

Owyhee County

COMMUNITY WILDFIRE PROTECTION PLAN

2026 Update



NORTHWEST
MANAGEMENT, INC.

Photo: Adam Echsbach/Idaho Press Tribune - Air tanker dumping retardant on Soda fire near Reynolds Creek, August 2015

ACKNOWLEDGEMENTS

This Community Wildfire Protection Plan represents the efforts and cooperation of several organizations and agencies working together to improve preparedness for wildfire events while reducing factors of risk.



Other Partners Include:

Bureau of Reclamation
Idaho Power
Murphy-Reynolds-Wilson Rural Fire Protection District
Cities of Homedale, Marsing, and Grand View
Idaho Office of Emergency Management

To obtain copies of this plan contact:

Owyhee County Clerk's Office
Angie Barkell - Owyhee County Clerk
abarkell@co.owyhee.id.us

Table of Contents

Acknowledgements	ii
Declaration of Concurrence	iii
1. Plan Overview and Planning Process.....	7
Background	7
Goals.....	7
The Planning Process.....	7
Planning Meetings	7
Public Outreach.....	8
The Planning Team	8
Plan Maintenance and Monitoring	8
2. County Description and Community Profiles.....	9
History	9
Geography and Ecology.....	9
Climate	10
Population and Demographics	11
Land Ownership	12
Economy.....	13
Communities	13
Bruneau.....	14
Givens Hot Springs	14
Grand View	15
Grasmere	15
Homedale.....	15
Indian Cove	15
Marsing	15
Murphy	15
Murphy Hot Springs	15
Oreana	16
Pleasant Valley.....	16
Reynolds Creek	16
Riddle	16
Silver City	16

Three Creek.....	16
Triangle	17
Wilson	17
Fire Protection Districts and Capacities	18
Rural Fire Districts.....	18
Rangeland Fire Protection Districts	18
3. Wildfire Risk Assessment	20
Local Event History.....	20
Megafires	23
Fires in 2025 Year to Date	24
Wildland-Urban Interface.....	25
Wildfire Hazard Assessment.....	26
Historic Fire Regime	26
Vegetation Condition Class	26
Wildfire Hazard Risk.....	27
USDA Wildfire Likelihood	28
Wildfire Suppression Difficulty Index.....	29
Landscape Risk Assessment	30
Vulnerabilities	33
Public Health	33
Economy	33
Infrastructure.....	34
Recreation.....	35
4 – Mitigation Action Items.....	36
5 – Appendices	81
Appendix 1 - Mapping Products	81
Appendix 2 - Tables	95
Appendix 3 - Documenting the Planning Process	99
Planning Meetings	99
Public Outreach.....	120
Appendix 4 – Fire District Summaries	129
Appendix 5 – Bibliography	135

1. PLAN OVERVIEW AND PLANNING PROCESS

BACKGROUND

The idea for community-based wildfire planning and prioritization is neither novel nor new. However, the incentive for communities to engage in comprehensive landscape planning and prioritization was given new and unprecedented impetus with the enactment of the Healthy Forests Restoration Act (HFRA) in 2003. This landmark legislation includes the first meaningful statutory incentives for the US Forest Service (USFS) and the Bureau of Land Management (BLM) to consider the priorities of local communities as they develop and implement wildfire mitigation projects. For a community to take full advantage of this new opportunity, it must first prepare a CWPP and update the document every 5 years in order to maintain access to associated project funds.

The process of updating the 2005 Owyhee County Community Wildfire Protection Plan (CWPP) kicked off in February 2025 with the goal of helping Owyhee County clarify and refine its priorities for the protection of life, property, and critical infrastructure in the wildland–urban interface on both public and private land. The planning process guided community members and leaders through valuable discussions regarding management options and implications for the surrounding land base. Local fire service organizations helped define issues that may place the county, communities, and/or individual homes at risk. Through the collaboration process, the CWPP planning team discussed potential solutions, funding opportunities, and regulatory concerns, and documented their resulting recommendations in the CWPP. The planning process also involved public outreach to ensure the perspectives of county residents were considered.

GOALS

As part of the 2025 CWPP update process, a set of mitigation goals were identified for Owyhee County:

- Prioritize the protection of people, structures, infrastructure, and unique ecosystems that contribute to our way of life and the sustainability of the local and regional economy
- Educate communities about the unique challenges of wildfire preparedness in the county
- Reduce the impact of wildfire and potential losses incurred by both public and private residents and entities
- Develop land use policies to alleviate potential wildfire risks and impacts for future development
- Strategically locate and plan infrastructure projects that take into consideration the impacts of wildfire

THE PLANNING PROCESS

PLANNING MEETINGS

Throughout 2025, Owyhee County and Northwest Management, Inc. (NMI) held a series of meetings to guide the concurrent updates of the County's All-Hazard Mitigation Plan (HMP) and Community Wildfire Protection Plan (CWPP). The planning effort has emphasized stakeholder engagement, inter-agency coordination, and public involvement. Discussions have focused on identifying threats and challenges associated with wildfire within the county, defining the wildland-urban interface (WUI), refining hazard mapping and fuel modeling, and incorporating local infrastructure, economic, and agricultural considerations. Throughout this process, the group compiled a list of

past, ongoing, and proposed projects in order to inform mitigation efforts and unlock potential funding. For a more detailed record of meetings, refer to Appendix 2.

PUBLIC OUTREACH

The public was invited to participate in the process via a news release and graphic during the project’s early stages. The news release and graphic were provided to the Owyhee Avalanche (local newspaper) and posted on the official County Facebook page among other local forums.

The Owyhee County Outpost Days event on June 8, 2025 in Murphy was attended by NMI with a display of public outreach materials explaining the HMP and CWPP updates. It also included several activities seeking input from local residents on their hazards of highest concern, desired mitigation projects, and high-risk areas within the county. An online Google Survey was also shared via QR code on the display and was also disseminated via the County Facebook Page and other local forums. A Marsing City Council member later used these materials to continue public outreach efforts at the Snake River Market on June 21, 2025, and the Marsing 3rd of July Fireworks Celebration. A record of public outreach materials and efforts is included in **Appendix 3**.

THE PLANNING TEAM

A wide range of stakeholders and community members participated in the planning process from various federal, state, county, city and private agencies. For a full list of participants in each planning meeting, see **Appendix 3**.

PLAN MAINTENANCE AND MONITORING

The Owyhee County Wildfire Protection Plan will be reviewed at least annually at meetings convened by the Owyhee County Commissioner’s Office, open to the public and involving all municipalities/jurisdictions, where action items, priorities, budgets, and modifications can be made or confirmed. Amendments to the plan should be documented and attached to the formal plan as an amendment. It is recommended for counties to start their 5-year update during year 4 of the current plan to prevent any lapse in funding.

2. COUNTY DESCRIPTION AND COMMUNITY PROFILES

HISTORY

Owyhee County was the first county established by Idaho territorial legislature on the last day of 1863. It was named after the Native Hawaiians who passed away while trapping and exploring the area in the early 19th century with the Northwest Company.

The Western Shoshone, Northern Paiute, and Bannock Tribes originally inhabited the present-day county. The Shoshone-Paiute Tribes currently govern the Duck Valley Reservation at the southern end of Owyhee County, straddling the state border with Nevada's Elko County. Most of the local population resides in the Nevada portion of the Reservation.

Several mining booms centered around the current seasonally inhabited community of Silver City occurred from the mid-1800s to the early 20th century. During this time, sheep ranching and wool production was also commonplace. However, by the 1930s, irrigated row-crop agriculture and cattle grazing had become the major drivers of the economy, which continues to this day (*Idaho State Historical Society, 1964*).

GEOGRAPHY AND ECOLOGY

The county covers a vast area of 7,668 square miles, being second only to Idaho County in terms of land area for the state, and the 25th largest county in the US by land area. At least 303 waterways are present, making up well over 100,000 linear miles of river (*Abrams et al., 2018*). Elevations range from 2,200 feet above sea level in the northwest corner on the Oregon border to over 8,400 feet at Hayden Peak in the Owyhee Range. Deep canyons cut through the basalt- and rhyolite-dominated uplands, many of which are protected as part of 6 federal wilderness areas: a result of the collaborative planning of the Owyhee Initiative Working Group created by the County Commissioners in 2001 (*Steubner, 2019*).

Owyhee County is made up of the Snake-Columbia Shrub Steppe ecoregion. Sagebrush (*Artemisia* spp.) is the dominant vegetation type, complemented by wheatgrasses (*Agropyron* spp.), Idaho fescue (*Festuca idahoensis*), or other perennial bunchgrasses. Invasive annual grasses have also established themselves, especially in areas adjacent to the Snake River Valley. Bunchgrasses and juniper woodlands are present in the higher regions near Silver City and east of Highway 51 on the Nevada border (*Primm, n.d.*). Aspen, Douglas fir, and alpine conifers are present in the higher reaches of the Owyhee Range, and willows and cottonwoods can be found in some riparian areas (*Seyfried et al., 2001*).

Most of Owyhee County is dominated by rangeland used primarily for cattle grazing. In contrast, the northern portion of the county along the Snake River supports extensive irrigated row-crop agriculture, particularly near Homedale, Marsing, and Grand View. The river corridor also features stretches of sagebrush-grassland interspersed with basalt cliffs and headlands that slope down to the channel, creating a distinctive mix of agricultural and natural landscapes. Concentrated Animal Feeding Operations (CAFOs) and dairy farms are also present in this region (*Abrams et al., 2018; Life on the Range, n.d.*).

CLIMATE

Temperatures range dramatically, from -34 F° in the Owyhee Range in wintertime to 115° F in the lowlands by the Snake River in midsummer, where the average highs creep over 90° F in July and August (**Figure 1**; *US Climate Data, 2024*).

Most of the county receives about 8-16 inches of precipitation per year on average, but the lower elevations are much drier (**Figure 2**; *CEC, 2023*).

The Owyhee Mountains can get significant snowfall, with Silver City routinely getting over 90 inches total annually and the high-altitude areas reaching over 18 feet; however, the most populated areas in the Snake River valley usually get less than 6 inches (*NOAA, 2024*).

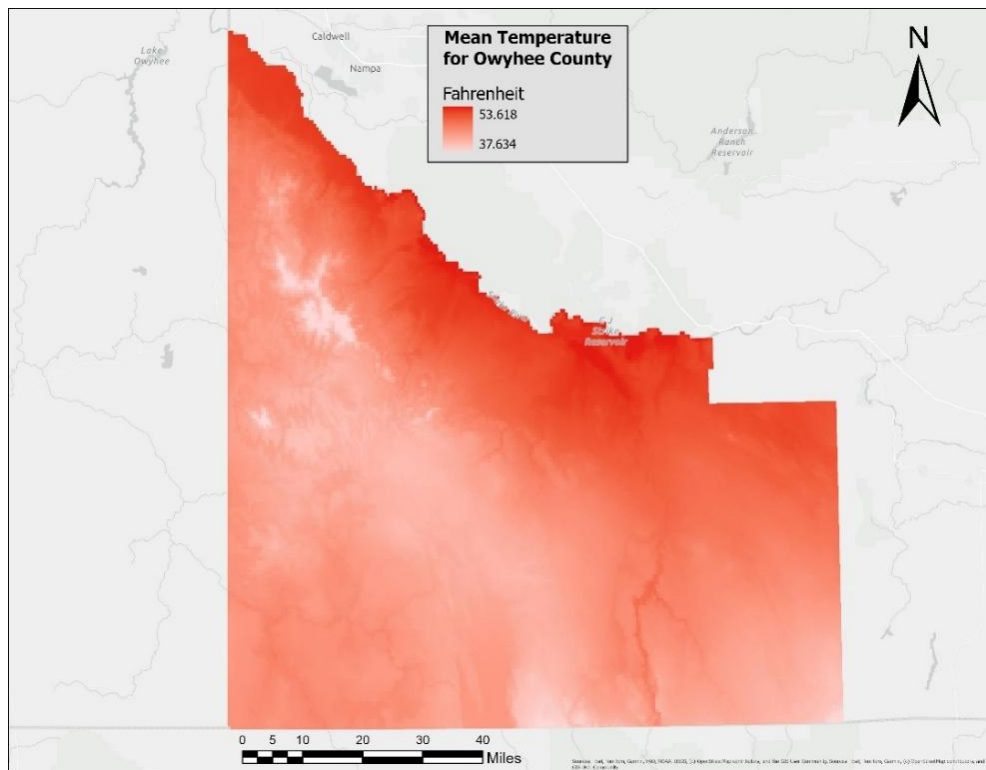


Figure 1) Mean temperatures from 1991-2020 based on climate normals from the Oregon State University PRISM database.

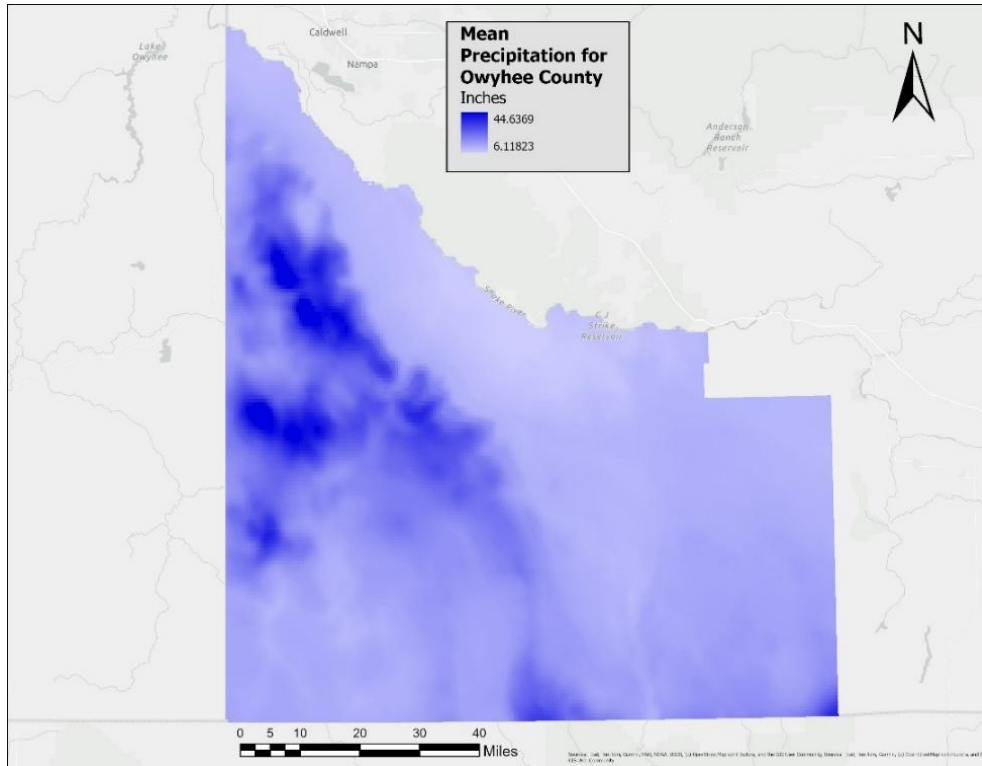


Figure 2) Average precipitation from 1991-2020 based on climate normals from the Oregon State University PRISM database.

POPULATION AND DEMOGRAPHICS

Despite the county’s vast land area, the population was estimated at 12,284 according to the 2023 ACS, making it one of the nation’s most sparsely populated counties at less than 2 persons per square mile. The bulk of the population is clustered on the northern fringe of the county, in and around the three incorporated cities of Homedale, Marsing, and Grand View, as well as the unincorporated communities of Bruneau and Murphy, the latter of which is the county seat (*US Census Bureau, 2024*). Over 250 people reside in the Idaho portion of the Duck Valley reservation at the southern end of Idaho State Highway 51 (*Sho-Pai Tribes, 2023*).

The population has increased by about 7% since the 2020 Census (**Table 1; ACS, 2023; Census, 2020**). Moreover, the highly populated Treasure Valley and Boise/Caldwell/Nampa metro is nearby, resulting in heavy recreational use of the Owyhee Front (*Abrams et al., 2018*). The county overall has been growing at a greater rate than the incorporated areas, suggesting an increasing number of people may be settling in outlying rural areas within the Wildland-Urban Interface.

The median household income in Owyhee County was reported at \$59,773 from 2019-2023 by the 2023 ACS, about \$15,000 less than the state median for the same period. The per capita personal income is also less than the state, at \$48,928 vs. \$59,192 in 2023, respectively. The poverty rate was reported at 13.4 %, which is 2.8 % higher than the State of Idaho.

The median age has increased to 38.3 as of 2023, up from 33 and 36 for the 2000 and 2010 censuses, respectively (*ACS, 2023; Census, 2000, Census, 2010*). 19.1 % of the population is over 65, and 30% identify as some race other than non-white Hispanic. Both are increases from the 2020 census, indicating an aging and diversifying population.

Table 1) Population Trends in Owyhee County.

City	1970	1980	1990	2000	2010	2020	2023 (ACS est.)
Owyhee County	6,422	8,272	8,392	10,644	11,526	11,913	12,284
Homedale	1,411	2,078	1,963	2,528	2,633	2,881	3,006
Marsing	610	786	798	890	1,031	1,229	1,245
Grand View	-	366	330	470	452	440	431
Murphy (CDP)	100	150	150	150	97	96	-
Bruneau (CDP)	-	-	-	-	-	121	-

LAND OWNERSHIP

Roughly three-quarters of the county's land area is managed by the Bureau of Land Management, with another 3% or so each being military (Saylor Creek Bombing Range), and Tribal (Duck Valley Reservation), respectively. Roughly 7% is made up of state lands (Department of Lands, Parks and Rec, Fish and Game, etc.). Only about 12% of the county's land is privately owned (Table 2;

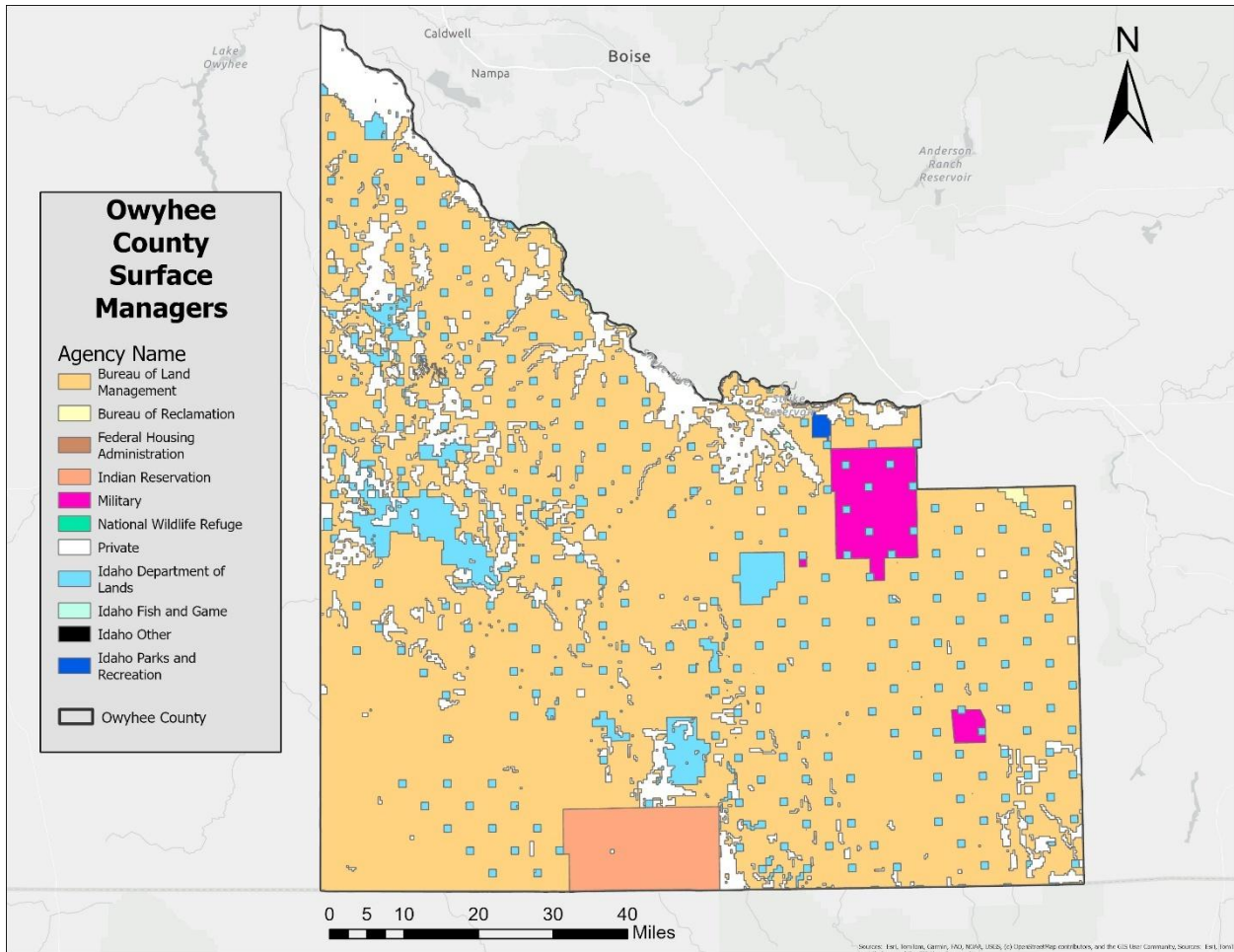


Figure 3).

Table 2) Surface land manager in Owyhee County by acres and percentage.

Managing Agency	Acres Managed	Percentage of County
Bureau of Land Management	3,726,855	75.8 %
Private	587,215	11.9 %
Idaho Department of Lands	327,887	6.7 %
American Indian Reservation	145,258	3.0 %
Military	115,229	2.3 %
Bureau of Reclamation	11,063	0.2 %
Idaho Parks and Recreation	4,888	0.1 %
Idaho Fish and Game	1,143	<0.1 %
National Wildlife Refuge	156	<0.1 %
Idaho (Other)	3	<0.1 %
Federal Housing Administration	<1	<0.1 %

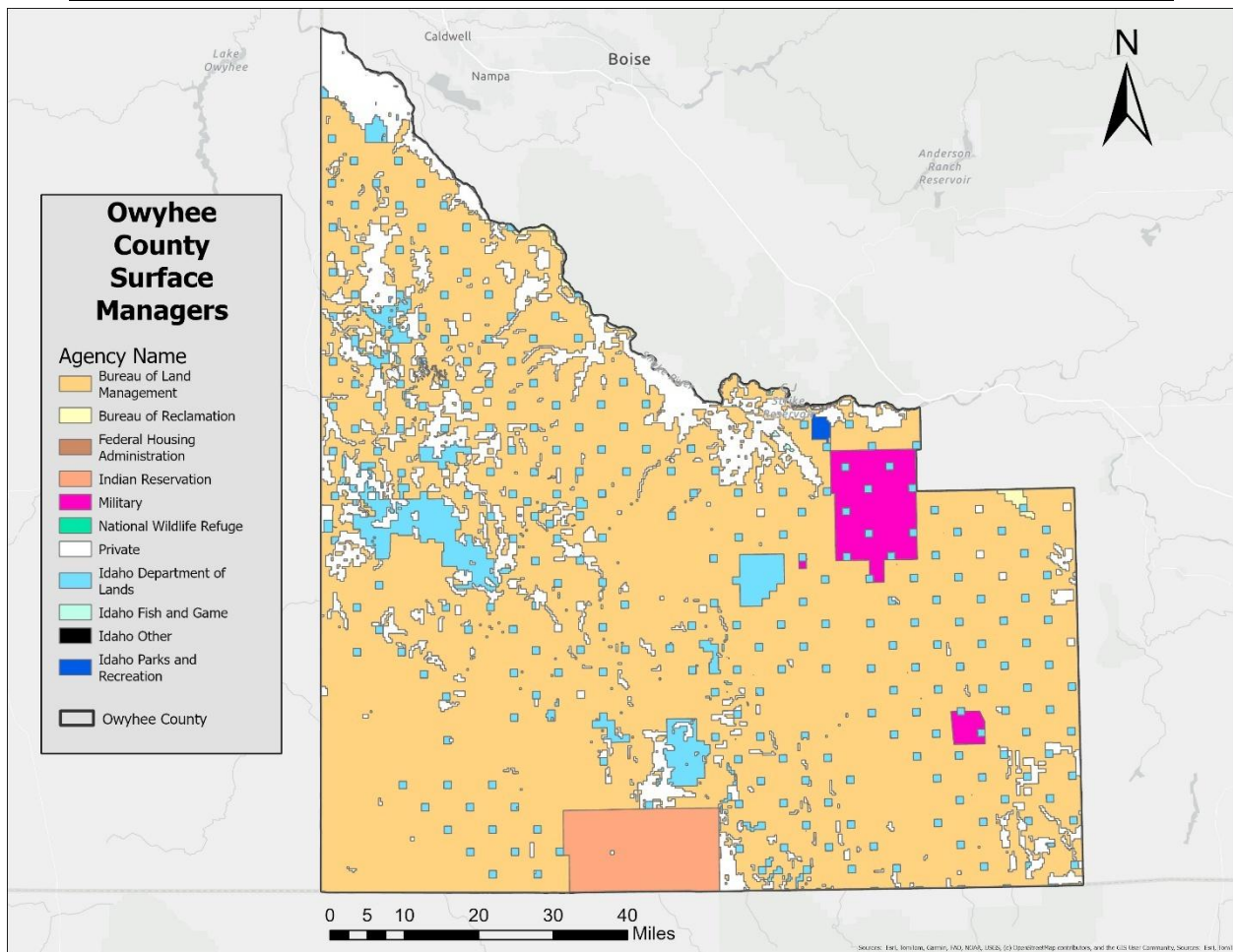


Figure 3) Surface management for land in Owyhee County is displayed above.

ECONOMY

Agriculture is the single largest contributor to the local economy, with roughly two-thirds of the sector being livestock operations. Irrigated row crops are grown in the Snake River plain, and dairy farms and feedlots are also present in the county. According to the Owyhee County Labor Force and Economic Profile (*Idaho Department of Labor, 2024*), most jobs are in Natural Resources and Mining (includes agriculture), with the Marsing Agricultural Labor Sponsoring Commission and JR Simplot being the top employers for the county. Many residents commute to nearby cities in Ada and Canyon counties.

COMMUNITIES

Descriptions for the incorporated cities of Owyhee County as well as various CDPs were adapted from the Owyhee County website and listed below, with additional community assets noted where relevant. Populations are from the ACS 2023 data unless otherwise noted. **Figure 4** displays the locations of the communities discussed in the following section, overlain by satellite imagery of the county and surrounding area.

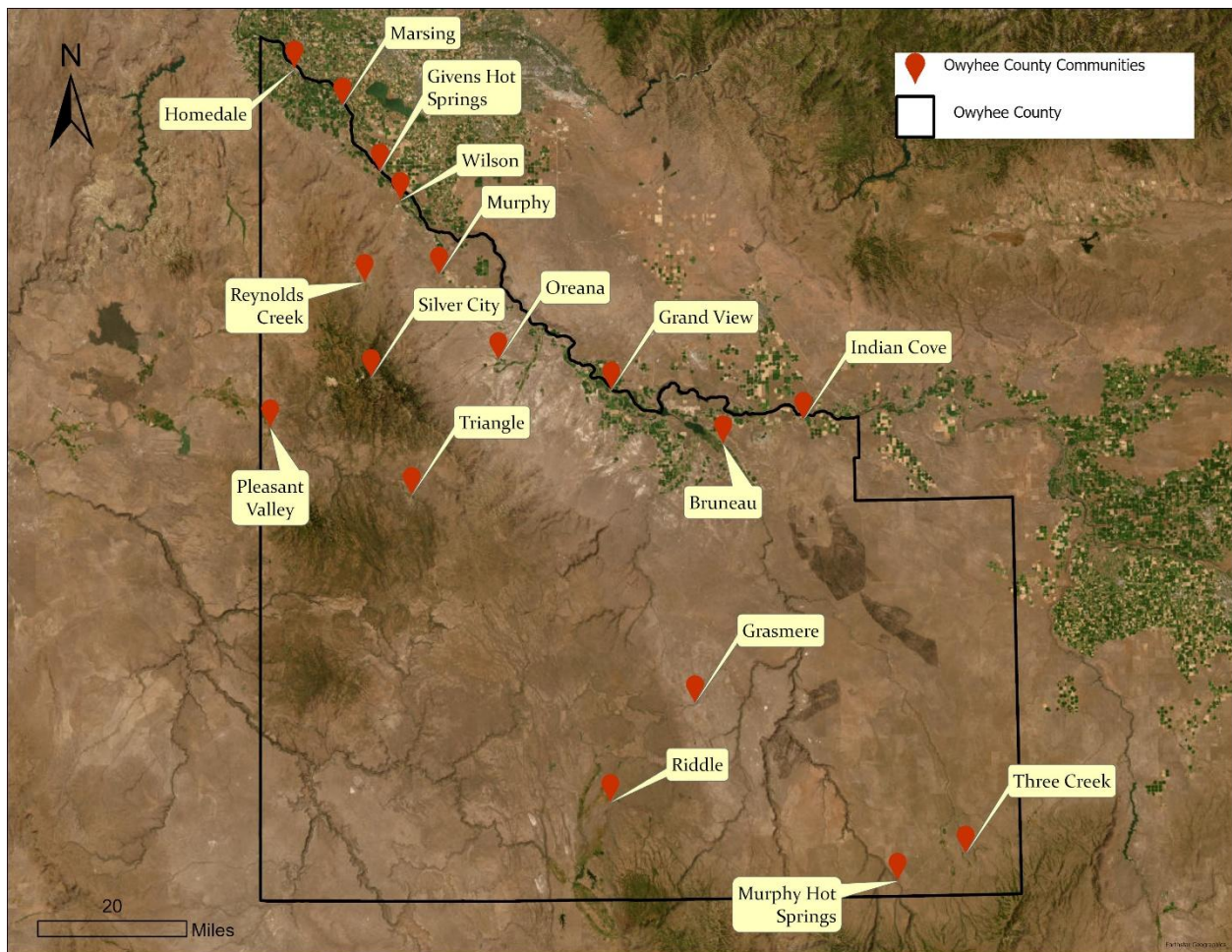


Figure 4) The locations of various communities in Owyhee County are shown here.

BRUNEAU

Bruneau is located near the confluence of the Bruneau River and is adjacent to the Bruneau Sand Dunes State Park, a popular destination for outdoor enthusiasts. Community assets include the Bruneau Elementary School and abundant farmland in the Bruneau River floodplain.

- **Population:** 121 (2020 US Census)

GIVENS HOT SPRINGS

Givens Hot Springs is a small, unincorporated settlement in Owyhee County, Idaho, located along the Snake River southwest of Marsing that has served historically as a local recreation and bathing destination centered on its natural hot springs. The community also features the Sunrise Skypark Airport, a private residential airport subdivision.

Population: 250 (estimate from Owyhee County Assessor)

GRAND VIEW

Situated about an hour from Boise and Nampa, Grand View serves as a gateway to the Owyhee County Outback, offering opportunities for fishing, boating, picnicking, hunting, and camping. Local assets include the Grand View Elementary School and Grand View Store.

- **Population:** 431

GRASMERE

Grasmere is a historic service stop with some rural residences in the surrounding area that still hosts a nearby remote U.S. Air Force station, staffed by active-duty service members from the nearby Mountain Home Air Force Base.

- **Population:** 24 (estimate from Owyhee County Assessor)

HOMEDALE

Located along the Snake River in southwestern Idaho, Homedale offers a variety of recreational and cultural activities within a welcoming small-town community. Important structures include the Owyhee County Community Center and Fairgrounds, Homedale Elementary School, and the Homedale Municipal Airport.

- **Population:** 3,006

INDIAN COVE

Indian Cove is a small, unincorporated rural area in northeastern Owyhee County along the Snake River near the Idaho-Oregon border. The community consists of dispersed ranches and rural residences within a semi-arid high desert landscape, with land use dominated by agriculture and grazing, and is located just east of Bruneau Dunes State Park.

- **Population:** 79 (estimate from Owyhee County Assessor)

MARSING

Marsing is situated in the scenic Snake River Valley, surrounded by beautiful views, lush wine country, and expansive outdoor recreation areas. Notable community assets include the AMVAC Chemical Corporation, Marsing Elementary and High Schools, and Owyhee County DMV.

- **Population:** 1,229

MURPHY

As the county seat of Owyhee County, Murphy is among the smallest county seats nationwide. It is home to the Owyhee County Historical Museum and Library.

- **Population:** 96 (2020 Census)

MURPHY HOT SPRINGS

Murphy Hot Springs is an unincorporated rural community in southeastern Owyhee County centered around natural hot springs and associated recreation. The community is located in a narrow canyon along Three Creek Road and includes a small general aviation airstrip (Murphy Hot Springs Airport), with surrounding wildland fuels and limited access contributing to wildfire risk and evacuation challenges.

- **Population:** 22 (estimate from Owyhee County Assessor)
-

OREANA

Located about 14 miles southeast of Murphy, Oreana is home to Our Lady, Queen of Heaven Catholic Church, which is listed on the National Register of Historic Places.

- **Population:** 180 (estimate from Owyhee County Assessor)
-

PLEASANT VALLEY

Pleasant Valley is a very small, rural unincorporated community with dispersed ranches and homes in western Owyhee County, near the Oregon border. The community also features Pleasant Valley Elementary School (PK–8).

- **Population:** 52 (estimate from Owyhee County Assessor)
-

REYNOLDS CREEK

Reynolds Creek, also known as Reynolds, is a sparsely developed rural area and historic townsite west of Murphy, associated with early ranching and settlement along the Reynolds Creek valley. Today it consists primarily of scattered rural properties within semi-arid rangelands, with limited infrastructure and wildfire risk influenced by surrounding wildland fuels.

- **Population:** 44 (estimate from Owyhee County Assessor)
-

RIDDLE

Riddle features a general store and gas station run by the Riddle Ranch. It was the fictional location for the beginning and end of the film “Vanishing Point” (1997 remake).

- **Population:** 31 (estimate from Owyhee County Assessor)
-

SILVER CITY

Silver City is one of the few 19th-century mining towns that did not burn down or become commercialized into a modern city. Visiting Silver City is like stepping back into history. Even so, its setting in the heavily forested Owyhee Range makes it an especially vulnerable community in the Wildland-Urban Interface, highlighting the importance of fuels reduction efforts in the region.

- **Population:** 1 year-round resident according to Assessor
-

THREE CREEK

Three Creek is a small rural community area in southeastern Owyhee County, Idaho, characterized by dispersed ranches, agricultural land use, and a very low residential population. The community supports public education through Three Creek Elementary-Junior High School, serving grades Pre-K through 8.

- **Population:** 29 (estimate from Owyhee County Assessor)

TRIANGLE

Triangle is a seasonally occupied small rural locality in Owyhee County near Triangle Reservoir consisting of a handful of dispersed residences and agricultural lands. Its remote setting, limited access routes, and surrounding rangelands present wildfire risk and emergency response considerations.

- **Population:** No year-round residents according to Assessor.

WILSON

Wilson is an unincorporated rural locality in Owyhee County. Located along Highway 78 between Murphy and Marsing, it is characterized by dispersed ranches and residences on the interface of irrigated agriculture and rangeland.

- **Population:** 214 (estimate from Owyhee County Assessor)
-

RURAL FIRE DISTRICTS

These departments serve the residents of the three incorporated cities in the county and their surrounding areas, as well as two unincorporated areas that contain the communities of Bruneau and Murphy, respectively (**Figure 5**). Although not shown on the map, Silver City Fire and Rescue operates seasonally in about a 5-mile radius from Silver City when it is not snowbound.

RANGELAND FIRE PROTECTION DISTRICTS

These are non-profit associations of volunteers (mainly local ranchers) who are trained and authorized to respond to wildfires on private, state, and federal lands. They collaborate closely with federal firefighters from whom they receive training and red cards in order to be the first line of defense against rangeland fires (*Davis et al., 2017*). The Owyhee, Saylor Creek, and Three Creek are the three RFPAs with response areas inside Owyhee County (**Figure 5**); however, RFA response boundaries do not establish suppression jurisdiction or financial responsibility.

FIRE PROTECTION JURISDICTION, RFA BOUNDARIES, AND WILDERNESS RESPONSE

In Idaho, wildfire suppression responsibility is determined by jurisdiction and tax assessment rather than response capability alone. “Assessed” lands refer to properties included on county tax rolls for fire protection purposes. Rural Fire Protection Districts are jurisdictional agencies in this sense (even when staffed entirely by volunteers) because they operate within defined service boundaries and are financially responsible for suppression. In contrast, Rangeland Fire Protection Associations (RFPAs) function as non-taxing response areas and do not carry suppression cost responsibility or receive delegation of authority. RFPAs also do not have a legal obligation to respond to fires within their mapped response areas; however, they frequently choose to do so because wildfires often threaten rangeland forage, infrastructure, and livelihoods on which local ranching operations depend. As a result, RFPAs commonly serve as an early response and initial attack resource when available, coordinating closely with state and federal fire agencies.

Moreover, jurisdiction on federal or state lands defaults to the owning agency, while the Idaho Department of Lands (IDL) serves as the primary suppression authority on most private lands and frequently acts as the default jurisdictional agency statewide. The exclusion of the North Fork Owyhee Wilderness from the Owyhee RFA response area (see the blank spot within the Owyhee RFA response area in **Figure 5**), while other wilderness areas are included in neighboring RFA boundaries appears to reflect historical boundary decisions made by RFA boards at the time of formation in coordination with local fire departments and IDL, rather than a current operational limitation. BLM field staff have also indicated that apparent gaps in RFA boundaries, such as along portions of the Bruneau River, may be attributable to cartographic issues rather than intentional exclusions. In any case, RFA response boundaries do not materially affect wildfire operations on federal wilderness lands.

Regardless of whether a wilderness area is included within an RFA’s mapped response area, wildfire suppression activities on BLM-managed wilderness requires approval from various levels of BLM leadership. Within these areas, wildfire suppression activities that would otherwise be prohibited under the Wilderness Act may be authorized on an emergency basis when they are determined to be the minimum necessary to protect life, property, or critical resources. Appendix C of the *Owyhee Canyonlands Wilderness and Wild & Scenic Rivers* planning documents establishes a tiered approval framework for these emergency actions. The BLM Field Office Manager may approve

lower-impact suppression actions such as helicopter bucket work and dip site use, motorized water pumps, aerial retardant application, air transport and supply drops, chainsaw use, temporary fence repair, and erosion control treatments using biodegradable materials. Actions involving increased mechanization or ground disturbance (motor vehicle use, helispot construction with major ground disturbance, installation of temporary monitoring facilities, and erosion control measures using stakes, wire, or other semi-permanent materials) require approval by the BLM District Manager. The most ground-disturbing actions, including the use of heavy equipment and major post-fire emergency stabilization or rehabilitation activities such as drill seeding, require approval by the BLM State Director. All approvals must document that the proposed action represents the minimum tool necessary and employ Minimum Impact Suppression Tactics, with supporting rationale submitted as part of the formal Record of Approval process (BLM, 2014).

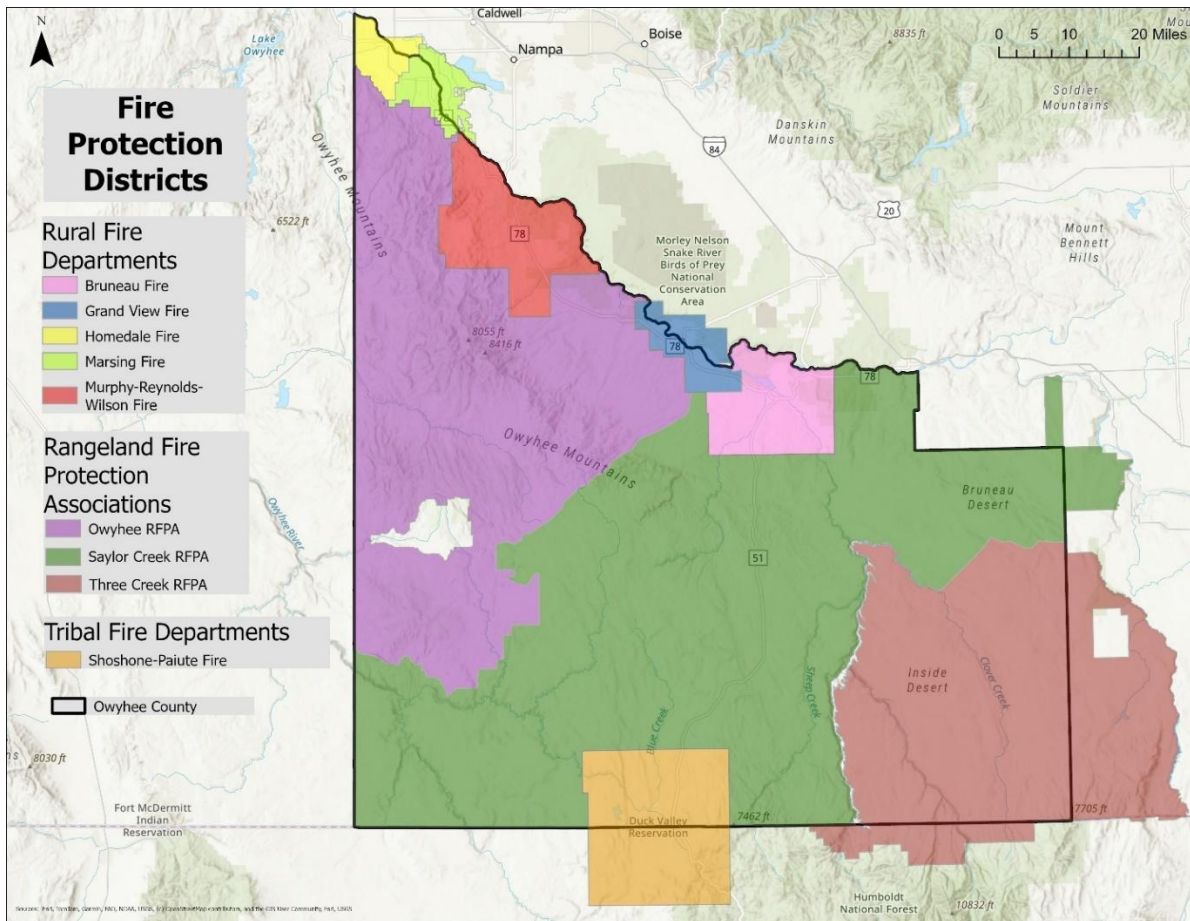


Figure 5) Displayed above is a map of the Rural Fire Districts, Rural Fire Protection Associations, and Tribal Fire Departments within and surrounding Owyhee County. Silver City Fire and Rescue also seasonally operates within an approximately 5-mile radius of Silver City, but is not shown in this map due to not having officially designated jurisdictional boundaries. Note that all these organizations are primarily made up of volunteers.

3. WILDFIRE RISK ASSESSMENT

LOCAL EVENT HISTORY

Ignition data from the National Interagency Fire Center (NIFC) covering 1992-2024 and burn perimeter data from the Monitoring Trends in Burn Severity (MTBS) program spanning 1956-2024 were analyzed for Owyhee County. While the datasets are not necessarily comprehensive or standardized, they still provide valuable insight into the county's wildfire history and patterns over time.

There has been an average of 36.4 wildfire ignitions per year from 1992-2024, with about 57% being naturally caused, and 43% being started by humans (**Figure 6**). Among fires with known causes, lightning was the most common, followed by exhaust particles, electric transmission lines, land clearing, passenger vehicles, agricultural burning, and more. July and August have historically had the most ignitions and most acres burned, followed by September and June (**Table 3**). Almost 2.9 million acres have burned in the county from 1992-2024, with an average of 87,788 acres per year. 2007, 2010, and 2015 stand out as extraordinary fire years, with a staggering 735,120 acres of total burned area having occurred in 2015. Other years like 2009, 2014, and 2023 were relatively mild, with under 1,000 acres burned in each of those years (**Figure 7**). Most ignitions have occurred on BLM land, which is the largest land manager in the county, with about 76% of the county's area being under its jurisdiction.

The highest concentration of documented wildfires has historically been in the very thinly populated eastern third of the county (**Figure 8 & Figure 9**). The majority of this area is under the jurisdiction of the Three Creek and Saylor Creek, RFPAs, respectively, underscoring the need for collaboration with federal and state agencies to respond to the large concentration of fires. Despite the high number of ignitions, 30% were contained before exceeding 1 acre, or 371 out of a total of 1,203 ignitions from 1992-2024 (*NIFC, 2025*).

Table 3) Average wildfire size in acres and total acres burned per month from 1992-2024 in Owyhee County according to the NIFC dataset, rounded to the nearest whole number.

Month	Average Incident	Acres Burned	Human Caused	Naturally Caused
January	593	593	1	0
February	1	4	3	1
March	44	663	12	3
April	11	272	8	16
May	195	7,033	7	29
June	812	148,655	64	119
July	4,011	1,536,070	131	249
August	3,093	1,100,943	166	190
September	336	45,367	95	39
October	950	56,034	30	29
November	228	1,366	3	3
December	2	2	1	1

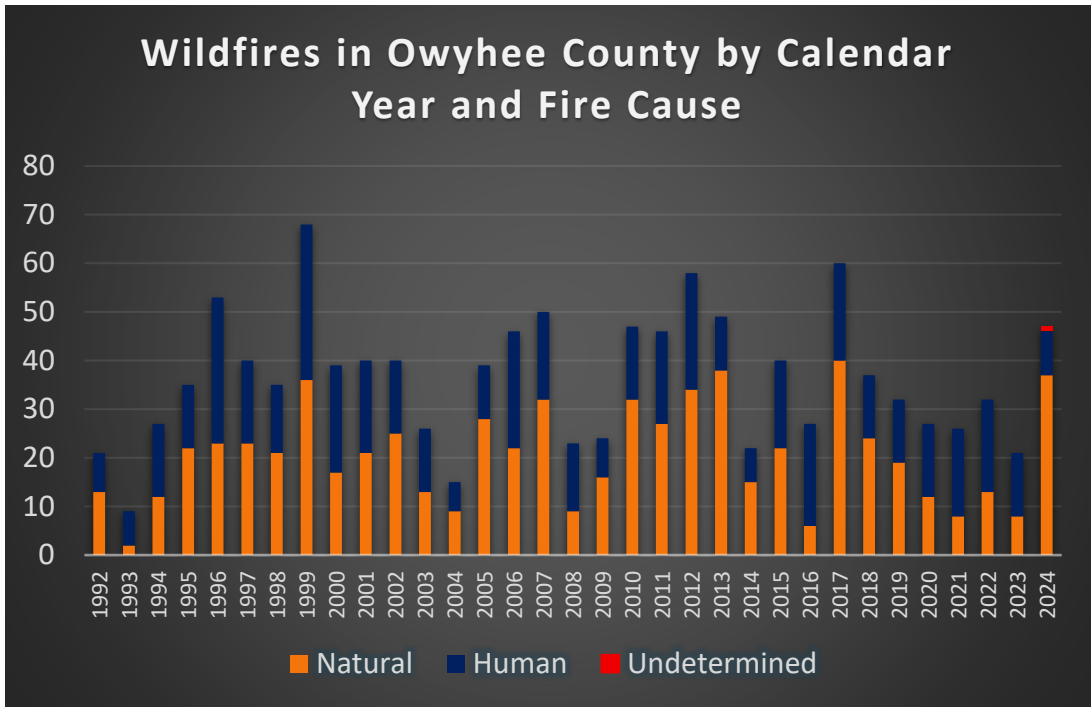


Figure 6) An overview of wildfires separated by calendar year and whether the ignition was human or naturally-caused. The data were obtained from the NIFC Dataset.

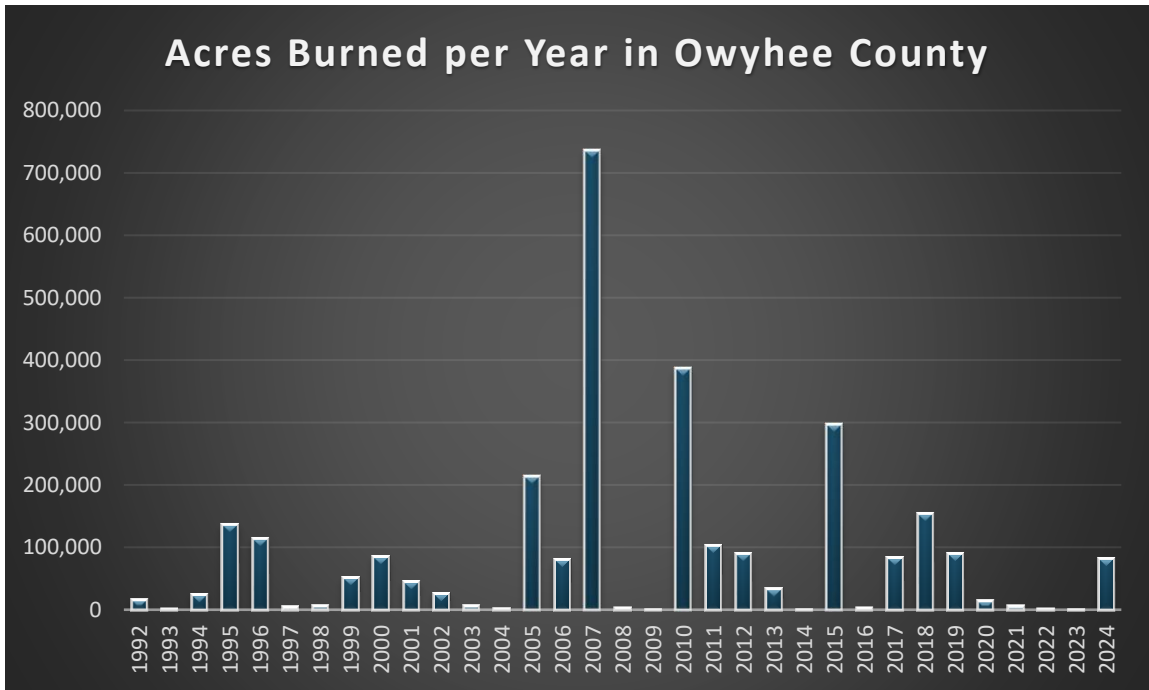


Figure 7) The number of acres burned per year in wildland fires in Owyhee County from 1992-2024 according to NIFC.

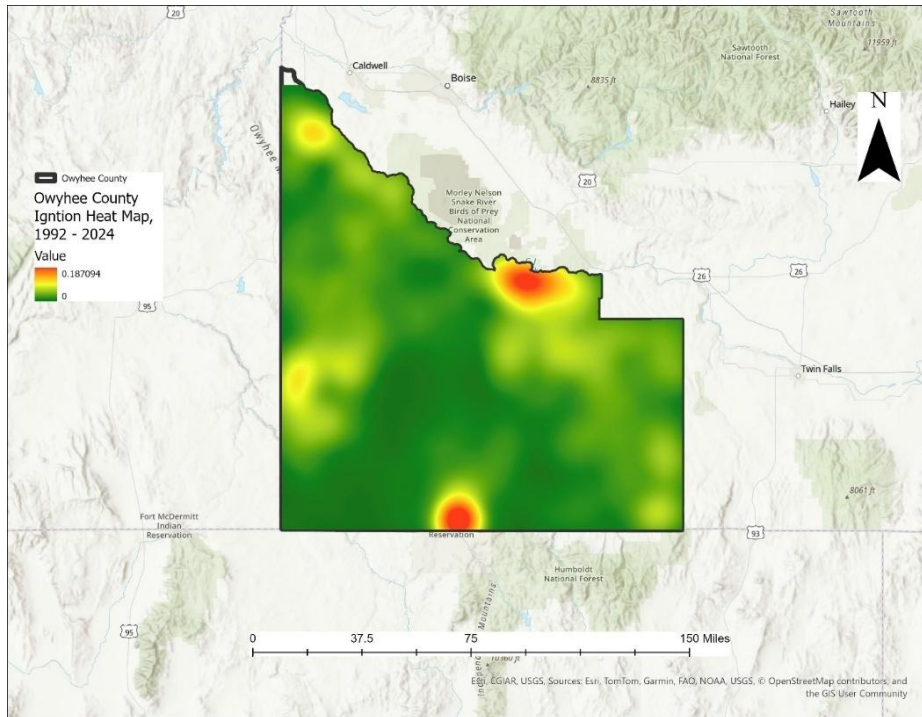


Figure 8) A kernel density heat map generated in ArcGIS Pro is shown here for wildfire ignitions from 1992-2024. The data were downloaded from NIFC.

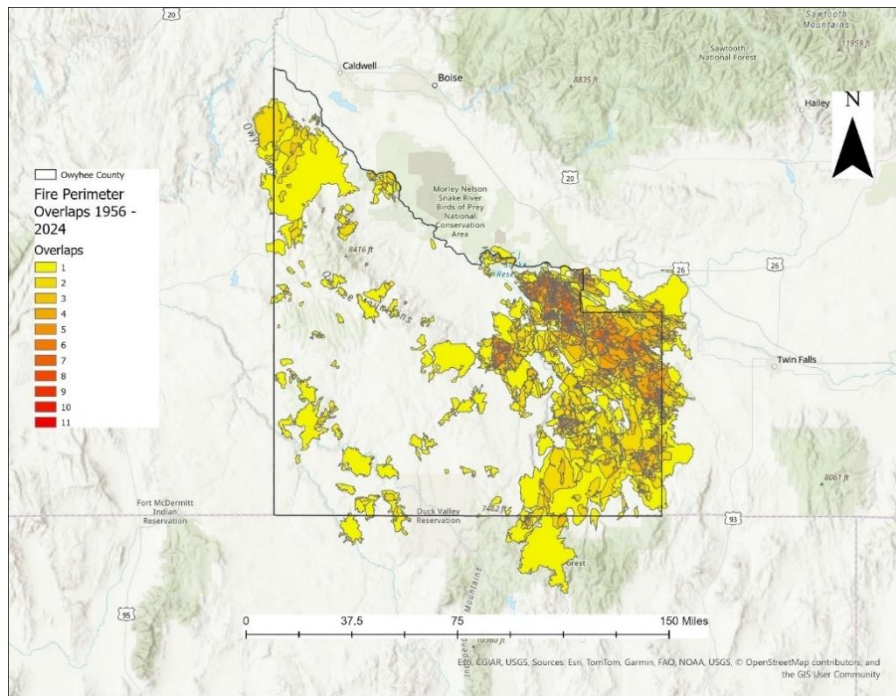


Figure 9) Wildfire footprints intersecting with Owyhee County since 1956 from the MTBS dataset showing the number of overlaps. Documented wildfire perimeters appear to be concentrated in the northeast section of the county, southeast of Bruneau.

MEGAFIRES

25,000 acres has been proposed as a threshold for defining “megafires,” or unusually large wildfires that can stretch the resources of fire protection agencies to the limit. 100,000 acres is another common metric for defining this phenomenon (Linley et al., 2022). The documented history of so-called megafires in Owyhee County and its immediate surroundings is outlined in **Figure 10**.

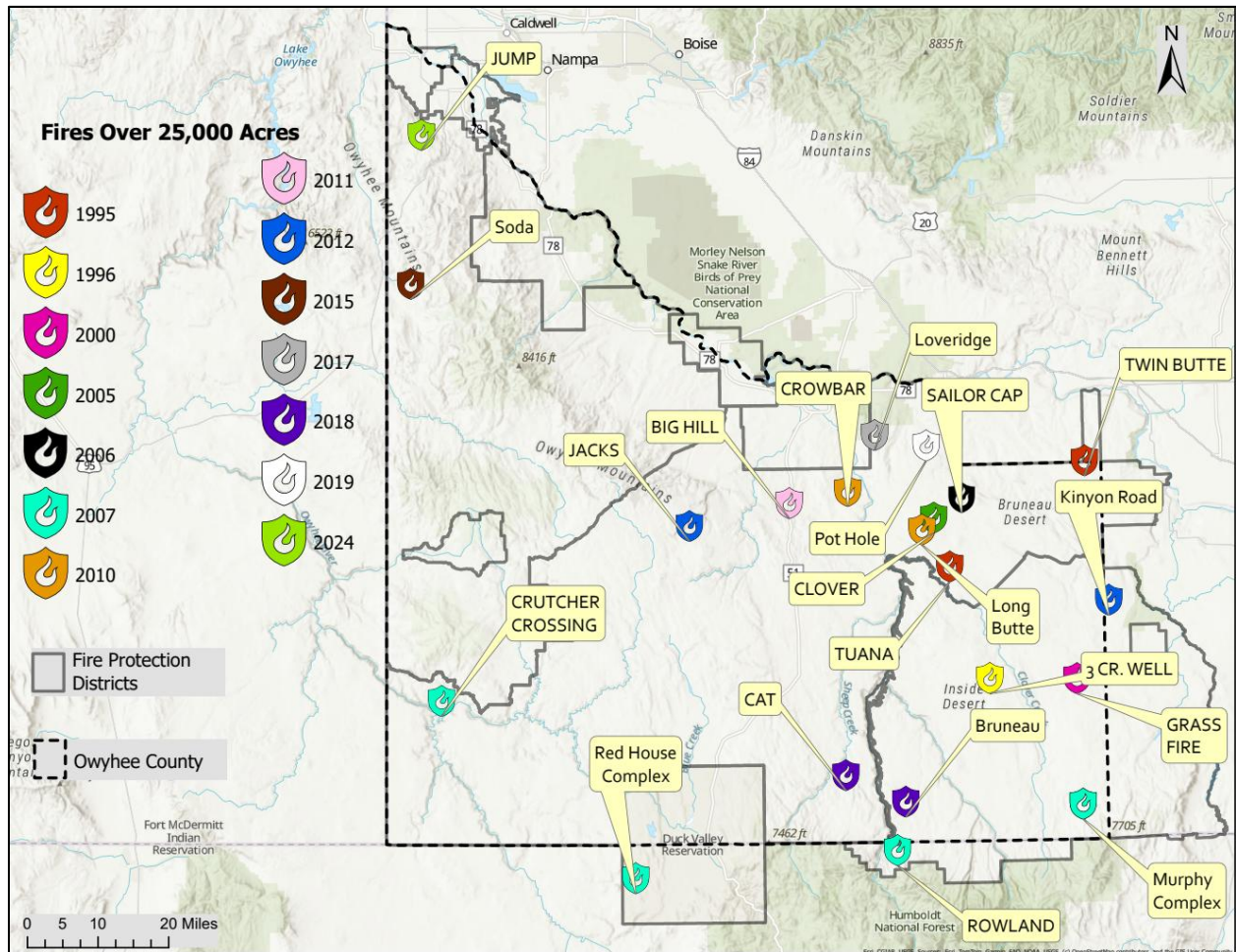


Figure 10) Documented wildfires over 25,000 acres that occurred in Owyhee County and surrounding fire districts from 1992-2024 according to the NIFC dataset.

SODA FIRE: AUGUST 2015

Caused by a lightning strike on August 10, 2015, the Soda Fire spread rapidly, eventually scorching nearly 280,000 acres of rangeland across southwestern Idaho and southeastern Oregon, including around 50,000 acres of priority sage-grouse habitat. Also affected were 41 grazing allotments, three wild horse management areas, and a popular recreation area along the Owyhee Front. Thanks to the heroic efforts of firefighters from the Bureau of Land Management (BLM), Idaho Department of Lands (IDL), local Fire Districts, Rangeland Fire Protection Associations (RFPAs), and others, no primary residences were destroyed. However, one homestead structure succumbed to the flames. The fire was declared 100% contained on August 23, 2015. In response, the fire spurred the creation of the Soda Fuel Breaks Project: a large-scale effort to reduce fuels, improve firefighter access and staging areas, and foster

closer coordination between government agencies and private landowners. (Meredith & Brunson, 2022; Williamson, 2018).

FIRES IN 2025 YEAR TO DATE

As of September 8, 2025, 48 wildland ignitions had been recorded in or near Owyhee County, burning about 46,109 acres with an average size of 960 acres (Figure 11). About one-third of fires were controlled under 1 acre, while 20 incidents (42%) exceeded 20 acres. The largest were the Blackstone Fire (≈22,000 acres) and the Striker Fire (≈6,000 acres). Estimated suppression costs total \$6.5 million. Causes were 50% natural, 45.8% human, and 4.2% undetermined. While no fires in the county exceeded 100,000 acres, nearby Elko County, Nevada experienced two major incidents in the same kind of sagebrush-grassland habitat found in much of Owyhee County, with the Cottonwood Fire reaching 132,000 acres.

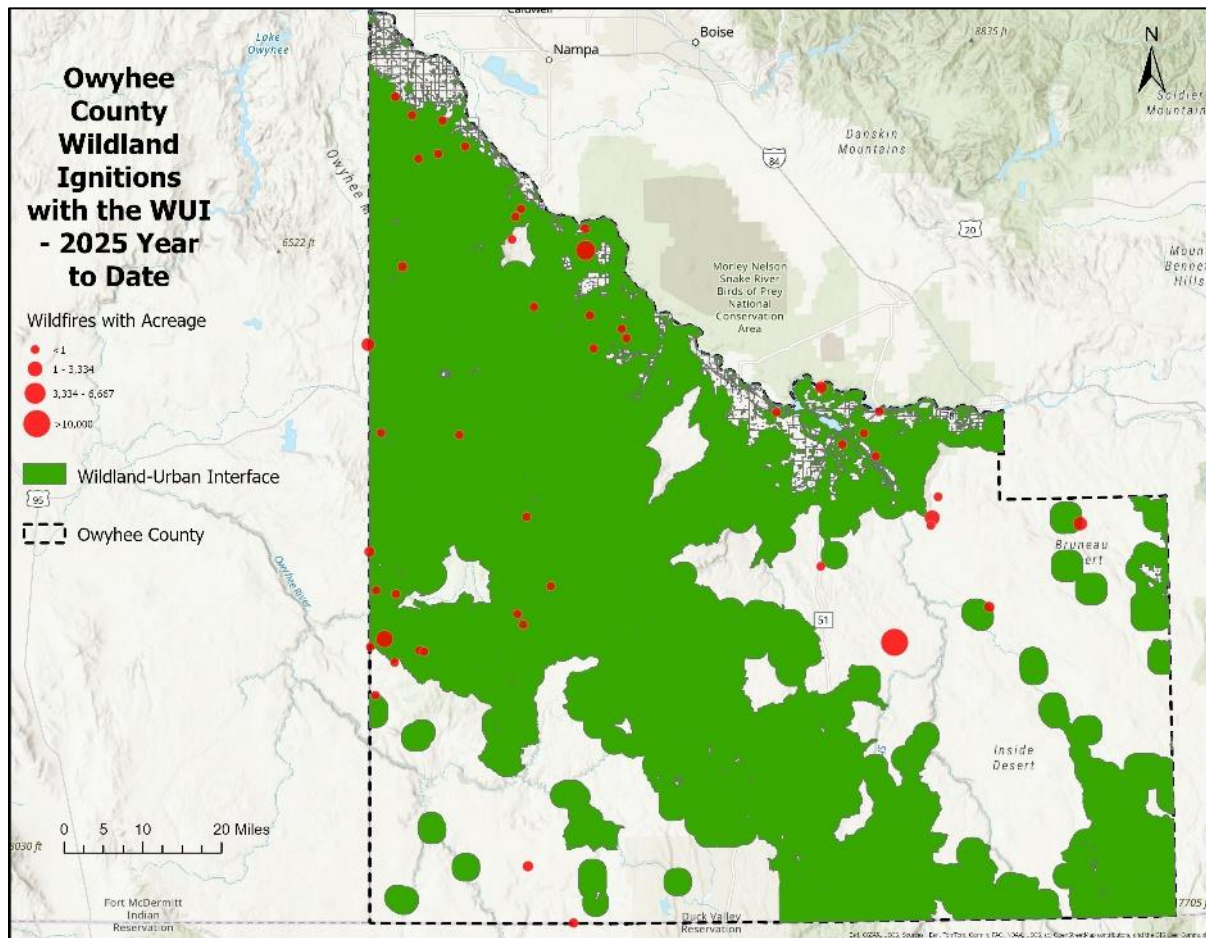


Figure 11) NIFC ignitions varied by incident size underlain by the Owyhee County Wildland-Urban Interface.

WILDLAND-URBAN INTERFACE

The Wildland-Urban Interface (WUI) represents areas where wildland fuels meet homes, infrastructure, or other valued assets. It includes both interface zones (dense development bordering vegetation) and intermix zones (scattered structures within wildlands). It was delineated using the Idaho Department of Lands' method, buffering private lands by 1.5 miles, and including entire HUC-12 watersheds where those buffers cover at least half the area. Agricultural fields, bare ground, and open water were excluded, and final boundaries may be refined with stakeholder input (**Figure 12**).

DISCLAIMER: TO BE USED FOR PLANNING PURPOSES ONLY

The WUI shown in this plan is for planning purposes only. It is non-regulatory and must not be used to make, deny, or condition land-use or land-management decisions, including but not limited to grazing leases or allotments, agricultural operations, timber or vegetation treatments, permitting, enforcement, zoning, adjudication, or insurance. The WUI does not alter property rights, grazing privileges, water rights, or any agency jurisdiction, decision authority, or obligations. Any site-specific project must undergo appropriate field verification, site-level analysis, landowner/permittee coordination, and compliance with applicable laws and policies (e.g., NEPA, NHPA, ESA) independent of the WUI.

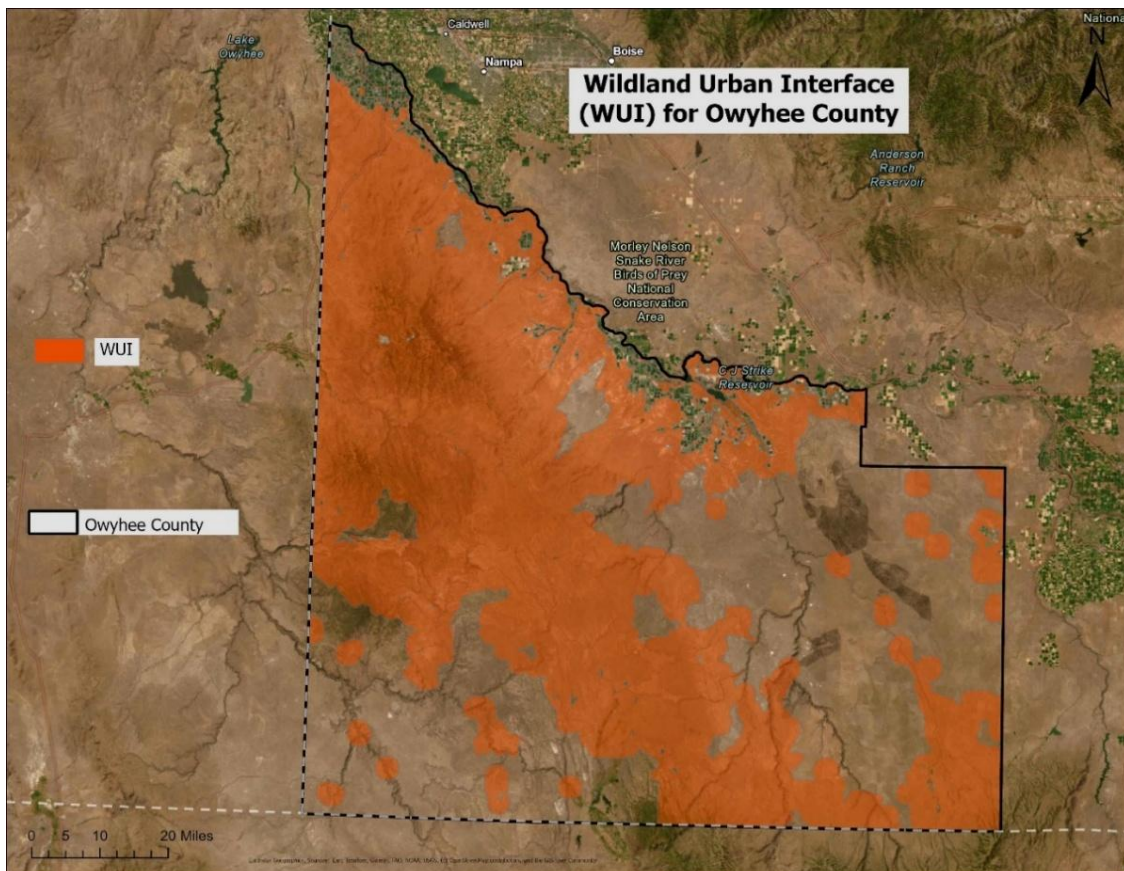


Figure 12) Wildland-Urban Interface (WUI) for Owyhee County.

HISTORIC FIRE REGIME

The Fire Regime Group dataset estimates historic fire regimes based on vegetation dynamics, fire spread, and fire effects. Although useful for broad-scale planning efforts in order to inform ecologically appropriate regional land management objectives, it should not be relied upon for land use decisions on a smaller scale, i.e. 10,000 acres or less. Moreover, the historically long fire return intervals and paucity of fire history data from before the mid-20th century introduces uncertainty, so the data should be interpreted with caution. Local knowledge, fire scars, paleontological records, and expert-lead site studies are crucial for determinations on the most appropriate treatment for locations within the County (*Thomas-Van Gundy, 2014*). Nonetheless, the results of the Fire Regime Group analysis for Owyhee County are shown in **Table 4**. For a map of the county’s fire regimes, see **Appendix 1**.

Table 4) Fire Regime Groups as defined by LandFire (2016), based on presumed historical fire return intervals and vegetation cover.

Fire Regime Group	Percent
Percent replacement fire less than 66.7%, fire return interval 101-200 years	47 %
Percent replacement fire less than 80%, fire return interval 36-100 years	34 %
Percent replacement fire less than 66.7%, fire return interval 16-35 years	11 %
Any severity, fire return interval 501 or more years	7 %
Open Water	<1 %
NA	<1 %
Any severity, fire return interval 201-500 years	<1 %
Barren-Rock/Sand/Clay	<1 %
Percent replacement fire less than 66.7%, fire return interval 6-15 years	<1 %

Although fires in Owyhee County once occurred only every few decades, fire frequency has sharply increased due to the spread of invasive annual grasses and greater human activity in sagebrush areas. Some parts of the Snake River Plain have burned up to 11 times since 1956, preventing sagebrush recovery and converting large areas into grass-dominated landscapes (**Figure 8**). These changes have also led to longer, hotter, and more destructive fire seasons (*Bradley et al., 2017; Whisenant, 1990*).

VEGETATION CONDITION CLASS

Table 5 depicts how the vegetation is predicted to have been altered from its historical pre-European condition in Owyhee County. Similar to the Fire Regime Groups, it should be interpreted cautiously since it is based on assumptions about historic reference conditions. However, it can still be useful for coarse-scale landscape planning when trying to understand where changing land use and management such as fire suppression, grazing, or other developments have disrupted the historic fire regime. The data show a majority of the county has experienced moderate to high vegetation departure, illustrating a possible need for ecosystem restoration practices to be incorporated into local land management plans, especially in areas overrun with invasive annual grasses and forbs.

Table 5) Vegetation Condition Class by land area for Owyhee County based on data from Landfire, 2023.

Vegetation Condition Class	Percent
Moderate to High, Vegetation Departure 51-66%	45%
High, Vegetation Departure 67-83%	29%
Moderate to Low, Vegetation Departure 34-50%	14%
Very High, Vegetation Departure 84-100%	5%
Agriculture	4%
Low, Vegetation Departure 17-33%	2%
Barren or Sparse	1%
Developed	1%
Water	<1%

WILDFIRE HAZARD RISK

The Wildfire Risk Assessment Map was developed using the Idaho Department of Lands (IDL) methodology, which evaluates slope, aspect, vegetation, fire history, and the WUI to determine wildfire hazard. Each factor is weighted in a raster-based model to produce a cumulative risk score, a method widely used across Idaho (**Figure 13**).

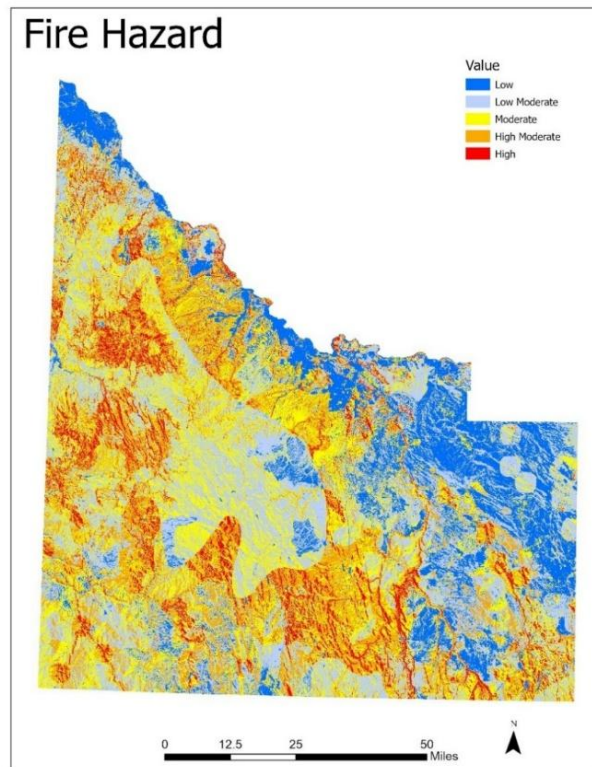


Figure 13) The Fire Risk Hazard Map from the Idaho Department of Lands for Owyhee County is displayed above. Note that despite the high concentration of ignitions in the northeast part of the county (Bruneau Desert), it displays as mostly low-moderate in this model due to the majority of this region not being included in the WUI.

USDA WILDFIRE LIKELIHOOD

The *Wildfire Likelihood* or *Burn Probability* map is from the USDA Wildfire Risk to Communities dataset. It shows how likely it is that a wildfire could start and spread in a given area. It is based on thousands of computer-simulated fires using weather, vegetation, and terrain data. This helps identify where fires are most likely to happen, even if it is not known exactly when they may occur. The information is meant to support long-term planning and decisions about wildfire risk reduction, not to predict specific fire events. Based on **Figure 14** below, the three incorporated cities have Low to Very Low risk of ignition in and immediately around their city limits. However, they still could be subject to hazardous air quality as a result of nearby fires due to their location in a river valley. The communities of Murphy and Bruneau, as well as other unincorporated areas, are at High Risk of ignition, being more exposed to wildland fuels. According to Wildfire Risk to Communities, the County has greater wildfire risk than 65% of Idaho counties overall.

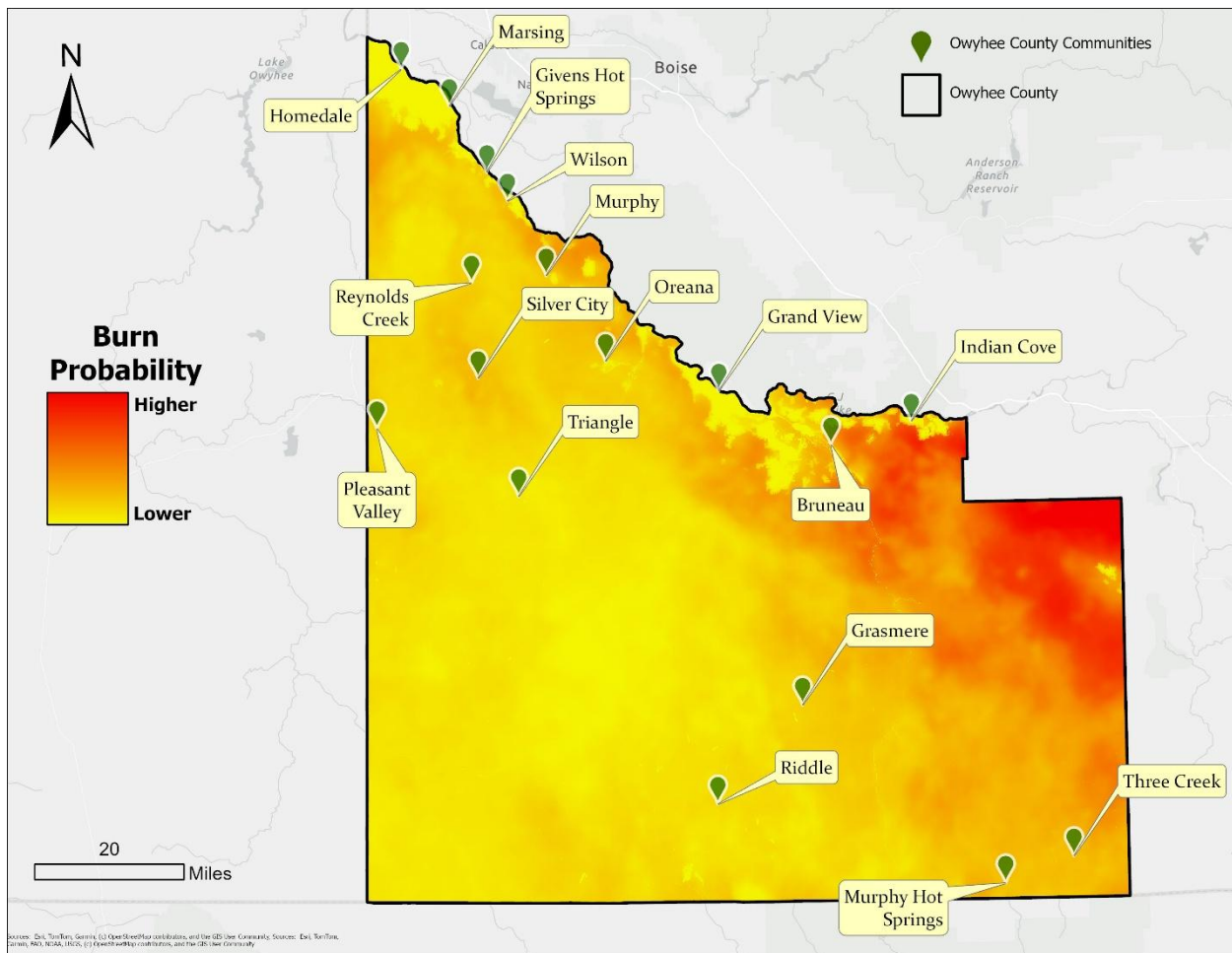


Figure 14) Burn Probability or Wildfire Likelihood for Owyhee County according to Wildfire Risk to Communities is shown here, along with the locations of cities and communities within the county.

WILDFIRE SUPPRESSION DIFFICULTY INDEX

The Wildfire Suppression Difficulty Index (**Figure 15**) spatially depicts how hard it would be to fight wildfire. It considers factors like steep terrain, dense vegetation, how fires are likely to behave during extreme weather, how fast crews can build firelines in different fuels, and how easy it is to get to the fire from roads or trails. Due to the size and remoteness of much of Owyhee County, response times to wildland fire ignitions can exceed several hours, including in the frequently-burned Bruneau Desert in the northeastern part of the county. These delays often occur during the most critical period for effective initial attack, allowing fires to grow rapidly before suppression resources arrive on scene.

This index focuses only on work done on the ground (not with aircraft). The score ranges from 1 to 10, with higher numbers meaning more difficult firefighting conditions. For simplicity, the data is grouped into six levels of difficulty. The analysis shows that the Cities of Homedale, Marsing, and Grand View, as well as the CDPs of Bruneau and Murphy have low to moderate suppression difficulty, but the community of Silver City in the Owyhee Mountains has high suppression difficulty, underscoring a possible need for improved access and egress into the community during fire season.

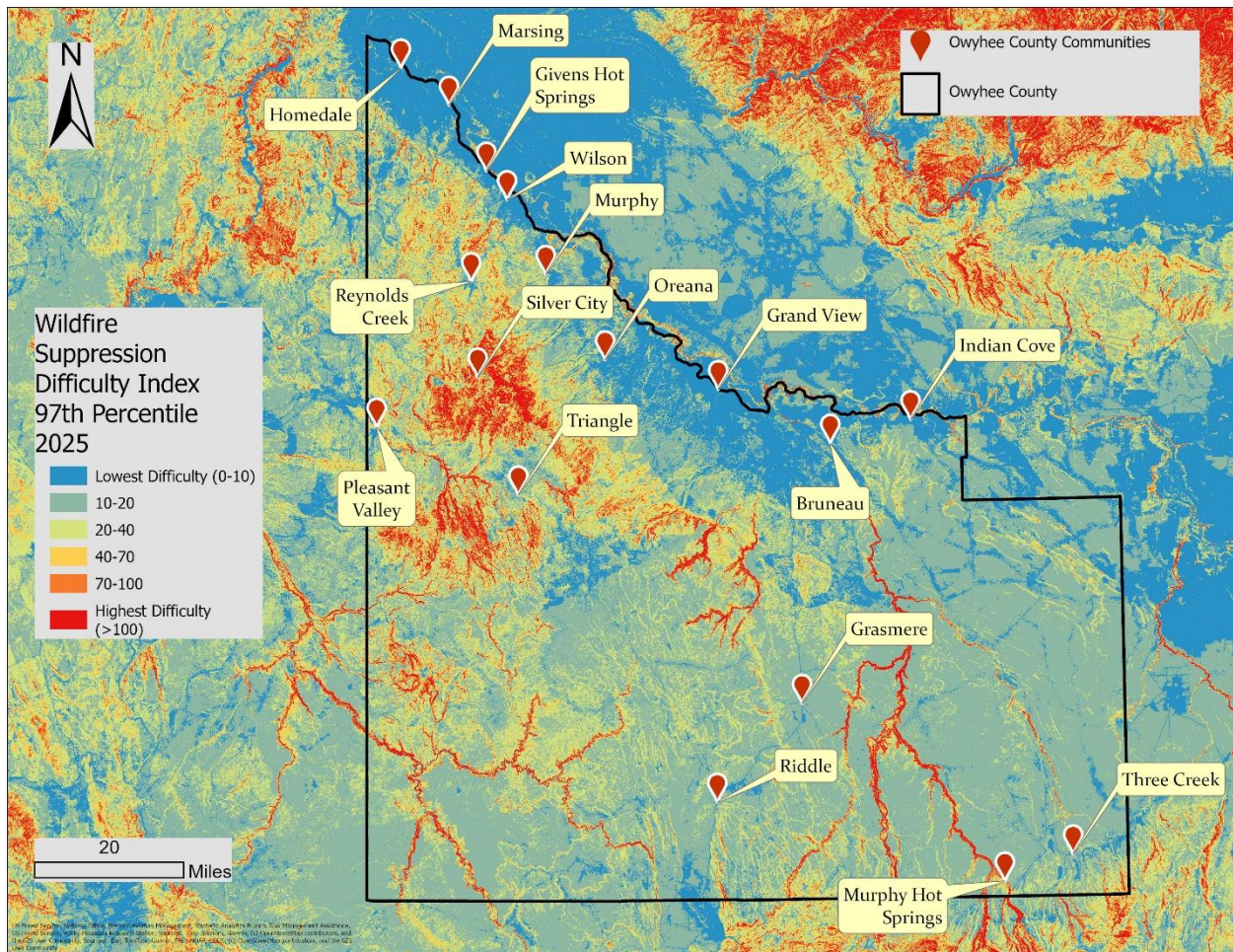


Figure 15) Wildfire Suppression Difficulty Index for Owyhee County and surrounds.

LANDSCAPE RISK ASSESSMENT

The broad categories of vegetation for Owyhee County are noted in **Table 6**. By far the most prevalent vegetation type is shrub: likely the sagebrush-steppe habitat that makes up vast areas of the basin and range province.

Table 6) Landscapes or vegetation types of Owyhee County. The data are from the Land Fire Existing Vegetation Type dataset from 2024.

Vegetation Type	Acres	Percent
Shrub	3,071,864	62 %
Herb/Grass	1,303,420	26 %
Tree	333,614	7 %
Agriculture	140,644	3 %
Sparse	32,197	<1 %
Developed	24,087	<1 %
Water	19,413	<1 %
Barren	699	<1 %

FIRE FUEL MODELS IN OWYHEE COUNTY

The distribution of *Scott and Burgan's (2005) 40 Fire Behavior Fuel Models (FBFM40)* was mapped and summarized in **Table 7**. The analysis indicates that the dominant vegetation types contributing to wildfire potential are grass-shrub and grassland systems, with some areas of shrubland and timber litter fuels. These vegetation types are associated with moderate to high fire risk, depending on fuel load and continuity, weather conditions, and topography.

Table 7) The proportion of fuel types for Owyhee County according to LandFire (2024). The fuel models are from Scott & Burgan's 40 Fuel Models from 2005.

FBFM40	Percent	Description
GS2	44%	Moderate load dry-climate grass-shrub. Moderate to high rate of spread, moderate flame length.
GR2	19%	Moderate load grass. High rate of spread, low to moderate flame length.
SH1	12%	Low load dry-climate shrub. Low rate of spread, low flame length.
SH2	7%	Moderate load dry-climate shrub. Moderate rate of spread, moderate flame length.
GS1	5%	Short, sparse dry-climate grass with some shrubs. Moderate rate of spread, low flame length.
GS3	3%	Heavy load grass-shrub. High rate of spread, high flame length.
NB3	2%	Irrigated agricultural fields. Non-burnable except for grass beneath vines and orchard trees, curing wheat, etc.
GR1	2%	Short, sparse grass. Low rate of spread, low flame length.
TU1	1%	Light load grass and timber litter. Low spread, low flame length.

FBFM40	Percent	Description
SH3	1%	Moderate load humid-climate shrub. Moderate spread, moderate flame length.
TL3	1%	Moderate load conifer litter with small limbs. Moderate spread, moderate flame length.
NB8 – TU3	<1%	Various non-burnable, low-spread, or rare fuel types with negligible area

TIMBER LANDS

Forests primarily occur in the western part of the county in the Owyhee Range, as well as the extreme south-central zone, where the northern fringes of Nevada’s Buck Creek Mountains spill over into the county. Sagebrush and grasslands gradually transition to juniper-dominated woodlands, which are replaced by Douglas Fir-Ponderosa Pine communities at higher elevations, with some Subalpine Fir occurring near the county’s highest summits. Quaking Aspens can be found in some sheltered draws.

Land ownership in these regions is split more or less evenly between BLM, IDL, and private landowners. Developments are sparse, consisting mostly of seasonal cabins and homes, ranch outposts, as well as scattered infrastructure like repeater sites, cell towers, and fire lookouts.

WILDFIRE POTENTIAL

There appears to be a lower concentration of documented ignitions and wildfire in the forested parts of the county, and the rate of spread may be lower than grasslands. However, the potential intensity could be higher than the shrub-steppe and grassland areas of the county given the larger fuels, including dead and down timber litter, which could pose a severe threat to Silver City and other isolated developments. Moreover, the heightened difficulty of fire suppression in these areas underscores the potential hazardous outcomes from wildfire.

FIRE PROTECTION

The bulk of the county’s timberlands are under the jurisdiction of the Owyhee RFPA and Silver City Fire and Rescue, with small areas in the MRW Fire District, Saylor Creek RFPA, and the Duck Valley Reservation. Although each district may provide an initial response in the event of a wildland fire, extended attack would likely be the responsibility of the BLM and IDL.

POTENTIAL MITIGATION ACTIVITIES

Forest Type-Specific Treatments:

- Juniper Woodlands: mechanical thinning, mastication, and pile burning are effective where dense canopy and encroachment increase fire risk.
- Douglas Fir & Ponderosa Pine: Combined thinning and prescribed fire can reduce hazardous fuels and restore fire-resilient conditions.
- Subalpine Fir & Lodgepole Pine; Aspen: shelterwood harvesting and patchy prescribed burns remain viable, though perhaps more limited options at higher elevations. Fir tree removal and shelterwood harvesting should be explored as fuels reduction measures, especially in the vicinity of Silver City, where a crown fire in the abundant fir forests that encompass the town could be catastrophic for the historic mining town.

Defensible Space & Property Protection:

- Maintain 100+ feet of defensible space by mowing fine fuels and pruning ladder fuels from trees.
- Use fire-resistant building materials; relocate flammable items like propane tanks and firewood.
- Maintain clear driveways and roads to ensure safe evacuation and emergency access.
- Conduct road inventories to identify access constraints in high-risk areas.

Landscape-Scale Strategies:

- Implement fuel breaks and prescribed burning during safe weather conditions.
- Use targeted grazing and mulch dense understory vegetation to reduce fuel loads.
- Maintain old or primitive access roads for fire response logistics.
- Encourage property-specific fire response plans, Firewise practices, and local community education.

RANGELANDS

Sagebrush steppe and shrublands dominate Owyhee County’s landscape, with grasslands and invasive annuals, especially cheatgrass, medusahead, and crested wheatgrass being common in areas like the Snake River Valley and Bruneau Desert. These invasives can increase ignitions and shorten fire return intervals (*Crist et al., 2023*). Most rangelands are managed by BLM and other public agencies. Rural development, including ranches and homes in areas like Murphy and Oreana, is often surrounded by flammable vegetation. Combined with rugged terrain and limited access, this makes wildfire suppression in remote zones particularly difficult.

WILDFIRE POTENTIAL

Rangelands in Owyhee County face moderate to high wildfire risk due to dense grass-shrub fuels, sloped terrain, and limited access for firefighting. These open landscapes form continuous fuel beds that can carry fast-moving fires under hot, dry, and windy conditions. Sagebrush and grassland can produce large flame fronts and embers that travel up to 1.5 km, or even further where juniper has encroached (*Donovan et al., 2023*). Risk is highest in late summer and fall, when dry conditions and unharvested or overgrown vegetation increase fire intensity and spread.

Invasive species like cheatgrass worsen fire risk by creating fine, early-drying fuels that ignite easily and spread fire rapidly. Once established, cheatgrass increases fire frequency and hinders native vegetation recovery, contributing to a destructive fire-invasion feedback loop (*Crist et al., 2023*).

FIRE PROTECTION

All Fire Districts and RFPAs contain at least some rangelands, with the bulk of this land cover type being under the jurisdiction of the Owyhee, Saylor Creek, and Three Creek RFPA. Although each district may provide an initial response in the event of a wildland fire, extended attack would likely be the responsibility of the BLM and IDL.

POTENTIAL MITIGATION ACTIVITIES

- Targeted grazing reduces fine fuels like cheatgrass and has proven effective locally. Over 36 miles of fuel breaks were established after the 2015 Soda Fire, and USDA research supports its role in limiting flame lengths and slowing fire spread, especially in grassy areas with lower shrub cover (*Schachtschneider et al., 2024*).
- Invasive grass management is essential to break the grass-fire cycle. Practices include removing species like cheatgrass and reseeding with native perennials to reduce ignition risk and restore ecological balance.

- Juniper removal helps reduce ladder fuels and restore native sagebrush-steppe habitat; mechanical thinning is widely used to limit fire intensity in encroached areas.
- Prescribed fire, when feasible, can reduce fuel accumulation and promote native vegetation recovery. Burns have been conducted recently in the Juniper Mountain and Reynolds Creek areas within Owyhee County, among other locations.
- Community education and capacity building, through efforts by organizations including the Idaho Rangeland Resource Commission, BLM, and the University of Idaho Extension can help promote defensible space, home hardening, and preparedness. Partnerships with RFPAs have also expanded local firefighting capacity.
- Roadside fuel breaks improve suppression access, support community protection, and act as effective containment lines in open rangeland settings.

VULNERABILITIES

PUBLIC HEALTH

Wildfire smoke is one of the most significant public health threats in Owyhee County. Fine particulate matter can exacerbate asthma, COPD, and other respiratory conditions, particularly among older adults and uninsured residents, both of whom are overrepresented in the local population. Wildfire smoke has also been associated with higher rates of respiratory infection and may pose health risks weeks after exposure (*Delfino et al., 2016*). Visibility reduction during fires increases the risk of traffic accidents, especially along busy corridors like US-95. In addition, the loss of recreation access and aesthetics, especially in frequently visited public lands, may negatively affect community well-being and quality of life.

ECONOMY

The county's ranching and agricultural economy is highly vulnerable to wildfire damage. Fires can destroy fencing, troughs, hay storage, forage, and livestock, as well as disrupt harvesting and transportation. Invasive annual grasses, like cheatgrass, tend to increase fire frequency and reduce rangeland productivity. While some ranchers adapt grazing strategies to salvage forage after fire, these adaptations are often short-term and insufficient to offset losses (*Taylor et al., 2011*). Post-fire support, such as cost-share programs for reseeding, fencing repairs, temporary forage assistance, and technical planning aid, is critical to recovery, particularly for operations with limited financial reserves or federal grazing permits. The 2015 Soda Fire demonstrated the potential cost of rangeland wildfires, with more than \$40 million spent on rehabilitation for fencing, reseeding, invasive species management, and infrastructure repair (*Olsen et al., 2021*).

INFRASTRUCTURE

Wildfire can pose significant threat to a wide array of critical infrastructure in Owyhee County, including transportation corridors, electrical transmission lines, irrigation and water delivery systems, and rangeland improvements. The county's landscapes are dominated by fine fuels, primarily grass and grass-shrub communities, which support fast-moving fires, especially from late spring through early fall as fuels cure. While these fires often produce moderate flame lengths, their rapid spread can overwhelm suppression efforts, placing roads, utility lines, and nearby communities at elevated risk. Key transportation routes such as US-95, ID-51, and ID-78 traverse highly flammable rangelands. Thousands of unimproved BLM and county roads serve as vital access points for ranchers, recreationists, and emergency responders.

Fires can severely damage or destroy irrigation pivots, pumps, and delivery systems, while post-fire erosion frequently clogs canals and degrades water quality. The destruction of fencing, pipelines, troughs, and other range improvements used to manage livestock and conserve soil and water further complicates post-fire recovery (**Figure 16**). Wildfire can also disrupt remote communication systems, including radio repeaters used by first responders, hampering coordinated suppression and evacuation efforts.

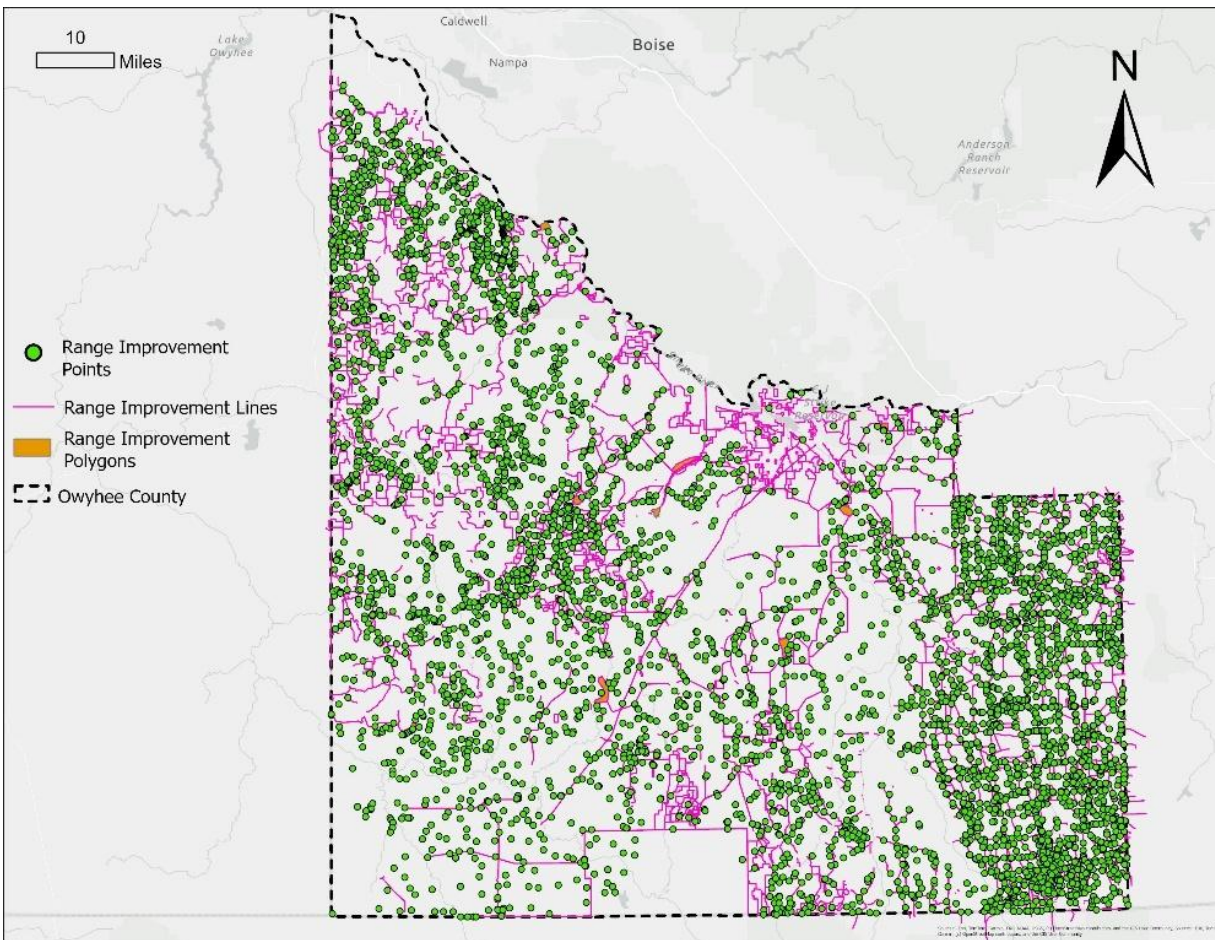


Figure 16) A spatial depiction of Rangeland Infrastructure is displayed here, having been obtained from the BLM GIS portal.

RECREATION

Recreation in Owyhee County presents both wildfire risks and vulnerabilities. Popular destinations such as Jump Creek Falls, the Owyhee Front OHV trail system near Hemingway Butte and Rabbit Creek, and the backcountry canyons of the Owyhee and Bruneau-Jarbidge Rivers draw thousands of visitors annually. Other popular areas include the CJ Strike Reservoir and Bruneau Sand Dunes State Park near the communities of Bruneau and Indian Cove, respectively. Moreover, the historic town of Silver City, located in the Owyhee Range, receives 10s of thousands of recreators annually, compounding fire risk in this vulnerable WUI community and amplifying egress hazards in the event of a wildfire or other natural disaster (Figure 17).

The high volume of visitors that all these locations attract results in increased emergency responses for wildland/vehicle fires, health crises, rescues, and other emergencies. These areas are also often characterized by flammable vegetation, limited access routes, and minimal infrastructure, increasing their exposure to wildfire. Recreational activities, particularly dispersed camping and off-highway vehicle (OHV) use, can inadvertently ignite fires through unattended campfires, sparks from vehicles, or unauthorized trail creation, potentially adding to ignition risk and accelerating land degradation (Cohen, 2024; Steubner, 2019). At the same time, these sites are vulnerable to fire damage that can impact public safety, degrade natural resources, and restrict access through closures or trail loss. Increased visitation associated with the growth of the Greater Boise Area as well as limited on-site enforcement in remote areas further compound these risks.

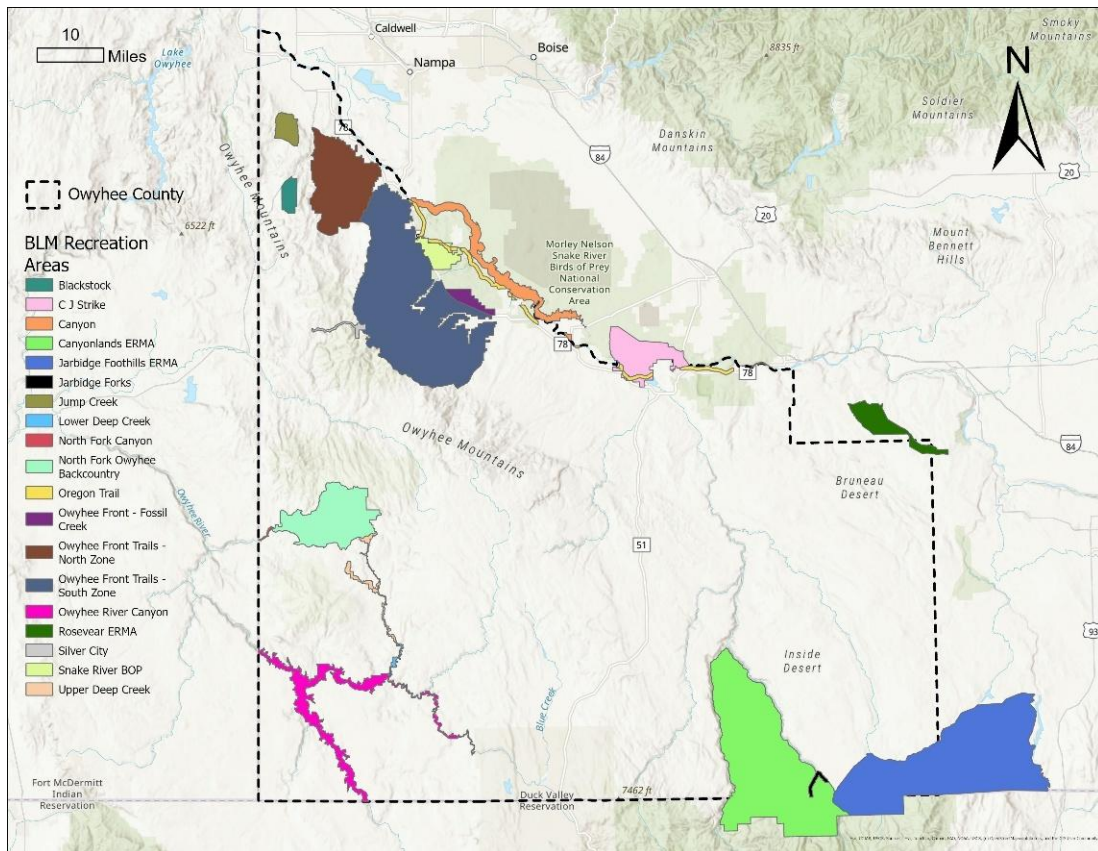


Figure 17) Displayed above is a map of recreation areas maintained by the BLM in and around Owyhee County. Although not explicitly shown here, the Bruneau Dunes State Park is another notable recreational area in the northeast part of the county, directly southeast of the CJ Strike Recreational Area.

4 – MITIGATION ACTION ITEMS

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
1	County-Wide Emergency Alert System	Education/Capacity Building		Owyhee County	Continue to use countywide emergency alert system for ignition/wildfire notifications and evacuations and explore opportunities for improvement, especially for those in rural or undeveloped locations like Oreana and other unincorporated communities. For example, one Oreana resident expressed a desire for instant text notifications for fires near his homes, whether prescribed burns or wildland notifications.	FEMA EMPG, County budget; \$100K - \$250K	Owyhee County, Rural Fire Districts	2026-2027

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
2	Clearing debris on Idaho FG easement	Mitigation/Fuels Reduction		Hardtrigger Creek near Wildhorse Road, Givens Hot Springs	<p>Work with Idaho Fish and Game to form a plan to clear debris in Hardtrigger Creek near Wildhorse Lane, since this practice has been disallowed due to the easement.</p> <p>Steps: Reach out to Idaho Fish and Game about the feasibility of a change in land management on the easement to allow clearing of tumbleweeds and other debris to mitigate flooding issues.; Explore possible methods for clearing the debris i.e. targeted grazing, prescribed burns, etc.; If possible, develop a land use plan to keep the drainage clear of debris through periodic maintenance.</p>	FEMA HMGP, County budget; \$50K - \$150K	Owyhee County, MRW Fire, IFG	2027

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
3	Bolster public education on wildfire ignition risks	Education		Owyhee County	Identify suitable locations for hazard signage; study other avenues of public outreach i.e. radio, social media, public events, letters in mail; develop effective language for warning the public on common high-risk scenarios (recreational shooting, off-roading, etc.) and possible consequences & penalties; coordinate with land managers; write grants for materials and contactor(s); install signage at identified high-risk areas (i.e. OHV trailheads)	FEMA EMPG, CDWG; County budget; \$100K - \$250K	Owyhee County, ITD, RFDs, RFPAs	2026-2027

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
4	New Fire Station for MRW Rural Fire District	Capacity Building		MRW Rural Fire District	Volunteers from MRW Fire have expressed the need for a new fire station in order to accommodate all their equipment and serve as a centralized hub to better serve their district.; Steps: Secure funding for the new station.; Commission a study to determine the best location.; Find a contractor to begin construction.	FEMA HMGP, CWDG, County budget; \$8M - \$10M	Owyhee County, MRW Fire	2027-2028
5	Compliance Officer	Capacity Building		Owyhee County	Hire a compliance inspector or create a position for one to enforce conditional use regulations for construction in fire prone areas: Define job description; Secure funding; Hire and train inspector; Implement inspection program and enforcement protocol.	CDWG; County budget; \$75K - \$150K annually	Owyhee County	2027

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
6	Redistricting Rural Fire districts	Planning		Owyhee County, Rural FDs	Adjust rural fire district boundaries to resolve areas with unclear jurisdictions i.e. Oreana: Map service gaps; engage fire districts, RFPAs, and communities; formalize boundary changes and update dispatch protocols.	FEMA HMGP, CDWG, County budget, Staff Time; \$10K - \$15K	Owyhee County, Rural FDs, RFPAs	2026-2027
7	Reline City of Grand View Water Tank	Capacity Building		City of Grand View	Reline City of Grand View water tank to improve water availability in the case of a wildland fire or other emergency.	IDWR, USDA RD; \$50K - \$100K	City of Grand View, IDWR	2026-2027
8	Lithium Battery Plant EAP	Planning		Hemingway Substation	Develop Emergency Action Plan for lithium battery plant hazards: Perform hazard assessment; Coordinate with MRW Fire and facility operators; Conduct education and outreach on possible hazards; Draft EAP; Conduct training and exercises.	County budget, FEMA HMGP; \$25K - \$75K	Owyhee County, MRW Fire District	2026-2027

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
9	Tumbleweed Burning	Mitigation/Fuels Reduction		Owyhee County	Partner with BLM to develop a strategy to systematically burn tumbleweed accumulations from ditches and at culvert and bridge crossings; Inventory problematic locations and choke-points; Seek grants for environmental assessments if needed; Conduct assessments and coordinate with BLM on a plan for prescribed burns and other thinning methods	County Budget, BLM Grants; \$50K - \$150K	BLM, Owyhee County Road & Bridge	2027

10	Fuels Reduction near Critical Infrastructure	Mitigation/Fuels Reduction		Owyhee County	Plan, fund, and implement fuels reduction projects along roads, power lines, municipal watersheds, and other infrastructural components as outlined in the Owyhee County WUI Wildfire Mitigation Plan (2005 or most recent document);; Continue to partner with BLM and other land managers on targeted grazing (i.e. Owyhee Front), prescribed burns (i.e. Reynolds Creek, South Mountain), mechanical & chemical thinning of juniper & invasive annuals; coordinate on Tri-State/Soda Fuel Break plans; continue to pursue federal and state grants for fuels reduction along county roads; coordinate with cities on weed prevention and vegetative thinning where practical; explore opportunities for broader-scale landscape management (environmental assessments, equipment-shares, etc.)	FEMA HMGP, BLM Grants, County budget; \$250k - \$1M or more depending on scope	Owyhee County, BLM, IDL, IDT, Road & Bridge, Private Landowners, Cities	2026-2028
----	--	----------------------------	--	---------------	---	--	---	-----------

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
11	Education and conditional use for new construction.	Planning/Education		Owyhee County	Educate construction permit applicants and the general public on fire resilient building materials and defensible spaces and continue conditional use permits for all new construction in fire prone areas.	County Budget, Staff Time; \$10K - \$15K	Owyhee County	2026
12	WUI Advisory Committee	Planning		Owyhee County	Investigate the feasibility of forming a WUI Advisory Committee to advise County Commissioners on wildland urban interface issues and treatments: Identify suitable members and associated functions; Develop an initial plan and propose to County Commissioners; Coordinate with fire chiefs & RFPAs chairs; Conduct public outreach; Develop plan for regular meetings, monitoring & maintenance	FEMA HMGP, CWDG, County budget, Staff Time; \$15K - \$20K	Owyhee county, Rural Fire Districts, RFPAs, BLM, IDL	2027

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
13	Defensible Spaces around Private Lands	Planning, Fuels Reduction		Owyhee County	Work with the BLM and IDL to investigate the possibility of planning, funding, and implementing community defensible space and fuels reduction projects around private lands, including where they abut federal and state lands: Coordinate with landowners and managing agencies; Develop a set of guidelines and requirements (i.e. private lands must also be properly managed to mitigate ignition risk); Hire contractor(s) and conduct environmental assessments if needed; Begin fuels reduction work either through contractors or by private landowners in coordination with BLM/IDL/other managing agencies	County Budget, Staff time; \$15K - \$500K depending on progress & scope	Owyhee County, BLM, IDL, Private Landowners	2027-2028

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
14	Fire Department and RFPA Training	Capacity Building		Owyhee County	Identify and assess fire department needs and necessary RFPA trainings: Inventory current RFD/RFPA equipment & personnel; Assess gaps & needs; Convene with Chiefs/Chairs to establish priorities; Draft a plan for each department to bolster capabilities; Write grants to obtain each jurisdiction's greatest needs (hire contractor(s) if necessary); Conduct training as needed	FEMA HMGP, CWDG, BLM Grants, IDL Cost-Share, County budget; \$25K - \$50K	Owyhee County; BLM; IDL; RFPAs; RFDs	2027-2028
15	Starlink for Firefighters	Capacity Building		Owyhee County	Equip RFPA & RFD vehicles with Starlink & an inverter to provide AC power, including a ROAM plan and compatible dish for effective communication in the field.; Convene with Fire Chiefs/Chairs to confirm Comms priorities; write grants to obtain equipment; equip/retrofit vehicles; conduct training campaigns & field exercises for staff & volunteers	FEMA HMGP, CWDG, County budget, staff time/TBD; \$50K - \$100k initially; \$15K - \$30K annually	Owyhee County, RFPAs, RFDs	2027-2028

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
16	Water Supply Study & Enhancement	Planning		Owyhee County	Enhance and maximize water availability for wildland firefighters throughout the county;; Identify areas lacking a sufficient water supply; Develop MOUs and handshake-agreements with private landowners to use livestock water and other sources in emergencies; Develop a plan to identify suitable sites for publicly accessible fill/dip sites; Write grants; Hire contractors; Begin construction	FEMA HMGP, CWDG, BLM Grants, IDL Cost-Share, County budget; \$25K - \$1M or more depending on scope	Owyhee County, Owyhee Cattlemen's Association, BLM, IDL, various RFDs	2027-2029

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
17	Enhance radio coverage and interoperability	Education		Owyhee County	Enhance radio coverage, interoperability, and dispatch links for rural fire districts (digital narrow band upgrade for concurrence with BLM);; Inventory current systems; Explore possible comms alternatives (i.e. mesh radios, satellite phones, starlink, etc.); Interview RFDs & RFPAs to establish priorities; Conduct radio propagation study to identify coverage gaps and inform future repeater placements; Design upgrade plan; Procure new radios/repeaters; Coordinate training and interoperability tests.	BLM, FEMA; \$50K - \$100K	BLM, Owyhee County	2027-2029

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
18	14-day camping limit enforcement	Planning, Capacity-Building		Owyhee County	Enforce 14-day camping limit on all public lands to reduce human-caused ignitions; Draft ordinance/policy; Coordinate with Sheriff and land managers, BLM LEOs, etc.; Implement enforcement and public outreach; Explore opportunities for improving signage	County budget, staff time; \$15K - \$20K	Owyhee County, Sheriff's Office, BLM, IDL	2026

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
19	Silver City Zoning Amendment	Planning		Silver City	Amend historic zoning (Owyhee County Ordinance 88-03) to reduce wildfire ignition risk while maintaining Silver City's historic character. The project would allow limited use of ignition-resistant, non-combustible exterior materials (i.e. fiber-cement siding with historic profiles and stone or concrete porches and decks) to reduce ember ignition on common ignition zones. Tasks include drafting a zoning amendment, developing design guidelines, legal review, and public outreach.	FEMA HMGP; Community Wildfire Defense Grant; IDL cost-share (\$25K-\$50K)	SCFR; SCHA; community volunteers; IDL; Owyhee County Historic Preservation Commission; Owyhee County Attorney	2026–2028

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
20	Defensible Space Volunteering	Mitigation / Fuels Reduction		Cities and communities in Owyhee County	Expand defensible space and community fuel reduction around homes and infrastructure through parcel prioritization, defensible space assessments, volunteer and assistance programs, and periodic chipper and burn days. Implementation depends on community participation and agreement.	FEMA HMGP; Community Wildfire Defense Grant; IDL cost-share (\$10K-\$20K annually per community)	Community volunteers; IDL; Cities; Homeowners Associations; local fire departments	2027 (ongoing)
21	Silver City Fuels Reduction	Mitigation / Fuels Reduction		Silver City	Implement forest fuels reduction and wood utilization projects surrounding Silver City, with emphasis on dense fir stands and declining aspen groves. Activities may include fuels mapping, thinning, mastication, fuel breaks, and firewood gleaning where appropriate, coordinated with BLM, IDL, and private landowners to reduce crown fire potential and ember production.	BLM Fuels Program; USFS/IDL grants; stewardship contracts; timber sales (\$250K-\$750K)	BLM; IDL; SCHA; SCFR	2027–2030

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
22	Silver City Water Upgrades	Capacity Building		Silver City	<p>Upgrades are needed to the town's existing water supply system of 4" PVC piping with 4" riser hydrants in order to support a target firefighting capacity of approximately 1,200 GPM, including expansion of town water storage to a buried one-million-gallon tank.</p> <p>Separately, Silver City Fire & Rescue maintains a non-potable water source at the Morning Star Mine using a 10 HP pump producing approximately 100 GPM; proposed improvements include lining the existing tailings pond, evaluating piping to the Landing Zone to supply a 6,000-gallon dip tank,, and constructing a headwall in Jordan Creek below the cemetery to support engine fill and dip-tank recharge during fire response.</p>	FEMA; USDA Rural Development; other federal grants; Idaho infrastructure funds, Integra DeLamar Mine (\$1M-\$3M)	SCFR; Owyhee County Commissioners; BLM; IDWR; Integra DeLamar Mine	2028-2032

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
23	Silver City Egress Plan	Planning		Silver City and surrounding area	Develop a coordinated evacuation and egress plan for Silver City, including route mapping, traffic control procedures, signage, map distribution, and periodic drills, to improve public safety and emergency access during wildfire and other emergency events.	FEMA EMPG; CWDG; County Budget (\$15K-\$50K)	Owyhee County Sheriff; SCFR; Owyhee County Emergency Management; IDT; Silver City Property Owners; Owyhee County Historic Preservation Commission	2026–2027
24	Propane Tank Burial	Mitigation / Fuels Reduction		Silver City	Bury large propane tanks located near the Historic Idaho Hotel and other high-risk structures to reduce the potential for a Boiling Liquid Expanding Vapor Explosion (BLEVE) during wildfire or structure fire events.	FEMA EMPG, IDL cost-share (\$50K-\$100K)	BLM; IDL; Owyhee County; Silver City Fire & Rescue; Owner of the Historic Idaho Hotel	2026–2027

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
25	Fire Station for SCFR	Capacity Building		Silver City Area	Work with BLM to study the possibility of a new fire station for SCFR located on federal land to improve response capacity, equipment storage, and firefighter safety	FEMA Assistance to Firefighters Grant (AFG), Community Wildfire Defense Grant (CWDG), USDA Rural Development, State of Idaho fire or infrastructure grants, local cost-share or donations; (\$50K-\$100K for feasibility and siting study)	SCFR, BLM, Owyhee County; Idaho Department of Lands (IDL); Silver City Historical Association (SCHA); community stakeholders	2028-2032
26	Clearing Juniper Thinning Debris	Fuels reduction		Juniper & South Mountain areas	Develop a plan with the BLM to burn, masticate, or otherwise clear Juniper debris left behind from thinning operations in the Mud Flat Road/Juniper/South Mountain area to allow easier firefighter access	BLM, IDL cost-share, CWDG; \$500k - \$1m	Owyhee RFP, Jordan Valley RFP, BLM, IDL, Oregon Department of State Lands	2027-2028
27	2" Trash Pumps	Capacity Building		Owyhee County / Owyhee RFP Area	Purchase several 2-inch trash pumps to improve initial attack and water transfer capacity during wildfire suppression operations.	IDL VFA Grant, BLM Rural Fire Readiness, RFP funds; \$4K - \$8K	Owyhee RFP, BLM, IDL	2026

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
28	Drip Torches	Capacity Building		Owyhee County / Owyhee RFPA Area	Acquire drip torches for prescribed burning, backburning, and firefighter training exercises to improve live-fire readiness.	IDL VFA Grant, BLM Rural Fire Readiness, RFPA funds; \$1.5K - \$3K	Owyhee RFPA, BLM, IDL	Spring 2026
29	Batteries & Field Power Systems	Capacity Building		Owyhee County / Owyhee RFPA Area	Purchase rechargeable batteries and portable chargers for handheld radios, GPS units, and other field electronics used during wildfire operations.	IDL VFA Grant, BLM Rural Fire Readiness, RFPA funds; \$1K - \$2K	Owyhee RFPA, BLM, IDL	Spring 2026
30	PPE Replacement	Capacity Building		Owyhee County / Owyhee RFPA Area	Purchase new and replacement PPE, including large Nomex shirts for RFPA members based on 2026 training headcount to ensure compliance with wildland firefighting standards.	IDL VFA Grant, BLM Rural Fire Readiness, RFPA contributions; \$5K - \$7K	Owyhee RFPA, BLM, IDL	Spring 2026
31	RFPA Maintenance Fund	Capacity Building		Owyhee County / Owyhee RFPA Area	Establish and maintain an operating fund to cover fuel (routine training & incident response), PM/repairs, tires, parts, and contingency for 10 military cab-over engines and 30–40 personnel.	RFPA dues, BLM Cooperative Fire Agreement reimbursements, county support; \$50k - \$100k initially; \$150k - \$250k annually	Owyhee RFPA, Owyhee County, BLM, IDL	2026-2027

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
32	Type 6 Upgrade	Capacity Building		Bruneau Fire District	Overhaul or replace existing 2012 Ford F-550 Type 6 engine with a newer model featuring increased water and equipment capacity to improve response capabilities.	FEMA AFG, IDL VFA Grant, BLM Rural Fire Readiness, local match; \$250K - \$400K	Bruneau Fire District, Owyhee County, IDL, BLM	2026-2027
33	Bruneau Fire Station Renovation	Capacity Building		Old BLM Guard Station 2 miles from Bruneau	Renovate the recently donated BLM guard station to include deeper engine bays & volunteer offices.	FEMA AFG, IDL VFA Grant, BLM Rural Fire Readiness, local match; \$300k - \$400k	Bruneau Fire District, Owyhee County, BLM, IDL	2027-2028
34	Training Facility & Helipad Construction	Capacity Building		Bruneau Fire District	A live fire training structure for volunteers to practice wildland firefighting situations as well as a paved and lighted helipad for air ambulances will both be constructed at the soon-to-be-new Bruneau Fire station at the old BLM Guard Station near Bruneau.	Donated to Fire Department	Bruneau Fire District, BLM	Ongoing - 2026

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
35	WUI homeowner Outreach	Education		Bruneau town edge / WUI	Conduct homeowner education and outreach to reduce wildfire risk at the wildland–urban interface through defensible space training, fuel reduction awareness, and Firewise participation.	FEMA EMPG, IDL Community Fire Assistance, local funds; \$10K - \$25K	Bruneau Fire District, Owyhee County, IDL	2026-2027
36	Local Burn Permits	Planning		Bruneau Are/Owyhee County	Develop a local regulation or permit system requiring residents to call for authorization before conducting spring prescribed burns to reduce escaped fires and improve coordination.	County ordinance, local funds, staff time; Cost depends on legislative action	Owyhee County, Idaho RFPA Network, IDL, State Legislature	2026-2027
37	Volunteer Incentives	Planning/Capacity Building		Bruneau Fire District, Owyhee County; possible statewide	Support development of a state or federal volunteer firefighter benefits program providing retirement or insurance incentives to improve recruitment and retention of rural volunteers.	IDL, State Legislature, Staff Time; Cost depends on legislative action	Owyhee County, State Legislature, Idaho Fire Chiefs Association, RFPAs, IDL, FEMA	2026-2027

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
38	Statewide RFPA Funding Mechanism	Planning/Capacity Building		Bruneau Fire District, Owyhee County; possible statewide	Advocate for creation of a small recreational licensing fee (added to fishing, boating, RV, ATV registrations) to at least partially fund RFPAs statewide for training, equipment, and operations.	IDL, State Legislature, Staff Time; Cost depends on legislative action	Owyhee County, Idaho RFPA Network, IDL, State Legislature	TBD
39	Digital Compliance for Radios	Capacity Building		Three Creek RFPA	Upgrade existing radios to digital compliance standards by purchasing digital licenses for current radios and replacing non-compliant units. This ensures interoperability with BLM, IDL, and other fire agencies that have already upgraded.	BLM surplus program, FEMA AFG, IDL Volunteer Fire Assistance (VFA) Grant, RFPA self-assessment funds; \$45K - \$60K	Three Creek RFPA, BLM, IDL, Owyhee County	2026
40	Fire Shelter Replacement	Capacity Building		Three Creek RFPA	Replace expired fire shelters to meet current NFPA standards and reduce liability risk. Approximately 60 shelters need to be replaced.	FEMA AFG, IDL VFA, IDL Forestry & Fire Grants, RFPA funds; \$30K - \$35K (\$500 - \$550 per shelter)	Three Creek RFPA, IDL	2026
41	PPE Modernization and Maintenance	Capacity Building		Three Creek RFPA	Replace aging and worn PPE including gloves, Nomex, helmets, and boots; establish a maintenance fund for periodic repairs and replacements.	FEMA AFG, IDL VFA, IDL Forestry & Fire Grants, RFPA funds; \$20K - \$25K initially; \$5k annually	Three Creek RFPA, IDL	2026-2027

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
42	AED Purchase and Training Program	Capacity Building, Education		Three Creek RFPA	Purchase updated AEDs and provide CPR/AED training for volunteers, addressing medical risk among an aging volunteer base and during extended wildland incidents.	FEMA AFG, local donations, RFPA funds; \$5K - \$10K	Three Creek RFPA, IDL	2026
43	Engine and Equipment Maintenance	Capacity Building		Three Creek RFPA	Maintain and repair aging apparatus (surplus BLM engines, etc.) - includes diesel, tires, filters, parts, and minor labor costs. Preventive maintenance ensures operational readiness for wildfire response.	BLM/IDL Assistance Agreements/Cost-Share; \$30K - \$50K annually	Three Creek RFPA, BLM, IDL	2026-2027
44	Sage-Grouse Habitat Improvement	Mitigation/Fuels Reduction		South Mountain?	640 Acres of Juniper eradication - limbed piled and burned	IDL funds; \$500k - \$1M	Idaho Department of Lands	May 15, 2026
45	New Brush Truck for GVFD	Capacity Building		Grand View - Oreana	Purchase a new type 6 brush truck to help with WUI fires in the extensive outreaches of GVFD's response area.	CWDG, IDL cost-share, BLM donations; \$375,000	GVFD, BLM, IDL	2027-2028
46	GVFD radio standardization	Capacity Building		Grand View - Oreana	Reach complete standardization of all GVFD apparatus, especially the capability of going digital.	CDWG, IDL cost-share, GVFD budget; \$15,000	GVFD, IDL	2026-2027

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
47	Clover Seedling Hand Planting	Mitigation	Figure 18	The junction of Clover Crossing and Clover/Three Creek Roads	Restoration and re-establishment of 50,000 ARTRW seedlings after the 2019 Clover Fire.	TFD Fuels; \$220,000	BLM Jarbidge Field Office	October 2024
48	Horse Butte North Drill 9 (Sandbergs bluegrass)	Mitigation	Figure 18	Northern portion of the Horse Butte (Big Bend)	The seeding will establish fire-resistant perennial vegetation with the fuel break segment. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	BIL; \$50,000	BLM Jarbidge Field Office	October 2024
49	Horse Butte Rd Maintenance	Mitigation	Figure 18	Northern portion of the Horse Butte (Big Bend)	Maintenance (added gravel and graded) of Horse Butte Rd to its existing condition and improve access and response time to fire resources and other uses in the area.	BIL; \$750,000	BLM Jarbidge Field Office	Spring 2025
50	Pot Hole 5 Chemical	Mitigation	Figure 18	Unit 5 of the 2019 Pot Hole Fire	Follow up treatment associated with the Emergency Stabilization & Rehabilitation (ES&R) Plan to treat annual exotic species.	TFD Fuels; \$50,000	BLM Jarbidge Field Office	September 2024

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
51	Winter Camp 11 & 12 Chemical	Mitigation	Figure 18	Unit 11 and 12 of the 2018 Winter Camp Fire	Follow up treatment associated with the Emergency Stabilization & Rehabilitation (ES&R) Plan to treat annual exotic species.	TFD Fuels; \$280,000	BLM Jarbidge Field Office	September 2024
52	Hot Spring; 3 & 4 Chemical	Mitigation	Figure 18	Unit 3 and 4 of 2019 Hot Spring Fire	Follow up treatment associated with the Emergency Stabilization & Rehabilitation (ES&R) Plan to treat annual exotic species.	TFD Fuels; \$92,000	BLM Jarbidge Field Office	September 2024
53	Pot Hole North Drill 8 Seeding	Mitigation	Figure 18	North end of Pot Hole Road	The seeding will establish fire-resistant perennial vegetation with the fuel break segment. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	BIL; \$35,000	BLM Jarbidge Field Office	October 2024
54	Pot Hole North Aerial 5 Seeding	Mitigation	Figure 18	North end of Pot Hole Road	The seeding will establish fire-resistant perennial vegetation with the fuel break segment. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	BIL; \$50,000	BLM Jarbidge Field Office	October 2024

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
55	Clover South 6 Mowing	Mitigation	Figure 18	Clover Crossing Road. From Horse Butte Road SE to Clover Crossing.	The mowing treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	BIL; \$25,000	BLM Jarbidge Field Office	October 2024
56	Clover South Chem 17	Mitigation	Figure 18	Clover Crossing Road. From Horse Butte Road SE to Clover Crossing.	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	BIL; \$37,000	BLM Jarbidge Field Office	September 2024
57	Clover South Chem 18 Option 1	Mitigation	Figure 18	Clover Crossing Road. From Horse Butte Road SE to Clover Crossing.	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	BIL; \$31,000	BLM Jarbidge Field Office	May 2025

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
58	Clover South Chem 18 Option 2	Mitigation	Figure 18	Clover Crossing Road. From Horse Butte Road SE to Clover Crossing.	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	BIL; \$31,000	BLM Jarbidge Field Office	June 2025
59	Horse Butte North Drill 9 (Sandberg's bluegrass)	Mitigation	Figure 18	Northern portion of the Horse Butte (Big Bend)	The seeding will establish fire-resistant perennial vegetation with the fuel break segment. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	BIL; \$10,000	BLM Jarbidge Field Office	September 2025
60	2025 Roadside Fuel Break Chemical	Mitigation	Figure 18	Main access roads within the northern portion of the Jarbidge Field Office.	Treat noxious weeds to prevent spread within and adjacent to mechanically treated areas. Protects sage grouse General and Priority Habitats.	TFD Fuels; \$25,000	BLM Jarbidge Field Office	Spring 2025

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
61	205 Fuel Breaks Tumbleweed Burn	Mitigation	Figure 18	Main access roads, fence lines and drainages within the northern portion of the Jarbidge Field Office.	Treatment would remove dry vegetation from existing road template and adjacent fence lines to reduce roadside fuels. Protects sage-grouse General and Priority Habitats. With the Oregon-Idaho-Nevada Health Lands focal area.	BIL; \$35,000	BLM Jarbidge Field Office	Winter, Spring, 2025
62	Middle Kinyon Chem 17	Mitigation	Figure 18	Middle portion of the Kinyon Road	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	BIL; \$50,000	BLM Jarbidge Field Office	September 2024
63	Middle Kinyon Chem 18	Mitigation	Figure 18	Middle portion of the Kinyon Road	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	BIL; \$39,985	BLM Jarbidge Field Office	May 2025

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
64	Middle Kinyon Chem 18	Mitigation	Figure 18	Middle portion of the Kinyon Road	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	BIL; \$50,015	BLM Jarbidge Field Office	June 2025
65	Middle Kinyon Drill 11	Mitigation	Figure 19	Middle portion of the Kinyon Road	The seeding will establish fire-resistant perennial vegetation with the fuel break segment. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	BIL; \$30,000	BLM Jarbidge Field Office	September, 2025
66	Clover South Drill 11	Mitigation	Figure 19	Clover Crossing Road. From Horse Butte Road SE to Clover Crossing.	The seeding will establish fire-resistant perennial vegetation with the fuel break segment. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	BIL; \$219,140	BLM Jarbidge Field Office	September, 2025

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
67	Middle Kinyon Aerial 6	Mitigation	Figure 19	Middle portion of the Kinyon Road	The seeding will establish fire-resistant perennial vegetation with the fuel break segment. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels; \$242,834	BLM Jarbidge Field Office	Winter, 2025/2026
68	Pot Hole Chemical 6	Mitigation	Figure 19	South of Crows Nest Butte	Follow up treatment associated with the Emergency Stabilization & Rehabilitation (ES&R) Plan to treat annual exotic species.	TFD Fuels; \$225,000	BLM Jarbidge Field Office	September, 2025
69	Pot Hole Chemical 7	Mitigation	Figure 19	North of Horse Butte	Follow up treatment associated with the Emergency Stabilization & Rehabilitation (ES&R) Plan to treat annual exotic species.	TFD Fuels; \$255,000	BLM Jarbidge Field Office	September, 2025
70	HMA Middle Mow 7	Mitigation	Figure 19	West of Grindstone Butte	The mowing treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	BIL; \$23,000	BLM Jarbidge Field Office	December, 2025

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
71	HMA 2 Mow 7	Mitigation	Figure 19	East of Twin Butte	The mowing treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	BIL; \$68,750	BLM Jarbidge Field Office	December, 2025
72	HMA 3 Mow 7	Mitigation	Figure 19	East of Notch Butte	The mowing treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	BIL; \$54,000	BLM Jarbidge Field Office	December, 2025
73	HMA 4 South Maintenance Mow 7	Mitigation	Figure 19	East of Indian Butte	The mowing treatment will reduce tall vegetation with the fuel break segment as maintenance of existing fuel break. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	BIL; \$12,600	BLM Jarbidge Field Office	December, 2025

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
74	In-House fuel break Maintenance	Mitigation	Figure 19	North of Clover Crossing and Soth of Coonskin Butte	The mowing treatment will reduce tall vegetation with the fuel break segment as maintenance of existing fuel break. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	BIL; \$35,000	BLM Jarbidge Field Office	Spring, 2026
75	HMA 3 Chem 20 Option 1	Mitigation	Figure 20	East of Notch Butte	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels; \$9,300	BLM Jarbidge Field Office	Spring, 2027
76	HMA 3 Chem 20 Option 2	Mitigation	Figure 20	East of Notch Butte	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels; \$9,300	BLM Jarbidge Field Office	Spring, 2027

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
77	HMA Middle Chem 19	Mitigation	Figure 20	West of Grindstone Butte	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities	TFD Fuels; \$5,300	BLM Jarbidge Field Office	Fall 2026
78	HMA Middle Chem 20 Option 1	Mitigation	Figure 20	West of Grindstone Butte	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities	TFD Fuels; \$5,300	BLM Jarbidge Field Office	Spring, 2027
79	HMA Middle Chem 20 Option 2	Mitigation	Figure 20	West of Grindstone Butte	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities	TFD Fuels; \$5,300	BLM Jarbidge Field Office	Spring, 2027

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
80	Crows Nest 2 Mow 9	Mitigation	Figure 20	Crows Nest Road between The Big Hill and Twin Buttes	The mowing treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels; \$38,000	BLM Jarbidge Field Office	Fall 2026
81	Crows Nest 3 Mow 9	Mitigation	Figure 20	Crows Nest Road between Twin Buttes and Indian Ridge	The mowing treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels; \$77,500	BLM Jarbidge Field Office	Fall 2026
82	Hot Spring 3 Seedling	Mitigation	Figure 21	Inside Desert NE of Jarbidge-Bruneau River's conversion	Restoration and re-establishment of 150,000 ARTRW seedlings after the 2019 Hot Spring Fire.	TFD Fuels; \$175,000	BLM Jarbidge Field Office	Fall 2027
83	Coonskin Chemical 1	Mitigation	Figure 21	South and west of Castleford Butte	Follow up treatment associated with the Emergency Stabilization & Rehabilitation (ES&R) Plan to treat annual exotic species.	TFD Fuels; \$338,343	BLM Jarbidge Field Office	Fall 2027

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
84	Mosquito Lake Chemical 1	Mitigation	Figure 21	South of Mosquito Lake Butte	Follow up treatment associated with the Emergency Stabilization & Rehabilitation (ES&R) Plan to treat annual exotic species.	TFD Fuels; \$16,000	BLM Jarbidge Field Office	Fall 2027
85	Soldier Chemical 1	Mitigation	Figure 21	South of Saylor Creek Air Force Range	Follow up treatment associated with the Emergency Stabilization & Rehabilitation (ES&R) Plan to treat annual exotic species.	TFD Fuels; \$175,483	BLM Jarbidge Field Office	Fall 2027
86	Dove Chemical 1	Mitigation	Figure 21	Bruneau Desert, near Dove Spring	Follow up treatment associated with the Emergency Stabilization & Rehabilitation (ES&R) Plan to treat annual exotic species.	TFD Fuels; \$119,132	BLM Jarbidge Field Office	Fall 2027
87	HMA 2 Aerial Seeding 7	Mitigation	Figure 21	East of Twin Butte	The seeding will establish fire-resistant perennial vegetation with the fuel break segment. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels; \$201,569	BLM Jarbidge Field Office	Winter 2027-2028

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
88	HMA 3 Aerial Seeding 7	Mitigation	Figure 21	East of Notch Butte	The seeding will establish fire-resistant perennial vegetation with the fuel break segment. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels; \$152,628	BLM Jarbidge Field Office	Winter 2027-2028
89	HMA Middle Aerial Seeding 7	Mitigation	Figure 21	West of Notch Butte	The seeding will establish fire-resistant perennial vegetation with the fuel break segment. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels; \$56,000	BLM Jarbidge Field Office	Winter 2027-2028
90	HMA 2 Drill Seeding 7	Mitigation	Figure 21	East of Twin Butte	The seeding will establish fire-resistant perennial vegetation with the fuel break segment. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.; .	TFD Fuels; \$25,000	BLM Jarbidge Field Office	Summer/Fall 2027

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
91	HMA 3 Drill Seeding 7	Mitigation	Figure 21	West of Notch Butte	The seeding will establish fire-resistant perennial vegetation with the fuel break segment. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels; \$16,500	BLM Jarbidge Field Office	Summer/Fall 2027
92	HMA Middle Drill Seeding 7	Mitigation	Figure 21	West of Notch Butte	The seeding will establish fire-resistant perennial vegetation with the fuel break segment. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels; \$6,000	BLM Jarbidge Field Office	Summer/Fall 2027
93	Crows Nest 2 Chemical 21	Mitigation	Figure 21	Crows Nest Road between The Big Hill and Twin Buttes	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels	BLM Jarbidge Field Office	Fall 2027

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
94	Crows Nest 3 Chemical 21	Mitigation	Figure 21	Crows Nest Road between Twin Buttes and Indian Ridge	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities	TFD Fuels	BLM Jarbidge Field Office	Fall 2027
95	Crows Nest 2 Chemical 22 Option 1	Mitigation	Figure 21	Crows Nest Road between The Big Hill and Twin Buttes	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels	BLM Jarbidge Field Office	Spring, 2028
96	Crows Nest 2 Chemical 22 Option 2	Mitigation	Figure 21	Crows Nest Road between The Big Hill and Twin Buttes	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels	BLM Jarbidge Field Office	Spring, 2028

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
97	Crows Nest 3 Chemical 22 Option 1	Mitigation	Figure 21	Crows Nest Road between Twin Buttes and Indian Ridge	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels	BLM Jarbidge Field Office	Spring, 2028
98	Crows Nest 3 Chemical 22 Option 2	Mitigation	Figure 21	Crows Nest Road between Twin Buttes and Indian Ridge	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels	BLM Jarbidge Field Office	Spring, 2028
99	Balanced Rock Middle Mow 11	Mitigation	Figure 21	Balanced Rock Road between Crows Nest Flat and Saylor Creek	The mowing treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels; \$89,119	BLM Jarbidge Field Office	Fall 2027-Spring 2028

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
100	Grassy Hills South Middle Mow 11	Mitigation	Figure 21	Buck Flat Well, south to Three Creek Hwy	The mowing treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels; \$122,719	BLM Jarbidge Field Office	Fall 2027- Spring 2028
101	Hot Springs 4 Seedling	Mitigation	Figure 22	The junction of Clover Crossing and Clover/Three Creek Roads	Restoration and re-establishment of 50,000 ARTRW seedlings after the 2019 Hot Spring Fire.	TFD Fuels	BLM Jarbidge Field Office	Fall 2028
102	Crows Nest 2 Drill seeding	Mitigation	Figure 22	Crows Nest Road between The Big Hill and Twin Buttes	The seeding will establish fire-resistant perennial vegetation with the fuel break segment. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels	BLM Jarbidge Field Office	Summer-Fall 2028
103	Crows Nest 3 Drill seeding	Mitigation	Figure 22	Crows Nest Road between Twin Buttes and Indian Ridge	The seeding will establish fire-resistant perennial vegetation with the fuel break segment. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels	BLM Jarbidge Field Office	Summer-Fall 2028

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
104	Crows Nest 2 Aerial seeding	Mitigation	Figure 22	Crows Nest Road between The Big Hill and Twin Buttes	The seeding will establish fire-resistant perennial vegetation with the fuel break segment. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels	BLM Jarbidge Field Office	Winter 2028-2029
105	Crows Nest 3 Aerial seeding	Mitigation	Figure 22	Crows Nest Road between Twin Buttes and Indian Ridge	The seeding will establish fire-resistant perennial vegetation with the fuel break segment. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels	BLM Jarbidge Field Office	Winter 2028-2029
106	Balanced Rock Middle Chem 23	Mitigation	Figure 22	Balanced Rock Road between Crows Nest Flat and Saylor Creek	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels	BLM Jarbidge Field Office	Fall 2028

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
107	Grassy Hills Chem 23	Mitigation	Figure 22	Buck Flat Well, south to Three Creek Hwy	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels	BLM Jarbidge Field Office	Fall 2028
108	Balanced Rock Middle Chem 24 Option 1	Mitigation	Figure 22	Balanced Rock Road between Crows Nest Flat and Saylor Creek	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels	BLM Jarbidge Field Office	Spring 2029
109	Balanced Rock Middle Chem 24 Option 2	Mitigation	Figure 22	Balanced Rock Road between Crows Nest Flat and Saylor Creek	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels	BLM Jarbidge Field Office	Spring 2029

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
110	Grassy Hills Chem 24 Option 1	Mitigation	Figure 22	Buck Flat Well, south to Three Creek Hwy	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels	BLM Jarbidge Field Office	Spring 2029
111	Grassy Hills Chem 24 Option 2	Mitigation	Figure 22	Buck Flat Well, south to Three Creek Hwy	The chemical treatment will reduce brush and tall vegetation with the fuel break segment in preparation for seeding. Fuel breaks would protect sage-grouse priority habitats, including existing and recovering sagebrush communities.	TFD Fuels	BLM Jarbidge Field Office	Spring 2029
112	Bruneau Rodeo	Education		Bruneau, ID	Bruneau Community Assistance work at the Bruneau Rodeo involving:	Reg. Fuels	BLM Bruneau Field Office	2026
113	Bruneau BOSH Wildlife Surveys	Planning		Bruneau Field Office Portion of the project	Planning and clearance surveys for wildlife in the Bruneau-Owyhee-Sage-grouse-Habitat project mitigation treatments	IJA; \$50,000	BLM Bruneau Field Office	2026
114	Tri-state Chemical Treatments	Mitigation		Bruneau Field Office Portion of the Project. Hwy 51 Right of way.	Chemical treatments for annual grasses and weeds along roads.	IJA; \$225,000	BLM Bruneau Field Office	2026

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
115	Bosh Lop and Scatter Treatments	Mitigation		Bruneau Field Office Portion of the project	Non-commercial thinning contracts for lop and scatter of juniper.	IJJA; \$450,000	BLM Bruneau Field Office	2026
116	Sunshine Prescribed Fire	Mitigation			Prescribed burning treatments	IJJA	BLM Bruneau Field Office	2026-2027
117	Tri-state Fuel Breaks Mow	Mitigation		Mud Flat Road	Mowing along right-of-way along Mud Flat Road.	IJJA	BLM Bruneau Field Office	2026
118	Tri-state Fuel Breaks Seeding	Mitigation		Mud Flat Road	Seeding right-of-way along Mud Flat Road.	IJJA	BLM Bruneau Field Office	2026
119	Tri-state Fuel Breaks Handcut	Mitigation		Mud Flat Road	Hand cutting along right-of-way along Mud Flat Road.	IJJA	BLM Bruneau Field Office	2026
120	Juniper mountain pile RX	Mitigation		Owyhee Field Office Portion of the project	Prescribed fire implementation.	TBD	BLM Owyhee Field Office	2027
121	Juniper mountain cut and pile	Mitigation		Owyhee Field Office Portion of the project	Hand cut and pile contract for future RX.	TBD	BLM Owyhee Field Office	2027
122	Bosh Lop and Scatter Archeological	Mitigation		Owyhee Field Office Portion of the project	Archeological surveys prior to mechanical treatments.	IJJA, \$340k	BLM Owyhee Field Office	2026
123	Bosh Lop and Scatter Treatments	Mitigation		Owyhee Field Office Portion of the project	Planned treatments of lop and scatter thinning contracts of juniper encroachment into sage grouse habitat.	IJJA, Agreements; \$450k	BLM Owyhee Field Office, Pheasants Forever	2026
124	SODA Jackpot Rx	Mitigation		South of Marsing near Highways 55/95-Owyhee Field Office	Prescribed Fire treatments in the Soda Fuels project area adjacent to the Soda Fire associated with fuel breaks along the Owyhee Front.	IJJA, \$43K	BLM Owyhee Field Office	2026

Project #	Project Name	Type	Map	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
125	Soda Mowing	Mitigation		Owyhee Field Office	Fuel compaction mowing treatments along fuel breaks along the Owyhee Front associated with targeted grazing	IIJA, \$65K	BLM Owyhee Field Office	2026
126	Soda Targeted Grazing	Mitigation		South of Marsing, ID-Owyhee Field Office	Targeted Grazing Fuel breaks along roads to reduce annual grass loading in the Owyhee Front	IIJA, \$100k	BLM Owyhee Field Office	2026
127	Soda Fire Road Maintenance	Mitigation		Owyhee Field Office	Road maintenance along the Owyhee Front creating access for fire equipment and aiding in Fuel breaks between WUI and SODA fire rehab.	IIIIA, \$150K	BLM Owyhee Field Office	2026

5 – APPENDICES

APPENDIX 1 - MAPPING PRODUCTS

This section includes additional maps not included elsewhere in the document, as well as data and supporting documentation used as part of the GIS analysis for this CWPP update.

WILDLAND URBAN INTERFACE METHODOLOGY

This methodology is used by the Idaho Department of Lands and was utilized to create the base layer for the Owyhee County WUI.

Definition: an area where developed lands interact with undeveloped lands and includes the infrastructure and natural resources that communities rely on for existence.

Location: it is found in remote, scattered development areas to highly developed urban areas and everywhere in between.

Mapping

1. All private land is extracted from the BLM ownership layer
2. Private Lands are buffered with a 1.5-mile buffer
3. The 1.5-mile buffer is put over the top of HUC12 watersheds
4. Those watersheds that by ocular estimation are more than 50% encompassed by the 1.5-mile buffer are selected
5. Finally, the 1.5-mile buffer is extended to the selected HUC12's to create the final WUI for a County

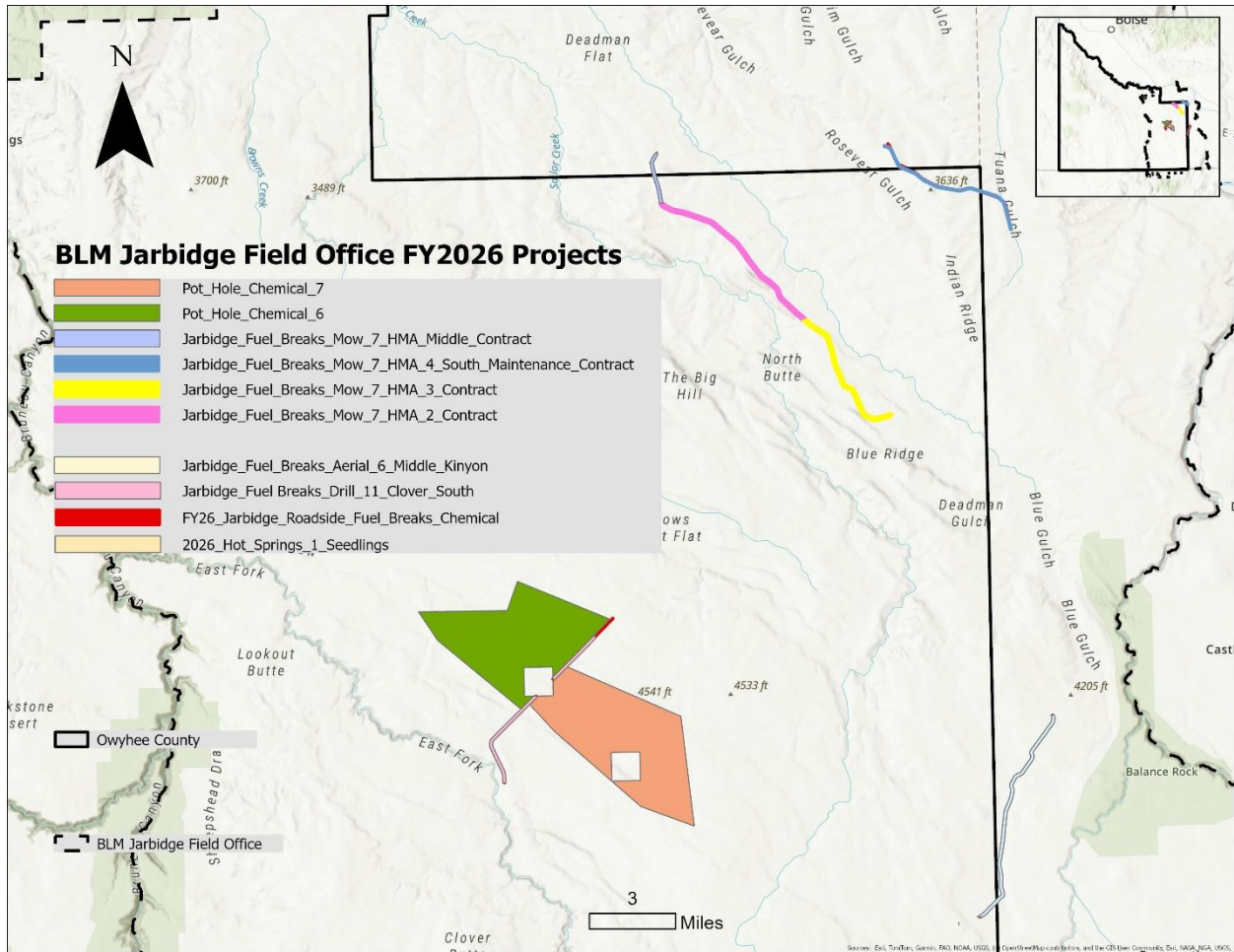


Figure 19) Fuels mitigation projects for the BLM Jarbidge Field Office (covering the eastern third of Owyhee County) are mapped here for the 2026 fiscal year.

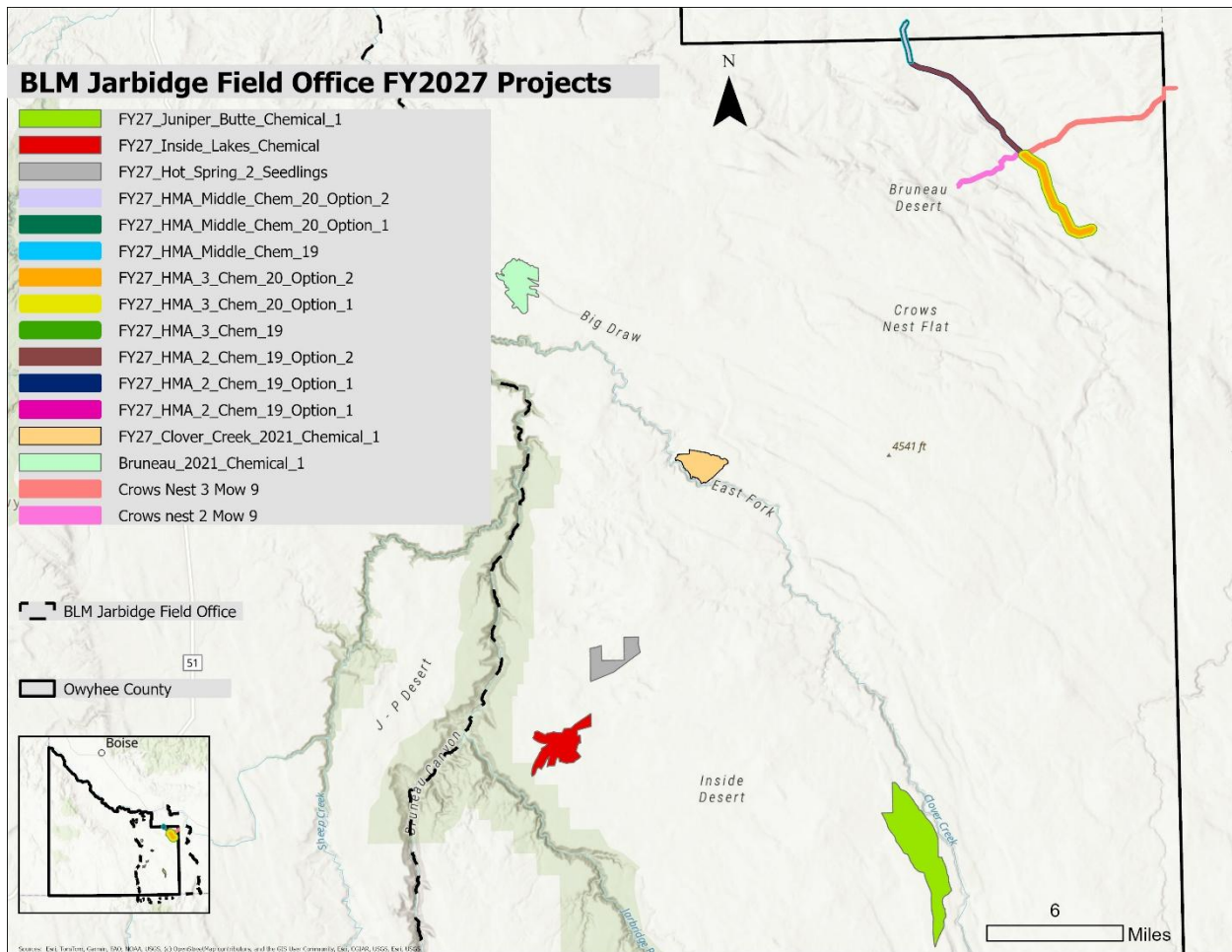


Figure 20) Fuels mitigation projects for the BLM Jarbidge Field Office (covering the eastern third of Owyhee County) are mapped here for the 2027 fiscal year.

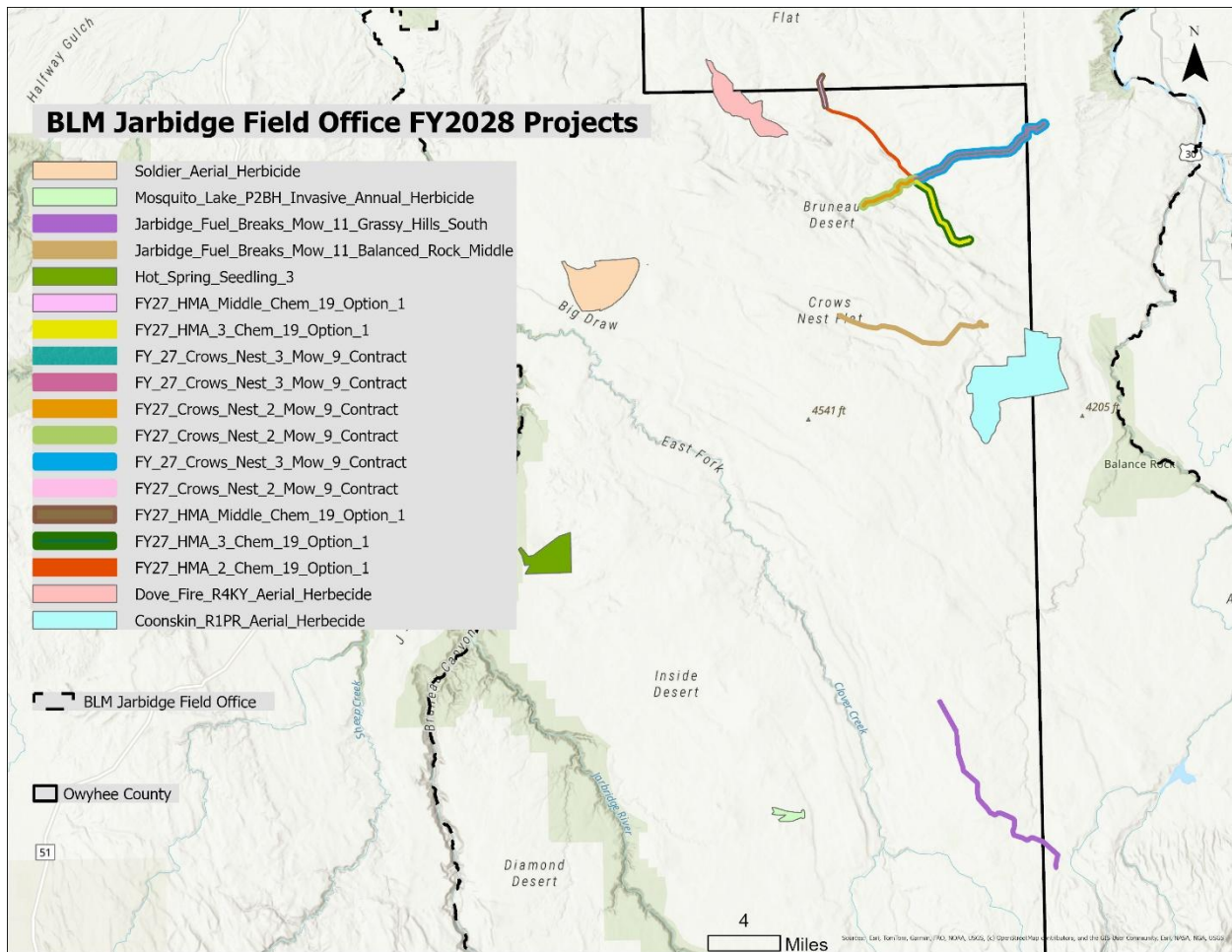


Figure 21) Fuels mitigation projects for the BLM Jarbidge Field Office (covering the eastern third of Owyhee County) are mapped here for the 2028 fiscal year.

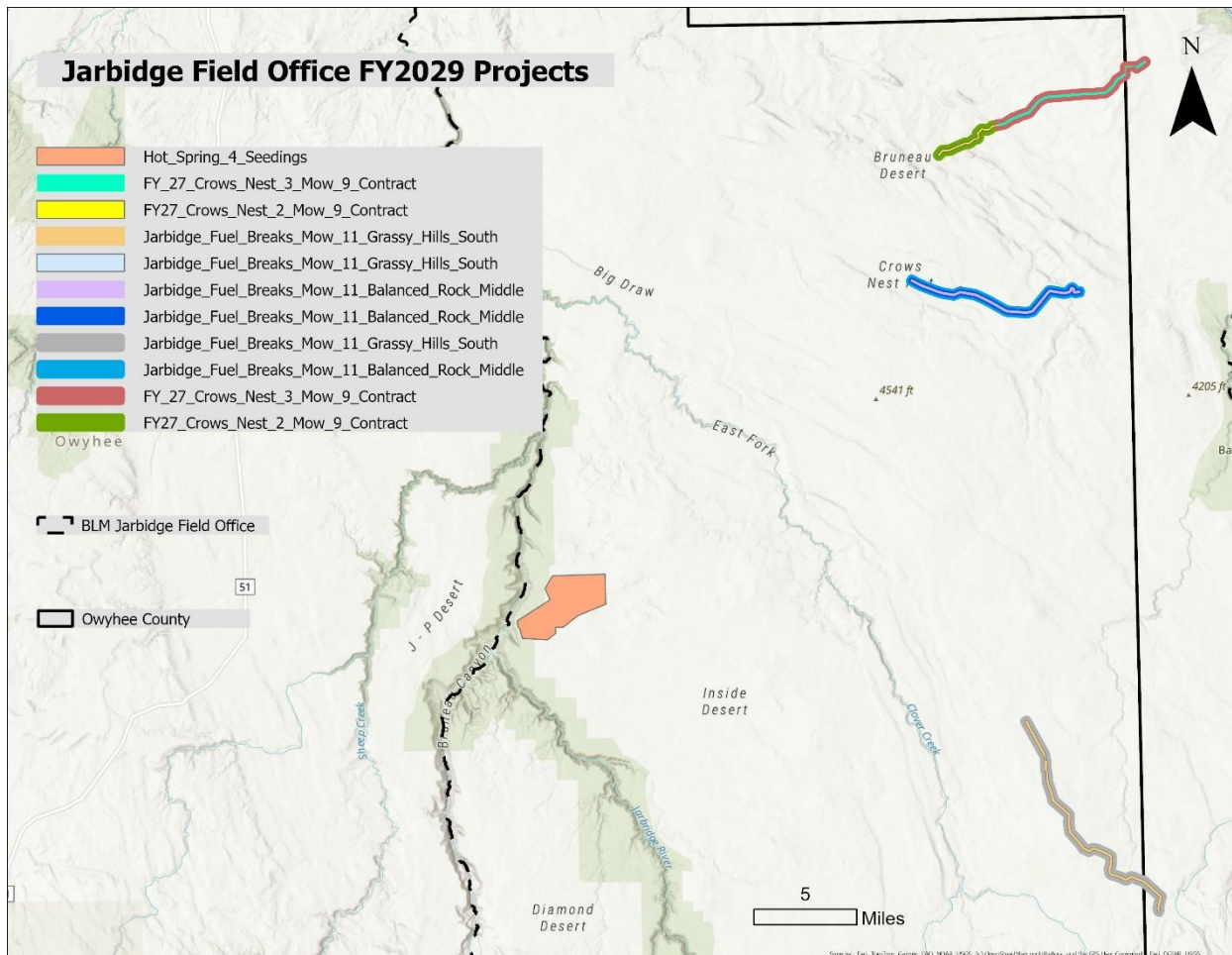


Figure 22) Fuels mitigation projects for the BLM Jarbidge Field Office (covering the eastern third of Owyhee County) are mapped here for the 2029 fiscal year.

MEGAFIRES OVER 100,000 ACRES

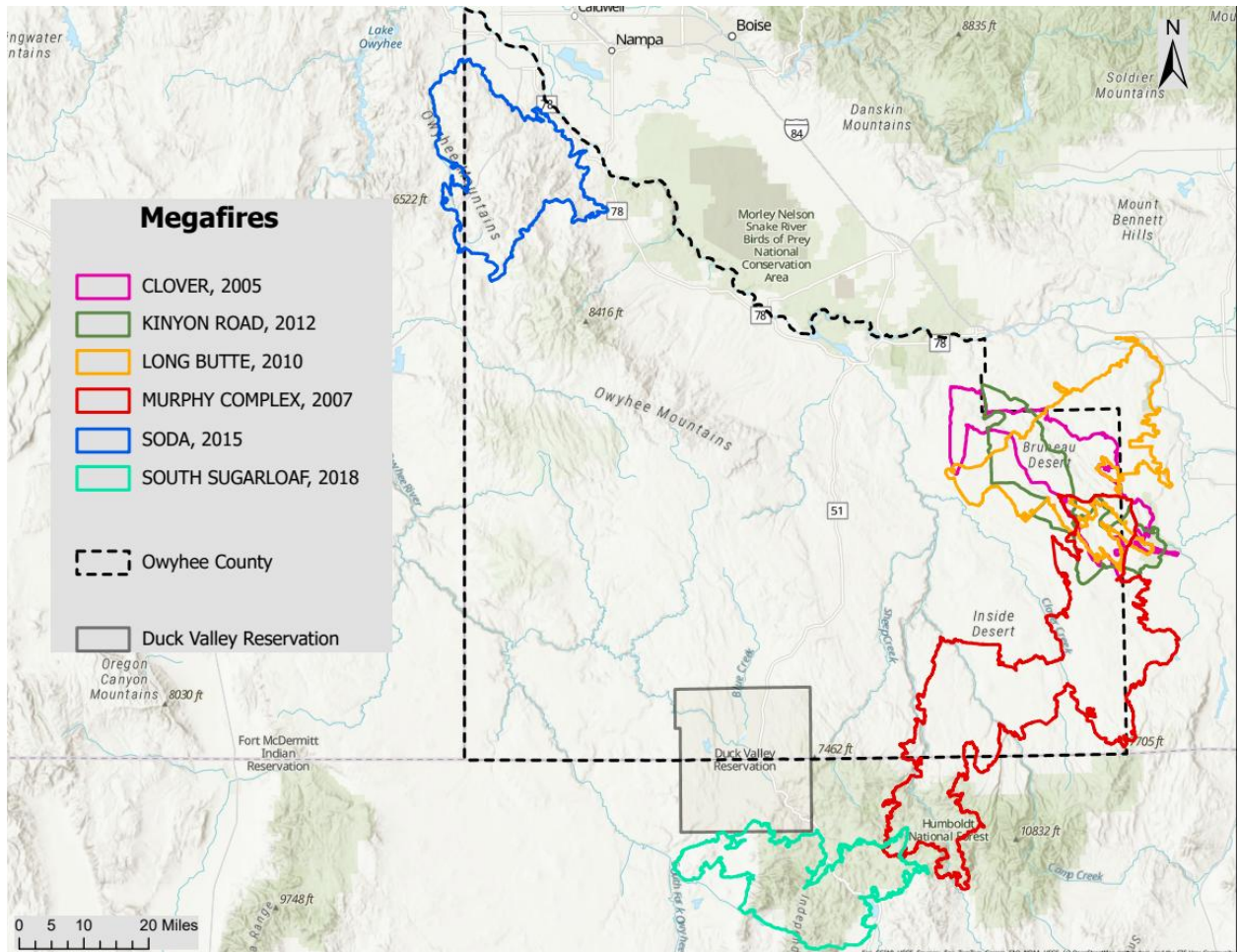


Figure 23) Footprints of "megafires" over 100,000 acres from the MTBS dataset that intersect with Owyhee County and its adjoining fire districts, which in this case only included Duck Valley Reservation managed by Sho-Pai Fire.

EXISTING VEGETATION TYPE

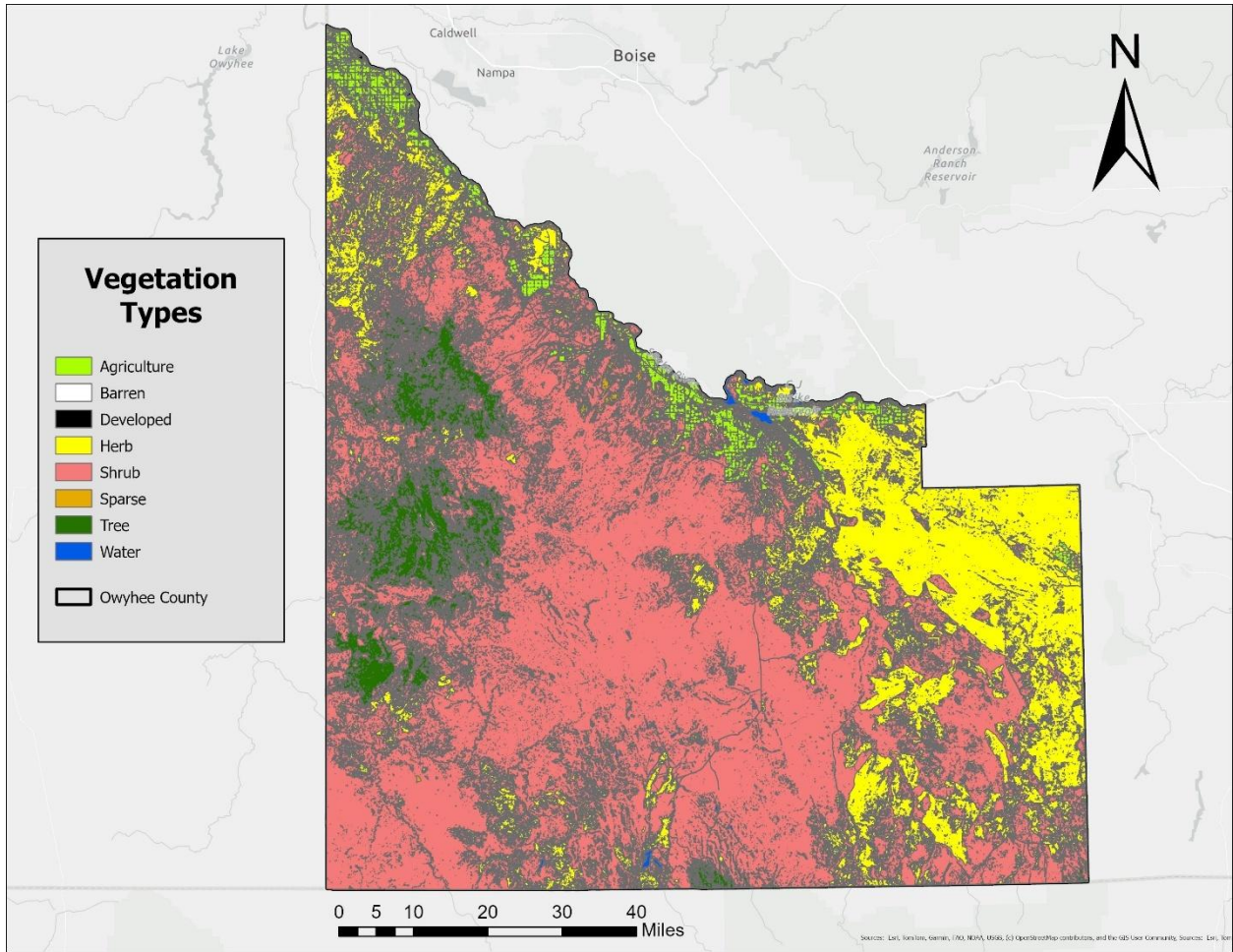


Figure 24) Existing vegetation types for Owyhee County based on data from Landfire (2024).

FIRE REGIME GROUPS

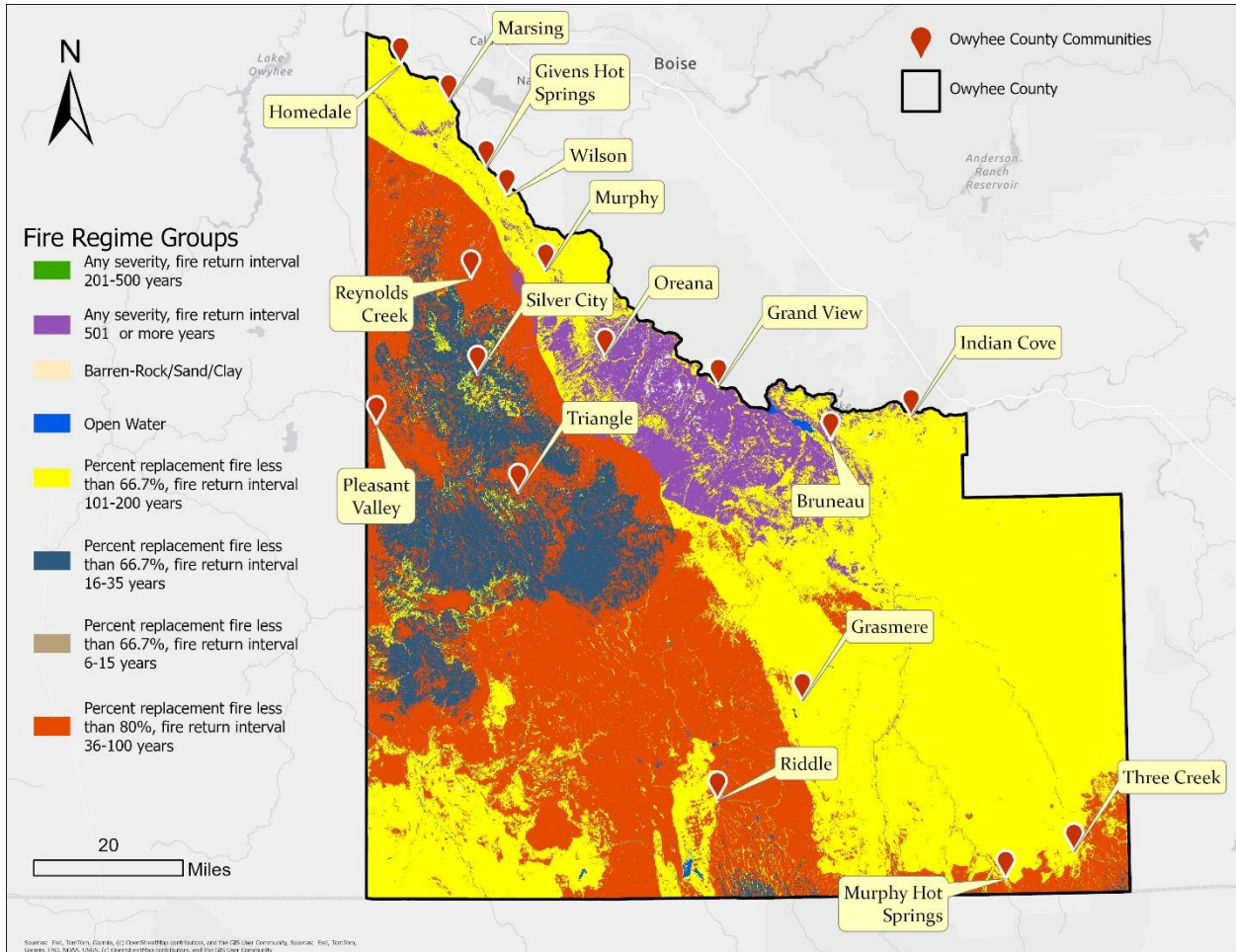


Figure 25) Fire regime groups for Owyhee County according to Land Fire (2023) - a visual representation of Table 6.

VEGETATION CONDITION CLASS

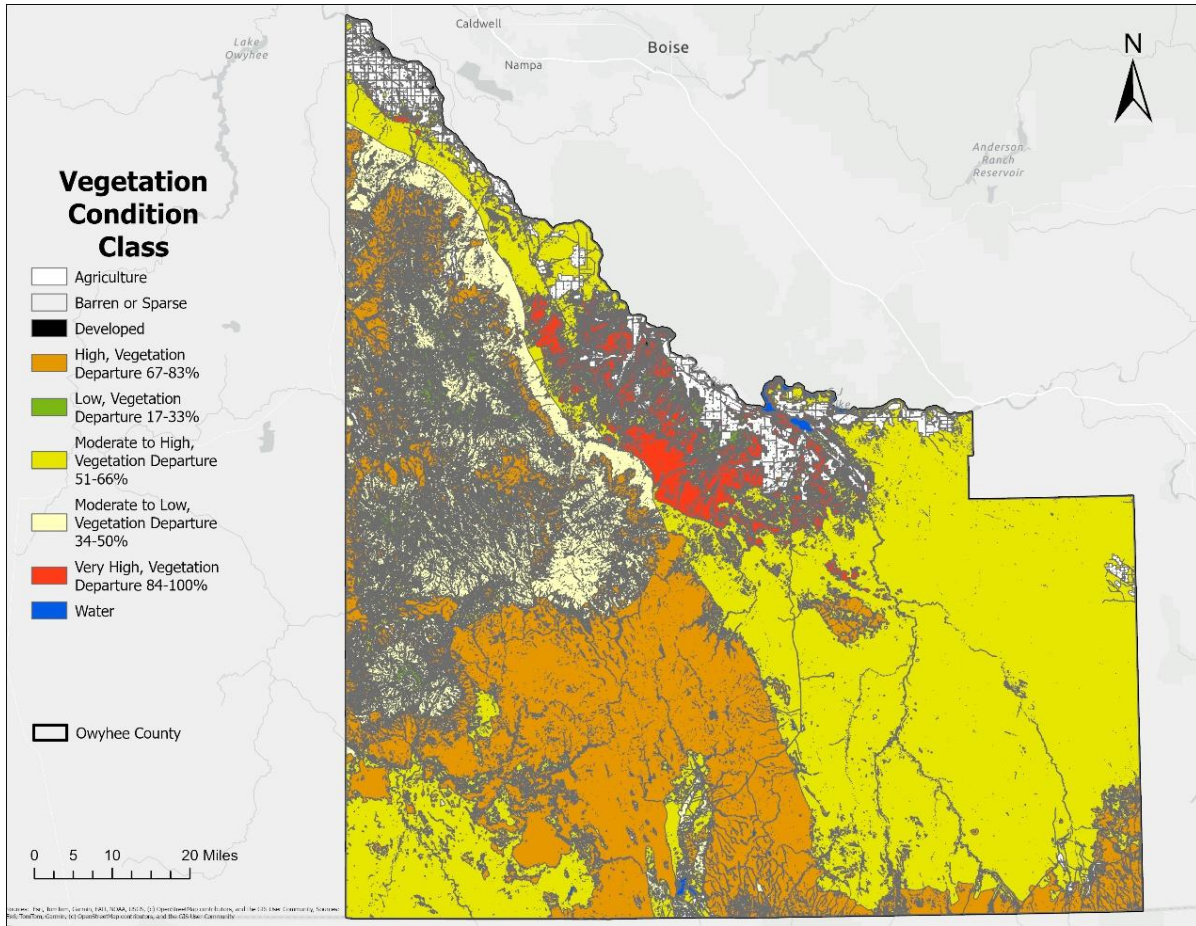


Figure 26) Vegetation Condition Class for Owyhee County based on data from LandFire (2023).

USDA WILDFIRE HAZARD POTENTIAL

The Wildfire Hazard Potential (WHP; **Figure 27**) dataset is a nationwide tool designed to help identify areas in the U.S. where wildfires are most likely to burn with high intensity. It is primarily used for long-term strategic planning, allowing land managers and policymakers to prioritize where to focus fuel reduction, mitigation, and resource investment efforts across broad landscapes. WHP is not a real-time risk forecast and does not incorporate the WUI as the IDL layer does. It is a landscape-scale indicator built on simulations of fire behavior, vegetation conditions, and historical fire patterns to show where severe wildfire could occur if one were to ignite (*USFS, 2024*).

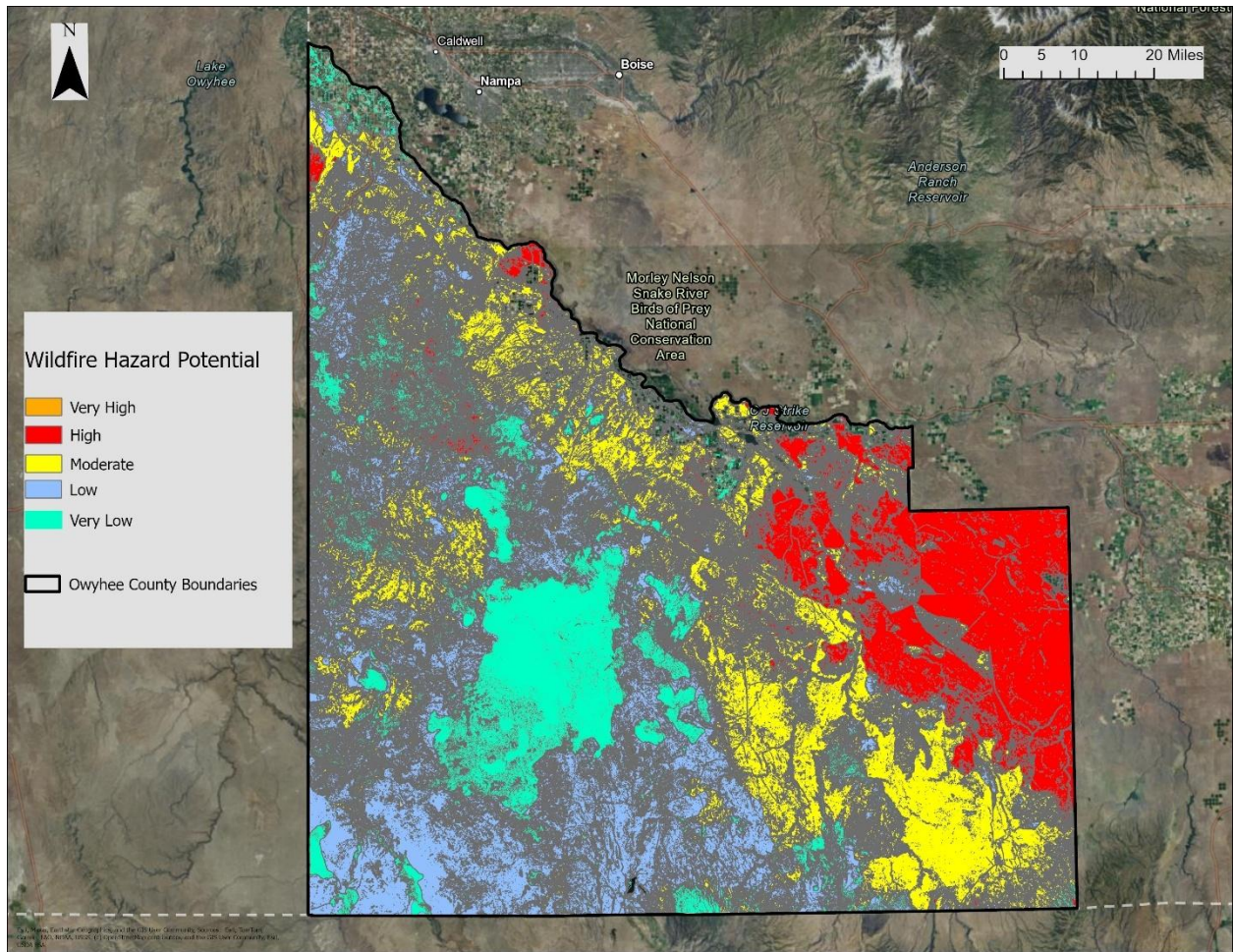


Figure 27) Wildfire Hazard Potential for Owyhee County.

IGNITION PROBABILITY

This spatial dataset from Moran, C. J., Scott, J. H., & Vogler, K. (2023) synthesizes past fire occurrences as well as various topographic, climatic, vegetative, and human development factors to spatially map the probability of wildfire ignition for the western and southeastern United States. Shown here is the composite ignition probability layer (the combined likelihood of wildfire ignition from both human and natural causes) clipped to Owyhee County (Figure 28).

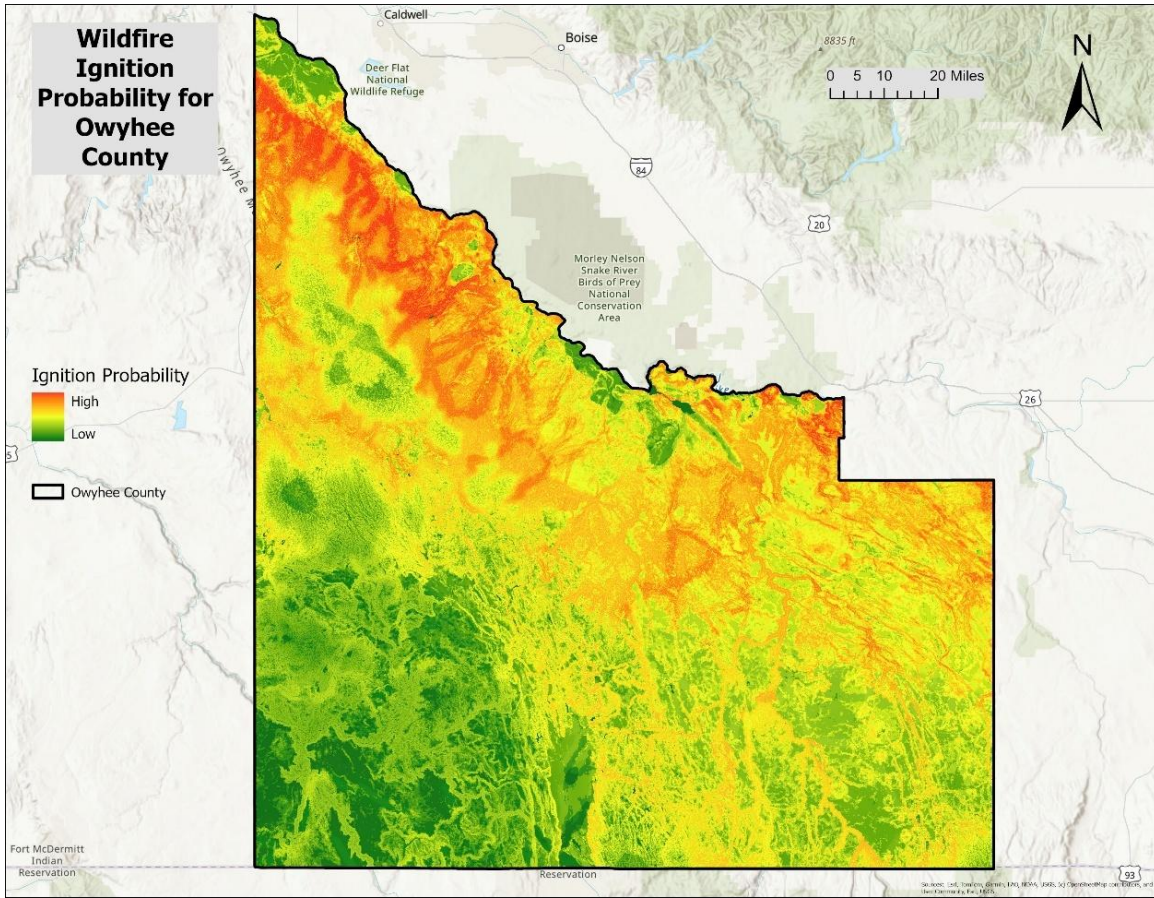


Figure 28) Composite ignition probability for Owyhee County. The GIS layer was sourced from Moran, C.J., Scott, J. H., & Vogler, K. (2023).

WILDFIRES IN 2025

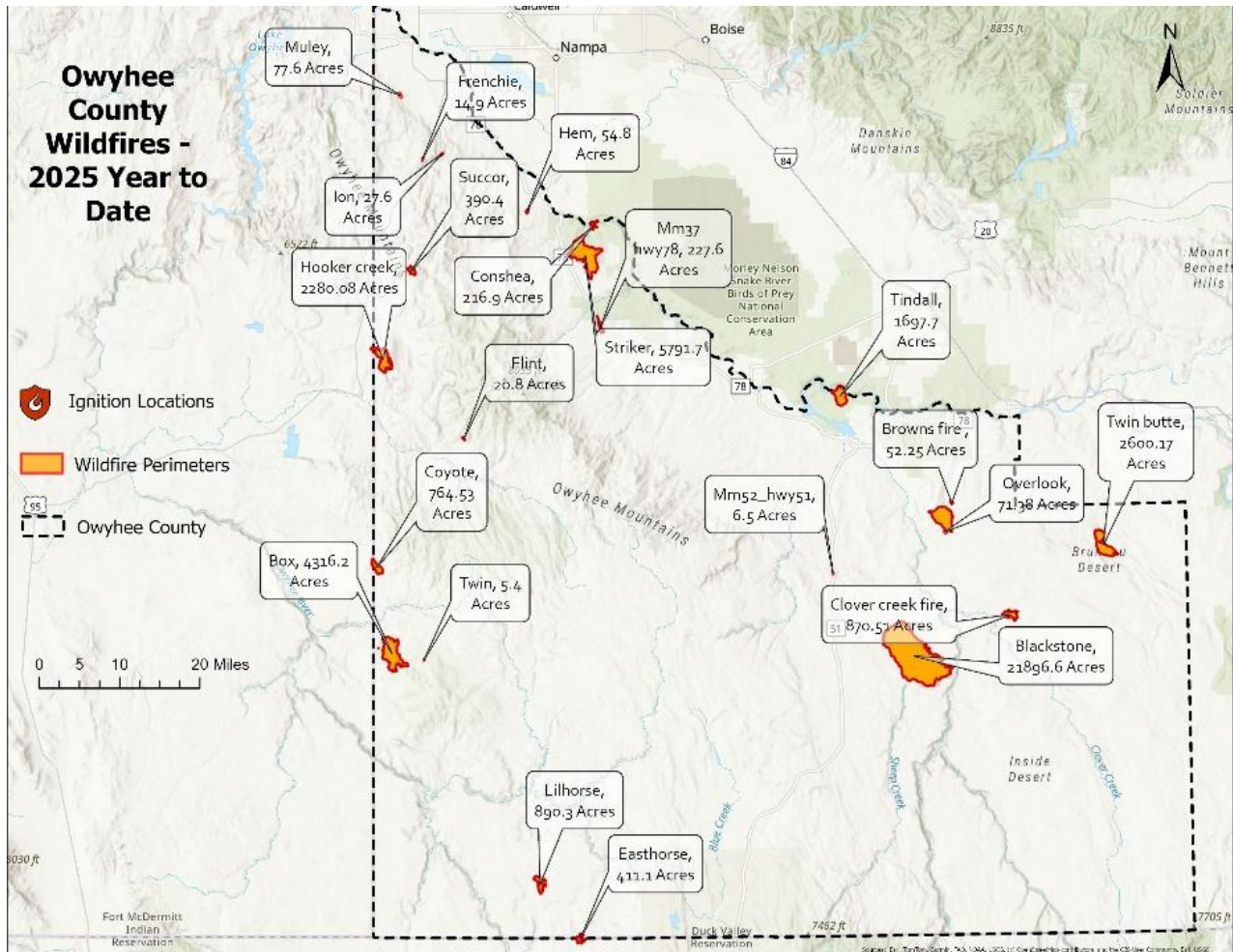


Figure 29) WFIGS Fire Perimeters within Owyhee County for 2025 year to date.

BUREAU OF LAND MANAGEMENT PROJECTS SINCE 2015

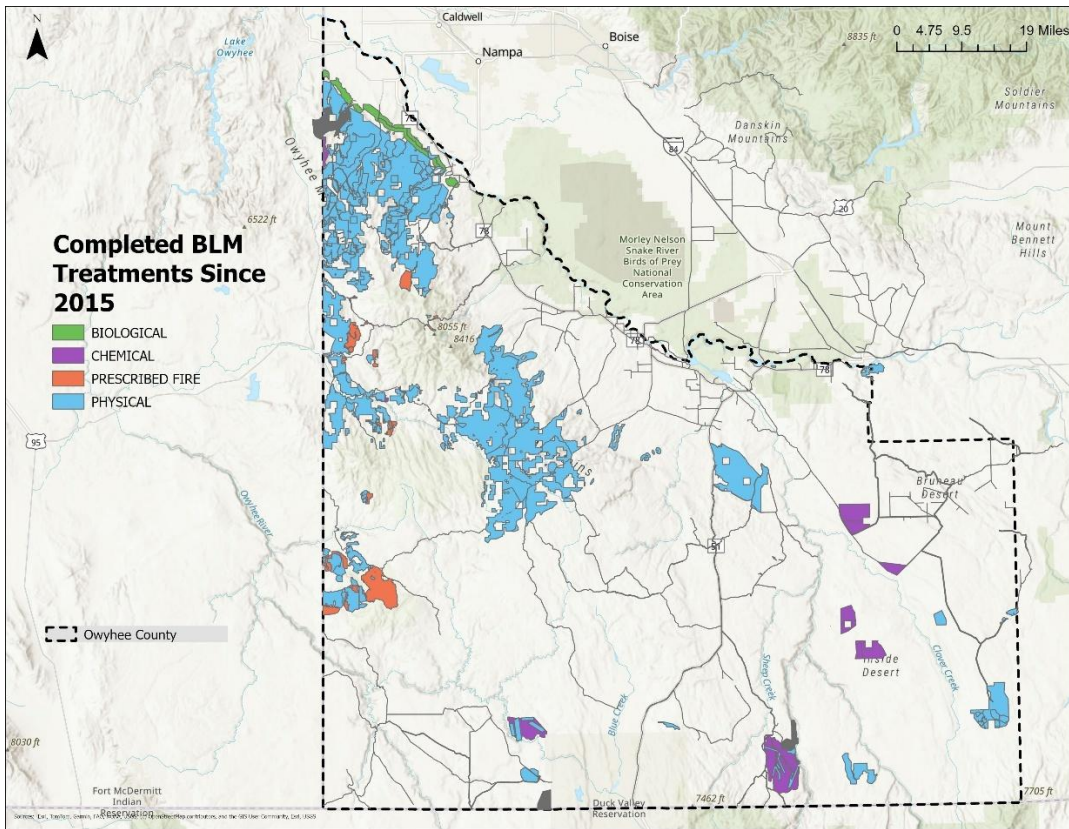


Figure 30) A visual representation of projects completed by the Bureau of Land Management since 2015 in Owyhee County, organized by project type.

APPENDIX 2 - TABLES

Table 8) Fires in 2025 within Owyhee County year to date.

Incident Name	Fire Discovery Date & Time	Incident Size (Acres)	Estimated Cost to Date (\$)	Fire Cause
FEDERAL	2025-03-09 1:23:00	0.1		Human
CONSHEA	2025-03-27 22:11:00	216.9		Human
EASTYOUNG	2025-05-07 22:09:02	2		Human
CLARKY	2025-05-09 23:35:00	6.7		Human
REYNOLDS	2025-05-23 18:26:02	4		Human
Twin Butte	2025-05-28 19:26:00	2600.17	50,000	Human
MM73 HWY51	2025-05-29 18:53:41	2.3		Human
ION	2025-06-13 17:03:00	27.6		Human
FLINT	2025-06-14 22:57:27	20.8		Human
BUCKAROO	2025-06-16 1:00:23	2		Human
MM37 HWY78	2025-06-30 0:39:08	227.6	6,481,480	Human
Winter Camp	2025-07-01 23:27:00	3386.72	300,000	Human
FORK	2025-07-01 23:59:00	0.5		Natural
Clover Creek	2025-07-03 23:00:51	870.51	200,000	Natural
NORSOM	2025-07-05 19:42:40	1		Human
JOHNNY	2025-07-13 0:03:00	1		Natural
COYOTE	2025-07-13 17:03:00	764.53	500,000	Undetermined
FRENCHIE	2025-07-13 23:10:40	14.9		Human
TINDALL	2025-07-15 22:09:00	1697.7	85,000	Human
CHAULKY	2025-07-17 5:11:26	6.4		Human
HEM	2025-07-18 21:57:57	54.8		Human
JUMP	2025-07-22 0:28:32	0.1		Human
Browns	2025-07-23 0:35:00	52.25		Human
LILHORSE	2025-07-24 23:54:23	890.3	350,000	Natural
SUNSHINE	2025-07-26 19:35:31	0.1		Natural
DOUGH	2025-07-26 23:58:23	0.5		Natural
SCHOOL	2025-07-27 22:26:42	0.1		Natural
SUCCOR	2025-07-28 6:24:00	390.4	100,000	Natural
LOUISA	2025-07-28 15:53:58	0.1		Natural
BATES	2025-07-29 3:38:00	3		Natural
BLACKSTONE	2025-07-30	21896.6	250000	Natural
EASTHORSE	2025-07-30 1:40:45	411.1	146480	Natural

Incident Name	Fire Discovery Date & Time	Incident Size (Acres)	Estimated Cost to Date (\$)	Fire Cause
TWIN	2025-07-30 21:59:00	5.4		Natural
STRIKER	2025-07-31 7:48:44	5791.7	100000	Natural
SLACK	2025-08-01 0:37:33	0.1		Natural
SHOOROCK	2025-08-06 2:52:18	2		Natural
MM52 HWY51	2025-08-12 19:30:53	6.5		Human
SOLDIER	2025-08-13 6:39:33	0.3		Natural
JUNIPER	2025-08-13 16:32:00	0.25		Natural
BERRY	2025-08-13 16:40:00	0.2		Natural
BOX	2025-08-13 17:00:00	4316.2	3800000	Natural
HOOKER CREEK	2025-08-16 21:00:00	2280.08	600000	Undetermined
RYE	2025-08-17 3:59:19	3.5		Natural
LOOP	2025-08-17 5:31:26	0.25		Natural
MM69 HWY51	2025-08-26 0:14:40	1		Human
Overlook	2025-08-27 0:21:58	71.38		Natural
PEACHY	2025-08-28 12:54:00	0.1		Natural
MULEY	2025-08-31 21:27:00	77.6		Human

Table 9) Projects completed by the Bureau of Land Management completed since 2015 in Owyhee County, summarized by project type.

Category	Description	Sub-Groups (Major Themes)	Total Unique Projects	Total BLM Acres
Chemical Treatments	Herbicide or pesticide applications for vegetation control (subtypes: PESTICIDE, HERBICIDE). Often pre- or post-fire prep.	- Tri-State/Grasmere Fuel Breaks (e.g., BruneauStrategicFuelBreaks_Chemical) - Soda Fire/Owyhee Front (e.g., SODA_Fire_FR64_FuelBreaks_Chemical) - Jarbidge Fuel Breaks (e.g., Jarbidge_Fuel_Breaks_Chem_15_HMA4) - South Mountain/Pole Creek (e.g., South_Mountain_FR69_Herbicide) - Other (e.g., Winter_Camp_Chemical, Hot_Springs_Chemical)	34	~117,500
Prescribed Burns	Controlled burns (subtype: NONE, often with "RX" in name). Reduces fuel loads directly.	- South Mountain/Pole Creek (e.g., PoleCreek_RX, TroutSprings_RX) - Silver City (e.g., Silver_City_FR67_Pile_Burning) - Soda Fire/Owyhee Front (e.g., SODA_FR64_Jackpot_RX) - BOSH/Triangle (e.g., BOSH_Jackpot_RX) - Other (e.g., Tumbleweed RX, CJ_Strike_Wildlife_RX)	28	~45,000
Mechanical Treatments	Physical removal like cutting, thinning, mowing, or piling (subtype: REMOVE, often "Mechanical" or "Lop&Scatter" in name).	- BOSH/Triangle (e.g., BOSH_Lop&Scatter, BOSH_Mechanical_Piles) - South Mountain/Pole Creek (e.g., PoleCrk_Slash&Girdle, TroutSprings_Mechanical) - Soda Fire/Owyhee Front (e.g., SODA_Fire_FR64_FuelBreaks_Mechanical) - Fuel Breaks/Jarbidge (e.g., Jarbidge_Fuel_Breaks_Mow) - Other (e.g., Silver_City_FR67_Mechanical, JohnstonDraw)	52	~185,000
Seeding/Planting	Restoration via aerial/ground seeding or planting (subtype: PLANT). Post-fire rehab to reduce invasive fuels.	- Soda Fire ESR (e.g., S3 Aerial Seeding, R3 Aerial Seeding) - Fuel Breaks/Jarbidge (e.g., Jarbidge_Fuel_Breaks_Aerial_Seed) - Grassy Hills/Horse Butte (e.g., GRASSY HILLS BRUSH PLANTING) - South Mountain (e.g., ShrubSeedlingPlanting, Seeding) - Other ESR (e.g., Doyle ESR, Otter ESR)	38	~320,000

Category	Description	Sub-Groups (Major Themes)	Total Unique Projects	Total BLM Acres
Targeted Grazing	Livestock grazing to reduce fine fuels (subtype: NON-CLASSICAL, names with "Grazing").	- Soda Fire/Owyhee Front (e.g., SODA_Fire_FR64_FuelBreaks_Grazing) - BOSH/Triangle (e.g., Owyhee_SageGrouseMech with grazing) - Other (e.g., Targeted_Grazing in various FR areas)	9	~32,000
Road Maintenance /Agreements	Infrastructure support like road mowing or agreements for access (subtype: OTHER/NON-CLASSICAL, names with "Road", "Agreements"). Indirect fuels reduction via maintenance.	- Paradigm/Owyhee County (e.g., OwyheeCounty_RoadAgreements) - Tri-State/Grasmere (e.g., Tri-State Fuel Break Road Maintenance) - Soda Fire (e.g., SODA_Fire_Road Maintenance_OwyheeFront) - BOSH (e.g., BOSH_Lop&Scatter_Agreements)	18	~8,500
Other/Mixed	Miscellaneous or mixed methods (subtype: OTHER, or uncategorized like "Water Haul", "Seed Caching").	- Trout Springs/South Mountain (e.g., TroutSprings_Mechanica other) - BOSH Mixed (e.g., BOSH_Hand_Piles) - ESR Other (e.g., Seed Caching in Otter ESR) - General (e.g., MahoganyRidge, Aspen)	21	~25,000

APPENDIX 3 - DOCUMENTING THE PLANNING PROCESS

This appendix includes meeting agendas, the minutes taken at planning committee meetings, and a record of published articles regarding the CWPP.

PLANNING MEETINGS

FEBRUARY 25, 2025 – KICKOFF MEETING

AGENDA

A G E N D A	<p>Owyhee County Update Project:</p> <p>Hazard Mitigation Plan & Community Wildfire Protection Plan</p> <p>Kickoff Meeting</p> <p>Tuesday, February 25, 2025</p> <p>10:00 a.m. – 12:00 p.m.</p> <p>Owyhee County Museum and Library 17085 Basey St, Murphy, ID 83650 (virtual option included)</p>	
10:00 a.m.	OPEN – Introductions	Jim Desmond and Angie Barkell
10:10 a.m.	<p>GROUP MEETING</p> <p>I. Orientation and Overview</p> <ul style="list-style-type: none"> ➤ Presentation: overview of Hazard Mitigation Plan and Community Wildfire Protection Plan updates ➤ Review: goals and mission statement from the last plan ➤ Discussion: Any success stories since the 2018 update? ➤ Discussion: Have any projects been completed, discarded, or started since the last update? 	Northwest Management, Inc. (NMI) and Group
10:40 a.m.	<p>II. Build the Planning Team</p> <ul style="list-style-type: none"> ➤ Who’s missing? How could we reach them and allow for involvement? <ul style="list-style-type: none"> ○ Discuss FEMA and state requirements ➤ Planning team responsibilities ➤ What other federal/state/county/city plans should be incorporated? <ul style="list-style-type: none"> ○ Should we involve people from those organizations? 	
11:00 a.m.	<p>III. Developing Outreach Strategy</p> <ul style="list-style-type: none"> ➤ Who, what, when ➤ Townhall meeting, present at local event, social media, surveys, traditional news outlets, document review period 	
11:20 a.m.	<p>IV. Meetings and Communications</p> <ul style="list-style-type: none"> ➤ Establish primary points of contact ➤ Meeting format/schedule – discussion of agendas and deliverables needed for each meeting 	
11:30 a.m.	<p>V. Exercises</p> <ul style="list-style-type: none"> ➤ Hazard Summary Worksheet <p>VI. Homework</p> <ul style="list-style-type: none"> ➤ GIS data ➤ Local Knowledge Questionnaire ➤ Hazard Summary Worksheet 	
12:00 p.m.	ADJOURNMENT	

Figure 31) Agenda for the Owyhee County CWPP and HMP updates on February 25th, 2025.

SUMMARY

The kickoff meeting for the Owyhee County Multi-Jurisdiction All-Hazard Mitigation Plan (AHMP) and Community Wildfire Protection Plan (CWPP) update was held in Murphy. Northwest Management, Inc. (NMI) facilitated the session alongside county officials. Discussions focused on identifying wildfire and other natural hazards, establishing mitigation goals, and outlining stakeholder engagement strategies. Emphasis was placed on public involvement, inter-agency coordination, and the importance of an integrated approach to hazard planning.

PARTICIPANTS

Table 10) Participants in the Kickoff Meeting.

Name	Affiliation
Chuck Cooley	Chief – Murphy-Reynolds-Wilson Fire
Elizabeth Wahl	Marsing City Councilor
Hayzen Corder	Mayor – City of Marsing
JC Fuquay	Road Supervisor – Owyhee County Road and Bridge District 1
Jeff Ulmer	Emergency Manager – Gem County, Idaho
Jery Mayer	Chief – Marsing Fire
Jim Hyslop	Silver City Fire and Rescue - Chief
Joseph Powell	Payette County Emergency Management
Larry Kendrick	Owyhee County Sheriff
Lorrie Pahl	Idaho Office of Emergency Management
Louis Monson	Murphy-Reynolds Wilson Fire
Lynette Enrico	Marsing City Council
Mary Huff	Owyhee County Planning and Zoning (Director)
Travis Hire	Idaho Department of Transportation
Travis Jewett	Owyhee County Road and Bridge #3
Tyre Holfeltz	Idaho Department of Lands
Walt Holton	Owyhee County Commissioner
Dustin Jewett	Owyhee County Road and Bridge #3
Mike Guerry	Three Creek RFPA
Jim Desmond	Owyhee County Emergency Manager
Eric Zechmann	BLM Twin Falls Safety Officer
Jackie Frey	Twin Falls County EM
Johnny Biddinger	Washington County EM
David McCarville	Bureau of Reclamation – Snake River Emergency Manager
Maija Reed	Idaho Office of Emergency Management
Crash Marusich	Ada County Mitigation Coordinator
Kimberly Bearden	Homedale Highway
Samuel Edwards	Weiser Fire
Dominique Cota	Idaho Office Of Species Conservation
Bryce Bealba	Idaho State Parks - Bruneau Sand Dunes
JD Phipps	Marsing Ambulance

Media Release
From: Owyhee County Emergency Management
Date: March 18, 2025
RE: Owyhee County Hazard Mitigation Plan Update and Community Wildfire Protection Plan Update

Owyhee County Initiates Project for Updating Hazard Plans

MURPHY, IDAHO – Owyhee County began the process of updating its Hazard Mitigation Plan and Community Wildfire Protection Plan last week. The county hosted a “kickoff” meeting on February 25, at the Owyhee County Museum in Murphy. The main purpose of the meeting was to assemble the planning team assigned to work on these updates, set some preliminary goals, and brief the team on the general outline of the revision process. The Hazard Mitigation Plan examines risks posed by natural hazards, including flood, drought, earthquake, landslide, wildfire, avalanche, and severe weather. The Community Wildfire Protection Plan takes a focused view of wildland fire. Both plans will also develop strategies to reduce the impacts from the respective hazards.

Northwest Management, Inc. has been retained by Owyhee County to provide risk assessments, hazard mapping, research, and to collaborate with the planning team to update the plans. As part of the update process, the Community Wildfire Protection Plan will be incorporated into the wildfire section of the Hazard Mitigation Plan.

The planning team consists of representatives from a variety of local agencies, organizations, governments, and groups, who will meet regularly to complete the project. Attendees last week included representatives from Murphy-Reynolds-Wilson Fire, the City of Marsing (including Marsing Fire and Ambulance), Idaho DOT, Three Creek Rural Fire Protection Association, the Bureaus of Reclamation and Land Management, Homedale Highway, Idaho Office of Emergency Management, Silver City Fire and Rescue, Weiser Fire, Idaho State Parks, Idaho Office of Species Conservation, and Emergency Management staff from Gem, Payette, Owyhee, Ada, Twin Falls, and Washington Counties. The Sheriff, Planning Director, Emergency Manager, and Road and Bridge Professionals from Owyhee County, as well as a County Commissioner, were also present.

The Federal Emergency Management Agency (FEMA) requires counties to update the Hazard Mitigation Plan every five years to remain eligible for federal hazard funding. The incorporated cities in Idaho County are currently recognized as adopting jurisdictions in the plan and will also adopt this plan update. The Community Wildfire Protection Plan will be updated to comply with the latest state and federal requirements.

Community input will also play a key role throughout the planning process. Public meetings, reviews of the plans, and a public comment period will be announced in the future. The current version of the Owyhee County Hazard Mitigation Plan can be accessed and viewed upon request and is also available on the county website (the 2005 CWPP is also included in the document). This project is expected to be completed by the end of 2025.

Questions can be addressed to Jim Desmond (Owyhee County Emergency Manager) at (208) 249-0571 and OCNRCDIR@aol.com, or Angela Barkell (Owyhee County Clerk) at (208) 495-2421 and abarkell@co.owyhee.id.us.

Figure 32) Initial press release announcing the kickoff of the Owyhee County CWPP and HMP updates.

Owyhee County All Hazard Mitigation Plan & Community Wildfire Protection Plan, 2025

We are updating these important plans this year!



We kicked things off with a meeting in Murphy on February 25th (see image to the left). Several important planning stakeholders attended and many groups and agencies across the county will be involved moving forward. These plans are designed to improve our resiliency to natural hazards, including wildfire, and make the county eligible for mitigation grants. Northwest Management Inc. has been contracted to help revise and rewrite the documents.

There will be many upcoming opportunities for everyone in the county to get involved, voice their questions and concerns, and provide input. Please stand by for updates and announcements!

Background Image: Soda Fire taken by Partners in the Sage

Figure 33) The graphic that was shared to the Owyhee County Facebook page and other local forums announcing the kickoff of the plan updates.

A G E N D A	<p>Owyhee County Update Project:</p> <p>Hazard Mitigation Plan & Community Wildfire Protection Plan</p> <p>Meeting #2</p> <p>Tuesday, March 25, 2025</p> <p>10:00 AM – 11:30 AM</p> <p>Microsoft Teams Virtual Meeting</p>	
10:00 am	OPEN – Introductions and Words of Welcome	Jim Desmond and Angie Barkell
10:15 am	<p>GROUP MEETING</p> <p>I. Old Business</p> <ul style="list-style-type: none"> ▪ Recap of the kickoff presentation ▪ Planning Team Updates ▪ Recap of Planning Philosophy and Goals ▪ Hazard Summary Worksheet and Local Knowledge Questionnaire follow-up discussion <p>II. Exercises</p> <ul style="list-style-type: none"> ▪ Capabilities Assessment <p>III. Discussion of Plan Revision Details</p> <ul style="list-style-type: none"> ▪ Chapter 3: Community Profiles ▪ Example figures for various hazards <ul style="list-style-type: none"> ➢ Ideas and suggestions ▪ Mitigation Projects <ul style="list-style-type: none"> ➢ Overview ➢ Start thinking about updates and new projects ▪ Discussion of local plans and planning mechanisms <p>IV. Further Discussion of Public Outreach Strategy</p> <ul style="list-style-type: none"> ▪ Town-hall style meeting, public events, community forums, local news, etc.? <p>V. The Next Steps</p> <ul style="list-style-type: none"> ▪ Complete worksheets at your convenience ▪ Schedule a CWPP-focused meeting for April ▪ Look for Chapter 3 of HMP to review. ▪ Follow up on public outreach opportunities ▪ Look out for the mitigation project table 	Adam & Nicholas (NMI) and Group
10:30 am		
10:45 am		
11:15 am		
11:25 am		
11:30 am	ADJOURNMENT	

Figure 34) Agenda for the second Owyhee County CWPP/HMP update planning meeting.

SUMMARY

This virtual session emphasized the concurrent updates of the AHMP and CWPP. NMI introduced hazard summary and local knowledge tools to collect input on wildfire risk and community vulnerabilities. Discussion covered updates to county profiles, with a focus on demographics, infrastructure, and wildfire-relevant features like bridges. Idaho Power and other agencies highlighted the need for improved geospatial data, and the group stressed that risk assessments are merely for planning purposes and don't reflect any kind of forecast or guarantee of specific hazard events but rather serve to prioritize mitigation efforts based on potential impacts and vulnerabilities.

PARTICIPANTS

Table 11) Participants in Meeting #2 on March 25th, 2025.

Name	Affiliation
Nicholas Cancalosi-Dean	Northwest Management, Inc.
Tjaden, Joanna P	BLM (Bureau of Land Management)
Adam Herrenbruck	Northwest Management, Inc.
Chuck Cooley	MRW Fire
Jackie Frey	Idaho Office of Emergency Management
Louis Monson	MRW Fire
Rachele King	Owyhee County Clerk's Office
Joshua Uriarte	Idaho Office of Species Conservation
Merrick, Dennis	Idaho Power
Roseman, Birk	BLM (Bureau of Land Management)
James Desmond	Owyhee County Emergency Manager
Sheriff Larry Kendrick	Owyhee County Sheriff
Smith, Jenn	University of Idaho
Beck, Jonathan M	BLM (Bureau of Land Management)
McCarville, David P	U.S. Bureau of Reclamation
Wilhelm, Ammon	BLM (Bureau of Land Management)
Jensen, K. Scott	University of Idaho Owyhee county Extension
Kendall, Shawn	Idaho Power
Jace Hogg	Idaho Office of Species Conservation
Mary Huff and Brook Russell	Owyhee County Planning and Zoning
Pahl Lorrie	Idaho Office of Emergency Management
Joseph Howell	Payette County
Bryce Bealba	Idaho Parks and Recreation
Tyre Holfeltz	Idaho Department of Lands
Reed Maija	Idaho Office of Emergency Management

AGENDA

A G E N D A	<p>Owyhee County Update Project: Hazard Mitigation Plan & Community Wildfire Protection Plan Meeting #3 – CWPP Focus</p> <p>Thursday, April 24, 2025 6:00 p.m. – 7:30 p.m.</p> <p>Owyhee County Courthouse 20381 ID-78, Murphy, ID 83650 (virtual option included)</p>	
6:00 p.m.	OPEN – Introductions/Housekeeping	Jim Desmond, Angie Barkell, Adam & Nicholas
6:05 p.m.	<p>GROUP MEETING</p> <p>I. Old Business</p> <ul style="list-style-type: none"> ▪ Questions and/or comments regarding any past meetings/work <p>II. CWPP Discussion and Exercises</p> <ul style="list-style-type: none"> ▪ Overall CWPP discussion ▪ Wildland-Urban Interface <ul style="list-style-type: none"> ➢ Definition and map ▪ Wildfire Risk Mapping <ul style="list-style-type: none"> ➢ Analysis produced by WildfireRisk.org, IDL, etc. ➢ Discussion of high-risk areas in the county ▪ Wildfire Mitigation Projects <ul style="list-style-type: none"> ➢ Criteria and examples. ➢ Which are ongoing, completed, deferred, prospective, etc.? ▪ Other Components of the CWPP <p>III. The Next Steps</p> <ul style="list-style-type: none"> ▪ Schedule the next overall meeting ▪ Schedule the next CWPP-specific meeting ▪ Discuss the project timeline <p>IV. Homework</p> <ul style="list-style-type: none"> ▪ Identify and send in wildfire projects ▪ Complete previously assigned worksheets ▪ Review Community Descriptions chapter 	Adam, Nicholas, & Planning Group
6:15 p.m.		Tyre Holfeltz, Adam, and group
7:15 p.m.		Adam, Nicholas, & Planning Group
7:25 p.m.		
7:30 p.m.	ADJOURNMENT	

Figure 35) Agenda for the Owyhee County CWPP/HMP update meeting #3, held in person in Murphy, ID with a virtual option.

SUMMARY

This hybrid meeting centered on refining the CWPP. Key topics included defining and mapping the wildland-urban interface (WUI), aligning wildfire risk with economic and agricultural concerns, and integrating fire district boundaries and critical infrastructure into the planning process. Adjustments to fuel modeling (e.g., vegetation weighting) were proposed for better hazard mapping. The group also explored categorizing mitigation projects, discussed updating building codes and zoning, and emphasized the need for enhanced communication systems, including the potential use of Starlink during wildfire emergencies.

PARTICIPANTS

All Hazard Fire Mitigation Planning Meeting 04/24/2025	
PLEASE PRINT NAME	AGENCY (IF APPLICABLE)
Louis Monson	MRW FIRE
Chuck Cooley	MRW FIRE
Jim Hyslop	Silver City Fire & Rescue, Inc
Tyre Holfeltz	IDL
Jerry Mayan	Marsing Fire
Chris Cromwell	BLM Fire

Figure 36) In-person participants at the third Owyhee County Hazard Mitigation Planning Meeting.

All Hazard Fire Mitigation Planning Meeting 04/24/2025	
Zoom PLEASE PRINT NAME	AGENCY (IF APPLICABLE)
Dennis Merrick	Idaho Power
James Gallacci	Idaho Power
Jared Jablonski	Boise BLM
Mike Guerry	Three Creek RFPA
Ryan Berlin	Twin Falls BLM

Figure 37) Virtual participants at the third Owyhee County Hazard Mitigation Planning Meeting.

AGENDA

A G E N D A	<p>Owyhee County Update Project: Hazard Mitigation Plan & Community Wildfire Protection Plan Meeting #4</p> <p>Thursday, May 15, 2025 9:30 a.m. – 11:00 a.m. MST</p> <p>Virtual Teams Meeting (accommodation for those unable to attend online upon request)</p>	
9:30 a.m.	<p>OPEN – Introductions/Housekeeping</p> <ul style="list-style-type: none"> ➤ Tracking your time and mileage 	Jim Desmond, Angie Barkell
9:35 a.m.	<p>GROUP MEETING</p> <p>I. CWPP Meeting Recap</p> <ul style="list-style-type: none"> ▪ Any questions about CWPP projects? <ul style="list-style-type: none"> ➤ Discuss past wildfire projects ➤ Review template for new projects ▪ Discuss the various versions & drafts of hazard maps <ul style="list-style-type: none"> ➤ WUI maps ➤ Various hazard maps 	Adam, Nicholas, and Group
9:55 a.m.	<p>II. Public Outreach</p> <ul style="list-style-type: none"> ▪ Finalize plans for Outpost Days ▪ Other ideas? 	
10:10 a.m.	<p>III. Discussion of Past Handouts and Activities</p> <ul style="list-style-type: none"> ▪ Hazard Summary Worksheet ▪ Local Knowledge Questionnaire ▪ Feedback on Chapter 3 	
10:30 a.m.	<p>IV. The Hazards</p> <ul style="list-style-type: none"> ▪ Floods, Avalanche, Earthquake, Landslide, Severe Weather, Drought, Wildland Fire <ul style="list-style-type: none"> ➤ Local event history, impacts, values at risk, high concern areas, changes in risk, current mitigation strategies 	
10:45 a.m.	<p>V. Assignments for Adopting Jurisdictions</p> <ul style="list-style-type: none"> ▪ Capability Assessments ▪ What are your Projects? – Public Works, Planning Department, Highway Department, BLM, Conservation District, etc. ▪ Related County/City Plans <ul style="list-style-type: none"> ➤ How was the HMP incorporated? ➤ Are there any we should be referencing? 	
10:55 a.m.	<p>VI. Next Steps</p> <ul style="list-style-type: none"> ▪ Review past projects and start to brainstorm new projects ▪ Provide all requested information ▪ How can we reach all stakeholders and group members? 	
11:00 a.m.	ADJOURNMENT	

Figure 38) Agenda for the fourth Owyhee County Planning Meeting.

SUMMARY

A recap of recent CWPP discussions highlighted ongoing wildfire mitigation projects, such as tumbleweed removal and roadside fuels reduction funded through BLM grants. Coordination with road and bridge departments was identified as essential to expanding these efforts. The group also discussed opportunities for improving building and zoning policies to reduce wildfire risk. While stricter regulations faced some resistance due to property rights concerns, an educational campaign on fire-resistant materials was proposed. The formation of a Wildland-Urban Interface Advisory Committee was also suggested to guide community input on fire safety measures.

Public engagement strategies were discussed, including participation in local events like Outpost Days and Grandview Days to raise awareness of wildfire preparedness and emergency planning. Herrenbruck reviewed the All-Hazard Mitigation Plan update process and emphasized the need to reassess risks such as flooding and landslides—and the group stressed that risk assessments are merely for planning purposes and don't reflect any kind of forecast or regulatory mandate, but rather help identify vulnerabilities and prioritize local mitigation efforts.

PARTICIPANTS

Table 12) Meeting #4 Participants

Name	Affiliation
Nicholas Cancalosi-Dean	Northwest Management, Inc.
Adam Herrenbruck	Northwest Management, Inc.
Dennis Merrick	Idaho Power
James Desmond	Owyhee County Emergency Manager
Sheriff Larry Kendrick	Owyhee County Sheriff
Jolyn Thompson	City of Marsing
Mary Huff	Owyhee County Planning and Zoning
Lorrie Pahl	Idaho Office of Emergency Management
Heidi Novich	Idaho Office of Emergency Management
Jeff Ulmer	Gem County Emergency Manager
Tyre Holfeltz	Idaho Department of Lands

AGENDA

A G E N D A	Owyhee County, Idaho Community Wildfire Protection Plan Virtual Meeting Tuesday, July 1, 2025 10:00 a.m. – 11:30 a.m. (Mountain Time)			
10:00 a.m.	OPEN – Introductions and welcome	All		
GROUP MEETING				
10:05 a.m.	I. Recap of Public Outreach i. Feedback and input	Adam Herrenbruck and Nicholas Cancalosi-Dean, Group		
10:15 a.m.	II. Review the status of the CWPP and HMP update process i. Show CWPP draft to group and open up to questions or comments			
10:30 a.m.	III. Wildland-Urban Interface (WUI) definition and map i. Recap WUI methodology as discussed earlier in 2025 ii. Open up for comments and suggestions			
10:45 a.m.	IV. Mitigation Actions/Projects i. Past wildfire projects: i. Review the rest of the old wildfire projects from the previous plan ii. Identify projects that should be carried/adapted into this plan ii. New projects: i. Types of projects ii. Who should submit projects? iii. What information is needed? iii. Other past projects (as time allows) i. Flood, earthquake, landslide, etc.			
11:25 a.m.	V. Next Meeting? i. Date and venue			
	VI. Homework i. Review past projects for updates ii. Propose new projects iii. Review hazard section drafts			
11:30 a.m.	ADJOURNMENT			
Contact Info: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;"> Project Manager: Adam Herrenbruck herrenbruck@northwestmanagement.com Northwest Management Office: 208-883-4488 </td> <td style="padding: 2px;"> Project Lead: Nicholas Cancalosi-Dean ncancelosidean@northwestmanagement.com </td> </tr> </table>			Project Manager: Adam Herrenbruck herrenbruck@northwestmanagement.com Northwest Management Office: 208-883-4488	Project Lead: Nicholas Cancalosi-Dean ncancelosidean@northwestmanagement.com
Project Manager: Adam Herrenbruck herrenbruck@northwestmanagement.com Northwest Management Office: 208-883-4488	Project Lead: Nicholas Cancalosi-Dean ncancelosidean@northwestmanagement.com			

Figure 39) Agenda for the fifth mitigation planning meeting on July 1, 2025.

SUMMARY

The fifth Owyhee County Hazard Planning Meeting on July 1 focused on updating previous projects and proposing new ones for the CWPP and HMP based on community input. Key concerns included wildland fire, severe weather, and drought, with strong support for more public education and increased emergency response capacity. Outreach efforts have been well-received, and tools like the cotton ball exercise and online survey are helping prioritize hazards. Draft materials, including the updated WUI map and mitigation action lists, were reviewed, and participants were encouraged to provide feedback, especially on local needs like RFPA equipment and community-specific projects.

Table 13) Meeting #5 Participants

Name	Affiliation
Nicholas Cancalosi-Dean	Northwest Management, Inc.
Adam Herrenbruck	Northwest Management, Inc.
James Desmond	Owyhee County Emergency Manager
Sheriff Larry Kendrick	Owyhee County Sheriff
Jackie Frey	Twin Falls County Emergency Management
Ammon Wilhelm	Bureau of Land Management
Lynette Enrico	City of Marsing
Dennis Merrick	Idaho Power
Jerry Mayer	Marsing Rural Fire Department
Cuck Cooley	Murphy-Reynolds-Wilson Fire
Angie Barkell	Owyhee County Clerk

A G E N D A	Owyhee County, Idaho Hazard Mitigation/Wildfire Protection Plan Virtual Meeting Thursday, July 31, 2025 10:00 a.m. – 11:30 a.m. (Mountain Time)			
10:00 a.m.	OPEN – Introductions and welcome	All		
	GROUP MEETING			
10:05 a.m.	I. Quick Update on Ongoing Public Outreach Efforts i. Feedback and input	Adam Herrenbruck and Nicholas Cancalosi-Dean, Group		
10:15 a.m.	II. Recap of meeting with the city of Homedale i. Show brainstormed projects to group ii. Encourage stakeholders to send in more projects			
10:30 a.m.	III. CWPP status update i. Discuss feedback received so far ii. Open up for comments and suggestions			
10:45 a.m.	IV. HMP Status Update i. Introduce hazard summary section to group ii. Solicit any initial feedback iii. Encourage group to review, especially hazards that pertain to them and their community			
	V. Continue covering Mitigation Actions/Projects i. Past projects: i. Review the rest of the hazard projects from the previous plan ii. Identify projects that should be carried/adapted into this plan ii. New projects: i. Types of projects ii. Who should submit projects? iii. What information is needed?			
11:25 a.m.	VI. Next Meeting? i. Date and venue – likely an in-person meeting in September			
	VII. Homework i. Review past projects for updates ii. Propose new projects iii. Review hazard summary drafts			
11:30 a.m.	ADJOURNMENT			
Contact Info: <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"> Project Manager: Adam Herrenbruck herrenbruck@northwestmanagement.com Northwest Management Office: 208-883-4488 </td> <td style="width: 50%;"> Project Lead: Nicholas Cancalosi-Dean ncancelosidean@northwestmanagement.com </td> </tr> </table>			Project Manager: Adam Herrenbruck herrenbruck@northwestmanagement.com Northwest Management Office: 208-883-4488	Project Lead: Nicholas Cancalosi-Dean ncancelosidean@northwestmanagement.com
Project Manager: Adam Herrenbruck herrenbruck@northwestmanagement.com Northwest Management Office: 208-883-4488	Project Lead: Nicholas Cancalosi-Dean ncancelosidean@northwestmanagement.com			

Figure 40) Agenda for the July 31 planning meeting

SUMMARY

The meeting focused on hazard mitigation planning for Owyhee County, with an emphasis on community engagement and wildfire risk management. Adam Herrenbruck opened the session by outlining the agenda, which included updates on public outreach efforts. Nicholas Cancalosi-Dean reported on community engagement activities, noting that wildfires were identified as the primary hazard of concern, followed by severe weather and flooding. He highlighted the use of a cotton ball exercise at local events to engage residents in hazard identification and mentioned a Google survey distributed to gather further community feedback.

The discussion included the necessity of collaboration with local cities, particularly Homedale, to ensure compliance with the Hazard Mitigation Plan. Herrenbruck stressed the importance of community feedback on hazard impacts

and mitigation projects, while Cancalosi-Dean provided an overview of wildfire history and risk in the county. The group acknowledged the need to incorporate various models and resources at risk into the hazard mitigation plan, with Jim Desmond emphasizing the economic impact of wildfires on the grazing industry and Joanna Tjaden noted challenges in wildfire suppression due to accessibility issues and large distances.

Additional topics included the suggestion for a text alert system for wildfire notifications and the need for a new fire station to improve training and equipment storage. The group discussed the importance of mapping vegetation types and wildfire hazards, as well as documenting past mitigation projects funded by federal grants. Herrenbruck encouraged attendees to review the draft of the Community Wildfire Protection Plan and share feedback, while Ammon Wilhelm proposed educational signage to inform the public about fire risks at popular recreation areas. A follow-up meeting was scheduled for September 11th to continue discussions on city projects and gather more input.

PARTICIPANTS

Table 14) Meeting #6 Participants

Name	Affiliation
Nicholas Cancalosi-Dean	Northwest Management, Inc.
Adam Herrenbruck	Northwest Management, Inc.
James Desmond	Owyhee County Emergency Manager
Sheriff Larry Kendrick	Owyhee County Sheriff
Joanna Tjaden	Bureau of Land Management
Ammon Wilhelm	Bureau of Land Management
Alex Cox	Idaho Department of Lands

A G E N D A	Owyhee County, Idaho Hazard Mitigation/Wildfire Protection Plan In-Person Meeting Thursday, September 11, 2025 10:00 a.m. – 12:00 p.m. (Mountain Time)			
10:00 a.m.	OPEN – Introductions and welcome	All		
GROUP MEETING				
10:05 a.m.	I. Update on CWPP/HMP Progress i. What we still need from adopting jurisdictions before sending draft to FEMA ii. Discuss strategies for obtaining the needed info	Adam Herrenbruck and Nicholas Cancalosi-Dean, Group		
10:15 a.m.	II. CWPP status update i. Summarize feedback and projects received from planning team and community stakeholders ii. Last call for edits and projects before we send to IDL			
10:35 a.m.	III. Introduction to HMP Hazard Summaries i. Introduce hazard summary sections – landslide, earthquake, etc. ii. Solicit any initial feedback iii. Brainstorm potential mitigation projects for each hazard iv. Individual review of each hazard needed			
11:20 a.m.	IV. Continue covering Mitigation Actions/Projects i. Past projects: i. Review any hazard projects from the previous plan that haven't yet been covered ii. Identify projects that should be retained ii. New projects: i. Types of projects ii. Who should submit projects? iii. What information is needed?			
11:50 a.m.	V. Next Meeting? i. Likely a virtual meeting in October			
	VI. Homework i. Continue to review past HMP projects ii. Propose new projects for HMP iii. Review hazard summary drafts iv. Last call for CWPP edits			
12:00 p.m.	ADJOURNMENT – LUNCH PROVIDED FOR IN-PERSON ATTENDEES			
Contact Info:				
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;"> Project Manager: Adam Herrenbruck herrenbruck@northwestmanagement.com Northwest Management Office: 208-883-4488 </td> <td style="padding: 2px;"> Project Lead: Nicholas Cancalosi-Dean ncancelosidean@northwestmanagement.com </td> </tr> </table>			Project Manager: Adam Herrenbruck herrenbruck@northwestmanagement.com Northwest Management Office: 208-883-4488	Project Lead: Nicholas Cancalosi-Dean ncancelosidean@northwestmanagement.com
Project Manager: Adam Herrenbruck herrenbruck@northwestmanagement.com Northwest Management Office: 208-883-4488	Project Lead: Nicholas Cancalosi-Dean ncancelosidean@northwestmanagement.com			

Figure 41) Agenda for September 11 meeting

SUMMARY

The meeting focused on the continuing update of the all-hazard mitigation plan and the community wildfire protection plan (CWPP). Key points included the need to meet FEMA requirements, particularly from adopting jurisdictions like the three incorporated cities. The CWPP, further along than the CWPP, includes detailed historical data on wildfires, demographics, and economic impacts. Notable fires like the Soda Fire in 2015 and recent fires in 2025 were discussed. The conversation highlighted the negative economic impact of wildfire (the risks of which are sometimes associated with recreation) on local resources and the need for better planning to address wildfire risks and community needs.

PARTICIPANTS

Table 15) Meeting #7 Participants

Name	Affiliation
Nicholas Cancalosi-Dean	Northwest Management, Inc.
Adam Herrenbruck	Northwest Management, Inc.
JD Phipps	Marsing Ambulance
James Desmond	Owyhee County Emergency Manager
Larry Kendrick	Owyhee County Sheriff
Lynette Enrico	City of Marsing
Jolyn Thompson	City of Marsing
Lorrie Pahl	Idaho Office of Emergency Management
Chuck Cooley	Murphy-Reynolds-Wilson Fire District
Jerry Mayer	Marsing Fire District
Angie Barkell	Owyhee County Clerk
Aaron Wilhelm	Bureau of Land Management
Joanna Tjaden	Bureau of Land Management
Mary Huff	Owyhee County Planning & Zoning
Kirby Cook	City of Marsing/Civil Dynamics
Jim Hyslop	Silver City Fire & Rescue

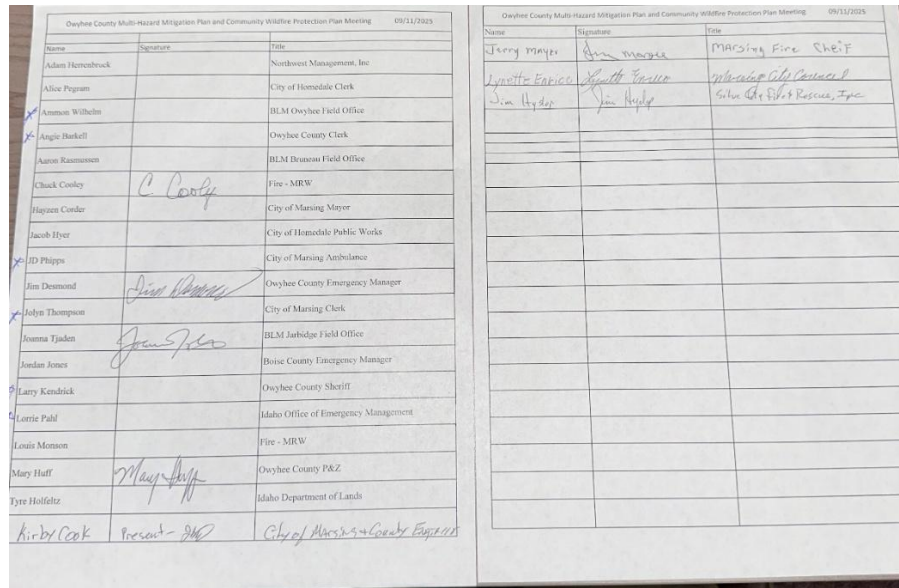


Figure 42) Sign in sheet for Meeting #7 with in-person (signature) & online (starred) participants.

AGENDA

A G E N D A	Owyhee County, Idaho Hazard Mitigation/Wildfire Protection Plan In-Person Meeting Thursday, October 30, 2025 10:00 a.m. – 11:30 a.m. (Mountain Time)			
10:00 a.m.	OPEN – Introductions and welcome	All		
GROUP MEETING				
10:05 a.m.	I. CWPP Recap & Update i. Show current version of project table and briefly summarize for group ii. Update on projects received from RFPAs and Fire Departments recently iii. Final call on edits & projects before sending draft to IDL	Adam Herrenbruck and Nicholas Cancalosi-Dean, Group		
10:20 a.m.	II. Going over HMP Hazard Summary Sections i. <i>Wildfire</i> <ul style="list-style-type: none"> • CWPP incorporated into HMP with FEMA-required sections added • Go over both old & new wildfire projects in draft 			
10:35 a.m.	ii. <i>Flood</i> <ul style="list-style-type: none"> • Review flood section in HMP and go over related projects in draft 			
10:50 a.m.	iii. <i>Severe Weather</i> <ul style="list-style-type: none"> • Review HMP section and cover related projects for each jurisdiction 			
11:05 a.m.	III. Update on HMP forms needed for Adopting Jurisdictions i. Briefly recap hazard summary rankings for each jurisdiction ii. Capability Assessment – we have drafts for each jurisdiction, but input is needed to ensure accuracy & completeness iii. Show HMP Project Table Format to group – organized by jurisdiction			
11:20 a.m.	IV. Next Steps/Homework i. CWPP draft will be submitted to IDL by end of October ii. Review HMP sections & provide any feedback iii. Virtual meeting – late November?			
11:30 a.m.	ADJOURNMENT			
Contact Info: <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;"> Project Manager: Adam Herrenbruck herrenbruck@northwestmanagement.com Northwest Management Office: 208-883-4488 </td> <td style="width: 50%;"> Project Lead: Nicholas Cancalosi-Dean ncancalosi@northwestmanagement.com </td> </tr> </table>			Project Manager: Adam Herrenbruck herrenbruck@northwestmanagement.com Northwest Management Office: 208-883-4488	Project Lead: Nicholas Cancalosi-Dean ncancalosi@northwestmanagement.com
Project Manager: Adam Herrenbruck herrenbruck@northwestmanagement.com Northwest Management Office: 208-883-4488	Project Lead: Nicholas Cancalosi-Dean ncancalosi@northwestmanagement.com			

Figure 43) Agenda for 8th planning meeting on October 30, 2025.

SUMMARY

The Owyhee County Hazard Mitigation Planning discussion focused on various aspects of hazard mitigation, particularly concerning wildfire and flooding risks. Herrenbruck noted the virtual format of the meeting, which differed from the agenda's indication of an in-person gathering. Nicholas Cancalosi-Dean provided updates on the Community Wildfire Protection Plan (CWPP), encouraging feedback on the draft project table that outlines wildfire mitigation initiatives.

Concerns regarding the CWPP's influence on insurance rates were raised, with Herrenbruck clarifying that insurance companies utilize their own wildfire risk models, which are separate from the CWPP. Cancalosi-Dean recapped the Wildland Urban Interface (WUI) methodology, emphasizing its role as a planning tool that does not affect grazing leases, while also highlighting the urgency of finalizing the wildfire plan draft for review.

The implications of WUI designations were a significant topic, with concerns raised about their potential impact on ranchers and local communities. Herrenbruck explained the importance of WUI designations for securing grant funding, while Desmond highlighted the complexities of government plans and their effects on grazing allotments. The group acknowledged the need for further discussion on this topic, suggesting a dedicated meeting with the Natural Resource Committee. Additionally, they discussed the necessity of expert fire management advice and confirmed a follow-up meeting date, while agreeing on the importance of preparing disclaimers to clarify the intended use of the planning documents.

PARTICIPANTS

Table 16) Meeting #8 Participants

Name	Affiliation
Nicholas Cancialosi-Dean	Northwest Management, Inc.
Adam Herrenbruck	Northwest Management, Inc.
Louis Monson	Murphy-Reynolds-Wilson Fire
James Desmond	Owyhee County Emergency Manager
Chuck Cooley	Murphy-Reynolds-Wilson Fire
JD Phipps	Marsing Ambulance
Mary Huff	Owyhee County Planning and Zoning
Rachele King	Owyhee County Clerk’s Office
Guy Dodson	Shoshone-Paiute Fire

A G E N D A	Owyhee County, Idaho Hazard Mitigation/Wildfire Protection Plan Virtual Meeting Tuesday, November 18, 2025 10:00 a.m. – 11:30 a.m. (Mountain Time)			
10:00 a.m.	OPEN – Introductions and welcome	All		
	GROUP MEETING			
10:05 a.m.	I. CWPP Update i. Briefly summarize recent edits ii. Discuss alternative WULs	Adam Herrenbruck and Nicholas Cancalosi-Dean, Group		
10:20 a.m.	II. Going over remaining HMP Hazard Summary Sections i. <i>Avalanche</i> <ul style="list-style-type: none"> • Review hazard summary section and associated projects ii. <i>Drought</i> <ul style="list-style-type: none"> • Review hazard summary section and associated projects iii. <i>Earthquake</i> <ul style="list-style-type: none"> • Review hazard summary section and associated projects iv. <i>Landslide</i> <ul style="list-style-type: none"> • Review hazard summary section and associated projects 			
11:05 a.m.	III. Reminder on required HMP forms i. Capability Assessment: we will go with current versions for each adopting jurisdiction barring any feedback ii. Recap HMP Project Table and reiterate need for projects			
11:20 a.m.	IV. Next Steps/Homework i. Continue to review HMP sections & provide any feedback ii. Next meeting - early to mid December?			
11:30 a.m.	ADJOURNMENT			
Contact Info:				
<table border="1" style="width: 100%;"> <tr> <td style="width: 50%;"> Project Manager: Adam Herrenbruck herrenbruck@northwestmanagement.com Northwest Management Office: 208-883-4488 </td> <td style="width: 50%;"> Project Lead: Nicholas Cancalosi-Dean ncancalosi@northwestmanagement.com </td> </tr> </table>			Project Manager: Adam Herrenbruck herrenbruck@northwestmanagement.com Northwest Management Office: 208-883-4488	Project Lead: Nicholas Cancalosi-Dean ncancalosi@northwestmanagement.com
Project Manager: Adam Herrenbruck herrenbruck@northwestmanagement.com Northwest Management Office: 208-883-4488	Project Lead: Nicholas Cancalosi-Dean ncancalosi@northwestmanagement.com			

Figure 44) Meeting #9 Agenda.

SUMMARY

The discussion centered on hazard mitigation strategies for Owyhee County, particularly focusing on juniper management, timber harvesting, and various natural hazards. Adam Herrenbruck proposed establishing relationships with the Bureau of Land Management (BLM) to enhance juniper control efforts. James Desmond provided historical context regarding the challenges of utilizing juniper for energy, citing inadequate infrastructure and high transportation costs as significant barriers. Tyre Holfeltz emphasized the importance of local milling to reduce these costs, while Nicholas Cancalosi-Dean highlighted access issues for fire response teams due to juniper debris.

The conversation also addressed the economic and logistical challenges of timber harvesting in the Silver City area, with concerns raised about fire risks from dense forests. Herrenbruck noted the reliance on grant funding for current projects and the necessity for partnerships to explore future opportunities. Wilhelm Ammon informed the group about the approval of 10,000 acres for conifer removal to enhance habitats, while Cancalosi-Dean committed to following up on delayed BLM project details. The group discussed the Wildland-Urban Interface (WUI) and clarified that the planning document would not affect land use decisions, with an emphasis on collaboration and adaptability in the planning process.

PARTICIPANTS

Table 17) Meeting #9 Participants

Name	Affiliation
Nicholas Cancalosi-Dean	Northwest Management, Inc.
Adam Herrenbruck	Northwest Management, Inc.
Jim Hyslop	Silver City Fire & Rescue
James Desmond	Owyhee County Emergency Manager
Chuck Cooley	Murphy-Reynolds-Wilson Fire
Tyre Holfeltz	Idaho Department of Lands
Ammon Wilhelm	Bureau of Land Management
Larry Kendrick	Owyhee County Sheriff
Lorrie Pahl	Idaho Office of Emergency Management

JANUARY 29, 2026 - MEETING #10

AGENDA

A G E N D A	Owyhee County, Idaho Hazard Mitigation/Wildfire Protection Plan Virtual Meeting Thursday, January 29, 2026 10:00 a.m. – 11:30 a.m. (Mountain Time)
10:00 a.m.	OPEN – Introductions and welcome All
10:05 a.m.	GROUP MEETING I. CWPP Update i. Briefly summarize recent edits ii. Current status - approval by Commissioners imminent Adam Herrenbruck and Nicholas Cancalosi-Dean, Group
10:20 a.m.	II. HMP Status i. Public Comment Period until Feb 15 ii. Will likely submit draft to IOEM within the next week iii. Open-ended discussion of current draft, including public comments received so far as well as any last-minute feedback from planning team
10:50 a.m.	III. Next Steps/Homework i. Review latest HMP draft ii. Await feedback/approval from the State on the draft(s)
11:00 a.m.	ADJOURNMENT
Contact Info: Project Manager: Adam Herrenbruck herrenbruck@northwestmanagement.com Northwest Management Office: 208-953-4458 Project Lead: Nicholas Cancalosi-Dean ncancalosi@northwestmanagement.com	

Figure 45) Meeting #10 Agenda

SUMMARY

The discussion focused on the final drafts of the Community Wildfire Protection Plan (CWPP) and the Hazard Mitigation Plan (HMP) for Owyhee County. Nicholas Cancalosi-Dean reported that the latest CWPP draft is slated for approval by the county commissioners on February 2, 2026, contingent on clarifications regarding jurisdictional boundaries. Adam Herrenbruck suggested including details about the approval process for equipment use in wilderness areas to address commissioner concerns. The group emphasized the importance of clear communication with the commissioners and discussed the rugged nature of the wilderness, which impacts firefighting methods. Herrenbruck encouraged proactive feedback on the draft and highlighted the need for documenting public input to ensure transparency. Overall, the participants were urged to stay engaged in the planning process and to address any necessary edits promptly.

PARTICIPANTS

Table 18) Meeting # 10 Participants

Name	Affiliation
Nicholas Cancalosi-Dean	Northwest Management, Inc.
Adam Herrenbruck	Northwest Management, Inc.
Jim Hyslop	Silver City Fire & Rescue
James Desmond	Owyhee County Emergency Manager
Chuck Cooley	Murphy-Reynolds-Wilson Fire
Aaron Rasmussen	Bureau of Land Management
Ammon Wilhelm	Bureau of Land Management
Joanna Tjaden	Bureau of Land Management
Louis Monson	Murphy-Reynolds-Wilson Fire
Crash Marusich	Ada County Emergency Management

PUBLIC OUTREACH

JUNE 8, 2025 - OWYHEE COUNTY OUTPOST DAYS PUBLIC OUTREACH SUMMARY

Thank you to MRW Fire, Angie Bartkell (Owyhee County Clerk), the Sheriff's Office, and all others who assisted with our public outreach at the Owyhee County Outpost Days on Sunday. We received constructive engagement from local residents and stakeholders, who identified high-risk areas and past hazard events on the county map and provided input on proposed mitigation measures.

Wildfire emerged as the top concern, followed by drought/severe weather and flooding, with additional votes for earthquakes and landslides. The online public survey, advertised during Outpost Days and on the County Facebook page, continues to collect responses. A summary of public outreach results is provided in the following pages:

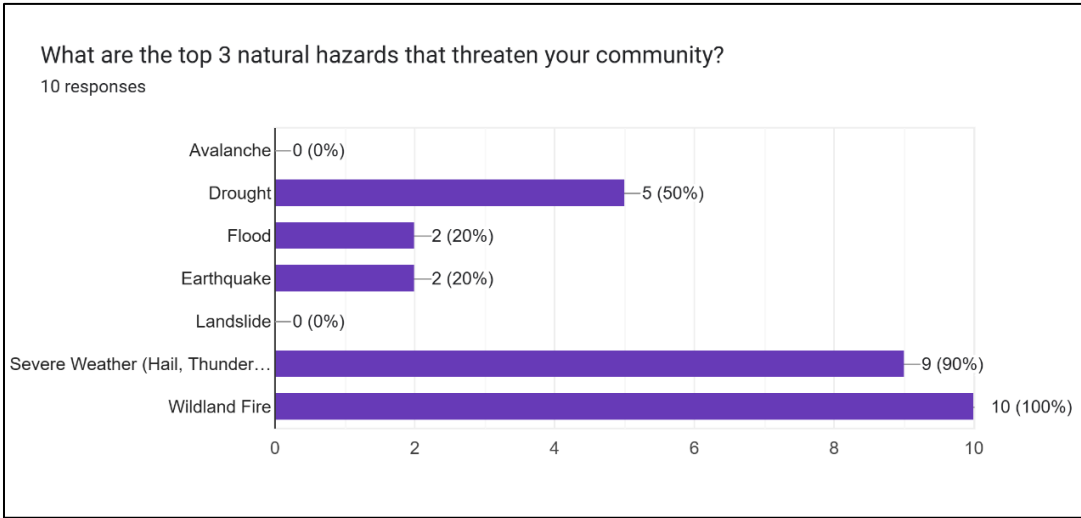
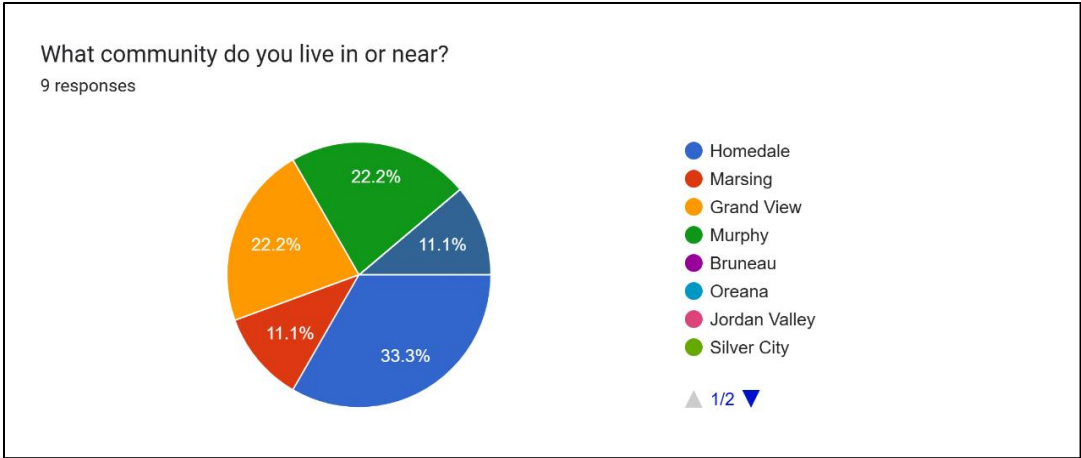


Figure 46) Google survey results, part 1.

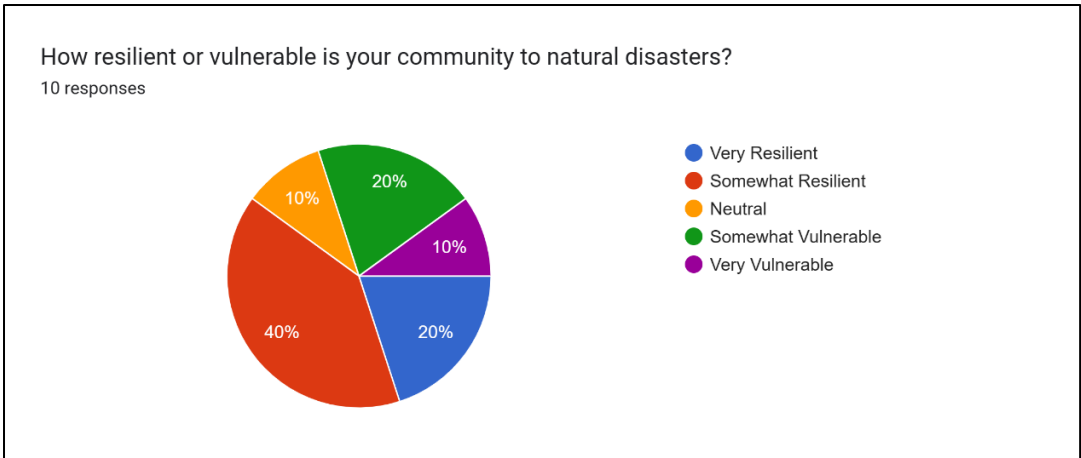
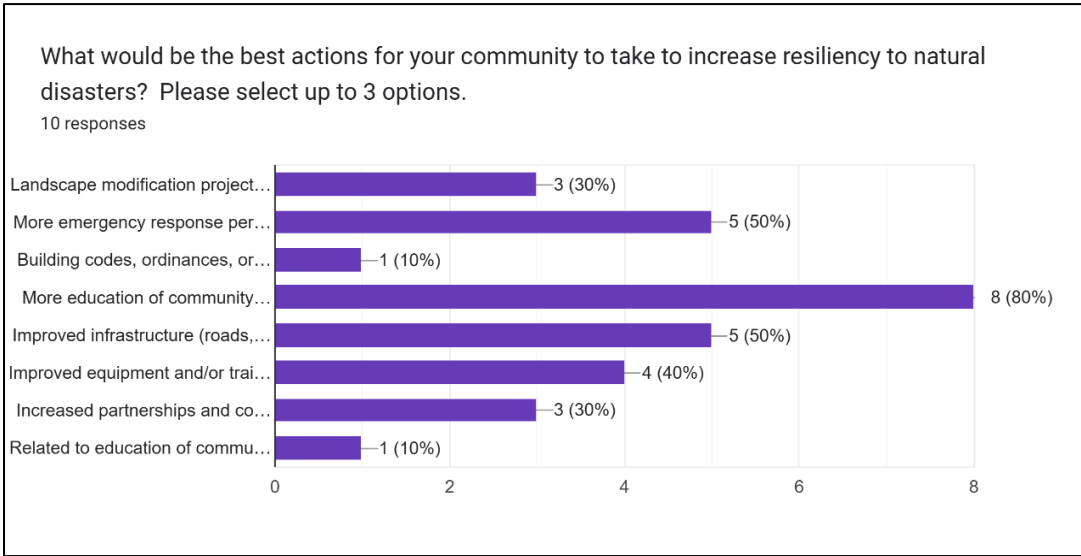
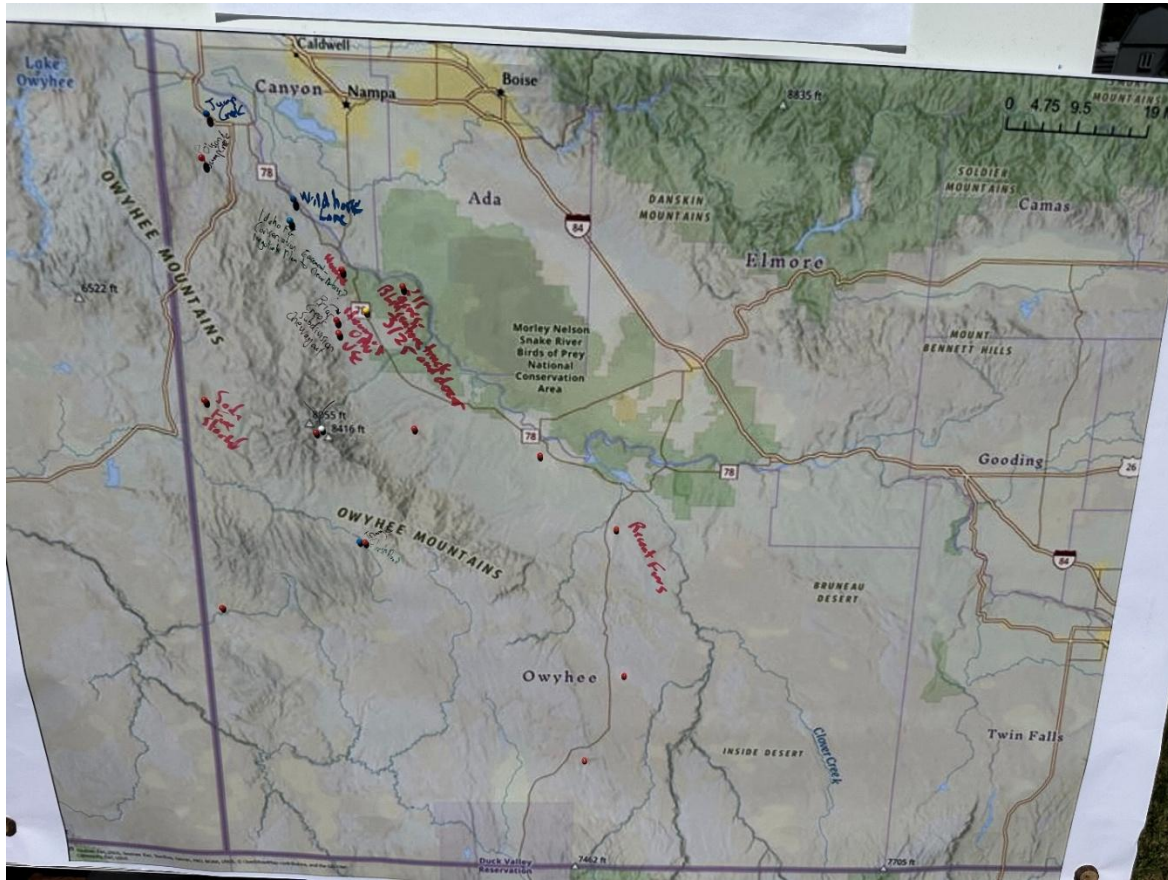


Figure 47) Google Survey Results, Part 2.



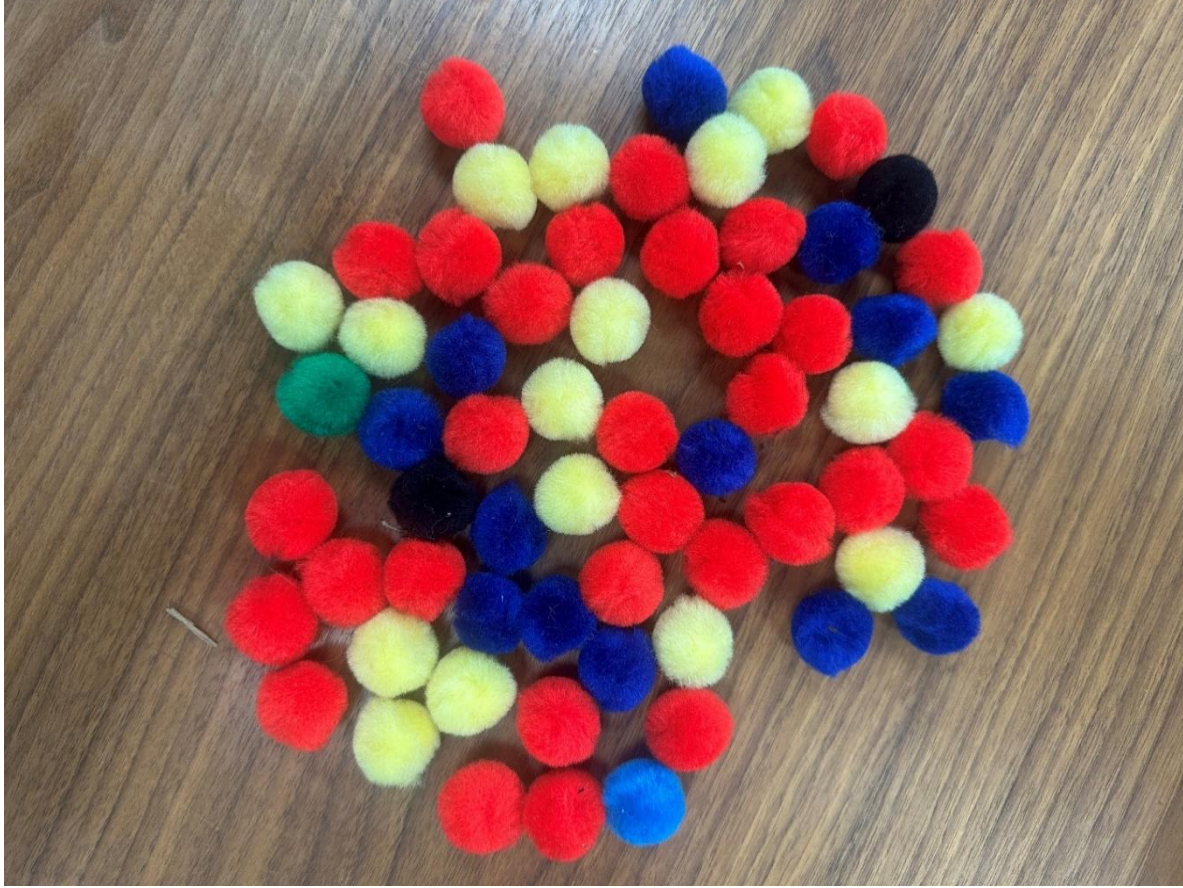
WHAT CONCERNS YOU THE MOST?

PLACE A PIN ON THE MAP IN A LOCATION OF HIGH CONCERN FOR ANY DISASTER WITH A CORRESPONDING COLOR.

- Avalanche
- Drought/Severe Weather
- Flooding
- Earthquake
- Landslide
- Wildfire



Figure 48) The top image is a map of Owyhee County with past hazard occurrences as well as locations identified by the public and local stakeholders as high-risk for various hazards. The bottom image shows the instructions that were given to the public for the exercise.



WHAT CONCERNS YOU THE MOST?

FOR YOUR NATURAL HAZARD OF HIGHEST CONCERN, PLACE THREE COTTON BALLS OF THE CORRESPONDING COLOR IN THE BASKET. FOR YOUR HAZARD OF SECOND-MOST CONCERN, PLACE TWO COTTON BALLS, AND ONE FOR YOUR THIRD HAZARD.

○Avalanche

●Drought/Severe Weather

●Flooding

●Earthquake

●Landslide

●Wildfire



Figure 49) Results of the public conveying their hazard of top concern with cotton balls of corresponding colors are shown in the top image, with the instructions underneath.

.....
SNAKE RIVER COUNTRY MARKET – JUNE 21, 2025

A huge thank you goes out to Marsing City Councilperson Lynette Enrico, who adapted and used the Outpost Days public outreach materials to continue engaging Owyhee County residents during a Snake River Country Market in Marsing on June 21! The results of these efforts are shown on the following pages:

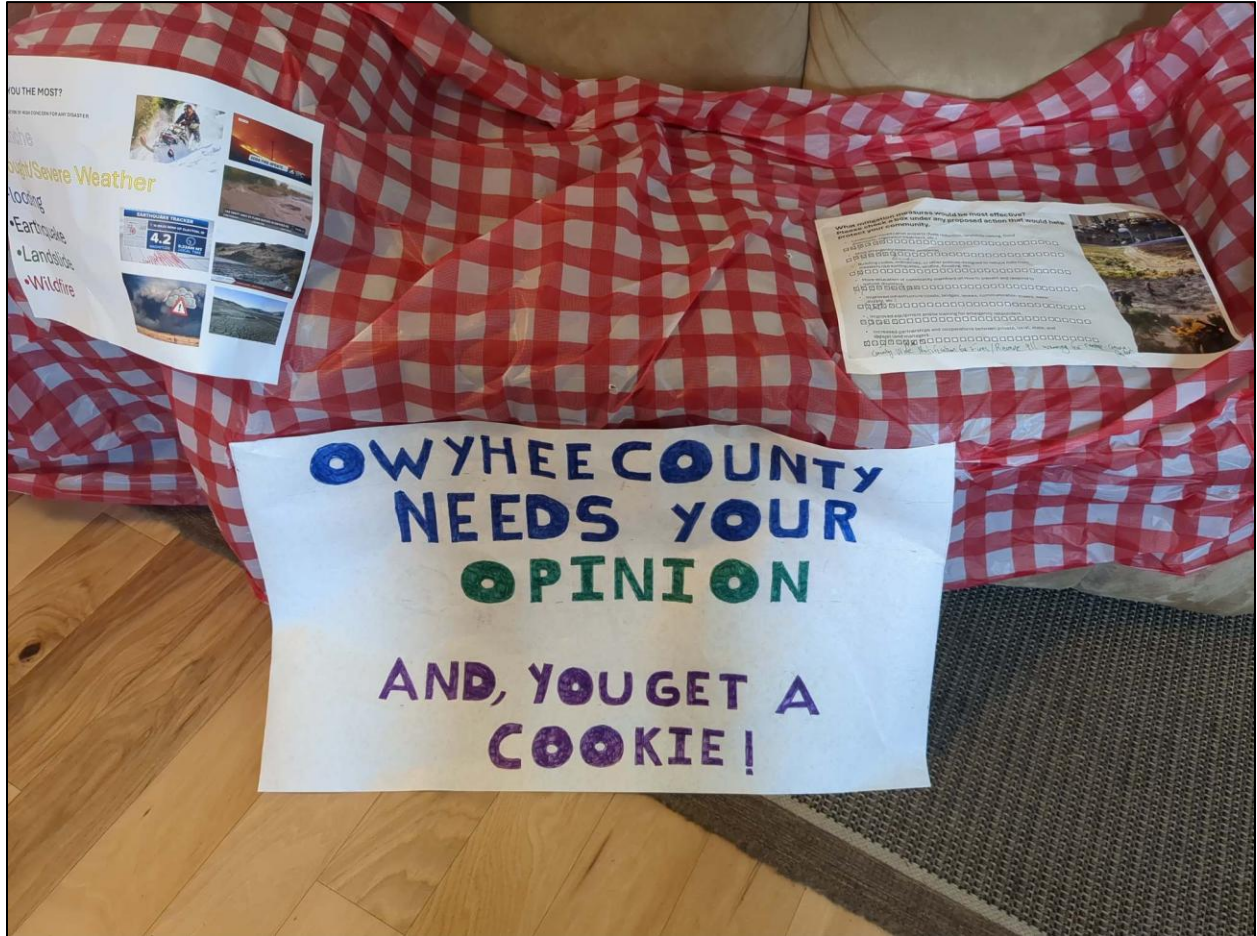


Figure 51) Public Outreach Display for the Snake River Market in Marsing.



Figure 53) Results of the cotton ball hazard ranking exercise from the Snake River Market.

APPENDIX 4 – FIRE DISTRICT SUMMARIES

BRUNEAU FIRE DEPARTMENT

Contact	Stacey Buckingham (Chief), bruneaufire@gmail.com , (208) 845-2288. PO Box 243, Bruneau, ID 83604
MOU's	
Staff/Volunteers	1 Chief, 15 Volunteers, 3 commissioners, 1 financial controller
Fire Stations	1
Equipment	<ul style="list-style-type: none"> ● 2010 Ford F350 Type 6 Fire Engine ● 1995 Pierce Dash Pumper ● 2012 Freightliner Type 3 Wildland Engine ● 4,000-gallon tanker

GRAND VIEW FIRE DEPARTMENT

Contact	Greg Becker (Chief), gregbecker7@gmail.com , (208) 590-2828, 721 S Roosevelt St Grand View, ID, 83624
MOU's	Elmore County Rescue, BLM
Staff/Volunteers	20
Fire Stations	2
Equipment	<p><i>Fire Station – 721 S Roosevelt Ave</i></p> <ul style="list-style-type: none"> ● Engine 9 – 1994 Pierce Saber ● Engine 10 – 1986 Pierce Arrow ● Rescue 1 – 2000s International walk-around ● 2008 GMC Sierra Command Vehicle ● 2016 Peterbilt/Randco Tender <p><i>Brush Station – 535 Riverside Ave.</i></p> <ul style="list-style-type: none"> ● Brush 2 (2000s International 7300 4x4 Type 4) ● Brush 3 (2018 Ram 3500 4x4 Type 6) ● Kenworth tender – 1978

HOMEDALE FIRE DEPARTMENT

Contact	Dennis Uria (Chief), homedalefd@gmail.com , (208) 337-3450, PO Box 905, Homedale, ID 83628
MOU's	
Staff/Volunteers	
Fire Stations	1
Equipment	<p><i>Fire Station - 20 West Colorado Avenue</i></p> <ul style="list-style-type: none"> • Medic 73 – 2024 Ram 3500 (Type I) • Medic 74 – 2021 Ram 3500 (Type I) • Engine 1101 – 2015 Rosenbauer Commander • Engine 1102 – 2000s Kenworth T800 / Pierce • Tender 1121 – 2000s Kenworth T800 / Pierce • Tender 1122 – 1990s Kenworth T300 • Brush 1151 – 2010s Ram 5500 • Brush 1152 – 1990s Dodge 2500 • Brush 1163 – 1900s (exact year unspecified) Type 4 wildland unit

MARSING FIRE DEPARTMENT

Contact	Jerry Mayer (Chief), marsingruralfire@gmail.com , (208) 550-6010, 303 Main St, Marsing, ID 83639
MOU's	City of Marsing
Staff/Volunteers	29
Fire Stations	2 (Main Street and Walker Lane Substation)

Equipment	<p><i>Fire Station - 303 Main Street</i></p> <ul style="list-style-type: none"> • Engine 1 – 2006 Freightliner M2 106 / Rosenbauer • Tender 1 – 2024 Freightliner M2 106 / Rosenbauer • Brush 1 – 2024 Ford F-350 4x4 • Rescue 1 – 2008 Ford F-550 4x4 wet rescue • Engine 2 – 1999 Pierce Saber • Tender 2 – 2008 Freightliner M2 106 / Midwest • Brush 3 – 2023 Ford F-350 4x4 • Brush 4 – 2019 Ford F-550 4x4 / Rosenbauer Type 6 <p><i>Walker Sub-Station</i></p> <ul style="list-style-type: none"> • Brush 2 (2003 Ford F-350 4x4) • Tender 3 (1993 GMC TopKick) • Engine 4 (2002 Freightliner FL70) • 2014 Ford F150 Command Vehicle
-----------	---

MURPHY-REYNOLDS-WILSON FIRE DEPARTMENT

Contact	Chuck Cooley (Chief), chief@mrwfire.org , (208) 404-9746, 11606 ID-78, Melba, ID 83641
MOU's	
Staff/Volunteers	
Fire Stations	4
Equipment	<p><i>Murphy Station 1 - 17014 Old Highway 45 Street, Murphy</i></p> <ul style="list-style-type: none"> • Engine 501 – 1987 GMC C70 4x4 / E-One Type 3 • Tender 521 – 1985 GMC General • Brush 561 – Stewart & Stevenson Type 4 <p><i>Wilson Station 2 - 10427 Johnston Lane, Melba</i></p> <ul style="list-style-type: none"> • Quick Response 541 – 2023 Ram 3500 walk-around rescue • Quick Response 542 – 2008 Ford F-350 Type 6 • Command 550 – 2002 Chevrolet Silverado 4x4 • Brush 562 – 2001 International 4x4 Type 4 • Quick Attack 566 – 1992 Ford L Type 6 <p><i>Givens Station 3 - 11606 ID-78, Melba</i></p>

	<ul style="list-style-type: none"> • Engine 502 – 1978 American LaFrance 1000 • Engine 503 – 1980 Ford L-9000 • Tender 523 – 2000 Ford F-750 • Tender 525 – 2008 Freightliner • Tender 527 – 1989 Kenworth T800 • Brush 563 – 1990 International 4x4 Type 4 <p><i>Reynolds Station 4 - Rabbit Creek & Reynolds Creek Road, Murphy</i></p> <ul style="list-style-type: none"> • Brush/QRU 564 – 1990 Ford F-350 4x4 Type 6 <p><i>Sunrise Skypark Airport</i></p> <ul style="list-style-type: none"> • Brush 567 – 1976 Dodge Power Wagon 4x4 Type 6 <p><i>Take home Vehicles</i></p> <ul style="list-style-type: none"> • Tender 526 (2008 Freightliner), EMS 540 (2008 Chevrolet Silverado 2500), UTV (2017 Honda Pioneer 1000 EPS 4x4)
--	--

OWYHEE RFPA

Contact	Kenny Kershner (Chair), kershnerlivestock@hotmail.com , (208) 583-3333
MOU's	MRW Fire, Jordan Valley, OR RFPAs
Staff/Volunteers	30 Volunteers
Fire Stations	1
Equipment	10 Type 6 Fire Engines – 2 six-wheel & 8 four-wheel 1078 cabover trucks

SAYLOR CREEK RFPA

Contact	Mike Faulkner (Chair), shepmikef@gmail.com , 208-539-6658
MOU's	
Staff/Volunteers	
Fire Stations	1
Equipment	

SILVER CITY FIRE AND RESCUE

Contact	Jim Hyslop (Chief), jimhyslop123@gmail.com , (208) 890-6718
MOU's	
Staff/Volunteers	

Fire Stations	1
Equipment	<p><i>Fire Station - 28349 Owyhee Street</i></p> <ul style="list-style-type: none"> • 1985 One-Ton Type 6 • 1972 Military 6x6 with a 1,000-gallon tank and 9 hp pump • 4 2500-gallon fold-a-tanks • 6,000-gallon helicopter dip tank • Morningstar reservoir with 100 gallon-per-minute pump

SHOSHONE-PAIUTE FIRE

Contact	Guy Dodson (Fire Management Officer), dodsonjr.guy@shopai.org, (208) 759-3100 Ex-5104
MOU's	2 – Elko County, NV & Boise/Bruneau BLM – Wildland
Staff/Volunteers	4 Full-Time, 10 Volunteer Firefighters
Fire Stations	1
Equipment	<ul style="list-style-type: none"> • 1 Type 1 Structure Engine • 1 Type 3 Structure Engine • 2 Type 6 Wildland Engines • 1 Type 4 Wildland Engine • 1 Type Tactical Water Tender

THREE CREEK RFPA

Contact	Mike Guerry (Chair), mbasco121@gmail.com, (208) 731-6653
MOU's	Boise & Twin Falls District BLM, Idaho Department of Lands
Staff/Volunteers	50
Fire Stations	1
Equipment	<ul style="list-style-type: none">• 2 Type 4 Engines• 2 Type 6 Engines• Water Tender• 5 Military Trailers with slip-in units• Various Tractor Disks, Dozers, & Graders (owned by individual members)

APPENDIX 5 – BIBLIOGRAPHY

- Abrams, Jesse; Johnduff, Michael; Charnley, Susan, (2018). *Beaver-related restoration in Owyhee County, Idaho: opportunities and challenges*. Res. Pap. PNW-RP-611. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 21 p.
- Bayham, J., Yoder, J. K., Champ, P. A., & Calkin, D. E. (2022). *The economics of wildfire in the United States*. *Annual Review of Resource Economics*, 14, 379–401. <https://doi.org/10.1146/annurev-resource-111920-014804>
- Beck, H., Zimmermann, N., McVicar, T. et al. *Present and future Köppen-Geiger climate classification maps at 1-km resolution*. *Sci Data* 5, 180214 (2018). <https://doi.org/10.1038/sdata.2018.214>
- Bernton, Hal. (1984, May 18). *Idaho farm community girds for flood waters*. *The Washington Post*. <https://www.washingtonpost.com/archive/politics/1984/05/19/idaho-farm-community-girds-for-flood-waters/57e42d44-1969-4aac-9a6c-5eb48d72ba38/>
- Bonner, J.L. (2012). *Idaho's Kinyon Road fire among nation's largest at 150K acres*, *Idaho News*, July 7th, 2012, <https://idahonews.com/news/local/idahos-kinyon-road-fire-among-nations-largest-at-150k-acres>
- Bradley, B. A. (2018). *Cheatgrass (Bromus tectorum) distribution in the western United States: Patterns and drivers of expansion*. *Frontiers in Ecology and the Environment*, 16(4), 204–211. Retrieved from https://rockies.audubon.org/sites/default/files/bradley2018_article_cheatgrassbromustectorumdistri.pdf
- Brown, N. (2017, July 10). *10 years later: The legacy of Idaho's huge Murphy Complex Fire*. *Magic Valley*. https://magicvalley.com/news/local/10-years-later-the-legacy-of-idahos-huge-murphy-complex-fire/article_fc496882-c895-5d03-8e13-75b06a5ef203.html
- Bureau of Land Management. (2014). *Owyhee Canyonlands Wilderness and Wild & Scenic Rivers: Appendices (Appendix C: Record of approval for emergency use of motorized equipment or mechanical transport in wilderness)*. U.S. Department of the Interior, Bureau of Land Management, Boise District. <https://eplanning.blm.gov/Documents/?id=5750bc81-a7f2-f011-8407-001dd80c29f3&spid=1cbe0743-a8f2-f011-8407-001dd806295a>
- Bureau of Land Management. (2024, February 14). *BLM begins targeted grazing effort to reduce cheatgrass along Owyhee Front*. U.S. Department of the Interior. <https://www.blm.gov/press-release/blm-begins-targeted-grazing-effort-reduce-cheatgrass-along-owyhee-front>
- CAPE Analytics. (2024). *HAIL RISK: THE GROWING THREAT FOR PROPERTY INSURERS*. <https://capeanalytics.com/blog/hail-risk-for-property-insurers/>
- Cole, K., (2010). *Long Butte fire in southern Idaho burns 215,000 acres in one day*, *Wildlife News*, August 23, 2010, <https://www.thewildlifeneeds.com/2010/08/23/long-butte-fire-in-southern-idaho-burns-215000-acres-in-one-day/>
- Commission for Environmental Cooperation (CEC). 2021. "Climate Zones of North America". Beck, Hylke E.; Zimmermann, Niklaus; McVicar, Tim R.; Vergopolan, Noemi; Berg, Alexis; Wood, Eric F. (2018): *Present and future Köppen-Geiger climate classification maps at 1-km resolution*. *Scientific Data* 5:180214. Ed. 1.0, Vector digital data [1:10,000,000].

Cohen, Rachel, (2024). BLM halts trail assessment in Owyhee County amid public concerns, published April 29, 2024, Retrieved January 23, 2025 from <https://www.boisestatepublicradio.org/news/2024-04-29/blm-grand-view-travel-management-owyhee-county>

Chambers, J. C., Smith, W. D., & McMahon, G. (2018). Effects of climate change on terrestrial animals. In J. E. Halofsky, D. L. Peterson, J. J. Ho, N. J. Little, & L. A. Joyce (Eds.), *Climate change vulnerability and adaptation in the Intermountain Region (Part 2, pp. 191–226)*. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.

Crist, M. R., Belger, R., Davies, K. W., Davis, D. M., Meldrum, J. R., Shinneman, D. J., Remington, T. E., Welty, J., & Mayer, K. E. (2023). Trends, Impacts, and Cost of Catastrophic and Frequent Wildfires in the Sagebrush Biome. *Rangeland Ecology & Management*, 76, 275–290. <https://doi.org/10.1016/j.rama.2023.03.003>

Davis, E. J., Abrams, J., Wollstein, K., Meacham, J. E., Steingisser, A., & Cervený, L. K. (2017). Rangeland fire protection associations: An alternative model of wildfire response. *Ecosystem Workforce Program Briefing Paper Number 78*. University of Oregon.

Department of Ecosystem Science, University of Wyoming, 201607, United States Annual Temperature Raster: .

Federal Emergency Management Agency. (n.d.). National Risk Index. Retrieved January 20, 2025, from <https://hazards.fema.gov/nri/report/viewer?dataLOD=Counties&dataIDs=C16073>

Firehouse, (2005). Clover, Idaho Fire Grows to 156 Square Miles, Threatens Homes, <https://www.firehouse.com/operations-training/news/10508307/clover-idaho-fire-grows-to-156-square-miles-threatens-homes>

Heller, Matthew, (2019). US Sagebrush Biome 2019 [Dataset]. U.S. Fish and Wildlife Service Open Data. Retrieved January 21, 2025, from <https://gis-fws.opendata.arcgis.com/datasets/fws::us-sagebrush-biome-2019/about>

Higuera, P. E., Cook, M. C., Balch, J. K., Stavros, E. N., Mahood, A. L., & St. Denis, L. A. (2023). Shifting social-ecological fire regimes explain increasing structure loss from Western wildfires. *PNAS Nexus*, 2(3), pgad005. <https://doi.org/10.1093/pnasnexus/pgad005>

Idaho Office of Emergency Management. (2018). State of Idaho Hazard Mitigation Plan: Chapter 3.3 Risk Assessment: Severe Storms. <https://ioem.idaho.gov/wp-content/uploads/2018/12/ID-SHMP-Chapter-3.3-Severe-Weather.pdf>

Innes, Robin J.; Zouhar, Kris. (2018). Fire regimes of mountain big sagebrush communities. In: *Fire Effects Information System*, [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Missoula Fire Sciences Laboratory (Producer). Available: https://www.fs.usda.gov/database/feis/fire_regimes/mountain_big_sagebrush/all.html [2025, January 20].

Jaffe, Melissa R.; Scott, Joe H.; Callahan, Michael N.; Dillon, Gregory K.; Karau, Eva C.; Lazarz, Mitchell T. 2024. *Wildfire Risk to Communities: Spatial datasets of wildfire risk for populated areas in the United States*. 2nd Edition. Updated 10 September 2024. Fort Collins, CO: Forest Service Research Data Archive. <https://doi.org/10.2737/RDS-2020-0060-2>

Jakes, Pamela J.; Esposito, Christine; Burns, Sam; Cheng, Antony S.; Nelson, Kristen C.; Sturtevant, Victoria E.; Williams, Daniel R. 2012. *Best management practices for creating a community wildfire protection plan*. Gen. Tech. Rep. NRS-89. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 27 p.

Linley, Grant D.; Jolly, Chris J.; Doherty, Tim S.; Geary, William L.; Armenteras, Dolores; Belcher, Claire M.; Bird, Rebecca Bliege; Duane, Andrea; Fletcher, Michael-Shawn; Giorgis, Melisa A.; Haslem, Angie; Jones, Gavin M.; Kelly, Luke T.; Lee, Calvin K. F.; Nolan, Rachael H.; Parr, Catherine L.; Pausas, Juli G.; Price, Jodi N.; Regos, Adrian; Ritchie, Euan G.; Ruffault, Julien; Williamson, Grant J.; Wu, Qianhan; Nimmo, Dale G. (2022). What do you mean, 'megafire'? *Global Ecology and Biogeography*. 31: 1906-1922.

National Weather Service. (2025). *Lightning fatalities in 2025*. <https://www.weather.gov/safety/lightning-fatalities>

Melillo, J.M.; Richmond, T.C.; Yohe, G.W., eds. 2014. *Climate change impacts in the United States: Third National Climate Assessment*. Washington, DC: U.S. Global Change Research Program. 829 p

Meredith, G. R., & Brunson, M. W. (2021). Effects of wildfire on collaborative management of rangelands: A case study of the 2015 Soda Fire. *Rangelands*, 44(7), 306-315. <https://doi.org/10.1016/j.rala.2021.03.001>

Owyhee County. (n.d.). Community. Retrieved January 27, 2025, from <https://owyheecounty.net/community/#:~:text=The%20Oregon%20Trail%2C%20the%20earliest,harder%20than%20the%20main%20trail>.

Phillips, A. (2025, January 8). Why more Americans are dying from the cold. *The Washington Post*. <https://www.washingtonpost.com/weather/2025/01/08/cold-weather-deaths-winter-exposure-increase/>

Primm, S. (n.d.). Snake-Columbia Shrub-Steppe [WWF ecoregion profile]. *World Wildlife Fund*. Retrieved January 22, 2025, from <https://www.worldwildlife.org/ecoregions/na1309>

PRISM Climate Group. (2021). *PRISM climate normals: 1991-2020*. Oregon State University. Retrieved November 27, 2024, from <https://prism.oregonstate.edu/normals/>

W. Riggs, D. Breazeale, G. Myer, (2001).

Measuring the economic impacts from wildland fire

Journal of the American Society of Farm Managers & Rural Appraisers, 64 (2001), pp. 39-42

Romanello, M., McGushin, A., Di Napoli, C., Drummond, P., Hughes, N., Jamart, L., Kennard, H., Lampard, P., Solano Rodriguez, B., Arnell, N., Ayeb-Karlsson, S., Belesova, K., Cai, W., Campbell-Lendrum, D., Capstick, S., Chambers, J., Chu, L., Ciampi, L., Dalin, C., ... Costello, A. (2022). The 2022 report of the Lancet Countdown on health and climate change: health at the mercy of fossil fuels. *The Lancet Planetary Health*, 6(9), e748–e786. [https://doi.org/10.1016/S2542-5196\(22\)00067-5](https://doi.org/10.1016/S2542-5196(22)00067-5)

Rowland, M. M., Suring, L. H., Leu, M., Knick, S. T., & Wisdom, M. J. (2011). SAGEBRUSH-ASSOCIATED SPECIES OF CONSERVATION CONCERN. In S. T. Knick & J. W. Connelly (Eds.), *SAGEBRUSH ECOSYSTEM CONSERVATION AND MANAGEMENT: ECOREGIONAL ASSESSMENT TOOLS AND MODELS* (pp. 46–68). U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

Seyfried, M., Harris, R., Marks, D., & Jacob, B. (2001). Geographic database, Reynolds Creek Experimental Watershed, Idaho, United States. *WATER RESOURCES RESEARCH*, 37(11), 2825–2829. <https://doi.org/10.1029/2001WR000413>

Short, Karen C. 2022. *Spatial wildfire occurrence data for the United States, 1992-2020 [FPA_FOD_20221014]*. 6th Edition. Fort Collins, CO: Forest Service Research Data Archive. <https://doi.org/10.2737/RDS-2013-0009.6>. As reported at wildfirerisk.org/preventignitions.

Shoshone–Paiute Tribes & Owyhee Watershed Council. 2004. *Owyhee Subbasin Plan – Chapter 4: Owyhee Subbasin Management Plan*. Edited by Steven C. Vigg, Final Draft, May 28, 2004. Submitted to the Northwest Power & Conservation Council, Portland, Oregon

Stuebner, S. (2019). *The Owyhee Initiative: An Idaho success story*. Idaho Rangeland Resource Commission.

University of Idaho. (n.d.). *Idaho Climate-Economy Impacts Assessment (ICEIA)*. University of Idaho McClure Center for Public Policy Research. Retrieved [date], from <https://www.uidaho.edu/president/direct-reports/mcclure-center/iceia>

United Press International. (1984, April 20). *Flooding in Idaho*. UPI Archives. <https://www.upi.com/Archives/1984/04/20/Flooding-in-Idaho/7498451285200/>

U.S. Census Bureau. (2022). *Small Area Health Insurance Estimates (SAHIE): Owyhee County, Idaho*. Retrieved from <https://www.census.gov/programs-surveys/sahie.html>

U.S. Environmental Protection Agency. (2012). *Air Quality Index (AQI) – A guide to air quality and your health*. Retrieved from https://www.epa.gov/sites/default/files/2016-04/documents/2012_aqi_factsheet.pdf

Visser, Garrett, (2023). *Travel Management in Owyhee County- What Sportsmen Need to Know*. Retrieved January 23, 2025 from <https://idahowildlife.org/news/travel-management-in-owyhee-county-heres-what-sportsmen-need-to-know>

Wildfire Risk to Communities. (n.d.). *Vulnerable Populations in Owyhee County, Idaho*. Retrieved January 20, 2025, from <https://wildfirerisk.org/explore/vulnerable-populations/16/16073/>

Winkler, R. L., & Petersen, J. (2024, September 26). *Fewer People Are Moving Out of Rural Counties Since COVID-19*. Amber Waves, U.S. Department of Agriculture, Economic Research Service. Retrieved from <https://www.ers.usda.gov/amber-waves/2024/september/fewer-people-are-moving-out-of-rural-counties-since-covid-19>

Whisenant, Steven G, (1994). *General Technical Report INT-276: Proceedings—Ecology and management of annual rangelands*. Intermountain Research Station. Retrieved from https://www.fs.usda.gov/rm/pubs_int/int_gtr276/int_gtr276_004_010.pdf