Project in Stinkingwater Mountains Attempts to Make the Area Less Prone to Wildfires

Harney County Wildfire Collaborative looks to unite agencies and landowners with common goals

By Lauren Brown
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Each summer, the wildfires in the west dominate the news. This summer, Oregon was home to the largest wildfire in the country as the lightning-caused Bootleg fire ignited on July 6 and raged in Southern Oregon well into August burning more than 400,000 acres with 100% containment achieved by August 15. Likewise, the Stinkingwater Mountains east of Burns have had their fair share of destructive fires. The area comprises more than 300,000 acres. About 100,000 acres of it burned most recently in the 2014 Buzzard Complex Fire, and the area has recently become the site of a project designed to prevent or mitigate the effects of catastrophic megafires.

The Harney County Wildfire Collaborative, a collaborative of the High Desert Partnership, chose the Stinkingwater Mountains as the site of its next project because it has a sagebrush rangeland landscape that provides both forage for livestock and key habitat for wildlife including elk, mule deer and sage grouse. Another reason for choosing the area was the mix of public and private ownership.

The area faces multiple fire management issues that include invasive juniper on 60,000 acres and invasive annual grass infestations on 115,000 acres. Annual grass infestations create high fine fuel continuity and increase the probability of wildfire ignition and rapid spread while juniper fuels are “heavy fuels” that make suppression difficult and create very intense fires that result in high understory plant mortality.

Autumn Muir was one of the original members of the Harney County Wildfire Collaborative when it formed in 2014. She lived and worked in Harney County for 10 years and worked as a wildlife biologist for the Oregon Department of Fish and Wildlife. She now works for the Lake County Umbrella Watershed Council as the Uplands Coordinator and was recently contracted to act as the facilitator for the Stinkingwaters subcommittee through the collaborative and the High Desert Partnership. “There are various simultaneous projects ongoing and planned within the project area,” Muir said. “Annual grass treatments (chemical and biological) winter grazing, riparian restoration, road improvements, water source repairs, seeding, juniper thinning, cross fencing for better rotational grazing opportunities, feral horse gathers, fuels condition fire risk monitoring,

fuel break modeling, education and outreach and discussions about utilizing new decision support tools such as PODs (Potential wildland fire Operations Delineations) to help inform project planning, priorities and implementation."

The goal for the short term is to decrease the abundance of annual grass and juniper trees, increase the abundance of large perennial bunchgrass and determine where the most effective fuel breaks should be placed.

Targeting Medusahead

Some of the areas that have previously burned in the Stinkingwaters have become infested with Medusahead, an invasive annual grass that creates a fine fuel that ignites easily. It grows in a continuous mat along the landscape and can carry fire efficiently when ignited. Areas with a lot of Medusahead are susceptible to more frequent fires that can be large and severe.

Bill Dragt, a Supervisory Natural Resource Specialist with the Three Rivers field office of the Bureau of Land Management, said treating the Medusahead on the east side of the Stinkingwater Mountains is a primary focus. The BLM has conducted large spray projects of more than 130,000 acres, treating the Medusahead with the herbicide Plateau.

Dragt said the BLM is also utilizing winter grazing of Medusahead, which germinates in the fall if there is enough precipitation. When it is young and tender, the cows will seek out the Medusahead, which at that point, is a more palatable feed than the perennial bunch grasses, which are coarser. Dragt said one permittee has been winter grazing the Medusahead since 2012 and has been pleased with the result. "However, we still get a new crop of Medusahead every summer so it will be long-term management," he said.

Pictured: Medusahead, an invasive annual grass.

Zola Ryan, District Conservationist with the Natural Resource Conservation Service in Hines, said the NRCS is working with the Harney County Cooperative Weed Management Area and the Harney Soil and Water Conservation District on a project called the Stinkingwater Medusahead Management Plan. Some of the areas they have identified for treatment also happen to overlap with the Harney County Wildfire Collaborative's project area. Ryan said the NRCS has divided the area into five phases, and they will work their way through each area, one at a time. "The goal is really to do our best to contain the Medusahead infestation that's there," Ryan said. In 2018, the project received funding for more than $800,000 and was intended to specifically develop contracts with local landowners in the Stinkingwaters area to treat Medusahead.

In the Phase 1 Beaver Tables area of the project, 7,500 acres of Medusahead were identified for treatment on private land. "We have contracted to provide financial assistance on about 6,400 acres of private land in that area, so we've got about 85 percent of the infestation on private lands in that area being treated," Ryan said.

When NRCS works with a landowner, they contract with them to spray the weeds multiple times over the course of three years to try and deplete the Medusahead seed bank. The NRCS also contracts with landowners to seed areas with perennial bunchgrass to keep weeds from coming back. "We can provide some incentive payments as well to help the landowners with keeping livestock off those seedings for a couple of years to let that seeding become established," Ryan said.

As they move into the Phase 2 Crane-Buchanan area of the project, Ryan said about 9,700 acres have been identified for treatment. "We've just started working there, so right now we've contracted treatment on 600 acres," Ryan said.

Private landowners in the Stinkingwaters area who are interested in financial assistance for treating the Medusahead on their property can contact Ryan at the Hines NRCS office, 541-573-6446 ext. 107, for more information on the project.

The Oregon Department of Fish and Wildlife also plans to treat Medusahead in the Riverside wildlife area, said Tom Segal, a biologist with ODFW. He said they plan to treat 3,700 acres this fall and are coordinating with the BLM on the project. They plan to treat the area with an herbicide called Open Range G that is used to treat Medusahead and cheatgrass. "It's different from your regular liquid spray herbicide in that it's actually sand – the herbicide is affixed to sand particles. What that does is allow that herbicide to get down below the shrub canopy," he said. "We tried it last year and had some success. We're excited to try it again this year."

Planning and monitoring

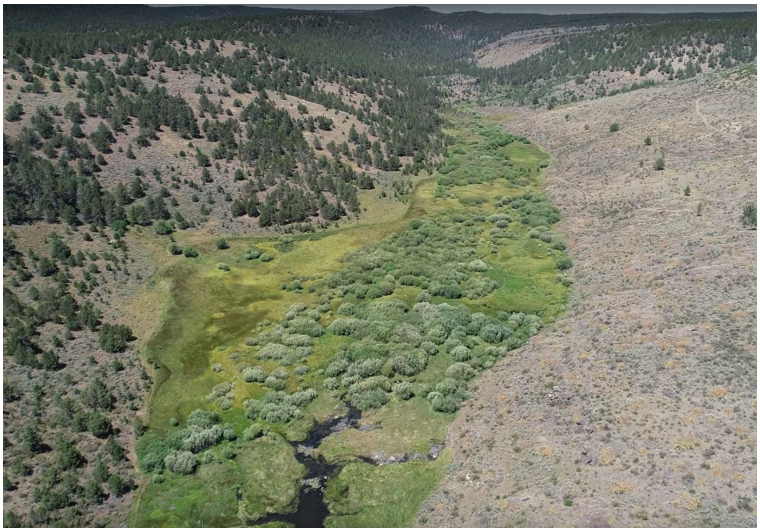
This summer, the Harney County Wildfire Collaborative has a crew conducting assessment surveys of high priority roads within the Stinkingwaters project area. Dustin Johnson, a High Desert Partnership board member and Harney County Wildfire Collaborative partner, said that in order to prioritize which areas in the Stinkingwater Mountains the collaborative will focus on, the land is being categorized into Potential Operations Delineations or PODs. The vegetation, wildlife and infrastructure within the POD will determine its ranking and how to prioritize protecting the POD from wildfire.

Pictured above: Two members of the Harney County Wildfire Collaborative monitoring crew, Megan Ellibee and Danika Piotrowski at work in the Stinkingwater Mountains region.

The PODs are connected via roads or Potential Control Locations (PCLs) that were identified by firefighting experts at the BLM. "Those are the locations on the landscape where firefighters think that they stand a pretty good chance at stopping a fire, so they can get suppression equipment into those locations somewhat efficiently," Johnson said.

This summer a crew has been traveling the PCLs and assessing the vegetation and condition of the PCLs. This will help project leaders determine which PCLs will need to be targeted for maintenance to serve as effective fire breaks in the event of a wildfire. "This will probably be a multi-year endeavor, and we're hoping that as we gather information, it can be used to point to areas that might need some attention," Johnson said.

Riparian restoration



The long-term goal of the wildfire collaborative's Stinkingwater Mountains project is to create a landscape that provides livestock forage and wildlife habitat, is resilient to the effects of wildfire, and contains fuel loading amounts, types, and patterns that are favorable to suppression efforts and result in smaller, more frequent fires.

Pictured: The Alder Creek Restoration Project landscape and the restoration result of an increased water table.

While that goal may seem distant at this point, there are glimmers of hope. The BLM's Alder Creek Restoration Project in the Stinkingwater Mountains won national acclaim in April 2020 when the Western Division of the American Fisheries Society gave the project it's Riparian Challenge Award.

The project started in 2015. Phase one involved the reconstruction of the Alder Creek 35 acre wet meadow, while phase two repaired the riparian area above the meadow. Phase three of the project was juniper control and about 75 acres of juniper trees were cut in adjacent aspen and mountain mahogany stands. Then, 319 acres of junipers were cut on the ridge east of Alder Creek. This created a 5.5 mile fuel break.

Pictured: An enhanced Beaver pond that is deep enough to use in the event of a wildfire.

Dragt said that, while the project as a whole was not a traditional fuel break, it does create a big wet spot in the middle of juniper encroachment, and the beaver pond that was enhanced is deep enough to dip out of in the event of a wildfire.

Jeff Rose, District Manager for the Bureau of Land Management in Burns, said it's all part of trying to figure out how to improve riparian health throughout that system. He noted that the Stinkingwaters have a lot of different land uses and values, and that he believes the collaborative will help figure out the best way to unify and move from what appears to be random acts of restoration to a more planned, strategic approach to achieving the goals. "If we're doing the smart thing now, then good on us and we'll continue to do it. But if it goes the way I feel like it's going to go, we'll be able to make some better land use decisions and coordinate and leverage efforts," he said. "It doesn't mean we have to work on projects together, but we want to be working next to each other or implementing things that actually help support what somebody else is doing someplace else," he said.

Muir sees the work of the wildfire collaborative as a way to proactively mitigate megafires in the Stinkingwaters area. "The invasive weeds and other ecological issues that face the Stinkingwaters project area are not going to solve themselves. We must unite to work together to slow the conversion of native grasses to annual grasses and reduce the risks of future wildfires. With strategic and collaborative efforts, we hope to make this landscape more resilient and resistant to megafires. Wildfire knows no boundaries, neither should our restoration efforts," she said.

This article is provided by High Desert Partnership; a Harney County nonprofit convening and supporting six collaboratives including the Harney County Wildlife Collaborative.

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