



## Six Years of Salmon Surveys—Wow!

- Janel Hull, JCWC

In 2016, we completed the sixth year of volunteer-led salmon surveys throughout the Johnson Creek Watershed. Thank you to our dedicated salmon survey volunteers for their accomplishments!



Every year, salmon surveyors volunteer their time on weekends from September to December to walk mile-long stretches of Johnson Creek in search of salmon spawning activity. They work in pairs wearing waders, life jackets, wading belts, and polarized sunglasses, and carrying poles to balance on the slippery stream bottom. Once they spot a salmon, they use their identification training to note the species, sex, and behavior of the salmon. If volunteers find a salmon carcass, they transport it back to the JCWC office for further study. Finally, after returning home, these hardworking volunteers enter their data online to keep a record of all salmon sightings. Thanks to our volunteers, we now have another year of fascinating salmon data.

This year, we documented four salmon! On November 26th, volunteers spotted one live coho swimming in Crystal Springs creek. On November 5th and December 3rd, volunteers found a total of 3 coho near Liberty Road in Gresham; one of these Gresham salmon was alive and the other two were carcasses. In the last 6 years, our volunteers have documented a total of 22 spawning coho salmon.

With this small but powerful dataset, we have created a watershed-wide map of the distribution and spawning activity of Johnson Creek’s salmon. Such maps help us identify key areas for spawning activity, which is important especially as we replace culverts, create habitat enhancement projects, and do other restoration work to improve habitat for the fish. We use the salmon survey data to apply for grant funds to support these projects, which means that the information collected by salmon surveyors is directly used to improve conditions for salmon living in Johnson Creek. So thank you, salmon surveyors, for another year of valuable data!



## Never Fear! The NCCC Team is Here!

- Alexis Barton, JCWC and NCCC

If you happened to see, in the past two weeks, a large, eclectic group of young adults sporting the letters “NCCC”, then chances are you have come across the latest AmeriCorps team to be working with the Johnson Creek Watershed Council. In the team’s own words: “Each member of our Team Green Two is from various towns, cities, and states across the country, in addition to having different interests and educational backgrounds. We are eager and excited for the opportunities we will have to serve Oregon through the Johnson Creek Watershed Council.”



*NCCC Team Green Two at the willow farm where they harvested over 700 willow live stakes in one day!*

And we are so lucky to have the help of the NCCC team this year on our restoration projects! The team will be on the ground in the watershed every day until mid-March with Noah, Riparian Program Manager, and Alexis, Riparian and Outreach specialist. The team will be removing invasive species, planting native plants, and participating in other riparian restoration work. Stay tuned for more details about the crew and what they’re up to with JCWC in our watershed!

## Amphibians, Volunteers and Biodiversity

- Daniel Newberry, JCWC

At our donor party at Carltonia on February 7, we played a biodiversity game. I gave a slideshow with photos of flora and fauna photographed in the watershed in 2016. Everyone tried to guess the species shown on each slide from a multiple choice list. It brought home to me two things. First, the incredible biodiversity we have in our mainly-urban watershed. Second, the role our community scientists and volunteer photographers played in finding these creatures.

At the one-day Ecoblitz at Powell Butte Nature Park last May, one of our volunteers found the first Oregon slender salamander ever found in Portland. We found a Columbia lily for the first time ever in the park. The 1,100+ bird sightings that day included species that hadn't been seen in four years, most notably a merlin and a turkey vulture.

In 2016, we started monitoring dragonflies at two wetland sites. Scientists are starting to understand that the species mix of dragonflies at a wetland can give clues as to the habitat quality. High schooler Phil Nosler made the first sighting ever in Multnomah County of both an autumn meadowhawk and a black meadowhawk. Our project science advisor, Celeste Mazzacano, recorded the earliest sighting in the county of a twelve-spotted skimmer.

This is all solid information added to the body of scientific knowledge. It's because of our dedicated volunteers that the Council is able to have projects that can have an impact on the way land is managed and an understanding how climate change and other factors are affecting our watershed.

COMMUNITY NEWS

## A Bulky Gift - Courtney Beckel, JCWC

We would like to thank Bob's Red Mill for a very generous donation! Ninety pounds of bulk foods (13-bean soup mix, brown rice, and lentils) are already being used to help us prepare hearty, delicious meals for evening volunteer events. Thanks to this donation, we will be able to nourish well over 200 volunteers this year at dinnertime trainings, orientations, and events!



## Join Our 19th Annual Watershed Wide Event!

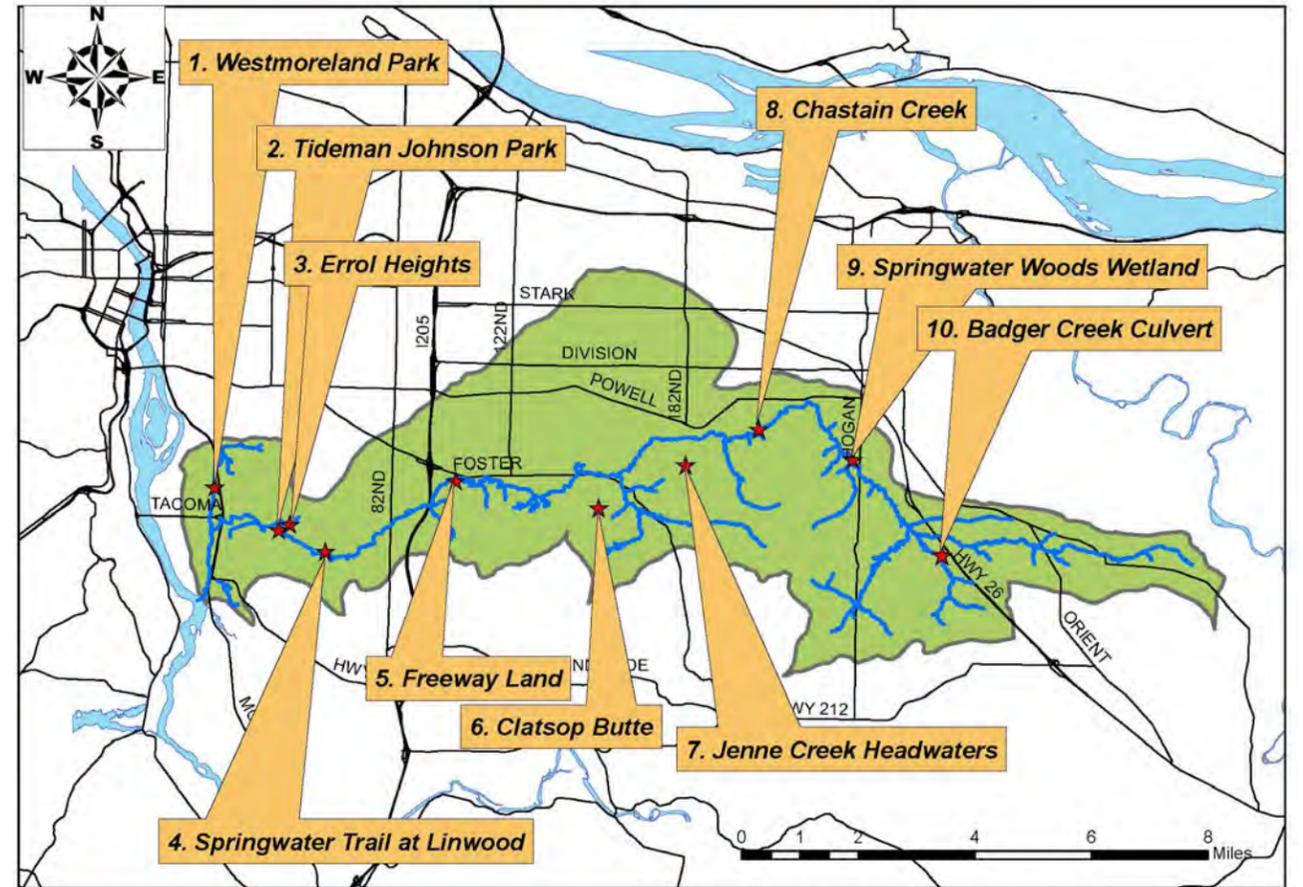
Saturday, March 4th will be our nineteenth annual Watershed Wide Event, with ten restoration sites throughout Johnson Creek and its tributaries. With the help of hundreds of volunteers (we hope this will include you!), we will be planting thousands of native trees and shrubs, mulching new plantings, removing invasive plants, and introducing people to the work we do to improve wildlife habitat in the watershed.

The restoration work parties will run from 9 AM to 12 PM. A thank you pizza lunch will be provided by JCWC at two locations (one close to Portland, the other in Gresham) from 12:30 PM to 1:30 PM. The map shows the locations of the work sites.

To sign up, visit:

[www.jcwc.org/events/ww](http://www.jcwc.org/events/ww)

See you on March 4th!



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NEW GRANTS

### Clackamas County Soil and Water Conservation District

Annual general council support that will partially fund our outreach, watershed education & action planning, and volunteer & landowner engagement in Clackamas County. (\$9,500)

### Metro Nature In Neighborhoods Capital Grant

"North Fork Johnson Creek Open Migration" - Replace and retrofit two culverts. This culvert replacement project is part of a larger, multi-partner project that will significantly improve fish passage by replacing or retrofitting seven fish passage barriers on North Fork Johnson Creek. (\$79,746)

## Hearing the Story of Pacific Lamprey - Janel Hull, JCWC

On December 6th, over 45 people gathered to learn about an important native fish species: Pacific lamprey. Although sometimes considered uncharismatic for its gaping mouth and eel-like body, the Pacific lamprey has a beautiful story to be told. This native fish species is critical to both healthy river ecosystems and to Native American culture.

Attendees met at the Native American Student & Community Center to hear presentations from the Johnson Creek Watershed Council, from PSU Indigenous Nations Studies (INST), and from a Grand Ronde storyteller. Cassidy Hayes, INST student and Standing Rock Sioux member, shared a history of her tribe's relationship with rivers and outlined many of the threats that face Pacific lamprey in their recovery. Greg Archuleta, Grand Ronde storyteller, shared beautiful origin stories about the lamprey as well as a thrilling video of a team of youths harvesting lamprey from Willamette Falls. Finally, Judy Bluehorse Skelton, INST Senior Instructor and Nez Perce/Cherokee, shared her hope for the future of lamprey.



Thank you to Judy Bluehorse Skelton, Greg Archuleta, and Cassidy Hayes for their speeches. Thank you to the American Indian Science and Engineering Society (AISES), the PSU Indigenous Nations Studies Program, and the Native American Student and Community Center for their event sponsorship. And a special thank you to the Spirit Mountain Community Fund for their funding of this project.

## Beavers in Johnson Creek - Katie Songer, JCWC



Beavers are at home in the water.

If you live, work, or play near Johnson Creek, chances are you've seen a beaver dam or three. You may also have seen chewed tree stumps, mud slides into the water, or even live beavers. But how much do you actually know about these furry creatures? Here are some Johnson Creek beaver FAQs and their answers.

### What are some cool things you can tell me about beavers?

Okay, technically few people ask this. But did you know that beavers often mate for life? It's true. Also, beavers can hold their breath for up to 15 minutes! They're also quite the engineers—the longest beaver dam in the world (in Alberta, Canada) is over half a mile long!

### Wow! Do they live in that humongous dam?

Beavers don't typically live in their dams. Instead, they build lodges or bank burrows. Burrows are just what the name implies: tunnels and chambers in the streambank. Lodges are nests made of wood and mud, and are found on banks or surrounded by water. We believe that most Johnson Creek beavers are bank burrowers, but at least two lodges have been spotted. Both burrows and lodges have underwater entrances, although from the outside, a lodge just looks like a big pile of sticks.

### How many beavers live in our watershed?

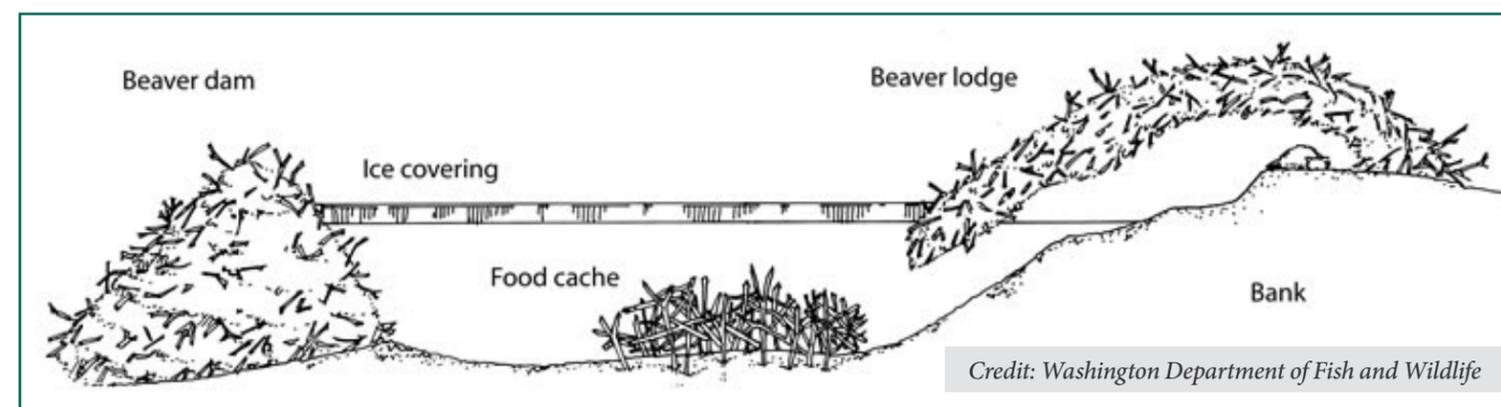
No one knows the answer to this one! Kate Holleran, Natural Resources Scientist at Metro, says she doesn't remember much beaver activity when she began working here nine years ago. Nowadays, she sees frequent evidence of beavers along Johnson Creek. Anecdotes like this indicate that beavers are likely on the rise, but we can't be sure without numbers to back up the stories.

### Are their numbers increasing in general?

Despite being nearly wiped out worldwide by the early 1900s due to the fur trade, beaver are on the rebound. The North American beaver population is now estimated at around 10 million, due at least in part to reintroduction and restoration efforts. (It was estimated at 55 million before European contact.)

### You said "the North American population." Where else do beavers live?

I'm so glad you asked! They are a cosmopolitan species native to almost the entire Northern Hemisphere, minus the driest deserts and harshest tundras. There are two species of beaver—Eurasia's species, *Castor fiber*, is similar to North America's species, *Castor canadensis*. Although beavers live in many different environments, they prefer small to medium streams with shallow slopes and useful vegetation, especially cottonwoods and willows. (Sound familiar?)



Credit: Washington Department of Fish and Wildlife

### Do beavers eat those cottonwoods and willows?

Beavers are herbivores. They eat leaves, twigs, and the inner bark of woody plants (but not dead wood), as well as grasses and the roots of herbaceous plants. In colder climates, they stockpile woody plants for winter eating, creating caches of wood. Smart!

### If they don't eat fish, then why do beavers build dams?

Some people think beavers create ponds to catch fish, but that's incorrect. The truth is that beavers are excellent swimmers, but are awkward and vulnerable on land. By damming a stream and establishing a pond, they create a safe environment in which they can move easily and escape predators such as coyotes.

### How many beaver dams are in the watershed?

Now, that's a question we can begin to answer. In summer 2016, we sent 28 volunteers out to map beaver dams in Johnson Creek. They found over 30 dams on the 10 surveyed reaches. (Reach length varied and was up to 1 mile.) We'll repeat and expand the surveys in summer 2017. We hope to learn where dams are, learn how long they persist once they're built, and begin to understand how we might work with beavers in future restoration projects.

### Did you say work with beavers?

Yes! Beavers are generally quite beneficial to wildlife, including threatened salmon—beavers and salmon evolved together. Like humans, beavers are ecosystem engineers, dramatically modifying their environment and creating whole new ecosystems. Beaver ponds and wetlands provide valuable habitat—for example, cool, deep water in which sensitive salmon and trout can take refuge from high summer temperatures and from predators. Metro and other agencies are learning to "invite" beaver to natural areas where they will be beneficial, for instance by planting extra willows and other woody plants that will appeal to them.



Volunteers measured and mapped beaver dams in 2016

### But what about beavers' negative impacts?

While beavers benefit fish and wildlife, they are not always compatible with modern infrastructure! Some landowners enjoy beavers' presence, but some properties simply cannot handle beavers. Landowners with beaver concerns have various options for living with beaver or discouraging beaver, such as fencing trees, dismantling dams, or installing beaver deterrents. Our website has some helpful links for ideas: [www.jcwc.org/caring-for-my-land](http://www.jcwc.org/caring-for-my-land).

### Got it. Now, how about some more cool beaver facts?

Sure! Beavers are nocturnal, building their dams at night. They live for around 12 to 20 years—about as long as many pets—and each year, a mating pair has a litter of 2 to 8 kits. Kits weigh about 1lb at birth, and can swim within just a few days. They stick around for a couple years before leaving the colony (family unit) and mating. While living at home, kits help their parents work on dams, store food for winter, and raise younger siblings.

### Awesome. How can I learn more about beavers in Johnson Creek?

Stay tuned for our next volunteer beaver surveys in 2017, and for the Beaver Science page we'll soon post on [jcwc.org](http://jcwc.org)!

## Our New Creek Crew Leaders Are Off To The Races!

- Courtney Beckel, JCWC



Our FIRST EVER Creek Crew training was a lively time at the JCWC office this January. Nineteen volunteer leaders stepped up to the challenge of leading small groups at restoration events for the 2017 year. We have lots of restoration events, especially in the winter and spring. With our small staff, having the help of trained leaders will increase our capacity to serve more of the people who live, work, and play in the watershed. Creek Crew leaders will lead volunteer teams and teach them how to plant trees, remove invasive species, and remove trash from the creek. These activities improve water quality, habitat value, and ecosystem function in the watershed.

We kicked off the evening with a hearty bean soup and socializing, and settled into a colorful powerpoint orientation about the watershed. We discussed our values as a watershed council, got to see some cool pictures of the critters that call Johnson Creek home, talked about the ecological framework for our restoration work in the watershed, and went over safety procedures in the case of emergency during an event.

During the hands-on training portion of the night, we had fun with role playing as we rotated through 3 different stations to gain even more skills. At station 1, leaders practiced how to facilitate the registration table (which can be pretty hectic at our larger events). At station 2, leaders learned about tool safety and strategies on facilitating groups. At station 3, leaders learned how to plant a tree, three different ways.

Creek Crew leaders walked away with a leadership role, a JCWC beanie, new friends, and lots of smiles. Thanks so much to our volunteers for being a part of the Creek Crew Team! See you at our next event!

## Thank You to Wisdom Workforce Crew

- Alexis Barton, JCWC

We have wrapped up our second season working with a Wisdom of the Elders workforce internship crew. Their Wisdom Workforce Development Internship Crew program provides environmental conservation and restoration training and career pathways for Native American adults. The incredibly hardworking crew joined us at various sites throughout the watershed, helping us accomplish the restoration work that's so important to improving the health and habitat of Johnson Creek.



The crew helped us remove invasive species like Armenian blackberry and English ivy, and we worked hard together mulching a large berm along the Springwater Trail in preparation for planting. Together we also planted native bare root plants, and harvested – and planted – willow live stakes. Native plants' roots will keep the bank soil from eroding, and their canopy helps to keep the creek cool.

Thank you, Wisdom Workforce crew!



Wisdom Workforce Crew: Alexis, Noah, Alvey, Brandee, Lee, Rebecca, Tameron, LeNae, and Treston. Not pictured: Priscilla. Photo credit: Wisdom of the Elders

## Thank you Moda!

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



Within Your Reach

## A New Role For Janel

Janel began her history with the Johnson Creek Watershed Council as a Community Outreach Intern. After her internship, Janel joined the council as the 2015-2016 AmeriCorps Member, where she served planning and coordinating riparian planting volunteer events.



After a year of service, she joined the staff team as our new Community Outreach Coordinator in September of 2016. In her new role, Janel is coordinating the Community Science Program, Internship Program, and strengthening our Equity and Diversity programming. She is excited to deepen her commitment to the watershed council through work that is close to her heart.

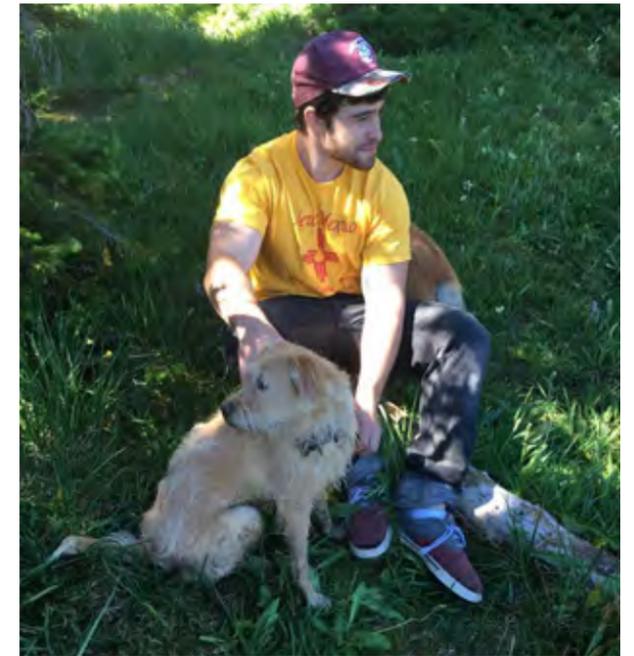
Welcome to the team, Janel!



## Our Newest Intern

Trevor Norman  
Community Outreach Intern

Trevor is a Gresham native and grew up near the headwaters of Johnson Creek! He has spent a lot of time hiking and camping in Mt. Hood and the Gorge. He graduated from the University of Oregon with a Bachelor's Degree in Environmental Science, and has volunteered with the National Forest Service, Friends of Trees, Sandy River Basin Watershed Council, and McKenzie River Trust.



During his time with us, Trevor has been instrumental in executing outreach and securing donations for events, and even became a Creek Crew leader! He is seeking a full time job in the environmental sector, and we could not recommend him more highly. We are fortunate to have him with us. Thank you for your service!

## Internship Opportunities

View open internships and apply online at [www.jcwc.org/internships](http://www.jcwc.org/internships).

### Community Outreach Internship (Accepting applications)

The Johnson Creek Watershed Council seeks a highly professional, personable intern to assist with outreach work. Internship will include representing JCWC at community events, assisting with volunteer recruitment, communications, and event planning.

### Social Media Internship (Accepting applications)

The Johnson Creek Watershed Council seeks a Social Media Intern to assist the Johnson Creek Watershed Council in developing our social media strategy. Over the coming year, we would like to see our social media outlets working better to communicate our message of restoration through science and community engagement.

### Invasive Species Control Internship (Open in March)

The Johnson Creek Watershed Council seeks an intern who will work in priority private and public natural areas that harbor garlic mustard (*Alliaria petiolata*), an invasive species that threatens the health of riparian areas throughout the Johnson Creek watershed. With training, a Johnson Creek Invasive Species Control Intern will identify and remove this species under the supervision of the Riparian Program Manager. Interns will gain experience with invasive species control methods, habitat restoration, field work, landowner outreach, environmental nonprofit management, and more.



1900 SE Milport Road, Suite B  
Milwaukie, OR 97222

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## Upcoming Opportunities

Find details, registration, and more at our online Events Calendar: [www.jcwc.org/events-calendar](http://www.jcwc.org/events-calendar).

-  **Watershed Wide Event**  
March 4th — *Help weed, plant, and mulch at our largest volunteer event of the year!*  
Ten locations throughout the watershed!
-  **Powell Butte Wetland Planting**  
March 18th — *Help plant trees at this beautiful wetland site!*
-  **JCWC Board Meeting**  
March 21st — *Open to the public!*  
JCWC Office: 1900 SE Milport Rd, Milwaukie
-  **Tree Care at Clatsop Butte**  
April 29th — *Join JCWC and Friends of Trees for tree care at Clatsop Butte!*
-  **Outreach Task Force Training**  
May 3rd — *Outreach Ambassadors are the face of the Watershed Council at tabling events, community events, fairs, and more! The ideal volunteer for this role is outgoing, comfortable working with community members, and loves to share the work Johnson Creek Watershed Council does. We will be*

*hosting an informational session and training on the evening of Wednesday, May 3rd at our office. JCWC office, 1900 SE Milport Rd, Milwaukie*

-  **Tree Care at Veteran's Creek**  
May 13th — *Join JCWC, Friends of Trees, and Portland Parks for tree care at Veteran's Creek!*

-  **JCWC Board Meeting**  
May 16th — *Open to the public!*  
JCWC Office: 1900 SE Milport Rd, Milwaukie

-  **Johnson Creek Annual Celebration**  
May 25th — *Join us for our annual celebration!*

-  **Dragonfly Survey Opportunities**  
June 3rd Orientation — *Want to learn about the beautiful dragonflies at your local urban wetland? Join us for a field season of dragonfly monitoring. Volunteers will work in pairs to survey on weekends throughout the summertime to identify dragonfly activity.*  
June - September Surveys



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**Alexis Barton**  
AmeriCorps Outreach & Riparian Specialist

**Courtney Beckel**  
Volunteer Coordinator

**Cathy Geiger**  
Operations & Finance Coordinator

**Janel Hull**  
Community Outreach Coordinator

**Noah Jenkins**  
Riparian Program Manager

**Daniel Newberry**  
Executive Director

**Katie Songer**  
Restoration Project Manager