

Behind the Scenes

February 2022



Dear Friend,

Despite the mercury dipping at or below freezing at night, there are signs of spring appearing all around us. Swelling buds on tree limbs, snowdrops blooming, the first migratory bird sightings and lengthening daylight hours are all imbuing the surrounding landscape with excitement and renewed energy. During this time of year, LWC staff are immersed in both grant applications and winter planting season. While it is easy to get excited about the fact that our crews are busy putting almost 260,000 native trees and shrubs in the ground at our various restoration sites, rousing a similar level of enthusiasm about grant applications might be a bit tougher. Grant-writing is certainly an arduous, time-consuming endeavor that — instead of inspiring excitement — may instead inspire a sudden craving for a second (or third) cup of coffee. Yet there is a distinct aura of hope and anticipation that weaves its way into the process of putting strategies and rationale down on paper. Though tedious at times, the questions asked in a grant application prompt us to fully articulate our vision for a project and flesh out the strategies that will allow us to achieve that vision. Preparing a project budget reminds us of all the partners who have committed their time, money and energy to work with us to see a particular project through to the very end. Much like a spring flower emerges from a tiny bud, a completed grant application is the blossoming of an idea that was nurtured and fed until it matured into a fully formed, viable plan.

Not all applications will ultimately get funded, of course. But the purpose and goal of that project continue to lie dormant and, with further refinement, will be able to re-emerge at another time. So, for those of you who have just as much indoor prep and planning activities as outdoor planting activities to work on this Spring, I hope you find renewed energy and excitement as you work diligently towards feeding and nurturing those buds!

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

Mark Your Calendar with these Upcoming Events!

LWC 20th (+1) Anniversary Celebration



When: May 14 @ 1 - 4pm
Where: Emerson Vineyards

On January 24, 2021, we marked the 20th anniversary of the LWC. But we had to delay celebrating with you last year because of the upsurge of COVID-19 cases due to the Delta variant. This year, however, we are ready and excited to celebrate 20 (+1) years of partnership with our watershed community! You can get more details and RSVP at www.LuckiamuteLWC.org/20th-anniversary-celebration

Spring Bird Walk, Ethnobotany Walk, Sips 'n' Sites at LSNA

When: Spring 2022 (stay tuned for details!)



We are planning some terrific outdoor events in the coming months, and we can't wait to tell you all about them! A date for our annual Spring Bird Walk at J2E Tree Farm is being coordinated, as well as an Ethnobotany Walk with Greg Archuleta in Soap Creek Valley. Finally, we will be having a Sips 'n' Sites tour at Luckiamute State Natural Area to show the progress of our 10-year old floodplain forest restoration area, as well as the 158,000 young trees and shrubs that were just planted at the [Phase V restoration site](#). Afterwards, we'll meet up at a local winery for some 'sips' to round out the afternoon.

One way we thank our Friends of the LWC for their support is early registration for limited capacity events, so check your inbox soon for an early-bird invitation to all of these events!

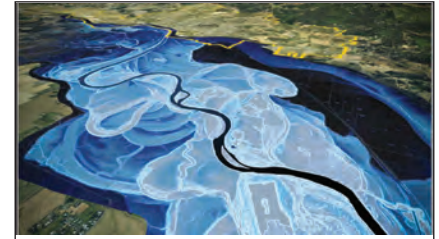
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Watershed Notes

Thinking Like a River

If you were asked to close your eyes and imagine a river, what imagery would arise? For those of us who grew up immersed in modern Western society and culture, our minds would most likely conjure a singular channel winding its way through a landscape with water constantly flowing in a single direction. Yet, before our waterways were drastically altered by settlement, industrialization and development, this is not how a typical river would have behaved.

A river is made up of countless living and non-living components that are always interacting and reshaping each other in new ways. A river includes more than its main channel – it also encompasses a vast hidden network of underground channels; surface meanders that transform over time; and a floodplain that remains intricately connected with the main channel even when it appears 'dry'. Like any natural process, the shaping of rivers is a dynamic and often unpredictable process.



Thanks to LIDAR and aerial ortho-photography, the Willamette and its former channels near Corvallis are clearly visible in this image by Daniel Coe. 2010 Oregon Dept. of Geology and Mineral Industries.



Severe streambank erosion at Riverview Park is the result of a long history of alterations in the shape, structure and function of Ash Creek.

Suppressed or hidden from view by human design and engineering, natural river shaping processes are often not noticeable to the casual observer for many decades or even centuries, until – sometimes in the blink of an eye – the river suddenly transforms. At Riverview Park in Independence, the change in this particular segment of Ash Creek seemed to happen overnight after the torrential rains and flooding we experienced in early January. In reality, however, this seemingly sudden change is a result of long-term, systemic transformation in the Ash Creek watershed due to a wide array of factors.

Two hundred years ago, a person standing in this same location would have found themselves gazing out over a sprawling marshy area, surrounded by sedges, rushes, cattails and trees like willow, ash and alder. Taking a step forward, their boots would have sunk deep in the marshy soil with a squelch. Small rivulets would have criss-crossed the area, and ducks, frogs, turtles, fish, beaver and other wetland-dependent wildlife would have been plentiful. During a significant rain event, the increased amount of water would have been dispersed over the entire width of the floodplain, greatly reducing its rate of flow and erosive power.

With the arrival of European-American settlers and other migrants to this area, Ash Creek was dredged and channelized for farming, logging, housing and urban development, leading to a deeper and straightened channel. To reduce local flooding and increase drainage, systems were built to deliver runoff to the creek as efficiently as possible. As a result, significant rain events now fill up these channels quickly and suddenly, causing a fire hose effect and increased stream power. Upstream, the loss of riparian vegetation, tiled farm fields, drained wetlands, and increased impervious surfaces have all resulted in the increased rate and volume of stormwater delivered to Ash Creek, which creates flashy and powerful flows that are highly erosive. It's predicted that this type of event will become increasingly frequent and severe with climate change and more intense winter rains.



This view of a freshwater marsh at Killin Wetlands Nature Park in Banks gives us an idea of how Ash Creek might have appeared 200 years ago.

On the scale of a small watershed like Ash Creek, there is great potential for benefit if coordinated efforts are made among our cities, Ash Creek Water Control District, the LWC, local businesses and community members. In the long term, stormwater management on a watershed scale is needed, with an emphasis on low-impact development (i.e. constructed wetlands and rain gardens) to increase water retention throughout the system and slow delivery of water to Ash Creek. There are limited options to address severe erosion like we are seeing at Riverview Park — a culmination of decades of impact arising from many sources. While not a cure-all, healthy riparian (streamside) zones with mature native trees and shrubs can help strengthen and improve streambank stability at many other locations along the creek.

According to Kalapuyan world view, all elements of a river community are inextricably woven together, with no distinction between the plants, animals, soils, water and humans that co-exist here. When we make decisions about how to restore and protect Ash Creek, we must also incorporate this way of thinking about the river. There is a role for every single one of us to play in restoring the health of our watershed and all those who call it home. **For a list of ways you can be a great watershed steward, visit our website at www.luckiamutelwc.org/watershed-steward.**