



HARNEY COUNTY
Wildfire
COLLABORATIVE

STRATEGIC ACTION PLAN | JUNE 2023

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Harney County Wildfire Collaborative is a collaborative working group convened and supported by High Desert Partnership.

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PURPOSE OF THIS DOCUMENT

This Strategic Action Plan articulates the long-term vision and shared goals of the Harney County Wildfire Collaborative (HCWC) partners, and describes the HCWC, our mission and vision, how we function, and our strategic approach. This Plan provides long-term, overarching guidance for partners whose work aligns with and contributes to this large-scale effort, a starting point for coordinating with other partners with similar interests, and a group of collaborators who can, together, enable diverse actions to achieve our shared vision of Harney County's landscapes. HCWC partners are empowered and enabled to initiate and carry out diverse projects that contribute to our shared vision and goals, many of which are planned, implemented and shared by the appropriate subcommittees.



HARNEY COUNTY *Wildfire* COLLABORATIVE

This and other relevant documents produced by the Harney County Wildfire Collaborative, its partners and subcommittees are available on our website:

HarneyWildfireCollaborative.org

VISION

We envision a range of public and private partners collaborating to strategically reduce the potential for and the impact of catastrophic wildfires* and to build resilient landscapes in Harney County that preserve and enhance their social, economic and ecological values for posterity.

*Catastrophic wildfires are fires that, due to their size, severity, location, rate of spread or other characteristics, have serious negative impacts on the social, economic and ecological values across the landscape.

MISSION

The mission of the Harney County Wildfire Collaborative is to (a) encourage data collection and knowledge sharing so that sound science informs partners' management decisions, (b) foster enabling conditions, including financial, procedural, economic, social, and communications to empower partners' actions, and (c) enable coordination that promotes collective action towards achieving a shared vision.

THE HARNEY COUNTY WILDFIRE COLLABORATIVE

The Harney County Wildfire Collaborative (HCWC) was formed in December 2014, when a core team with varied interests came together in response to the impacts seen across Harney County from four large wildfires—the Long Draw, Miller Homestead, Holloway and Buzzard Complex fires—which together burned over 1.5 million acres of sagebrush steppe in Harney County. These initial partners, representing federal management and research agencies (Bureau of Land Management, US Fish and Wildlife Service, USDA Agricultural Research Service), non-governmental organizations (The Nature Conservancy), Harney County government, local Rangeland Fire Protection Associations (RFPA), and ranchers, agreed that collaboration was a critical element to addressing the threat of catastrophic wildfires and their impacts in the county and that collaborative efforts would focus on suppression, prevention and restoration.

- **Suppression** is the communication, coordination and integration of actions taken to put fires out in both initial attack and extended attack.
- **Prevention** includes actions to reduce fire risk by minimizing the potential incident and impacts of catastrophic wildfires.
- **Restoration** is defined as establishing and maintaining resilient plant communities that will reduce the risk of catastrophic wildfires.

Collaborative efforts on suppression, prevention and restoration do not run sequentially and some degree of overlap and concurrence is expected.

THE FOCUS OF THE HCWC: HARNEY COUNTY

The Burns Paiute Tribe – A Brief History

Copied from [About The Tribe](#) with permission from Tribal staff

“The Burns Paiute Reservation is located in rural eastern Oregon. The Burns Paiute Tribe is primarily comprised of the descendants of the Wadatika Band of Northern Paiutes. The traditional homelands of the Burns Paiute include 5250 square miles of land in central-southeastern Oregon, Northern Nevada, northwestern California and western Idaho. The Burns Paiute still maintain aboriginal title to much of our aboriginal territory. The Tribe currently has 402 enrolled members of which 142 people call the Reservation their home. We are a relatively “young” community with over 50% of our population being under the age of 18.

Our history is both tragic and inspiring to living tribal members. We are the last truly free people in Oregon. Our ancestors resisted encroachment of settlers, refused to cede any of our lands, and fought to preserve our traditional life ways. Because of ancestors’ resistance to Euro-America intrusion in our extermination campaigns against our people. A treaty of “Peace and Friendship” was eventually signed, but never ratified. An Executive Order Reservation was established setting aside 1.8 million acres for our people in 1869 but the Malheur Reservation was short-lived. An uprising to the east, the Bannock War, came to our homeland and when our people abandoned the Malheur Reservation to escape further conflict, a heavy price was paid. After the “war,” our surviving ancestors were forcibly marched over 300 miles in knee-deep snow to Fort Simcoe and Fort Vancouver in Washington State. After a time, our ancestors began sneaking away from the forts. After five years, those remaining at the forts were given the option to leave. Those Wadatika who returned to the Harney Valley found that the tribe was now landless. In our absence, our Malheur Reservation was returned to “Public Domain.” A makeshift tribal encampment was established on the outskirts of the town of Burns, Oregon. Since those dark days, the community has worked to improve our situation. We have purchased by the tribe and later converted to federal trust status. The purchased land is now our Reservation. We continue to work very hard to meet the needs of our people including preserving our traditional way of life as best we can.



Burns Paiute Tribe members participating in a tribal event July 2022

For numerous reasons, the tragic post-contact treatment of the Wadatika also allowed for preservation of the language and many traditional subsistence and cultural practices. Our tribal ways endured because of returning survivors lived in a tight-knit tribal encampment with very limited resources, and they relied on one another to stay alive. Our children weren’t allowed in public schools, and until the 1920’s we were basically a forgotten tribal people. When the Indian agents did come to our remote encampment to take children to boarding school, people often successfully hid their children. When a small tribal school was established in the 1920’s, attendance was ephemeral, and the Wadatika children continued to use their Paiute language outside of school hours. By the 1940’s more of our children were being sent to boarding schools and later were admitted to the public schools in the town of Burns, Oregon. A gradual shift toward increased use of English as a first language didn’t occur in earnest until the 1960’s. Many traditional cultural practices endured and are still practiced among living tribal members.

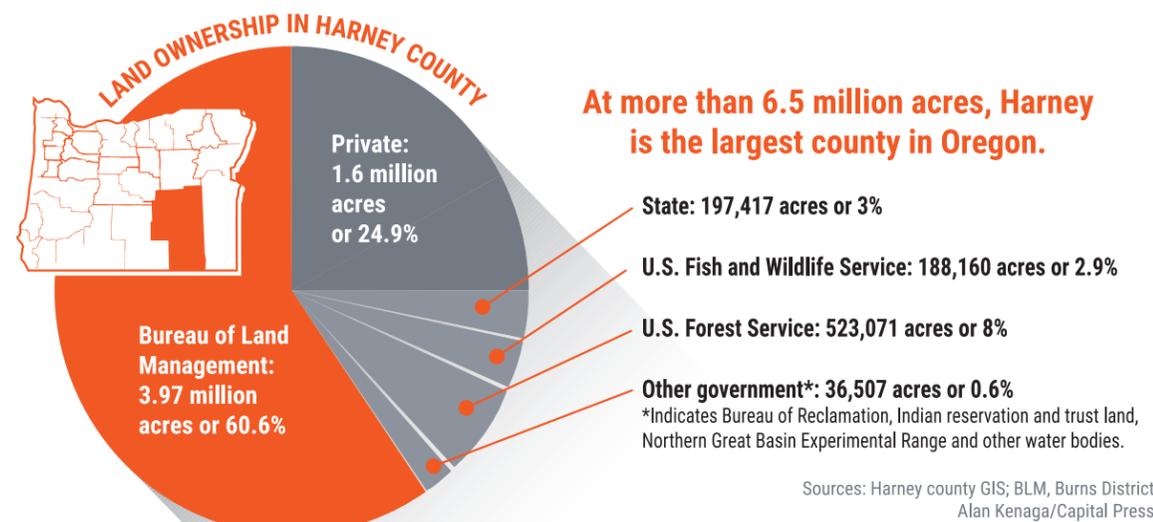
Financial resources to protect our cultural resources and preserve our heritage are scarce. Because of our limited financial resources, we only recently re-established and have been able to maintain a Culture & Heritage Department. In addition to the federally mandated cultural resource management activities on and off the reservation, the Culture & Heritage Department is tasked with seeking and acquiring resources to assure our tribal history, language, and traditional life ways are preserved and sustained. Such preservation and revitalization is of highest priority while funding for such efforts is extremely difficult to acquire.

Our elders are our most precious “cultural resource” and we want to make sure their knowledge lives on. Culture & Heritage Department activities provide opportunities to gain stronger familial and community ties with each other as we work toward the common goal of saving our culture.”

The Community

The Culture

Harney County is the tenth largest county in the U.S. in terms of land mass, at 10,226 square miles. This vast landscape is made up of 75% public lands managed by various government agencies. Harney County has a population of around 7,300 people with the median age of 46. It is a predominantly white Caucasian population (87% white and about 3% American Indian). Home ownership in the area is around 70% and the median property value is about \$112,000.



At more than 6.5 million acres, Harney is the largest county in Oregon.

HARNEY COUNTY QUICK FACTS

10th

Largest county in the United States at 10,226 square miles.

75%

Land in Harney County that is public land managed by government agencies.

7,300

Population of Harney County, many whose livelihood is tied to the land.

In High Desert Partnership's (HDP) view the culture of rural Harney County is one of self-reliance, determination, resilience, volunteerism, and taking care of each other. It is also a culture where a local landowner might say: "Oh, I've only been here 40 years or so", which is a sign of the respect given to those who come from families who have resided in the area for generations working on and caring for the land. There is a common sentiment among locals that "we can do this together" despite differences and fiercely held independence. As a community that has weathered hard times in the past, there is a resilient spirit deeply embedded in Harney County's rural culture that brings determination and optimism to new challenges. It is also a place where landowners who manage their own lands understand the choices and decisions they make have an impact on the community as a whole. It is this rural culture that has made working together such an effective tool for solving problems in Harney County. As Peter Walker shares in his book Sagebrush Collaboration, "In a nation staggering to find its center of gravity, Harney County proved the power of a community that knows how to work together."

The Economy

Among Oregon's most sparsely populated rural counties, Harney County faces common economic challenges because it is a community strongly tethered to its ranching, logging, and mining history. Developing new economic opportunities that maintain the natural balance and integrity of the landscape continues to be a major challenge. Agriculture and ranching have been a steady backbone of the local economy for generations. The expansion of groundwater irrigated agriculture has contributed to accelerated groundwater depletion that limits future growth and development. There is also a shift in generational interests where young farmers and ranchers are no longer guaranteed to take over their family business because they seek other career paths or leave the area for opportunities elsewhere.

Like so many rural Oregon communities, Harney County was once home to a booming timber industry. But rising costs, increasing regulation, and a range of other factors have completely eroded this industry over the years. The final closure of the Louisiana Pacific lumber mill in 2007 led to employment and income shortfalls for which no large-scale or single-source replacement has been found. These factors and others have led to the classification of Harney County as one of Oregon's "Top Five Distressed Counties" by Business Oregon. While the number of jobs in Oregon has grown more than 74% in the last 40 years, they have fallen significantly in Harney County, where there are 10% fewer living-wage jobs in the region now versus in 1976 (Oregon Office of Economic Analysis, 1976-2016). Harney County's unemployment rate at 13.1% is almost double the state rate of 6.8%. At the current time agriculture amounts to nearly 25-30% of the employment in the County. The Agricultural Census of 2017 shows cattle and hay production as the dominant agricultural products in the area. The public sector is a primary employer accounting for some 39% of the jobs in Harney County.

Opportunity: New Natural Resource Economy

Since 2007, there have been outstanding advances in Harney County toward implementing environmentally-sound, ecologically based ecosystem management throughout the region using a collaborative model. There also has been a shift in Harney County to embrace grassroots economic development strategies and Biz Harney Opportunity Collaborative, an economic collaborative convened by HDP, is building on this interest by intentionally developing pathways for entrepreneurs and small businesses within the natural resources restoration and conservation sector. Opportunities are ripe as Harney County is uniquely located to capitalize on the area's land-based economy and multiple collaborative efforts are coming together to solve these complex issues.

The Landscape

Modified from the **Threat-Based Land Management in the Northern Great Basin: Manager's Guide**

Harney County covers over 10,000 square miles in southeastern Oregon, and is part of the Northern Great Basin ecosystem. The climate, topography, soils and vegetation of the Northern Great Basin are complex and vary considerably. This complexity provides habitat for a wide array of wildlife, including birds, mammals, reptiles and amphibians. These lands are primarily managed for grazing livestock, hay production, and other agriculture-related uses, and also include vast open spaces largely untouched by roads or other human impacts.

Climate

In the Northern Great Basin, annual precipitation can fluctuate greatly. For example, at the Northern Great Basin Experimental Range in southeast Oregon, between 1937 and 2007 the annual precipitation ranged from less than 5 inches to more than 21 inches. Of the 70 years in that period, only about 1 year

in 4 fell within 10% of the long-term average. This fluctuation can have a major impact on plants. Annual precipitation is especially important for vegetation in dry systems like the sagebrush ecosystem, driving plant growth and biomass. Wet years may be highly productive; during dry years, plants may be dormant. This annual variability in vegetation has important implications for management concerns such as wildfire risk, and these qualities create uncertainty for land managers when it comes to choosing, implementing, and tracking management actions.

Topography and Soils

Slope, aspect, and soil conditions can differ tremendously over relatively short distances. The Northern Great Basin has a tumultuous past including volcanic activity, uplifting mountains, and glacial activity with ice dams and enormous Pleistocene lakes. The resulting geology, topography, and sediments create a complex mosaic of soils.

The Vegetation

Modified from **Threat-Based Land Management in the Northern Great Basin: Manager's Guide** and the **Sagebrush Conservation Strategy— Challenges to Sagebrush Conservation**

Large perennial bunchgrasses

Large perennial bunchgrasses are critical for the long-term sustainability of native vegetation communities because they effectively compete with annual grasses (Davies 2008, Boyd and Svejcar 2011, Davies et al. 2011). Their root masses bind soil in place and increase infiltration (Pierson et al. 2007). They also provide forage and habitat for wildlife.



Blue Bunch Wheatgrass

Primary species include Bluebunch wheatgrass (*Pseudoroegneria spicata*), Idaho fescue (*Festuca idahoensis*), Thurber's needlegrass (*Achnatherum thurberianum*), Needle and thread (*Hesperostipa comata*), Squirreltail (*Elymus elymoides*), and Indian ricegrass (*Achnatherum hymenoides*). The non-native bunchgrass Crested wheatgrass (*Agropyron cristatum*) and its allies are widespread across the northern Great Basin and fill an ecological niche similar in some ways to that of native large perennial bunchgrasses. That said, the role of crested wheatgrass should be based on specific management objectives.

Small perennial bunchgrasses

Small perennial bunchgrasses are separate from larger bunchgrass species because they fill a different ecological niche (James et al. 2008). They are characterized by relatively shallow root systems that may compete differently with invasive plant species. These grasses can dominate in harsh, shallow soil sites or where heavy and continuous grazing has reduced other bunchgrasses. In much of the northern Great Basin, the primary species is Sandberg's bluegrass (*Poa secunda*), a low-statured and early growing grass common across the western sagebrush ecosystem.

Invasive annual grasses

Invasive annual grasses can fundamentally alter vegetation communities by filling in areas where native grasses are not sufficient. This dramatically increases fire frequency and leads to a loss of sagebrush and perennial grass cover. The primary species in this group are Cheatgrass (*Bromus tectorum*), Medusahead (*Taeniatherum caput-medusae*), and Ventenata (*Ventenata dubia*), though other species are expanding in parts of the northern Great Basin. Native annual grasses are not prominent in this region.

Annual forbs

These small-statured plants have highly variable productivity, depending on yearly and site conditions. Common species include native blue-eyed Mary (*Collinsia parviflora*) and the non-native Alyssum (*Alyssum desertorum*). Some common mustard species can reach substantial heights on disturbed soils or under favorable climatic conditions. Generally, annual forbs may not have tremendous ecological impact. In some years, though, their density and cover can overwhelm perennial forbs. Large numbers of non-native species can indicate depleted understory conditions.

This category does not include larger-statured weedy species such as yellow star thistle (*Centaurea solstitialis*), which are commonly listed as noxious weeds. The best way to identify separate species within this group (for example, small-statured forbs vs. knapweeds) is for experienced managers to examine them at the site.

Perennial forbs

Perennial forbs consist of native species that often have highly variable distributions and respond with dramatic variation in production (cover, density, size, etc.) annually based on growing conditions. At a given site, this group typically includes more species than the other functional groups. This group also does not include noxious weed species, such as Skeletonweed (*Chondrilla juncea*), whose identification and management requires expert and local knowledge.



Invasive annual grass species Medusahead

Sagebrush and other shrubs

This group includes shrub species and subspecies. Identifying the species and subspecies of sagebrush can help determine site potential, plant community resilience, and restoration practices. Common sagebrush species and subspecies include Wyoming big sagebrush (*Artemisia tridentata* ssp. *wyomingensis*), Mountain big sagebrush (*A. tridentata* ssp. *vaseyana*), and Low sagebrush (*A. arbuscula*). Other shrub species can help identify past land use and site potential. For example, a high proportion of Rabbitbrush (*Chrysothamnus viscidiflorus*) may indicate a past disturbance, Greasewood (*Sarcobatus vermiculatus*) may indicate saline soil conditions, and low sagebrush may indicate shallow soil conditions.

Sagebrush sea in the Stinkingwater Mountains region of southeast Oregon



Juniper encroachment in the Stinkingwater Mountains region of southeast Oregon



Conifers

This group includes tree species that are encroaching on the historically treeless sagebrush ecosystem. Large and expanding populations of Western juniper (*Juniperus occidentalis*) are of major concern in the northern Great Basin, while Utah juniper (*Juniperus osteosperma*) and Pinyon pine (*Pinus* sp.) are major threats in other regions. We use the term “juniper” when discussing conifer encroachment because western juniper is the most prevalent conifer species in the northern Great Basin.

Biological Soil Crusts

Biological soil crust communities (BSCCs) occur between sparsely distributed woody plants in sagebrush ecosystems and can comprise large parts of the flora cover, particularly where herbaceous vegetation is lacking (Rutherford and others, 2017). The crusts, which are formed by algae, fungi, cyanobacteria, lichens, and bryophytes, occur in semiarid areas. They stabilize soils and increase nutrient cycling, water infiltration, and establishment of vascular plants (Root and others, 2017). With potential changes in climate—and therefore changes in fire regimes and potential invasion by plants—the species richness, abundance, and cover of BSCCs is likely to change, in turn affecting hydrological and biogeochemical functions (Rutherford and others, 2017). BSCCs require at least one to two decades to recover after fire. With potential changes in climate, and therefore fire regimes and invasion of species, BSCCs could experience multiple stresses.

The Wildlife

Modified from the Sagebrush Conservation Strategy—Challenges to Sagebrush Conservation



Sagebrush sparrow sitting in sagebrush

Birds

The sagebrush ecosystem is home to a variety of sagebrush-dependent or -associated bird species, whose vulnerability to specific threats varies based on their ecology and behavior. In general, for the sagebrush-obligate and near-obligate passerines (Brewer’s sparrow, sagebrush sparrow, sage thrasher, gray flycatcher, and green-tailed towhee), any activity that eliminates, degrades, or reduces connectivity among sagebrush patches can reduce population size and occupancy of an area. Examples of sagebrush reduction are wildfire, mechanical thinning, mowing, herbicide application, or infrastructure development.

Greater Sage-grouse depend on large areas of contiguous sagebrush to meet all seasonal habitat requirements (Connelly and others, 2011a, b; Wisdom and others, 2011) and are considered sagebrush-obligate species. Sage-grouse occur across a diversity of sagebrush plant communities across the sagebrush biome. Consequently, sage-grouse distribution is strongly correlated with the distribution of sagebrush. Threats to sage-grouse are numerous and significant, including but not limited to invasive species, altered fire regimes, energy development, free-roaming equids, and a warming climate. The most significant change agents at landscape scales include invasive plant species and the role they play in altered fire regime and conifer expansion.



Male greater sage grouse surrounded by female sage grouse



Pronghorn in the sagebrush sea

Mammals

Pronghorn and Mule Deer are large mammals that utilize sagebrush ecosystems. Pronghorn feed on a variety of forage seasonally; however, during winter, they feed primarily on sagebrush. Pronghorn migrate seasonally to maximize access to high-nutrition vegetation, improve physical condition for increased reproductive success, and respond to changing environmental conditions. Pronghorn are impacted, to some degree, by any loss or fragmentation of sagebrush and grassland habitats and increasingly face threats from anthropogenic structures and disturbances that impact seasonal habitats and migrations.

Mule Deer are considered the most important ungulate species in the West due to their social and economic benefits to many individuals and State and local economies. Mule Deer inhabit a variety of shrub communities, but sagebrush is an important part of the diet for many populations, especially during the winter. Many populations rely on the ability to migrate through sagebrush foothills, from their winter ranges in sagebrush basins to summer ranges in higher elevation forests. Migration corridors serve as key habitats (in terms of access to high-quality forage) for these herds. Key threats to mule deer populations include loss and degradation of sagebrush habitats from invasive species, altered fire regimes, or anthropogenic disturbances.



Rocky Mountain Elk in the sagebrush sea

Like Mule Deer, Elk are an important game species to local communities and economies. Elk populations are concentrated in higher elevation forests, and forest fringe habitats, but many of these populations utilize sagebrush rangelands as winter range, with some populations remaining in the lower elevation habitat year-round. Elk are more resilient to the primary ecological threats to sagebrush rangelands than Pronghorn or Mule Deer, but sagebrush makes up an important part of their diet during winter. Like Mule Deer and Pronghorn, Elk are sensitive to anthropogenic structures and disturbances that impede migration corridors.

Small mammals provide a diverse presence within the sagebrush biome, often serving key ecological functions such as seed dispersal, soil aeration (burrowing mammals), and prey. Most management actions are surmised from actions for other small mammals and include protecting habitats from loss and fragmentation. Although management to conserve intact sagebrush landscapes is presumed to benefit these species, additional research is needed to inform conservation efforts.

Reptiles and Amphibians

Amphibians and reptiles are vertebrates that are often overlooked in assessments of the importance of sagebrush ecosystems for wildlife. Given their dependence on water, few amphibians are strongly associated with sagebrush habitats, although several use these uplands for foraging, shelter, or dispersal. Of the 116 reptiles that are predicted to occur within the sagebrush biome, about 5 lizards and 5 snakes were identified as both strongly associated with sagebrush habitats and occupied areas likely to be managed for sage-grouse.

The Challenge We Face

Modified from the **Threat-Based Land Management in the Northern Great Basin: Manager's Guide**

The primary threats to intact sagebrush ecosystem function in the northern Great Basin include invasion of annual grasses, expansion of native juniper populations, and associated changes to fire regimes. Annual grass invasion, juniper encroachment, and the management challenges they present vary at different elevations. Invasion of annual grasses and their interaction with wildfire is most problematic in low- to mid-elevation Wyoming big sagebrush plant communities. Invasive annual grasses form continuous fuel beds, leading to larger, more frequent fires that can reduce or eliminate desired perennial plant species. Juniper encroachment is most problematic at higher elevations, where it has increased dramatically. Increased juniper can reduce desired perennial vegetation and negatively impact sensitive wildlife. Both threats can be found in many mid-elevation transitional communities.

Climate Change

Climate change is expected to compound the threats already affecting rangelands across Harney County. A recent review projected that the northern Great Basin will experience increased temperatures, drier summers, and more variable and unpredictable annual precipitation (Mote et al. 2013). Hotter, drier rangelands with increased wildfire risk could create new plant communities with previously unreported species composition and abundance (Polley et al. 2013). With all these potential shifts, managers will need to classify vegetation in broader categories in order to assess success.

THE PURPOSE AND FUNCTIONING OF THE HCWC

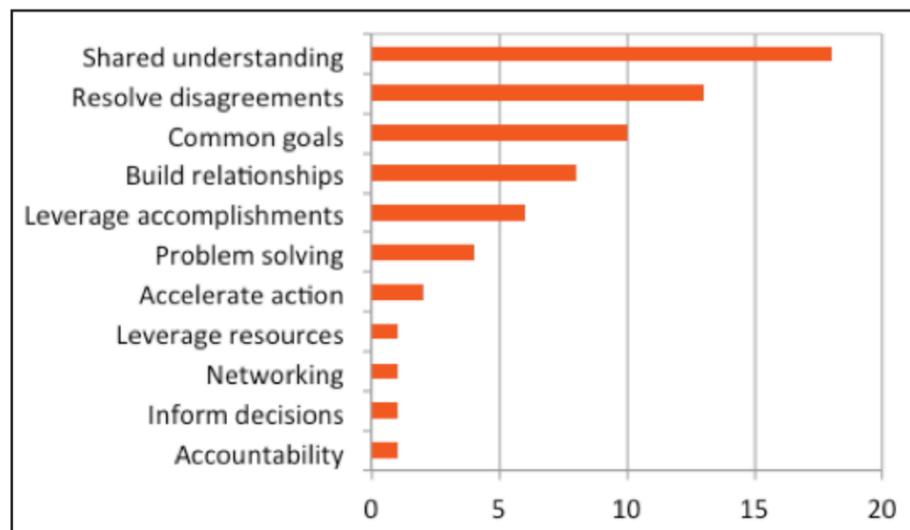
Purpose

The purpose of the Harney County Wildfire Collaborative is to provide a space for the group to reach consensus on specific, achievable, tangible and measurable steps to be taken by some or all partner entities (both public and private) to reduce the potential for and the impact of catastrophic wildfires and to build resilient landscapes in Harney County.

What We Do Together

Participants of the Harney County Wildfire Collaborative come together to:

- **Achieve a shared understanding** of the challenges and opportunities, and identify common goals;
- **Discuss options and problem-solve together**, identifying a shared path forward;
- **Build and maintain** the interpersonal and inter-organizational relationships that make collaboration possible;
- **Leverage the strengths and capacities** of different partners to accelerate progress towards our shared vision.



Responses during the May 2021 HCWC meeting to the following questions: "What does a successful Collaborative look like? What makes you say "yes, this is why we are part of this Collaborative"? What benefits do you/the entity you represent expect to get from Collaborative?"



Harney County Wildlife Collaborative participants during a field tour in the Stinkingwater Mountains July 2022

HCWC Participants

Oregon Cattlemen's Association, Harney County Landowners, Burns Paiute Tribe, North Harney Rangeland Fire Protection Association (RFPA), Frenchglen RFPA, Lone Pine RFPA, Crane RFPA, Fields/Andrews RFPA, Silver Creek RFPA, Intermountain West Joint Venture, US Fish and Wildlife Service's Divisions of Refuges and Division of Ecological Services, Oregon Natural Desert Association, Burns District of the Bureau of Land Management, Harney Soil and Water Conservation District, Harney County Cooperative Weed Management Area, Oregon Desert Land Trust, Oregon State University Extension, Eastern Oregon Agricultural Research Center (USDA Agricultural Research Service), Burns Interagency Fire Zone, Oregon Department of Fish and Wildlife, Harney County Court, EcoSource Native Seed & Restoration, Oregon Agricultural Trust, The Nature Conservancy, Pheasants Forever, Oregon Department of Forestry, USDA Natural Resource Conservation Service, Office of the State Fire Marshal, Burns Fire Department, Wildlandscapes, Harney County Watershed Council.

Representatives from all of these entities have participated in suppression, prevention, and/or restoration activities.

HCWC Structure and Roles

The core process is bringing the HCWC participants together at regularly scheduled meetings to share information and perspectives, discuss issues, problem-solve together, find common ground and make progress on our shared activities. The regular schedule is a full or half-day facilitated meeting, currently scheduled the third Tuesday of odd-numbered months in Burns.

HDP contracts a third-party facilitator to help engage, excite, coordinate, manage time, and guide the HCWC towards progressive goals they have identified. The facilitator strives to be objective and equitable in their approach.

The processes that help the HCWC make progress together are overseen by a Coordinating Committee, a small group of representative partners of the HCWC, that assists HDP and the facilitator in process development of the group's discussions. This Committee also oversees the facilitator's performance, approves agendas, and updates the HCWC's operating principles.

Subsets of HCWC Participants form part of multiple subcommittees, each established for a particular shared purpose, and may be more or less active depending on the work being carried out and the needs and capacities of its Participants. Subcommittees meet between full HCWC meetings to develop draft work products for full group review, discussion and direction.

Currently, the HCWC has 4 subcommittees:

- **Pueblos Project Subcommittee**
- **Stinkingwaters Subcommittee**
- **SOWR Project Subcommittee**
- **Communications Subcommittee**

Once a Subcommittee's purpose has been accomplished, regular or frequent meetings will cease but ongoing updates related to monitoring or adaptive management details will continue to be provided to the full HCWC as appropriate and relevant.

High Desert Partnership's Role

The High Desert Partnership convenes and manages the group's structure and operations, and functions as a neutral backbone support organization in pursuit of the HCWC's shared goals and activities. Support includes grant writing and management, coordination of collaborative projects, facilitation of the HCWC and its subcommittees, as needed, information stewardship, monitoring and assessment of HCWC priority projects, communication and outreach to HCWC participants and to citizens of Harney County.

Achieving Consensus

All issues the HCWC chooses to discuss are addressed through a consensus process and solutions will be jointly developed. Final decisions of the HCWC will be those that all parties can live with moving forward. Individual Participants of the HCWC are the agents of action in Harney County, and maintain their autonomy and authorities throughout. Agencies, non-profits, and individuals may use the information generated through the HCWC to develop actions.

THE HCWC'S SHARED GOALS

SUPPRESSION GOAL

Coordinate wildfire response across multiple jurisdictions and encourage the adoption of the **Potential Operational Delineations (POD)** framework so that all responders have an understanding of the shared values across the landscape and placement of potential control locations, where fuel conditions are more conducive to controlling wildfires.

PREVENTION GOAL

Reduce the likelihood of catastrophic wildfire across the landscape through:

- 1 Strategic restoration of sage steppe;
- 2 Implementing concepts of PODs and Potential Control Locations (PCL) where appropriate;
- 3 Early detection and rapid response to wildfires;
- 4 Ensuring effective coordination and collaboration of cooperators and landowners for increased response capacity;
- 5 Broad communication and education of seasonal wildfire risk to increase private and public awareness.

RESTORATION GOAL

Foster the ecological enabling conditions for no net fire-related loss in sagebrush and bunchgrass plant communities, as measured by elevation-specific percent changes in perennial bunchgrass cover and invasive annual grass cover, guided by resilience and resistance principles.

COORDINATION GOAL

Establish collaboration principles that enable coordinated suppression, prevention, and restoration across multiple spatial and temporal scales and that results in resilient, diverse, and effective partnerships, and a model that can be replicated throughout Harney County and beyond.

COMMUNICATION GOAL

Use a variety of communication methods to increase different levels of participation in the HCWC, especially from Harney County landowners and community members, so that all partners' values of the landscape are represented and all partners contribute to effective wildfire prevention, suppression and restoration across Harney County rangelands.

THE HCWC'S STRATEGIC APPROACH

The Harney County Wildfire Collaborative's approach is centered on bringing together public and private partners to agree on what is needed, and then enabling those partners who can make it happen, including enabling access to the knowledge—local, traditional, and scientific—that can best inform action.

We accomplish this through a step-by-step approach:

- 1 Identify the factors, challenges, issues that impact our collective ability to prevent catastrophic wildfires and create, maintain or restore resilient landscapes.
- 2 Agree on goal(s) for addressing priority challenges or issues. If challenge is site specific, continue to #3. If challenge is not site specific, skip to #6.
- 3 Define criteria for a good site to pilot approaches to achieve that goal.
- 4 Select a site that meets criteria.
- 5 Create a subcommittee to delineate and describe subunits of the site, prioritize them, and select a pilot project area. Subcommittees will be based on desired expertise and engagement is highly encouraged.
- 6 Identify and invite private and public partners to the Collaborative and coordinate partners' roles and processes. Need a process to ensure equitable workloads to prevent burnout.
- 7 Identify tools, approaches, resources and monitoring to carry out to achieve goals (outlined for the pilot project area if site specific), track progress and learn.
- 8 Implement and monitor.
- 9 Evaluate successes and failures, regularly report back to the Collaborative.
- 10 Revisit original (pilot project area) goals and within the Collaborative's overall priorities and if still relevant, identify other work that could be done to adaptively manage.
- 11 Plan how to export across Harney County and beyond to achieve Collaborative goals and incorporating or pivoting to new technologies and strategies.
- 12 Repeat selection process of different challenges and issues and identify a new pilot project area to act as representative focal landscape for testing new methods to prevent and suppress catastrophic wildfires and increase resilience in Harney County.

PROJECTS AND ACCOMPLISHMENTS

Suppression

The HCWC chose to focus initially on the obstacles to effective suppression of catastrophic wildfires. At the time, the strained relationships between the federal agencies with fire response capabilities and local Rangeland Fire Protection Associations (RFPAs) was a key issue. A critical starting point, therefore, was to build the relationships needed to underpin a cohesive firefighting response. The HCWC, therefore, worked to establish shared knowledge of current conditions, review the fire history in Harney County, and to clarify the Memorandum of Understanding between BLM and the RFPAs. They then developed creative ways to share training, communication tools, equipment, and protocols, including the establishment of a shared radio frequency where agency staff and RFPA members were able to communicate while responding to fires. These efforts resulted in new positive relationships that enabled federal and RFPA resources to work together during suppression activities. To ensure continuity of this work model, an RFPA liaison position was created within the Burns Interagency Fire Zone.

Prevention

Changes to national policy direction created an opportunity for pilot projects within the Great Basin to evaluate using targeted grazing as a fire suppression tool, as well as other treatments to limit fire spread. For the HCWC to make this opportunity a reality required identifying a pilot project area based on values the group wanted to protect, and engaging stakeholders with interests in that area.

The HCWC's efforts to identify a pilot project area focused on protecting "the best of the best," namely areas at highest risk to catastrophic wildfires, where there is highest potential for ecological change or uplift, and where there has been substantial investment in restoration. This interest was articulated into a series of pilot project criteria:

- **High level of risk of fire present at site**, based on level of fuel accumulation, probability of burning, length of time since last fire, and presence of annual grasses;
- **Potential for impact present at site**, including ability to manage for Sage-grouse habitat, ability to return to a desired state, ability to increase resilience and/or resistance, and the site's viability;
- **Enabling conditions present at site**, including availability of infrastructure (usable roads, water), willingness of permittees to participate, NEPA considerations, and multiple value propositions are present: economic, wildlife, recreation, historical, good condition native ecosystems.

The HCWC selected the Pueblo Mountain Area, and the Pueblos Subcommittee formed in May 2016. At 219,319 acres, this area was still considered too big for a pilot project, so the Subcommittee delineated seven smaller subunits. They identified values, threats, and resources for each subunit, and ranked them according to the pilot project criteria. They then developed a Pilot Project Prevention Plan, focused on (a) improving response time when a fire starts, through early detection via deploying cameras and improved road access, and (b) maintain and improve desirable ecological conditions, through facilitating outcome-based grazing, and managing vegetation (brush mowing, prescribed burning, herbicide applications, and seeding). This plan was then codified in the Pueblo Mountains Pilot Project Environmental Assessment (EA).



Bureau of Land Management employee implementing a prescribed burn in the Pueblo Mountains September 2019

Restoration

As work progressed on prevention, the HCWC agreed to take a similar approach—that of selecting a pilot project area—in focusing on restoration. They selected an already degraded site, **the Stinkingwaters Mountains Area**. The Stinkingwaters Subcommittee formed in October 2018. The Stinkingwaters included much more diverse land ownership, and again required that the HCWC engage new stakeholders. This area provided an opportunity to test out more tools and techniques to combat the devastating effects of catastrophic wildfires, and had the potential for multiple projects to occur simultaneously, coordinating with other entities’ efforts (NRCS, County Weed Board, private landowners, etc).

As in the Pueblos, the Subcommittee delineated four subunits (River-East, West, South, and North), and identified threats and issues for each subunit, as well as the landowners, permittees and community members with whom to engage in this geographic area. They carried forward a communication and outreach effort (one-on-one meetings, followed by newsletters, and workshops or RFPA meetings), and integrated comments and concerns gathered from preliminary community contacts into the recommendation to move forward focused on (a) combating invasive annuals (cheatgrass and medusahead that have come in after wildfires) and (b) reducing juniper encroachment. The intent was to address existing medusahead infestation at low elevations, and heavy fuel loads in juniper-encroached areas at high elevations. Possible tools the



View of the Stinkingwater Mountains region in southeast Oregon

Subcommittee discussed include herbicide spraying, winter grazing, and establishment of fuel breaks. Additional considerations arose and needed to be taken into account, including the need for water improvements to help move cattle strategically and to help with transition years when treatment to other fields require rest; seeding is needed where medusahead spraying has already been completed, and road improvements are needed for suppression access. Work led by HCWC partner entities continued for several years in the Stinkingwaters on both private and public lands, including water and improvements, spraying and seeding projects, and monitoring.

The Subcommittee also discussed and started planning fuel breaks, an effort informed by new available science focused on a framework of **Potential Operational Delineations (PODs)** and **Potential Control Locations (PCLs)**. HCWC partners created maps of PCLs, and identified priorities for ensuring these PCLs were functional as places where fire suppression activities could be concentrated with a higher potential for success in holding a fire. They held community meetings to discuss and refine the PCL maps, prioritized PCLs based on location relative to rangelands at risk of conversion to annual grasses and to partners’ past and ongoing vegetation treatments, and are collecting vegetation data via a roadside inventory along these PCLs to assess condition and treatment needs. The HCWC continues to develop the PCL and POD maps, and to discuss what aspects of this work could be expanded beyond the Stinkingwaters.

In 2021, as the Stinkingwaters work continued, the Oregon Legislature passed Senate Bill 762, which opened an opportunity for funding for wildfire mitigation projects. The discussions and actions in the Stinkingwaters to date meant that a key set of HCWC partners were well placed to develop and submit a collaborative, landscape scale project titled the **Southeast Oregon Wildfire Resiliency (SOWR) Project**. HDP, as a supporting entity for the HCWC, was successful in obtaining \$5 million for the SOWR project, and the SOWR Subcommittee was formed in January 2022 to coordinate its implementation. Partners have since been working together to identify and hire contractors, purchase herbicide, plan and implement aerial spraying of 68,000 acres of lands with invasive annuals, and to reduce juniper encroachment on 5003 acres in the Stinkingwaters Pilot Project Area.



A section of land in southeast Oregon receiving wildfire resilience treatments as part of the Southeast Oregon Wildfire Resiliency Project

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