbing, Oh My!**

Starting September 2019, dedicated students from David Douglas High School have been engaging in hands-on environmental field trips at Leach Botanical Garden, in partnership with the Johnson Creek Watershed Council, City of Portland Bureau of Environmental Services, Friends of Leach Botanical Garden, Portland Parks & Recreation, Blueprint Foundation and Wisdom of the Elders.

These students are part of a career technical education class focusing on natural resources. The goal of the class is for the students to engage in fieldwork with industry professionals and environmental stewards in forestry, agriculture, environmental management, and restoration. And this is exactly what they have done! So far, these students have helped clear over 1.5 acres of invasive blackberry and plant over 250 native shrubs and trees! These bright students have also engaged in amphibian surveys, macroin-

As this program continues, these students will learn even more about this natural area and gain applicable skills to this industry. We look forward to working with them throughout the rest of the school year and are excited to see their continued passion and growth.





vertebrate surveys, vegetation transect monitoring, greenhouse propagation, photopoint monitoring, and even machete trail maintenance training.



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# **Upcoming Events**

For details and to sign up for any of these events, contact us at info@jcwc.org or call 503-652-7477.

Thank you Moda!

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

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#### $rak{V}$ Watershed Wide Event

Sat, Mar 7, 8:45 AM - 12 PM Multiple sites in the watershed

### 🞾 Ivy Removal

Sat, Apr 4th, 9 AM - 12 PM Errol Heights Park

#### ♥ Nature Patch Planting

Sat, Apr 4th, 10 AM - 1 PM Lents Park V Ivy Removal Sat, Apr 18th, 9 AM - 12 PM Errol Heights Park

#### JCWC's Anniversary Celebration Thu, May 28th, 2020 Save the date! Come Celebrate! Tickets available online at: http://JohnsonCreek.brownpapertickets.com

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