In-stream restoration: A beautiful mess

BY CHARLOTTE HYDE AND LUKE WIMMER

What does a restored ecosystem look like? Sometimes, it might look a bit messier than you would think. Take a moment to visualize a healthy stream. Is it just one straight channel, or does it twist and turn? Is it clear of debris, or are there some logs in the channel? If the stream you have conjured is winding, braided, and littered with woody debris, it is an excellent habitat for salmon, steelhead, and other aquatic organisms.

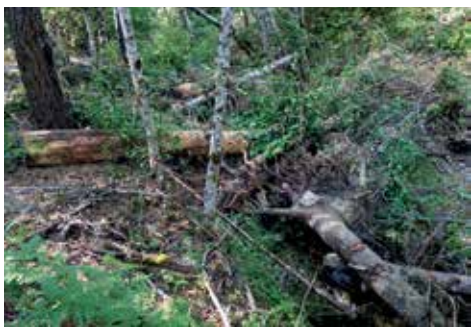
A salient example of messy but effective restoration is the Applegate Partnership and Watershed Council's (APWC) West Fork Evans Large Woody Debris and Tributaries Enhancement Project, which has sought to improve habitat quality for endangered fish in a high-priority area of the Rogue watershed for a decade. Evans Creek and its tributaries are home to populations of federally protected coho salmon, as well as Chinook salmon, steelhead, and Pacific lamprey. These populations, along with scores of others who rear and spawn in Western rivers, have long suffered from historical land-management regimes that have left their streams warm, shallow, disconnected, and largely degraded.

For over a century, people have straightened, dredged, and cleared streams for transportation, irrigation, and flood-risk reduction. However, when combined with extensive damming, the introduction of invasive species, and the loss of valuable riparian areas, this paradigm has resulted in river systems that are far removed from their original states.

Large-scale in-stream restoration is a tall order. One way to improve fish habitat is through the introduction of large woody debris. True to its name, large woody debris (LWD) refers to large pieces of dead wood that, prior to human interference, commonly littered western rivers. When placed in-stream, woody debris creates the structural complexity needed to support fish habitat.

LWD plays a crucial role in stream ecosystems by altering the trajectory of a stream's high and low flows. During high flows, water pummeling against LWD scours the sediment underneath, creating deep, slow-moving scour pools. These gravelly pool tails make ideal winter sites for salmon to build their redds and lay eggs. In summer, juvenile salmon use these pools to feed, grow, and prepare for their long out-migration to the ocean.

LWD helps slow the flow of water, making it easier for adult fish to move upstream and for juveniles to rear while conserving their energy. In restoration projects, LWD is often spread across the floodplain to slow water and reduce erosion during high-water events. By providing shaded areas and creating deep water pockets, LWD also helps decrease water temperature, benefiting cold-water species. Finally, LWD provides hiding places for fish, offering refuge from predators and enhancing their overall habitat.



A recently installed LWD structure in Cold Creek illustrates the messiness of stream restoration. Photo: Luke Wimmer.

One year later an LWD structure on Salt Creek is settling into the ecosystem and forming valuable fish habitat. Photo: Luke Wimmer.

The final phase of the West Fork Evans Creek Tributaries Enhancement Project, the culmination of a decade of planning and labor, was completed this month. Over 10 miles of stream were restored with 192 LWD structures containing over 1,100 individual pieces of wood. These logs were harvested from the Obenchain fire, other burned areas, and nearby locations onsite. Placements were completed by Benchwood LLC, a local contractor specializing in riparian restoration. Our partners in this project include the Medford District Bureau of Land Management, Lone Rock Resources, and Silver Butte Timber Company. Both projects were made possible through funding from the Oregon Watershed Enhancement Board, Wild Salmon Center, and a Bureau of Land Management Title II Grant.

If you walk by the most recent installation, it might look chaotic (pictured). A mass of fallen branches and tire tracks from installation do not exactly evoke a pristine ecosystem. However, as the LWD settles into the system, its impacts will start to manifest. After a year, you'll see pools, riffles, and channels beginning to form, creating resilient and supportive fish habitat (pictured). Projects like these help us work with the natural processes of our rivers rather than against them. In doing so, we can support the recovery of the fish who exemplify our region.

If you have questions about this and other LWD projects, contact Luke Wimmer, aquatic restoration program director, at luke@apwc.info.

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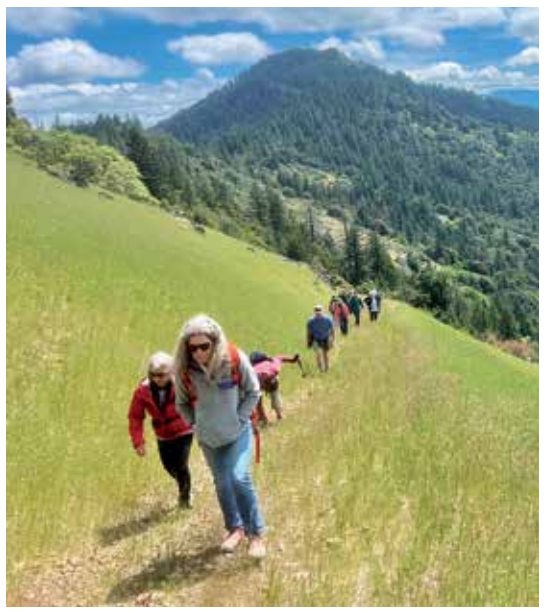
The Tallowbox Trail officially opened to the public; BLM is nonresponsive to requests for construction of the already approved Wellington Mine Trail.

A tale of two trails

BY MARTY PAULE

Applegate Siskiyou Alliance (ASA) has been working to approve, build, and maintain new nonmotorized trails on public lands in the Applegate Valley. This includes both the Tallowbox Trail, which was recently opened to the public on Bureau of Land Management (BLM) lands, and the Wellington Mine Trail, which the BLM approved in the 2016 Resource Management Plan (RMP) and ASA has proposed for trail construction. Yet, despite significant support for the Wellington Mine Trail, previous authorizations for trail construction, and numerous email requests for BLM to collaborate with the public toward trail construction, trail opening, and implementation of the 2016 RMP, the BLM has created a tale of two trails—one open to the public and benefiting residents in the region, the other already approved, but ignored by BLM and not benefiting the public as intended.



Hikers at the Tallowbox Trail grand opening about one mile from the upper Tallowbox Trailhead in the mountains above Cantrall Buckley Park.

Tallowbox Trail

After years securing authorization from the Medford District BLM and months building the Tallowbox Trail, ASA officially opened the trail to the public this past June. Traversing the Burton-Ninemile Lands with Wilderness Characteristics (LWC), the Tallowbox Trail is the only public hiking trail in the 6,103-acre roadless area. The LWC extends from Star Gulch up the southern flank of Tallowbox Mountain, Baldy Mountain, and Burton Butte. It also includes significant mature and old-growth forest at the headwaters of Ninemile Creek on the Thompson Creek side of the ridgeline. The area supports beautiful flower-filled prairies on the most exposed slopes, rare plant populations, patches of live oak woodland, deciduous oak groves, madrone forest, chaparral, and mature or old-growth mixed-conifer forest in drainages, on north-facing slopes, on Deadman Gulch, and in the headwaters of Ninemile Creek.

Built by local volunteers in the Applegate Valley and by professional trail builders hired by ASA with a small grant from the Ashland Food Co-op, the trail was completed this past spring. Rustic trail signs were made by a local carpenter and posted in May, and ASA held a grand opening on May 19. Residents and hikers from around the region joined us to hike the upper trail to the summit of Tallowbox Mountain, enjoying big vistas and colorful flower displays.

Now that the trail is open to the public and adding significantly to our nonmotorized trail network, we would like to thank Jameson Whitehead, of BLM's recreation staff, for working with us toward trail construction. We would also like to thank the Ashland Food Co-op for funding the more technical sections of trail construction through their Community Grants Program; our wonderful trail volunteers; John MacKenzie, for the construction of trail signs; and professional trail construction services from Josh Weber at Green Path Landworks.

For more information, maps, and a detailed description of the trail, visit applegatesiskiyoualliance.org/tallowbox-trail-now-open-to-the-public.

Wellington Mine Trail

In the 2016 RMP, the BLM approved the Wellington Mine Trail as an extensive recreation management area and nonmotorized trail, allowing for a new "nonmotorized trail opportunity with access to lands with wilderness characteristics in a backcountry setting." The area was identified as closed to off-highway vehicle (OHV) use in the 2016 RMP Extensive Recreation Management Area Framework and, due to its unique attributes, was determined to have the "potential to draw local and regional visitors seeking nonmotorized trail opportunities."

This past March, ASA and the Wellington Wildlands Council submitted a letter to the BLM, signed by nine nonprofit conservation and trail organizations, eight local businesses, and numerous individuals requesting a meeting with BLM to discuss collaboration toward opening this already approved trail to the public and implementing their 2016 RMP. We also submitted a petition signed by 142 local and regional residents pledging support for the Wellington Mine Trail. Yet, after numerous follow-up emails and requests to meet, the BLM has failed to respond and work with the public toward implementation of an already approved nonmotorized trail.

Currently in this tale of two trails, one trail is benefiting the public, while the other's benefit remains unrealized. Community members and organizations are ready to collaborate toward the opening of the Wellington Mine Trail; we only ask that BLM come to the table.

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