



Looking Back on Four Years of the Bilingual Nature Program

Tiffany Mancillas, JCWC Community Outreach Coordinator

The Bilingual Nature program focuses on creating public events for communities on a relevant environmental topic in their native language with youth from the communities leading all planning, implementation and follow up communications. Interns are paid \$15 per hour and receive professional development training and experiences around the watershed.

This year we have had the opportunity to work with Helen Chen and Khan Tung in creating bilingual nature programming at Leach Botanical Garden. The garden saw its first-ever tours in Mandarin and Zomi, reaching new audiences. Both events were well received and had interactive tours.

Both tours discussed the history behind the garden as well as many modern renovations and their significance. During the tours, participants were able to see areas not normally accessible to the public. These areas include the historic cottage and the South side of the garden. On the tours educational resources are provided regarding free recreational areas to visit in the Johnson Creek Watershed.

Khan shared, "I am so excited and so keen about this internship because through this internship I can show my young people to turn their heads more into nature and have some knowledge of the environment by teaching them as much as I can. That was exactly what I did in my Zomi-Bilingual Nature Tour Event. I was able to pour all the thoughts that I've carried in my head to the Zomi adolescents."

Helen also mentioned that "I tried to incorporate these solutions to help bridge the language barrier. In early September, I hosted a tour in Mandarin for people in the community at Leach Botanical Garden. This tour tailored for the Chinese-speaking community was an attempt to connect those who are interested with nature in a language and manner that they may be more comfortable with. The tour explored breathtaking parts of the garden: its newly built tree walk, stone cabin, and many more."

To learn more behind the scenes and the in-depth experiences of Helen and Khan during their internships check out their blog posts on jwc.org.

We are grateful to our partners at Leach Botanical Garden and funders Meyer Memorial Trust and East Multnomah Soil and Water Conservation District for making this program possible.

—(Continued on page 3)

Thank You 2021 Clean-Up Volunteers

Courtney Beckel, JCWC Volunteer Program Manager

Thank you to 213 volunteers who cleaned 14 sites over seven miles in the creek on Saturday, August 21, 2021!



Who helped?

Volunteers including families, kids, parents, grandparents, teachers, students, couples, volunteer groups, church groups, corporate teams, neighborhood groups, and Creek Captains.

Project partners—including Portland Parks and Recreation who helped plan, lead and support Parks teams, North Clackamas Parks and Recreation who provided site support as well as trash hauling, the City of Gresham who hosted a site and helped recruit, SOLVE and American Rivers for providing clean-up supplies, Ground Score Association for doing pre-clean-up outreach to campers, Sunset and Hoodview for providing hauling and disposal, Rose CDC for providing interns Dima and Liana to help

—(Continued on page 6)



Changing Trees For A Changing Climate

Daniel Newberry, JCWC Executive Director

This summer's extreme heat brought into focus a revegetation challenge that practitioners in our field have been grappling with for years: what tree and shrub species will have the best chance at survival in our area as summer temperatures continue to rise?

A decade ago, the challenge was often phrased as "how can we alter conditions to give native species a boost?" Techniques like providing extra shade for young seedlings and mycorrhizal root dipping were often used to give native species a fighting chance.

Across the metro area, Western Red-cedar mortality has increased dramatically. We've seen a massive die-off of mature Red Alder, though it's not clear why. Are today's forests in Medford the future forests of the Portland metro area?

Last year, our Riparian Program Manager, Noah Jenkins, led a mortality survey of 1,150 plantings we installed the previous winter at our large wetland restoration project on Mitchell Creek. All these plants were marked with flags that were color-coded according to species, which made the data collection easy.

The planting sites covered ecotones from dry to wet, so these results do not constitute a rigorous scientific study. The plants were mulched, but otherwise did not receive additional management. We found that the highest survival trees were Black cottonwood (78% survival) and Ponderosa pine (70%). Red-osier dogwood (54%) had the highest survival of the shrub species. On the other hand, such native species staples as Big-leaf maple (2%) and Red alder (8%) had such high mortality that we may remove them altogether from our future planting plans.



Ponderosa Pine.
Photo: Walter Sigmund
(Creative Commons)

Daniel

Daniel Newberry, Executive Director

New Grants & Contracts

Oregon Watershed Enhancement Board

\$131,465

General council support for 2 years.

East Multnomah SWCD

\$76,666

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

City of Portland Environmental Services

This year's amount: \$50,000

Funding for Watershed Protection and restoration, community science programs, Diversity and Inclusion program, and optional watershed restoration projects for a 5-year period.

Clackamas Water Environment Services

\$29,831

Partially funds our Watershed Wide Event, Creek Cleanup, CreekCare, Service learning with schools and one Science in the Park event.

City of Gresham

\$27,500

General funding that supports our volunteer stewardship, DEI/education/outreach work, and specific funding for our riparian efforts in the City of Gresham.

Advantis Credit Union

\$8,345

Supports our annual creek clean-up.

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 6-year period.

The Herbert A. Templeton Foundation

\$6,000

Helping to support our Service Learning with Schools.

Clackamas Soil and Water Conservation District

\$5,000

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

Gray Family Foundation

\$3,840

Final year of 3 for funding towards service learning with schools.

Umpqua bank

\$3,500

Partially funds a Bilingual Environmental Restoration event.

(Looking Back on ... Bilingual Nature — continued from page 1)

A look at events through the years 2017-2021:

2017

- Abdulahi created content for a brochure translated into Somali. The event was held at Powell Butte Natural Area, discussing watersheds, wildlife, and plants, and a hands-on planting session.

2018

- Rita successfully planned a Spanish and English seed planting and nature walk at Leach Botanical Garden.
- Lucero hosted an event in Spanish at Leach Botanical Garden about native plants and some of the many ways plants communicate with each other and with other species.
- Khan did a partnership with both JCWC and City of Gresham at Powell Butte sharing native species and led a planting for the Zomi speaking community.

2019

- Aaron, hosted ¡Abejas, Plantas y Usted!, a pollinator workshop at Leach Botanical Garden in Spanish.

2020

- Melanie planned and led an event in Russian for the Slavic community to discover animals and creek life at Leach Botanical Garden.
- Theresa Huang, bilingual Intern, and Jeffrey Lee, Independent bilingual contractor, did incredible work on the project rain garden installation for local community members, unfortunately the final event was cancelled due to the start of COVID-19. Despite this, information has been shared, translated, and a free rain garden installed for a local family in the Chinese community.
- Martina hosted a virtual live event, El Portal al Boring Campo de Lava, in Spanish with an interactive bingo guide for kids that she made.

2021

- Khan hosted an event tailored for the Zomi-speaking community at Leach Botanical Garden and all attendees received a tee shirt designed by him to celebrate the event.
- Helen hosted an event at Leach Botanical 花园游览| Leach Botanical Garden Tour for the Mandarin-speaking community. In addition Helen created a blog article regarding intersectionality and inclusion in the environmental field for the JCWC website.

Hear directly from past interns:

"This opportunity I had to become an intern at the JCWC, has been the best! Being an intern at the JCWC feels so good! From walking through the doors of their old Milwaukie building to now walking through the doors of their new building! All of the staff members make me feel so welcome every time. Time goes by so fast when I'm there. I enjoy every minute I'm working and learning new skills! Honestly, being an intern has to be the highlight of my summer!" - Rita, 2017

"During my internship at the Johnson Creek Watershed Council, I learned so much about environmental conservation and working directly with a community. Words cannot express my gratitude for having the opportunity to work under the council for the duration of my internship. In my internship, I explored beautiful landscapes and learned about its history, researched environmental stewardship, and hosted my very own event." - Helen, 2021

"First and foremost, I would like to say thank you to Johnson Creek Watershed Council (JCWC) for giving me another chance to work with them and lead my community (the Zomi community) into another nature tour event once again. In 2018, I did my first Zomi-Bilingual Nature Tour with Johnson Creek Watershed Council (JCWC) through the City of Gresham where it happened to be my internship in Natural Resources and Stormwater. In that particular event, I explained to my community the differences between native plants and invasive plants along with the Western Red Cedar and Douglas Fir. And little did I know I would have this remarkable opportunity once again this year." -Khan, 2021

We give support to partner agencies, and mileage reimbursement for any bus fare or vehicle gas expended at work. The interns spend approximately 100 hours on their event, paid, including staff time to facilitate the internship: it is estimated that the program costs a total of \$ 25,000 - 35,000 per year for our organization to fund 4 interns. Unfortunately our funding from this program has come to an end as the grants we were allotted finished.

We have been able to reach so many new community members with this program and would like to continue it but for now it is on hold due lack of funding. Know of any funders for a program like this? Let us know by emailing us info@jcwc.org.



Khan leads a Zomi-Bilingual Nature Tour.

Science 101: Kids Learn About Water Science in Mill Park

Courtney Beckel, JCWC Volunteer Program Manager



Thank you to Madame Chaos and the other mad scientists at Mad Science Portland/Vancouver for bringing water science alive for families on Saturday, Sept 18 from 10 am-12 pm.

We learned about water pollution, water scarcity and conservation, and the properties of water that make it so spectacularly special. Perfectly curated props were used, including an assortment of graduated cylinders, a blow up globe, and of course dry ice.

Lots of audience participation was used, and the kids got a chance to read off parts of everyday life and their water consumption values, play a game of 'turn off the water while you're brushing your teeth' with comically large toothbrushes, and a trivia with dueling dinger bells.

After the water show there were also learning stations on native plants, water pollution and cleaning up oil spills, and a metaphorically rich bird adaptation activity: kids used different tools which symbolized different bird beaks to capture 'prey' like sequins and gummy worms.

A good time was had by all, folks stayed until the very end, and water science goody bags filled to the brim with good stuff, including water pH testing kits which were given out to everyone.

It was a very rainy day but we stayed mostly dry because we rounded up all the canopies we had between North Clackamas Parks and Recreation and Johnson Creek Watershed Council. Anyways, a little rain never quenched the curiosity of true lifelong learners! Seeing it all with the onset of the first rains made it all that much more magical.

Thank you to Clackamas Water Environment Services and North Clackamas Parks and Recreation for making this event possible!

Only 0.3% of all the Earth's water is readily available for drinking.



Fish Passage Improvement Project in Mitchell Creek!

Chuck Lobdell, JCWC Restoration Project Manager

JCWC recently completed another fish passage project in Mitchell Creek, a cold water tributary to Kelley Creek near Pleasant Valley. Since 2015 we have been working to restore fish passage throughout this important cold water stream with the ultimate goal of enabling salmon and steelhead to reach the protected headwaters, owned by Metro.



In 2019, we identified a passage barrier on private land immediately downstream from the culvert crossing at Baxter Road, however locating and contacting the landowner proved challenging. Ultimately, we made contact and obtained permission to evaluate the barrier and work to develop a solution. The barrier turned out to be approximately 3 cubic yards of concrete that was poured in place inside the creek channel, presumably to impound water.

Working with the landowner and a new contracting partner, GPT Construction LLC, we were able to remove this barrier and restore passage all the way up to SE 162nd Avenue where a City of Portland culvert is the last barrier to the headwaters. Funding for this project was provided by the East Multnomah Soil and Water Conservation District.



Restoration Project Update

Culvert Retrofit at 267th Avenue in the North Fork of Johnson Creek Complete: Wrapping Up the North Fork Open Migration Project!

Chuck Lobdell, JCWC Restoration Project Manager

An initiative that began in 2015 has been completed! The North Fork Open Migration project was conceived as a multi-partner collaboration aimed at eliminating all seven barriers to fish passage in the North Fork of Johnson Creek.

In 2016, East Multnomah Soil and Water Conservation District addressed three of these barriers on their Headwaters Farm property.

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



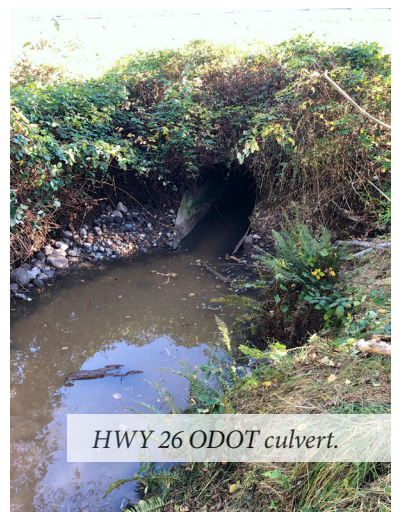
In 2018, JCWC made history when our fish passage project at SE 262nd Street was the first installation in North America of the revolutionary culvert retrofit technology known as Flexi Baffles. This low cost fish passage solution was developed in New Zealand.

In 2019, we restored fish passage under Highway 26 by again using Flexi Baffles to mitigate high and low flow problems. To fix an outflow jump height problem, we also cre-

ated an engineered riffle to backwater the culvert outlet.

The final fish passage barrier was eliminated in September of 2021, with another retrofit treatment at the culvert under 267th Avenue! This project was originally intended to be a full replacement project, however the design requirements provided to Multnomah County vastly proved to be cost-prohibitive. The only viable option to provide for fish passage at this site was to replicate our successful retrofits from previous projects downstream. We designed and modeled the culvert with and without the Flexi Baffles and indeed this was a viable solution.

On September 16th, 2021 our contractor GPT Construction LLC successfully completed the installation of 17 baffles and the North Fork of Johnson Creek is free of fish passage barriers! We can't wait to see what we find next spring with our eDNA sampling.



Creek Hero Spotlight: Joe Dahlke

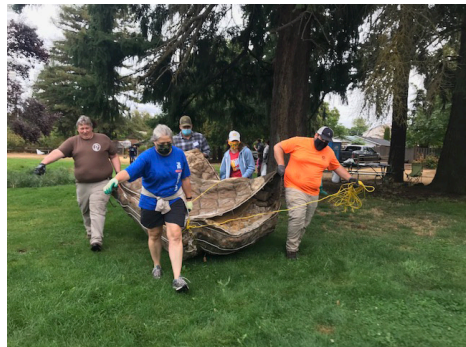
Joe Dahlke of North Clackamas Parks and Recreation District was a superstar assist for the Johnson Creek Clean-Up and Science in the Park!

Always helpful with infrastructure and logistics, he even helped remove trash from Mill Park in Milwaukie, including a very technically challenging mattress removal. He also worked with volunteers at the Clean-Up all day and facilitated operations elements like making sure we had a new port a loo, and even helped us transport the trash in his truck when we had a sudden shortage of trucks!

What a guy, what dedication, what perseverance! We love working with passionate people and partners. Thank you so much for your help, Joe!



Hey Joe! Thanks for all the help!



Thank You Clean Up Volunteers (Continued)

(Thank You Clean-Up Volunteers — continued from page 1)

us do outreach for the event, and our bilingual nature interns Khan Tung and Helen Chen who teamed up to lead a site.

Funders: Clackamas Water Environment Services, Portland's Bureau of Environmental Services, Advantis Credit Union, and the Mintkeski Family Fund of the Oregon Community Foundation.



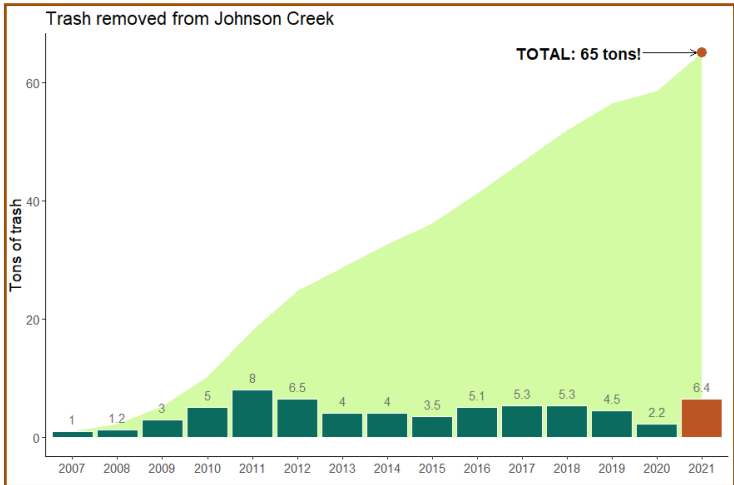
What were the volunteer jobs?

Picking up litter (from the creek, or a park), Creek Captains leading the event, photographers, burrito receivers (who wait for burrito deliveries), trash brigade (hauling trash from where litter was piled to trucks and dumpsters), trash royalty (separating hazardous material and tires from what came back).

What were the outcomes?

TOTAL TRASH REMOVED: 6.4 TONS

We haven't had this much trash since 2012! Which makes our new total AS OF 2021 — DRUMROLL PLEASE — 65 tons removed from the creek since we started this project in 2007. GO TEAM! —(Continued on page 7)



Thank You and Farewell Chuck!

Restoration Project Manager Chuck Lobdell will be leaving JCWC at the end of September to join the environmental team at Knife River. Chuck joined JCWC in the summer of 2017 and right out of the gate delivered the fish passage restoration at the Springwater Trail crossing at the North Fork of Johnson Creek.



This was the first of eight high priority fish passage barriers removed over the past few seasons, along with 3 in-stream habitat restoration projects. Chuck also helped Daniel launch the Council's stormwater program.

Over the past few seasons Chuck has also helped the Council fulfill part of our Diversity, Equity and Inclusion mission by recruiting and hiring contractors registered with the State of Oregon as Minority-owned, Woman-owned, or Emerging Small Business (MWESB). As Chuck moves on he leaves us with our first big stormwater project, fully funded, and two large wood restoration projects with funding awards pending.

We wish you well, Chuck, and thank you!

Welcome Our New AmeriCorps Member, Gwyn!



Gwyn Case grew up in the Portland area and earned an undergraduate degree in Fisheries and Wildlife Science at Oregon State University. She has worked as a field biologist with birds on both sides of the United States, from Piping Plovers in New York to Bell's Sparrows in California.

Most recently she has completed a master's degree studying the foraging ecology of Northern Goshawks in British Columbia. Most of her free time is spent baking or biking; what's left is devoted to reading, birdwatching, and knitting.

You can connect with Gwyn (she, her) via email at Gwyn@jcwc.org



Glad to have you aboard, Gwen!

Thank You Clean Up Volunteers (Continued)

(Thank You Clean-Up Volunteers — continued from page 6)

Other outcomes than just the trash we removed? Well... it's a beautiful day when 200+ volunteers get together to clean the creek, make friendships, and get a chance to experience the aquatic environment from within! There's no better way to make a difference while spotting wildlife, and getting acquainted with the personality of this very special urban creek. We are so humbled by our volunteers—thank you so much for caring for the creek with us!

Thank you also to our funders and partners for helping to make this community event a reality:

The Mintkeski Family Fund of the Oregon Community Foundation, Clackamas County's Water Environment Services, Portland General Electric, East Multnomah Soil & Water Conservation District, Portland Parks & Recreation, City of Gresham, Friends of Tideman Johnson, Leach Garden Friends, Friends of Trees, Americold, Fernando's Alegria, Tortilleria y Tienda de León, and the City of Portland's Bureau of Environmental Services.



Clackamas Rotary Club Cleanup volunteers. Photo: Carl Wikman

	Volunteers	Tons of trash
2007	30	1
2008	30	1.2
2009	50	3
2010	150	5
2011	178	8
2012	130	6.5
2013	140	4
2014	135	4
2015	160	3.5
2016	121	5.1
2017	238	5.3
2018	249	5.3
2019	220	4.5
2020	77	2.2
2021	213	6.4

15 years... 2121 volunteers... and 65 tons of trash!




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Upcoming Events


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

 **Habitat Enhancement**
Sat, Nov 6th, 9 AM - 12 PM
Tideman Johnson

 **Habitat Enhancement**
Wed, Nov 10th, 10 AM - 12 PM
Leach Botanical Garden

 **Habitat Enhancement**
Sat, Nov 20th, 9 AM - 12 PM
Errol Heights

 **Habitat Enhancement**
Sat, Dec 4th, 9 AM - 12 PM
Tideman Johnson

 **Habitat Enhancement**
Wed, Dec 8th, 10 AM - 12 PM
Leach Botanical Garden



Thank you Moda!

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



Johnson Creek
Watershed Council

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JohnsonCreekWC



Courtney Beckel
Volunteer Program Manager

Gwyn Case
Confluence AmeriCorps Member

Cathy Geiger
Operations & Finance Coordinator

Noah Jenkins
Riparian Program Manager

Chuck Lobdell
Restoration Project Manager

Tiffany Mancillas
Community Outreach Coordinator

Daniel Newberry
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