

Behind the Scenes

August 2018



Dear Friend,

In the watershed council world, we always need to keep one eye focused on the future even as we are fully engaged in our day-to-day tasks. Just last week, we wrapped up the last of three 3-hour strategic planning meetings, which will help refine our project focus and shape the way we engage with our watershed community. As a Friend of the LWC, you are an important part of our present and our future and we value your input. Your dedication and support ensures that we can continue to make progress towards clean water, healthy habitat and engaged communities in our watershed. With this in mind, you are more than welcome to view the progress we've made on our strategic plan and give us some feedback at our September 5 Open House celebration.

In this issue, you will read about the upcoming events in our second Love Your Watershed series, plus a status report from our Temperature Monitoring Program Coordinator, Caleb Price. And in case you were wondering, we haven't yet received confirmation on the exact day and time of the large wood placement in Upper Ritner Creek, so there is still time to contact me if you want to attend this unique opportunity to see restoration in action!

Happy reading,

--Suzanne Teller, LWC Outreach Coordinator (Outreach@LuckiamuteLWC.org or 503-837-0237)

Love Your Watershed Update: You asked, we listened!

Based on the success of last year's **Love Your Watershed** events, we have decided to offer an expanded line-up for this year's series. After a careful look at feedback received from an online survey we sent out this past June, we incorporated several of the recommendations suggested – including having some Sunday events, adding an additional pub talk topic and offering interactive tours. The September 23 Luckiamute Confluence Tour is already sold out, but you can now register for one or both of our Fall bird walks with Joel Geier. Our October 7 walk will be at Luckiamute State Natural Area's South unit, and our October 21 walk will take you along the Rich Guadagno Memorial Loop Trail at Baskett Slough National Wildlife Refuge. As a member of our Friends of the LWC network, you are not only getting the first chance to register for these popular walks, you will also be eligible for the reduced registration fee of \$8 - a 33% discount from the regular price of \$12. The registration fee covers a delicious bag lunch from Ovenbird Bakery, which includes your choice of sandwich, chips and a freshly baked cookie. To register, please visit www.LuckiamuteLWC.org/FallBirdWalks-Friends.



Another event you will want to put on your calendar is a Sips 'n' Science pub talk at the Valkyrie Wine Tavern, a brand new restaurant and bar in downtown Independence at 301 S. Main Street. Chris Jordan, Conservation Biologist with the National Oceanic and Atmospheric Administration, will be speaking about the role beavers can play in watershed restoration, and how communities have been partnering with these creatures to help protect and restore floodplain habitat. Stay tuned for more details at www.LuckiamuteLWC.org/LoveYourWatershed!

Your Land. Your Rivers. Your Community. Your Watershed.

Watershed Notes

Don't forget to drop by our office during our **LWC Open House Celebration on September 5 from 4 - 7pm!** You and your family are invited to come join us at 165 D Street in Independence to get a tour of our new office, enjoy some great food and drinks, and to celebrate the work we've accomplished together in the watershed! You'll also have the chance to enter a raffle to win some great prizes. No RSVP is required, but you can head to www.LuckiamuteLWC.org/LWC-open-house for more information. We hope to see you there!

LWC Temperature Monitoring Program News

By Caleb Price, Monitoring Program Coordinator

This May, the LWC kicked off the field season for the second year of a two-year water quality monitoring grant funded by the Oregon Watershed Enhancement Board (OWEB). LWC staff and volunteers deployed temperature loggers at 28 locations throughout the Luckiamute watershed, which record the ambient stream temperature at every hour of the day and provide valuable information about how warm the water gets during the hottest part of the year. The data generated by the temperature loggers will be used to inform future restoration projects in the watershed, and helps us better understand what areas are most suitable for fish during the long, hot days of summer.



The Luckiamute River and its tributaries are home to several species of native salmonids, including steelhead trout, Westslope cutthroat trout, and Coho salmon. Temperature has a profound effect on a fish's physiological processes: as the water warms, fish use more oxygen, require more food to support their increased rate of respiration, and are more vulnerable to disease and toxins. Because their swimming speed decreases as the water temperature increases, juvenile salmonids are more vulnerable to predation in higher temperature waters. Salmonids typically prefer water temperatures between 5 and 15°C (41 - 59°F), and will not usually tolerate temperatures above 20°C (68°F). Water temperatures between 22 and 24°C (71 - 75°F) will create a "thermal barrier" to fish movement and can totally eliminate juvenile salmonids from a given area of the stream. Temperatures at or above 25°C (77°C) are considered lethal for steelhead, cutthroat trout, and Coho salmon.

In August, LWC staff and volunteers revisited all 28 of the temperature monitoring stations to check water depth at the loggers and record reference temperatures with a specially-calibrated "NIST" thermometer. This instrument, provided by the Oregon Department of Environmental Quality (DEQ) allows the LWC to verify the data collected by the temperature loggers, and ensures that the temperature profiles (called "thermograms") created from the data are accurate.

By using the data generated from the Monitoring Program to focus on the areas of the watershed that have the coldest summertime temperatures, the LWC can ensure that future habitat restoration projects, such as riparian revegetation and in-stream large wood placement, will be of the most benefit to native fish by providing improved habitat and thermal refuge from extreme water temperatures during the heat of the summer.

LWC staff will return to the field in October to retrieve the temperature loggers and download the data collected during the 2018 field season. The data will first go through an extensive round of quality assurance and quality control checks before it is analyzed to generate useful measures of stream temperature, such as the "7-day running-average of the daily maximum". Using these statistics, the LWC can start to paint a picture of the health of the Luckiamute watershed when water flows are low and temperatures are at their most extreme. Stay tuned for an upcoming report on the temperature data collected by the LWC Monitoring Program from 2017 and 2018, which will be compiled and published this winter.

If you have any questions or would like to know more about the LWC's Temperature Monitoring Program, please feel free to contact Caleb at Monitoring@LuckiamuteLWC.org