

Putting Traditional Ecological Knowledge back into the Long Tom Watershed: Improving Dialog and Understanding

For an estimated 8-11,000 years native people have tended prairie and oak habitats in the Willamette Valley, using fire to maintain open conditions and nurture habitats that support hundreds of plant and animal species, many of which hold cultural importance as food, medicine, tools, weaving and home materials, decorations, essences for storytelling, and more. Prior to European settlement, approximately two million acres of prairie and oak habitat and 25,000 Kalapuyan people in 19 tribes and bands existed in the Willamette Valley (Christy and Alverson 2010; Lewis 2016). During the past 160 years, tribes have been isolated from cultural lands and practices. Residential and agricultural development has replaced and fragmented prairie and oak habitats, and the cessation of regular fires has allowed woody vegetation to encroach, establish, and suppress native species. Combined with invasive species introductions and rising global temperature, these changes have resulted in an extensive loss of land access, cultural practices, and knowledge for native people, and habitat for native plants and wildlife. Today, less than one percent of prairie and oak savanna, and less than five percent of oak woodland habitat remains in the Willamette Valley (Christy and Alverson, 2010; ODFW 2016), and a growing number of associated species are increasingly rare or threatened/endangered. The majority of remaining oak and prairie habitat, as much as 98 percent, exists on private land. Only a small percent is managed for conservation (Floberg et al. 2004). A smaller percent still is managed with traditional knowledge and cultural practices, including burning and harvesting plant materials.

Within the Willamette Valley, the Long Tom Watershed is considered an anchor area for remnant oak and prairie habitat. Since 2004, the LTWC has been working to restore and steward oak and prairie habitat on public and private lands. We're now active on more than 1,150 acres. Collectively, Rivers to Ridges Partnership organizations, which include LTWC, are working to restore and steward more than 15,000 acres of oak and prairie habitat in the Long Tom Watershed, primarily along Eugene's south ridgeline through the West Eugene Wetlands and around and north of Fern Ridge Reservoir. Among private and public landowners, and restoration practitioners, potential and interest exists to restore or protect additional acres and create habitat corridors across private and public lands that support viable populations of native species.

While our habitat restoration and stewardship efforts are based on current scientific principles and best practices, we acknowledge the need for more effective oak and prairie habitat restoration and long-term stewardship. We believe in pairing traditional ecological knowledge with current restoration models and sustainability plans to improve oak and prairie habitat. Interest and need exist to engage native people in plant harvesting, ecological burning, restoration planning, plant species selection, and knowledge sharing to inform and improve oak and prairie habitat restoration and stewardship, and to increase land access opportunities for native people. Private and public landowners have expressed to LTWC their interest in partnering with tribes and in welcoming native people to harvest plant materials. Yet, need exists also to create dialogue among tribes, tribal staff, restoration practitioners, and landowners to be able to pair traditional ecological knowledge with science in habitat restoration planning, action, and long-term tending and stewardship. And a mechanism is needed to establish formal relationships among tribes and landowners to facilitate long-term land access for cultural

purposes and land management practices that support it. LTWC has a long history of facilitating dialogue among diverse perspectives. We see an opportunity to help improve oak and prairie habitat health and land access for native people by facilitating meaningful dialogue and relationships through the proposed project.

The proposed project seeks to address the unmet need of incorporating traditional ecological knowledge by way of tribal participation into oak and prairie habitat restoration and stewardship in the Long Tom Watershed. We believe addressing this unmet need has potential to increase land access for tribes and improve current habitat restoration practices. We intend to explore opportunities to incorporate traditional knowledge and increase land access for native people through meaningful two-way dialogue and collaborative problem solving with committed and interested landowners. The proposed project will include one-on-one interviews with area tribal members and staff, public and private landowners, and restoration practitioners to improve our understanding of existing challenges to knowledge incorporation and land access, strengthen relationships between LTWC and area tribes, and frame workshops. The workshops will focus on incorporating traditional ecological knowledge into active oak and prairie habitat restoration and stewardship. We will hold workshops on the Andrew Reasoner Wildlife Preserve, a 293-acre private property that supports mixed species woodlands, savanna, and upland prairie (held in a conservation easement by McKenzie River Trust); another workshop will be held at Zumwalt Park, a 74-acre public property that supports oak, prairie, and conifer woodland habitat managed by Lane County and the Friends of Zumwalt Park.

Lane County and the Friends of Zumwalt Park are interested in improving the quality of remnant savanna and prairie in the park. LTWC received an OWEB restoration grant to work with the landowners on the Andrew Reasoner Wildlife Preserve to restore 65 acres of open oak woodland, 15 acres of oak savanna, and enhance 20 acres of prairie remnants which support great native plant diversity. The restoration project is starting in 2017, and the landowners have interest in engaging tribal members on the property. The insight and knowledge shared during the interviews and workshops will inform development of a formal agreement to enable long-term tribal access on the two sites. A summary report will capture the project's efforts. Six tribal youth will receive stipends to help with the interviews, workshops, and final summary report to gain experience in habitat stewardship, which combines traditional ecological knowledge with restoration science. We hope the conversations held and ideas shared and captured inform a model relationship/agreement that is transferable to other private and public lands to increase tribal land access and engagement in habitat stewardship. As a result of the project, we hope other community organizations engaged in oak and prairie habitat restoration identify involvement of native people as a priority in their work.