



Within Your Reach

A publication of the Johnson Creek Watershed Council

reach: a) a portion of a stream or river b) an extent, esp. of knowledge or comprehension

An Oak's Perspective: Restoring the Johnson Creek– Willamette River Confluence

By Robin Jenkinson,
JCWC Restoration Coordinator

A 200-year-old Oregon White Oak grows on the bedrock bluff where Johnson Creek flows into the Willamette River in Milwaukie, Oregon. When this acorn sprouted, beaver were already locally extinct and many riverside forests cut. The rattle of streetcars on rails shook its roots starting in the early 1890's, and businesses and homes were built around it. After centuries of impacts to the natural environment, people began actively restoring this confluence area 20 leaf-falls ago, which includes the quarter-mile of Johnson Creek that flows through a six acre ravine.

To start the restoration, the Klein family stewarded the land and placed a conservation easement on their portion of the forested ravine (including Klein Point, where our Oak stands tall). An old house was removed from the floodplain and the ODS Companies renovated their building to LEED certification standards. The Watershed Council, ODS Companies and others organized garbage clean-ups, held weeding parties, and planted thousands of diverse native trees and shrubs. The beavers moved back in and Bald eagles swooped, chasing osprey, their talons clinging to silvery fish.

And, we're happy to announce that this year, we've taken another huge step closer towards ecological recovery. The Council and partners placed 150 logs in Johnson Creek to enhance habitat for threatened coho, chinook, and steelhead. In addition, we constructed a riffle that provides year-round fish passage over an exposed sewer pipe.

To make a lasting difference, we must sustain our efforts and take a long-term perspective like the Oregon Oak, which can live up to 500 years. Aggressive clematis, ivy, and blackberry are grow-

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Secured logs are stacked around wood pilings in the gravel at the mouth of the creek.



The cool water from Johnson Creek creates habitat for juvenile salmon and trout.



Kyung Lee/Spinwave Photography

The Ribbon Cutting Ceremony was preceded by a parade to the Oak tree.

Second Annual Johnson Creek Days



Held in September, Johnson Creek Days are a month-long series of diverse, fun and free events that encourages residents to become aware of and take pride in Johnson Creek. These

events help facilitate the understanding of how a healthy Johnson Creek Watershed improves the quality of life in our community.

Johnson Creek Days kicked off on August 27 with the **Johnson Creek Clean Up**. Over 200 volunteers helped remove trash from the creek this year! It is evident that real progress is being made toward a cleaner waterway when the total amount of trash removed has decreased from over five tons in 2010 to three and half tons in 2011.

Special thanks goes to our event partners: Overland Park Coalition, Clackamas County Water Environment Services, Portland Parks and Recreation, REI, North Clackamas Parks and Recreation, Green Lents, Fred Meyer Foundation, Recology, and Umpqua Bank.



Oregon's US Senator Jeff Merkley helped collect garbage from Johnson Creek.

The natural beauty of Johnson Creek was celebrated during Johnson Creek Days through a series of plein air **Paint Outs** that culminated in the **Johnson Creek Art Show** held at Spring Creek Coffee House. Seventeen artists exhibited over 30 pieces of work. Thanks to Art Media, ArtHeads Framing, Johnson Creek Brass Band and Spring Creek Coffee House for sponsoring the Paint Outs and hosting the show.

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Investigating Instream Health Using Macroinvertebrates

By Roy Iwai, Water Resources Specialist, Multnomah County Road Services

If you want to know how healthy a stream is, there are many different ways to investigate. You could start by looking at the physical habitat and note if there are trees and shrubs on the stream bank and a variety of pools and riffles instream. You might consider water quality and determine if conditions such as temperature and amount of dissolved oxygen are right to support life. One way we recently explored this question was by looking at the kind of benthic macroinvertebrates we found in the stream. “Benthic macroinvertebrates” means “bottom-dwelling animals-without-backbones that we can see with the naked eye.” It’s a term that scientists use to refer to the “bugs” that live in streams. I’ll use both terms in this article.

“Benthic macroinvertebrates” means “bottom-dwelling animals-without-backbones that we can see with the naked eye.”

Stream macroinvertebrates come in all shapes and sizes, and all are sensitive to conditions in the water, and the environment around the stream. Some are more sensitive than others. Some examples include worms, snails, and the aquatic larvae of terrestrial (land-based) insects such as mayflies or caddisflies. We even include animals like crayfish and clams for this investigation.

Macroinvertebrates are useful to study because each species has a unique tolerance for temperature, sediment condition, and pollution. They can also be categorized by preferred feeding habits, and their relative abundance. There will be a different set of macroinvertebrates for each different set of conditions. In other words, different kinds of bugs live in streams in urban areas with no trees and lots of stormwater than live in small headwater streams with lots of surrounding forest. With the variety of bugs we find in the stream, we can measure how healthy (or how impacted) a stream reach is. Fish diversity can be used to measure stream health too, but there are many advantages to studying stream bugs. They don’t move much in the stream, they are very sensitive to the conditions where they live, and they are a lot easier to catch!

Beginning in 2009, staff from the different local jurisdictions got together to develop a program to investigate macroinver-

tebrates watershed-wide. Each summer, we collect samples from a variety of areas that are representative of the stream reaches in Johnson Creek and its tributaries, and we have the bugs identified down to the family, genus and species by a professional entomologist (a scientist who studies bugs).

We found that the total number of different species varies significantly across the watershed, from over sixty different species found in the forested headwater areas of Kelley Creek, down to less than twenty species in some reaches of the Johnson Creek mainstem. The number of sensitive species decreases as the level of urbanization increases, and the amount of vegetation decreases. These conclusions aren’t surprising, and they mirror other studies in Oregon, Washington, and across the nation.

What is interesting, however, is to learn that there are sensitive macroinvertebrates in some headwater reaches of Johnson Creek tributaries. These bugs can colonize in other parts of the watershed, if conditions improve. We also note that some urban areas have bug scores higher than others. This means that there are mitigating factors that may allow us to live in cities and have healthy streams. Strategies like increasing tree cover and native vegetation all over the watershed (not just the stream banks), increasing stormwater treatment (or reducing the amount of pavement that produces stormwater runoff), and reducing chemical use and runoff, are viable solutions that can incrementally improve the health of bugs in the stream.

With more bug data and more improvements in the watershed, it is our hope that we can continue to measure the improvements in stream health and learn how to better manage the watershed. While the stream bugs now indicate a high level of watershed disturbance, the stream can recover with sustained efforts by the people who live and work in the watershed.

More information on stream macroinvertebrates will be included in the forthcoming 2012 Johnson Creek - State of the Watershed report due out in May, 2012.

Confluence

Continued from page 1

ing over the native trees and shrubs planted a decade ago. So this winter, we’ll organize weed removal and planting events; next summer, we’ll host another garbage clean-up. Tours will help people spread this work elsewhere (three national professional societies are including the site in their conference tours in 2012). The City of Milwaukie will construct an interpretive overlook in the shade of the Oak tree on the bluff, which will pay tribute to the history of the place and describe our ecological goals for recovering Johnson Creek.

In another 100 years, the Oak might see cedars rising from under maple canopies warbling with birdsong. Cottonwoods will surge tall and fall into the creek, adding more habitat for growing fish populations. And, generations of students will clamber through the forests, measure progress, and continue to learn how we can further enhance habitat and be resilient to the changes to come.



Gary Klein shepherded the project from concept to reality.

THANK YOU

To the landowners: Most of all, Gary and Sharon Klein who have shepherded this project from concept to reality, the ODS Companies for their steadfast support, and the City of Milwaukie for their commitment and assistance.

To the volunteers: Yarrow Murphy, Marvin Smith, Sarah Ferguson, Matt Wood, Erin Oost JCWC Board members Bob Sanders, Rick Attanasio and Perry Rikli, New Urban School, Clackamas Web Academy, Portland Waldorf School, ODS employees and many other groups who have stewarded this site over the past decade.

For donating logs and boulders: PGE, City of Portland Parks and Recreation, Office of Healthy Working Rivers, and Bureau of Environmental Services, Willamette Sailing Club, Multnomah County Roads, and City of Milwaukie Operations.

For funding: Oregon Watershed Enhancement Board (OWEB), The Nature Conservancy, PGE, FishAmerica Foundation, NOAA Restoration Center, River Network, MillerCoors, Jubitz Family Foundation, and Metro Nature in Neighborhoods Program.

Johnson Creek Days

Continued from page 1

The First Friday art reception also included a **Ribbon Cutting Ceremony** to toast the completed construction of the confluence project at the mouth of Johnson Creek. Thanks to Nancy Peirce's class at the Portland Waldorf School who helped lead the 80 celebrants from the Art Show to the Confluence project.

The **Children's Discovery Carnival** was a family event during Johnson Creek Days. Children constructed bird feeders, nature journals and sedum gardens all made with recycled materials. Thanks to our partners who contributed activities: Metro, the City of Portland, artist John Brandsberg, Leach Botanical Gardens and the Crystal Springs Community Collaborative.

Other events included a **bike tour of rain gardens** in Gresham, **group running events**, a **geo-cache**, a **poker-themed bike ride** and a **freshwater mussel survey**.

Johnson Creek Days was spearheaded by a group of volunteers who formed the Johnson Creek Days Event Committee. They met monthly to brainstorm the most ideal events to reach more of the community. Want to contribute to this committee? The first meeting is January 18 from 6-8pm. Email Amy at amy@jcw.org for more information.



Mussel sampling volunteers discovered freshwater mussels were abundant at Ambleside.



"Summer Haze" by Stephanie Cissna from the Powell Butte Paint Out.



Watercolorist, Kathy Allegri demonstrated her art techniques at the Brookside Paint Out.



Kids enjoyed making bird feeders at the Children's Discovery Carnival in Sellwood Park.

Thinking Ahead: Planned Giving

The end of the year is an excellent time to consider a donation to Johnson Creek Watershed Council. While JCWC is always pleased to accept cash gifts, there are a number of options to consider. You might want to consider donating other assets.

For example, gifts to charitable organizations can include bequests, appreciated stocks or other securities, personal property, or real estate. These types of in-kind gifts make no impact on your cash flow during your lifetime, can relieve you of the burden of managing property, and help reduce your assets and taxes in the future.

JCWC can be named as a beneficiary on your life insurance policy or retirement fund. Funding a charitable gift annuity or creating a charitable remainder trust can provide you a fixed, regular income for the rest of your life.

There are many ways to give that cost you nothing during your lifetime, reduce your capital gains, save on federal estate tax, and provide JCWC with valuable capital to help us accomplish our mission. If you have questions about planned giving, please contact JCWC Executive Director Matt Clark at 503-652-7477. Also consult an attorney, CPA or financial advisor.

Support Johnson Creek—Become a Friend

I want to begin by thanking the many people who generously supported JCWC over the past months, both financially and with your time and skills. More than 140 people gave during our Summer Appeal, which ended in September. With your support, matched by donations from the Mintkeski Family Fund of the Oregon Community Foundation and ODS Companies, we raised over \$30,000 for Johnson Creek.

Our volunteer program is stronger than ever, touching all of our programs and increasing our capacity at all organizational levels. Our Event Committee planned and produced a series of successful Johnson Creek Days events in September. Dozens of adult and student volunteers participated in this summer's freshwater mussel surveys, contributing to our increased understanding of the age classes and spatial distribution of the mussel populations in Johnson Creek Watershed. Our restoration volunteers continue to steward the many natural areas that make Johnson Creek Watershed special.

JCWC just finished a strategic plan, which will guide us over the next five years and beyond. A recurring theme as the board and staff developed the plan was a sense that JCWC is poised to move to a new level of impact and achievement, with expanded and more integrated programs. One of the rea-

sons we're prepared to make this jump is because of the tremendous community support we receive. We appreciate it greatly, and we need it to continue if we are to realize the ambitious goals laid out in our strategic plan. I am asking you, if you didn't have a chance to give during our Summer Appeal, to **become or renew as a Friend of Johnson Creek** during our year-end membership campaign.

You'll find an envelope enclosed in this newsletter. I encourage you to **mail your tax-deductible donation today**. In early December, JCWC volunteers will be calling to remind you about our membership campaign.

We know that not everyone has the resources to contribute financially, particularly as our state and our country's difficult economic times continue. Your time and skills are as appreciated and valuable as your financial contributions. Please contact JCWC's Volunteer and Outreach Coordinator, Amy Lodholz at amy@jcw.org to learn how you can get involved. Together we can ensure that the Council has the resources we need to achieve our goals for watershed health.

A handwritten signature in black ink, appearing to read "Matt Clark".

Matt Clark
Executive Director, JCWC

JCWC Gratefully Acknowledges Our Generous Donors

October 1, 2010-September 30, 2011

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East Lents Floodplain— Restoration at the Heart of the Watershed

By Marie Johnson, Portland Bureau of Environmental Services



www.brucemacgregorphotography.com

After the streambanks were contoured to provide more flood storage, they were stabilized with stepped soil wraps, which are layers of dirt wrapped in geotextile fabric. Logs with rootwads were installed to provide fish habitat in the stream. Areas disturbed by construction were seeded and then mulched with straw.

October marks completion of Phase 1 of the East Lents Floodplain Restoration Project, located on a 70-acre site south of Foster Road between SE 106th and 112th Avenues. Portland Bureau of Environmental Services is leading the project, funded in part by a \$2.7 million FEMA Pre-disaster Mitigation Grant. Phase 2 and project completion is scheduled for fall 2012.

Because Johnson Creek's floodplain is wide and flat, large areas to the north are impacted when the creek tops its banks. Currently, Johnson Creek floods about every other year, affecting local residents, business people and commuters who make up to 25,000 daily trips on Foster Road. When completed, the East Lents project is expected to cut flood frequency in half.

To accomplish this, Environmental Services purchased 54 acres of land and helped 60 property owners move outside the flood area. The project will:

- Reshape the banks of Johnson Creek,
- Remove three bridges and parts of three roads to widen the stream channel and restore floodplain,
- Expand the floodplain and reconnect it to the creek, and
- Revegetate the site with about 70,000 native trees and other plants.

In addition to reducing flooding, the project will improve water quality, and enhance habitat for fish and other wildlife.

Decades ago, Johnson Creek had plentiful populations of salmon and trout. Though

fewer fish live in the creek today, Johnson Creek is still home to several native fish species. Fish salvages, conducted as part of the East Lents project, collected and relocated 1,685 native fish. Of these, 9 Coho salmon, 14 steelhead trout and 12 cutthroat trout were recovered.

The Johnson Creek Watershed Council supports the East Lents project through its invasive weed control efforts on and near the project. In 2007-2009, JCWC treated over 5,000 knotweed stems, a quarter acre of garlic mustard and 50 square meters of yellow flag iris in the area. The JCWC is currently working with owners of the Freeway Lands Company site, who are funding restoration of 300 meters of stream on their property. To date, JCWC has treated knotweed, an acre of reed canary grass and a substantial amount of blackberry. This winter, the Council will plant two acres with 6,000-7,000 native plants.

For decades, local, state and federal agencies have worked to reduce damaging floods along Johnson Creek. In the 1930s, the Works Progress Administration attempted to stop flooding by rock-lining the creek. In 1964, after the largest recorded Johnson Creek flood damaged about 1,200 homes, the Soil Conservation Service, the Army Corps of Engineers, and the Metropolitan Service District (Metro) explored ways to reduce frequent flooding, but were unable to find an approach that garnered the support of the local community.

In 1994, Environmental Services began purchasing properties in Lents and three other target areas through its Willing Seller Program. Since 2001, these efforts have been guided by the Johnson Creek Restoration Plan, which identifies restoration projects that together are expected to reduce damaging floods to an average of once every 10 years.

Environmental Services continues to work in partnership with local, state and federal agencies to improve watershed conditions. A joint effort with Metro and North Clackamas Parks and Recreation, near Luther Road and 82nd Avenue, is scheduled to begin in 2013. It will restore floodplain and in-stream habitat while protecting an exposed sewer pipe. The Army Corps of Engineers is estimated to begin the Springwater Wetlands Project in 2012 to restore and reconnect wetland habitat from Beggars Tick Marsh to Zenger Farm. Restoration projects are also underway on Crystal Springs.

For more information about Environmental Services Johnson Creek Watershed Restoration Program, visit: <http://www.portlandonline.com/bes/index.cfm?c=33213&c>

NCRA Sanitary Sewers Benefit Watershed Health

By John Nagy, Clackamas County Water Environment Services

Public sewer service is now available in portions of the North Clackamas Revitalization Area (NCRA). Clackamas County Water Environment Services, on behalf of Clackamas County Service District No. 1 (CCSD

Formed in 2006, the North Clackamas Revitalization Area includes over 1000 acres in unincorporated Clackamas County.

#1) has completed the first and second phases of construction on the sanitary sewer collection system that will serve approximately 970 customers within the CCSD #1 service area of the NCRA. These properties are currently served by on-site wastewater disposal systems, such as septic systems and cesspools. Septic systems and cesspools can be a source of bacteria and other pollutants that can flow to Johnson Creek and impair water quality. While these systems work well in rural areas, at urban densities connecting these properties to public sanitary sewer systems provides the treatment necessary to improve and protect watershed health.

Property owners in the Phase 1 and 2 areas who are ready to connect to the public sewer system can take advantage of a sanitary sewer system development charge (SDC) credit, offered through a cooperative agreement between the Clackamas County Development Agency (CCDA) and CCSD #1. A limited sewer hook-up grant program is also available to those who qualify through a second cooperative agreement with Clackamas County Community Development, CCDA and CCSD #1.

Construction of Phase 3 of the NCRA sewer project is expected to begin in September 2011 and be completed by summer 2012. Property owners will receive a notice from CCSD #1 when service to their property is available.

For more information, call Water Environment Services at 503-742-4567 or <http://www.riverhealth.org/north-clackamas-revitalization-area-sanitary-sewers>.

JCWC Board of Directors Approves Five-Year Strategic Plan

Overview and Rationale for Planning

At its October 2011 board meeting, the Board of Directors approved a five-year strategic plan for the Johnson Creek Watershed Council, culminating a year-long planning process and setting an ambitious course for the Council to move to a new level, both programmatically and organizationally. The Council's previous strategic plan, completed in 2006, focused on operational and governance elements that were critical at that stage of our organizational development. Since 2006, these elements have become a matter of course for us as a well-run nonprofit. We are ready to move to the next plateau, developing and implementing a truly holistic, science-based approach to watershed health. The new Strategic Plan sets out the detailed goals and objectives and processes to achieve that.

Summary of the Planning Process

In January 2011, after interviewing several planning consultants, JCWC hired Pam Mavrolas to facilitate our plan development. We formed a Strategic Planning Team consisting of three staff members (including JCWC Executive Director, Matt Clark) and three board members to lead the planning and plan implementation process. In March, the Planning Team met for an all-day "mini-retreat" to lay a foundation and set the context for planning. After the mini-retreat, Pam and Matt developed an Outreach Plan in order to gather information from key JCWC stakeholders about the environment in which JCWC operates. As part of the Outreach Plan, JCWC board and staff conducted eighteen one-on-one interviews and three discussion groups, which were then summarized for the two-day facilitated planning retreat in May 2011 for the full board and staff. After the retreat, the Planning Team wrote the Plan.

Key Strategic Directions

Over the next five years, JCWC will emphasize a number of key strategies (listed below) that both continue its strong programs of work and expand those programs to meet new challenges facing the watershed:

- A. Continue to strategically select and implement as well as facilitate large and small-scale restoration projects that will improve ecological function and connect riparian, in-stream and upland habitat in the watershed.
- B. Lead a collaborative, peer-reviewed process to develop a comprehensive and realistic scientific framework for Johnson Creek Watershed that guides the actions needed to achieve desired future conditions and informs as to the amount and type of development the Watershed can sustain while maintaining key ecological functions.
- C. Add and communicate ecological, economic, and recreational value that broadens and deepens awareness of and appreciation for Johnson Creek Watershed by local residents and in the region at large.
- D. Become a well-known, trusted presence and partner in the upper watershed.
- E. Integrate environmental education into all JCWC programs and projects, especially in our work with landowners.
- F. Revitalize the JCWC offices to enhance and communicate JCWC's value and to provide a popular and active hub for community meetings and celebrations, environmental education, and collaborative research along Johnson Creek.
- G. Increase JCWC's capacity and influence in proactive watershed land use policy as guided by the scientific framework discussed in strategic direction B above.
- H. Grow Johnson Creek Watershed Council's financial and human resources to increase as well as to highlight our organizational stability and increase our capacity to partner with key stakeholder organizations, agencies, institutions, businesses and private landowners in the watershed and engage volunteers and watershed residents in our current and new program directions.

JCWC UPDATES...

www.brucemacgregorphotography.com



Walt Mintkeski retrieves a scooter from the creek during the Johnson Creek Clean Up.

Walt Mintkeski Receives Lifetime Conservation Achievement Award

In recognition of his tireless dedication to Oregon's natural legacy, founding JCWC board member, Walt Mintkeski has received the Oregon Chapter of The Nature Conservancy's Lifetime Conservation Achievement Award. Accepting the award at an awards luncheon, Walt recounted how the original Earth Day in 1970 crystallized his lifelong love of water, inspiring him to dedicate himself professionally and personally to conserving the oceans, bays, rivers, and streams that he cherishes. Walt also highlighted how important Johnson Creek has been to him throughout his adult life, as a place where he and his kids explored, and as a place to which he has dedicated so many volunteer hours to restoring.

Congratulations, Walt, on this well-deserved recognition. We are very proud of you, and appreciate all that you've done, not just for Johnson Creek, but for all of this beautiful state we call home.

Wanted: JCWC Conservation Registry Intern

Now that we've created an online catalogue of over 250 completed restoration projects throughout the Johnson Creek Watershed (thank you Peregrine Edison-Lahm and Sara Ennis!), we're looking for an intern to help keep these case studies up-to-date. Duties would include restoration project site visits, interviews with project managers, and data entry at jwc.conservancyregistry.org.

Please visit our website www.jcwc.org for more information about the position. To apply, send a brief email cover letter with your resume attached to robin@jcwc.org

Freshwater Mussel Surveys

Continuing a partnership with the Xerxes Society for Invertebrate Conservation, the Johnson Creek Watershed Council sought to learn more this summer about the native freshwater mussels found in Johnson Creek.

Freshwater mussels were surveyed by volunteers in four new locations this year – including the future site of the Johnson Creek light-rail station near SE Tacoma Street, Gresham Woods, the Bundy Reserve and Metro's Ambleside property in Gresham. Volunteers learned about the biology and ecology of native freshwater mussels, and the many ways these animals benefit water quality and fish habitat. Native mussels are sensitive to pollution and disturbance, so exploring mussel distribution and the age structure of mussel beds provides insight on the biological conditions of Johnson Creek. Native Western Pearl Shell mussels were found in two stream reaches surveyed.

The events are rare opportunities for the general public to assist with field research. Participants received environmental education about an important component of the stream biota which most people know very little about, and simply enjoyed Johnson Creek.

Thank you to the over 90 volunteers who contributed to the surveys this year! The statistics are currently being evaluated. JCWC will share the results of the data when they are available.

JCWC Presents Four Presidential Services Awards

The Johnson Creek Watershed Council is pleased to honor four volunteers in 2011 with the Presidential Service Award. Event Committee Chair Nicole Alexander, Intern Shawn Brown, and Board Members Russ Mantifel and Torrey Lindbo have all contributed 100 hours or more of volunteer service towards the Council's mission. This award highlights their trail-blazing attitudes and dedication to the well-being of others and the environment. Congratulations! JCWC is proud of you and thankful for your service.

The Presidential Service Award was established by the United States to recognize the valuable contributions volunteers are making in our communities and encourage more people to serve. This award is a way to thank and honor those who, by their demonstrated commitment and example, inspire others to engage in volunteer service.

If you have questions about volunteering, email Amy at amy@jcwc.org.

JCWC Intern Profiles:

Caitlin Dobson, Outreach Intern



Caitlin Dobson came to the Council this fall with a degree in English from the University of West Georgia. Her long term plans are to return to school to pursue a career that would help improve the health of people and the environment.

During her internship, Caitlin has worked to update JCWC's database and helped with volunteer restoration events. She has worked behind-the-scenes on photography, flyer distribution, and volunteer recruitment. Her flexibility and work ethic have been very much appreciated.

Caitlin enjoys reading, writing, drawing, biking, dark comedy, road trips and free ice cream.

Shawn Brown, Water Quality Intern

Shawn Brown jumped right in this summer by placing temperature loggers throughout the watershed. In addition to managing temperature data, he researched creative approaches to sharing new science about Johnson Creek.



And he's not afraid to reach out or get dirty, helping with weeding, mulching, and tabling at Farmer's Markets.

After graduating with a BS in Natural Resources in his home-state of Kentucky, he worked for three years as a Water Quality Technician. In college, he visited coal mining operations. "I saw many poor communities there despite the richness in resources and heard accounts of poor water quality in wells that have been used for generations," he says. "I have been working to ensure that people have access to clean water and help prevent contamination ever since."

Shawn is an avid gardener and a co-owner of Four Door Farm in Southwest Portland, which this year produced enough surplus to can tomato sauce, pickles, and blackberry preserves.

Calendar of Events

For details, visit our website: www.jcwc.org or call 503-652-7477

December 2011

Friends of Johnson Creek Campaign

Saturday, December 10

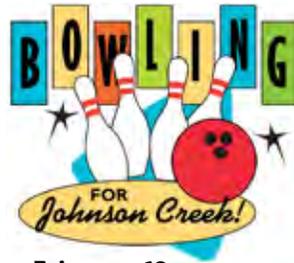
Volunteer Tree Planting. Mitchell Creek, 9am-1pm. RSVP to amy@jcwc.org.

Monday, January 16

MLK Day Volunteer Event. Butler Creek Restoration in Gresham, 10-12pm. RSVP to amy@jcwc.org.

Wednesday January, 18

Johnson Creek Days Event Committee 2012–Kick Off meeting. JCWC Headquarters, 6-8pm. We are seeking new committee members who are interested in helping plan Johnson Creek Days events. Email amy@jcwc.org for details or to attend the meeting.

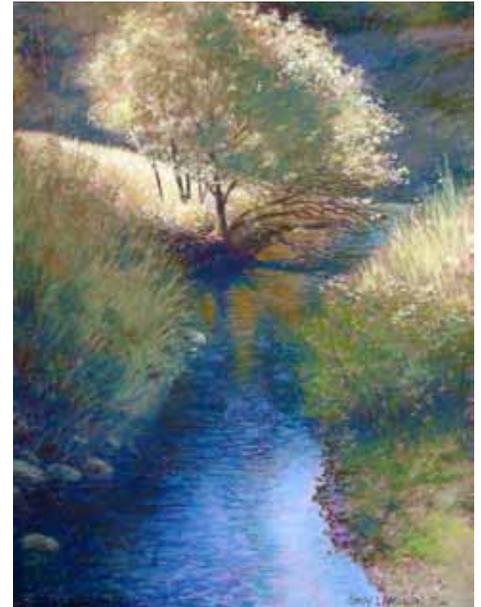


Sunday, February 12

JCWC Bowling Fundraiser. Milwaukie Bowl, 1-3pm. Families welcome! Bowling shoes, two games and raffle included.

Saturday, March 3

14th Annual Watershed Wide Event. 10 sites, 9-12pm. Join other volunteers to restore the watershed, rain or shine. Lunch provided after the restoration parties. Groups and families welcome! RSVP to amy@jcwc.org.



Johnson Creek, a pastel by Milwaukie artist Gary Michael, received top honors as the Best in Show from the North Clackams Arts Guild. This painting was displayed at the 2010 Johnson Creek Art Show.

Photo Opp:

Here are some impressive pictures of the logs and boulders that were brought in to stabilize the land at the confluence of Johnson Creek with the Willamette River this fall.

Visit Milwaukie's Waterfront Park to see the final design in person. Volunteers will be needed to fully restore the riparian areas this winter. Watch for volunteer events.



Pilot Salmon Survey In Progress

The Council contacted the Oregon Department of Fish and Wildlife (ODFW) to assist in a pilot volunteer project to get more data on the spawning coho population in Johnson Creek. We wanted to make sure the data was statistically relevant to our partners and be sure that our surveyors received proper training.

Coho spawn from mid-October through mid-December. Volunteers go out in pairs to four reaches of the creek looking for live or dead coho. None have been seen yet but this pilot project is a learning experience for both the volunteers and the Council. In 2012 the Council will officially launch the coho spawning volunteer monitoring project.

Over 30 volunteers signed up to participate. An orientation was held at the beginning of November. Volunteers survey weekly at each site for seven weeks.