2025

Owyhee County Multi-Hazard Mitigation Plan

Owyhee County Emergency Management

12/17/2025

Owyhee County, Idaho

NORTHWEST MANAGEMENT, INC.

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Forward

Hazard mitigation refers to any sustained action taken to reduce or eliminate long-term risk to human life, property, and critical functions from natural or human-caused hazards. Although mitigation actions may be undertaken before, during, or after an incident, they are most effective when grounded in a comprehensive, inclusive, and long-term planning process developed prior to disaster events.

The *2025 Owyhee County Multi-Hazard Mitigation Plan (MHMP)* serves as the five-year update to the County's *2018 All-Hazard Mitigation Plan*. This update reflects changes in hazard conditions, recent events, community development patterns, and the evolving needs of Owyhee County's residents, economy, and infrastructure.

Owyhee County and its incorporated communities face a variety of natural hazards: wildfire, flooding, drought, severe weather, geologic hazards, and others. These all may threaten public safety, critical facilities, transportation corridors, agricultural and rangeland resources, and the continuity of essential services. Proactive mitigation has been shown to significantly reduce recovery costs, minimize damage to public and private property, and strengthen long-term community resilience.

This Plan identifies hazards of concern, evaluates vulnerabilities, and establishes actionable mitigation strategies intended to reduce or avoid future losses. It is not an emergency response plan, but rather a framework to support long-term risk-informed decision making related to land use, infrastructure investment, policy development, and interagency coordination.

The 2025 Plan satisfies the requirements for a local multi-hazard mitigation plan under 44 CFR §§ 201.6 and 201.7 and incorporates the flood hazard planning requirements under 44 CFR § 79.6 for NFIP-participating jurisdictions within Owyhee County (currently the City of Homedale). This maintains Homedale's eligibility for FEMA's Flood Mitigation Assistance (FMA) program and other flood-related federal funding opportunities.

FEMA Approval

This page will contain the FEMA approval letter.

Formal Adoption by Governing Body

This page will contain the signed Owyhee County adoption resolution and resolution records from the other adopting jurisdictions.

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CHAPTER 1: PLANNING PROCESS

1.1 OVERVIEW OF THIS PLAN AND ITS DEVELOPMENT

This Multi-Jurisdiction All Hazard Mitigation Plan, 2025 update, is the result of analyses, professional cooperation and collaboration, assessments of hazard risks and other factors considered with the intent to reduce the potential for hazards to threaten people, structures, infrastructure, and unique ecosystems in Owyhee County, Idaho. The Owyhee County All Hazard Mitigation Plan (AHMP) underwent a revision in 2018, and this document serves as the required 5-year update of the plan under the Pre-Disaster Mitigation program.

In October 2024, Owyhee County Office of Emergency Management contracted services to update the AHMP to Northwest Management, Inc. of Moscow, Idaho.

The planning team responsible for implementing this project was organized and led by the Owyhee County Emergency Manager. Agencies and organizations that were invited to participate in the planning process are listed in **Table 1.**

Table 1) Listed below are organizations or agencies that had at least one representative participate in at least some part of the planning process, whether that be attending a meeting, providing feedback or materials, or helping guide the update process.

Local & Regional Agencies	State, Federal, Tribal & Other Partners
Murphy–Reynolds–Wilson Fire	Idaho Office of Emergency Management (IOEM)
Marsing Fire Department	Idaho Department of Lands (IDL)
Silver City Fire & Rescue	Idaho Department of Transportation (ITD)
Three Creek RFPA	Idaho Office of Species Conservation
Weiser Fire	Idaho Power
Marsing Ambulance	Idaho State Parks – Bruneau Dunes
Owyhee County Sheriff's Office	Bureau of Land Management (BLM)
Owyhee County Emergency Management	Bureau of Reclamation – Snake River Area Office
Owyhee County Planning & Zoning	Gem County Emergency Management
Owyhee County Road & Bridge (Districts 1 & 3)	Payette County Emergency Management
Owyhee County Commissioners	Twin Falls County Emergency Management
City of Marsing	Washington County Emergency Management
Marsing City Council	Ada County Emergency Management / Mitigation
Homedale Highway District	Shoshone-Paiute Fire (Duck Valley)
Northwest Management, Inc. (NMI)	Boise County Emergency Management

1.2 FEDERAL EMERGENCY MANAGEMENT AGENCY PHILOSOPHY

Local hazard mitigation plans form the foundation of a community's long-term strategy to reduce disaster losses and break the cycle of disaster damage, reconstruction, and repetitive damage. The Federal Emergency Management Agency (FEMA) supports local mitigation planning to achieve the following:

- Foster partnerships among all levels of government.
- Develop and strengthen non-governmental and private partnerships.
- Promote more disaster-resilient and sustainable communities.
- Reduce the costs associated with disaster response and recovery by promoting mitigation activities.

Local mitigation plans are investment strategies that communities develop throughout the planning process to identify hazards, assess risks and vulnerabilities, and develop mitigation strategies that can be funded using a wide range of resources. As stated in 44 CFR § 201.1(b), "the purpose of mitigation planning is for state, local and tribal governments to identify the natural hazards that impact them, to identify actions and activities to reduce any losses from those hazards, and to establish a coordinated process to implement the plan, taking advantage of a wide range of resources." This coordinated process allows mitigation investments to be based on a community-based, risk-informed decision-making process. The local mitigation planning process helps the whole community understand the importance of mitigation and develop mitigation actions based on current and future risks and capabilities.

The following guiding principles should be considered in advance of developing or updating a local mitigation plan:

- **Plan and Invest for the Future:** The plan is based on the experiences of the past and present and on projections for the future, including long-term climate change considerations and changes in development. The planning process sets the direction for years and decades into the future, using the best available information, tools and resources from partners and stakeholders to make a strong case for mitigation investments and implementing actions. Consider all possible types of mitigation actions (land use regulations, building codes, nature-based solutions, etc.) to address current and future risks.
- **Collaborate and Engage Early:** The planning process brings together diverse community-based partners representing the interests of the whole community. It includes those able to implement mitigation actions using a wide range of resources, and leaders from underserved communities and socially vulnerable populations. Meaningful representation from and conscious collaboration with underserved and vulnerable populations are critical for equitable outcomes. federal, state, and local engagement is also critical for successful mitigation planning, as partners from all levels of government bring additional resources including, but not limited to, data, funding, and technical expertise.
- **Integrate Community Planning:** Design the planning process to fit the unique needs of each community. Integrating hazard risk with the most appropriate planning scale and processes, such

as land use, economic development, housing, infrastructure, resilience planning and/or natural resource planning, will minimize conflicting initiatives, such as development in hazard- prone areas. Prepare a single-jurisdiction plan or participate in a multi-jurisdictional one, based on local capabilities.

The plan development process and each five-year update are opportunities to advance the previous and ongoing mitigation efforts, integrate the plan with other community planning initiatives, improve engagement with community-based organizations that represent underserved communities, accurately reflect changes in risk and recalibrate the mitigation strategy and priorities.

FEMA makes funding available for planning through grants like the Hazard Mitigation Grant Program (HMGP), and the Flood Mitigation Assistance (FMA) Program. Approved mitigation plans are a requirement for local governments, including special districts, to be eligible for the projects funded under the HMA and other FEMA programs. Public Assistance funding is available to implement mitigation measures for damaged eligible facilities to protect against future damages, so long as the recipient has an approved state mitigation plan. Mitigation plans must be reviewed and updated every five years and formally adopted by each participating jurisdiction's governing body as part of receiving approval.

FEMA will only review a local Multi-Hazard Mitigation Plan submitted through the appropriate State Hazard Mitigation Officer (SHMO). Draft versions of local Multi-Hazard Mitigation Plans will not be reviewed by FEMA. FEMA will review the final version of a plan prior to local adoption to determine if the plan meets the criteria, but FEMA will be unable to approve it prior to adoption.

In Idaho the SHMO is:

Idaho Office of Emergency Management 4040 Guard Street, Bldg 600
Boise, ID 83705

1.3 GOALS AND GUIDING PRINCIPLES

1.3.1 OWYHEE COUNTY PLANNING PHILOSOPHY

This effort will utilize the best and most appropriate science from all partners and will integrate local and regional knowledge about natural hazards while meeting the needs of local citizens and the regional economy.

1.3.2 MISSION STATEMENT

To make Owyhee County residents, communities, state agencies, local governments, and businesses less vulnerable to the effects of natural and man-made hazards through the effective administration of hazard mitigation grant programs, hazard risk assessments, wise and efficient infrastructure hardening, and a coordinated approach to mitigation policy through federal, state, regional, and local planning efforts. Our combined prioritization will be 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.

1.3.3 JURISDICTIONAL PLANNING AND MITIGATION GOALS

As part of the 2025 AHMP 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 natural hazard preparedness in the county
- Reduce the impact of hazard events and potential losses incurred by both public and private residents and entities
- Develop land use policies to alleviate potential hazard risks and impacts for future development
- Strategically locate and plan infrastructure projects that take into consideration the impacts of natural hazards

1.3.4 INTEGRATION WITH OTHER LOCAL PLANNING MECHANISMS

During the development of this Multi-Hazard Mitigation Plan several planning and management documents were reviewed to avoid conflicting goals and objectives. Existing programs and policies were reviewed to identify those that may weaken or enhance the hazard mitigation objectives outlined in this document. The following narratives help identify and briefly describe some of the existing planning documents and ordinances considered during the development of this plan. This list does not necessarily reflect every plan, ordinance, or other guidance document within each jurisdiction; however, this is a summary of the guidance documents known to and recommended for review by members of the planning team.

1.3.4.1 OWYHEE COUNTY COMPREHENSIVE PLAN

The Owyhee County Comprehensive Plan serves as a guiding framework for the county's future growth and development. Its primary objectives include:

- **Preserving Heritage**: Safeguarding the county's unique customs, traditions, and way of life while accommodating reasonable and orderly growth.
- **Protecting Property Rights**: Ensuring that land use policies respect private property rights and do not adversely impact property values.
- **Guiding Land Use**: Providing direction for land use and development decisions to maintain a safe, healthy living environment and a robust economic climate.
- **Coordinated Planning**: Ensure consistent planning across all land types within the county.
- **Public Participation**: Encouraging full public involvement in the plan's implementation and future amendments to address evolving community needs.

The plan emphasizes that decisions by the Planning and Zoning Commission and the Board of County Commissioners must be consistent with its guidelines and any implementing ordinances. It also highlights the importance of regular reviews and updates to remain responsive to the county's changing needs.

The following plans also informed the hazard mitigation planning process:

- Owyhee County Energy Plan
- Owyhee County Natural Resource Plan
- Owyhee County Community Wildfire Protection Plan
- Idaho All Hazard Mitigation Plan
- Idaho Forest Action Plan

CHAPTER 2: DOCUMENTING THE PLANNING PROCESS

2.1 PARTICIPATING JURISDICTIONS

This Plan covers all areas within Owyhee County, including the Idaho portion of the Shoshone-Paiute Tribes' Duck Valley Reservation, the incorporated cities in the county, unincorporated communities, fire protection districts, and rangeland fire protection associations. The cities of Homedale, Marsing, and Grand View engaged in the planning process as full participants and adoptees of the 2025 AHMP update along with Owyhee County.

Representatives from each adopting jurisdiction regularly attended planning meetings, communicated consistently with the contractor (NMI) and the planning team, provided information necessary to update the plan, and offered feedback to drafts and suggestions. Records have been retained that show this participation in the following forms: 1) FEMA worksheets; 2) Questionnaires; 3) Meeting notes; 4) Meeting sign-in sheets; and 5) Email correspondence. A non-exhaustive sample of this record is retained in the Appendices (Chapter 7).

Owyhee County and the cities of Homedale, Marsing, and Grand View have participated pursuant to 44 CFR Part 201.6(a)(4).

2.2 THE PLANNING TEAM

This Hazard Mitigation Plan (HMP) is an update to the 2018 Hazard Mitigation Plan. The original document and the 2025 update are the result of analyses, professional cooperation and collaboration, assessments of hazard risks, and other factors considered with the intent to reduce the potential for hazards to threaten people, structures, infrastructure, and unique ecosystems in Owyhee County, Idaho. The planning team responsible for implementing this project was led by Owyhee County Emergency Management. Individuals and organizations that participated in at least one of the planning meetings are listed in **Table 2**.

Table 2) Listed below are individuals who participated in at least some part of the planning process, whether that be attending a meeting, providing feedback or materials, or helping guide the update process.

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 & Bridge District 1
Jeff Ulmer	Emergency Manager – Gem County, Idaho
Jery Mayer	Chief – Marsing Fire
Jim Hyslop	Chief – Silver City Fire & Rescue
Joseph Powell	Payette County Emergency Management

Name	Affiliation
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 & Zoning Director
Travis Hire	Idaho Department of Transportation
Travis Jewett	Owyhee County Road & Bridge #3
Tyre Holfeltz	Idaho Department of Lands
Walt Holton	Owyhee County Commissioner
Dustin Jewett	Owyhee County Road & 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 Emergency Management
Johnny Biddinger	Washington County Emergency Management
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 District
Samuel Edwards	Weiser Fire
Dominique Cota	Idaho Office of Species Conservation
Bryce Bealba	Idaho State Parks – Bruneau Dunes State Park
JD Phipps	Marsing Ambulance
Nicholas Cancalosi-Dean	Northwest Management, Inc.
Joanna P. Tjaden	BLM
Adam Herrenbruck	Northwest Management, Inc.
Dennis Merrick	Idaho Power
Birk Roseman	BLM
Jenn Smith	University of Idaho Extension
Jacob Hyer	City of Homedale Public Works
Kathy Brown	City of Grand View Clerk's Office
Dan Patterson	City of Grand View Public Works

In 2024, Owyhee County Emergency Management solicited competitive bids from companies to provide the service of updating the Owyhee County, Idaho Multi - Hazard Mitigation Plan. Northwest Management, Inc. was selected to provide this service to the County. NMI is a natural resource consulting firm located in Moscow, Idaho.

2.3 AHMP PLANNING TEAM MEETINGS

The Planning Process began in February 2025 with the kickoff meeting and continued with regular meetings throughout the 2025 calendar year. A brief summary of planning meetings is included below:

2.3.1 FEBRUARY 25, 2025

The kickoff meeting in Murphy initiated the multi-jurisdictional HMP update process, facilitated by NMI, and focused on risk identification, mitigation priorities, required data, and outreach strategies. The discussion emphasized ongoing interagency collaboration and incorporating local knowledge into hazard assessments.

2.3.2 MARCH 15, 2025

A virtual planning session continued the concurrent development of the HMP and CWPP, introducing hazard worksheets and questionnaires to collect local input. Participants discussed data needs such as GIS resources and infrastructure inventories, and highlighted FEMA compliance requirements.

2.3.3 APRIL 24, 2025

A hybrid meeting in Murphy addressed WUI methodology, mapping refinements, economic implications of wildfire, and categorization of mitigation projects. The group also discussed zoning considerations, communication system improvements, and integrating wildfire planning into the broader HMP effort.

2.3.4 MAY 15, 2025

The meeting focused on documentation requirements and ongoing wildfire mitigation initiatives funded through federal partnerships. Discussion included coordination with Road and Bridge, the feasibility of Firewise education or construction considerations, and planning for summer public outreach events.

2.3.5 JULY 1, 2025

The group reviewed updated WUI maps and draft mitigation projects informed by public feedback identifying wildfire, severe weather, and drought as top concerns. Participants were encouraged to refine jurisdiction-specific project needs, particularly regarding RFPA capacity.

2.3.6 JULY 17, 2025

Adam Herrenbruck and Nicholas Cancalosi-Dean of NMI met with Jacob Hyer of Homedale Public Works as well as a representative of the Homedale Police Department in order to explain the HMP process and introduce the hazard summary ranking exercise and capability assessment: both required documents for local adoption of the plan. The hazard summary worksheet was completed during the meeting, and the capability assessment was sent for later completion.

2.3.7 JULY 31, 2025

This session emphasized integrating community feedback into hazard prioritization, noting wildfire as the leading concern followed by severe weather and flooding. Participants discussed communications improvements, vegetation mapping, and the need to document past mitigation investments, and scheduled a follow-up meeting for September.

2.3.8 SEPTEMBER 11, 2025

The group advanced CWPP and HMP content with an emphasis on adoption requirements for incorporated cities and FEMA compliance. Historical wildfire impacts and current 2025 events were used to frame economic and recreational ignition risks for inclusion in the plans.

2.3.10 OCTOBER 30, 2025

The meeting centered on reviewing CWPP drafts and clarifying WUI methodology, including its non-regulatory purpose and lack of effect on grazing or insurance practices. Participants agreed that clear planning disclaimers were needed and recommended further consultation with the Natural Resource Committee.

2.3.11 NOVEMBER 18, 2025

This meeting addressed fuels management challenges, access constraints, and the need for multi-agency collaboration, particularly in juniper and timbered areas. Participants also reviewed avalanche, drought, earthquake, and landslide risks, acknowledged Silver City's vulnerabilities, and outlined next steps for capability assessments and finalizing draft materials.

A more detailed account of planning meetings can be found in **Appendix A.**

2.4 PUBLIC INVOLVEMENT

Public involvement was a core component of the planning process. Outreach activities included:

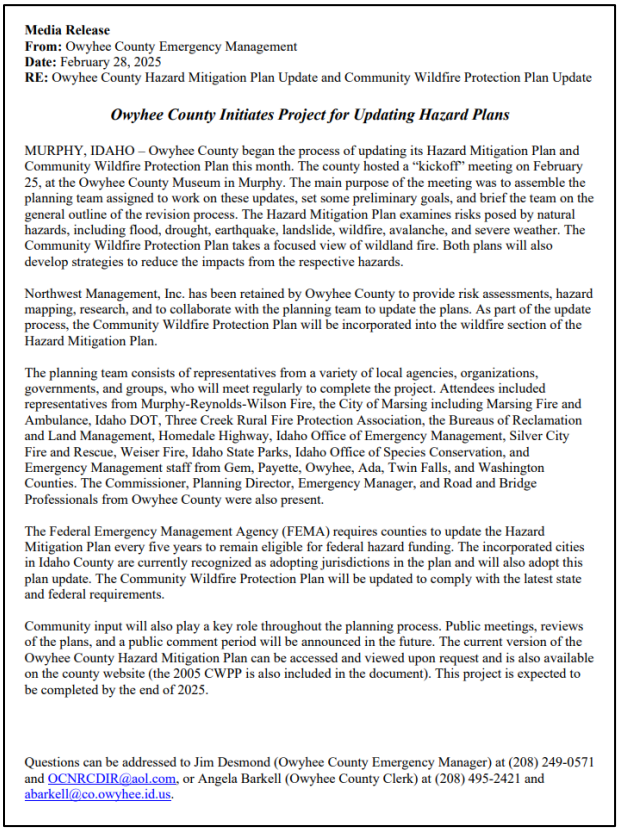
- Early-process news releases and announcements through local media and the County's official Facebook page.
- In-person engagement at Owyhee County's 2025 Outpost Days event in early June, including map-based identification of high-risk areas, ranking of hazard concerns, and input on preferred mitigation approaches.
- Distribution of an online Google survey advertised at events and via social media to gather additional comments from residents, including those in rural settings.

These activities helped identify community priorities, document areas with recurrent hazard impacts, and validate mitigation concepts developed during planning meetings. Materials, summaries of feedback, and survey results are retained in **Appendix B**.

The HMP benefits from sustained engagement by local fire districts, RFPAs, BLM, IDL, and other partners who will also share roles in future plan implementation. The plan is intended to be maintained collaboratively, with annual review by the County and stakeholders to monitor progress, revise priorities, and support grant applications and project execution.

2.4.1 NEWS RELEASES

To announce the beginning of the plan update process, formal news releases were created and distributed to inform the public that the process was taking place, who was involved, why it was important to Owyhee County, and who to contact for more information. The initial press release announcing the kickoff of the plan is included below; it was submitted to the Owyhee Avalanche (a local newspaper) to notify the public about the start of the planning process **(Figure 1)**. A social media graphic **(Figure 2)** was also shared with the planning team to complement the news release; it was posted to various local Facebook pages, including the official Owyhee County page.



Media Release
From: Owyhee County Emergency Management
Date: February 28, 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 this month. 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 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 Commissioner, Planning Director, Emergency Manager, and Road and Bridge Professionals from Owyhee County 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 1) Initial press release submitted to the Owyhee Avalanche announcing the kick-off of the Hazard Mitigation and Community Wildfire Protection Plan update.

Figure 2) Initial social media post announcing the project kickoff that was posted to the County Facebook page and various other local online forums.

2.4.2 PUBLIC OUTREACH MATERIALS

The following materials were used in order to solicit feedback on natural hazards and their relative threats to the County and its communities. **Figure 3** was used as both an announcement for the start of the public outreach process and also as a poster for the Outpost Days and other public events. See **Appendix B** for more details.

Figure 3) This graphic was used as both a social media announcement informing the public about the public outreach process, as well as the primary poster that was used for the Outpost Days and other public events.

2.4.3 PUBLIC COMMENT PERIOD

A public comment period will be conducted from [DATE] through [DATE] to allow Owyhee County residents, community organizations, and other stakeholders to review the full draft Hazard Mitigation Plan and submit comments for consideration by the planning committee. A news release will be issued to local media outlets, including *The Owyhee Avalanche*, and posted on the official Owyhee County website and social media pages. The notice will provide information on where the draft plan can be accessed and instructions for submitting written comments.

Hardcopy drafts will be made available at the Owyhee County Courthouse in Murphy. Each hardcopy will include guidance for submitting comments to the planning committee. These offices may retain hardcopy drafts beyond the official comment window so that visitors can review the plan, ask questions, or provide input at any point during the update cycle.

A record of published notices, web postings, and all public feedback received during the comment period will be included in **Appendix B** of this plan.

2.4.4 WEB POSTING

The draft plan will also be posted on the Owyhee County website homepage for public review during and after the official comment period. The webpage will include instructions for submitting public comments, as well as contact information for Owyhee County Emergency Management and Northwest Management, Inc., who are jointly supporting the update.

Chapter 3: Community Descriptions

3.1 OWYHEE COUNTY

Owyhee County is located in extreme southwestern Idaho, bordering Oregon and Nevada to the west and south, respectively **(Figure 4).**

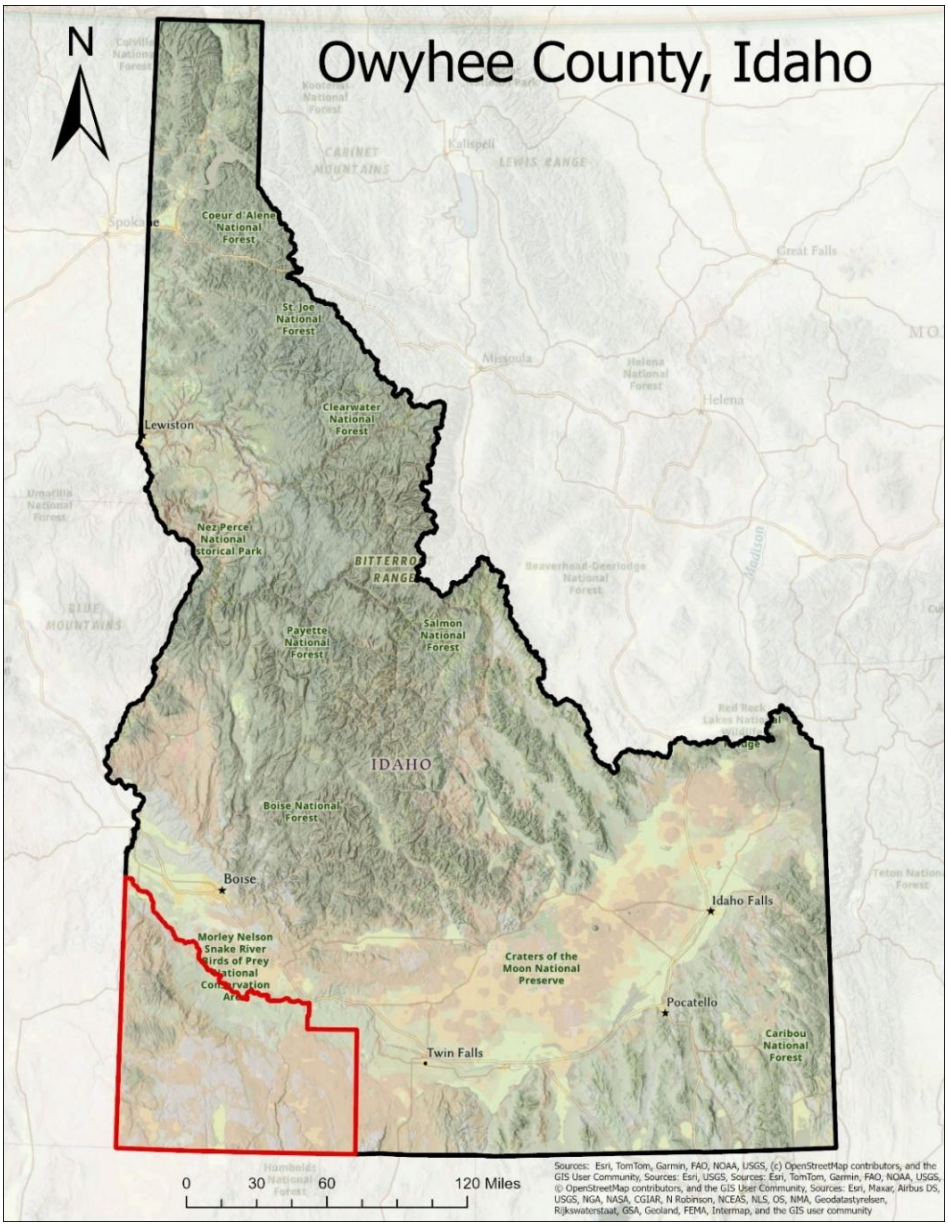


Figure 4) Location of Owyhee County, ID (outlined in red).

3.1.1 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).*

3.1.2 SHOSHONE-PAIUTE TRIBES

The Western Shoshone and Northern Paiute traditionally lived across Idaho, Nevada, and Oregon but lost land and resources with European settlement. Treaties were signed, some ratified and others not, in hopes of ensuring survival. Today, their descendants live on the Duck Valley Indian Reservation, established in 1877 and later expanded. It straddles the border of Idaho and Nevada.

The tribes formally united under a tribal government in 1936. Education evolved from boarding schools to the Owyhee Combined Schools. Healthcare services improved over time, with a modern facility built in 1976.

Governed by a Business Council, the tribe maintains an economy centered on farming and ranching, with 12,000 acres of farmland and the Wildhorse Reservoir supporting irrigation. The reservation spans nearly 290,000 acres, home to over 2,000 tribal members, preserving their ancestral way of life.

3.1.3 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 wheatgrass (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 at 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.).*

3.1.4 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 5**; *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 6**; *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).*

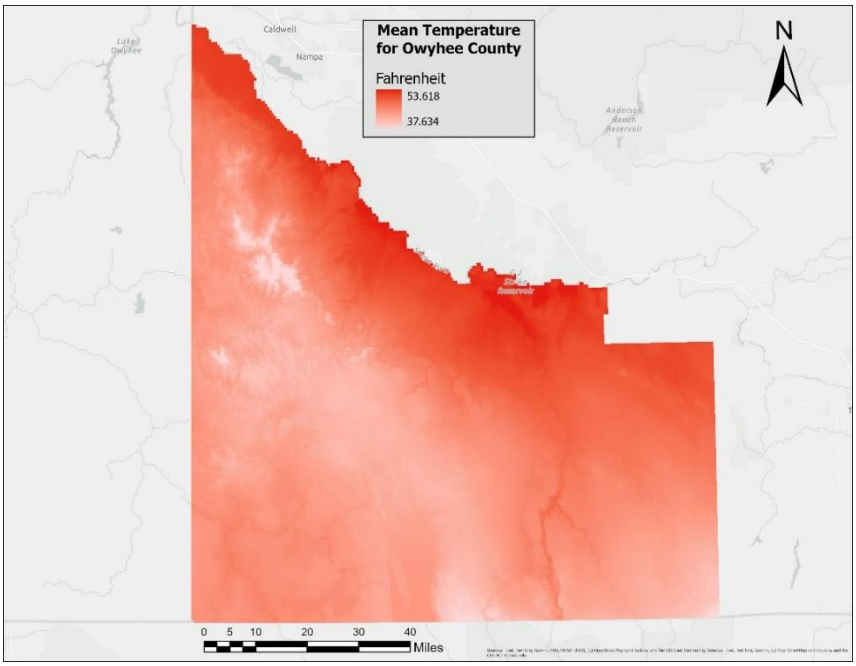


Figure 5) Mean temperatures from 1991-2020 based on climate normals from the Oregon State PRISM database.

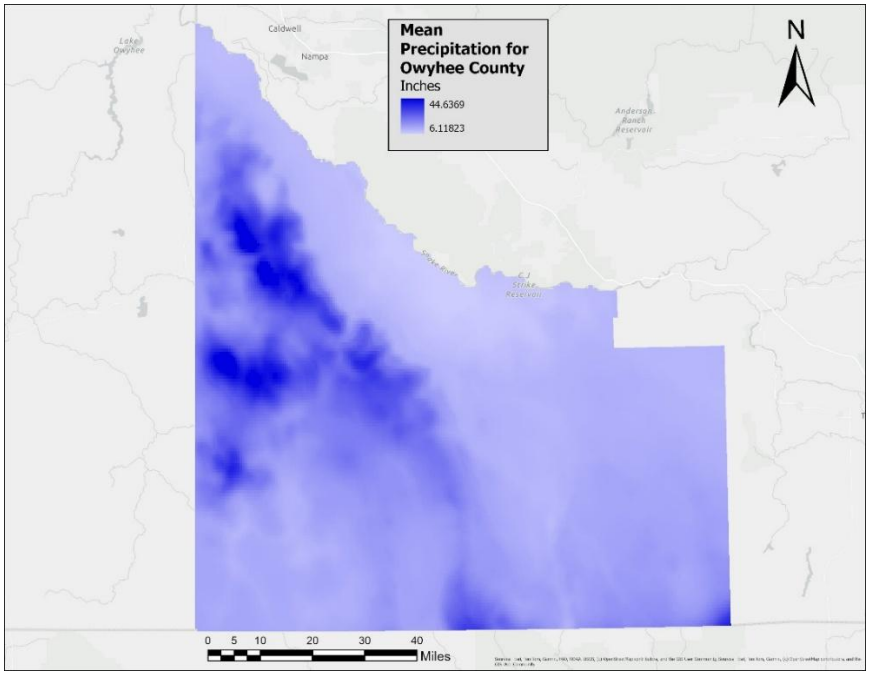


Figure 6) Average precipitation from 1991-2020 based on climate normals from the Oregon State PRISM database.

3.1.5 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 **(Figure 7; Table 3).**

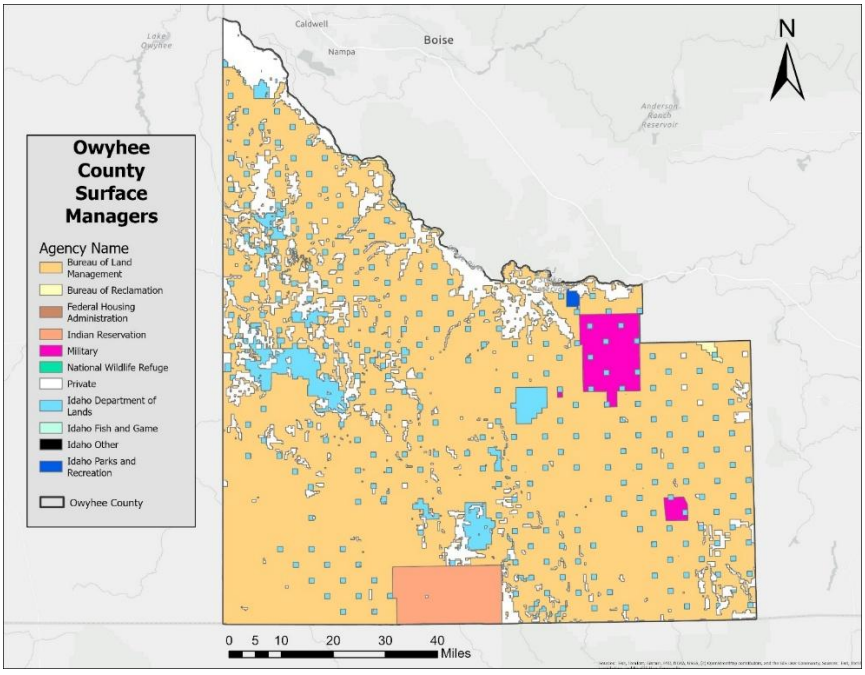


Figure 7) Land ownership in Owyhee County, ID. Refer to the table below for a summary of ownership by acres.

Table 3: Surface Land Managers in Owyhee County

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 %

3.1.6 VEGETATION

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 bunch grasses. Invasive annual grass has also established itself, especially in areas adjacent to the Snake River Valley. Bunch grasses 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 occur in some riparian areas *(Seyfried at al., 2001).* Broad vegetation categories according to *LANDFIRE (2022*) are shown in **Table 4** and **Figure 8**.

Table 4) Calculated values for land cover-types in Owyhee County, ID. Values were calculated using Existing Vegetation Type data from LANDFIRE (2022).

Vegetation Type	Acres	Percent
Shrub	3,071,864	62.3 %
Herb	1,303,420	26.5 %
Tree	333,614	6.8 %
Agriculture	140,644	2.9 %
Sparse	32,197	0.7 %
Developed	24,087	0.5 %
Water	19,413	0.4 %
Barren	699	<0.1 %

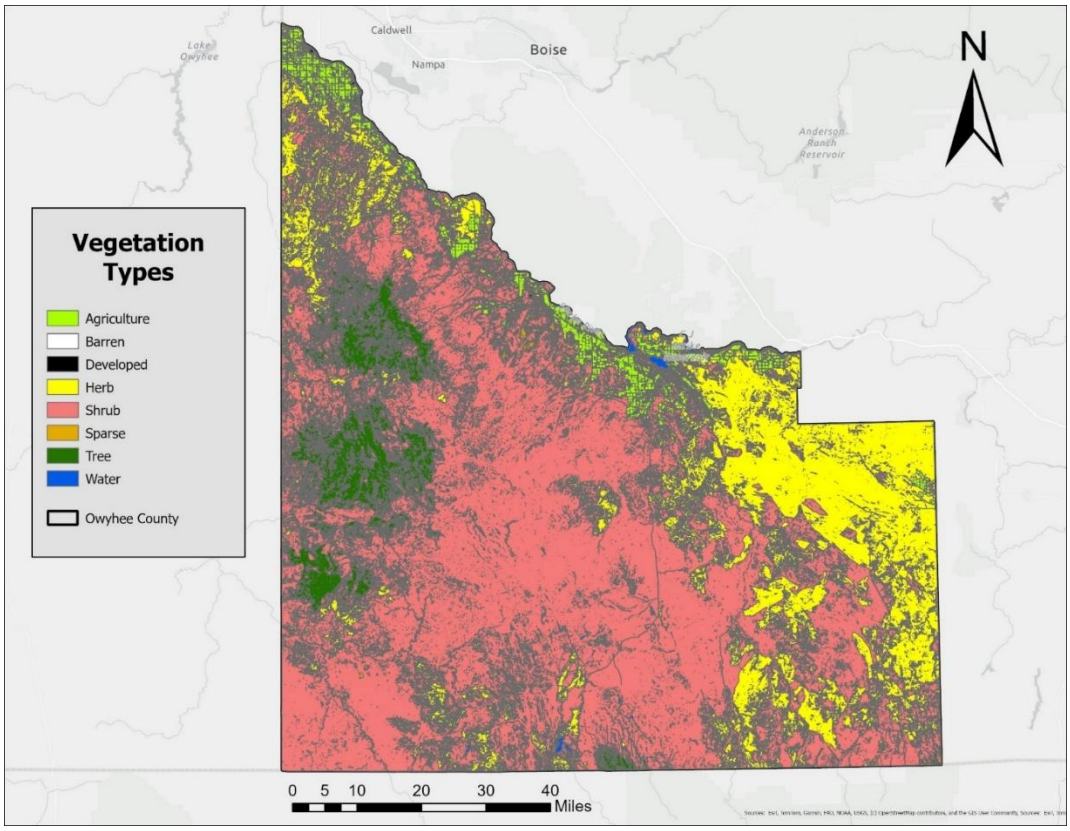


Figure 8) Vegetation Cover in Owyhee County is shown here; adapted from Land Fire.

3.1.7 FISH AND WILDLIFE

Owyhee County is home to a diverse array of fish and wildlife species. Owyhee County streams provide habitat for trout, smallmouth bass, and even salmon in certain stretches of the Owyhee River, as well as sturgeon in the Snake River. The rugged canyonlands and mountains contain populations of important game animals like pronghorn, mule deer, elk, and bighorn sheep. The sage-steppe uplands contain important habitats for key species like the sage grouse and pygmy rabbit, as well as game birds like chukar and quail. Herds of wild horses roam the steppe and are managed by the BLM in a network of Herd Management Areas.

3.1.8 HYDROLOGY

The Idaho Department of Water Resources has identified 7 Groundwater Flow Systems within Owyhee County: Boise Valley, Homedale-Murphy, Mountain Home Plateau, Bruneau-Grandview, Salmon Falls Creek, Rock Creek, Duck Valley, and Juniper Basin. Much of the southern portion of the county is not underlain by a Groundwater Flow System.

The Snake River Plain Aquifer System intersects with the areas of row-crop agriculture in northern Owyhee County. This vast system spans from near Yellowstone National Park in eastern Idaho all the way to Hells Canyon on the border with Oregon. It supplies many domestic rural wells, as well as municipal supplies and irrigation for farms. It is primarily made up of unconsolidated deposits and Pliocene-and-younger

basalts within Owyhee County. The deeper aquifers within this system typically tapped by municipalities typically provide excellent quality *(Pearson, n.d.).*

According to IDWR, there is a Critical Groundwater Area in the northeastern corner of the county defined as "all or part of a groundwater basin that does not have sufficient groundwater to provide a reasonably-safe supply for irrigation or other uses at the current or projected rates of withdrawal." A Groundwater Management area is also present around Bruneau and Grand View. This is defined as "all or part of a groundwater basin that may be approaching the conditions of a CGWA."

3.1.9 AIR QUALITY

According to FirstStreet.org According to FirstStreet.org, Owyhee County generally has better air quality than 65% of Idaho counties based on the number of days with poor air quality. However, the Snake River Plain and Treasure Valley are susceptible to wintertime inversions and wildfire smoke accumulation (*https://www.boisestate.edu/research-hcri/resources-hazards/air-quality-and-smoke/*). Vulnerable populations to this hazard in the county include pregnant women (about 129 people), children and teens (3,033), adults with Asthma, COP, heart disease (1,356), and people over 65 years old (2,197).

The American Lung Association *(https://www.lung.org/)* lists the Boise City-Mountain Home-Ontario, OR area (proximal to Owyhee County) as having the 17th-worst short-term particle pollution in the nation for 2024. The EPA air quality monitoring station in Nampa is the closest station to Owyhee County, and data downloaded from AQICN.org, it has recorded an average PM2.5 value of 34.61 µg/m3, which is near the EPA's "unhealthy for sensitive groups" threshold (USEPA, 2012). These pollutants also contain human carcinogens that can contaminate water sources, soil, as well as indoor and outdoor settings. Long-term exposure could possibly increase the risk of certain cancers and other health conditions *(Romanello et al., 2022).*

Wildland fires often occur in the summer and fall, and prescribed fire and agricultural burning in the spring and fall. All major river drainages are subject to temperature inversions, which trap smoke as well as vehicle and industrial emissions, causing local air quality problems. This occurs most often during the summer and fall months and would potentially affect all communities in Owyhee County.

Smoke management in Owyhee County is facilitated, in part, by the Idaho/Montana Airshed Group. This group advises when conditions are appropriate for prescribed burning based on information participating members supply to them. Owyhee County is made up of 3 airsheds, with Airshed 23 making up much of the western third, 22 covering most of the populated areas, and 25 making up a tiny portion of eastern Owyhee County. These latter airsheds are shared with the Treasure and Magic Valleys, respectively, and the Boise Impact Area also encompasses the Homedale and Marsing metro areas. This means that air quality trends in these greater regions, such as inversions, smog, and wildfire smoke, could also affect large swaths of Owyhee County.

3.1.10 DEMOGRAPHICS AND SOCIOECONOMICS

Despite the county's vast land area, the population was estimated at 12,284 as of July 1, 2023, making it one of the countries' most sparsely populated counties at 1.65 persons per square mile (**Table 5**). The bulk of the population being 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 *(Census, 2020; ACS, 2022; Wildfire Risk, 2023).* 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).*

Table 5) 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	100	150	150	150	97	96	
Bruneau	-	-	-	-	-	121	36

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 **(***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.

The largest sectors of employment are agriculture, forestry, fishing & hunting, construction, and retail trade. Agriculture is the single largest contributor to the local economy, with roughly two-thirds of the sector being livestock operations. The county's vast rangelands make it well-suited to cattle ranching.

About 21,000 dairy cows, 30,800 beef cows and 84,800 other cattle (feeders, replacement heifers, etc.) exist in Owyhee County presently *(Ag, Livestock & Range - UI Extension in Owyhee County, n.d.)*. Other important crops include grains, oilseeds, dry beans, dry peas, melons, potatoes, and sweet potatoes, which are grown with irrigation adjacent to the Snake River. Feedlots and dairy farms are also present.

According to the Owyhee County Labor Force and Economic Profile *(Idaho Department of Labor, 2024)*, most jobs are in natural resources and mining, with Marsing Agricultural Labor Sponsoring Commission and JR Simplot being the top employers for the county.

3.1.11 HAZARD MANAGEMENT CAPABILITIES

Owyhee County Emergency Management is responsible for the administration and overall coordination of the emergency management program for Owyhee County and the cities within the county.

County, City, and volunteer agencies throughout the county are dedicated to reducing catastrophic losses from disasters, including the Owyhee County Sheriff's Office, Homedale Police Department, and various local EMS and Volunteer Fire Organizations, although their budgets and personnel are limited, underscoring the importance of state and federal aid after major disasters. All incorporated cities in the County have copies of the latest version of the County's Hazard Mitigation and Emergency Operations Plans: both designed to help mitigate losses resulting from natural and human-caused disasters.

Many states, counties and communities in the nation believe they are prepared for natural and human-caused disasters; however, not all of them have faced the necessity of testing this belief. Too often, resources are tested beyond the ability of counties and communities to effectively respond, especially when the unexpected occurs. The Idaho Office of Emergency Management (IOEM) and FEMA work closely with the counties and communities of Idaho in the form of desktop exercises and preparedness drills in order to increase preparation and abilities of the state's first responders.

The BLM has cooperative agreements with 3 Rural Fire Protection Associations in Owyhee County: Owyhee, Saylor Creek, and Three Creek. These associations are made up of local volunteers (mostly local ranchers) who are trained and authorized to respond to wildfires on private, state, and federal lands. This is in addition to the 5 fire departments that cover the more populated areas of the county: Homedale, Marsing, Murphy-Reynolds-Wilson, Grand View, and Bruneau. Silver City Fire and Rescue also operates during fire season in a roughly 5-mile radius of the historic community of Silver City. There are also mutual aid agreements with fire departments and emergency managers in adjacent counties, such as Melba Fire and Ambulance in Canyon County.

The Shoshone-Paiute Nation (based in Owyhee, NV) provides ambulance and emergency response services for the Duck Valley Reservation on the southern periphery of the county. Quick Response Units are based in Bruneau, Melba, and Jordan Valley, in addition to EMS responders like Grand View, Marsing, and Homedale Ambulance, as well as the EMS section of MRW Fire. The closest hospitals are in Caldwell, Nampa, Boise, Mountain Home, and Owyhee, NV; only limited care clinics are present within the county proper. Life flight services are available to Boise *(Owyhee County 2010 Comprehensive Plan).*

3.2 INCORPORATED COMMUNITIES

The cities of Homedale, Marsing, and Grand View are the only three incorporated communities in Owyhee County. In addition to the County, all three cities are adopting jurisdictions in the 2025 Owyhee County AHMP.

3.2.1 HOMEDALE

Homedale is the largest city in Owyhee County. It covers an area of 1.41 square miles at an altitude of 2,241 feet above sea level. The population, as reported in the 2023 ACS estimate, was 3,006 **(Figure 9).** The city sits near the northwest corner of the county, intersecting the Snake River and Highway 95. Important structures include the Owyhee County Community Center and Fairgrounds, Homedale Elementary School, and the Homedale Municipal Airport.

Homedale's history began in 1898 when Jacob Mussell established a ferry across the Snake River. By 1914, the town had a mayor, council, schoolhouse, and railroad connection, officially becoming a city in 1920. Austrian immigrants and Basque settlers contributed to its cultural heritage. Today, Homedale is a growing small-town community with a business-friendly atmosphere and a strong local economy. The current mayor, whose family has lived in the area for generations, is committed to its continued growth (*cityofhomedale.org*). See **Figure 10** on the next page for a map of the city limits.

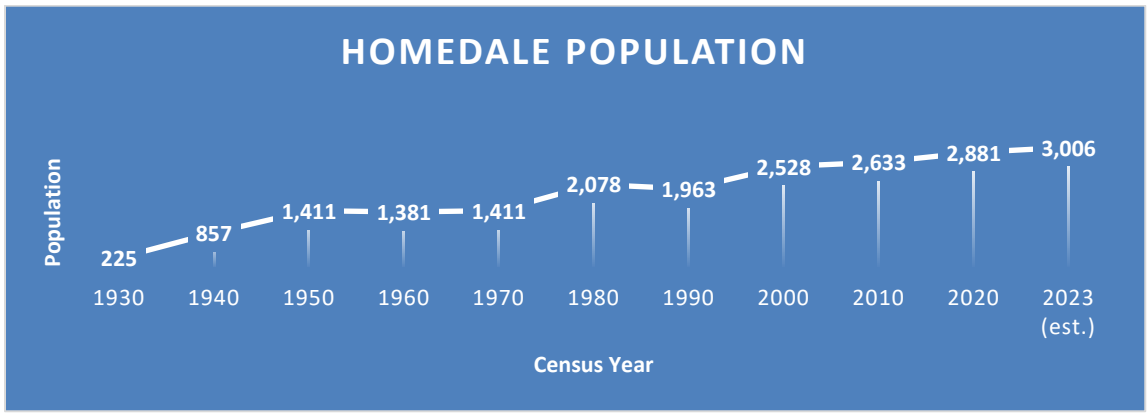


Figure 9) Population trend since 1930 for Homedale, Idaho based on US Census counts and American Community Survey estimates.

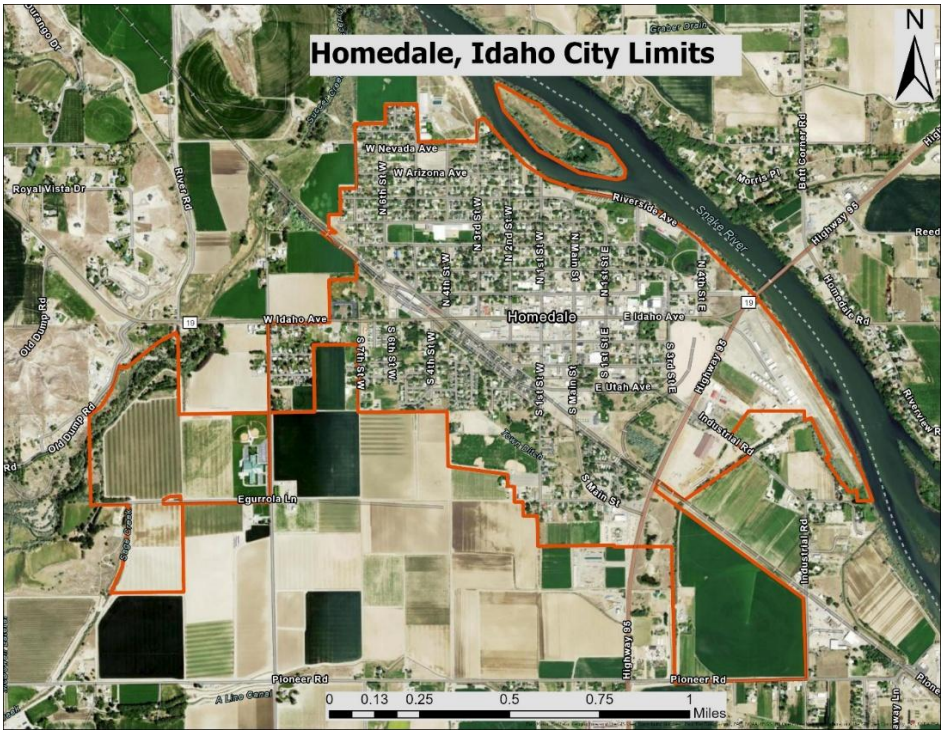


Figure 10) City limits of Homedale, Idaho

3.2.2 MARSING

Marsing was established in the early 20th century, growing around ferry crossings on the Snake River. The arrival of irrigation in 1909 supported agriculture, leading to the town's development. Originally named Butte, it was later renamed to Marsing and officially incorporated in 1941 (*cityofmarsing.org*).

The population was estimated at 1,245 as of 2023 and has been increasing since 1960 (**Figure 11**). With an area of around 0.77 square miles and an elevation of 2,300 feet above sea level, it is located along the Snake River, about 7 miles southeast of Homedale **(Figure 12).** Notable community assets include the AMVAC Chemical Corporation, Marsing Elementary and High Schools, and Owyhee County License Bureau.

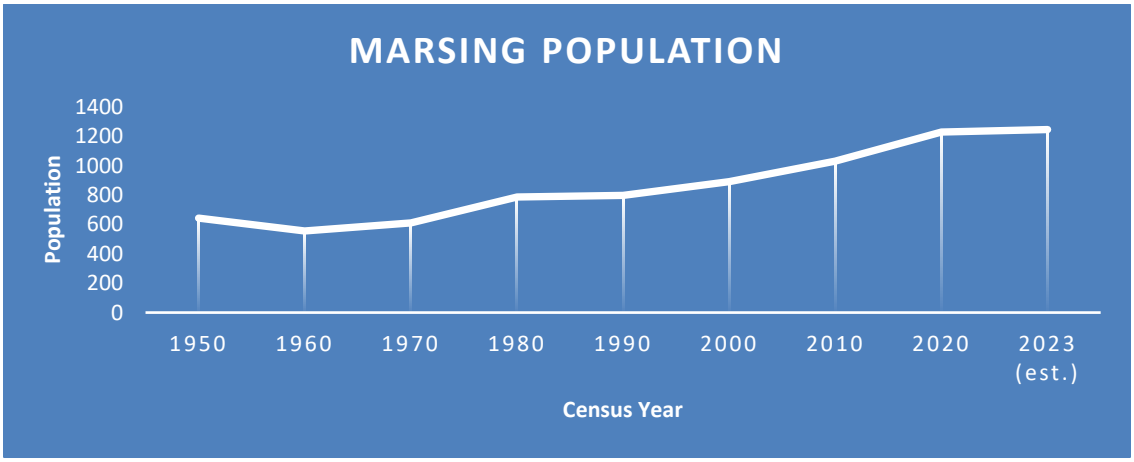


Figure 11) Population trend since 1950 for Marsing, Idaho based on US Census counts and American Community Survey estimates.

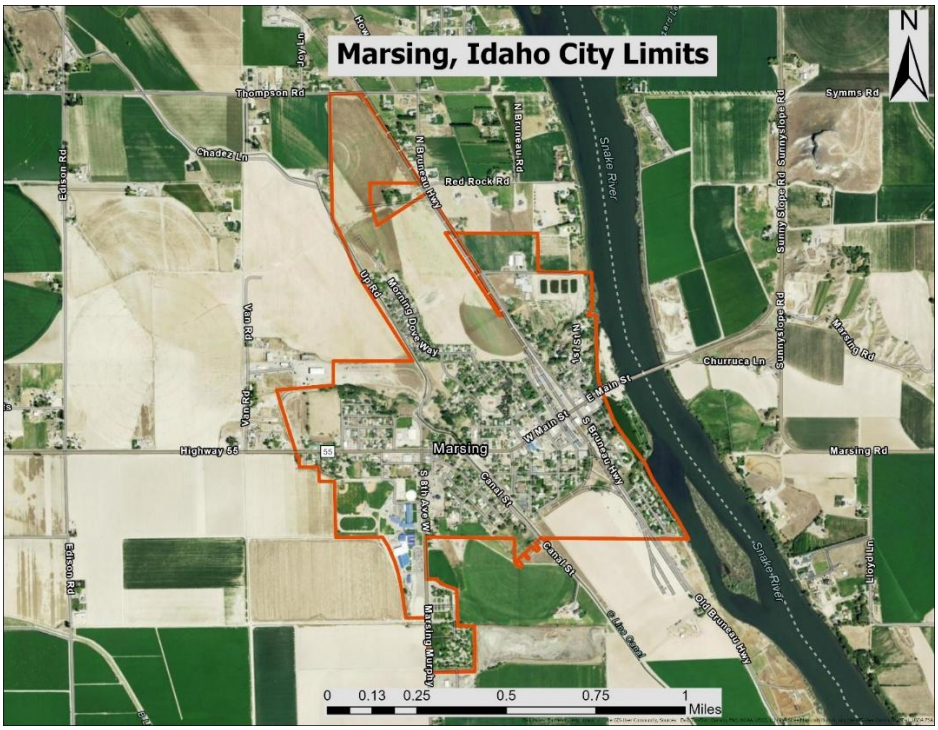


Figure 12) City limits for Marsing, Idaho

3.2.3 GRAND VIEW

The city of Grand View's population was estimated at 431 as of 2023, indicating a decrease since 2000 **(Figure 13).** With an area of around 0.59 square miles and an elevation of 2,385 feet above sea level, it is located along the Snake River, about 53 miles southeast of Marsing **(Figure 14).** Community assets include the Grand View Elementary School and Grand View Store.

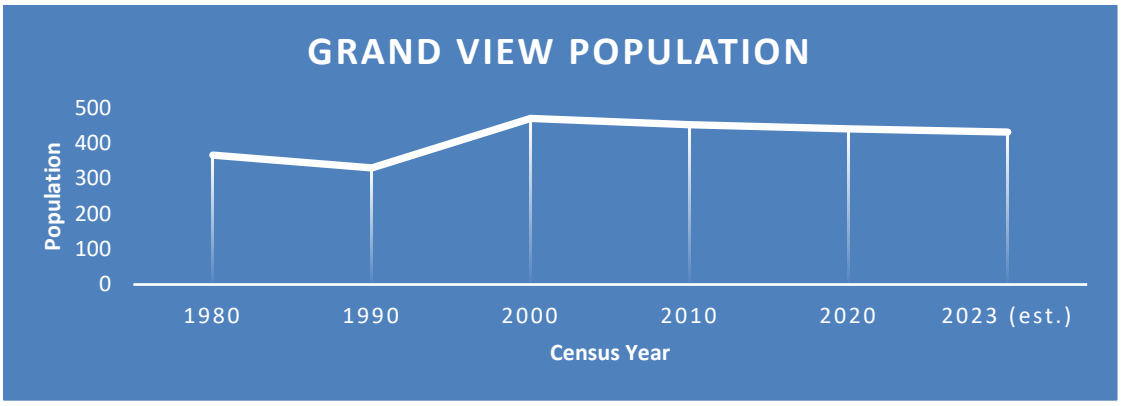


Figure 13) Population trend since 1980 for Grand View, Idaho based on US Census counts and American Community Survey estimates.

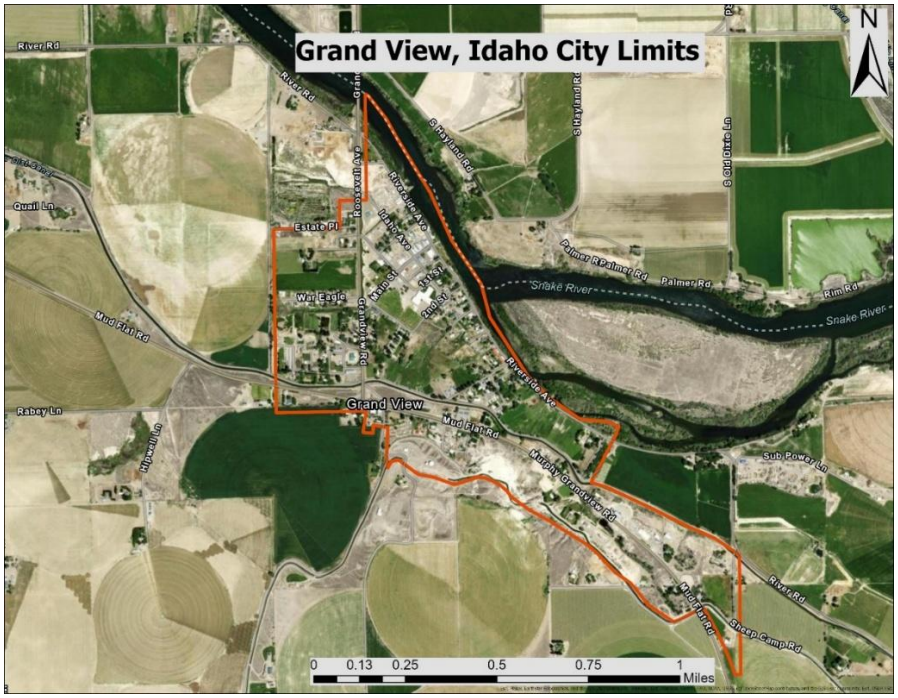


Figure 14) City limits for Grand View, Idaho

3.3 INFRASTRUCTURE

3.3.1 TRANSPORTATION

3.3.1.1 AIRPORTS

There are four public airports in Owyhee County:

- Homedale Municipal Airport
- Murphy Airport
- Grasmere Airport
- Murphy Hot Springs Airport
- 45 Ranch Backcountry Airport (Day-Use Only)

The former two are asphalt runways that serve their namesake communities of Homedale and Murphy, with any hazards being relayed to Boise Airport. The latter two are unsurfaced runways in the interior of the county. Grasmere is located on Highway 51 west of the Bruneau River canyon, and Murphy Hot Springs Airport is located near the tiny community of the same name near the Nevada border in the upper East Fork Jarbidge River canyon. The 45 Ranch is located in an extremely remote part of the South Fork of the Owyhee River and is owned by the Jim Richmond Backcountry Aviation Foundation.

3.3.1.2 RAIL

There is no active rail service in Owyhee County since routes to Homedale and Marsing were decommissioned in 1996.

3.3.1.3 ROADS

US Highway 95 crosses the county's northwestern corner and is the primary north–south travel corridor for the state of Idaho. ID-55 provides access east from Marsing into Canyon County, while ID-19 goes from Homedale west into Oregon's Malheur County. State Highway 78 extends southeast toward Murphy and Grand View, and ID-51 is a major north-south corridor bisecting Owyhee County, connecting Mountain Home in Elmore County, Idaho to Elko County, Nevada.

Various smaller roads cross the county's interior, including Mud Flat Road, Juniper Mountain Road, and Oreana Loop Road. These and other routes provide access for many rural residents. A multitude of unimproved roads and trails traverse the county's vast rangelands and mountains, some used mainly by ranchers and others seeing heavy recreational use **(Figure 15)**. Most of these unimproved routes are managed by the BLM, but some belong to state and private owners.

In addition, Owyhee County recognizes the existence of certain historic travel corridors established prior to the repeal of Revised Statute 2477 (RS 2477). Consistent with State of Idaho direction, the County views RS 2477 rights-of-way as valid existing public access routes where historic use has been documented. These corridors are important for rural access, emergency response, and wildfire suppression. Their identification does not alter land management authority or trigger new regulatory requirements but rather acknowledges longstanding public travel routes that continue to serve community and operational needs.

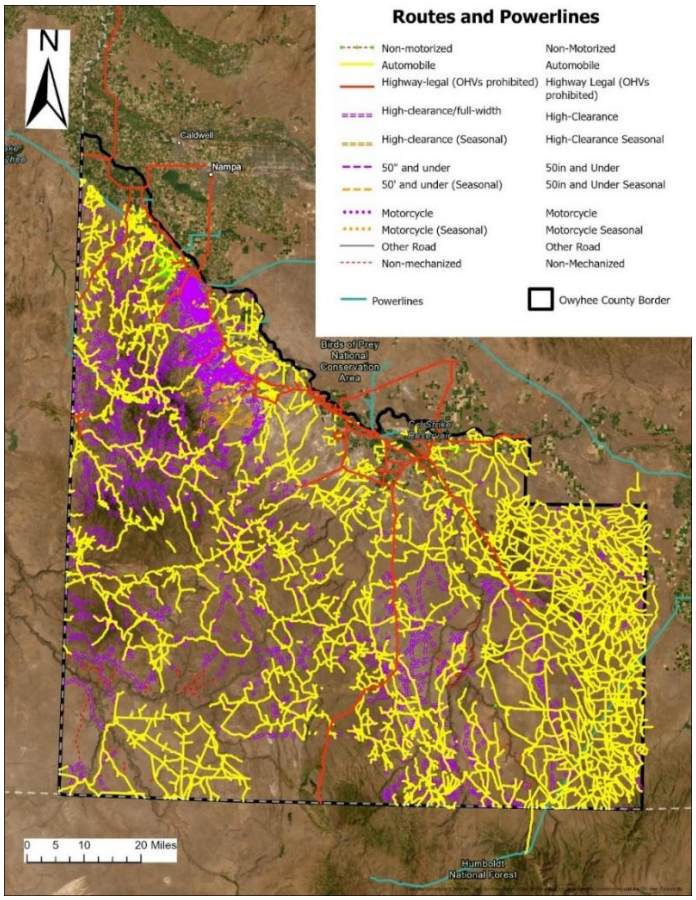


Figure 15) Vehicle routes, trails, and powerlines in Owyhee County

3.3.2 PUBLIC SERVICE FACILITIES

3.3.2.1 MUNICIPAL WATER SOURCES

The City of Homedale sources its municipal supply from two groundwater wells, with an additional two serving as backups. As of 2023, there were 973 metered connections, with 2,720 customers served. The City of Marsing has four groundwater wells with one backup, serving over 1,000 residents. The Grand View Water and Sewer Association manages two groundwater wells for the city, serving over 350 residents.

3.3.2.2 SEWAGE DISPOSAL & DRAINAGE

Owyhee County is served primarily by individual septic systems, and the cities of Homedale, Marsing, and Grand View have municipal services.

3.3.2.3 ELECTRICITY

The CJ Strike Dam is managed by Idaho Power near the City of Grand View. It has an 89,000-kilowatt capacity. There are about 162 miles of powerlines within the county. There are also two majors solar powerplants: Murphy Flat Solar and Grand View Solar Two in neighboring Elmore County that make up about 37% of the county's energy production, with the rest being hydropower (*findenergy.com*). Idaho Power is the main utility company serving Owyhee County residents.

3.3.2.4 GAS

There is a major natural gas pipeline trending NE-SW across the county, from southeast of the community of Bruneau to the remote southwest corner of the county. It extends all the way to the Lake Tahoe area, and notable clients include Southwest Gas Corporation, Sierra Pacific Power Co., and Nevada Gold Mines LLC **(Figure 16).**

3.3.2.5 TELEPHONE, INTERNET, MEDIA

Cellular coverage in Owyhee County is limited and variable due to terrain, distance from major population centers, and the predominance of federal land. Commercial service exists primarily along US-95, ID-55, ID-78, and ID-51, and near the incorporated communities of Homedale, Marsing, Grand View, and Bruneau. Cellular service in these areas is provided mainly by Verizon (Cellco Partnership), AT&T, and T-Mobile. Coverage on the Owyhee Front and in remote rangeland or canyon areas is intermittent to nonexistent, particularly south and east of Grand View and in the Owyhee Mountains.

A concentration of LTE towers is located near Homedale and Marsing, with additional tower sites south of the Snake River and in the foothills. Several LTE and microwave relay sites that serve Owyhee County are located just outside county jurisdiction in Ada and Canyon Counties. Southeast of Silver City, a small cluster of tower infrastructure provides partial service into the Owyhee Range but is limited by topography and distance. Internet access is primarily provided via wireline (DSL or fiber) in the incorporated communities, while many rural residents rely on fixed wireless relays or satellite-based systems.

Local emergency communication relies heavily on radio systems, and many rural or backcountry locations cannot depend on commercial cell service. Where cellular or internet connectivity is unreliable,

emergency responders and ranching operations frequently use VHF radios, BLM/IDL tactical repeaters, or satellite systems.

Broadcast radio and local news media are generally received from the Boise/Caldwell/Nampa market. Cable and fiber internet availability outside incorporated communities is limited.

3.3.2.6 SOLID WASTE

Homedale and Opaline Tipping stations accept solid waste disposal in the region, along with numerous drop box locations from Murphy to Hammet Bridge. Garbage collection is provided by Westowns and Disposal and Republic Services (ESI).

3.3.2.7 IRRIGATION DISTRICTS

There are 13 irrigation districts in Owyhee County. These are quasi-public or governmental organizations created to oversee irrigation development or acquire extant irrigation projects. The Gem Irrigation District encompasses the Homedale and Marsing areas, while the Grand View Irrigation District includes the City of Grand View.

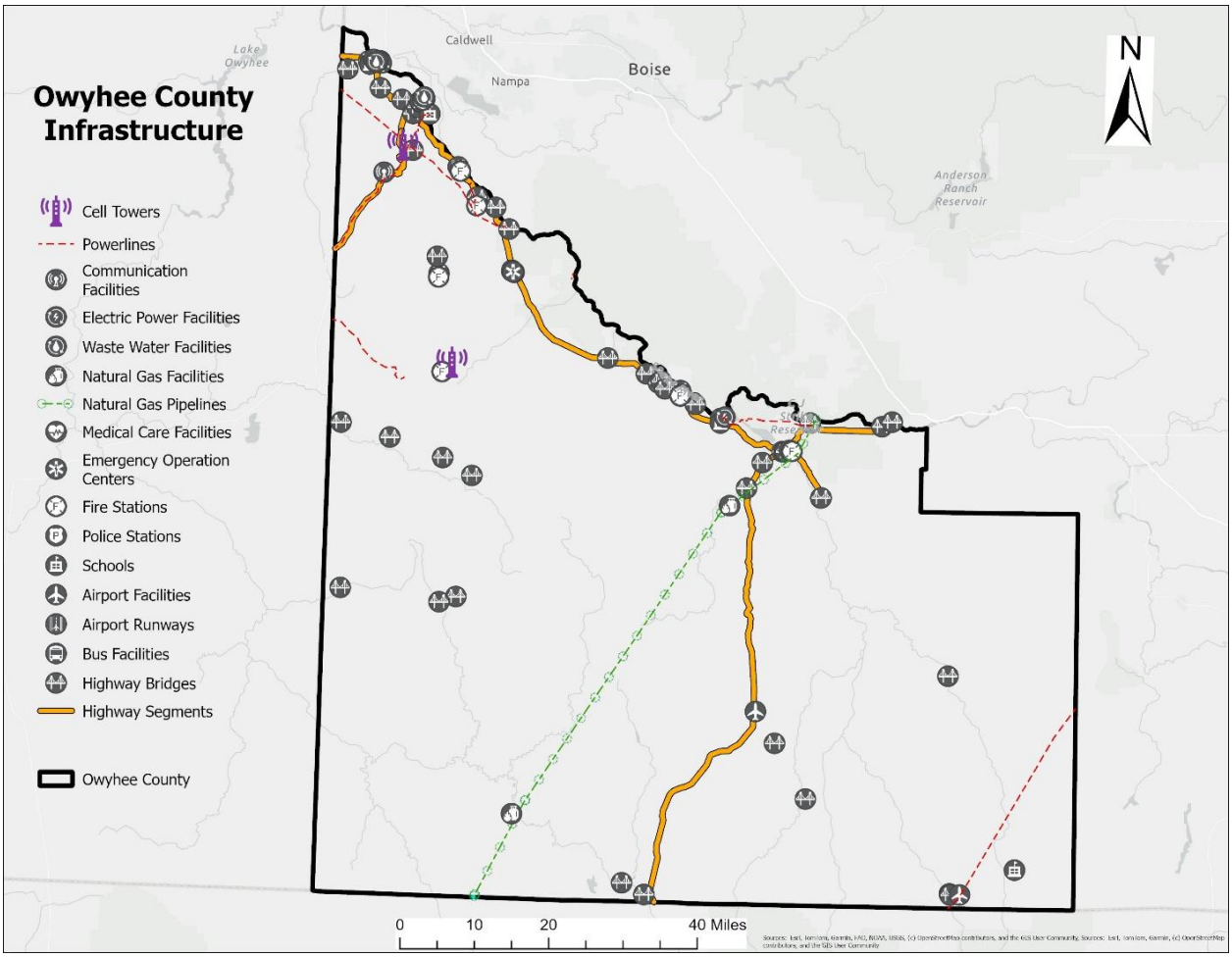


Figure 16) An overview of important infrastructure in Owyhee County - not intended to be a comprehensive list.

3.4 NOTABLE AREAS

Most of Owyhee County's land area is made up of public land, most of which allows for multiple uses such as resource extraction, intensive land management, grazing, and recreation. The six wilderness areas featuring designated Wild and Scenic rivers are afforded higher levels of protection **(Figure 17).**

3.4.1 MORLEY NELSON SNAKE RIVER BIRDS OF PREY AREA

This immense 485,000-acre area features the densest population of nesting birds of prey in North America, possibly even the world. Most of it is located in Canyon, Ada, and Elmore counties, but Owyhee County still contains 143,337 acres along the Snake River in the north-central part of the county. Although it is primarily managed by the BLM as a wildlife conservation area, it allows for various land ownerships within it, including state and private entities.

3.4.2 OWYHEE CANYONLANDS WILDERNESS AREAS AND WILD AND SCENIC RIVERS

The dramatic and labyrinthine canyons of Owyhee County include 517,000 acres of BLM-managed federal wilderness and 316 miles of National Wild and Scenic Rivers.

3.4.3 SAYLOR CREEK BOMBING RANGE

This is a 110,000-acre area southeast of Bruneau used for target practice and bombing drills by US Air Force aircraft from the nearby Mountain Home AFB.

3.4.4 BRUNEAU DUNES STATE PARK

Bruneau Dunes State Park is a significant recreational and natural resource in Owyhee County and contains the highest single-structure sand dune in North America, rising approximately 470 feet above the surrounding desert landscape. The park supports a range of recreational uses, including hiking, horseback riding, sandboarding, fishing in associated lakes, and picnicking, with motorized access limited to designated roadways. The park also includes the Bruneau Dunes Observatory, which provides public astronomy programs and nighttime visitation. As a major visitor destination, the park represents both an economic and recreational asset and a location where effective hazard awareness, emergency access, and public safety planning are important considerations.

3.4.5 DEER FLAT NATIONAL WILDLIFE REFUGE

This refuge protects wildlife on numerous Snake River islands in northwest Owyhee County: part of a larger unit to the north in Canyon County.

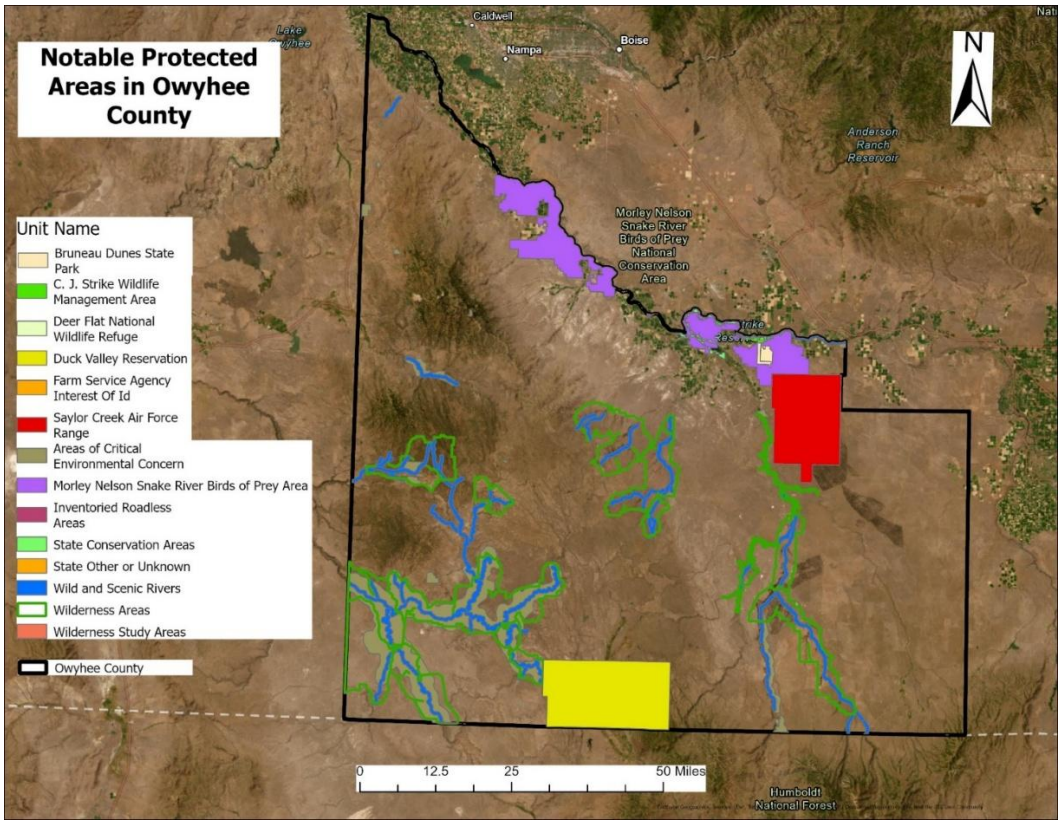


Figure 17) Protected and/or special-use areas within Owyhee County.

3.4.6 CULTURAL & HISTORIC SITES

The National Historic Register of historic places identifies those buildings, landscapes, and places that have been nominated and confirmed as historically significant. It is by no means an exhaustive list of all historic and cultural sites in the County (**Figure 18** & **Table 6**).

Table 6) National Historic Register Summary for Owyhee County, ID.

Name	Location	Historical Significance	Type of Property	Date Listed
Bernard's Ferry	N of Murphy off ID 78	Transportation; Architecture	Site	5/22/1978
Bruneau Episcopal Church	Off ID 51	Architecture	Building	11/17/1982
Camas and Pole Creeks Archeological District	Address Restricted	Prehistoric	District	5/28/1986
Camp Lyon Site	1 mi. E of U.S. 95	Military	Site	12/27/1972
Camp Three Forks	S of Silver City	Military	Site	12/15/1972

Name	Location	Historical Significance	Type of Property	Date Listed
Delamar Historic District	6 mi. W of Silver City	Industry; Architecture	District	5/13/1976
Gusman, James E., and Emma, Ranch	South Mountain Rd.	Agriculture	District	12/9/1999
Noble Horse Barn	Reynolds Cr. 12 mi. SW of Murphy	Agriculture; Exploration/Settlement	Building	8/7/1991
Our Lady, Queen of Heaven Church	Oreana	Architecture	Building	11/28/1980
Owyhee County Courthouse	ID 45	Architecture	Building	11/17/1982
Poison Creek Stage Station	S of Homedale off Jump Creek Rd.	Transportation; Architecture	Building	5/22/1978
Silver City Historic District	Silver City and its environs	Industry	District	5/19/1972
Wickahoney Post Office and Stage Station	Wickahoney Creek	Transportation; Architecture	Building	5/27/1982

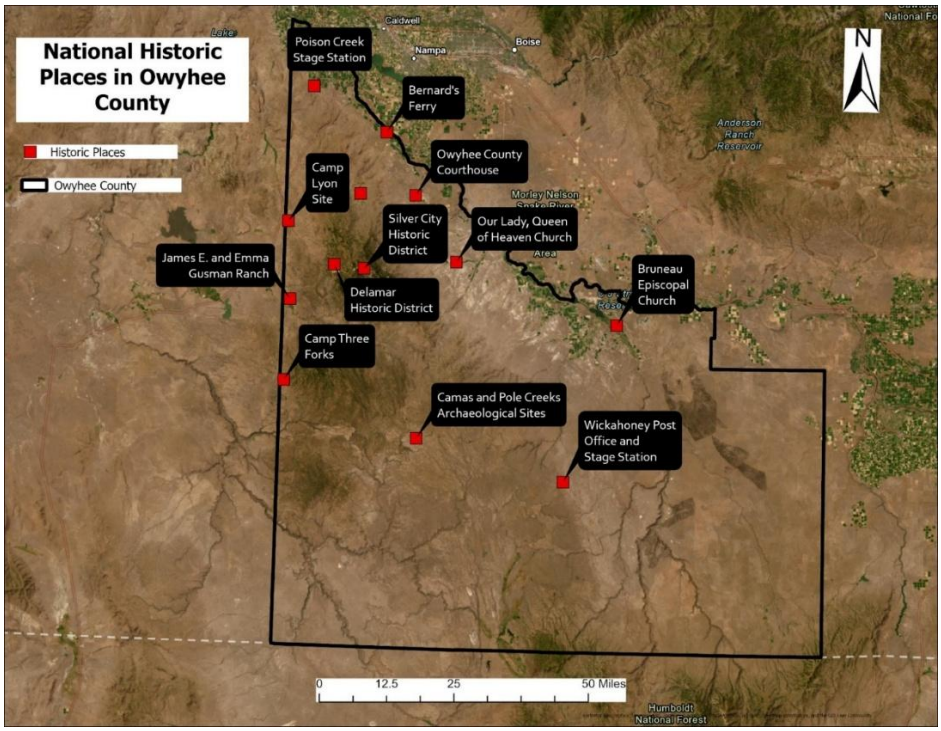


Figure 18) Locations on the National Register of Historic Places in Owyhee County

CHAPTER 4: HAZARD IDENTIFICATION & RISK ASSESSMENT

4.1 CHANGES IN PRIORITY

The 2018 Owyhee County AHMP identified several hazards deemed significant for the county. Those hazards were retained and examined for the 2025 update. There were no changes in priority in terms of the hazards addressed since the last iteration of the plan.

4.2 NATURAL HAZARDS

- Avalanche
- Drought
- Earthquake
- Landslide
- Severe Weather
    i. Extreme Heat
    ii. Lightning
    iii. Hail
    iv. Tornado
    v. Straight Line Wind
    vi. Winter Storms
    vii. Extreme Cold
- Flooding
- Wildfire (also assessed through the concurrent CWPP update)

Mormon cricket (*Anabrus simplex*) infestation was also included as an ancillary hazard due to its periodic occurrence in Owyhee County and its potential to disrupt agriculture, transportation, and emergency response. Mormon cricket impacts are acknowledged in **Appendix D** but are not quantitatively modeled or prioritized for mitigation actions due to limited data and the absence of typical life-safety or structural risk pathways.

4.3 CHANGES IN DEVELOPMENT

Since the adoption of the 2018 Owyhee County Multi-Hazard Mitigation Plan, Owyhee County and its participating jurisdictions have experienced modest population growth and limited residential and commercial development, with no large-scale subdivisions, extractive development, or significant urban expansion that would materially alter the exposure profile in hazard-prone areas. Building permit activity within the County and cities has been generally consistent with historical trends, focused on infill

construction, minor commercial improvements, and utility upgrades, with no documented rapid growth adjacent to mapped floodplains, avalanche paths, or the wildland-urban interface (WUI) that would substantially increase vulnerability. In addition, infrastructure improvements (such as water system upgrades, road enhancements, and utility expansions) have largely reflected maintenance and service improvements rather than new development in high-risk corridors. As a result, existing hazard exposures remain largely as characterized in the 2018 plan, and the mitigation strategy has been updated to reflect project status progress and evolving priorities rather than fundamental shifts in development patterns.

4.4 HAZARD RISK SUMMARIES & SELECTION

This section includes an overview of the hazards that will be addressed for each adopting jurisdiction. Each adopting jurisdiction assigned a significance ranking to the selected hazards using a modified version of FEMA worksheet 5.1 of the Local Mitigation Planning Handbook **(Table 7).**

Hazards were evaluated using the descriptions and scores included in **Table 7**. The resulting outputs, for each adopting jurisdiction, are included in **Table 8**: Owyhee County, **Table 9**: City of Homedale, **Table 10**: City of Marsing, **Table 11**: City of Grand View, **Table 12**: Murphy Reynolds Wilson Fire, **Table 13**: Silver City, and **Table 14**: Three Creek Rangeland Protection Association.

Table 7) Hazard ranking criteria. This table was developed using FEMA worksheet 5.1 from the Local Mitigation Planning Handbook.

Location (Geographic Area Affected)		
Negligible	1	Less than 10% of planning area or isolated single-point occurrences
Limited	2	10 to 25% of the planning area or limited single-point occurrences
Significant	3	25 to 75% of the planning area or frequent single-point occurrences
Extensive	4	75 to 100% of the planning area or consistent single-point occurrences
Maximum Probable Impact (Magnitude/Strength based on historic events or future probability)		
Weak	1	Limited classification on scientific scale, moderate speed of onset or moderate duration, resulting in little to no damage
Moderate	2	Moderate classification on scientific scale, moderate speed of onset or moderate duration, resulting in some damage and loss of services for days
Severe	3	Severe classification on scientific scale, fast speed of onset or long duration, resulting in devastating damage and loss of services for weeks or months
Extreme	4	Extreme classification on scientific scale, immediate onset or extended duration, resulting in catastrophic damage and uninhabitable conditions
Probability of Future Events (Occurrence in the next 50 years)		
Unlikely	1	Less than 1% probability of occurrence in the next year or a recurrence interval of greater than every 100 years
Occasional	2	1 to 10% probability of occurrence in the next year or a recurrence interval of 11 to 100 years
Likely	3	10 to 90% probability of occurrence in the next year or a recurrence interval of 1 to 10 years
Highly Likely	4	90 to 100% probability of occurrence in the next year or a recurrence interval of less than 1 year
Overall Significance		
Low	3 to 5	Two or more criteria fall in lower classifications or the event has a minimal impact on the planning area.
Medium	6 to 8	The criteria fall mostly in the middle ranges of classifications and the event's impacts on the planning area are noticeable but not devastating
High	9 to 12	The criteria consistently fall in the high classifications and the event is likely/highly likely to occur with severe strength over a significant to extensive portion of the planning area

4.4.1 OWYHEE COUNTY

Table 8) Owyhee County Hazard Risk Summary, based on the combined results of all submissions from the jurisdiction.

Rank	Hazard	Location	Extent	Probability	Total Score
High	Wildland Fire	3.7	3.5	3.8	**11.0**
	Drought	3.3	3.0	3.5	**9.8**
	Severe Weather	3.2	2.8	3.3	**9.3**
Medium	Flooding	3.0	2.6	2.8	**8.4**
Low	Landslide	1.2	1.3	1.8	**4.3**
	Avalanche	1.5	1.2	1.5	**4.2**
	Earthquake	1.0	1.2	1.0	**3.2**

4.4.2 HOMEDALE

Table 9) City of Homedale Hazard Risk Summary, based on conversation with representatives from the jurisdiction.

Rank	Hazard	Location	Extent	Probability	Total Score
Medium	Severe Weather	4.0	2.0	2.0	**6.0**
	Wildland Fire	2.0	2.0	2.0	**6.0**
Low	Drought	1.0	1.0	1.0	**3.0**
	Flooding	1.0	1.0	1.0	**3.0**
	Earthquake	1.0	1.0	1.0	**3.0**
	Landslide	0.0	0.0	0.0	**0.0**
	Avalanche	0.0	0.0	0.0	**0.0**

4.4.3 MARSING

Table 10) City of Marsing Hazard Risk Summary, based on the combined results of all submissions from the jurisdiction.

Rank	Hazard	Location	Extent	Probability	Total Score
High	Wildland Fire	3.5	3.5	3.8	**10.8**
	Drought	3.5	3.3	3.5	**10.3**
Medium	Severe Weather	3.0	2.3	3.0	**8.3**
	Flooding	2.5	2.8	3.0	**8.3**
Low	Landslide	2.0	1.5	2.0	**5.5**
	Earthquake	1.0	1.5	1.0	**3.5**

Rank	Hazard	Location	Extent	Probability	Total Score
	Avalanche	1.0	1.0	1.0	**3.0**

4.4.4 GRAND VIEW

Table 11) Grand View Hazard Risk Summary, based on conversation with representatives from the jurisdiction.

Rank	Hazard	Location	Extent	Probability	Total Score
Medium	Drought	3.0	2.0	2.0	**7.0**
Low	Severe Weather	1.0	2.0	2.0	**5.0**
	Wildland fire	1.0	1.0	2.0	**4.0**
	Flooding	1.0	1.0	1.0	**3.0**
	Earthquake	1.0	1.0	1.0	**3.0**
	Landslide	0.0	0.0	0.0	**0.0**
	Avalanche	0.0	0.0	0.0	**0.0**

4.4.5 MURPHY REYNOLDS WILSON FIRE

Table 12) Murphy Reynolds Wilson Fire District Hazard Risk Summary, based on the combined results of all submissions from the jurisdiction.

Rank	Hazard	Location	Extent	Probability	Total Score
High	Wildland Fire	3.0	3.0	3.0	**9.0**
Medium	Severe Weather	3.0	2.0	2.0	**7.0**
	Flooding	3.0	2.0	2.0	**7.0**
Low	Avalanche	1.0	2.0	1.0	**4.0**
	Earthquake	1.0	1.0	1.0	**3.0**
	Landslide	1.0	1.0	1.0	**3.0**

4.4.6 SILVER CITY

Table 13) Silver City Idaho Hazard Risk Summary, based on the combined results of all submissions from the jurisdiction.

Rank	Hazard	Location	Extent	Probability	Total Score
High	Wildland Fire	4.0	4.0	4.0	**12.0**
	Avalanche	3.0	3.0	3.0	**9.0**
Low	Severe Weather	2.0	2.0	1.0	**5.0**

	Flooding	2.0	1.0	2.0	**5.0**
	Drought	2.0	1.0	1.0	**4.0**
	Earthquake	1.0	1.0	1.0	**3.0**
	Landslide	1.0	1.0	1.0	**3.0**

4.4.7 THREE CREEK RFPA

Table 14) Three Creek RFPA Hazard Risk Summary, based on the combined results of all submissions from the jurisdiction.

Rank	Hazard	Location	Extent	Probability	Total Score
High	Wildland Fire	3.0	3.0	3.0	**9.0**
Medium	Flooding	2.0	3.0	2.0	**7.0**
Low	Earthquake	1.0	2.0	2.0	**5.0**
	Avalanche	1.0	1.0	1.0	**3.0**
	Landslide	1.0	1.0	1.0	**3.0**

4.5 FEMA MAJOR DISASTER DECLARATIONS

The following disaster declarations are all those that are on record for Owyhee County (**Table 15**).

Table 15) Presidential Disaster Declarations for Owyhee County.

Declaration Date	Incident Subcategory	Disaster Number	Declaration Title
4/9/2020	Biological	4534	**COVID-19 PANDEMIC**
3/13/2020	Biological	3467	**COVID-19**
2/27/2006	Severe Storm	1630	**Severe Storms and Flooding**
9/13/2005	Hurricane	3244	**Hurricane Katrina**
1/4/1997	Severe Storm	1154	**Severe Storms, Flooding, Mud, and Landslides**
12/31/1964	Flood	186	**Heavy Rains and Flooding**

4.5.1 DECLARATION 4534 – BIOLOGICAL 4534 (APRIL 9, 2020)

On April 6, 2020, Governor Brad Little requested a major disaster declaration due to the Coronavirus Disease 2019 (COVID-19) pandemic beginning on January 20, 2020, and continuing. The Governor requested a declaration for the Crisis Counseling Program, Disaster Unemployment Assistance, Disaster Case Management, and Disaster Legal Services under the Individual Assistance program statewide; emergency protective measures (Category B), including direct Federal assistance, under the Public

Assistance program statewide; and Hazard Mitigation statewide. This event was of the severity and magnitude that the need for supplemental Federal assistance was determined to be necessary prior to the completion of joint Federal, State, and local government Preliminary Damage Assessments (PDAs). Per 44 C.F.R.§ 206.33(d) and § 206.36(d), the requirement for a joint PDA may be waived for those incidents of such unusual severity and magnitude that formal field damage assessments are not required to establish the need for supplemental Federal assistance under the Stafford Act.

On April 9, 2020, President Trump declared that a major disaster exists in the State of Idaho. This declaration made emergency protective measures (Category B) not authorized under other Federal statutes, including direct Federal assistance, under the Public Assistance program requested by the Governor available to state and eligible local governments and certain private nonprofit organizations on a cost-sharing basis for all areas in the State of Idaho.

4.5.2 DECLARATION 3467 – BIOLOGICAL (MARCH 13, 2020)

No Preliminary Damage Assessment Report is available for this declaration.

4.5.3 DECLARATION 1630 – SEVERE STORM (FEBRUARY 27, 2006)

The coincidence of heavy rain and snowmelt brought on by unseasonably warm temperatures, causing flooding in various intermittent drainages. At least two roads were washed out: Oreana Loop and Silver City roads, the latter of which necessitated the rescue of two-dozen people from Silver City. At least one injury was reported after a roadway collapsed into Jump Creek. A FEMA Major Disaster was eventually declared on February 27, 2006, and $1,106,062.86 were obligated to restore damaged infrastructure.

4.5.4 DECLARATION 3244 – HURRICANE (SEPTEMBER 13, 2005)

A Major Disaster was declared in the State of Idaho as a result of evacuees who traveled to Idaho after the devastation caused by Hurricane Katrina in the states of Louisiana and Mississippi.

4.5.5 DECLARATION 1154 – SEVERE STORM (JANUARY 4, 1997)

A combination of heavy rain and snowmelt caused flooding in many areas of southern Idaho, including Owyhee County.

4.5.6 DECLARATION 186 – FLOOD (DECEMBER 31, 1964)

No Preliminary Damage Assessment Report is available for this declaration.

4.6 COUNTY DISASTER DECLARATIONS

The disasters detailed in **Table 16** were declared at the county level, but not necessarily at the state or federal levels.

Table 16) Owyhee County disaster declarations from 2000-2025.

Year	Disaster Type	Description	Impacts
2025	**Drought**	USDA Drought Declaration covering Owyhee & neighboring counties.	Fires from dry conditions; reduced grazing capacity; dry wells/springs; economic stress to ranching.

Year	Disaster Type	Description	Impacts
2024	**Infrastructure (Bridge Failure)**	State condemned Salmon Creek Rd Bridge (Reynolds Creek) due to structural fatigue.	1-hr detour each way; emergency access loss; disruption to livestock hauling; major local impact.
2024	**Insect Infestation (Grasshoppers & Mormon Crickets)**	Countywide eruptions damaging crops and rangeland.	Crop & forage loss; property damage; fouled stock water; limited chemical control by BLM; parallels 2018 courthouse flooding from cricket carcasses.
2023	**Insect Infestation (Grasshoppers & Mormon Crickets)**	Widespread infestations on private lands; includes Exhibit A listing affected parcels (e.g., Oreana, Mud Flat Rd).	Crop/forage destruction; foul livestock water; habitat loss (incl. sage-grouse); agricultural economic risk.
2021	**Drought**	Countywide drought impacts on agriculture.	Dry springs/wells; wildfire risk; soil degradation; crop failures; threats to ranch economy.
2017	**Emergency Extension**	Extended prior emergency declaration (details in earlier 2017 docs).	—
2017	**Flooding / Excess Snowmelt**	Excess snow caused flooding across county.	Road & property damage; access issues.
2015	**Fire**	Wildland fire disaster (Aug 13 2015).	—
2015	**General Disaster Declaration**	(Likely related to prior wildfire or drought).	—
2014	**Drought Ratification**	Ratified prior drought emergency correspondence to state.	—
2012	**Drought**	Regional drought affecting agriculture.	—
2009	**Flooding**	Two successive flood declarations.	Infrastructure and property damage.
2007	**Fire & Drought**	Wildland fires (Rowland Fire – Elk Mountain) and drought conditions; Governor declarations included.	Fire suppression & agricultural losses.
2004	**Insects (Mormon Crickets & Buffalo Gnats)**	County requested state disaster declaration.	Crop & range damage, livestock impact.

CHAPTER 5: NATURAL HAZARD ASSESSMENTS

5.1 AVALANCHE

5.1.1 DESCRIPTION

An avalanche is a swift-moving mass of snow, often mixed with debris like ice, soil, rocks, and trees, sliding down a slope. Though hard to predict precisely, they are fueled by complex weather and terrain interactions. They are most common after heavy snowstorms or during thaws, with 90% starting on 30–45-degree slopes. Hillsides above timberline facing away from prevailing winds are prime spots, but avalanches can also strike below timberline in gullies or clearings. Dense trees may stabilize snow, yet avalanches can still travel through moderate forests. Avalanches can often be triggered by their victims; for example, a snowmobile may destabilize a snow slab and become buried and trapped along with its rider.

Avalanches come in two forms: loose snow, starting at a point with dry, fresh snow and rarely causing harm, and slab avalanches, where a cohesive snow layer releases at once, sometimes destructively. Slab avalanches gain speed and mass as they descend, triggered by instability or turbulence. Their path includes a steep starting zone (25–50 degrees), a track zone (15–30 degrees) where velocity peaks, and a flatter runout zone (5–15 degrees) where debris settles.

Most avalanches occur in the higher alpine areas of Idaho in the central, eastern, and northern parts of the state: ranges like the Selkirks, Bitterroots, and Lost Rivers. Between 2018 and 2025, Idaho experienced over 20 avalanche incidents involving backcountry recreation, resulting in 20 fatalities. The incidents closest to Owyhee County occurred in Boise County, where a snowmobiler was killed near Red Mountain in March 2023, and in Elmore County, where a snowbiker was killed at Trinity Lakes in the same month. Other fatal avalanches occurred primarily in eastern and northern Idaho, including multiple deaths in Bonneville, Shoshone, and Blaine counties. The deadliest single incident took place in Shoshone County in January 2020, where three skiers were buried and killed near Wardner Peak. Most fatalities involved snowmobilers or snowbikers, and many incidents were triggered after recent snowfall on weak snow layers. Non-fatal incidents often involved partial burials or minor injuries.

5.1.2 LOCAL EVENT HISTORY

Avalanches often occur in remote areas of the county and are thus not observed or documented. At the time of writing, there was no database tracking avalanches within the county. However, there are accounts of several incidents from Silver City Fire & Rescue. According to Jim Hyslop from that organization, avalanches are not uncommon and occur almost every year in the Silver City region. In 2005, a snowmobiler was swept up in an avalanche in Long Gulch (historically noted as a dangerous spot) but managed to power out of it. A recent avalanche on War Eagle Mountain southeast of Silver City was also noted, with no reported injuries or fatalities. However, there is at least one report of a fatal avalanche

incident from the historical record: two brothers were buried in their cabin in Long Gulch in the 1870s and were unfortunately unable to escape.

5.1.3 PROBABILITY OF FUTURE OCCURRENCE

There is practically no avalanche threat to the incorporated areas of Owyhee County: hence the lack of a FEMA Risk Index Score. However, there is still a risk in some unincorporated areas, notably in the vicinity of Silver City. Most of the danger would be to backcountry travelers and recreators. Although there have not been any avalanche-related fatalities in Owyhee County, the risk is present as the Owyhee Range increases in popularity with winter adventurers. The County has identified the Long Gulch Avalanche Zone as an area of high-concern in previous plans. This is a drainage adjacent to Silver City that may pose a threat to recreators in the winter and spring **(Figure 19).**

Figure 19) A view of the Long Gulch Avalanche Zone adjacent to Silver City, Idaho. The south-facing (right) side of the valley, combined with its steep gradient, makes the drainage a treacherous location for avalanches in the wintertime.

There are no avalanche events on record according to FEMA within Owyhee County (**Table 17**). However, anecdotal evidence suggests near-annual avalanche occurrences in the vicinity of Silver City, indicating that avalanches are possible in the higher elevations of the Owyhee Mountains. Regional climatological data indicate that persistent winter snowpack in the Silver City area generally develops above approximately 7,000-8,000 feet, based on National Weather Service snow-level forecasts and long-term snowpack monitoring at nearby high-elevation sites.

While most reported observations are concentrated near Silver City, similar conditions exist in other high-elevation portions of the Owyhee Range, including South Mountain (approximately 7,800 feet) and, to a lesser extent, the Juniper Mountains (approximately 6,800 feet). These areas are remote and infrequently visited, which likely contributes to the absence of documented avalanche incidents. Where sufficient snow accumulation coincides with steep slopes and favorable aspect, particularly on north-facing terrain,

localized avalanche conditions may occur. As a result, avalanche hazard in Owyhee County is considered spatially limited, episodic, and largely confined to remote alpine terrain above approximately 7,000 feet *(National Weather Service [NWS], n.d.; Natural Resources Conservation Service [NRCS], n.d.).*

Table 17) Annualized frequency for Avalanche in Owyhee County according to FEMA, showing no events on record.

FEMA National Risk Index			
Hazard Type	**Annualized Frequency**	**Events on Record**	**Period of Record**
Avalanche	--	n/a	n/a
Probability of Future Events			
n/a	No events on record.		

5.1.4 IMPACTS

5.1.4.1 OWYHEE COUNTY

The most likely impacts from avalanches in Owyhee County are injuries or fatalities to wintertime recreational users in remote areas. While damage to forest resources, vegetation, infrastructure such as communication towers or powerlines, historic structures, seasonal cabins, or other outposts is possible, such occurrences are rare and unlikely. Local roads could be temporarily blocked by snow and debris, but most are already closed during winter months. Overall, the potential impacts of avalanches in Owyhee County are considered minimal.

5.1.4.2 CITY OF HOMEDALE

The city Homedale has negligible impacts or vulnerabilities to avalanche hazards.

5.1.4.3 CITY OF MARSING

The City of Marsing has negligible impacts or vulnerabilities to avalanche hazards.

5.1.4.4 CITY OF GRAND VIEW

The City of Grand View has negligible impacts or vulnerabilities to avalanche hazards.

5.1.5 DEVELOPMENT TRENDS

The vast majority of recent growth in the county has occurred in lower-elevation areas well outside of avalanche-prone terrain. There was an increase in snowmobilers and other wintertime recreators in the early 2020s associated with the explosive population growth of the Treasure Valley, but that trend has reportedly leveled off more recently. Even so, seasonal visitors and recreators may be vulnerable during the winter months. Overall, however, current development trends have not increased the county's long-term exposure to avalanche risk since adoption of the 2018 AHMP.

5.1.6 VALUE OF RESOURCES AT RISK

There are 137 total improvements in the community of Silver City with a total value of $5,800,599. This is the most notable settlement in the county with avalanche risk, although the likelihood of damaging events here is still low. According to FEMA, there are no calculated Exposure or Expected Annual Loss values from avalanche in Owyhee County.

5.2 DROUGHT

5.2.1 DESCRIPTION

Drought is a natural part of the climate cycle in nearly every region, including Idaho. While there are objective, measurable ways to define drought, experts often find these definitions lacking since drought is influenced by multiple factors, and its start and end are gradual and hard to pinpoint. The National Drought Mitigation Center describes drought as stemming from a prolonged lack of precipitation, typically lasting a season or longer, which leads to insufficient water for specific activities, communities, or ecosystems. Essentially, what is considered a “drought” in a particular area depends on a noticeable drop in water availability compared to the region’s typical conditions *(National Drought Mitigation Center, n.d.).*

It’s important to recognize that water supply is not solely determined by precipitation, but also factors like evaporation, transpiration, and human consumption. According to the NOAA National Climactic Data Center, large parts of Idaho have faced moderate to severe drought conditions since the last plan update in 2018.

Though broadly defined as periods of unusually dry conditions, there are four main types of droughts, which are sometimes interrelated and concurrent:

- Meteorological Drought: This refers to a prolonged period of lower-than-average rainfall in a specific area, shaped by the region's typical climate. It is commonly what people picture when they hear the word "drought."
- Agricultural Drought: This happens when insufficient soil moisture fails to meet the needs of crops, varying by region, crop type, and timing. It typically follows a meteorological drought and can lead to major crop failures and financial strain for farming communities.
- Hydrological Drought: Characterized by a shortage of water in surface and underground sources, this type of drought is evident through diminished river flows, lower lake or reservoir levels, and declining groundwater tables. It develops after a meteorological drought due to the interconnected nature of water systems.
- Socioeconomic Drought: This occurs when water scarcity directly affects people or communities, with the severity of its impact depending on their capacity to cope or adapt.

5.2.2 LOCAL EVENT HISTORY

In 2012, the US Department of Agriculture started declaring agricultural disasters designed to fast-track emergency loans to crop producers in regions affected by natural hazards like drought, wildfire, and

excessive rain. Owyhee County has received 50 disaster declarations since the program's inception, making it one of the most disaster-prone counties in Idaho according to this metric *(USDA, 2024).*

Between 2012 and 2025, Owyhee County experienced frequent USDA-designated drought disaster declarations, with 50 individual declarations recorded during this period. Most declarations were for prolonged or intensifying drought conditions, often spanning multiple months or designated as "continuing." The years 2014, 2015, and 2022 were particularly active, each with multiple overlapping drought designations. In addition to droughts, two wildfire-related declarations occurred in July and August 2012 and July 2018, and a single excessive rain declaration was issued in August 2014. These designations reflect the county's chronic exposure to climatic extremes, with drought being by far the most recurrent hazard. The most recent declaration as of December 2025 was for a drought beginning in July 2025.

Moreover, there have been drought disasters declared at the county level on 4/9/1990, 6/16/2003, 8/6/2007, 9/4/2012, 7/26/2021, 4/28/2022, 5/9/2022, and 7/15/2025.

According to the US Drought Monitor, a weekly assessment of the severity and extent of drought in the United States, local conditions as of November 6, 2025 range from None to Moderate Drought **(Figure 20).** However, there have been notable periods of widespread drought in the county. These include periods from early 2001 to mid-2005, mid-2012 to early 2016, and mid-2021 to early 2023 when virtually all of Owyhee County was suffering from some level of drought **(Figure 21).** However, the county has enjoyed increased precipitation and moisture since 2023. This is shown by the Palmer Drought Severity Index (PDSI) for the county. The PDSI uses temperature and precipitation to estimate relative dryness, ranging from -10 (very dry) to 10 (very wet) *(National Integrated Drought Information System, n.d.;* **Figure 22).**

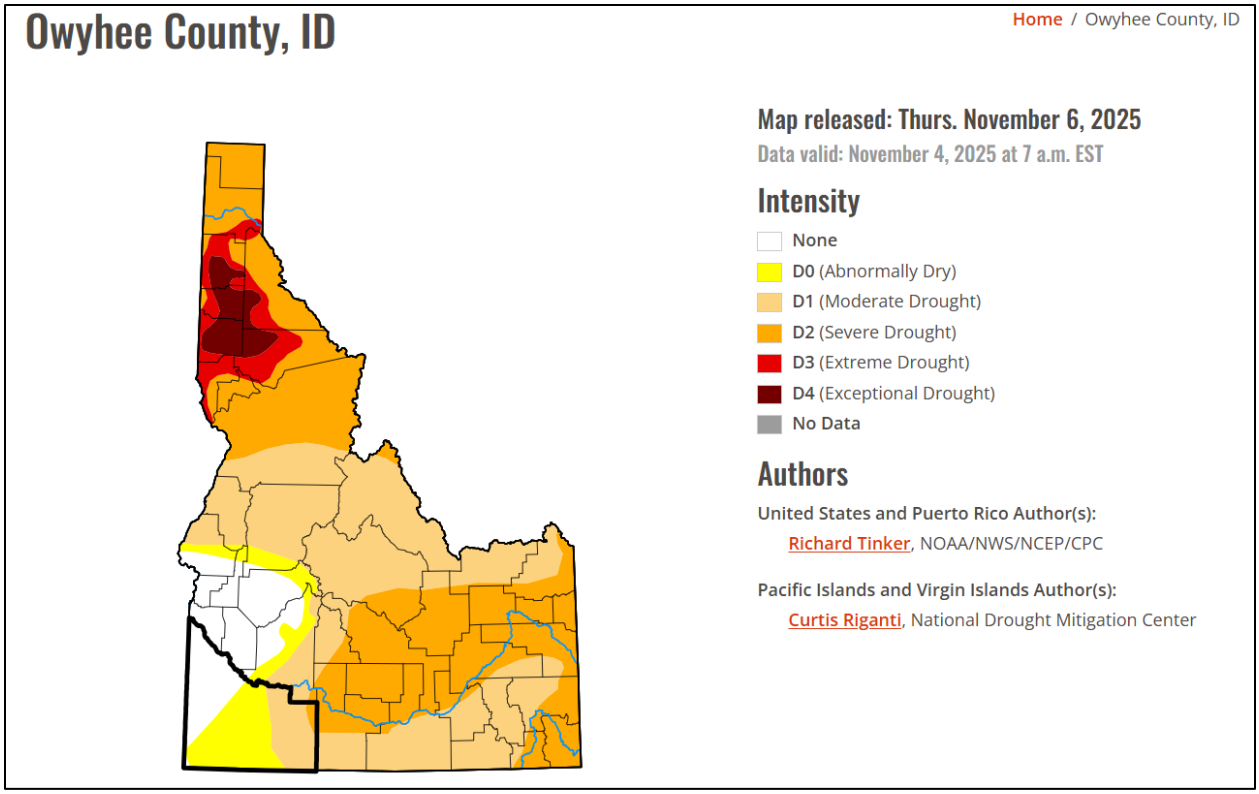


Figure 20) Current drought conditions for Idaho as of November 6, 2025 for the State of Idaho according to the US Drought Monitor, with Owyhee County outlined in bold.

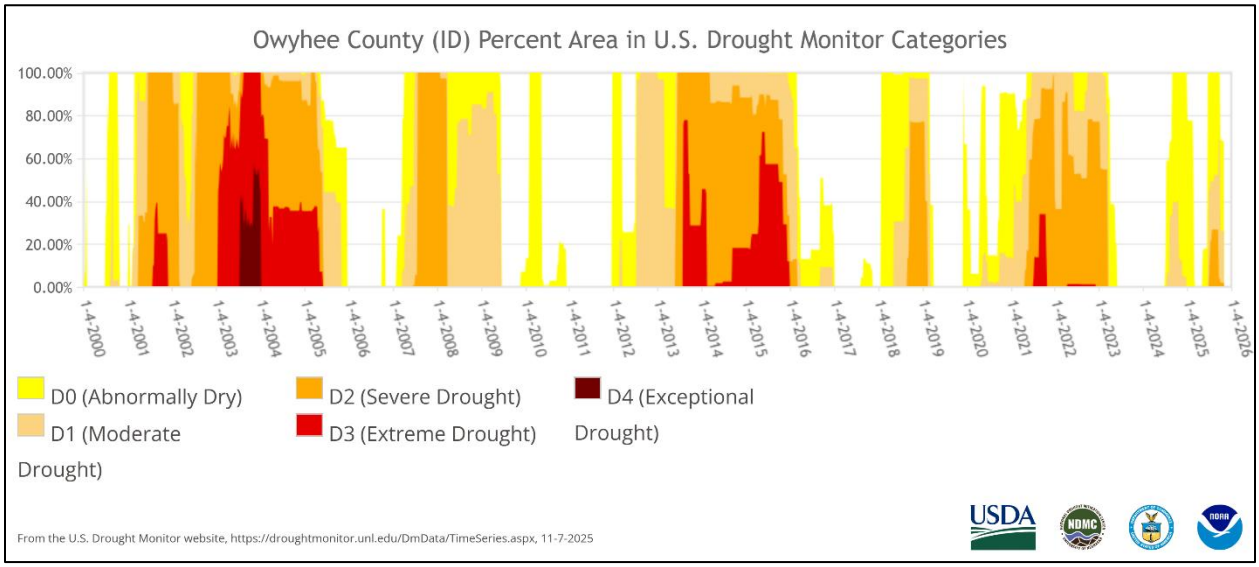


Figure 21) Depicts the proportion of Owyhee County's land area in various stages of drought from D0 (Abnormally Dry) to D4 (Exceptional Drought).

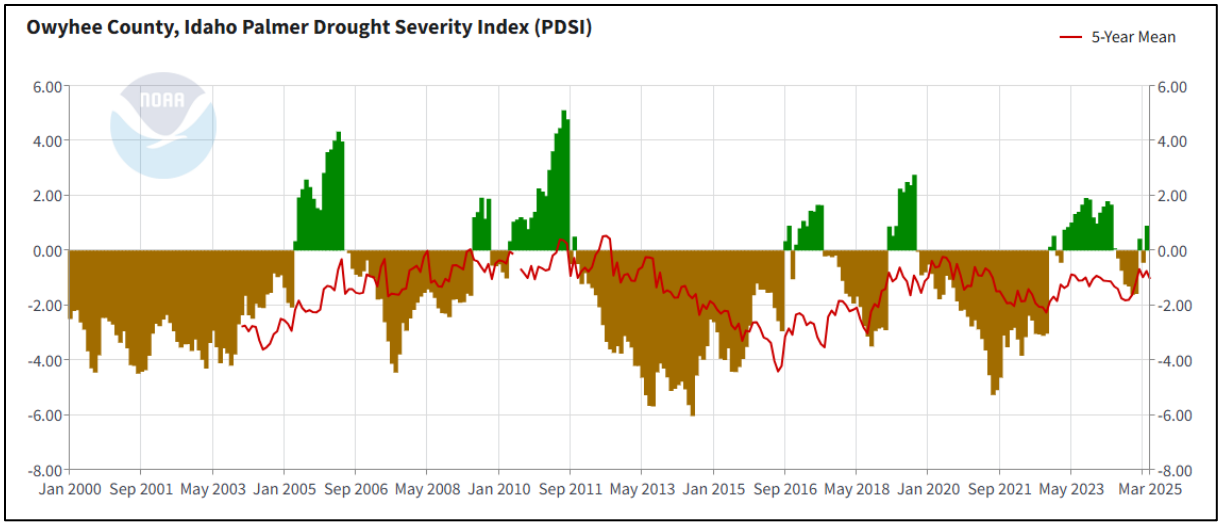


Figure 22) The PDSI for Owyhee County since 2000 is displayed, with a time series showing the 5-year mean in red. Note that the majority of months since the turn of the century have been recorded as unusually dry.

5.2.3 PROBABILITY OF FUTURE OCCURRENCE

Given its semi-arid high desert environment, Owyhee County is especially vulnerable to drought. Owyhee County has been determined to have experienced almost 2,000 instances of drought over the 22-year interval from 2000-2021 **(Table 18).** This suggests the county is virtually guaranteed to experience some form of water shortage in any given year.

Table 18) Annualized frequency for drought in Owyhee County according to FEMA.

FEMA National Risk Index			
Hazard Type	**Annualized Frequency**	**Events on Record**	**Period of Record**
Drought	89.6 events per year	1,988	2000-2021 (22 years)
Probability of Future Events			
Highly Likely	An average of 89.6 events per year can be expected if the trends from 2000-2021 continue.		

5.2.4 IMPACTS

5.2.4.1 OWYHEE COUNTY

Drought poses a significant threat to Owyhee County, particularly due to its reliance on irrigated agriculture and livestock grazing. While annual crops grown locally are somewhat more drought-resilient than perennials, prolonged dry periods can still reduce yields and strain irrigation supplies. This could eventually result in higher food costs for consumers, straining family budgets and the regional economy. Livestock forage may decline, and reduced artesian flow from springs and seeps could impact ranching operations. The Snake River provides limited buffering for core agricultural areas and towns, but this benefit diminishes during years of low snowpack and decreased reservoir storage *(IDWR, 2021).*

Recreational use of the county's waterways, including kayaking, rafting, and fishing, may also decline as stream flows drop and fisheries degrade. Hydroelectric generation at facilities like the CJ Strike Dam could decrease during droughts, increasing regional energy demand and economic stress. Nearly all drinking water in the county comes from groundwater wells, which are vulnerable to depletion during extended droughts *(USGS, 2022).* Additionally, dry conditions increase wildfire risk, particularly in years following heavy vegetation growth.

5.2.4.2 CITY OF HOMEDALE

The City of Homedale shares the same drought-related risks and vulnerabilities identified for Owyhee County. While city-specific agricultural statistics are unavailable and the agricultural footprint within city limits is minimal, Homedale's economy and identity are closely tied to the surrounding agricultural sector. A prolonged, severe drought could therefore depress regional agricultural output and employment, with secondary effects on local businesses and community cohesion. If municipal water-conservation measures were enacted, up to 996 households within the city could be directly affected.

5.2.4.3 CITY OF MARSING

The same potential risks and vulnerabilities that impact Owyhee County also apply to the City of Marsing. While city-specific agricultural statistics are unavailable and the agricultural footprint within city limits is minimal, Marsing's economy and identity are closely tied to the surrounding agricultural sector. A prolonged, severe drought could therefore depress regional agricultural output and employment, with secondary effects on local businesses and community cohesion. Were water conservation practices to be enforced in the city, there are 505 households that could potentially be affected.

5.2.4.4 CITY OF GRAND VIEW

The same potential risks and vulnerabilities that impact Owyhee County also apply to the City of Grand View. While city-specific agricultural statistics are unavailable and the agricultural footprint within city limits is minimal, Grand View's economy and identity are closely tied to the surrounding agricultural sector. A prolonged, severe drought could therefore depress regional agricultural output and employment, with secondary effects on local businesses and community cohesion. Were water conservation practices to be enforced in the city, there are 505 households that could potentially be affected.

5.2.5 DEVELOPMENT TRENDS

Since 2018, Owyhee County has experienced modest population growth, with limited new residential and commercial development primarily concentrated in and around the incorporated cities of Homedale, Marsing, and Grand View *(Owyhee County Demographic Report, 2023*). While overall development remains low-density and rural in character, incremental population growth has increased municipal and domestic demand for groundwater, which serves as the primary source of potable water for most communities in the county.

New residential connections, public facilities, and commercial uses rely on groundwater systems that also support agricultural production and livestock operations, particularly during periods of reduced surface water availability. Although no significant groundwater supply disruptions or emergency shortages have been documented since adoption of the 2018 plan, increased demand during dry years may compound drought-related stress on water systems if prolonged dry conditions persist *(Owyhee County Comprehensive Plan, 2024).*

Outside incorporated areas, land use remains predominantly agricultural, and groundwater demand continues to be driven primarily by irrigation rather than population growth. Overall, development trends since 2018 have not resulted in a substantial increase in drought vulnerability, but incremental increases in groundwater demand underscore the importance of water conservation practices, infrastructure maintenance, and long-term planning to reduce drought-related impacts *(Idaho Department of Labor, 2025).*

5.2.6 VALUE OF RESOURCES AT RISK

The FEMA National Risk Index estimates that Owyhee County faces a relatively low overall drought risk, with a score of 55.1. However, the county still has a significant exposure value of over $37 million, reflecting the economic assets potentially at risk: primarily agricultural. The Expected Annual Loss (EAL) from drought-related agricultural impacts is relatively modest at $28,320, underscoring that while potential losses exist, they are not expected to occur frequently or at high severity **(Table 19).**

Table 19) Exposure and Expected Annual Loss (EAL) for Owyhee County from drought according to FEMA. Note that Exposure and EAL values are solely from agricultural losses in the case of drought.

FEMA National Risk Index		
Drought	**Risk Index Rating and Score:**	**Relatively Low (55.1)**
Total Values at Risk	Exposure Values	$37,375,523
	Expected Annual Loss	$28,320

Moreover, according to the 2022 USDA Agricultural Census, farmers in Owyhee County had a net income of $97,181,000, with an average of $210,804 per farm. These incomes are potentially at risk in the event of a drought. The market value of agricultural products sold was $463,023,000 for the same year within the county, with livestock, poultry and their products contributing to $364,331,000 of this figure *(USDA, 2022).*

5.3 FLOODING

5.3.1 DESCRIPTION

Flooding is defined by The National Weather Service (NWS) as "the inundation of a normally dry area caused by rising water in an existing waterway, such as a river, stream, or drainage ditch." In addition to these natural events, there are a number of factors controlled by human activity that may cause or contribute to flooding. These include dam failure, levee failure, and activities that increase the rate and amount of runoff such as paving, reducing ground cover, and clearing forested areas. Flooding is a periodic event along most rivers with the frequency depending on local conditions and controls such as dams and levees. The land along rivers that is identified as being susceptible to flooding is called the floodplain.

The federal standard for floodplain management under the National Flood Insurance Plan (NFIP) is the "100-year floodplain." This area is chosen using historical data such that in any given year there is a one percent chance of a "Base Flood" (also known as "100-year Flood" or "Regulatory Flood"). A Base Flood is one that covers or exceeds the 100- year floodplain. In Idaho, flooding most commonly occurs in the spring of the year, often caused by snowmelt. Floods occur in Idaho every one to two years and are considered the most serious and costly natural hazard affecting the state.

Flooding is a dynamic natural process. Along rivers, streams, and coastal bluffs a cycle of erosion and deposition is continuously rearranging and rejuvenating the aquatic and terrestrial systems. Although many plants, animals and insects have evolved to accommodate and take advantage of these ever-changing environments, property and infrastructure damage often occurs when people develop coastal areas, and floodplains and natural processes are altered or ignored.

Flooding can also threaten life, safety, and health and often results in substantial damage to infrastructure, homes, and other property. The extent of damage caused by a flood depends on the topography, soils, and vegetation in an area, the depth and duration of flooding, velocity of flow, rate of rise, and the amount and type of development in the floodplain.

5.3.1.1 RIVER FLOODING

River flooding, the condition where the river rises to overflow its natural banks, may occur due to a number of causes including prolonged general rainfall, locally intense thunderstorms, snowmelt, and ice jams. Water levels on the Snake River in Owyhee County are moderated by the CJ Strike Dam upstream of Grand View.

5.3.1.2 FLASH FLOODING

Flash flood is defined by NWS as *"a flood caused by heavy or excessive rainfall in a short period of time, generally less than 6 hours. Flash floods are usually characterized by raging torrents after heavy rains that rip through riverbeds, urban streets, or mountain canyons, sweeping everything before them. They can occur within minutes or a few hours of excessive rainfall. They can also occur even if no rain has fallen, for instance after a levee or dam has failed, or after a sudden release of water by a debris or ice jam."*

Flash floods differ from riverine floods in the rapidity with which they develop, often occurring with little or no warning. They may occur during thunderstorms due to rapid runoff from steep terrain, from areas where the soil is already saturated, or in urban areas where vegetation has been removed and pavement has replaced exposed soil. Flash floods may also arise as the result of dam failure or the breakup of ice jams.

5.3.2 LOCAL EVENT HISTORY

NWS and FEMA records show that both river and flash flooding have occurred fairly frequently in Owyhee County, with 25 events recorded since 1997. This indicates an average occurrence of almost one flood event per year. However, floods are usually underreported in Idaho, especially flash floods that may occur in remote backcountry arroyos and rivers. A more detailed description of the two flood events since the 2018 HMP update as well as an account of the 2006 FEMA Major Disaster are included below:

5.3.3 PROBABILITY OF FUTURE OCCURRENCE

Based FEMA's Probability of Future Events metric (**Table 20**), flooding is *likely* to occur in Owyhee County each year. Minor flooding is expected county-wide but is unlikely to significantly impact infrastructure or the economy. Greater effects are anticipated on isolated rural roads, especially where culverts may be at capacity due to the build-up of tumbleweeds and other debris.

Table 20) Annualized frequency and probability of future occurrence for floods in Owyhee County according to FEMA.

FEMA National Risk Index			
Hazard Type	**Annualized Frequenc**	**Events on Record**	**Period of Record**
Riverine Flooding	1 event per year	23	1996-2019 (24 years)
Probability of Future Events			
Likely	An average of 1 event per year can be expected if the trends from 1996-2019 continue.		

5.3.2.1 HEAVY RAIN AND FLOOD EVENT 6/13/2023

Thunderstorms brought about a half an inch of rain to southern Idaho, causing urban flooding due in part to the ground's saturation from preceding rain events. The County Emergency Manager observed water and mud flowing over Highway 78 about 3/4 of a mile northwest of Murphy. The Sheriff also reported Highway 78 being washed out at mile marker 28 two months earlier due to a flash flood.

5.3.2.2 HEAVY RAIN AND FLOOD EVENT 8/10/2022

An upper-level trough on the West Coast slowly edged in between a ridge of high pressure to the east of the region. This allowed monsoon moisture to move into the region along with strong southwest flow. Several days of isolated supercells occurred, bringing heavy rain and large hail to the region. These monsoon rains caused flash flooding in Rabbit Creek near Murphy. At least one road was washed out.

5.3.2.3 FEMA MAJOR DISASTER 1630 – 2/27/2006

The coincidence of heavy rain and snowmelt brought on by unseasonably warm temperatures, causing flooding in various intermittent drainages in Owyhee County. At least two roads were washed out: Oreana Loop and Silver City Roads, the latter of which necessitated the rescue of two-dozen people from Silver City. An injury was reported after a roadway collapsed into Jump Creek **(Figure 23).** A FEMA Major Disaster was eventually declared by President Bush on February 27, 2006, and $1,106,062.86 were obligated to restore damaged infrastructure.

Floods inundate county

Owyhee declares emergency

One of the strongest storms to hit Owyhee County in the past 40 years dumped enough torrential rain during the holiday weekend to wash out county roads and trigger flood worries.

With the county commission's blessing, Owyhee County Sheriff Gary Aman declared a state of emergency Sunday. The commissioners signed a resolution for extra funding at their weekly meeting Tuesday.

Law enforcement and emergency response crews stayed busy with stranded motorists and flooded roadways.

Only one injury was reported. A Homedale man was transported to a local hospital with minor injuries when Thompson Road caved in over Jump Creek, swallowing the pickup he was driving.

On Page 10A

A 2001 Ford Ranger pickup sits over a culvert on Jump Creek on Thompson Road after the roadway collapsed under the weight of the truck Saturday morning. Dan Uranga was transported to a local hospital where he was treated for minor injuries and released. ***More photos on Pages 12A-13A***

On Page 11A

Nearly 4 inches of precipitation in the form of rain or snow, fell in Owyhee County during the holiday weekend, washing out roads, stranding recreationalists and creating a work overload for rescue teams.

On Page 11A

As rain wreaked havoc throughout the county, irrigators were praising the recent storms that has brought local watersheds to near or above normal snow levels and water storage.

Figure 23) A headline is pictured from the Wednesday, January 4, 2006 edition of the Owyhee Avalanche (Vol. 22, No. 1) reporting on the aftermath of the historic flooding that eventually triggered a FEMA Major Disaster within the county.

Other than the recent and notable events discussed above, the following is a summary of flooding events documented in the country according to the NOAA Storm Events Database:

Fatal Flooding Event

- **Date:** June 6, 2009
- **Location:** Murphy
- **Type:** Flash Flood
- **Fatalities:** 1
- **Narrative:** A vehicle was swept into the Snake River near Murphy, resulting in one fatality. Highway 78 was closed due to flooding.

Other Flooding Events

These events caused localized flooding, road closures, with some impacts to transportation infrastructure. NOAA recorded no property damage, but some incidents caused temporary disruption to local roads:

- Oct 19, 2015 – *Givens Hot Springs* – Vehicle swept away by debris flow
- Sep 5 & 12, 2013 – *Murphy, Grandview, Oreana* – Flash floods from heavy rain
- May 9 & 14, 2011 – *Hot Springs* – Bruneau River flooding from rain/snowmelt
- Jun 5 & 14, 2009 – *Bruneau & Givens Hot Springs* – Roads flooded, debris on highways
- Jun 30 & Jul 1, 2004 – *Homedale* – Urban flooding and creek overflow
- May 18, 2004 – *Murphy* – Mud and debris washed across streets
- Aug 22, 2003 – *Murphy* – Sinker Creek overflowed
- Jul 27, 1998 – *Reynolds* – Flash flood washed out part of Reynolds Creek Road
- May 13, 1998 – *Homedale* – Small stream flooding from Catherine Creek, bridge washed out near Grand View
- Apr 4, 1998 – *Reynolds* – Flooding from Reynolds Creek overflow
- Sep 2 & 11, 1997 – *Reynolds & Murphy* – Flash floods from thunderstorms
- May 16, 1997 – *Murphy* – Flash flood from heavy rain
- Aug 27, 1996 – *Near Reynolds Creek & NW Murphy* – Flash flood

5.3.4 IMPACTS

5.3.4.1 OWYHEE COUNTY

Flash floods can occur in Owyhee County and throughout the Great Basin during the summer months when monsoonal moisture surges north from Arizona and the Gulf of California, as well as during the cooler season from November to May, when the bulk of annual precipitation occurs in the region *(Christensen, n.d.; NWS, n.d.).* These events often occur with little warning, carrying high-velocity water, debris, and sediment, potentially sweeping away vehicles, pedestrians, or recreationalists, as seen in the 2006 floods that washed out Oreana Loop and Silver City Roads, requiring evacuations.

While isolated deaths and injuries have occurred, the primary impacts are temporary disruptions to rural roads and community isolation, with minimal long-term economic or environmental effects. However, localized erosion, contamination, or damage to homes, businesses, and infrastructure may occur. Public

services are unlikely to be significantly compromised, but residents and recreationalists should monitor weather conditions to mitigate risks.

5.3.4.2 CITY OF HOMEDALE

The potential impacts from flooding in Homedale are similar to the impacts described for Owyhee County as a whole.

Riverine flooding on the Snake River, though unlikely due to the large floodplain area and moderating influence of upstream dams, nonetheless has the potential to impact several pieces of key infrastructure, including the Municipal Airport, High School Football Field, City Pool, and numerous other residences and businesses near the riverbanks. Succor Creek intersects with the city's southwestern corner and flows into the Snake about 0.75 miles downstream from the city limits. It has the potential to impact some agricultural lands and structures both within and close to the city's administrative boundaries in the event of a 100+ year flood event.

If an extreme flood event were to occur on the Snake River or Succor Creek, farmers in and around Homedale might have to pull their irrigation pumps, potentially disrupting production and affecting their bottom lines, not to mention any direct damage to crops from floodwaters. Although unlikely, a flood event has the potential to affect the city's water supply by infiltrating groundwater reserves. Local travel routes could also be altered or closed temporarily, including the Highway 95 bridge and Riverside Ave.

5.3.4.3 CITY OF MARSING

The potential impacts from flooding in Marsing are similar to the impacts described for Owyhee County as a whole.

There is no FEMA-approved floodplain mapped for the City of Marsing. However, there are community assets potentially at higher risk due to their proximity to the Snake River. These include the wastewater treatment plant, the Marsing boat ramp, Marsing Island Park, and numerous residences.

If an extreme flood event were to occur on the Snake, farmers in and around Marsing might have to pull their irrigation pumps, potentially disrupting production and affecting their bottom lines, not to mention any direct damage to crops from floodwaters. Although unlikely, a flood event has the potential to affect the city's water supply by infiltrating groundwater reserves. Local travel routes could be altered or closed temporarily, including the Highway 55 bridge and Riverfront Drive.

5.3.4.4 CITY OF GRAND VIEW

The potential impacts from flooding in Grand View are similar to the impacts described for Owyhee County as a whole. Notable structures within the flood hazard area include several residences and agricultural irrigation pumps, a boat ramp, riverside tavern and restaurant, as well as Grand View water and sewer facilities. The Grand View Elementary School is also not far from the flood zone.

If an extreme flood event were to occur on the Snake, farmers in and around Grand View might have to pull their irrigation pumps, potentially disrupting production and affecting their bottom lines, not to mention any direct damage to crops from floodwater. Although unlikely, a flood event has the potential

to affect the city's water supply by infiltrating groundwater reserves. Travel on Riverside Drive, which closely parallels the river, could also be interrupted. Travel over State Highway 167 could also be disrupted if any part of the bridge washes out.

Moreover, there is an Emergency Action Plan in place through Idaho Power for a breach or failure of CJ Strike Dam just upstream of the city. Although highly unlikely, such an event could potentially inundate large portions of the city in a matter of minutes *(Idaho Power, 2024)*.

5.3.5 DEVELOPMENT TRENDS

Since adoption of the 2018 Owyhee County All-Hazard Mitigation Plan, overall population growth and development within the county have remained modest. Countywide population has increased by approximately 3-4 percent since 2018, with limited new residential and commercial construction primarily occurring within or adjacent to the incorporated cities of Homedale and Marsing. Development in these areas has consisted mainly of infill and small-scale projects rather than large subdivisions or major land-use conversions. There has been no documented large-scale residential or commercial development within mapped flood hazard areas in participating jurisdictions during this period.

A small number of recent or planned commercial developments, including retail and service facilities within the Homedale area, may incrementally increase impervious surface coverage at the local scale. While such development has the potential to increase localized runoff, it has not substantially altered watershed-scale flood risk or drainage patterns since the previous plan update.

Outside incorporated areas, land use remains predominantly agricultural, rangeland, or public land, with minimal permanent structural development within mapped or potential flood-prone areas. Some increased recreational use on public lands, including off-highway vehicle activity and informal trail use, has occurred since 2018. In isolated locations, these activities may contribute to vegetation disturbance or sediment delivery near drainages; however, no significant increase in flood exposure or flood-related damages has been documented as a result. Ongoing federal land management efforts, including travel management planning and access controls, are intended to limit these impacts over time.

Overall, development patterns since 2018 have not resulted in a measurable increase in flood exposure or vulnerability at the countywide scale. Flood risk in Owyhee County continues to be driven primarily by natural hydrologic conditions, episodic high-flow events, and localized drainage constraints rather than by urbanization or rapid land-use change.

5.3.6 VALUE OF RESOURCES AT RISK

5.3.6.1 DESIGNATED 100-YEAR FLOOD ZONES

Losses from flooding would occur when flood waters cause damage to structures, roads, agriculture, and other developments with values. Loss estimates can be calculated by analyzing the parcels and building footprints within the FEMA flood zone. In instances where most of the parcel and/or the structures inside the parcel are situated inside the flood zone, those parcels are counted among the flood zone parcels. Note that the floodplains for Homedale and Grand View have not been updated since 1976 and 1979,

respectively **(Figure 24** & **Figure 25),** and none exist for Marsing. See **Table 21** for improvement values within each defined floodplain.

Table 21) The value of improvements within the designated 100-year FFEMA floodplains for Homedale and Grand View. Note that the City of Marsing lacks any designated 100-year floodplains.

Flood Impact Zone	Number Of Improvements	Total Improvement Value
Homedale	122	$17,303,905
Grand View	17	$1,912,154

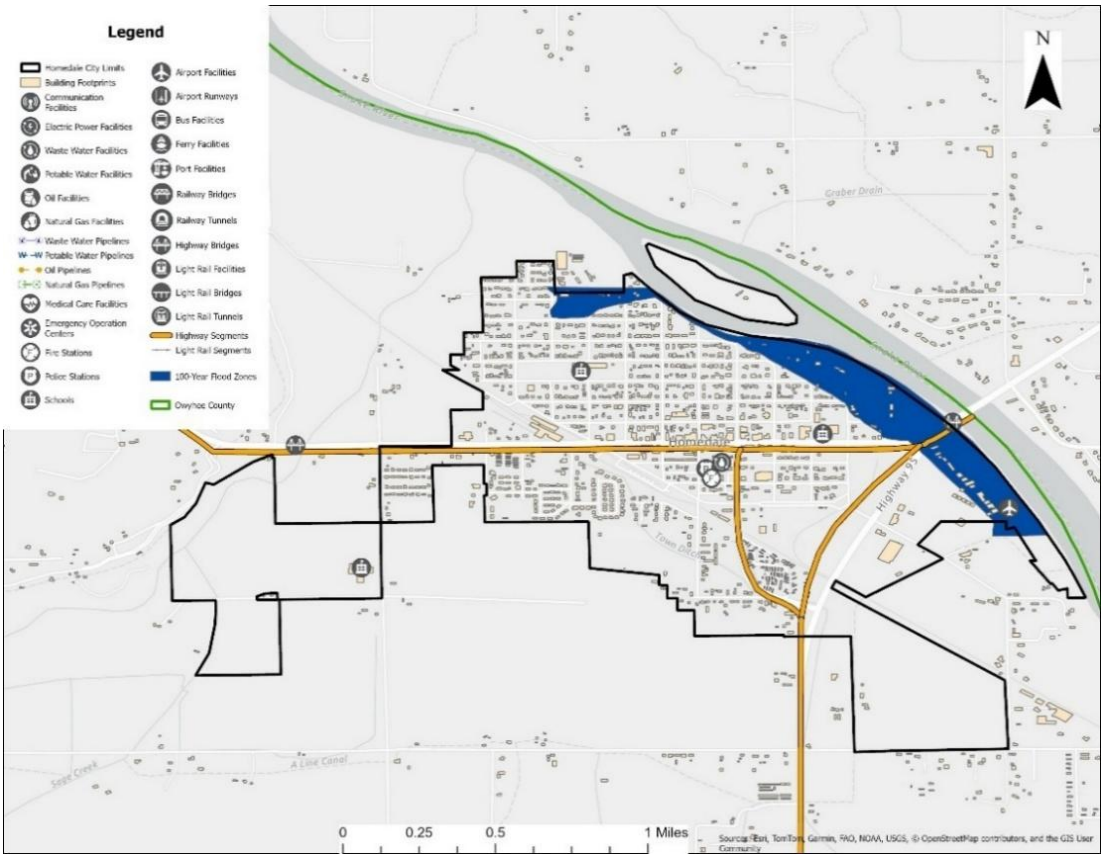


Figure 24) 100-year FEMA floodplain for the City of Homedale, last updated in 1987, overlain by critical infrastructure and a Microsoft Building Footprint Layer.

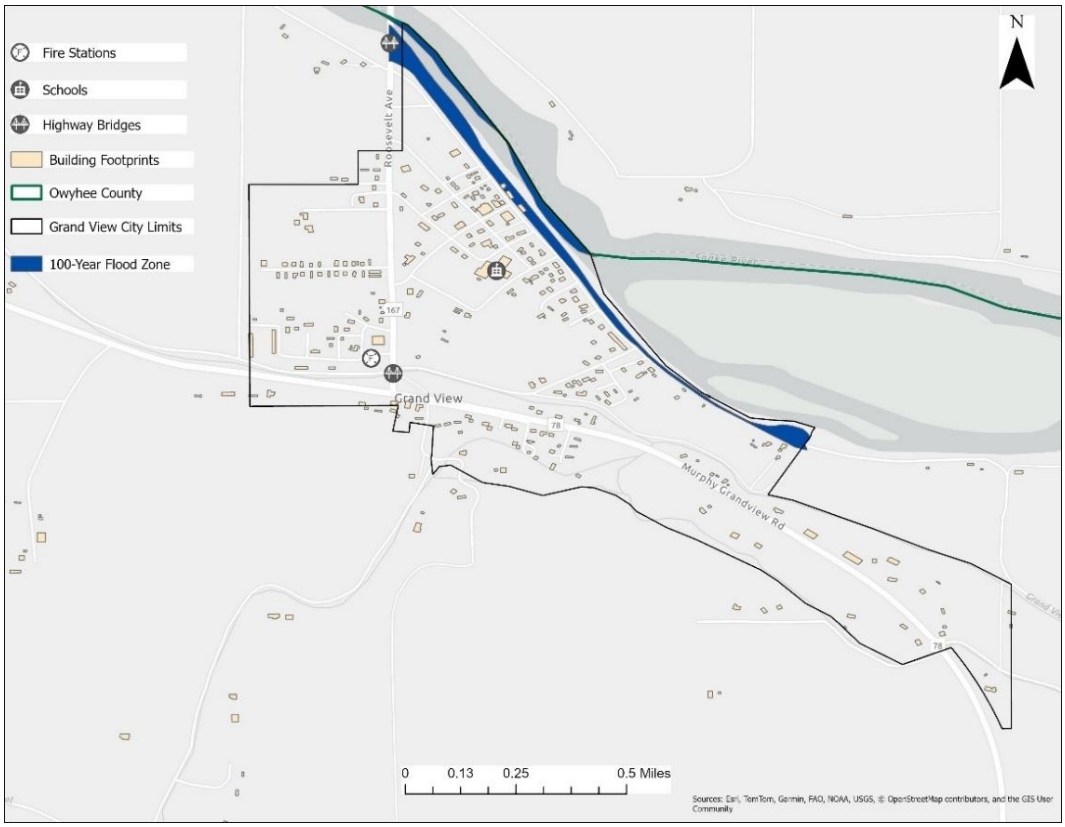


Figure 25) 100-year FEMA floodplain for the City of Grand View, last updated in 1979, overlain by critical infrastructure and a Microsoft Building Footprint Layer.

5.3.6.2 SSURGO FLOOD FREQUENCY

The Soil Survey Geographic Database (SSURGO), developed by the U.S. Department of Agriculture's Natural Resources Conservation Service (USDA-NRCS), includes a flooding frequency class attribute that estimates the annual probability of soil inundation during the growing season. Soils are classified as frequently flooded (greater than 50% chance), occasionally flooded (5%–50% chance), or rarely flooded (1%–5% chance), based on long-term field observations, landscape position, and soil morphology, not on modeled hydrology or weather data *(USDA-NRCS, 2023).*

For this assessment, Owyhee County parcel boundaries from the assessor's office were intersected with SSURGO flood frequency polygons using GIS. Parcels were flagged if at least a portion of their area overlapped soils classified in any of the flood frequency categories **(Figure 26).** This spatial overlay serves as a screening tool to identify areas where flood-prone soils may indicate elevated susceptibility to surface water accumulation or saturation. Values for flagged parcels are shown in **Table 22.**

SSURGO flood frequency data are not regulatory and do not correspond to FEMA flood zones or modeled flood extents. They are not intended to predict or confirm actual flood events at the parcel level, nor should they be used to determine insurance requirements or building restrictions. Instead, they offer a generalized, soil-based perspective on historical inundation tendencies, which can help inform hazard mitigation planning and site-specific investigations.

Table 22) Improvement and land values intersecting various SSURGO flood frequency zones.

SSURGO Flood Frequency Zone	Number Of Parcels	Land Value	Improvement Value
Frequent	1,048	$13,408,517	$17,918,690
Occasional	971	$21,120,185	$31,983,683
Rare	1,136	34,266,979	56,326,046

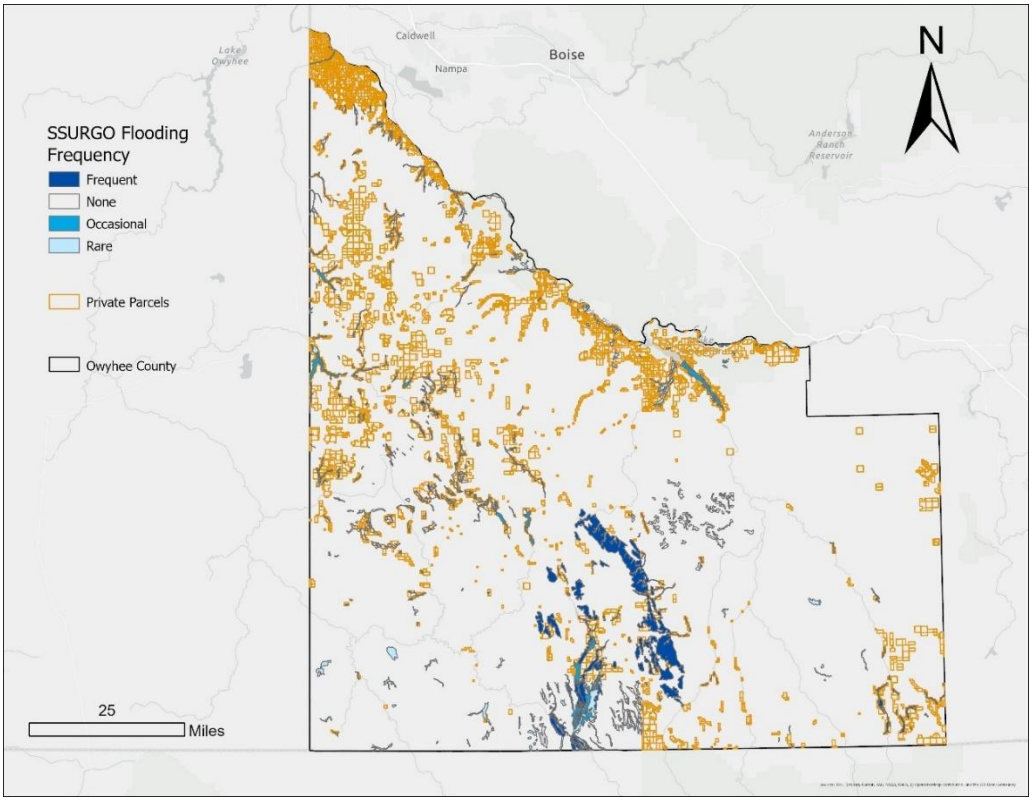


Figure 26) Flood frequency zones according to SSURGO overlain with Owyhee County parcels.

5.3.6.3 EXPOSURE AND EXPECTED ANNUAL LOSS

According to FEMA's National Risk Index, Owyhee County has a very low flood risk score of 15.5. The total exposure value, representing the estimated value of buildings, population, and infrastructure at risk from flooding, is approximately $831.7 million. However, the expected annual loss (EAL) from flooding is relatively low at $39,469, indicating that while the overall value of exposed assets is high, the likelihood and severity of flood-related losses are minimal on an annual basis **(Table 23)**.

Table 23) Exposure and Expected Annual Loss values for Owyhee County from flooding according to FEMA, along with the National Risk Index.

FEMA National Risk Index		
Flooding	**Risk Index Rating and Score:**	**Very Low (15.5)**
Total Values at Risk	Exposure Values	$831,745,260
	Expected Annual Loss	$39,469

5.3.7 NATIONAL FLOOD INSURANCE PROGRAM (NFIP)

Established under the National Flood Insurance Act of 1968, the National Flood Insurance Program (NFIP) was created to address the lack of affordable private-sector flood insurance, which had become increasingly unavailable due to the magnitude of flood-related losses. The NFIP provides federally backed flood insurance to property owners in participating jurisdictions and requires communities to adopt and enforce minimum floodplain management standards intended to reduce future losses. These standards restrict unsafe development in Special Flood Hazard Areas (SFHAs; commonly referred to as the 100-year floodplain) and ensure that new construction is built with flood-resistant materials and practices. Structures within a mapped 100-year floodplain have approximately a 26% probability of flooding over the course of a 30-year mortgage.

5.3.7.1 NFIP PARTICIPATION IN OWYHEE COUNTY

As of 2025, the City of Homedale is the only jurisdiction in Owyhee County that participates in the NFIP. Homedale maintains three active flood insurance policies (**Table 24**; see definitions in **Table 25**).

Owyhee County, Marsing, and Grand View are not NFIP-participating jurisdictions, and therefore do not administer local floodplain ordinances or have NFIP-insured structures.

Table 24) An accounting of NFIP policies within Owyhee County is displayed here.

Community Name	Policies in Force	Total Coverage	Total Written Premium + FPF	Annual Payment
City of Homedale	3	$812,000	$4,323	$5,376

Table 25) Definitions of the NFIP categories from Table 24.

Description	Definition
Policies in Force	The number of policies in force for a given state and combination of attributes.
Total Coverage	The total building and contents coverage for the policies in force.
Total Written Premium + FPF	This represents the sum of the premium and FPF (federal policy fee) for the policies in force.
Total Annual Payment	The actual amount paid by the policyholder after Reserve Fund assessments, HFIAA Surcharges, and Probation Surcharges

5.3.7.2 HOMEDALE'S FLOODPLAIN MANAGEMENT ORDINANCE (SUMMARY OF CHAPTER 15.20 – FLOOD HAZARDS)

NFIP compliance for the City of Homedale is implemented through Homedale City Code Title 15, Chapter 15.20: Flood Hazards, which establishes the City's regulatory framework for development in mapped flood hazard areas. Collectively, these standards meet NFIP minimum floodplain management requirements and ensure Homedale remains in good standing with the program. Its key components are outlined below.

5.3.7.2.1 ADOPTION OF FEMA FLOOD MAPS

The City adopts and enforces FEMA's 1987 Flood Hazard Boundary Map (FHBM), including all revisions (§15.20.020). Zone A delineations identify areas where floodplain regulations apply.

5.3.7.2.2 FLOODPLAIN DEVELOPMENT PERMITTING

A local floodplain development permit is required for any construction, substantial improvement, placement of mobile homes, or land-disturbing activity within the flood-prone area (§15.20.030–040).

Applications must include:

- Site description
- Proposed use
- Flood hazard information
- Elevation of the lowest habitable floor (or floodproofing elevation for non-residential structures) (§15.20.060).

The City must maintain elevation records for NFIP rating compliance (§15.20.130).

5.3.7.2.3 MINIMUM FLOOD PROTECTION STANDARDS

Structures must be anchored, constructed from flood-resistant materials, and designed to minimize flood damage (§15.20.080). Residential structures must be elevated to or above the base flood elevation (BFE); non-residential structures must be elevated or floodproofed to the BFE (§15.20.120).

5.3.7.2.4 SUBDIVISION AND INFRASTRUCTURE REQUIREMENTS

Subdivisions and major developments must:

- Minimize flood damage
- Protect utilities from flooding
- Provide adequate drainage (§15.20.090).
- Developments exceeding 50 lots or 5 acres must include BFE data.
- Water and sanitary systems must minimize infiltration and prevent flood-related failure (§15.20.100–110).

5.3.7.2.5 WATERCOURSE ALTERATION PROTECTIONS

The City must notify neighboring communities and the State before altering or relocating watercourses (§15.20.140). Altered channels must maintain their flood-carrying capacity (§15.20.150).

5.3.7.2.6 MOBILE HOME STANDARDS

Mobile homes placed in Zone A must be anchored using detailed over-the-top and frame-tie systems capable of resisting specified loading requirements (§15.20.160).

5.3.7.3 REPETITIVE LOSS PROPERTIES

As of 2025, there are no NFIP-classified Repetitive Loss (RL) or Severe Repetitive Loss (SRL) properties in Owyhee County. This includes the City of Homedale, the county's only NFIP-participating jurisdiction.

5.4 EARTHQUAKE

5.4.1 DESCRIPTION

The U.S. Geological Survey (USGS) defines earthquake as: *"Ground shaking caused by the sudden release of accumulated strain by an abrupt shift of rock along a fracture in the Earth or by volcanic or magmatic activity, or other sudden stress changes in the Earth."* The hazards associated with earthquakes are secondary to ground shaking (also called seismic waves) which may cause buildings to collapse, displacement or cracking of the earth's surface, flooding as a result of damage to dams or levees, or even fires from ruptured gas lines, downed power lines, and other sources. Earthquakes cause both vertical and horizontal ground shaking which varies both in amplitude (the amount of displacement of the seismic waves) and frequency (the number of seismic waves per unit time), usually lasting less than thirty seconds. Earthquakes are measured both in terms of their inherent "magnitude" and in terms of their local "intensity."

The magnitude of an earthquake is essentially a relative estimate of the total amount of seismic energy released and may be expressed using the familiar "Richter Scale" or using the "moment magnitude scale" now favored by most technical authorities. Both the Richter scale and the moment magnitude scale are based on logarithmic formulae, meaning that a difference of one unit on the scales represents about a thirty-fold difference in the amount of energy released (and, therefore, potential to do damage). On either scale, significant damage can be expected from earthquakes with a magnitude of about 5.0 or higher. What determines the amount of damage that might occur in any given location, however, is not the magnitude of the earthquake but the intensity at that particular place. Earthquake intensity decreases with distance from the earthquake's "epicenter" (its focal point) but also depends on local geologic features such as depth of sediment and bedrock layers. Intensity is most commonly expressed using the "Modified Mercalli Intensity Scale." This measure describes earthquake intensity on an arbitrary, descriptive, twelve-degree scale (expressed as Roman numerals from I to XII) with significant damage beginning at around level VII. Mercalli intensity is assigned based on eyewitness accounts. More quantitatively, intensity may be measured in terms of "peak ground acceleration" (PGA) expressed relative to the acceleration of gravity (g) and determined by seismographic instruments.

While Mercalli and PGA intensities are arrived at differently, they correlate reasonably well. While the locations most susceptible to earthquakes are known, there is little ability to predict an earthquake in the short term *(USGS, n.d.*).

5.4.2 LOCAL EVENT HISTORY

The following highlight earthquake events throughout recorded history that are significant either because they occurred in Owyhee County and/or because they were felt in Owyhee County. The "felt" earthquakes are recorded through the "Did You Feel It?" (DYFI) program with the USGS and measured using the Modified Mercalli Intensity (MMI) scale *(USGS, n.d.)*. The events listed in **Table 26** received at least one DYFI response from within the county, had their epicenters within the county, or were otherwise documented

to have affected the region encompassing Owyhee County. For a spatial representation of earthquakes felt in Owyhee County, see **Figure 27** & **Figure 28.**

Table 26) The earthquakes listed here received at least one DYFI response from within the county, had their epicenters within the county, or were otherwise documented to have affected the region encompassing Owyhee County. Magnitude is given in Modified Mercalli Intensity, the locations of the epicenters are described, as well as the date and time of occurrence, and a description of how it affected Owyhee County.

Magnitude	Location Description	Date & Time (UTC)	Depth (km)	Shaking in Owyhee County
4.9	10 km N of Smiths Ferry, ID	2/26/2024 17:25	12.2	Weak shaking in NW corner
4.7	25 km S of Wells, NV	8/31/2021 17:21	7.5	Weak shaking in southern half
4.6	27 km NW of Stanley, ID	6/25/2020 5:20	7.5	Weak shaking in northern part
3.6	45 km ESE of McDermitt, NV	4/13/2020 10:27	2.5	Weak shaking in SW corner
4.8	21 km WNW of Stanley, ID	4/1/2020 0:27	10	Weak shaking countywide
6.5	Stanley, ID	3/31/2020 23:52	12.1	Weak to light shaking
3.3	55 km E of McDermitt, NV	5/23/2013 20:56	0	Weak to light shaking in SW corner
2.9	Southern Idaho	11/12/2012 13:30	6.2	Epicenter in county
3	47 km NE of Owyhee, NV	7/22/2010 8:19	0	Epicenter in county
5.9	8 km ENE of Wells, NV	2/21/2008 14:16	7.9	Weak shaking in southern part
6.9	Borah Peak Earthquake, ID	10/28/1983 14:06	10	Light to moderate shaking
4.8	23 km NNE of Golconda, NV	7/6/1968 14:02	10	Weak shaking in SW corner
7.2	Hebgen Lake Earthquake, MT	8/18/1959 6:37	Unknown	Weak shaking in eastern Owyhee County
Unknown	Salmon River Earthquake	1947	Unknown	Dishes broken in Idaho City, cracked plaster in Weiser
6.6	Hansel Valley, UT earthquake	3/12/1934 15:05	8.5	Weak shaking in eastern part
5.2	45 km WNW of Jackpot, NV	9/5/1928 5:36	Unknown	Epicenter in county
5.3	32 km WNW of Banks, ID	5/13/1916 2:26	Unknown	Light to moderate shaking in S. Idaho

Magnitude	Location Description	Date & Time (UTC)	Depth (km)	Shaking in Owyhee County
6.8	Pleasant Valley, NV Earthquake	10/3/1915 6:53	10	Noted regionally, likely weak shaking
5.5	Near Shoshone, ID	11/11/1905 21:26	Unknown	Noted regionally

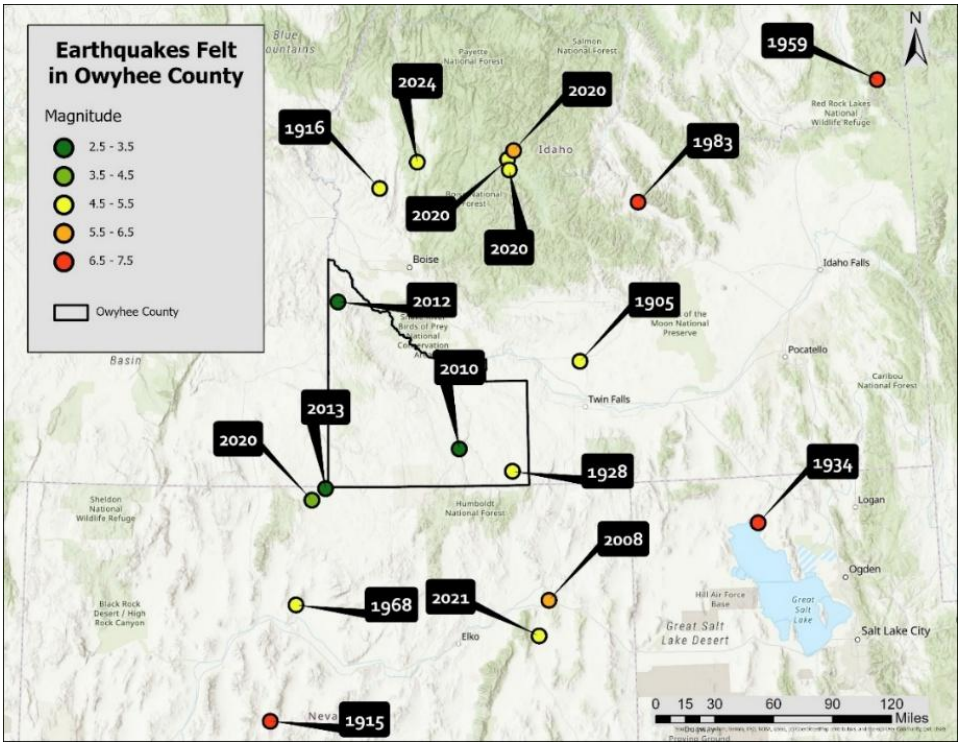


Figure 27) The epicenters of earthquakes known to have produced at least weak shaking in Owyhee County according to USGS "Did You Feel It" results and intensity shake maps. The events are color coded by magnitude and labeled by the year that they occurred.

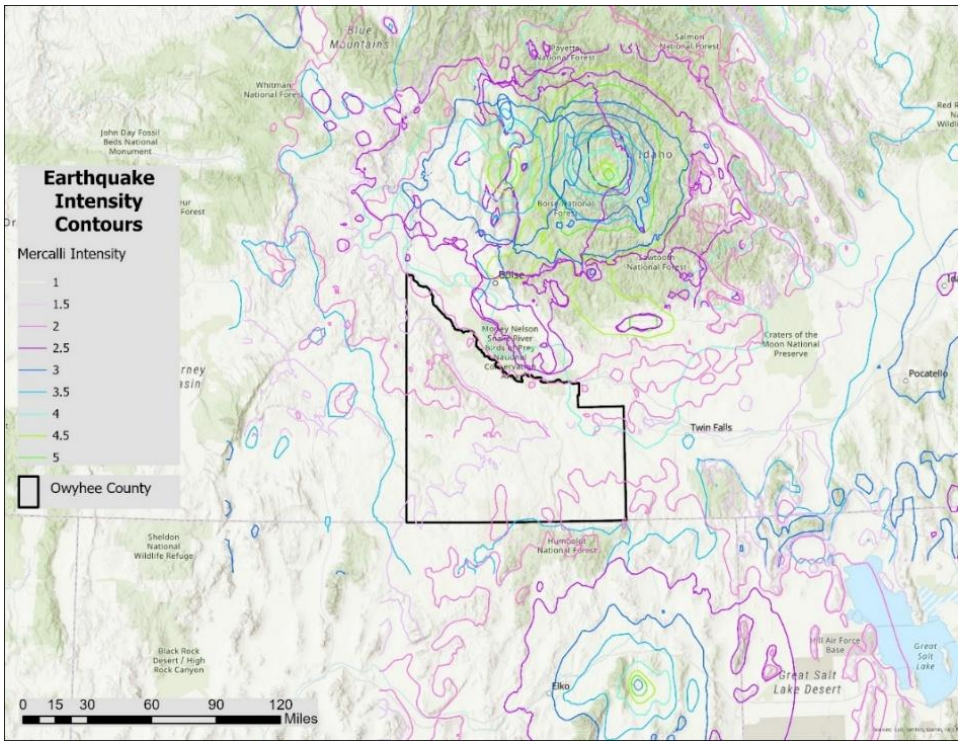


Figure 28) An overview of earthquake intensity contours in and around Owyhee County Since the last plan update. Only light and weak shaking has been experienced in the county during this time frame.

5.4.3 PROBABILITY OF FUTURE OCCURRENCE

Based on historical data and the annualized frequency in **Table 27**, earthquakes are *unlikely* to occur in Owyhee County each year. The US Geologic Survey says: "Neither the USGS nor any other scientists have ever predicted a major earthquake. We do not know how, and we do not expect to know how any time in the foreseeable future. USGS scientists can only calculate the probability that a significant earthquake will occur in a specific area within a certain number of years" *(USGS, n.d.).*

Table 27) Annualized Frequency based on the 2021 dataset according to FEMA.

FEMA National Risk Index			
Hazard Type	**Annualized Frequency**	**Events on Record**	**Period of Record**
Earthquake	0.077% chance per year	n/a	2021 dataset
Probability of Future Events			
Unlikely	Less than 1% probability of occurrence in the next year or a recurrence interval of greater than every 100 years		

While there are numerous NW-SE trending faults in the county, they do not appear to be seismically active at this time. There are some seismically active regions within several hundred miles of the county in northern Nevada and Utah, central Idaho, and the Yellowstone Hotspot. However, earthquakes originating in these areas are likely to only result in weak to moderate shaking in Owyhee County at most *(Wood, 1991).*

According to the USGS Earthquake Hazards Program, the majority of Owyhee County could expect 4-10 instances of damaging earthquake shaking in the next 10,000 years, and only minor events are projected for the county in the next 50 years **(Figure 29)**. While risk exists, it is minimal compared to more seismically active regions *(USGS, 2019)*.

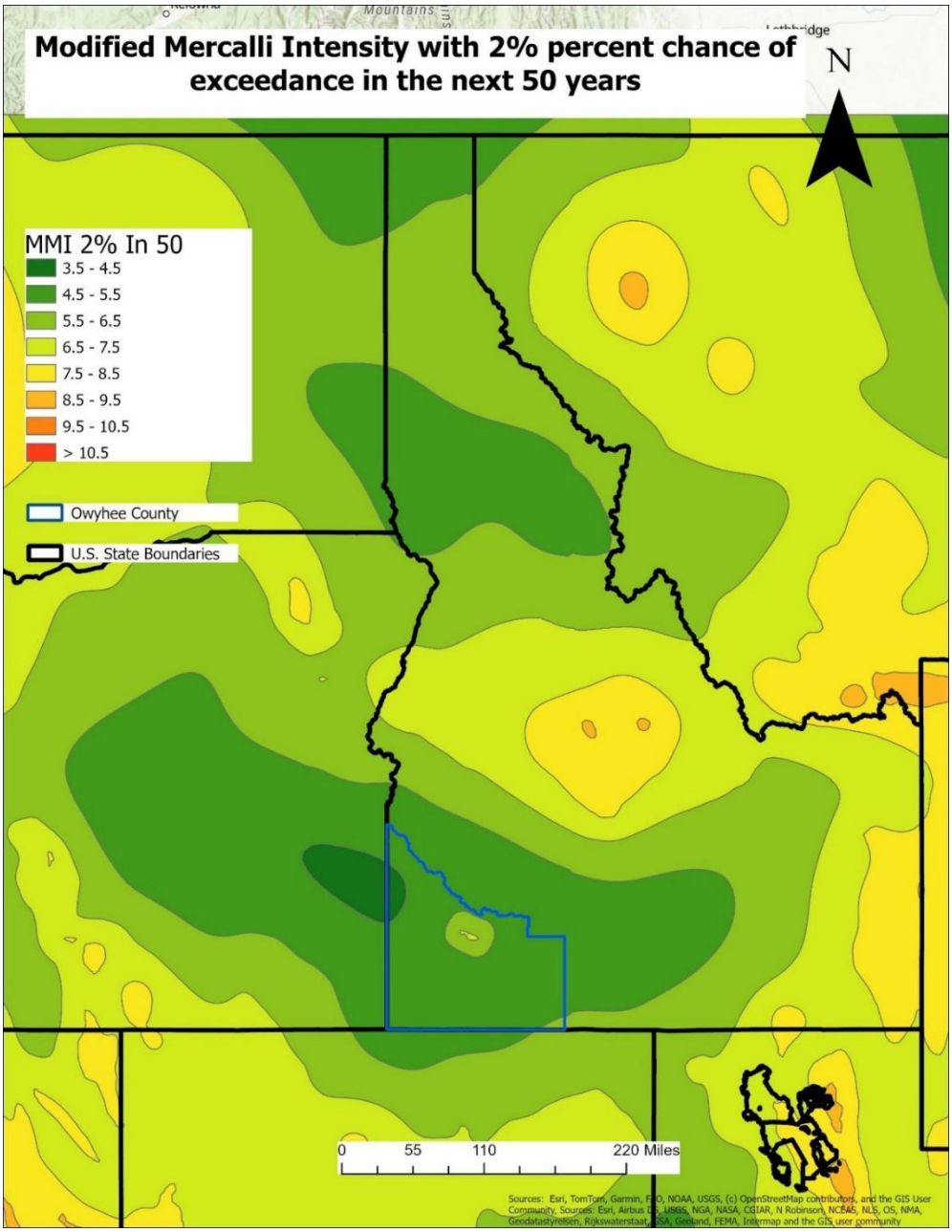


Figure 29) A regional view of seismic shaking hazard is depicted in this figure. Earthquake shaking is reported in Modified Mercalli Intensity 2% chance of exceedance in 50 years, meaning there is a 2% chance of shaking in excess of that value in the next 50 years.

5.4.4 IMPACTS

All of Owyhee County could potentially be affected by earthquakes. Although there will be some variation at the local level due to the location of the epicenter, impacts from earthquakes are expected to be similar across the county.

Based on geologic surveys and GPS studies, Owyhee County lies in a region of minimal seismic deformation with little active faulting nearby. While Idaho contains significant seismic sources like the Lost River and Sawtooth faults, those hazards are located in other parts of the state, making strong shaking within

Owyhee County extremely unlikely *(Gray & Lifton, 2023; Hobbs & Toda, 2020).* Most recorded shaking within the county has been light, and there are no documented cases of major damage. Nonetheless, even low to moderate shaking from distant events could have localized impacts, particularly in older or unreinforced structures that were not built to current seismic standards.

Potential impacts include minor structural damage, such as cracked foundations or walls, disruptions to utilities and communication networks, and rockfalls or landslides in steeper terrain, especially near river canyons. Agricultural equipment, transportation corridors, and energy infrastructure such as pipelines or substations could also be susceptible to ground motion, albeit minimally.

Another impact that has been reported by Owyhee County residents is the closing and opening of artesian springs. A major earthquake in October 1915 originated in northern Nevada and shook southern Idaho. Although no major damage was recorded, regional ranchers reported springs running murky or drying up altogether *(University of Nevada, Reno, n.d.).* According to the County's Emergency Manager, there are anecdotal accounts of similar effects to springs used by ranchers in the Owyhee County in more recent decades.

5.4.4.1 CITY OF HOMEDALE

Overall, the same potential risks and vulnerabilities that impact Owyhee County also apply to the city Homedale. There are 1,017 total housing structures (98% occupied and 2% vacant) and 3,006 people in Homedale as of 2023 that could be affected by an earthquake.

5.4.4.2 CITY OF MARSING

Overall, the same potential risks and vulnerabilities that impact Owyhee County also apply to the city of Moyie Springs. There are 515 total housing units (98% occupied and 2% vacant) and 1,245 people in Marsing as of 2023 that could be affected by an earthquake.

5.4.4.3 CITY OF GRAND VIEW

Overall, the same potential risks and vulnerabilities that impact Owyhee County also apply to the Kootenai Tribe of Idaho. There are 200 total housing units (88% occupied and 12% vacant) and 431 people in Grand View as of 2023 that could be affected by an earthquake.

5.4.5 DEVELOPMENT TRENDS

Earthquake vulnerability in Owyhee County remains largely unchanged by development. There have been no major public works projects, school expansions, or large-scale commercial developments that introduce new clusters of unreinforced masonry or other seismic-sensitive structures. Regional infrastructure continues as previously documented, and the geographic distribution of critical facilities has remained stable since the 2018 plan.

5.4.6 VALUE OF RESOURCES AT RISK

According to the FEMA National Risk Index, expected annual losses from earthquake activity in Owyhee County are approximately $104,099, with an exposure of over $140 billion **(Table 28).** This means that, on average, FEMA estimates around $104,099 in damage and disruption may occur each year due to earthquakes. The relatively low expected annual loss figure suggests that while there is significant value at risk, the probability of a damaging earthquake occurring in the county is very low.

Table 28) Exposure and Expected Annual Loss for Owyhee County from earthquakes according to FEMA.

FEMA National Risk Index		
Earthquake	**Risk Index Rating and Score:**	**Very Low (34.5)**
Total Values at Risk	Exposure Values	$140,665,043,000
	Expected Annual Loss	$104,099

5.5 LANDSLIDE

5.5.1 DESCRIPTION

The term “landslide” encompasses several types of occurrences (including mudslides) in which slope-forming materials such as rock and soil move downward under the influence of gravity. Such downward movement may occur as the result of an increase in the weight of slope-forming materials, an increase in the gradient (angle) of the slope, a decrease in the forces resisting downward motion (friction or material strength), or a combination of these factors. Factors that may trigger a landslide include weather related events such as heavy rainfall (one of the most common contributors), erosion, freeze-thaw weakening of geologic structures, and human causes such as excavation and mining, deforestation, vibration from explosions, or other sources, and such geologic causes as earthquake, volcanic activity, and shearing or fissuring. The speed of descent ranges from sudden and rapid to an almost imperceptibly slow creep where effects are only observable over a period of months or years *(Lifton, n.d.).*

5.5.2 LOCAL EVENT HISTORY

Owyhee County has limited records of large, damaging landslides affecting its population centers directly. However, rural roads like Silver City Road have been affected by mudslides and rockfall, including during the winter and spring of 2006, following the New Year’s flood that year which precipitated a FEMA Major Disaster Declaration **(Figure 30)**. Recurrent damage to the road continued through the spring due to high flows in the adjacent Scotch Bob Creek, and closures continued intermittently until October 2006 as the damage was repaired, and new culverts were installed. Over $1 million worth of damage was estimated to have occurred as of April 2006.

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From page 1

√ Flooding

Of most concern is the Owyhee River where big flows into the reservoir were predicted.

While inflows had dropped below 9,000 cubic feet per second (cfs) Thursday, they began increasing Friday afternoon and were back above 11,000 cfs. Saturday morning.

However, storage in the Owyhee Reservoir did get down near the Owyhee Irrigation District's goal of 670,000 acre feet.

The Owyhee Irrigation District baseline storage goal was designed to create more space to help control any major runoff. Discharge from the reservoir remained above 10,000 cfs.

According to a news release from the Vale Bureau of Land Management, the road to Birch Creek Ranch near Jordan Valley is currently impassable. The site is a popular pick up destination for floaters on the Owyhee River who are advised to check with their shuttle operator or the Vale District Office before making plans to go into the area.

Idaho Governor Dirk Kempthorne declared another statewide disaster emergency because of flooding Friday in the Boise and Gooding area.

Heavy spring rains and runoff have already saturated Treasure Valley waterways and melting snowpack means Idaho residents may be at risk for several more weeks.

"Above average snow pack in Idaho's mountains, above average spring precipitation and a rise in temperatures has created an imminent threat," Kempthorne said in a release Friday.

As for the Silver City Road, work should begin very soon, Aman said as the county plans to hire a consulting engineer firm. He said the firm would be paid for by FEMA.

"They will have 10-14 days to inspect the site, write up a bid and get something going," Aman said. "It has to be published for 14 days, but after that, we will start work immediately."

Aman said, if all goes well, the road could be opened as soon as mid June. But if the bid is not accepted, the road could still remain closed until this fall.

"I realize it has caused a lot of grief for a lot of people, including us," Aman said. "We have to keep the road closed to keep people safe and to keep Silver City safe. If it stretches out past mid June, we will probably go in and build a makeshift trail for four wheelers, or four-wheel drives to allow homeowners and emergency crews up there. But the more we do that and once construction starts, we will have to keep people out. It could set construction back if people are going back and forth."

Aman said with the additional damage, the county is looking at more money to repair the damages. He said the estimate is now at over $1 million.

"Everyone is working on this endlessly," Aman said.

"It is a top priority for us. Either the county will open it to certain vehicles, but we will get it open for needed things. Even if it was open right now, you couldn't get in because the snow is still too deep."

Aman said he is optimistic about the work that is planned. He said the area has been declared a categorically excluded project, which means environmental issues do not need to be addressed.

"They don't have to worry about snails, fish, plants, it can be done without hundreds of permits," Aman said. "No environmental assessment or environmental statement has to be done. Those can take many months to do, so this is good news."

— CAB

Silver City Road receives more damage

Scotch Bob Creek continues to flow over the Silver City Road last week, causing additional damage to the area already devastated by January flooding. High run-off is hitting the area as the area snowpack begins to melt. Mud slides also have struck the road, which is still in need of repairs from damage suffered in the original New Year's flooding. Photo by Larry McDaniel

Mud slides present new challenge

Mud, rocks and debris have been sliding onto the Silver City Road, compounding the damage that had been caused from flooding at the beginning of the year. Owyhee County Sheriff Gary Aman and county officials have continued to meet with officials from the Federal Emergency Management Agency (FEMA) and Homeland Security in an attempt to get the road open as soon as possible. Photo by Larry McDaniel

Figure 30) An excerpt from the April 19, 2006 edition of the Owyhee Avalanche is pictured above, describing damage from the recurring floods and associated mudslides and rockfalls along the Silver City Road in the winter and spring of 2006.

Moreover, mas movement events elsewhere along the Snake River corridor in southern Idaho demonstrate the potential for large-scale slope failures at similar sites within and adjacent to Owyhee County, especially where basalt flows overlie unconsolidated sediments near canyon rims.

5.5.2.1 THE 1993 BLISS LANDSLIDE (GOODING COUNTY)

The well-studied Bliss Landslide occurred just south of Bliss, Idaho **(Figure 31)**. Triggered by a combination of heavy rainfall following drought, fractured basalt caprock, and weak lacustrine deposits of the Glenns Ferry Formation and Yahoo Clay, this massive landslide:

- Destroyed a section of Shoestring Road.
- Temporarily dammed the Snake River, forcing the channel to reroute.
- Left the slope in a state of ongoing movement and instability

This event illustrates how moderate hydrologic changes and geologic weakness zones can lead to widespread, long-lasting impacts in landscapes similar to those found in parts of Owyhee County, such as the canyon scene pictured in **Figure 32** (*Gillerman, 2001)*.

Figure 31) An image of the aftermath of the 1993 Bliss Landslide is pictured above. Analogous sites can be found in the Snake River corridor in and immediately adjacent to Owyhee County (Bonnichsen and Godchaux, 2006).

Additional landslides have been identified along the Snake River Canyon, including in and adjacent to Owyhee County. Many of these are large prehistoric rotational slides that shaped the canyon walls, as well as smaller, shallow debris slides triggered by irrigation runoff or heavy precipitation. Some more recent regional incidents may have had minor impacts on agricultural fields, canals, and recreational areas, although few have resulted in notable damage due to the remoteness of many sites *(Bonnichsen and Godchaux, 2006).*

Owyhee County's Snake River corridor shares similar geologic characteristics, particularly near Murphy, Grand View, and Bruneau, where basalt-capped ridges overlook the river. Though no major impacts from landslides have been documented in Owyhee County, the underlying presence of unconsolidated sedimentary formations and periodic saturation from irrigation or rainfall could, in rare conditions, contribute to localized slope failures *(Bonnichsen and Godchaux, 2006)*.

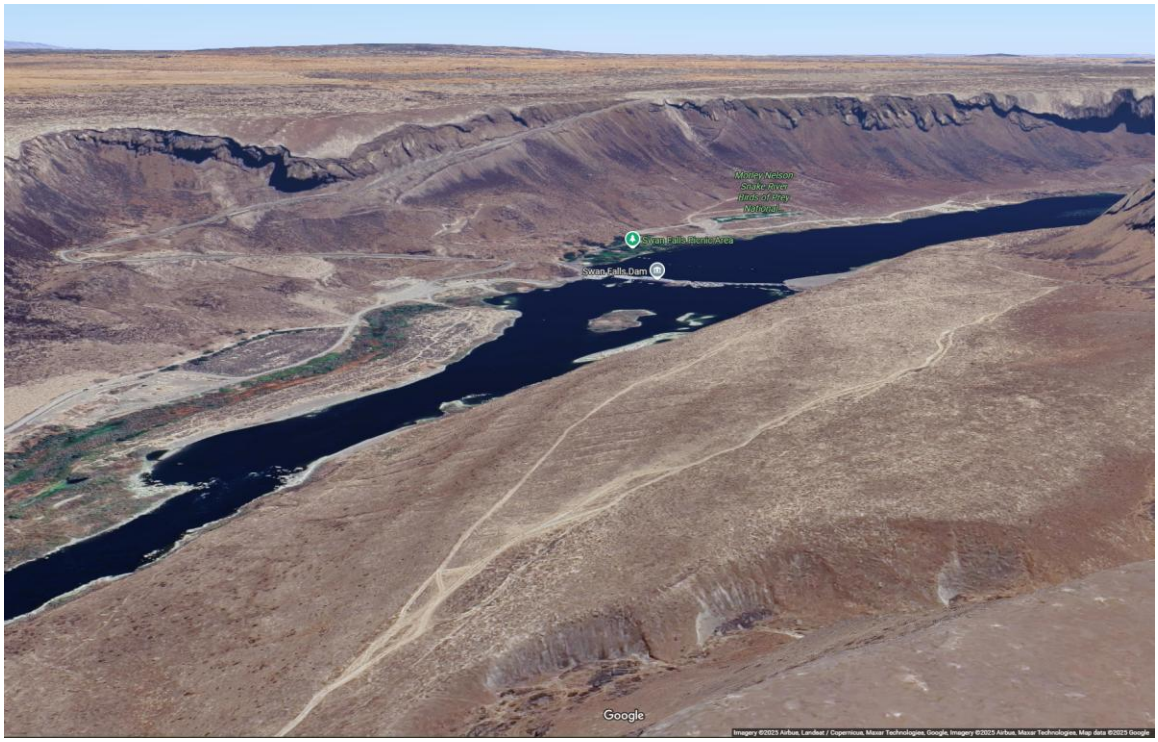

Figure 32) This is a snapshot of Google Imagery overlooking the Swan Falls Dam from the south bank of the Snake River in Owyhee County, about 9 miles northeast of Murphy. Although uncommon, landslides have occurred in nearby areas with similar lithology with basalt flows overlaying unconsolidated sediments (Lifton, n.d.). However, the risk of damaging landslides in Owyhee County is low.

5.5.2.2 IDAHO GEOLOGICAL SURVEY LANDSLIDE OCCURRENCES

Despite the lack of recent documented landslides in the county, numerous past landslide perimeter and point locations have been mapped in Owyhee County as part of the Idaho Geological Survey's efforts to construct a database of past slope failure occurrences throughout the state *(Lifton et al., 2021)*. These features are prehistoric in origin, with no evidence of recent movement, and are largely located in remote areas with limited infrastructure. However, several are adjacent to major transportation corridors like US Highway 95 and various county roads **(Figure 33)**.

The landslide footprints were interpreted from *Bonnichsen and Godchaux (2006)*. Additional landslide locations in the northwest, southwest, and south-central sectors of Owyhee County were documented as point locations by *Adams and Breckenridge (1991)* through aerial photo interpretation **(Figure 33).** However, these point-based features have limited spatial accuracy.

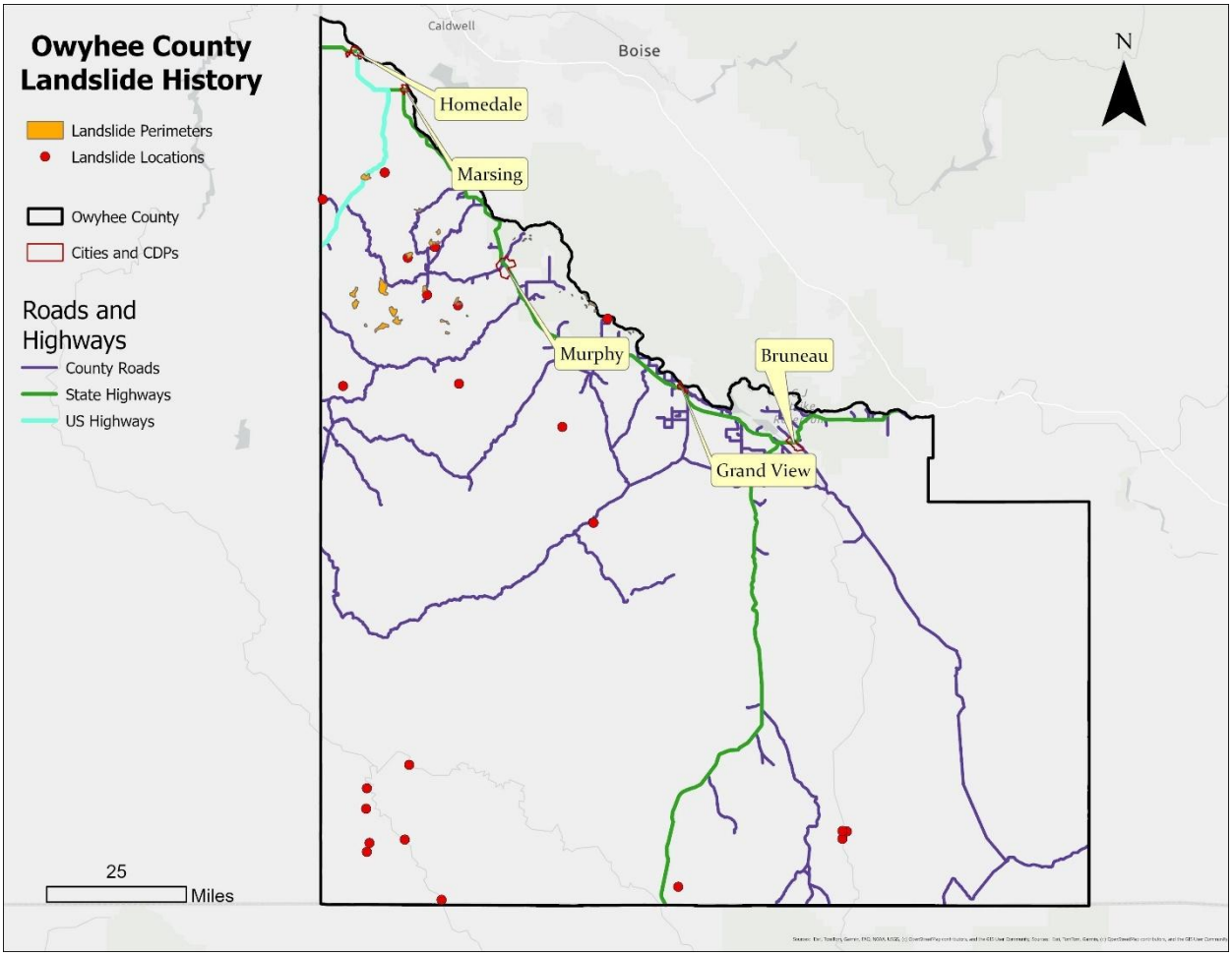

Figure 33) Landslide locations from the Idaho Geological Survey *(Lifton et al., 2021).* The orange polygons are landslide perimeter with good spatial accuracy, while the red landslide points are approximate locations of past landslides with more limited accuracy.

5.5.3 PROBABILITY OF FUTURE OCCURRENCE

Based on historical data and FEMA's *Probability of Future Events* definitions, landslides and mudslides are considered *unlikely* to occur in Owyhee County in any given year **(Table 29).**

Table 29) Annualized frequency for landslides in Owyhee County according to FEMA.

FEMA National Risk Index			
Hazard Type	**Annualized Frequency**	**Events on Record**	**Period of Record**
Landslide	0 events per year	0	2010-2021 (12 years)
Probability of Future Events			
Unlikely	Less than 1% probability of occurrence in the next year or a recurrence interval of greater than every 100 years		

Although no landslide events are documented in FEMA's records for the county, the Idaho State Hazard Mitigation Plan identifies areas of geologic susceptibility throughout the region, particularly along the

steep canyon walls of deeply incised river valleys *(Idaho Office of Emergency Management [IOEM], 2018).* These areas are largely uninhabited, but isolated communities such as Silver City and Murphy Hot Springs are more exposed due to their proximity to steep, erosion-prone slopes. Additionally, certain sections of U.S. Highway 95 in northwestern Owyhee County traverse moderately steep terrain. While the risk of landslides in this segment is lower than in areas farther north, where the highway intersects near-vertical slopes of unconsolidated materials, it still warrants contingency planning to ensure transportation safety, especially during and after events like severe weather or wildfire *(IOEM, 2018).*

5.5.3.1 LANDSLIDE SUSCEPTIBILITY MODEL

While it should not be interpreted as a forecasting tool for where landslide may occur, the US Geological Survey modeled landslide susceptibility throughout the United States and Puerto Rico based on a linear regression model incorporating past landslide occurrences and slope risk *(Belair et al., 2024)*.

As is shown in **Figure 34,** landslides and debris flows in Owyhee County are most likely to occur along steep slopes, particularly in rugged terrain such as the Owyhee, Bruneau, and Jarbidge canyons or in the mountainous portions of the county. These events may be triggered by intense precipitation, rapid snowmelt, seismic activity, or the aftermath of wildfires, each of which can compromise slope integrity by removing vegetation and saturating soils *(IOEM, 2018; USGS, 2005).*

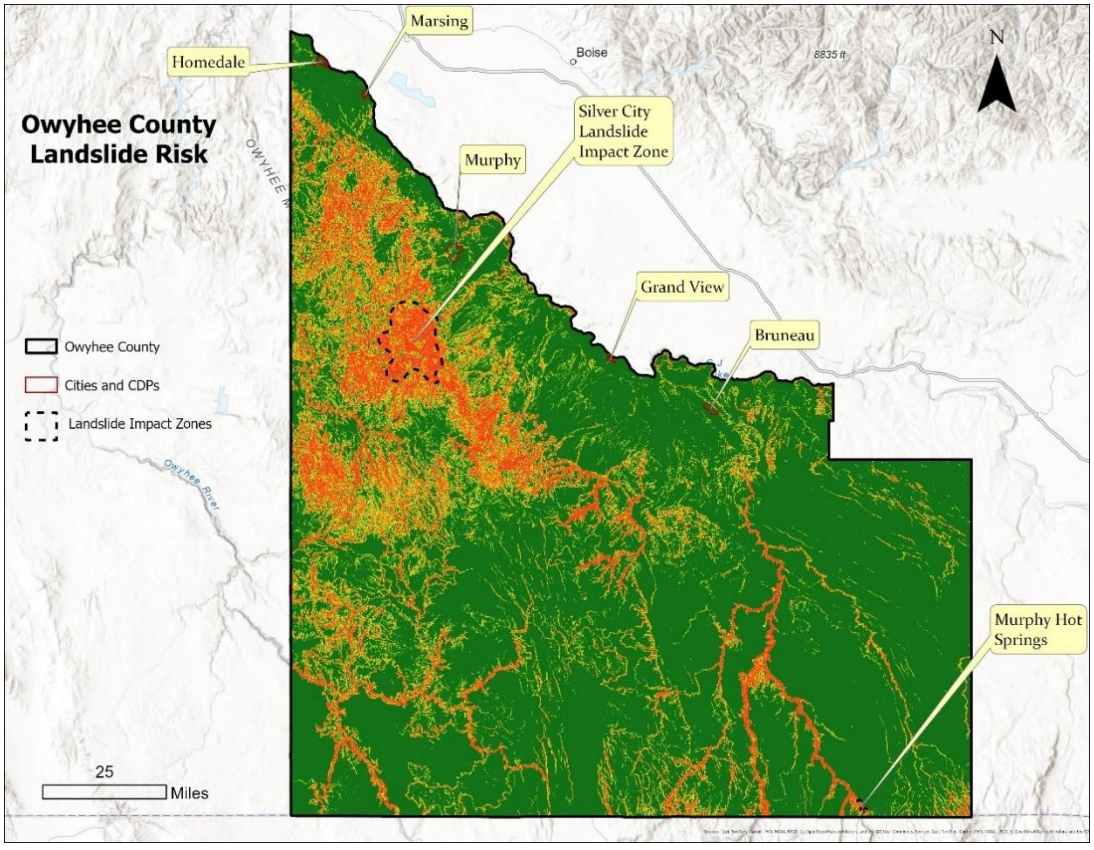

Figure 34) The results of the USGS Landslide Susceptibility model are displayed here for Owyhee County, along with the locations of notable communities, including all three incorporated cities, as well as Silver City and Murphy Hot Springs, the latter two of which have been identified as high-risk in past planning efforts.

5.5.4 IMPACTS

5.5.4.1 OWYHEE COUNTY

While landslides typically occur in remote and sparsely populated areas of the county, they may still affect environmental quality, access routes, and rural infrastructure.

Two communities in unincorporated Owyhee County, Silver City and Murphy Hot Springs, have been identified in previous planning efforts as being within Landslide Impact Zones due to their locations near steep terrain and limited access roads. Slope failures along routes like Silver City or Three Creek Roads could strand local residents or visitors given the limited access and egress to these remote communities (*Owyhee County, 2018).* Additionally, U.S. Highway 95, a critical transportation corridor, runs adjacent to moderately steep slopes in parts of the northwestern county. Although the risk of major slides in this corridor is relatively low, localized slope failures or mudflows could lead to temporary closures, detours, or damage to road infrastructure.

While unlikely, other possible impacts could include:

- Reduced water quality due to increased sedimentation in creeks and rivers, which can affect aquatic habitats and downstream irrigation infrastructure *(USGS, 2005).*
- Loss or restricted use of land, particularly in grazing allotments, riparian zones, or areas with sensitive environmental conditions.
- Rare but possible channel disruption or landslide-dammed water flow.
- Damage to or destruction of structures, particularly in Silver City or Murphy Hot Springs, where historic buildings and narrow access routes intersect with steep slopes.
- Loss of tourist revenues and recreational opportunities, especially if landslides damage scenic areas, trails, or access to popular canyons.
- Injuries or deaths, particularly to recreational users in high-risk areas, such as rock-climbers, OHV enthusiasts, rafters, etc.
- Decreased property values in localized high-risk zones.

5.5.4.2 CITY OF HOMEDALE

Homedale is located in the northwestern corner of Owyhee County on the broad, flat Snake River Plain. The surrounding terrain is composed primarily of agricultural land and irrigation canals, with no significant slopes or nearby canyon systems. As a result, the risk of landslides or debris flows is minimal. However, the City may be indirectly affected by bank erosion, particularly during high-flow events, or by sedimentation in irrigation systems due to upstream erosion or slope failures. These impacts could affect water quality or infrastructure functionality but are unlikely to be widespread or severe *(IOEM, 2018; USGS, 1981).*

5.5.4.3 CITY OF MARSING

Marsing is situated along the eastern edge of Owyhee County, on the Snake River floodplain, surrounded by low-relief agricultural and residential areas. Like Homedale, Marsing is on flat terrain and not directly

exposed to landslide-prone slopes. While it lies relatively near the Owyhee Front, the steeper slopes are west and south of town and do not immediately threaten the city itself. As such, the direct risk of landslides or debris flows to the City is very low. Minor bank erosion along the river and sedimentation impacts on irrigation structures remain the most plausible concerns related to slope stability in this area, although even these risks are low for the city and its surroundings *(IOEM, 2018; USGS, 1981).*

5.5.4.4 CITY OF GRAND VIEW

Grand View sits on flat terrain along the Snake River in southern Owyhee County, well removed from the steep slopes typically associated with landslide hazards. As such, the direct risk of landslides or debris flows is minimal. However, basalt bluffs underlain by unconsolidated sediments across the river could experience localized slope failures under certain conditions such as heavy rainfall *(USGS, 2005).* While these events are unlikely to impact the city directly, they could contribute to minor sedimentation in the Snake River, potentially affecting irrigation infrastructure or bank stability over time. Overall risk remains very low, however *(IOEM, 2018; USGS, 1981).*

5.5.5 DEVELOPMENT TRENDS

Significant development is unlikely to occur in the more landslide-prone regions of Owyhee County, and recent construction and demographic changes have not notably increased the county's risks from landslides.

5.5.6 VALUE OF RESOURCES AT RISK

According to the FEMA National Risk Index, the estimated annual losses from landslide in Owyhee County total approximately $21,900, with total exposure being nearly $20 billion **(Table 30).** As such, while exposure is significant, actual losses from landslide on an annual basis are expected to be very small in the county.

Table 30) Risk index rating, exposure, and expected annual loss for Owyhee County from landslides according to FEMA.

FEMA National Risk Index		
Landslide/Mudslide	**Risk Index Rating and Score:**	**Relatively Low (71.4)**
Total Values at Risk	Exposure Values	$19.9 billion
	Expected Annual Loss	$21,900

Figure 35 & **Figure 36** as well as **Table 31** below highlight parcel values within each Landslide Impact Zone. The lot values are derived from Owyhee County parcel data.

Table 31) Parcel and improvement values within each Landslide Impact Zone (LIZ) according to parcel data from the Owyhee County Assessor, as well as the number of buildings according to the FEMA USA Structures dataset.

LIZ	Parcels	Buildings	Land Value	Improvement Value
Silver City	137	71	$1,658,203	$5,800,599
Murphy Hot Springs	147	45	$2,865,308	$4,256,030

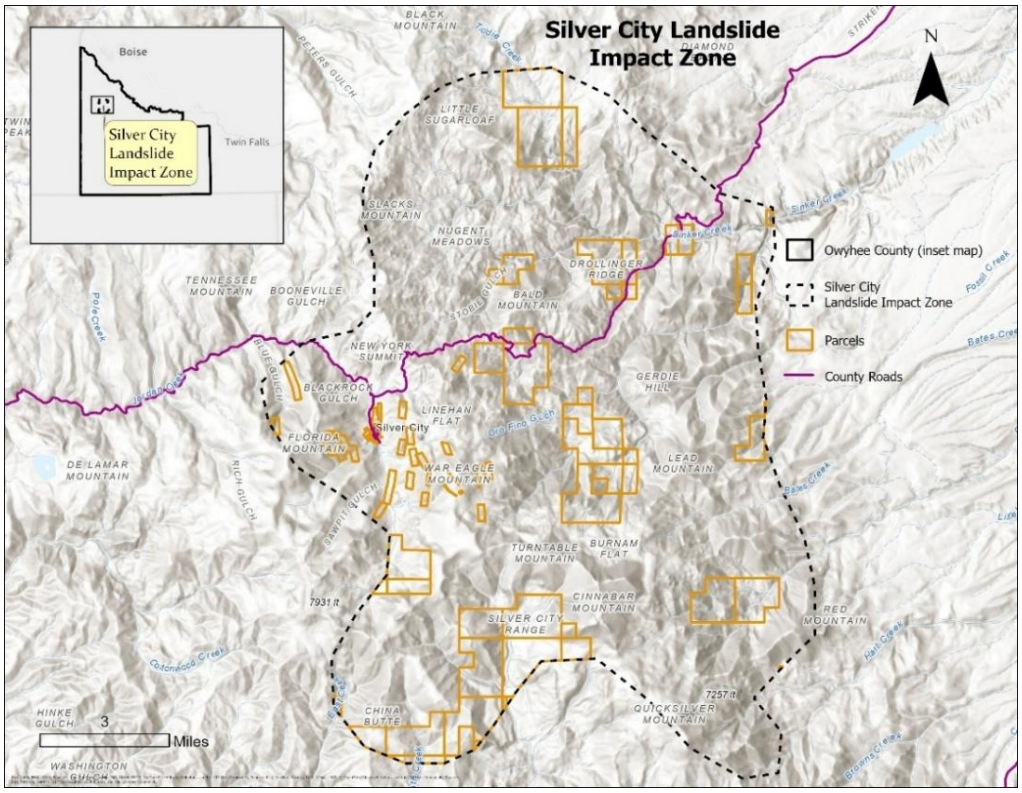

Figure 35) An overview of the Silver City Landslide Impact Area, including parcels and county roads.

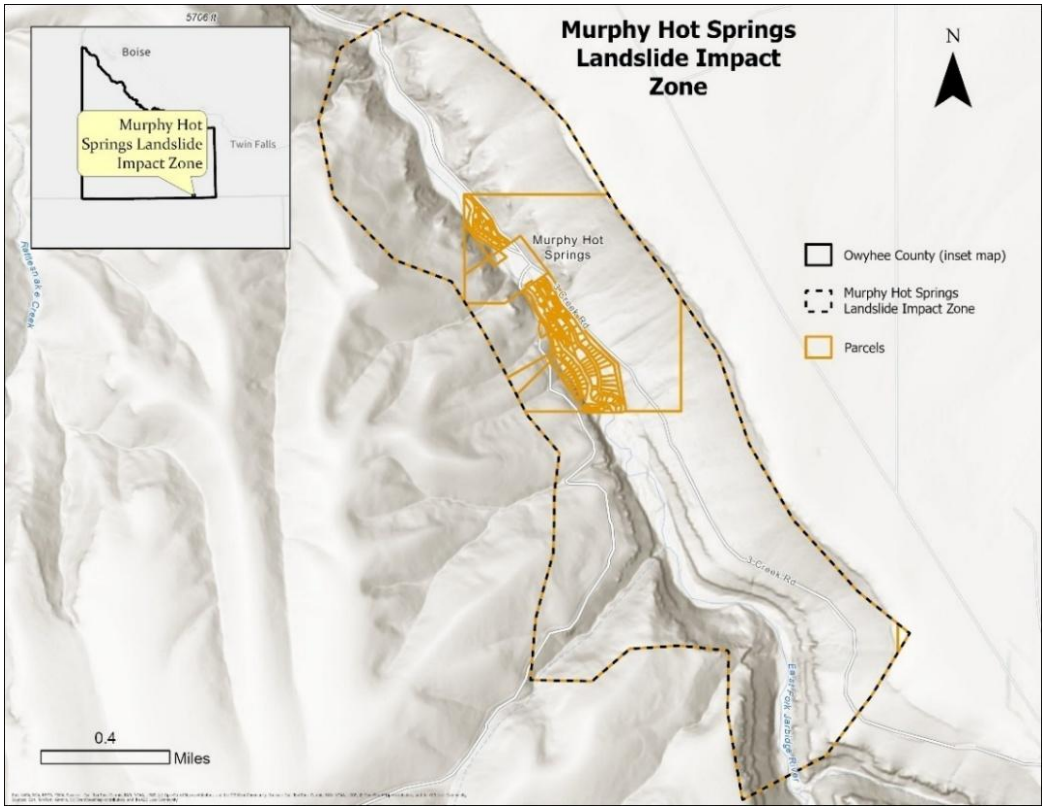

Figure 36) An overview of the Murphy Hot Springs Landslide Impact Zone, including parcels.

5.6 SEVERE WEATHER

5.6.1 DESCRIPTION

The severe weather hazards identified for Owyhee County include a range of atmospheric events with varying intensity and frequency, categorized by the National Risk Index and defined by agencies such as the National Weather Service and FEMA *(National Weather Service, n.d.; FEMA, 2021)*:

- Heat waves are extended periods of abnormally high temperatures, while cold waves refer to sudden and sustained drops in temperature well below normal for the area.
- Lightning is a rapid electrical discharge during thunderstorms, often occurring with minimal warning.
- Winter weather encompasses events like snowstorms and freezing rain, which develop under cold atmospheric conditions.
- Tornadoes are violently rotating columns of air extending from thunderstorms to the ground, though they are infrequent in this region.
- Hail refers to solid balls of ice formed in strong updrafts within thunderstorms.
- Strong wind events involve non-tornadic high-speed winds, typically associated with frontal systems or thunderstorms.
- Ice storms are caused by prolonged freezing rain that coats surfaces in a layer of ice.

5.6.2 LOCAL EVENT HISTORY

The following is a list of severe weather events from the NOAA Event Database since the last plan update, grouped by event type, and shown in **Table 32** arranged by hazard type:

5.6.2.1 DUST STORM

- April 29, 2024 - Treasure Valley: A dust storm related to a cold front caused visibility issues in Caldwell, near Owyhee County. While direct impacts in Owyhee County are unclear, regional transportation would likely have been affected.

5.6.2.2 EXCESSIVE HEAT

- September 6, 2022 - Treasure Valley: A prolonged heat wave brought record-breaking triple-digit temperatures across the region, including southwestern Idaho. One fatality was reported in New Plymouth, Payette County: tragically, a child left in a hot car *(Zenger, 2022)*.

5.6.2.3 HAIL

- June 5 & August 11, 2022 - Murphy: Severe thunderstorms produced large hail in and near Murphy, ID. These storms were part of broader monsoon-influenced systems bringing multiple rounds of convective activity.

5.6.2.4 HEAVY RAIN

- June 12, 2022 & June 9, 2023 - Reynolds; March 14, 2023 & August 4, 2023 - Triangle; May 4, 2024 - Triangle: These storms brought localized heavy rainfall and flash flooding to remote areas of Owyhee County. Notably, the May 2024 event raised flood concerns downstream near the Owyhee Reservoir.

5.6.2.5 HEAVY SNOW

- February 8, 2025 - Lower Treasure Valley: A Pacific storm brought 4-7 inches of snow and 50 mph wind gusts to the Treasure Valley, including parts of Owyhee County.
- January 13, 2024 - Lower Treasure Valley: A mesoscale snow band near the Owyhee Mountains and Homedale caused traffic disruptions, particularly along US Highway 20, directly affecting access routes in the county.
- March 29, 2023 - Owyhee Mountains: Snow accumulation above 5,000 feet led to road ponding and difficult travel in surrounding valleys, making this a notable event for higher elevation areas within the county.

5.6.2.6 HIGH/STRONG WINDS

- March 16, 2025 - Southwest Highlands: Extreme winds formed in the Snake River Basin as far south as the Duck Valley Reservation, with maximum speeds recorded at 61 mph, and sustained winds of 42 mph.
- December 2, 2023 & March 2, 2024 - Owyhee Mountains: Severe wind events affected travel and operations in the mountains, including nearby air traffic.

5.6.2.7 THUNDERSTORM WINDS

- May 11, 2025 - Hot Springs, Idaho: An upper-level trough moved through SW Idaho, causing a 63-mph wind gust to be observed at a mesonet weather station near Hot Springs, Owyhee County.
- July 24, 2024 - Three Creek Region: A severe wind gust was recorded at a local weather station, a result of a shortwave trough and associated cold front in SW Idaho.
- June 6, 2023 - Bruneau: Severe storms caused flooding and wind damage from Grandview to Boise.
- August 11, 2022 - Murphy: A significant thunderstorm produced damaging winds and heavy rain affected central Owyhee County.

5.6.2.8 TORNADO

- May 27, 2023 – Grand View: Funnel clouds and landspouts were reported near Grand View, Owyhee County.
- May 27, 2022 - Givens Hot Springs: A rare tornado event occurred near the Owyhee/Canyon County border, part of an unstable weather pattern.

5.6.2.9 WINTER WEATHER

- March 4 & April 6, 2024 - Upper Treasure Valley: Heavy snow and tree damage occurred in the Greater Boise Area, with possible indirect impacts on travel to/from Owyhee County.

5.6.2.10 OTHER EVENTS

Events such as cold season snowstorms (e.g., Nov 2022 - Jan 2024), high winds, and thunderstorms primarily impacted urban areas in the Treasure Valley, with little to no documented disruption in Owyhee County. However, they highlight regional vulnerabilities that could affect supply chains, emergency access, and transportation routes serving the county.

Table 32: Severe weather events from the NOAA Database, occurring from 1959-2017, and 2018-2025, as of October 2025. Injuries and fatalities are included at the bottom.

Category	1959–2017	2018–2025	Total
Occurrences by Event Type	-	-	-
Dense Fog	1	0	1
Dust Storm	0	1	1
Excessive Heat	0	1	1
Flash Flood	5	2	7
Flood	5	0	5
Hail	13	2	15
Heavy Rain	3	6	9
Heavy Snow	8	12	20
High Wind	3	6	9
Strong Wind	0	4	4
Thunderstorm Wind	15	5	18
Tornado	1	2	3
Wildfire	1	0	1
Winter Storm	5	0	5
Winter Weather	0	3	3
Total Occurrences	60	40	100
Injuries	4	0	4
Fatalities	1	0	1
Total Injuries + Fatalities	5	0	5
Property Damage	$190,000	$0	$190,000

5.6.3 PROBABILITY OF FUTURE OCCURRENCE

The probability of Owyhee County experiencing at least one severe weather event on an annual basis is very high **(Table 33)**.

Table 33) Annualized frequency data according to FEMA for the severe weather events identified in the Owyhee County hazard plan.

FEMA National Risk Index				
Hazard Type	**Annualized Frequency**	**Events on Record**	**Period of Record**	**Probability of Future Occurrence**
Cold Wave	0.1	2	2005-2021 (16 years)	Unlikely; 10-year Recurrence Interval
Hail	0.1	5	1986-2021 (34 years)	Unlikely; 10-year Recurrence Interval
Heat Wave	0.9	14	2005-2021 (16 years)	Likely; 1-year Recurrence Interval
Ice Storm	0.1	4	1946-2014 (67 years)	Unlikely; 10-year Recurrence Interval
Lightning	5	111	1991-2012 (22 years)	Highly Likely; 0.2-year Recurrence Interval
Strong Wind	0.2	7	1986-2021 (34 years)	Unlikely; 5-year Recurrence Interval
Tornado	0.0417	3	1950-2021 (72 years)	Unlikely; 25-year Recurrence Interval
Winter Weather	2.3	37	2005-2021 (16 years)	Highly Likely; 0.4-Year Recurrence Interval

The following is an assessment by specific weather hazard:

5.6.3.1 COLD WAVE

Cold waves are considered *Unlikely* in Owyhee County, with only two recorded events between 2005 and 2021, indicating a 10-year recurrence interval *(FEMA National Risk Index, 2023).*

5.6.3.2 HAIL

Hail events are *Unlikely*, with five occurrences over a 34-year period and a recurrence interval of approximately 10 years.

5.6.3.3 HEAT WAVE

Heat waves are *Likely*, with 14 events over 16 years (2005–2021), suggesting an annual recurrence pattern.

5.6.3.4 ICE STORM

Ice storms are *Unlikely*, with four events documented since 1946, resulting in a recurrence interval of about 10 years.

5.6.3.5 LIGHTNING

Lightning is *Highly Likely* in Owyhee County, with 111 events recorded over 22 years, yielding an approximate recurrence of once every 0.2 years.

5.6.3.6 STRONG WIND

Strong winds are classified as *Unlikely* by FEMA based on seven events over 34 years (5-year recurrence). However, regional weather patterns suggest strong, non-damaging wind events are more frequent, warranting a *Moderate* probability rating in local assessments *(Idaho Office of Emergency Management, 2023; NWS Boise, 2021).*

5.6.3.7 TORNADO

Tornadoes are *Very Unlikely*, with only three documented events between 1950 and 2021, indicating a 25-year recurrence interval.

5.6.3.8 WINTER WEATHER

Winter weather events are *Highly Likely*, with 37 recorded instances over 16 years, resulting in a recurrence interval of approximately 0.4 years.

5.6.4 IMPACTS

5.6.4.1 OWYHEE COUNTY

5.6.4.1.1 EXTREME HEAT

Extreme heat is especially hazardous to vulnerable populations such as older adults, children, individuals with chronic illnesses, and those without reliable cooling systems. High temperatures can lead to heat exhaustion, cramps, and potentially fatal heatstroke. While Owyhee County's rural character may mitigate some urban heat island effects, limited access to cooling centers and remote home locations can increase risk, particularly for older residents and agricultural workers. Nationally, over 1,700 heat-related deaths were reported in 2022 *(Phillips, 2025).* Beyond direct health effects, persistent heat can stress livestock, reduce rangeland forage, dry out vegetation, and elevate wildfire risks, compounding impacts to ranching operations.

5.6.4.1.2 EXTREME COLD

Cold waves in Owyhee County have a higher potential to impact sparsely populated rural communities, particularly those at higher elevations. Health risks include hypothermia and frostbite, especially for infants, the elderly, and those lacking adequate shelter or heating. With nighttime winter lows often dropping below 0° F, prolonged cold can increase heating demand, strain rural power infrastructure, and lead to frozen pipes or fuel shortages. Nationally, cold exposure caused approximately 3,571 deaths in 2022: more than double those from heat *(Phillips, 2025).* Rural areas are especially vulnerable to prolonged power outages during cold snaps, particularly for residents dependent on electrically powered oxygen systems.

5.6.4.1.3 LIGHTNING

Lightning is responsible for starting numerous wildfires in Owyhee County’s rangelands each year. While lightning-related fatalities and injuries are rare, the risk of wildfire ignition from cloud-to-ground strikes is significant, particularly during late summer dry periods. Lightning can also damage critical infrastructure or spark fires in remote areas where detection and response may be delayed, such as the Bruneau Desert and other outlying wildlands and rangelands. According to the *National Weather Service (2025),* lightning

causes dozens of wildfires in the state annually and is one of the leading natural causes of power outages nationwide.

5.6.4.1.4 HAIL

Though infrequent, hail events in Owyhee County can cause localized damage to vehicles, roofs, and crops. While most hailstorms are short-lived, even small hail can destroy tender crops and dent agricultural equipment. One documented hailstorm on July 14, 2007, caused $10,000 in property damage near Murphy, highlighting that while injuries are rare, economic losses are possible *(NOAA, 2024).* Unlike more hail-prone parts of the country, Owyhee sees these storms less often but still remains at risk during intense summer thunderstorms.

5.6.4.1.5 WINTER STORMS

Heavy snow, freezing rain, ice storms, and blizzard-like conditions can impact the higher elevations of Owyhee County, especially near Silver City and the Owyhee Mountains. While most of the county's population resides on the Snake River Plain where impacts are often less severe, winter weather can still lead to temporary travel disruptions, unsafe travel conditions due to snow, ice, and/or poor visibility, power outages, frozen pipes, and damage to structures. Some of the greatest risks come from unplowed roads, making rural access difficult for days at a time. Those relying on home medical equipment face heightened risks during outages *(NOAA, 2024).*

5.6.4.1.6 WIND AND THUNDERSTORMS

Severe windstorms and thunderstorms occasionally impact the county, with some causing property damage and/or downing power lines. For instance, on June 7, 2010, a thunderstorm with high winds caused $10,000 in damage to structures near Marsing *(NOAA, 2024).* Thunderstorms can disrupt rural transportation, particularly along Highway 95 and other primary corridors, potentially leading to increased accidents due to heavy rain and high winds.

5.6.4.1.7 TORNADOES

Though rare, tornadoes have occurred in Owyhee County. A tornado near Oreana in July 1998 caused roughly $30,000 in property damage. No injuries were reported, but the event demonstrated that tornadoes, while uncommon, are possible and may bring localized damage *(NOAA, 2024).*

5.6.4.2 CITY OF HOMEDALE

Overall, the same potential risks and vulnerabilities that impact Owyhee County also apply to the City of Homedale, although the risk of winter storms is not as pronounced as the high-elevation unincorporated areas in the interior-western part of the county.

13.8% of the population is over 65: this demographic is at higher risk for adverse health effects and accidents as a result of extreme heat and cold and may be less able to evacuate quickly in the event of a hazardous weather event. The poverty rate in the city is 19.7%: nearly twice that of the state overall *(ACS, 2024)*. Although severe weather events affect the entire population regardless of socioeconomic status, people below the poverty line are likely to face more issues with displacement/relocation and recovery and rehabilitation of property that was lost or damaged. Households with only one car would also be

particularly affected by vehicle damage as a result of hail or other severe storms, which may leave these families or individuals without transportation.

5.6.4.3 CITY OF MARSING

Overall, the same potential risks and vulnerabilities that impact Owyhee County also apply to the City of Marsing, although the risk of winter storms is not as pronounced as the high-elevation unincorporated areas in the interior-western part of the county.

27% of the population is over 65: this demographic is at higher risk for adverse health effects and accidents because of extreme heat and cold and may be less able to evacuate quickly in the event of a hazardous weather event. The poverty rate in the city is 11.1%: slightly higher than that of the state overall *(ACS, 2024)*. Although severe weather events affect the entire population regardless of socioeconomic status, people below the poverty line are likely to face more issues with displacement/relocation and recovery and rehabilitation of property that was lost or damaged. Households with only one car would also be particularly affected by vehicle damage as a result of hail or other severe storms, which may leave these families or individuals without transportation.

5.6.4.4 CITY OF GRAND VIEW

Overall, the same potential risks and vulnerabilities that impact Owyhee County also apply to the City of Marsing, although the risk of winter storms is not as pronounced as the high-elevation unincorporated areas in the interior-western part of the county.

25% of the population is over 65: this demographic is at higher risk for adverse health effects and accidents because of extreme heat and cold and may be less able to evacuate quickly in the event of a hazardous weather event. The poverty rate in the city is 19.3%: nearly double that of the state overall *(ACS, 2024)*. Although severe weather events affect the entire population regardless of socioeconomic status, people below the poverty line are likely to face more issues with displacement/relocation and recovery and rehabilitation of property that was lost or damaged. Households with only one car would also be particularly affected by vehicle damage as a result of hail or other severe storms, which may leave these families or individuals without transportation.

5.6.5 DEVELOPMENT TRENDS

Severe weather exposure is primarily a function of atmospheric and climatic factors. While the increase in population in the county and surrounding region since 2018 by definition increases potential exposure to severe weather, there has not been substantial development that would significantly modify community vulnerability to severe thunderstorms, hail, or winter storms beyond historical trends.

5.6.6 VALUE OF RESOURCES AT RISK

According to the NOAA Storm Events Database, 347 severe weather events have affected Owyhee County since records began in 1959. These events have resulted in 2 fatalities, 16 injuries, and approximately $100.3 million in property damage. It is important to note that these impacts may not have been confined

strictly to Owyhee County; NOAA often attributes damage estimates to broader impacted areas which encompass parts of the county, such as the Upper Treasure Valley Zone.

Among events specifically confined to Owyhee County, the NOAA Storm Events Database records 1 fatality, 4 injuries, and approximately $190,000 in property damage. Note that this analysis included floods and flash floods, which are often associated with heavy rain events. If hazards identified primarily as floods or flash floods are excluded, 0 deaths, 5 injuries, and $190,000 of property damage were recorded for Owyhee County.

Separately, FEMA estimates an Expected Annual Loss (EAL) of $340,927 from severe weather events in the county, with extreme temperatures (heat and cold waves) identified as the most impactful hazards in terms of annualized loss **(Table 34).**

Table 34) Expected Annual Loss ratings for various severe weather events in Owyhee County according to FEMA.

Hazard Type	Risk Index	EAL Value	Score	Exposure
Heat Wave	Relatively Low	$136,565	62.4	$140,468,228,290
Cold Wave	Relatively Moderate	$120,008	62.1	$138,334,952,968
Lightning	Very Low	$24,586	16.5	$140,154,677,113
Winter Weather	Relatively Low	$14,203	23.6	$140,468,228,290
Tornado	Very Low	$14,098	6.1	$140,468,228,290
Hail	Very Low	$12,905	16.3	$140,468,228,290
Strong Wind	Very Low	$9,763	6.2	$140,468,228,290
Ice Storm	Very Low	$8,799	20.2	$140,154,677,113
Total	n/a	$340,927 (sum)	26.7 (average)	$140,123,181,081 (average)

5.6.6.1 CITY OF HOMEDALE

There are 1,017 total housing structures (98% occupied and 2% vacant) and 3,006 people in Homedale as of 2023 that could be affected by severe weather. 63% of households were owner-occupied, with a median value of $200,000. About 19% of housing units are mobile homes, boats, RVs, vans, etc.: more than double the Idaho rate. These structures may be less robust and resilient to severe weather events compared to most single- and multi-unit domiciles.

5.6.6.2 CITY OF MARSING

There are 515 total housing units (98% occupied and 2% vacant) and 1,245 people in Marsing as of 2023 that could be affected by severe weather. 57% of households are owner-occupied, with a median value of $245,000. About 5% percent of housing units are mobile homes, boats, RVS, etc. These structures may be less robust and resilient to severe weather events than most single- and multi-unit domiciles.

5.6.6.3 CITY OF GRAND VIEW

There are 200 total housing units (88% occupied and 12% vacant) and 431 people in Grand View as of 2023 that could be affected by severe weather. Only 43% of households are owner-occupied, with a

median value of $174,100. About 35% percent of housing units are mobile homes. These structures may be less robust and resilient to severe weather events than most single- and multi-unit domiciles.

5.7 WILDLAND FIRE

5.7.1 DESCRIPTION

According to the U.S. Forest Service, a wildfire refers to any nonstructural, non-prescribed fire occurring in natural areas (*U.S. Forest Service, n.d.*). Typically, wildfires are understood as uncontrolled fires fueled by vegetation, oxygen, and heat, spreading through undeveloped landscapes (*National Wildfire Coordinating Group [NWCG], 2021*). For hazard assessment, wildfires are categorized as either "Wildland" fires: occurring in areas without development aside from infrastructure like roads and power lines, or "Wildland Urban Interface" (WUI) fires, which happen where natural landscapes intersect with human-built environments (*Federal Emergency Management Agency [FEMA], 2020*).

Wildfire is now widely recognized as an essential ecological process in wildland systems. Consequently, many wildland fires are generally allowed to burn unless they pose a threat to human life or property. However, in the WUI, aggressive fire suppression efforts are necessary, especially as human expansion into wildland areas increases. While lightning is the primary natural ignition source, most fires today result from human actions, whether accidental or deliberate (*Pyne et al., 2012*).

The behavior of wildfire, including their intensity and rate of spread, depends on various factors, including weather conditions (e.g., wind, temperature, rainfall), topography (e.g., slope), vegetation type and dryness, and the amount of available fuel (*Agee, 1993*).

In Idaho, fire has historically played a key role in shaping ecosystems. The seasonal occurrence of lightning-induced fires was once a regular part of the landscape during the summer months. Fire intensity and extent varied based on vegetation types, structure, and biomass accumulation. More frequent fire return intervals typically resulted in less significant ecological shifts (*Barrett et al., 1997*). In the region, fire events historically occurred every 1 to 47 years, with most intervals ranging from 5 to 20 years (*Morgan & Parsons, 2001*). When fires were less frequent, they tended to be more severe, leading to changes in vegetation type and structure. Over time, native plant species and communities evolved with fire as a natural disturbance factor, evident through species traits and fire history data such as fire scars and charcoal deposits, which demonstrate fire's long-standing influence in the Columbia Basin (*Wright & Bailey, 1982*).

5.7.2 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 fully 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 37).** 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 35**). 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 *(Smith, n.d.).*

The highest concentration of documented wildfires has historically been in the very thinly populated eastern third of the county, which is primarily made up of sagebrush and grasslands, with very sparse population or infrastructure **(Figure 38** & **Figure 39).** The majority of this area is under the jurisdiction of the Three Creek and Saylor Creek, RFPAs, respectively.

Despite the high number of ignitions county-wide, 30% were contained before exceeding 1 acre, or 371 out of a total of 1,203 ignitions from 1992-2024 *(NIFC, 2025).*

Table 35) Average wildfire size in acres and total acres burned per month from 1992-2024 in Owyhee County according to the NIFC dataset. The data were rounded to the nearest whole number.

Month	Average Incident Size	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

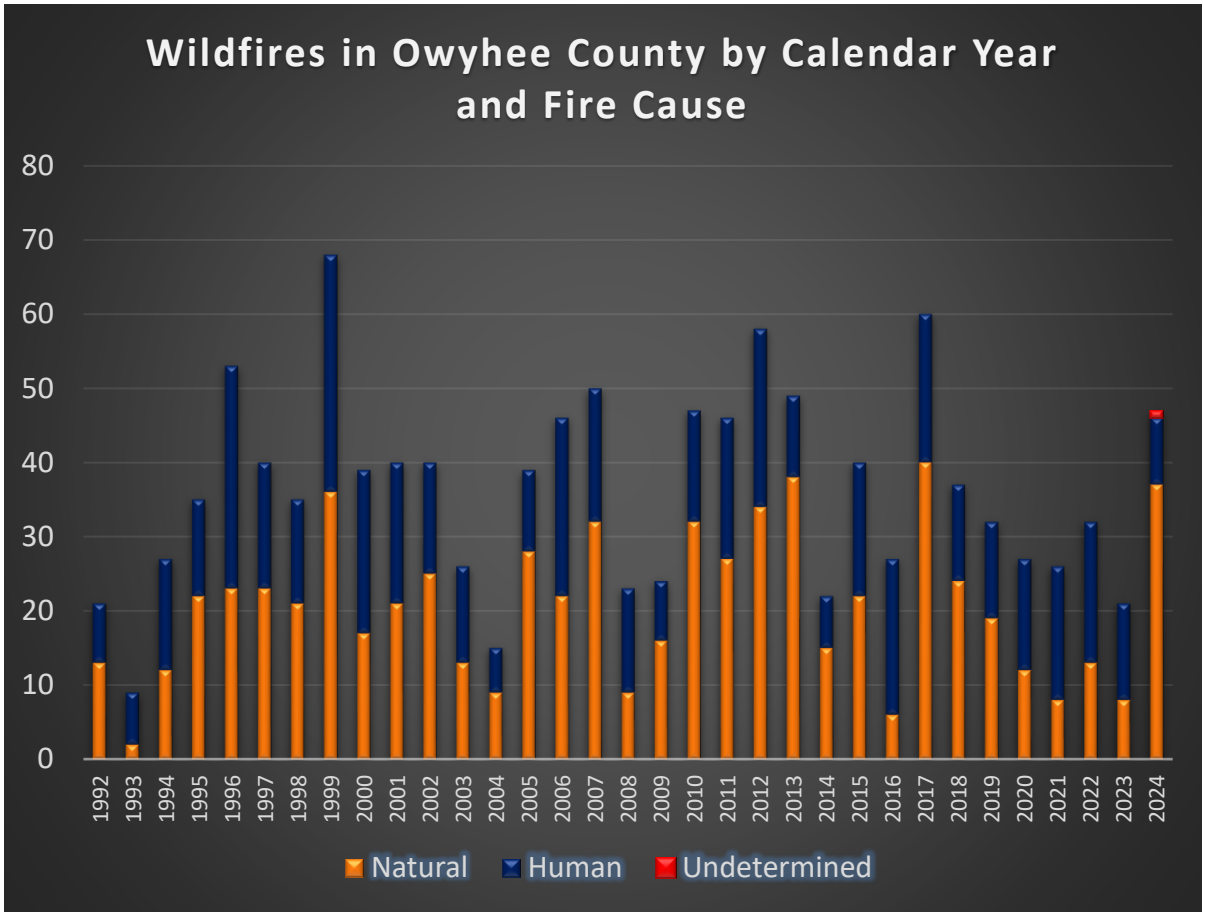

Figure 37) An overview of wildfires separated by calendar year and whether the ignition was human or naturally-caused. The data were obtained from the NIFC Dataset.

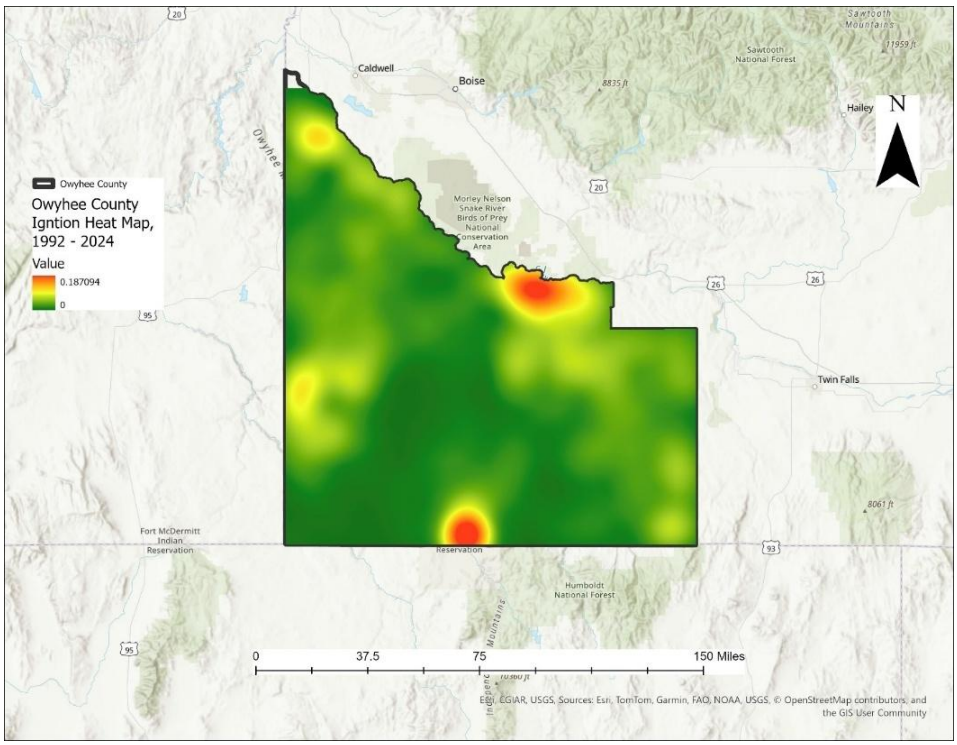

Figure 38) A kernel density heat map of wildfire ignition in Owyhee County, constructed with NIFC ignition data.

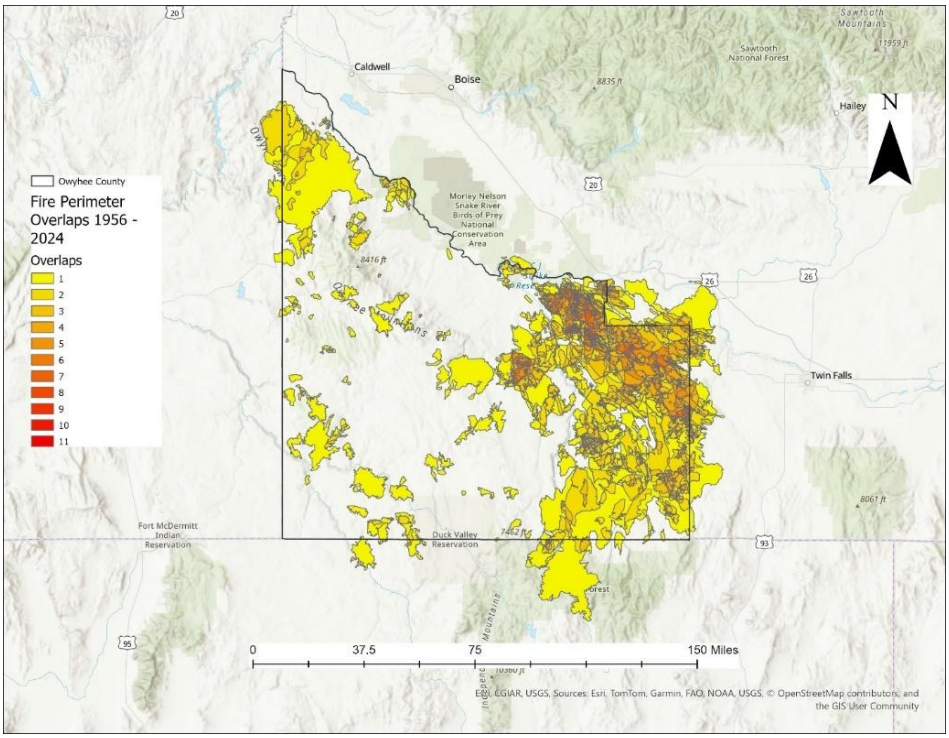

Figure 39) Wildfire footprints intersecting with Owyhee County since 1956 from the MTBS dataset show the number of overlaps in wildfire perimeters throughout this time period. Documented wildfire perimeters appear to be concentrated in the northeast section of the county, southeast of Bruneau.

5.7.2.1 MEGAFIRES

25,000 acres has been propsed as a threshold for defining “megafires,” or unusually large wildfires that can stretch the resources of fire protection agencies to the limit. The documented history of so-called megafires according to the former metric in Owyhee County is outlined in **Figure 40.**

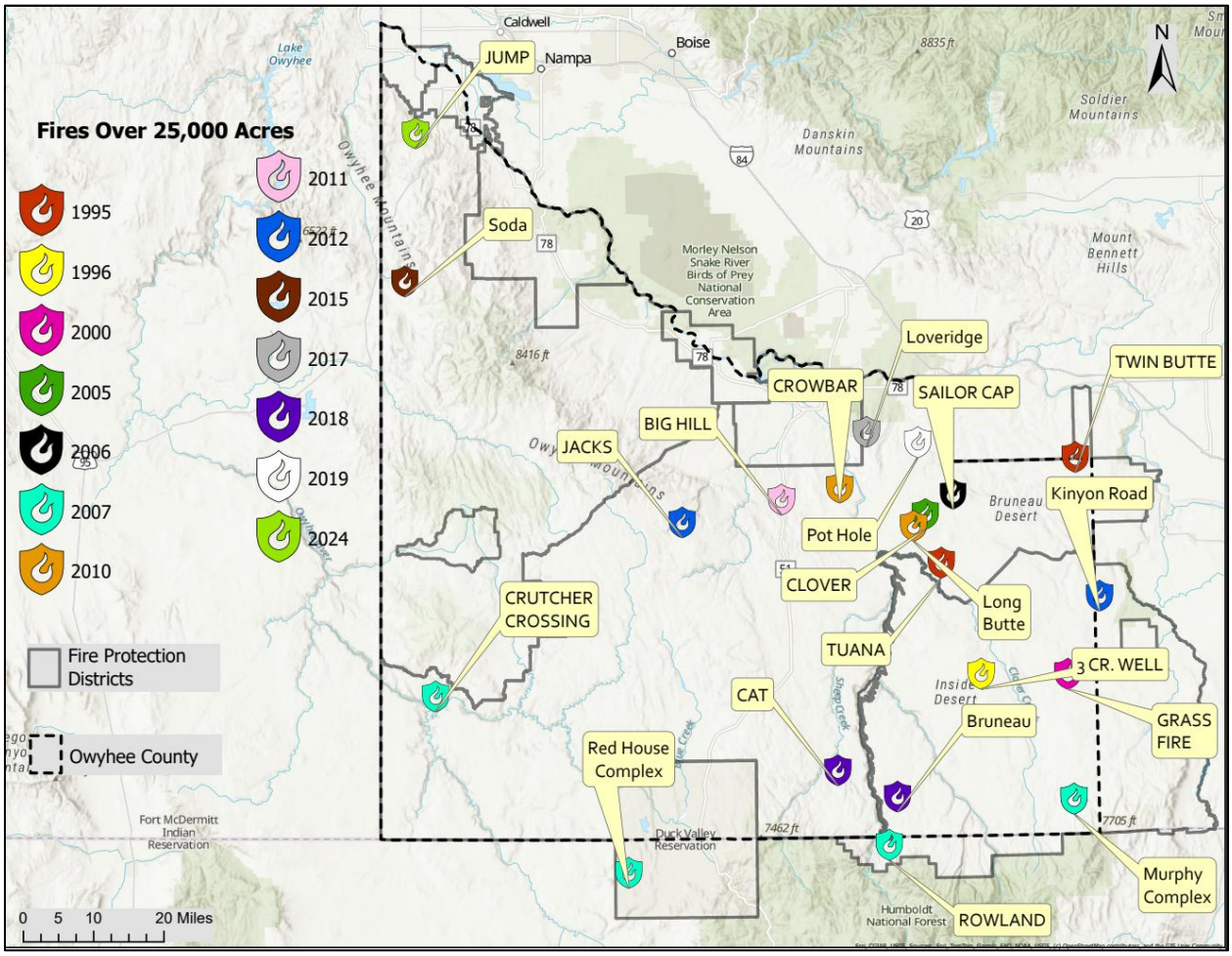

Figure 40) Documented wildfires over 25,000 acres that occurred in Owyhee County and surrounding fire districts from 1992-2024 according to the NIFC dataset.

5.7.2.1.1 SODA FIRE

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), regional fire departments, 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).*

5.7.3 PROBABILITY OF FUTURE OCCURRENCE

The FEMA National Risk Map shows a 1.79% chance per year of wildfire in the county, which equates to a 56-year return interval. However, this is only based on the 2021 dataset and is likely referring to a high-impact fire with major associated damage (**Table 36**).

In any case, the 36.4 ignitions per year according to the NIFC dataset suggests there is a virtual guarantee that at least one wildfire will occur within the county in any given year. Moreover, there are on average 12.1 wildfires exceeding 100 acres per year in Owyhee County, indicating a very high likelihood of large wildland blazes every year *(NIFC, 2025).*

Table 36) Annualized Frequency of wildfire according to the FEMA National Risk Map and based on only the 2021 dataset.

FEMA Annualized Frequency			
Hazard Type	Annualized Frequency	Events on Record	Period of Record
Wildfire	1.79% chance per year	n/a	2021 dataset
Probability of Future Events			
Occasional	There is an estimated 1.79% chance of any given location within Owyhee County experiencing highly damaging wildfire in any given year, or a recurrence interval of about 56 years.		

53% of the 1,204 wildfire ignitions from 1992–2024 occurring in July and August, often sparked by lightning or human activities like operating heavy machinery *(Keeley & Syphard, 2016*). The hot and dry conditions during these months make them the most likely times of year for wildfire ignitions to occur.

Overall, wildfire ignition risk in Owyhee County is very high, driven by several contributing factors including abundant flashy fuel sources, warm and dry summer conditions, frequent lightning strikes, increased recreation and highway travel, and potential development in fire-prone areas.

5.7.4 DEVELOPMENT TRENDS

Wildfire exposure continues to be influenced primarily by vegetation conditions, fuel continuity, and climatic variability rather than by intense urban expansion. Residential development in wildland-urban interface (WUI) areas has occurred at a slow pace since 2018, with limited new construction in historically fire-prone landscapes. There has been no significant increase in population density or subdivisions that would dramatically expand the WUI footprint beyond conditions described in the 2018 plan. Fuel management activities and CWPP-driven projects have incrementally altered local risk, but the overall development pattern has not materially increased exposure.

5.7.5 IMPACTS

5.7.5.1 OWYHEE COUNTY

Wildfires in Owyhee County can pose significant risks to public safety, natural resources, and the local economy. They can threaten the lives of ranchers, recreationists, and firefighters, especially in remote areas with limited access. Wildland fires also generate large volumes of smoke and fine particulate matter, which can degrade air quality for communities both nearby and downwind, potentially affecting vulnerable populations across the county, including in urbanized and agricultural areas that may otherwise be somewhat sheltered from direct exposure to flames. Visibility can be severely reduced near active fires, increasing the risk of accidents on highways like U.S. Route 95.

Beyond the immediate fire damage, post-fire impacts are especially concerning in Owyhee County's steep canyon country and rangelands. Loss of vegetation increases erosion, flash flood potential, and sediment runoff into streams and reservoirs, which may degrade water quality for agricultural and domestic *use (Wagenbrenner et al., 2006; USDA NRCS, 2020)*. Fires can also range infrastructure (troughs, fences, etc.) and forage resources critical to the region's ranching economy.

In Wildland-Urban Interface (WUI) areas, where human development meets wildland fuels, fires may cause the loss of homes, barns, outbuildings, and livestock, with cascading effects on families and local services. Tourism and outdoor recreation may also suffer due to reduced access, degraded scenery, and public health warnings related to smoke. In more remote areas, wildlife habitat can be lost or fragmented, especially for sagebrush-obligate species like the Greater Sage-Grouse, whose habitat is already under stress from invasive annual grasses and development pressures.

Irrigated agricultural areas in Owyhee County generally carry a lower wildfire risk early in the season, thanks to moist soil and green crops. These lands can sometimes act as effective fire breaks that help protect towns like Homedale, Marsing, and Grand View. However, the risk is not eliminated, particularly in late summer and early fall, when crops such as hay, wheat, and corn begin to dry out and become more flammable.

Fires during this period can ignite in fields due to farm equipment, vehicle sparks, or lightning strikes. Once started, flames can move quickly through dry crops and stubble. Even if the fire does not reach a structure directly, flying embers can land on nearby properties, especially where homes have dry vegetation, cluttered yards, or flammable debris, leading to structure loss or damage.

Vegetated irrigation ditches and canals, which are widespread across the county, often contain dry grass or invasive plants like phragmites or cheatgrass. These act as fire pathways that can carry flames from fields toward homes, roads, or utility corridors in Wildland-Urban Interface (WUI) areas *(Di Tomaso et al., 2017).*

Fires may also damage:

- Irrigation systems (pipes, pumps, pivots, power supplies)
- Stored hay, fencing, and barns
- Soil and water quality due to ash, erosion, and runoff

Still, the risk of damage to property and infrastructure from wildfire is markedly lower in irrigated agricultural lands and the urbanized areas they encompass than the outlying rangelands that make up the majority of the county's interior. Nevertheless, even if not directly impacted by flames, smoke and ash from nearby fires can reduce crop yield or quality, and disrupt farm operations due to visibility, labor shortages, and transportation delays *(Moeltner et al., 2013).* Similarly, residents in urbanized or agricultural areas that are somewhat shielded from direct exposure to flames may still suffer from degraded air quality and/or visibility as a result of upwind wildfires.

Moreover, the potential for embers to ignite spot fires up to 1.5 miles or more ahead of the main fire front exists in sagebrush and grassland areas, particularly during strong wind events and low humidity, though shorter transport distances of several hundred feet or less are more common *(BLM, 2022; NWCG, 2023).* Though unlikely, these embers can ignite receptive fuels within irrigated agricultural areas or even within communities under the right conditions, especially where dry vegetation, clutter, or flammable materials are present. This risk is heightened in communities surrounded by timberlands, such as Silver City, where denser fuels and terrain-driven winds can support longer-range ember transport and more aggressive fire behavior *(Cohen & Butler, 1998; Cal Fire, 2019).*

5.7.5.2 CITY OF HOMEDALE

Homedale is buffered by the irrigated agriculture that surrounds it, giving it a lower Wildfire Hazard Potential than the county's outlying rangelands. However, it still has some exposure to wildfire risk, as croplands, canals, and streamside vegetation can serve as conduits for fire spread under the right conditions. Moreover, the potential for embers exists should a fire come within approximately 1.5 miles of the city. Homedale Middle School would appear to be at slightly higher risk, along with the subdivisions near Succor Creek in the western part of the city.

Succor Creek intersects the city's boundaries and is used for irrigating nearby fields. Similar to other water sources, it could be contaminated with sediment, ash, fire retardant, and other chemicals as a result of an upstream fire. The city's groundwater wells also have the potential to be contaminated.

Travel in and out of Homedale on Highways 95 and 19 could also be disrupted by poor visibility or even a fire itself advancing fire along or across these corridors.

Even if a wildfire were to occur far enough from the city to not threaten structures directly, the associated wildfire smoke could create hazardous air quality for Homedale residents, especially the elderly, disabled, and those with respiratory conditions.

5.7.5.3 CITY OF MARSING

Marsing is buffered by the irrigated agriculture that surrounds it, giving it a lower Wildfire Hazard Potential than the county's outlying rangelands. However, it still has some exposure to wildfire risk, as croplands, canals, and streamside vegetation can serve as conduits for fire spread under the right conditions. Moreover, the potential for embers exists should a fire come within approximately 1.5 miles of the city.

Surrounding farmlands could also be damaged by wildfire and associated smoke, affecting the city's economy, a major component of which is irrigated agriculture. Water quality in surrounding canals could

be contaminated with sediment, ash, fire retardant, and other chemicals. The aquifer that supplies the city's water supply could also potentially be affected.

Even if a wildfire were to occur far enough from the city to not threaten structures directly, the associated wildfire smoke could create hazardous air quality for Marsing residents, especially the elderly, disabled, and those with respiratory conditions.

5.7.5.4 CITY OF GRAND VIEW

Grand View is buffered by the irrigated agriculture that surrounds it, giving it a lower Wildfire Hazard Potential than the county's outlying rangelands. However, it still has some exposure to wildfire risk, as croplands, canals, and riverside vegetation can serve as conduits for fire spread under the right conditions. Moreover, the potential for embers exists should a fire come within approximately 1.5 miles of the city.

Surrounding farmlands could also be damaged by wildfire and associated smoke, affecting the city's economy, a major component of which is irrigated agriculture. Water quality in surrounding canals could be contaminated with sediment, ash, fire retardant, and other chemicals. The aquifer that supplies the city's water supply could also potentially be affected.

Even if a wildfire were to occur far enough from the city to not threaten structures directly, the associated wildfire smoke could create hazardous air quality for Grand View residents, especially the elderly, disabled, and those with respiratory conditions.

5.7.6 VALUE OF RESOURCES AT RISK

Wildfires in Owyhee County may result in losses including human casualties, property damage, and environmental harm. Although wildfires in populated areas are relatively infrequent, many incidents incur response costs. The FEMA National Risk Index estimates Owyhee County's annual wildfire-related losses at approximately $2.5 million, with an exposure value of nearly $21 million **(Table 37).**

Table 37) Exposure, defined by FEMA as the "representative value of buildings (in dollars), population (in both people and population equivalence dollars), or agriculture (in dollars) potentially exposed to a natural hazard occurrence" and Expected Annual Loss, or the "average economic loss in dollars resulting from natural hazards each year" for wildfire in Owyhee County is displayed below.

FEMA Metric	Total	Building Value	Population Equivalence	Population	Agriculture Value
Exposure	$20,807,026,572	$442,667,244	$20,281,843,543	1,748.43	$82,515,785
Expected Annual Loss	$2,514,204	$2,495,461	$17,152	0.00	$1,592

Note - the following sections are taken from the concurrent update of the Owyhee County Community Wildfire Protection Plan (CWPP):

5.7.7 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 41)**.

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.

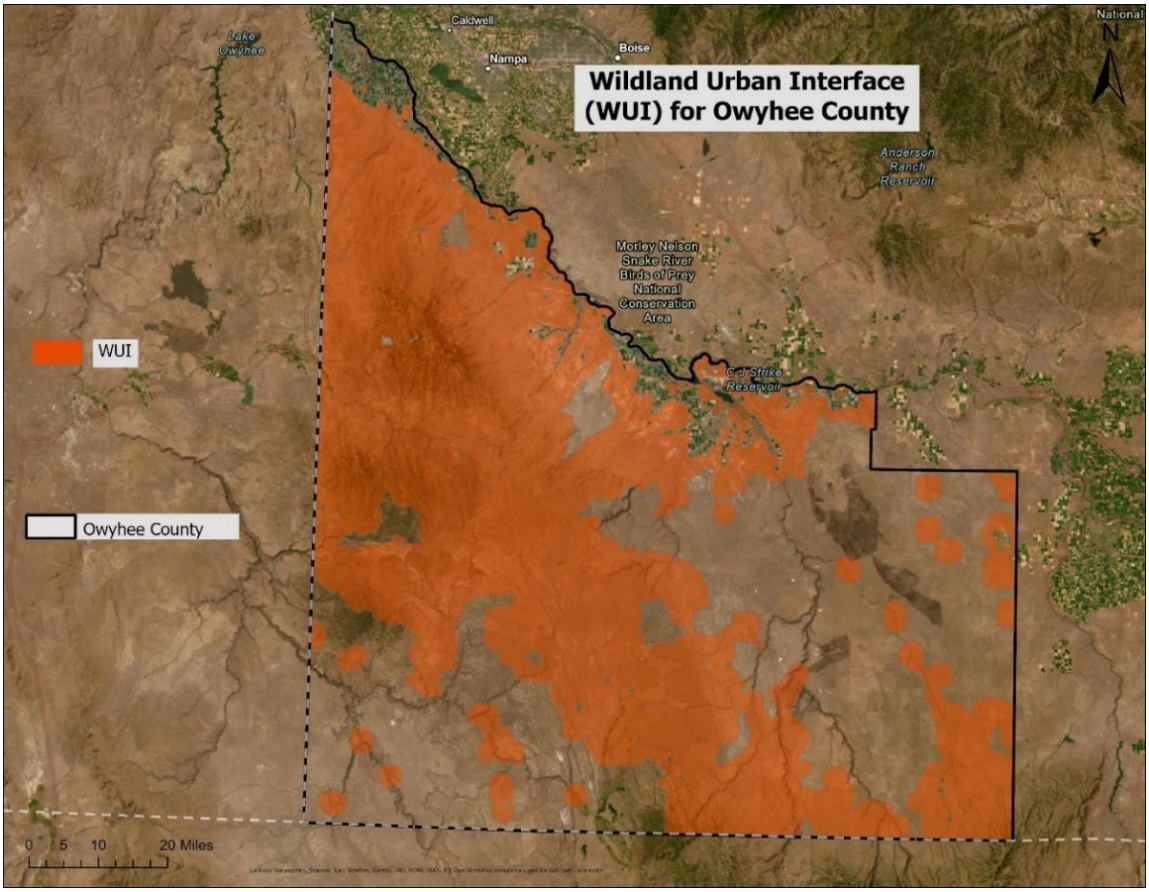

Figure 41) The Wildland-Urban Interface (WUI) for Owyhee County.

5.7.8 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 38.**

Table 38) Fire Regime Groups as defined by Land Fire (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 39).** These changes have also led to longer, hotter, and more destructive fire seasons *(Bradley et al., 2017; Whisenant, 1990).*

5.7.9 VEGETATION CONDITION CLASS

Table 39 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 39) Vegetation Condition Class by land area for Owyhee County based on data from Land Fire, 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%

Vegetation Condition Class	Percent
Barren or Sparse	1%
Developed	1%
Water	<1%

5.7.10 WILDFIRE HAZARD RISK

For the Wildfire Risk Assessment Map, Owyhee County followed Idaho Department of Lands (IDL) guidelines to evaluate factors contributing to the potential for severe wildfires **(Figure 42).** These factors include slope, aspect, fire history, vegetation type, and the wildland-urban interface (WUI). Each factor was assigned a weight and incorporated into a raster-based model, generating a cumulative fire hazard score by summing the values of each category. For instance, the lowest possible score is 3: reflecting a value of 1 for slope, aspect, and WUI, and 0 for vegetation and fire history. The highest possible score is 18, with maximum weights applied: 3 each for slope, aspect, WUI, and fire history, and 6 for vegetation. This modeling approach is based on a standard methodology developed by IDL and is commonly used across Idaho.

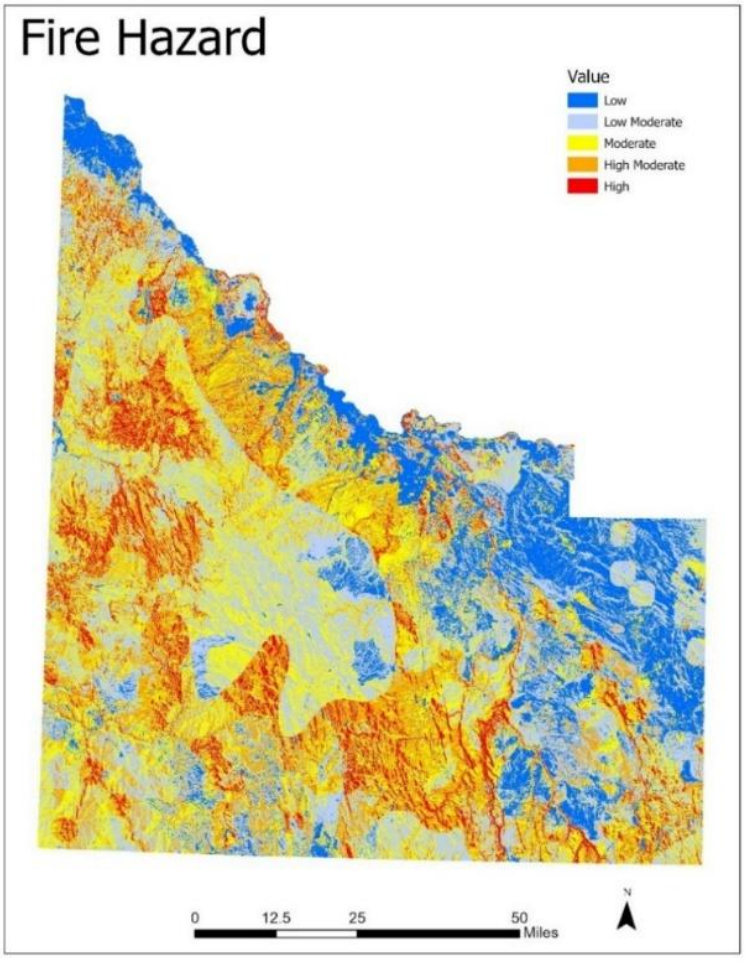

Figure 42) Fire Risk Hazard Map from the Idaho Department of Lands for Owyhee County.

5.7.11 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 43**, 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 residential areas not shown on the map, 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.

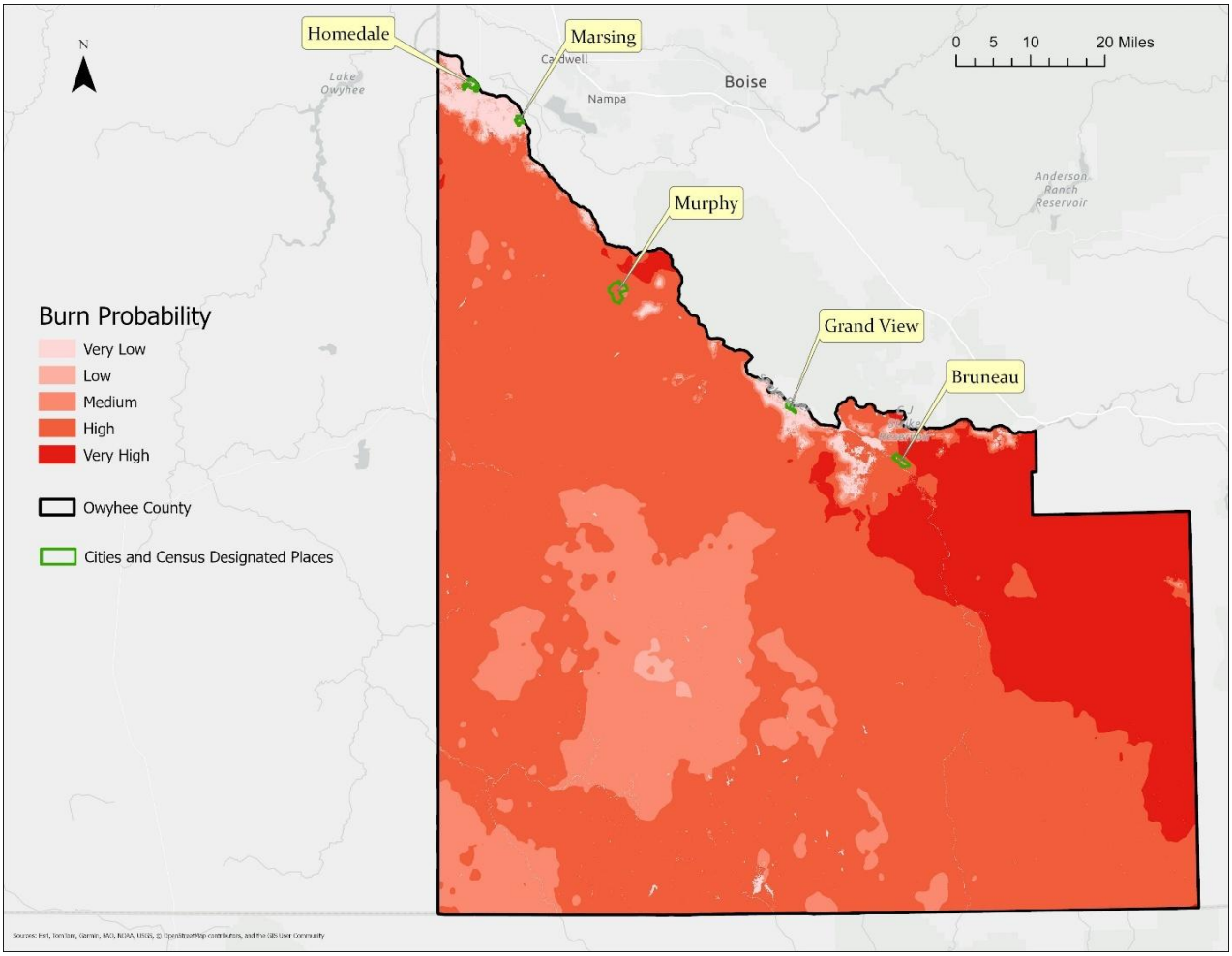

Figure 43) Burn Probability or Wildfire Likelihood for Owyhee County according to Wildfire Risk to Communities. The perimeters of notable communities in the county are included in green.

5.7.12 WILDFIRE SUPPRESSION DIFFICULTY INDEX

The Wildfire Suppression Difficulty Index **(Figure 44)** 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 areas surrounding Bruneau. 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.

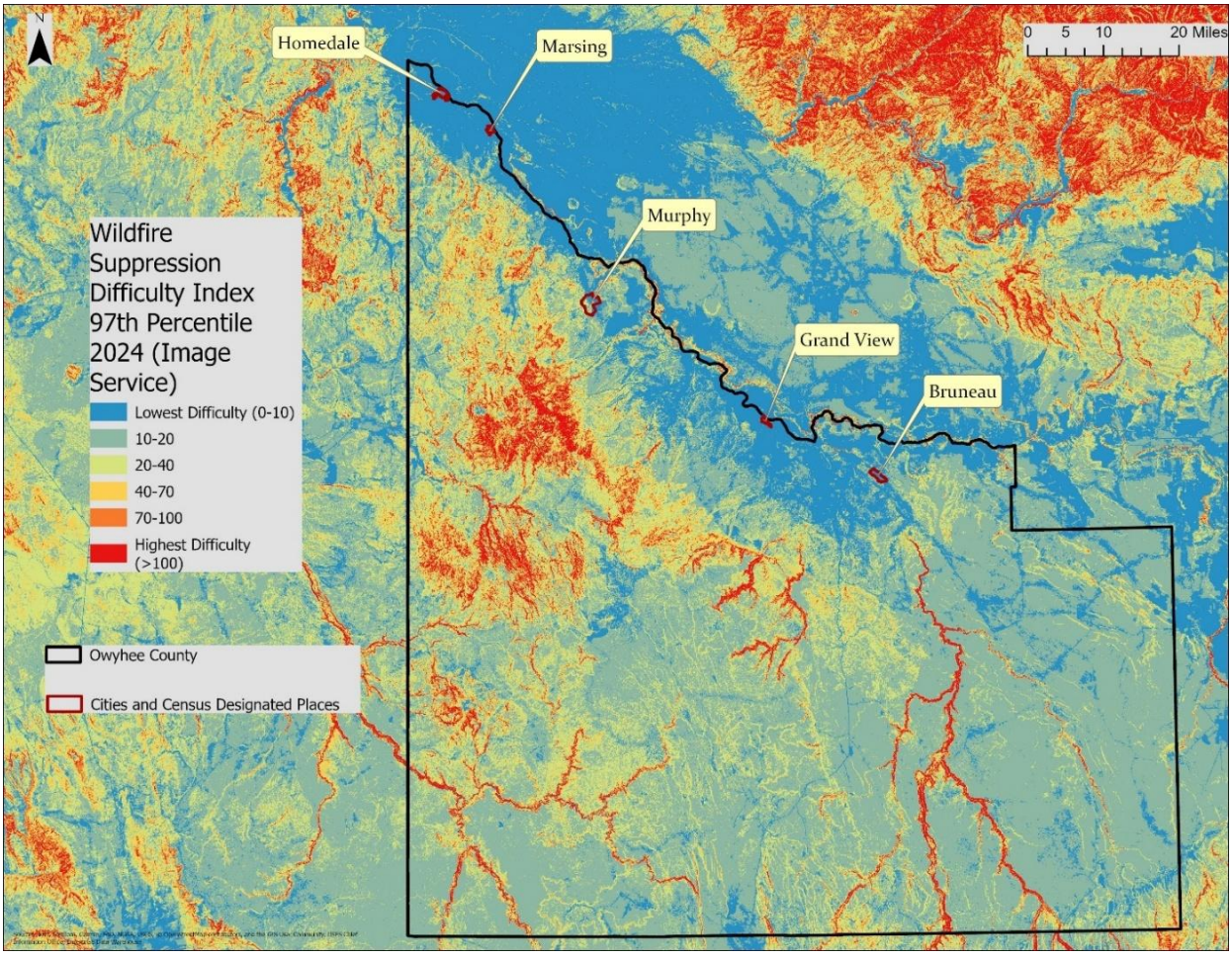

Figure 44) Wildfire Suppression Difficulty Index for Owyhee County and surrounds.

5.7.13 LANDSCAPE RISK ASSESSMENT

The broad categories of vegetation for Owyhee County are noted in **Table 40**. By far the most prevalent vegetation type is Shrub: likely representing the sagebrush-steppe habitat that makes up vast areas of the basin and range province.

Table 40) 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	3071864	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 %

5.7.13.1 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 41.** 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 41) The proportion of fuel types for Owyhee County according to Land Fire (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

5.7.13.2 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.

5.7.13.2.1 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.

5.7.13.2.2 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.

5.7.13.2.3 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.

5.7.13.3 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.

5.7.13.3.1 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).*

5.7.13.3.2 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.

5.7.13.3.3 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.

5.7.14 VULNERABILITIES

5.7.14.1 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.

5.7.14.2 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).*

5.7.14.3 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 45)**. Wildfire can also disrupt remote communication systems, including radio repeaters used by first responders, hampering coordinated suppression and evacuation efforts.

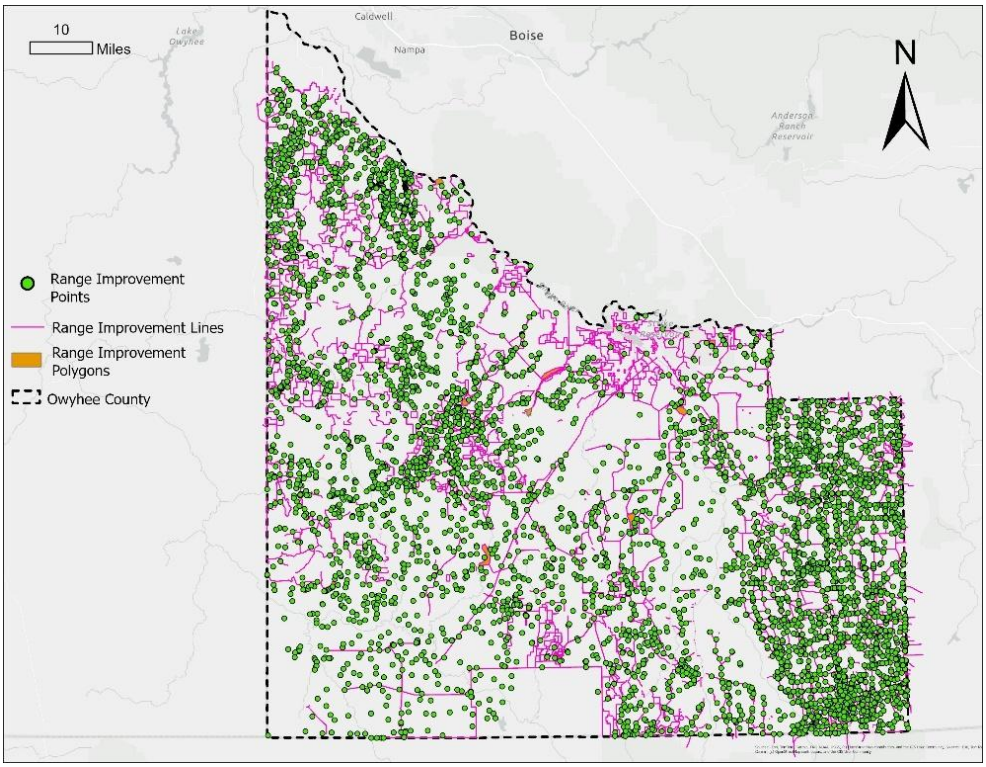

Figure 45) A spatial depiction of Rangeland Infrastructure is displayed here, having been obtained from the BLM GIS portal.

5.7.14.4 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 Grand View and Bruneau, 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 46).**

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.

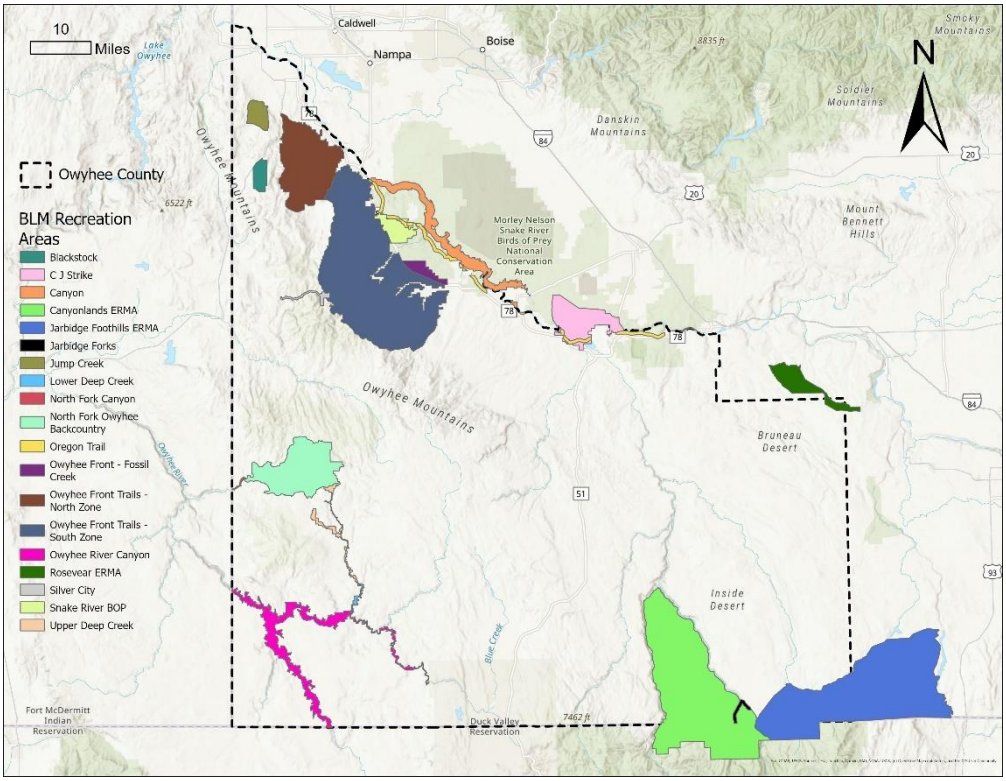

Figure 46) Displayed above is a map of recreation areas maintained by the BLM in and around Owyhee County. Although not explicitly shown here, the Bruneau Dunes State Park is another notable recreational area in the northeast part of the county, directly southeast of the CJ Strike Recreational Area.

CHAPTER 6: MITIGATION STRATEGY

6.1 ADMINISTRATION AND IMPLEMENTATION OF ACTION ITEMS

Critical to the implementation of this AHMP will be the identification and implementation of an integrated schedule of action items. These action items are targeted at achieving an elimination of lives lost, a reduction in structures destroyed or compromised, and the preservation of unique ecosystems that serve to sustain the way of life and economic stability in Owyhee County, Idaho.

All risk assessments were made based on the conditions existing during 2024/2025; thus, the recommendations in this section have been made considering those conditions. However, it may be necessary to fine-tune this plan's recommendations annually to adjust for changes in the components of risk, population density changes, infrastructure modifications, and other factors.

6.1.1 MECHANISMS TO INCORPORATE MITIGATION STRATEGIES

There are several planning processes and mechanisms in Owyhee County that will either use the risk assessment information presented in this document to inform decisions or will integrate the mitigation strategy directly into a variety of plans. Although not inclusive, the following is a summary of how previous AHMPs have been incorporated into other planning mechanisms available to each jurisdiction.

6.1.1.2 OWYHEE COUNTY HAZARD MITIGATION IMPLEMENTATION STRATEGY

Owyhee County adopted the 2025 Multi-Jurisdiction All-Hazard Mitigation Plan (HMP). Since adoption of the 2018 HMP, the County and its partners have implemented a range of mitigation activities, including wildland-urban interface fuels treatments and planning work documented in the Owyhee County WUI Wildfire Mitigation Plan and Community Wildfire Protection Plan updates in collaboration with the Bureau of Land Management and Idaho Department of Lands. The County also continues to integrate hazard considerations into local land-use decisions through its Comprehensive Plan, zoning ordinance, and subdivision regulations.

Owyhee County and the incorporated cities will continue to implement the mitigation strategy detailed in this Plan primarily through the following existing mechanisms:

6.1.1.2.1 OWYHEE COUNTY (UNINCORPORATED)

The County will implement its mitigation strategy through:

- **Owyhee County Comprehensive Plan** (Board-adopted, guiding land use, growth, and public facilities).
- **Title 9 – Zoning Regulations** (district standards, conditional uses, special overlays, and area-of-city-impact zoning consistent with the Comprehensive Plan).
- **Title 10 – Subdivision Regulations** (plat review standards for access, utilities, drainage, and lot design in hazard-prone areas).

- **Title 7 – Building Regulations** and adopted building codes, where applicable to structural safety and hazard-resistant construction.
- **Owyhee County Emergency Operations / Emergency Management programs**, which reference the HMP when considering mitigation, preparedness, and recovery activities.
- **Owyhee County WUI Wildfire Mitigation Plan and CWPP projects**, which continue to guide fuels reduction, access improvements, and preparedness in coordination with state and federal agencies, Rural Fire Districts, and Rangeland Fire Protection Associations.

6.1.1.2.2 CITY OF HOMEDALE

The City of Homedale will implement its mitigation strategy through:

- **Homedale Municipal Code, Title 15 – Buildings and Construction (including Chapter 15.20 Flood Hazards)**, which establishes minimum standards for development and floodplain management in support of NFIP participation.
- **Title 16 – Subdivisions** and related development standards for access, utilities, and stormwater management (where adopted).
- **Title 17 – Zoning**, which regulates land use, density, and placement of critical and vulnerable facilities.

6.1.1.2.3 CITY OF MARSING

The City of Marsing will implement the mitigation strategy through:

- **City of Marsing Comprehensive Plan and Impact Area Map**, which guide land use in and around the city.
- **Marsing City Code – Title 7: Building and Development**, **Title 8: Zoning**, and **Title 9: Subdivisions**, which provide the regulatory basis for building safety, permitted uses, and subdivision design in hazard-prone areas.

6.1.1.2.4 CITY OF GRAND VIEW

The City of Grand View will implement the mitigation strategy through:

- **Grand View Comprehensive Plan (2015)** and associated planning policies adopted by the City Council, which also serves as the Planning and Zoning Commission.
- **Grand View Zoning Ordinance**, which establishes zoning districts, development standards, and siting criteria for residential, commercial, and industrial uses.

6.1.1.2.5 OTHER IMPLEMENTATION PARTNERS

Mitigation actions identified for road, bridge, and utilities infrastructure will be implemented in coordination with Owyhee County Road & Bridge, Rural Fire Protection Associations, irrigation and canal companies, and state and federal partners (e.g., ITD, BLM, IDL). These entities will use their own capital improvement programs, maintenance plans, and operating procedures to carry out projects identified in the HMP, CWPP, and related planning documents.

6.2 PROGRESS ON PREVIOUS MITIGATION ACTIONS (2018 PLAN)

As part of the 2025 update, Owyhee County and the participating jurisdictions reviewed every mitigation action from the 2018 HMP to determine whether each project was completed, remains ongoing, has been revised and carried forward, has been combined with another action, or is no longer pursued.

Table 42 reproduces the 2018 actions verbatim and assigns a 2025 status using the following categories:

- **Completed** – Fully implemented; no further action required.
- **Ongoing** – Continues as an operational program or recurring activity.
- **Revised & Carried Forward** – Updated and incorporated into one or more 2025 actions (OC-xx, H-xx, M-xx, GV-xx).
- **Combined** – Merged into another 2025 project.
- **Deferred** – Still relevant but not feasible in the current plan cycle.
- **Deleted / Not Pursued** – No longer applicable, feasible, or consistent with county policy.

Table 42) Mitigation Action Items from 2018 and their status as of the current update in 2025.

2018 Action #	Hazard	2018 Action (from 2018 Plan)	Lead Agency (2018)	Original Timeline / Cost	2025 Status	Notes / New ID(s)
1	All Hazards	Maintain current hazard mitigation programs and deliver additional public education programs (newspaper articles on avalanche danger, fuel reduction campaigns, "Turn Around Don't Drown" for flooding).	Owyhee County, Cities of Homedale, Marsing, Grand View, Owyhee CD, SW Idaho RC&D, BLM	Cost not provided; Immediate / Short-Term	Revised & Carried Forward	Progress made via AlertSense, EOC identification, Facebook, and the county website. Expanded through OC-01, OC-09, H-07, M-06, GV-07 and CWPP education/outreach projects.

2018 Action #	Hazard	2018 Action (from 2018 Plan)	Lead Agency (2018)	Original Timeline / Cost	2025 Status	Notes / New ID(s)
2	Flood	Develop county and city policies to restrict development in flood zones to help prevent losses.	Owyhee County, Cities of Homedale & Grand View	Cost not provided; Immediate	Deleted	County has chosen not to adopt NFIP countywide due to regulatory burden and potential increased costs for residents. Homedale retains limited NFIP participation; Grand View has FIRMs but does not participate; Marsing has no FIRMs.
3	Landslide & Avalanche	County policy to restrict development near landslide and avalanche-prone landscapes.	Owyhee County	Cost not provided; Immediate	Deferred / Partially Addressed	Policy not fully developed. Avalanche hazard now addressed in new action OC-38 (Long Gulch awareness and signage) and in updated hazard mapping; formal countywide policy remains a long-term need.
4	Flood	Encourage county participation in the Flood Mitigation Assistance (FMA) Program.	Owyhee County	Cost not provided; Immediate	Deleted	FMA participation tied to NFIP enrollment; County does not intend to join NFIP at this time. Flood mitigation pursued instead through project-based efforts (OC-02, OC-36, GV-04, H-04).

2018 Action #	Hazard	2018 Action (from 2018 Plan)	Lead Agency (2018)	Original Timeline / Cost	2025 Status	Notes / New ID(s)
5	All Hazards	Incorporate the Owyhee County Multi-Hazard Mitigation Plan into the Owyhee County Comprehensive Plan, where applicable.	Owyhee County	Cost not provided; Immediate	Ongoing	HMP used to inform Comp Plan updates and land-use decisions. Continued integration identified as an ongoing planning and coordination task. Comp plan is being updated concurrently as of 2025.
6	Flood	Maintain City of Homedale participation in the National Flood Insurance Program (NFIP).	Owyhee County, Cities of Grand View & Homedale	Cost not provided; Immediate / Short-Term	Revised & Carried Forward	Homedale remains the only NFIP-participating jurisdiction (3 policies in force). Continued in new action H-04 (Maintain and enhance city policies promoting flood resilience and NFIP compliance).
7	Flood	Request FEMA update of Flood Insurance Rate Maps (FIRMs).	Owyhee County, Cities of Grand View & Homedale, FEMA	Cost not provided; Immediate	Deferred	Limited FEMA priority/funding for detailed FIRM updates in rural Owyhee. Managed instead via project-based studies (e.g., OC-02, OC-36, GV-04, dam-failure analyses).
8	Flood	Request FEMA Flood Insurance Studies for unincorporated areas, particularly Bruneau Valley.	Owyhee County, FEMA	Cost not provided; Immediate	Deferred	Not pursued due to NFIP non-participation for the County; flood risk addressed through localized analysis in this HMP and project scoping for Grand View, Marsing, and Bruneau areas.

2018 Action #	Hazard	2018 Action (from 2018 Plan)	Lead Agency (2018)	Original Timeline / Cost	2025 Status	Notes / New ID(s)
9	All Hazards	Develop county and city policy to actively enforce all International Building Codes (IBC) as adopted by the State of Idaho.	Owyhee County; Cities of Grand View, Marsing, Homedale	Cost not provided; Immediate	Ongoing	Homedale and Marsing have adopted and enforce IBC; Grand View is in process. Supported by H-02 and M-02 (ongoing IBC enforcement). County continues to rely on state-adopted codes and local implementation.
10	Flood	Develop ordinance to regulate future construction in the 100-year floodplain within Grand View and Homedale.	Cities of Grand View & Homedale	Cost not provided; Short-Term	Completed	Floodplain regulations adopted for participating areas (Homedale NFIP; Grand View FIRM-informed decisions). New actions H-04, GV-04, GV-06 build on this framework.
11	Wildland Fire	Continue to adopt and/or amend existing building codes and zoning ordinances as necessary to address wildland fire risks for all construction within the County.	Owyhee County; Homedale RFD; Marsing RFD; MRW RFD; Shoshone-Paiute Tribes Fire Mgmt.; Grand View RFD; Silver City F&R; Bruneau RFD; Mountain Home AFB FD	Cost not provided; Short- to Long-Term	Ongoing / Revised	Continued emphasis on WUI in codes; enhanced through OC-04 (enforcement for development in fire-prone areas), OC-31 (Silver City zoning), CWPP planning actions (e.g., 11, 12, 19).

2018 Action #	Hazard	2018 Action (from 2018 Plan)	Lead Agency (2018)	Original Timeline / Cost	2025 Status	Notes / New ID(s)
12	Wildland Fire	Develop County policy concerning building materials used in high-risk WUI areas on existing structures and new construction.	Same as above	Cost not provided; Short- to Long-Term	Ongoing / Revised	Not fully formalized countywide; partially addressed through historic/Silver City-specific work (OC-31; CWPP 19) and conditional-use practices; broader WUI standards remain a long-term objective.
13	Wildland Fire	Develop a formal WUI Advisory Committee to advise County Commissioners on WUI issues and treatments.	Owyhee County Commissioners & Emergency Manager	Cost not provided; Short-Term	Ongoing / Revised	A formal standing committee has not been fully institutionalized; WUI and fire issues are now addressed through CWPP processes and engagement with fire chiefs and RFPA leadership (CWPP 6, 12, 14).
14	All Hazards	Identify and assess additional facilities (hospital, LDS Church, schools in Grand View) and hardwire them for use with portable generators.	Owyhee County; Cities; unincorporated communities	Cost not provided; Immediate / Short-Term	Revised & Carried Forward	Incorporated into broader generator and critical-facility projects (H-03, M-04, GV-04, GV-08, OC-38-type efforts). Facility-by-facility hardwiring now addressed within new project scopes.

2018 Action #	Hazard	2018 Action (from 2018 Plan)	Lead Agency (2018)	Original Timeline / Cost	2025 Status	Notes / New ID(s)
15	All Hazards	Obtain needed resources for health care facilities, community centers, and other shelters (sandbags, cots, food, etc.).	Owyhee County; Cities; unincorporated communities	Cost not provided; Immediate / Short-/Long-Term	Ongoing	Red Cross willing to open shelters; County provides sandbags only. Supplies and shelter readiness now incorporated into local emergency management programs and generator/shelter actions (M-04, H-03, GV-04).
16	Flood	Evaluate structures in the flood zone to determine measures needed (elevation, barriers, wet-proofing, etc.).	Owyhee County; Cities; unincorporated communities	Cost not provided; Short-/Long-Term	Deferred / Partially Addressed	Comprehensive countywide program not completed. Evaluations now targeted through specific projects (GV-06, H-04, M-05, GV-05 dam-failure actions).
17	Flood	Reinforce Well #5 Riverside in Homedale to withstand 500-year flood events.	City of Homedale	Cost not provided	Completed	Project completed; subsequent water/well upgrades addressed under H-01 and H-03.
18	Earthquake	Implement a program to seismically stabilize historic sites in Flint, Silver City, and Oreana.	Owyhee County; BLM; SW Idaho RC&D; Owyhee CD; Cities; unincorporated communities	Cost not provided; Short-Term	Deferred	PDM funding considered but cost-benefit and private ownership issues remain barriers. Considered a long-term opportunity; not carried as a discrete 2025 action.

2018 Action #	Hazard	2018 Action (from 2018 Plan)	Lead Agency (2018)	Original Timeline / Cost	2025 Status	Notes / New ID(s)
19	Earthquake	Evaluate existing unreinforced masonry (URM) facilities (clinics, fire stations, senior centers, city halls, etc.) and retrofit if necessary.	Owyhee County; Cities; Health District; Marsing RFD; others	Cost not provided; Short-Term	Revised & Carried Forward	Now reflected as jurisdiction-specific URM actions H-09, M-10, GV-10 (evaluation and potential retrofit of URMs).
20	All Hazards	Post hazard and emergency response related rural signage (road IDs, house numbers, evacuation routes).	Owyhee County	Cost not provided; Immediate	Ongoing / Revised	House identification largely complete; evacuation routes included in Emergency Operations Plan. Remaining signage needs integrated into OC-09 (assembly/evacuation) and OC-37 (Silver City egress).
21	Severe Weather, Landslides & Avalanche	Post avalanche warning signs at each end of the Long Gulch avalanche zone.	Owyhee County	Cost not provided; Immediate	Deferred / Recast	Not fully completed. Hazard now addressed more holistically via OC-38 (avalanche awareness and winter safety in Long Gulch) including signage and outreach.
22	Flood	Identify repeated flooded areas and develop a countywide strategy to lessen the impact of flash flooding on agricultural lands.	Owyhee County; Owyhee CD; BLM; SW Idaho RC&D; private landowners	Cost not provided; Short-/Long-Term	Revised & Carried Forward	Now addressed through targeted flood actions (OC-02 Wildhorse/Hardtrigger; OC-36, GV-04 drainage; H-04 policies) rather than a single countywide strategy.

2018 Action #	Hazard	2018 Action (from 2018 Plan)	Lead Agency (2018)	Original Timeline / Cost	2025 Status	Notes / New ID(s)
23	Earthquake & Wildland Fire	Install additional components to overhead sprinkler system at Bruneau-Grand View High School.	Bruneau–Grand View School District & residents	Cost not provided; Short-Term	Deferred	Not completed as a standalone mitigation project; may be reconsidered in future school facility planning and grant opportunities.
24	Wildland Fire	Plan, fund, and implement home and community defensible space and hazardous fuels reduction projects as outlined in the 2005 WUI Wildfire Mitigation Plan.	Owyhee County; Cities; multiple fire districts and partners	Cost not provided; Immediate / Short-/Long-Term	Deferred / Superseded	Superseded by the updated CWPP and extensive BLM/IDL fuel break and restoration program (CWPP actions 10, 13, 20, 21, 25 and BLM projects 46–110).
25	Landslide & Avalanche	Install roadside debris catchment devices.	Owyhee County; ITD	Cost not provided; Short-/Long-Term	Revised	Not implemented as a stand-alone structural program. Elements incorporated into ongoing road maintenance and into OC-38/transportation hazard monitoring in steep terrain.
26	Flood	Identify where retention ponds are needed in the County.	Owyhee County; Owyhee CD; SW Idaho RC&D; ITD	Cost not provided; Short-/Long-Term	Deferred	Broad countywide retention-pond siting not completed. Localized storage/impoundment needs evaluated within specific projects (e.g., OC-36 Jordan Street impoundment, GV-04 drainage).

2018 Action #	Hazard	2018 Action (from 2018 Plan)	Lead Agency (2018)	Original Timeline / Cost	2025 Status	Notes / New ID(s)
27	Flood	Identify roads that need to be elevated above the 100-year flood zone (e.g., areas near Homedale Airport and Pioneer Road).	Owyhee County; Cities; ITD	Cost not provided; Short-/Long-Term	Revised & Carried Forward	Now embedded within H-04 (critical roads/structures), GV-04 & GV-06, and OC-36 evaluations rather than as an isolated countywide elevation study.
28	Flood	Replace undersized culverts near Silver City Road, Scorpion Creek, Sunrise Sky Park, Jarbidge and Bruneau Rivers.	Owyhee County; ITD	Cost not provided; Short-/Long-Term	Revised & Partially Completed	Some progress made in Silver City. Remaining culvert and headwall needs framed in OC-36 (Jordan Street culvert/impoundment) and other road/bridge mitigation opportunities.
29	Flood	Conduct study and strategy to prevent ice and debris jams on bridges/culverts on State Routes 51 and 78.	Owyhee County; Owyhee CD; SW Idaho RC&D; ITD	Cost not provided; Short-/Long-Term	Deferred	Remains a long-term opportunity, to be coordinated with ITD as funding and priorities allow. Not carried forward as a discrete 2025 action.
30	All Hazards	Develop an alternative access route into Silver City.	Owyhee County; Silver City community; BLM; private landowners	Cost not provided; Short-Term	Deferred	Alternative route has not been developed due to terrain, ownership, and cost constraints. Access/safety improvements are now addressed via OC-37 (Silver City evacuation/egress) and road maintenance.

2018 Action #	Hazard	2018 Action (from 2018 Plan)	Lead Agency (2018)	Original Timeline / Cost	2025 Status	Notes / New ID(s)
31	Severe Weather	Construct snow fences at strategic locations to prevent drifting on primary (Hwy 95) and secondary routes and near population centers.	ITD; Owyhee County; Cities; private landowners	Cost not provided; Short-Term	Deferred	Not implemented as a countywide program. Snow and drifting issues remain managed through routine winter maintenance and ITD priorities.
32	Flood	Develop stormwater retention swales and install diversion mechanisms (canals/ditches) in new developments near communities and in flood-prone areas.	Owyhee County; Owyhee CD; BLM; SW Idaho RC&D; private landowners	Cost not provided; Short-/Long-Term	Revised & Carried Forward	Now embedded into local development and drainage policies, especially within H-02/H-04 and GV-04 flood drainage planning, rather than as a single countywide structure program.
33	Flood	Install floodwater diversion mechanisms such as canals and ditches where necessary.	Same as above	Cost not provided; Short-/Long-Term	Deleted / Consolidated	Consolidated into more targeted drainage and culvert projects (OC-02, OC-36, GV-04, H-04). No longer tracked as a stand-alone countywide canal/ditch program.
34	Flood	Replace Third Street Bridge in Silver City with a structure capable of at least a 100-year flood and heavy trucks.	Community of Silver City; Owyhee County; SW Idaho RC&D	Cost not provided; Short-Term	Completed	Bridge replacement completed. Future work in Silver City now focuses on culverts, drainage, and flood mitigation (OC-36) rather than this structure.

2018 Action #	Hazard	2018 Action (from 2018 Plan)	Lead Agency (2018)	Original Timeline / Cost	2025 Status	Notes / New ID(s)
35	Flood & Wildland Fire	Partner with BLM to systematically burn tumbleweed accumulations from ditches and at culvert/bridge crossings.	Owyhee County; Owyhee CD; private landowners	Cost not provided; Immediate	Revised & Carried Forward	Reframed as CWPP action 9 (Tumbleweed Burning) and supported by BLM Jarbidge "205 Fuel Breaks Tumbleweed Burn" project (#60). Integrated into broader fuels and roadside maintenance strategy.
36	Flood	Conduct a study to address potential water flow capacity issues at the Snake River bridge on Grand View Road.	Owyhee County highway districts; City of Grand View; Owyhee County	Cost not provided; Long-Term	Completed	Idaho Power has developed action-plan maps and dam-failure planning; ongoing dam-related flood risk addressed in GV-05 and GV-06.
37	Flood / Wildland Fire	Plan, fund, and implement fuels reduction along roads, powerlines, municipal watersheds, and other infrastructure per WUI Plan.	Owyhee County; Cities; utilities; highway districts	Cost not provided; Long-Term	Ongoing / Revised	Continues through CWPP action 10 and extensive BLM fuel break program (projects 46–110). Also linked to OC-10, OC-25, and related fuels projects.
38	All Hazards	Obtain 1–2 additional generators for the County, one for each shelter location, and one for each city to run central wells during outages.	Owyhee County; Cities; school districts; fire districts; tribal and federal partners	Cost not provided; Short-/Long-Term	Revised & Carried Forward	Requirements now embedded into M-04, H-03, GV-04, GV-08 and related generator/shelter resilience projects, rather than tracked as one omnibus generator purchase.

2018 Action #	Hazard	2018 Action (from 2018 Plan)	Lead Agency (2018)	Original Timeline / Cost	2025 Status	Notes / New ID(s)
39	All Hazards	Evaluate locations of emergency services HQ, field offices, and storage facilities for proximity to hazards (especially flood zone).	Owyhee County; Cities of Grand View & Homedale	Cost not provided; Short-/Long-Term	Deferred	Comprehensive assessment not completed; partial consideration occurs through individual facility projects and siting decisions. Not carried forward as a discrete action.
40	All Hazards	Develop a plan to enhance emergency response capabilities and public safety in Silver City (safety zones, alert system, helipads, etc.).	Silver City community; BLM; Owyhee County	Cost not provided; Immediate	Deferred / Recast	Elements now addressed in OC-37 (evacuation/egress), CWPP project 23 (Silver City egress plan), and project 33 (training facility & helipad at Bruneau) rather than a single Silver City-only program.
41	All Hazards	Develop an additional water supply resource for municipal and fire department use in Silver City.	Silver City community; Owyhee County	Cost not provided; Short-Term	Ongoing / Revised	New sources limited, but some progress made developing water in old mines. Need is now captured in OC-34 and CWPP project 22 (Silver City water system upgrades).
42	All Hazards	Construct an Emergency Operations Center (EOC) in Silver City for use by responders.	Silver City community; SCFR; Owyhee County	Cost not provided; Long-Term	Ongoing / Deferred	Permanent EOC not yet constructed. Temporary setups and mobile command (Sheriff's Office) are used. Remains a long-term goal but is not a separate 2025 capital project.

2018 Action #	Hazard	2018 Action (from 2018 Plan)	Lead Agency (2018)	Original Timeline / Cost	2025 Status	Notes / New ID(s)
43	Wildland Fire	Identify and assess fire department needs and needed RFPA trainings.	Owyhee County; Cities; school districts; multiple RFDs/RFPAs	Cost not provided; Short-/Long-Term	Revised & Carried Forward	Now reflected in CWPP action 14 (Fire Department and RFPA Training) and higher-level advocacy/training actions (36, 37). Supports new capacity-building projects OC-11–OC-15, OC-23–OC-27, etc.
44	Wildland Fire	Enhance radio availability in each district, link to existing dispatch, improve range, and update to digital narrowband.	Owyhee County; BLM; IDL; multiple RFDs/RFPAs	Cost not provided; Short-/Long-Term	Deferred / Replaced	Original action deferred in that exact form. Functionally replaced and expanded by OC-06 (countywide radio modernization), OC-23, OC-30, and CWPP 17, 38 (digital compliance and coverage).
45	Wildland Fire	Redistricting of Rural Fire Districts.	Owyhee County; Cities; multiple RFDs; Tribes; Mountain Home AFB FD	Cost not provided; Short-Term	Ongoing / Revised	Work continues to address gaps (including adding RFPAs). Explicitly carried forward in OC-05 and CWPP action 6 (Redistricting Rural Fire Districts).
46	Wildland Fire	Identify areas lacking sufficient water supply and develop publicly accessible fill sites.	Owyhee County; BLM; IDL; multiple fire agencies	Cost not provided; Short-/Long-Term	Ongoing / Revised	County now requires hydrants in new developments. Broader water-availability work reframed in CWPP action 16 (Water Supply Study & Enhancement) and related city projects (GV-08, GV-04, H-01, M-01).

2018 Action #	Hazard	2018 Action (from 2018 Plan)	Lead Agency (2018)	Original Timeline / Cost	2025 Status	Notes / New ID(s)
47	All Hazards	Develop a radio interoperability working plan and provide funding for necessary hardware.	Owyhee County; Cities; multiple fire agencies and Tribes	Cost not provided; Short-/Long-Term	Deferred / Superseded	Standalone interoperability plan not completed. Functional interoperability improvements now embedded in OC-06, OC-23, OC-30 and CWPP actions 17, 38 as part of comprehensive communications upgrades.
48	Drought	Preserve economic stability during drought by encouraging agricultural interests to obtain crop insurance.	Owyhee County; Cities	No cost	Revised & Carried Forward	Recast as GV-09 (Encourage crop insurance & resilience planning around Grand View) and as ongoing Extension/FSA outreach. No-cost, long-term educational action.

6.2.1 NFIP AND FLOOD-RELATED ACTIONS (2018–2025)

Flood-related actions in the 2018 plan were also re-evaluated in light of current NFIP participation and local policy direction. Key points:

- Owyhee County (unincorporated) does not participate in the NFIP and does not intend to join during this planning cycle due to concerns regarding increased regulatory burden and potential insurance cost increases for rural landowners.
- Homedale remains the only NFIP-participating community, with only three policies in force.
- Grand View has FIRMs but does not participate in NFIP.
- Marsing has no FIRMs and does not participate in NFIP.

Because of these local decisions, certain 2018 actions, such as countywide NFIP enrollment, FIS/FIRM updates for unincorporated areas, and participation in FEMA's Flood Mitigation Assistance (FMA) program, have been deleted or deferred. Instead, the County and cities are focusing on project-based flood mitigation (culverts, road drainage, dam-related emergency planning, and localized improvements) reflected in the 2025 action items.

6.2.2 PRIORITIZATION OF MITIGATION ACTION ITEMS

Mitigation action items in this Plan were prioritized by each adopting jurisdiction using a combination of:

- The purpose and need of each action (risk reduction potential and alignment with local goals).
- Public support and stakeholder input documented through meetings, surveys, and outreach.
- The technical, financial, and administrative capability of each jurisdiction to implement the action.

Jurisdictions also used an internal STAPLEE-style review (Social, Technical, Administrative, Political, Legal, Economic, and Environmental) as a decision-support framework where appropriate. Priority rankings reflect local judgment and policy discretion and do not necessarily rely on a fixed scoring formula. In some cases, actions that perform well under STAPLEE criteria may still be assigned a lower priority due to funding limitations, competing local needs, implementation timing, or other factors.

In any case, in order to maintain continuity with the 2018 Hazard Mitigation Plan, each action is classified as *High*, *Medium*, or *Low* priority. These priority levels are used to guide implementation sequencing, identify responsible agencies or partners, and inform potential funding strategies.

6.3 MITIGATION ACTION ITEMS

Each adopting jurisdiction's representative on the planning committee worked with their governing body (Board of County Commissioners or City Council) to review, modify, and prioritize mitigation projects identified in this Plan. The resulting mitigation strategy for each jurisdiction reflects locally identified hazards and vulnerabilities, existing capabilities in land-use regulation, emergency management, and infrastructure planning, and available fiscal and staffing resources.

Although each jurisdiction's project list is unique, the strategies were discussed at joint planning meetings to encourage regional coordination, identify opportunities for multi-jurisdictional projects, and avoid conflicts or duplication of effort.

6.3.1 OWYHEE COUNTY (UNINCORPORATED)

ID	Haz.	Project Goal	Recommended Actions	Priority	Involved Organizations	Timeline & Status	Cost Estimate & Funding Source
OC-01	All Hazards	Continue to use countywide emergency alert system for ignition/wildfire notifications and evacuations and explore opportunities for improvement, especially in outlying unincorporated areas like Oreana.	Assess current platform(s); assess viable alternatives; configure/refine SMS/voice alerts for prescribed burns, etc.; pilot rural areas (e.g., Oreana); adopt SOPs; public outreach.	Medium	Owyhee County (EM)	Long Term New	$100K–$250K setup; $10K–$30K/yr O&M; Funding: FEMA EMPG/HMGP, County budget

ID	Haz.	Project Goal	Recommended Actions	Priority	Involved Organizations	Timeline & Status	Cost Estimate & Funding Source
OC-02	Flood	Reduce flooding along drainage near Wild Horse Ln/IFG easement.	Coordinate with IDFG for debris-clearing permissions; evaluate targeted grazing/prescribed burns; adopt periodic maintenance plan.	Medium	Owyhee County; MRW Fire; IDFG	Long Term New	$50K–$150K; Funding: FEMA HMGP, IDFG cost-share, County R&B, BLM coop.
OC-03	Wildland Fire	Build a new MRW Fire Station to expand response capacity.	Secure funding; site study; design & bid; construct & commission.	High	Owyhee County; MRW Fire	Long Term New	$4M–$10M; Funding: FEMA BRIC/HMGP, USDA Community Facilities, CDBG, County
OC-04	Wildland Fire	Improve enforcement for development in fire-prone areas.	Establish/hire compliance inspector; implement conditional-use reviews; inspection cadence; penalty framework; builder education.	Medium	Owyhee County (P&Z/Code Enforcement)	Medium Term New	$90K–$150K/yr; Funding: County budget, permit fees, HMGP (planning)
OC-05	Wildland Fire	Eliminate coverage gaps by adjusting rural fire district boundaries.	Map gaps (e.g., Oreana); convene RFD/RFPAs; adopt boundary changes; update dispatch/aid agreements.	Medium	Owyhee County; Rural FDs/RFPAs	Immediate-Long Term Revised from previous plan	$10K–$25K; Funding: County budget, HMGP (planning)
OC-06	Wildland Fire	Modernize radio communications and regional coverage.	Inventory systems; migrate to digital narrowband; add repeaters/links; integrate dispatch; user training.	High	Owyhee County; BLM; IDL; RFDs	Short-Long Term Revised from previous plan	$150K–$500K; Funding: FEMA AFG/HMGP, state LMR funds, County

ID	Haz.	Project Goal	Recommended Actions	Priority	Involved Organizations	Timeline & Status	Cost Estimate & Funding Source
OC-07	Wildland Fire	Reduce human-caused ignitions via a 14-day camping limit on public lands.	Enact/enforce ordinance; signage; coordinate with land managers; outreach; track compliance.	Medium	Owyhee County; Sheriff's Office	Short Term Ongoing	$10K–$30K**;** Funding: County budget (BLM/IDL in-kind)
OC-08	Wildland Fire	Create an Emergency Action Plan for lithium battery storage (Hemingway & future sites).	Hazard analysis; draft EAP with operators; train/exercise with MRW Fire; periodic updates.	Medium	Owyhee County; MRW Fire; Facility Operators	Medium Term New	$25K–$75K**;** Funding: FEMA HMGP (planning), facility cost-share, County
OC-09	All Hazards	Improve evacuation readiness via assembly points and public education.	Identify/sign assembly areas; publish maps; conduct outreach/drills with community partners.	Medium	Owyhee County (EM); community partners	Medium Term New	$10K–$40K**;** Funding: FEMA HMGP/EMPG, County budget
OC-10	Wildland Fire	Clear legacy juniper-thinning slash to improve access and reduce fuels.	Coordinate with BLM/IDL/ODSL & RFPAs; burn, masticate, or remove debris in Mud Flat/Juniper/South Mountain zones.	Medium–High	Owyhee RFPA; Jordan Valley RFPA; BLM; IDL; ODSL	2027–2028 New	$500K–$1M; Funding: BLM, IDL cost-share, CWDG

ID	Haz.	Project Goal	Recommended Actions	Priority	Involved Organizations	Timeline & Status	Cost Estimate & Funding Source
OC-11	Wildland Fire	Increase initial-attack water movement capacity.	Purchase multiple 2-inch trash pumps for IA and water transfer across RFPA areas.	Medium	Owyhee County / Owyhee RFPA Area	2026 New	$4K–$8K; Funding: IDL VFA, BLM Rural Fire Readiness, RFPA funds
OC-12	Wildland Fire	Improve readiness for prescribed fire/backburn ops.	Acquire drip torches and implement training/use protocols.	Medium	Owyhee County / Owyhee RFPA Area	Spring 2026 New	$1.5K–$3K; Funding: IDL VFA, BLM Rural Fire Readiness, RFPA
OC-13	Wildland Fire	Ensure field comms/power reliability for volunteers.	Purchase rechargeable batteries & portable chargers for radios, GPS, field devices.	Medium	Owyhee County / Owyhee RFPA Area	Spring 2026 New	$1K–$2K; Funding: IDL VFA, BLM Rural Fire Readiness, RFPA
OC-14	Wildland Fire	Keep RFPA PPE compliant and serviceable.	Purchase replacement Nomex, helmets, gloves, boots per 2026 headcount; establish replacement cycle.	Medium	Owyhee County / Owyhee RFPA Area	Spring 2026 New	$5K–$7K; Funding: IDL VFA, BLM Rural Fire Readiness, RFPA
OC-15	Wildland Fire	Establish reliable operating funds for RFPA engines & personnel.	Create RFPA maintenance/operations fund for fuel, PM/repairs, tires, parts; define annual budget.	High	Owyhee RFPA; Owyhee County; BLM; IDL	2026–2027 New	$50K–$100K setup; $150K–$250K/yr; Funding: RFPA dues, BLM CFA, county

ID	Haz.	Project Goal	Recommended Actions	Priority	Involved Organizations	Timeline & Status	Cost Estimate & Funding Source
OC-16	Wildland Fire	Upgrade/replace Bruneau Type-6 engine for greater capacity.	Overhaul or replace 2012 F-550 Type-6 to increase water/equipment capacity.	High	Bruneau Fire District; Owyhee County; IDL; BLM	2026–2027 New	$250K–$400K; Funding: FEMA AFG, IDL VFA, BLM RFR, local match
OC-17	Wildland Fire	Renovate Bruneau station (donated BLM guard station).	Design and renovate to modern specs with deeper bays and office space.	High	Bruneau Fire District; Owyhee County; BLM; IDL	2027–2028 New	$300K–$400K; Funding: FEMA AFG, IDL VFA, BLM RFR, local match
OC-18	Wildland Fire	Provide safe training & medevac capability at Bruneau site.	Construct live-fire training structure and paved/lighted helipad.	Medium	Bruneau Fire District; BLM	Ongoing–2026 New	TBD (in-kind noted); pursue AFG/partner grants
OC-19	Wildland Fire	Increase homeowner wildfire preparedness along Bruneau WUI.	Deliver Firewise/outreach on defensible space and participation; target priority neighborhoods.	Medium	Bruneau Fire District; Owyhee County; IDL	2026–2027 New	$10K–$25K; Funding: FEMA EMPG, IDL Community Fire Assistance, local

ID	Haz.	Project Goal	Recommended Actions	Priority	Involved Organizations	Timeline & Status	Cost Estimate & Funding Source
OC-20	Wildland Fire	Reduce spring burn escapes via local permitting/authorization.	Draft local burn authorization program/reg; public outreach; coordinate with IDL/RFPAs.	Medium	Owyhee County; Idaho RFPA Network; IDL; State Legislature	2026–2027 New	Staff time; cost depends on legislation
OC-21	Wildland Fire	Improve volunteer recruitment/retention through benefits.	Advocate for volunteer firefighter benefits (retirement/insurance) at state/federal levels.	Medium	Owyhee County; State Legislature; Idaho Fire Chiefs; RFPAs; IDL; FEMA	2026–2027 New	Staff time/advocacy
OC-22	Wildland Fire	Create statewide funding mechanism for RFPAs.	Support recreational licensing fee concept to fund RFPAs (training/equipment/Ops).	Medium	Owyhee County; Idaho RFPA Network; IDL; State Legislature	2026-2027 New	Staff time/advocacy
OC-23	Wildland Fire	Bring Three Creek RFPA comms into digital compliance/interoperability.	Purchase digital licenses; replace non-compliant radios to match BLM/IDL standards.	Medium	Three Creek RFPA; BLM; IDL; Owyhee County	2026 New	$45K–$60K; Funding: BLM surplus, FEMA AFG, IDL VFA, RFPA

ID	Haz.	Project Goal	Recommended Actions	Priority	Involved Organizations	Timeline & Status	Cost Estimate & Funding Source
OC-24	Wildland Fire	Replace expired fire shelters to current NFPA standards.	Procure ~60 fire shelters and distribute; document compliance and training.	Medium	Three Creek RFPA; IDL	2026 New	$30K–$35K (~$500–$550 each); Funding: AFG, IDL VFA, IDL Forestry & Fire Grants, RFPA
OC-25	Wildland Fire	Modernize/maintain PPE and establish replacement cycle.	Replace aging/worn PPE; set up maintenance fund for periodic repairs/replacements.	Medium	Three Creek RFPA; IDL	2026–2027 New	$20K–$25K initial; ~$5K/yr; Funding: AFG, IDL VFA, IDL Forestry & Fire Grants, RFPA
OC-26	Wildland Fire/All Hazards	Improve medical readiness during wildland ops/community events.	Purchase AEDs; run CPR/AED training for volunteers; integrate into incident response kits.	Medium	Three Creek RFPA; IDL	2026 New	$5K–$10K; Funding: AFG, local donations, RFPA
OC-27	Wildland Fire	Keep RFPA engines/apparatus operational and mission-ready.	Fund engine/equipment maintenance (diesel, tires, filters, parts, minor labor).	Medium	Three Creek RFPA; BLM; IDL	2026–2027 New	$30K–$50K/yr; Funding: BLM/IDL agreements & cost-share

ID	Haz.	Project Goal	Recommended Actions	Priority	Involved Organizations	Timeline & Status	Cost Estimate & Funding Source
OC-28	Wildland Fire	Reduce conifer encroachment and improve sage-grouse habitat resilience.	Eradicate ~640 acres juniper (limb/pile/burn) in South Mountain area; coordinate with IDL.	Medium–High	Idaho Department of Lands	May 15, 2026 New	$500K–$1M; Funding: IDL
OC-29	Wildland Fire	New Brush Truck for GVFD	Purchase a new type 6 brush truck to help with WUI fires in the extensive outreaches of GVFD's response area.	High	Grand View Fire Department	2027-2028 New	$375,000; Funding: CWDG, IDL cost-share, BLM donations
OC-30	Wildland Fire	GVFD radio standardization	Reach complete standardization of all GVFD apparatus, especially the capability of going digital	High	Grand View Fire Department	2026-2027 New	$15,000; Funding: CDWG, IDL cost-share, GVFD budget

ID	Haz.	Project Goal	Recommended Actions	Priority	Involved Organizations	Timeline & Status	Cost Estimate & Funding Source
OC-31	Wildland Fire	Amend historic zoning to allow limited non-combustible materials while maintaining historic character	Draft zoning amendment; develop design guidelines; conduct outreach and pilot retrofits	Medium	Owyhee County Planning and Zoning, State Historic Preservation Office (SHPO), Silver City Fire and Rescue (SCFR), Silver City Homeowners Association (SCHA)	Short-term (1–3 yrs) New	$25K–$50K Idaho SHPO grants, FEMA HMGP, CDBG
OC-32	Wildland Fire	Expand defensible space and community fuel reduction around homes	Map priority parcels; conduct defensible space surveys; launch volunteer/assistance program; hold chipper/burn days; ongoing outreach	High	SCFR, SCHA, community volunteers, IDL, Owyhee County Sheriff's Office (OCSO)	Short-term & Ongoing (initiate in 1 yr; repeat 3–5 yr cycle) New	$10K–$20K annually FEMA HMGP, Community Wildfire Defense Grant, IDL cost-share
OC-33	Wildland Fire	Implement forest fuels management and wood utilization projects	Complete fuels mapping and SA/Rx; conduct thinning, mastication, and fuel breaks; allow firewood gleaning; coordinate with BLM/IDL/private owners	High	BLM, IDL, SCHA, SCFR	Medium-term (2–5 yrs, phased) New	$250K–$750K BLM fuels program, USFS/IDL grants, stewardship contracts, timber sales

ID	Haz.	Project Goal	Recommended Actions	Priority	Involved Organizations	Timeline & Status	Cost Estimate & Funding Source
OC-34	Wildland Fire	Upgrade water supply and delivery system for firefighting	Assess current system (4" PVC, 3-phase generator, 10 HP pump, 100 GPM capability for 2.5 days); design 1M-gal tank, pump upgrades (1,200 GPM), Morning Star Mine reservoir lining and pump upgrade; improve dip tank by landing zone with another headwall below cemetery; explore options for routing water to dip tank from reservoir to 6,000 gallon dip tank with 5" Fire Hose vs. dipping directly from reservoir.	High	SCFR, Owyhee County Commissioners, BLM, IDWR	Long-term (3–7 yrs) New	$1M–$3M FEMA, USDA Rural Dev., Idaho infrastructure funds
OC-35	Wildland Fire	Arrange for the burial of several large propane tanks near the Historic Idaho Hotel in Silver City to avoid a possible Boiling Liquid Expanding Vapor Explosion (BLEVE).	Obtain funding, hire engineers, get plans approved by County Commission, find contractor to complete the burials.	High	SCFR, Owyhee County Commissioners, BLM, IDL	Short Term (1–2 Years) Revised from previous plan	$50K–$100K FEMA, USDA Rural Dev., Idaho infrastructure funds

ID	Haz.	Project Goal	Recommended Actions	Priority	Involved Organizations	Timeline & Status	Cost Estimate & Funding Source
OC-36	Flood	Replace Jordan Street culvert and add flash flood mitigation impoundment	Conduct hydraulic and hydrologic study; design culvert/impoundment; secure permits; construct replacement culvert and headwall	Medium	BLM (lead), Owyhee Co. Road & Bridge, USACE, SCFR, SCHA	Medium-term (3–5 yrs) New	$500K–$1M FEMA Flood Mitigation Assistance, NRCS watershed funds, BLM capital funds
OC-37	All Hazards	Develop evacuation and egress plan for Silver City	Map routes; draft SOPs for traffic control; install signage; distribute maps; conduct drills and after-action reviews	High	Owyhee Co. Sheriff, SCFR, Owyhee County Emergency Management, IDT	Short-term (1–2 yrs) New	$15K–$50K FEMA Emergency Management Performance Grant, Hazard Mitigation Grant Program, County Budget
OC-38	Avalanche	Increase avalanche awareness and winter safety in Long Gulch	Review avalanche history; identify risk points; install signage; launch outreach; explore seasonal patrol/watchman	Medium	Owyhee County Commissioners, BLM, SCFR, volunteer groups	Short-term (<1 yr signage) + ongoing outreach Revised from previous plan	$5K–$15K Idaho Parks and Rec Grants, BLM Rec Funds, private sponsors

6.3.2 CITY OF HOMEDALE

ID	Hazard	Project Goal	Recommended Actions	Priority	Involved Organizations	Timeline & Status	Funding & Cost Estimate
H-01	All Hazards	Implement water system upgrades (wells, wider pipes)	Finalize improvement plans; coordinate with neighboring cities; leverage secured regional grants; design & construct upgrades.	High	City of Homedale	Short Term Ongoing (Funding secured)	Funding secured (USDA/federal grants); $500K–$2M
H-02	All Hazards	Continue to enforce International Building Codes to maintain resilience	Maintain inspector training; update codes with State adoptions; conduct annual compliance checks.	High	City of Homedale	Long Term Ongoing	Local budgets; staff time
H-03	All Hazards	Identify and evaluate shelter/assembly facilities that meet Red Cross standards	Inventory facilities; assess against Red Cross checklist; retrofit as needed (generators, ADA).	Medium	City of Homedale	Medium Term Revised from previous plan	FEMA HMGP, Red Cross cost-share; $25K–$75K
H-02	All Hazards	Investigate drainage ditch ownership and tiling/filling feasibility	Identify owners/operators; conduct feasibility and environmental review; engage IDWR/landowners; develop management plan.	Not Scored	City of Homedale	Medium–Long Term New	FEMA FMA, City budget; $50K–$150K

ID	Hazard	Project Goal	Recommended Actions	Priority	Involved Organizations	Timeline & Status	Funding & Cost Estimate
H-03	All Hazards	Construct new well with backup generator for water/fire supply	Select site; design well & generator; complete environmental review; secure EPA/IDWR funding; construct and commission.	High	City of Homedale	Ongoing New	Funding secured (EPA/IDWR grants); $500K–$1M
H-04	Flood	Maintain and enhance city policies promoting flood resilience	Continue NFIP compliance; coordinate with FEMA for FIRM updates; prioritize critical roads/structures; design/elevate where feasible (e.g., Homedale Airport, Pioneer Rd); coordinate with ITD & county	Medium	City of Homedale, Owyhee County, ITD, FEMA	Medium–Long Term Revised/Consolidated from previous plan	FEMA FMA, HMGP, County/City budgets; $250K–$1M+ depending on scope
H-04	Severe Weather/Flood	Obtain a jetter truck/trailer to clear storm drainage	Identify flood-prone areas; prepare specs; apply for equipment grants; procure jetter; train staff; schedule routine maintenance.	High	City of Homedale	Short–Medium Term New	FEMA HMGP, USDA RD, City budget; $150K–$300K
H-05	Severe Weather	Obtain snow truck for road clearing	Assess road clearing needs; develop procurement plan; apply for grants; purchase snow truck; maintain and operate.	Medium	City of Homedale	Short–Medium Term New	FEMA HMGP, USDA RD, City budget; $150K–$250K

ID	Hazard	Project Goal	Recommended Actions	Priority	Involved Organizations	Timeline & Status	Funding & Cost Estimate
H-06	Severe Weather	Equip city trucks with winches for debris clearing	Inventory fleet; select winch models; procure and install winches; train operators; integrate into response plans.	Medium	City of Homedale, Owyhee County	Medium Term – Prospective	FEMA HMGP, County budget; $25K–$50K
H-07	Wildland Fire	Public education on Firewise principles	Develop outreach materials; partner with County & Fire District; host education at county fair; distribute brochures and resources.	Medium	Owyhee County, City of Homedale, Homedale Rural FD	Short Term – Prospective	FEMA HMGP, CWDG, County budget; $10K–$25K annually
H-08	Wildland Fire	Volunteer assistance program for vulnerable residents	Recruit youth organizations; provide training; coordinate volunteer cleanup days; arrange waste disposal or chipping.	Medium	City of Homedale, Homedale Rural FD	Short–Medium Term – Prospective	FEMA HMGP, City budget; $15K–$50K annually
H-09	Earthquake	Evaluate URMs for seismic safety and retrofit if necessary	Hire engineer; perform assessments; design retrofits; pursue FEMA PDM/HMGP funding for retrofits.	Low	City of Homedale, Owyhee County	Long Term – Deferred	FEMA PDM/HMGP, County budget; $250K–$1M per facility

6.3.3 CITY OF MARSING

ID	Hazard	Project Goal	Recommended Actions	Priority	Involved Organizations	Timeline & Status	Funding & Cost Estimate
M-01	All Hazards	Upgrade water supply infrastructure (new wells, wider pipes) to improve capacity and resilience	Finalize plans; complete engineering designs; pursue grants (USDA RD); construct and commission new wells/pipes.	High	City of Marsing Public Works	Short Term – Ongoing (Funding secured)	Funding secured (USDA/federal/state grants); $500K–$2M
M-02	All Hazards	Continue to enforce International Building Codes to maintain resilience	Maintain inspector training; update codes with State adoptions; conduct annual compliance checks.	High	City of Marsing	Long Term – Ongoing	Local budgets; staff time
M-03	All Hazards	Identify and evaluate shelter/assembly facilities that meet Red Cross standards	Inventory facilities; assess against Red Cross checklist; retrofit as needed (generators, ADA).	Medium	City of Marsing	Medium Term – Revised	FEMA HMGP, Red Cross cost-share; $25K–$75K
M-04	All Hazards	Inventory and upgrade generators for shelters, critical facilities, and water wells	Compile inventory; assess gaps; purchase/install generators; set maintenance plan.	Medium	City of Marsing, Owyhee County	Medium Term – Revised	FEMA HMGP, EMPG, County budget; $50K–$250K
M-05	Flood	Evaluate structures at risk from CJ Strike Dam failure	Evaluate inundation zone; identify exposed structures; investigate protection/relocation options; coordinate with Idaho Power.	Low	City of Marsing, Owyhee County, Idaho Power	Long Term – Revised	FEMA FMA, Idaho Power mitigation support; $100K–$500K

ID	Hazard	Project Goal	Recommended Actions	Priority	Involved Organizations	Timeline & Status	Funding & Cost Estimate
M-06	Wildland Fire	Support defensible space, fuels reduction, and outreach programs as identified by Owyhee County in the CWPP	Partner with County EM/IDL; conduct defensible space inspections; promote Firewise workshops; implement fuel breaks.	High	City of Marsing, Owyhee County	Long Term – Revised	FEMA HMGP, CWDG, IDL cost-share; $25K–$100K annually
M-07	Wildland Fire	Reduce fuels in canals, parks, and vegetated city areas	Assess fuel loads; develop fuels reduction plan; conduct mowing, grazing, or mechanical treatments; maintain annually.	Medium	City of Marsing, Owyhee County	Medium Term – New	FEMA HMGP, County funds; $50K–$150K
M-08	Wildland Fire	Assist vulnerable residents with defensible space	Develop a plan for volunteers to assist with defensible space efforts; coordinate cleanup events; provide disposal (chipping, burn days); offer cost-share assistance.	Medium	City of Marsing, Owyhee County	Medium Term – New	FEMA HMGP, CWDG, local cost-share; $15K–$50K annually
M-09	Drought	Conserve water during drought through irrigation enforcement	Monitor compliance; issue reminders/enforcement; evaluate improvements to reduce water waste.	Medium	City of Marsing	Short Term – Ongoing	City budget; staff time
M-10	Earthquake	Evaluate URMs for seismic safety and retrofit if necessary	Hire engineer; perform assessments; design retrofits; pursue FEMA PDM/HMGP funding for retrofits.	Low	City of Marsing, Owyhee County	Long Term – Deferred	FEMA PDM/HMGP, County budget; $250K–$1M per facility

6.3.4 CITY OF GRAND VIEW

ID	Hazard	Project Goal	Recommended Actions	Priority	Involved Organizations	Timeline & Status	Funding & Cost Estimate
GV-01	All Hazards	Upgrade water supply infrastructure (new wells, wider pipes) to improve capacity and resilience	Finalize plans; complete engineering designs; pursue grants (USDA RD); construct and commission new wells/pipes.	High	City of Grand View Public Works	Short Term – Ongoing (Funding secured)	Funding secured (USDA/federal grants/IDWR grants); $500K–$2M
GV-02	All Hazards	Purchase back truck/dump truck for maintenance and emergency repairs	Assess needs/specs; include in capital plan; obtain funding; procure vehicle; deploy for maintenance.	Medium	City of Grand View	Medium Term – Prospective	FEMA HMGP, City budget; $150K–$250K
GV-03	All Hazards	Pave city roads to improve emergency access	Identify critical routes; prepare phased paving plan; apply for grants; execute paving projects.	Not Scored	City of Grand View	Short–Long Term – Prospective	FEMA HMGP, USDA RD, City budget; $500K–$2M
GV-04	Flood	Develop flood drainage system to reduce localized flooding	Conduct hydrology/drainage study; design system; apply for FEMA/USDA funding; construct in phases.	High	City of Grand View	Long Term – Prospective	FEMA FMA, HMGP, USDA RD, City budget; $500K–$1.5M
GV-05	Flood	Evaluate structures at risk from CJ Strike Dam failure	Evaluate inundation zone; continue to adopt Idaho Power Emergency Action Plan; continue school evacuation drills; identify exposed structures; investigate protection/relocation options; coordinate with Idaho Power.	Medium	City of Grand View, Owyhee County, Idaho Power	Long Term – Revised	FEMA FMA, Idaho Power mitigation support; $100K–$500K

ID	Hazard	Project Goal	Recommended Actions	Priority	Involved Organizations	Timeline & Status	Funding & Cost Estimate
GV-06	Flood	Evaluate facilities and infrastructure in the 100-year flood plain	Inventory facilities, homes, and infrastructure in the 100-year flood zone; explore possible measures to protect them from floodwaters (elevation, swales, barriers, etc.)	Low	Owyhee County, ITD, City of Grand View (lead)	Long Term – Revised	FEMA FMA, HMGP, County/City budgets; $250K–$1M+ depending on scope
GV-07	Wildland Fire	Support defensible space, fuels reduction, and outreach programs as identified by Owyhee County in the CWPP	Partner with County EM/IDL; conduct defensible space inspections; promote Firewise workshops; recruit volunteers to clear brush and debris; implement fuel breaks where feasible.	High	Owyhee County (lead), City of Grand View	Long Term – Revised	FEMA HMGP, CWDG, IDL cost-share; $25K–$100K annually
GV-08	Wildland Fire/Drought	Reline city water tank to ensure emergency water availability	Inspect tank; design relining; secure funds; perform relining; monitor results.	Medium	City of Grand View	Short–Long Term – Prospective	FEMA, County budget; $100K–$300K
GV-09	Drought	Encourage crop nsurance & resilience planning for the agricultural community in and around Grand View	Partner with Extension Service & FSA to promote insurance and irrigation conservation	Low	Owyhee County (lead), USDA FSA, City of Grand View	Long-Term – Ongoing	USDA RMA/RD, NRCS, FEMA HGMP, ISDA Block Grant, Staff, agency time

ID	Hazard	Project Goal	Recommended Actions	Priority	Involved Organizations	Timeline & Status	Funding & Cost Estimate
GV-10	Earthquake	Evaluate URMs for seismic safety and retrofit if necessary	Hire engineer; perform assessments; design retrofits; pursue FEMA PDM/HMGP funding for retrofits.	Low	City of Grand View (lead), Owyhee County	Long Term – Deferred	FEMA PDM/HMGP, County budget; $250K–$1M per facility

6.4 MITIGATION ACTION ITEMS FROM COMMUNITY WILDFIRE PROTECTION PLAN

6.4.1 WILDLAND FIRE MITIGATION ACTION FRAMEWORK FOR THE OWYHEE COUNTY ALL-HAZARD MITIGATION PLAN

For the purpose of this All-Hazard Mitigation Plan (HMP), wildfire-related mitigation action items are carried forward and expanded from the Owyhee County Community Wildfire Protection Plan (CWPP), which is currently undergoing a full update concurrently with this plan.

Because both plans address wildfire risk reduction, some overlap between the CWPP mitigation actions and the HMP's broader mitigation strategy is expected.

The following categories, adapted for Owyhee County, describe how wildfire mitigation actions are grouped and presented in this plan.

6.4.1.1 PLANNING

Wildfire mitigation efforts must be grounded in consistent, proactive planning at the county level. Planning-related actions focus on strengthening regulatory and policy frameworks (e.g., land-use planning, building codes, development review, and coordination with federal partners) that reduce fire risk and improve community resilience.

Because these items are policy-oriented, cost estimates are not typically assigned, and final adoption or modification rests with elected officials, county departments, and cooperating agencies. Examples include:

- Integrating WUI considerations into land-use planning and zoning
- Adopting or updating county-level standards for defensible space, access, and water supply
- Improving interagency coordination with BLM, IDL, RFPAs, and municipal jurisdictions
- Incorporating wildfire hazard data into building and development review processes

6.4.1.2 MITIGATION

Mitigation actions are on-the-ground fuel treatments and physical interventions designed to directly reduce wildfire risk to people, structures, infrastructure, and economic assets across Owyhee County.

These actions may occur before, during, or after a wildfire event and should consider related hazards, such as post-fire flooding and debris flows, smoke impacts, erosion, and invasive species establishment, that regularly follow fire events in Owyhee County rangelands.

Examples include:

- Fuel breaks, right-of-way vegetation management, and strategic grazing programs

- Hazardous-fuel reduction projects on county lands, private lands, and in coordination with BLM/IDL
- Post-fire rehabilitation, erosion mitigation, and noxious-weed control
- Structural hardening and defensible space improvements in WUI areas

6.4.1.3 EDUCATION

Education and outreach are critical to wildfire preparedness in Owyhee County, particularly given its dispersed rural population and the importance of agricultural and rangeland communities.

Education-related actions focus on improving public understanding of wildfire risk, WUI responsibilities, smoke-related health issues, evacuation protocols, and post-fire hazards.

These efforts build on existing programs operated by Owyhee County Emergency Management, local RFPAs, municipal fire departments, IDL, BLM, and statewide preparedness platforms (e.g., AlertSense, Ready.gov, TextMyGov).

Examples include:

- Public workshops on defensible space and home hardening
- Education campaigns related to wildfire smoke, health risks, and N95 mask availability
- Evacuation awareness programs in communities at risk
- Outreach during burn season regarding fire-safe agricultural and rangeland practices

6.4.1.4 CAPACITY BUILDING

Capacity-building actions strengthen the ability of Owyhee County and its partners, including RFPAs, local fire districts, BLM, IDL, law enforcement, and county agencies to prepare for, respond to, and recover from wildfire.

This includes acquiring equipment, training, staffing, funding, and technology needed to improve emergency response effectiveness and firefighter safety.

Examples include:

- Acquiring modern PPE, radios, mesh network communications, and fire-response vehicles
- Increasing training for wildland fire operations, red-card certification, and incident command
- Enhancing dispatch capacity, GIS mapping, and fire weather intelligence
- Seeking federal and state mitigation grants (FEMA HMA, IDL, BLM, USDA

6.4.2 CWPP ACTION ITEMS

The following action items were taken directly from the Owyhee County Community Wildfire Protection Plan (CWPP), which is being updated concurrently with the MHMP. Some of the following items were referenced in Section 6.2 (Progress on Previous Mitigation Actions).

Project #	Project Name	Type	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	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
2	Clearing debris on Idaho FG easement	Fuels Reduction	Hardtrigger Creek near Wildhorse Road, Givens Hot Springs	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. Steps: 1. 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. 2. Explore possible methods for clearing the debris i.e. targeted grazing, prescribed burns, etc. 3. If possible, develop a land use plan to keep the drainage clear of debris through periodic maintenance.	FEMA HMGP, County budget $50K - $150K	Owyhee County, MRW Fire, IFG	2027

Project #	Project Name	Type	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
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: 1. Secure funding for the new station. 2. Commission a study to determine the best location. 3. Find a contractor to begin construction.	FEMA HMGP, CWDG, County budget $8M - $10M	Owyhee County, MRW Fire	2027-2028

Project #	Project Name	Type	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
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: 1. Define job description 2. Secure funding 3. Hire and train inspector 4. Implement inspection program and enforcement protocol.	CDWG; County budget $75K - $150K annually	Owyhee County	2027
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	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
9	Tumbleweed Burning	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		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	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	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
				landscape management (environmental assessments, equipment-shares, etc.)			
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

Project #	Project Name	Type	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
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 & RFPA 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
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	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
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	FEMA HMGP, CWDG, BLM Grants, IDL Cost-Share, County budget	Owyhee County, Owyhee Cattlemen's Association, BLM, IDL,	2027-2029

Project #	Project Name	Type	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
				suitable sites for publicly accessible fill/dip sites; write grants; hire contractors; begin construction	$25K - $1M or more depending on scope	various RFDs	
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
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	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 to allow limited non-combustible materials while maintaining historic character: Draft zoning amendment; develop design guidelines; conduct outreach and pilot retrofits	FEMA HMGP, Community Wildfire Defense Grant, IDL cost-share $25K - $50K	SCFR, SCHA, community volunteers, IDL, Owyhee County Sheriff's Office (OCSO)	2026-2028
20	Defensible Space Volunteering	Fuels reduction	Cities and communities in Owyhee County	Expand defensible space and community fuel reduction around homes: Map priority parcels; conduct defensible space surveys; launch volunteer/assistance program; hold chipper/burn days; ongoing outreach	FEMA HMGP, Community Wildfire Defense Grant, IDL cost-share $10K - $20K annually	Community volunteers, IDL, Owyhee County Sheriff's Office (OCSO), Cities, Homeowners Associations	2027
21	Silver City Fuels Reduction	Fuels Reduction	Silver City	Implement forest fuels management and wood utilization projects surrounding Silver City, especially in fir and aspen: Complete fuels mapping and SA/Rx; conduct thinning, mastication, and fuel breaks; allow	BLM fuels program, USFS/IDL grants, stewardship contracts, timber sales	BLM, IDL, SCHA, SCFR	2027 - 2030

Project #	Project Name	Type	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
				firewood gleaning; coordinate with BLM/IDL/private owners	$250K - $750K		
22	Silver City Water Upgrade	Capacity Building	Silver City	Upgrade water supply and delivery system for firefighting: Assess current system (4" PVC, 3-phase generator, 10 HP pump, 100 GPM capability for 2.5 days); design 1M-gal tank, pump upgrades (1,200 GPM), Morning Star Mine reservoir lining and pump upgrade; improve dip tank by landing zone with another headwall below cemetery; explore options for routing water to dip tank from reservoir to 6,000 gallon dip tank with 5" Fire Hose vs. dipping directly from reservoir.	FEMA, USDA Rural Dev., Idaho infrastructure funds $1M - $3M	SCFR, Owyhee County Commissioners, BLM, IDWR	2028-2032
23	Silver City egress plan	Planning	Silver City	Develop evacuation and egress plan for Silver City: Map routes; draft SOPs for traffic control; install signage; distribute maps; conduct drills and after-action reviews	FEMA EMPG, CWDG, County Budget $15K - $50K	Owyhee Co. Sheriff, SCFR, Owyhee County Emergency Management, IDT	2026-2027

Project #	Project Name	Type	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
24	Propane Tank Burial	Fuels Reduction	Silver City	Arrange for the burial of several large propane tanks near the Historic Idaho Hotel in Silver City to avoid a possible Boiling Liquid Expanding Vapor Explosion (BLEVE).	FEMA EMPG, IDL cost-share $50K - $100K	BLM, IDL, Owyhee County, Silver City Fire & Rescue,	2026-2027
25	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 RFPA, Jordan Valley RFPA, BLM, IDL, Oregon Department of State Lands	2027-2028
26	2” Trash Pumps	Capacity Building	Owyhee County / Owyhee RFPA 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, RFPA funds $4K - $8K	Owyhee RFPA, BLM, IDL	2026
27	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

Project #	Project Name	Type	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
28	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
29	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
30	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
31	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

Project #	Project Name	Type	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
32	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
33	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
34	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

Project #	Project Name	Type	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
35	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
36	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
37	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

Project #	Project Name	Type	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
38	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
39	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
40	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	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
41	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
42	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 yearly	Three Creek RFPA, BLM, IDL	2026-2027
43	Sage-Grouse Habitat Improvement	Fuels Reduction	South Mountain?	640 Acres of Juniper eradication - limbed piled and burned	IDL funds $500k - $1M	Idaho Department of Lands	May 15, 2026
44	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

Project #	Project Name	Type	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
45	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
46	Clover Seedling Hand Planting	Mitigation	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
47	Horse Butte North Drill 9 (Sandbergs bluegrass)	Mitigation	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
48	Horse Butte Rd Maintenance	Mitigation	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

Project #	Project Name	Type	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
49	Pot Hole 5 Chemical	Mitigation	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
50	Winter Camp 11 & 12 Chemical	Mitigation	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
51	Hot Spring 3 &4 Chemical	Mitigation	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
52	Pot Hole North Drill 8 Seeding	Mitigation	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

Project #	Project Name	Type	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
53	Pot Hole North Areial 5 Seeding	Mitigation	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
54	Clover South 6 Mowing	Mitigation	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
55	Clover South Chem 17	Mitigation	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
56	Clover South Chem 18 Option 1	Mitigation	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	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
57	Clover South Chem 18 Option 2	Mitigation	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
58	Horse Butte North Drill 9 (Sandberg's bluegrass)	Mitigation	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
59	2025 Roadside Fuel Break Chemical	Mitigation	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
60	205 Fuel Breaks Tumbleweed Burn	Mitigation	Main access roads, fence lines and drainages within the northern portion of the	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

Project #	Project Name	Type	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
			Jarbidge Field Office.				
61	Middle Kinyon Chem 17	Mitigation	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
62	Middle Kinyon Chem 18	Mitigation	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
63	Middle Kinyon Chem 18	Mitigation	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

Project #	Project Name	Type	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
64	Middle Kinyon Drill 11	Mitigation	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
65	Clover South Drill 11	Mitigation	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
66	Middle Kinyon Aerial 6	Mitigation	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
67	Pot Hole Chemical 6	Mitigation	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

Project #	Project Name	Type	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
68	Pot Hole Chemical 7	Mitigation	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
69	HMA Middle Mow 7	Mitigation	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
70	HMA 2 Mow 7	Mitigation	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
71	HMA 3 Mow 7	Mitigation	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

Project #	Project Name	Type	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
72	HMA 4 South Maintenance Mow 7	Mitigation	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
73	In-House fuel break Maintenance	Mitigation	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
74	HMA 3 Chem 20 Option 1	Mitigation	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

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75	HMA 3 Chem 20 Option 2	Mitigation	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 Middle Chem 19	Mitigation	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
77	HMA Middle Chem 20 Option 1	Mitigation	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

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78	HMA Middle Chem 20 Option 2	Mitigation	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	Crows Nest 2 Mow 9	Mitigation	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
80	Crows Nest 3 Mow 9	Mitigation	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
81	Hot Spring 3 Seedling	Mitigation	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

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82	Coonskin Chemical 1	Mitigation	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
83	Mosquito Lake Chemical 1	Mitigation	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
84	Soldier Chemical 1	Mitigation	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
85	Dove Chemical 1	Mitigation	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

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86	HMA 2 Aerial Seeding 7	Mitigation	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
87	HMA 3 Aerial Seeding 7	Mitigation	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
88	HMA Middle Aerial Seeding 7	Mitigation	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
89	HMA 2 Drill Seeding 7	Mitigation	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	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
90	HMA 3 Drill Seeding 7	Mitigation	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
91	HMA Middle Drill Seeding 7	Mitigation	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
92	Crows Nest 2 Chemical 21	Mitigation	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
93	Crows Nest 3 Chemical 21	Mitigation	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

Project #	Project Name	Type	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
94	Crows Nest 2 Chemical 22 Option 1	Mitigation	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
95	Crows Nest 2 Chemical 22 Option 2	Mitigation	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 3 Chemical 22 Option 1	Mitigation	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

Project #	Project Name	Type	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
97	Crows Nest 3 Chemical 22 Option 2	Mitigation	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	Balanced Rock Middle Mow 11	Mitigation	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
99	Grassy Hills South Middle Mow 11	Mitigation	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

Project #	Project Name	Type	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
100	Hot Springs 4 Seedling	Mitigation	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
101	Crows Nest 2 Drill seeding	Mitigation	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
102	Crows Nest 3 Drill seeding	Mitigation	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
103	Crows Nest 2 Aerial seeding	Mitigation	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

Project #	Project Name	Type	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
104	Crows Nest 3 Aerial seeding	Mitigation	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
105	Balanced Rock Middle Chem 23	Mitigation	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
106	Grassy Hills Chem 23	Mitigation	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
107	Balanced Rock Middle Chem 24 Option 1	Mitigation	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	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date
108	Balanced Rock Middle Chem 24 Option 2	Mitigation	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	Grassy Hills Chem 24 Option 1	Mitigation	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
110	Grassy Hills Chem 24 Option 2	Mitigation	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

Project #	Project Name	Type	Project Location	Project Description	Sources of Funding & Cost Estimate	Involved Orgs.	Projected Completion Date

CHAPTER 7 – PLAN MONITORING, MAINTENANCE, AND IMPLEMENTATION

7.1 PLAN MONITORING AND MAINTENANCE

Owyhee County policy calls for this Hazard Mitigation Plan to be reviewed annually following its adoption to ensure continued relevance, effectiveness, and compliance with FEMA requirements. The annual review will occur at a meeting of a joint planning committee consisting of representatives from Owyhee County, incorporated communities, fire districts, RFPAs, and relevant state and federal partners. The annual review meeting will be open to the public.

The Owyhee County Emergency Manager, or a designated representative, will schedule, publicize, and facilitate the annual review. Each participating jurisdiction will report on the status of mitigation actions, changes in vulnerability, completed projects, and emerging risks. Results of each annual review will be documented, including any changes to mitigation priorities or implementation status. Minor updates may be adopted as administrative amendments, while substantive changes will be incorporated during the five-year update.

A comprehensive update of the Hazard Mitigation Plan will be completed at least once every five years to maintain FEMA approval and eligibility for mitigation grant funding.

7.2 CONTINUED PUBLIC INVOLVEMENT

Owyhee County is committed to maintaining ongoing public involvement throughout plan implementation and maintenance. Members of the public may provide input during annual review meetings, at meetings of the Board of County Commissioners, or by contacting the Emergency Manager at any time.

A copy of the Hazard Mitigation Plan will be maintained at the Owyhee County Courthouse and posted on the County website. Public comments received outside of formal meetings will be logged by County staff and presented to the planning committee during the annual review process.

Public meetings may also be convened following significant hazard events, during development of major mitigation projects, or when changes in local conditions warrant additional outreach. Meeting notices will be publicized through the County website, postings at the Courthouse, and local media outlets, including *The Owyhee Avalanche*.

7.4 FIVE-YEAR PLAN UPDATE

The five-year plan update will include all activities conducted during annual reviews, in addition to the following:

- Update County demographic, socioeconomic, and land-use data.

- Incorporate newly adopted plans, ordinances, development regulations, or policy changes.
- Review emergency facilities, communication sites, and critical infrastructure.
- Review municipal and rural water sources, including those in flood- and landslide-prone areas.
- Re-evaluate hazard risk assessments using updated datasets (e.g., parcels, structures, fuels, infrastructure).
- Update vulnerability profiles and hazard risk rankings, as appropriate.
- Maintain all documentation related to the update through the Owyhee County Emergency Management Office.

7.3 ANNUAL REVIEW PROCESS

At a minimum, the annual plan review will address the following items:

- Update the record of hazard events occurring since the previous review.
- Review County and jurisdiction-specific hazard assessments for significant changes.
- Document mitigation actions completed, ongoing, deferred, or removed.
- Reprioritize mitigation actions based on changing needs, capabilities, or funding availability.
- Identify funding opportunities for new or continuing mitigation projects.
- Identify emerging hazards or data gaps for future consideration.
- Maintain meeting notices, attendance records, and minutes.

To support consistent tracking across jurisdictions, the planning committee may use the mitigation action review template shown in **Table 43**.

Table 43) Example template for a yearly mitigation action item update. The example given is a generic, made-up project to demonstrate the utility of the template.

Mitigation Action ID	Jurisdiction	Action Description	Current Status	Lead Agency	Notes / Needed Updates
A-1	County	Fuels reduction along priority roads	Ongoing	Road & Bridge Dept.	Awaiting funding for Phase 2

This template may be adapted as needed and does not replace jurisdiction-specific project documentation.

APPENDIX A: RECORD OF PLANNING TEAM MEETINGS

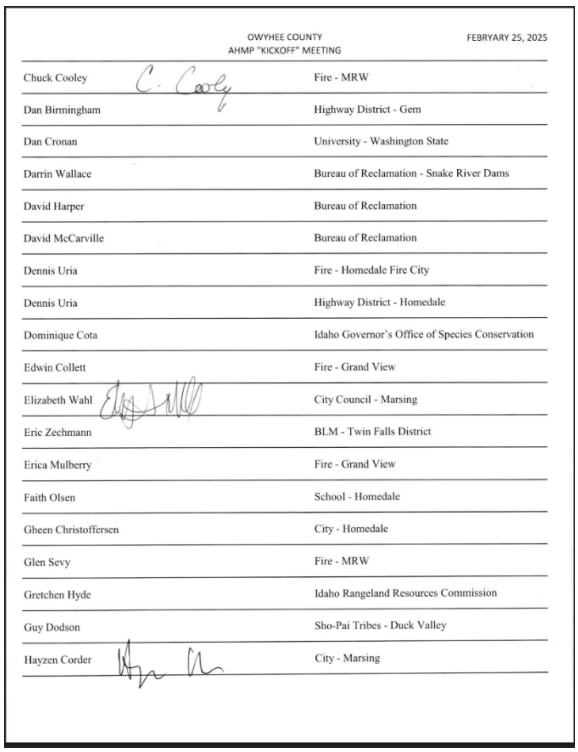
A.1 FEBRUARY 25, 2025 - KICKOFF MEETING

A G E N D A	**Owyhee County Update Project:** **Hazard Mitigation Plan &** **Community Wildfire Protection Plan** **Kickoff Meeting** **Tuesday, February 25, 2025** **10:00 a.m. – 12:00 p.m.** **Owyhee County Museum and Library** **17085 Basey St, Murphy, ID 83650** **(virtual option included)**	
10:00 a.m.	**OPEN – Introductions**	Jim Desmond and Angie Barkell
10:10 a.m. **10:40 a.m.** **11:00 a.m.** **11:20 a.m.** **11:30 a.m.**	**GROUP MEETING** **I. Orientation and Overview** ➢ 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? **II. Build the Planning Team** ➢ Who's missing? How could we reach them and allow for involvement? o Discuss FEMA and state requirements ➢ Planning team responsibilities ➢ What other federal/state/county/city plans should be incorporated? o Should we involve people from those organizations? **III. Developing Outreach Strategy** ➢ Who, what, when ➢ Townhall meeting, present at local event, social media, surveys, traditional news outlets, document review period **IV. Meetings and Communications** ➢ Establish primary points of contact ➢ Meeting format/schedule – discussion of agendas and deliverables needed for each meeting **V. Exercises** ➢ Hazard Summary Worksheet **VI. Homework** ➢ GIS data ➢ Local Knowledge Questionnaire ➢ Hazard Summary Worksheet	Northwest Management, Inc. (NMI) and Group
12:00 p.m.	**ADJOURNMENT**	

Figure 47) Kickoff meeting agenda.

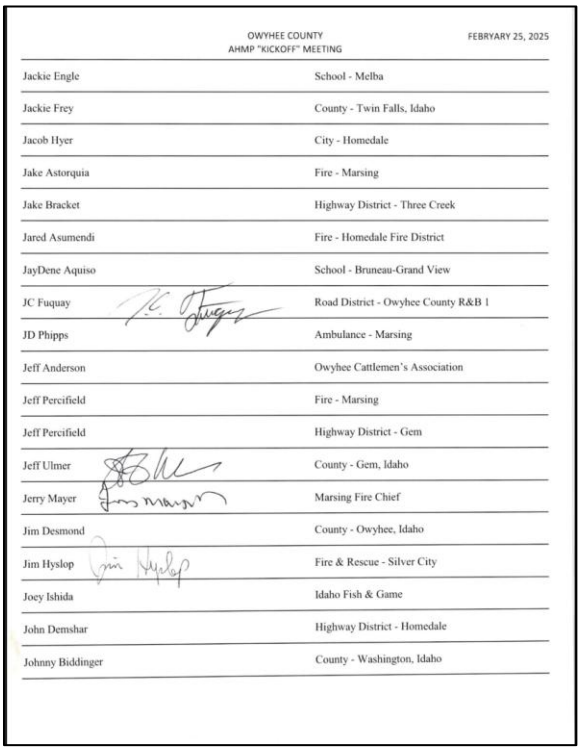
A.1.1 MULTI-JURISDICTIONAL PARTICIPATION

The County plus representatives from one of the three adopting cities (Marsing) attended the February kickoff meeting.



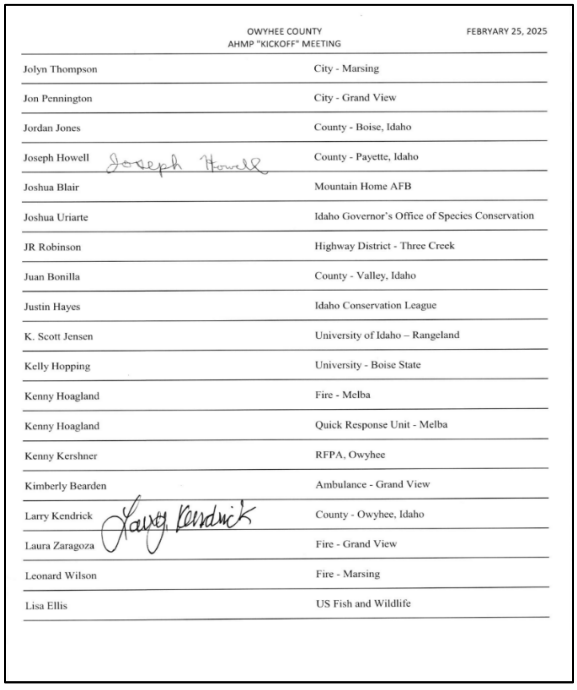
OWYHEE COUNTY
AHMP "KICKOFF" MEETING
FEBRYARY 25, 2025

Chuck Cooley	Fire - MRW
Dan Birmingham	Highway District - Gem
Dan Cronan	University - Washington State
Darrin Wallace	Bureau of Reclamation - Snake River Dams
David Harper	Bureau of Reclamation
David McCarville	Bureau of Reclamation
Dennis Uria	Fire - Homedale Fire City
Dennis Uria	Highway District - Homedale
Dominique Cota	Idaho Governor's Office of Species Conservation
Edwin Collett	Fire - Grand View
Elizabeth Wahl	City Council - Marsing
Eric Zechmann	BLM - Twin Falls District
Erica Mulberry	Fire - Grand View
Faith Olsen	School - Homedale
Gheen Christoffersen	City - Homedale
Glen Sevy	Fire - MRW
Gretchen Hyde	Idaho Rangeland Resources Commission
Guy Dodson	Sho-Pai Tribes - Duck Valley
Hayzen Corder	City - Marsing



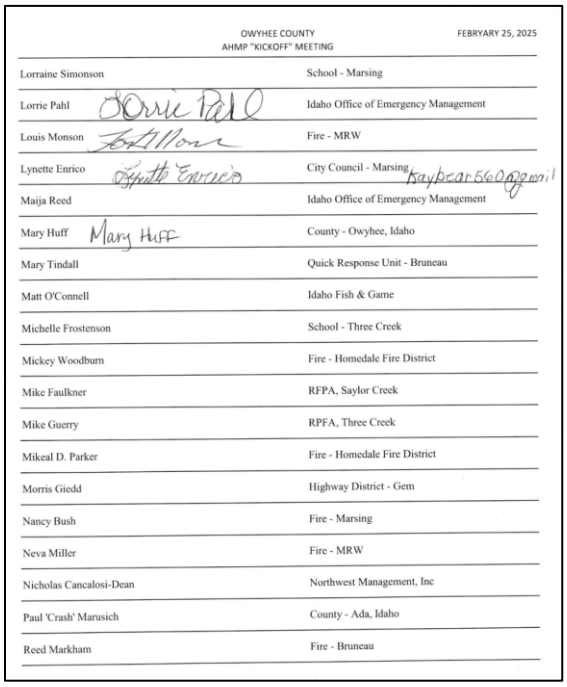
OWYHEE COUNTY
AHMP "KICKOFF" MEETING
FEBRYARY 25, 2025

Jackie Engle	School - Melba
Jackie Frey	County - Twin Falls, Idaho
Jacob Hyer	City - Homedale
Jake Astorquia	Fire - Marsing
Jake Bracket	Highway District - Three Creek
Jared Asumendi	Fire - Homedale Fire District
JayDene Aquiso	School - Bruneau-Grand View
JC Fuquay	Road District - Owyhee County R&B 1
JD Phipps	Ambulance - Marsing
Jeff Anderson	Owyhee Cattlemen's Association
Jeff Percifield	Fire - Marsing
Jeff Percifield	Highway District - Gem
Jeff Ulmer	County - Gem, Idaho
Jerry Mayer	Marsing Fire Chief
Jim Desmond	County - Owyhee, Idaho
Jim Hyslop	Fire & Rescue - Silver City
Joey Ishida	Idaho Fish & Game
John Demshar	Highway District - Homedale
Johnny Biddinger	County - Washington, Idaho



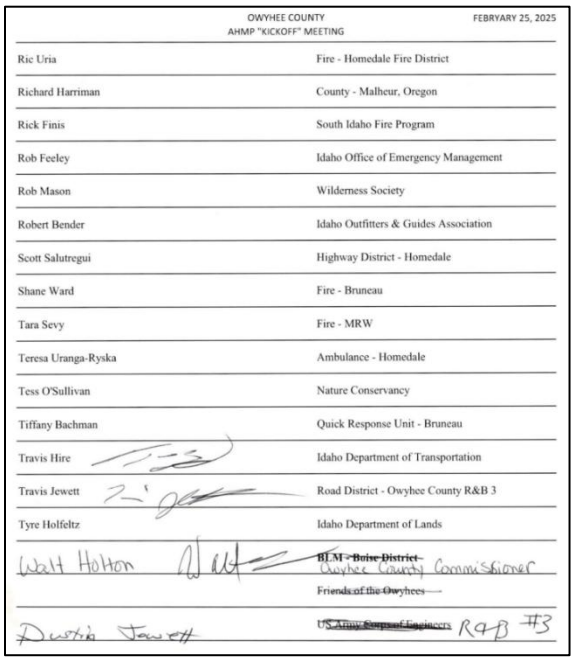
OWYHEE COUNTY
AHMP "KICKOFF" MEETING
FEBRYARY 25, 2025

Jolyn Thompson	City - Marsing
Jon Pennington	City - Grand View
Jordan Jones	County - Boise, Idaho
Joseph Howell	County - Payette, Idaho
Joshua Blair	Mountain Home AFB
Joshua Uriarte	Idaho Governor's Office of Species Conservation
JR Robinson	Highway District - Three Creek
Juan Bonilla	County - Valley, Idaho
Justin Hayes	Idaho Conservation League
K. Scott Jensen	University of Idaho – Rangeland
Kelly Hopping	University - Boise State
Kenny Hoagland	Fire - Melba
Kenny Hoagland	Quick Response Unit - Melba
Kenny Kershner	RFPA, Owyhee
Kimberly Bearden	Ambulance - Grand View
Larry Kendrick	County - Owyhee, Idaho
Laura Zaragoza	Fire - Grand View
Leonard Wilson	Fire - Marsing
Lisa Ellis	US Fish and Wildlife



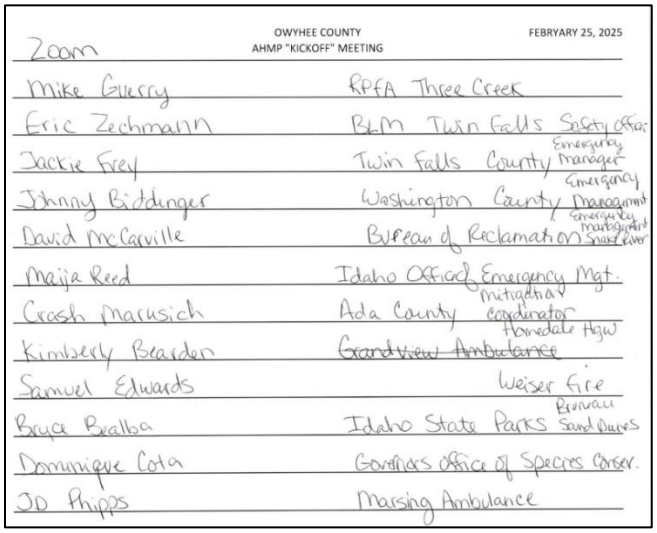
OWYHEE COUNTY
AHMP "KICKOFF" MEETING
FEBRYARY 25, 2025

Lorraine Simonson	School - Marsing
Lorrie Pahl	Idaho Office of Emergency Management
Louis Monson	Fire - MRW
Lynette Enrico	City Council - Marsing
Maija Reed	Idaho Office of Emergency Management
Mary Huff	County - Owyhee, Idaho
Mary Tindall	Quick Response Unit - Bruneau
Matt O'Connell	Idaho Fish & Game
Michelle Frostenson	School - Three Creek
Mickey Woodburn	Fire - Homedale Fire District
Mike Faulkner	RFPA, Saylor Creek
Mike Guerry	RPFA, Three Creek
Mikeal D. Parker	Fire - Homedale Fire District
Morris Giedd	Highway District - Gem
Nancy Bush	Fire - Marsing
Neva Miller	Fire - MRW
Nicholas Cancalosi-Dean	Northwest Management, Inc
Paul 'Crash' Marusich	County - Ada, Idaho
Reed Markham	Fire - Bruneau



OWYHEE COUNTY
AHMP "KICKOFF" MEETING
FEBRYARY 25, 2025

Ric Uria	Fire - Homedale Fire District
Richard Harriman	County - Malheur, Oregon
Rick Finis	South Idaho Fire Program
Rob Feeley	Idaho Office of Emergency Management
Rob Mason	Wilderness Society
Robert Bender	Idaho Outfitters & Guides Association
Scott Salutregui	Highway District - Homedale
Shane Ward	Fire - Bruneau
Tara Sevy	Fire - MRW
Teresa Uranga-Ryska	Ambulance - Homedale
Tess O'Sullivan	Nature Conservancy
Tiffany Bachman	Quick Response Unit - Bruneau
Travis Hire	Idaho Department of Transportation
Travis Jewett	Road District - Owyhee County R&B 3
Tyre Holfeltz	Idaho Department of Lands
Walt Holton	~~BLM - Boise District~~ Owyhee County Commissioner
	~~Friends of the Owyhees~~
Dustin Jewett	~~U.S. Army Corps of Engineers~~ R&B #3



OWYHEE COUNTY
AHMP "KICKOFF" MEETING
FEBRYARY 25, 2025

Zoom	
Mike Guerry	RPFA Three Creek
Eric Zechmann	BLM Twin Falls Safety Offic
Jackie Frey	Twin Falls Courtty Emergency Manager
Johnny Bitdinger	Washington Cauty Emergency Management
David McCarville	Bureau of Reclamation Snake River Emergency Management
Maija Reed	Idaho Office of Emergency Mgt. Mitigation
Crash Marusich	Ada County coordinator
Kimberly Bearden	~~Grandview Ambulance~~ Homedale Hgw
Samuel Edwards	Weiser Fire
Bruce Bralba	Idaho State Parks Private Sand Dunes
Dominique Cota	Governors office of Species Conser.
JD Phipps	Marsing Ambulance

Figure 48) Kickoff meeting sign-in sheet.

A.2 MARCH 25, 2025 - MEETING #2

AGENDA	Owyhee County Update Project: Hazard Mitigation Plan & Community Wildfire Protection Plan Meeting #2 Tuesday, March 25, 2025 10:00 AM – 11:30 AM Microsoft Teams Virtual Meeting	
10:00 am	OPEN – Introductions and Words of Welcome	Jim Desmond and Angie Barkell
10:15 am 10:30 am 10:45 am 11:15 am 11:25 am	GROUP MEETING I. Old Business ▪ Recap of the kickoff presentation ▪ Planning Team Updates ▪ Recap of Planning Philosophy and Goals ▪ Hazard Summary Worksheet and Local Knowledge Questionnaire follow-up discussion II. Exercises ▪ Capabilities Assessment III. Discussion of Plan Revision Details ▪ Chapter 3: Community Profiles ▪ Example figures for various hazards ➢ Ideas and suggestions ▪ Mitigation Projects ➢ Overview ➢ Start thinking about updates and new projects ▪ Discussion of local plans and planning mechanisms IV. Further Discussion of Public Outreach Strategy ▪ Town-hall style meeting, public events, community forums, local news, etc.? V. The Next Steps ▪ 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
11:30 am	ADJOURNMENT	

Figure 49) Meeting #2 Agenda

A.2.1 MULTI-JURISDICTIONAL PARTICIPATION

The county plus representatives from various federal, state, and county partners attended the meeting.

Table 44) Meeting #2 Participants

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

Name	Affiliation
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

A.3 APRIL 24, 2025 - MEETING #3

AGENDA	**Owyhee County Update Project:** **Hazard Mitigation Plan &** **Community Wildfire Protection Plan** **Meeting #3 – CWPP Focus** **Thursday, April 24, 2025** **6:00 p.m. – 7:30 p.m.** **Owyhee County Courthouse** **20381 ID-78, Murphy, ID 83650** **(virtual option included)**	
6:00 p.m.	**OPEN – Introductions/Housekeeping**	Jim Desmond, Angie Barkell, Adam & Nicholas
	GROUP MEETING	
6:05 p.m.	**I. Old Business** ▪ Questions and/or comments regarding any past meetings/work	Adam, Nicholas, & Planning Group
6:15 p.m.	**II. CWPP Discussion and Exercises** ▪ Overall CWPP discussion ▪ Wildland-Urban Interface ➢ Definition and map ▪ Wildfire Risk Mapping ➢ Analysis produced by WildfireRisk.org, IDL, etc. ➢ Discussion of high-risk areas in the county ▪ Wildfire Mitigation Projects ➢ Criteria and examples. ➢ Which are ongoing, completed, deferred, prospective, etc.? ▪ Other Components of the CWPP	Tyre Holfeltz, Adam, and group
7:15 p.m.	**III. The Next Steps** ▪ Schedule the next overall meeting ▪ Schedule the next CWPP-specific meeting ▪ Discuss the project timeline	Adam, Nicholas, & Planning Group
7:25 p.m.	**IV. Homework** ▪ Identify and send in wildfire projects ▪ Complete previously assigned worksheets ▪ Review Community Descriptions chapter	
7:30 p.m.	**ADJOURNMENT**	

Figure 50) Meeting #3 Agenda

A.3.1 MULTI-JURISDICTIONAL PARTICIPATION

The county plus representatives from various federal, state, and county partners attended the meeting.

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 Mayer	Marsing Fire
Chris Cromwell	BLM Fire

Figure 51) In-person participants for Meeting #3

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 52) Virtual participants for Meeting #3

A.4 MAY 15, 2025 - MEETING #4

A G E N D A	**Owyhee County Update Project: Hazard Mitigation Plan & Community Wildfire Protection Plan Meeting #4** **Thursday, May 15, 2025** **9:30 a.m. – 11:00 a.m. MST** **Virtual Teams Meeting** **(accommodation for those unable to attend online upon request)**	
9:30 a.m.	**OPEN – Introductions/Housekeeping** ➢ Tracking your time and mileage	Jim Desmond, Angie Barkell
9:35 a.m.	**GROUP MEETING** **I. CWPP Meeting Recap** ▪ Any questions about CWPP projects? ➢ Discuss past wildfire projects ➢ Review template for new projects ▪ Discuss the various versions & drafts of hazard maps ➢ WUI maps ➢ Various hazard maps	Adam, Nicholas, and Group
9:55 a.m.	**II. Public Outreach** ▪ Finalize plans for Outpost Days ▪ Other ideas?	
10:10 a.m.	**III. Discussion of Past Handouts and Activities** ▪ Hazard Summary Worksheet ▪ Local Knowledge Questionnaire ▪ Feedback on Chapter 3	
10:30 a.m.	**IV. The Hazards** ▪ Floods, Avalanche, Earthquake, Landslide, Severe Weather, Drought, Wildland Fire ➢ Local event history, impacts, values at risk, high concern areas, changes in risk, current mitigation strategies	
10:45 a.m.	**V. Assignments for Adopting Jurisdictions** ▪ Capability Assessments ▪ What are your Projects? – Public Works, Planning Department, Highway Department, BLM, Conservation District, etc. ▪ Related County/City Plans ➢ How was the HMP incorporated? ➢ Are there any we should be referencing?	
10:55 a.m.	**VI. Next Steps** ▪ 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 53) Meeting #4 Agenda

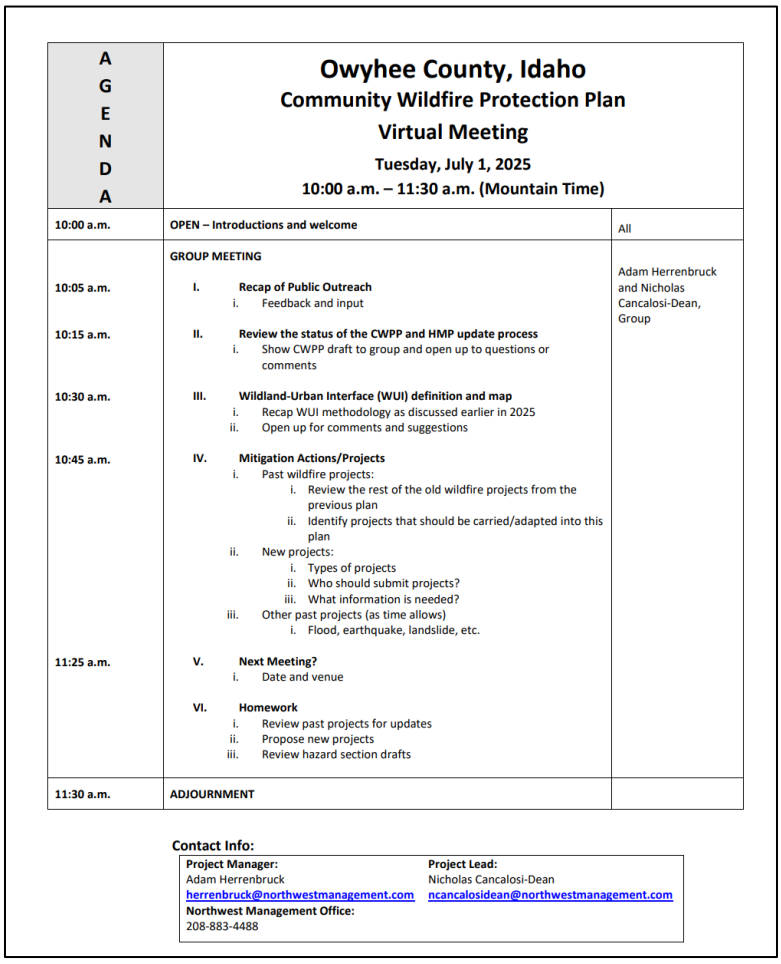
A.4.1 MULTI-JURISDICTIONAL PARTICIPATION

The county plus a representative from one of the adopting cities as well as various federal, state, and county partners attended the meeting.

Table 45) 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

A.5 JULY 1, 2025 - MEETING #5



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
10:05 a.m. **10:15 a.m.** **10:30 a.m.** **10:45 a.m.** **11:25 a.m.**	**GROUP MEETING** **I. Recap of Public Outreach** i. Feedback and input **II. Review the status of the CWPP and HMP update process** i. Show CWPP draft to group and open up to questions or comments **III. Wildland-Urban Interface (WUI) definition and map** i. Recap WUI methodology as discussed earlier in 2025 ii. Open up for comments and suggestions **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. **V. Next Meeting?** i. Date and venue **VI. Homework** i. Review past projects for updates ii. Propose new projects iii. Review hazard section drafts	Adam Herrenbruck and Nicholas Cancalosi-Dean, Group
11:30 a.m.	**ADJOURNMENT**	

Contact Info:

Project Manager: Adam Herrenbruck herrenbruck@northwestmanagement.com **Northwest Management Office:** 208-883-4488	**Project Lead:** Nicholas Cancalosi-Dean ncancalosidean@northwestmanagement.com

Figure 54) Meeting #5 Agenda

A.5.1 MULTI-JURISDICTIONAL PARTICIPATION

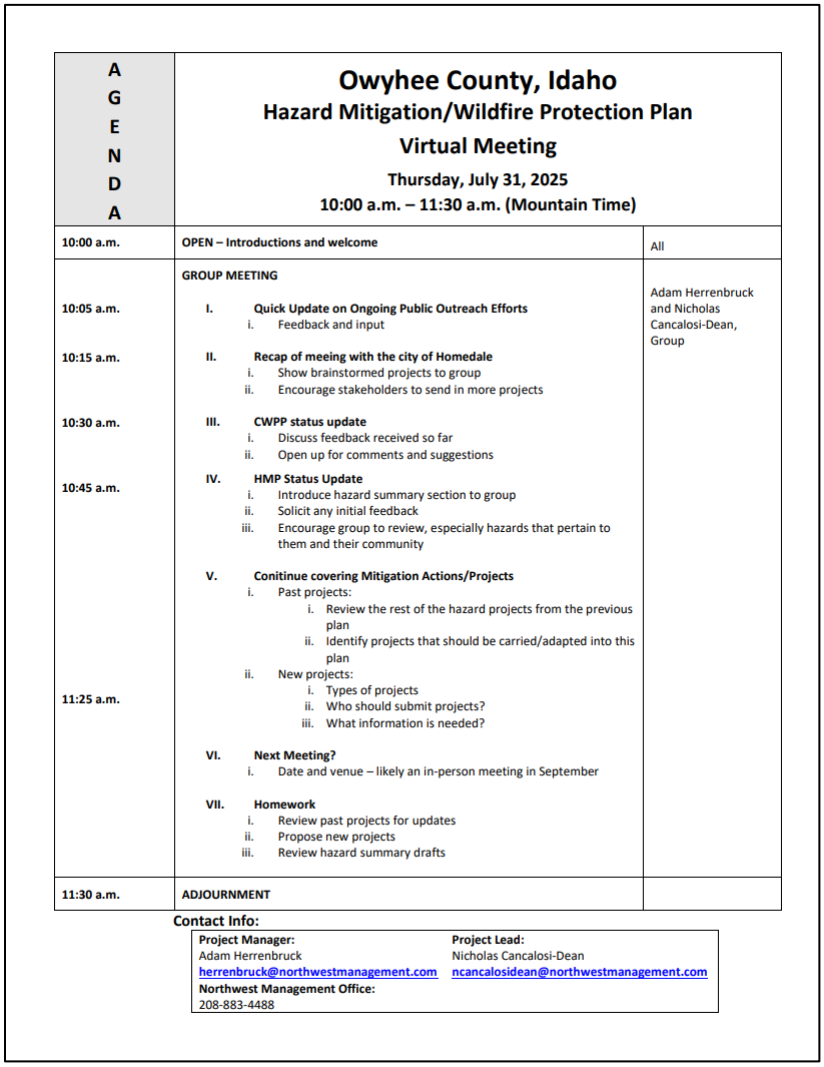
The county plus a representative from one of the adopting cities as well as various federal, state, and county partners attended the meeting.

Table 46) 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

Name	Affiliation
Dennis Merrick	Idaho Power
Jerry Mayer	Marsing Rural Fire Department
Cuck Cooley	Murphy-Reynolds-Wilson Fire
Angie Barkell	Owyhee County Clerk

A.6 JULY 31, 2025 - MEETING #6



AGENDA

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
10:05 a.m. **10:15 a.m.** **10:30 a.m.** **10:45 a.m.** **11:25 a.m.**	**GROUP MEETING** **I. Quick Update on Ongoing Public Outreach Efforts** i. Feedback and input **II. Recap of meeing with the city of Homedale** i. Show brainstormed projects to group ii. Encourage stakeholders to send in more projects **III. CWPP status update** i. Discuss feedback received so far ii. Open up for comments and suggestions **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. Conitinue 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? **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	Adam Herrenbruck and Nicholas Cancalosi-Dean, Group
11:30 a.m.	**ADJOURNMENT**	

Contact Info:

Project Manager:
Adam Herrenbruck
herrenbruck@northwestmanagement.com
Northwest Management Office:
208-883-4488

Project Lead:
Nicholas Cancalosi-Dean
ncancalosidean@northwestmanagement.com

Figure 55) Meeting #6 Agenda

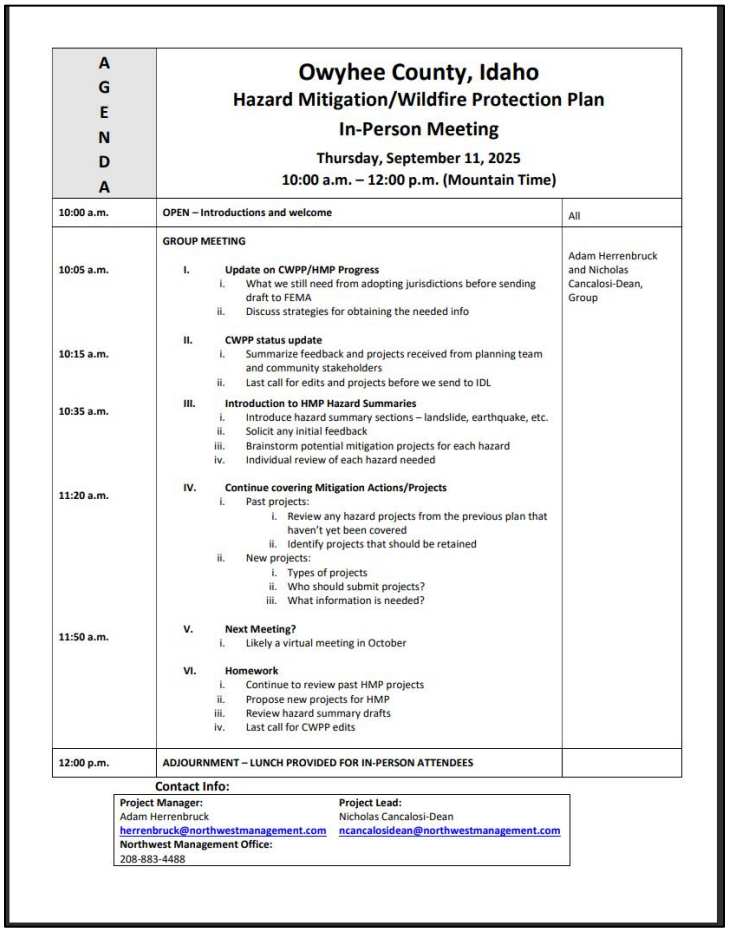
A.6.1 MULTI-JURISDICTIONAL PARTICIPATION

The county as well as representatives from federal and state partners attended the meeting.

Table 47) 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.7 SEPTEMBER 11, 2025 - MEETING #7



AGENDA

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
10:05 a.m. 10:15 a.m. 10:35 a.m. 11:20 a.m. 11:50 a.m.	GROUP MEETING 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 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 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 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? 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	Adam Herrenbruck and Nicholas Cancalosi-Dean, Group
12:00 p.m.	ADJOURNMENT – LUNCH PROVIDED FOR IN-PERSON ATTENDEES	

Contact Info:

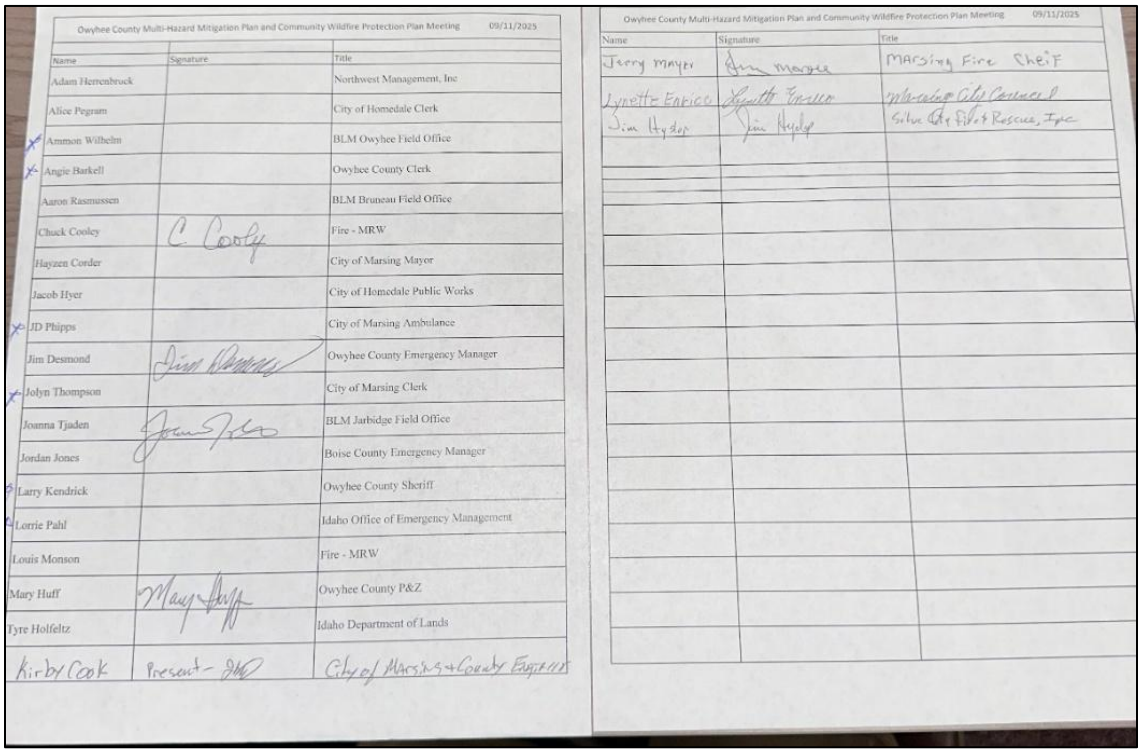
Project Manager:
Adam Herrenbruck
herrenbruck@northwestmanagement.com
Northwest Management Office:
208-883-4488

Project Lead:
Nicholas Cancalosi-Dean
ncancalosidean@northwestmanagement.com

Figure 56) Meeting #7 Agenda

A.7.1 MULTI-JURISDICTIONAL PARTICIPATION

The county plus a representative from one of the adopting cities as well as various federal, state, and county partners attended the meeting.



Owyhee County Multi-Hazard Mitigation Plan and Community Wildfire Protection Plan Meeting 09/11/2025

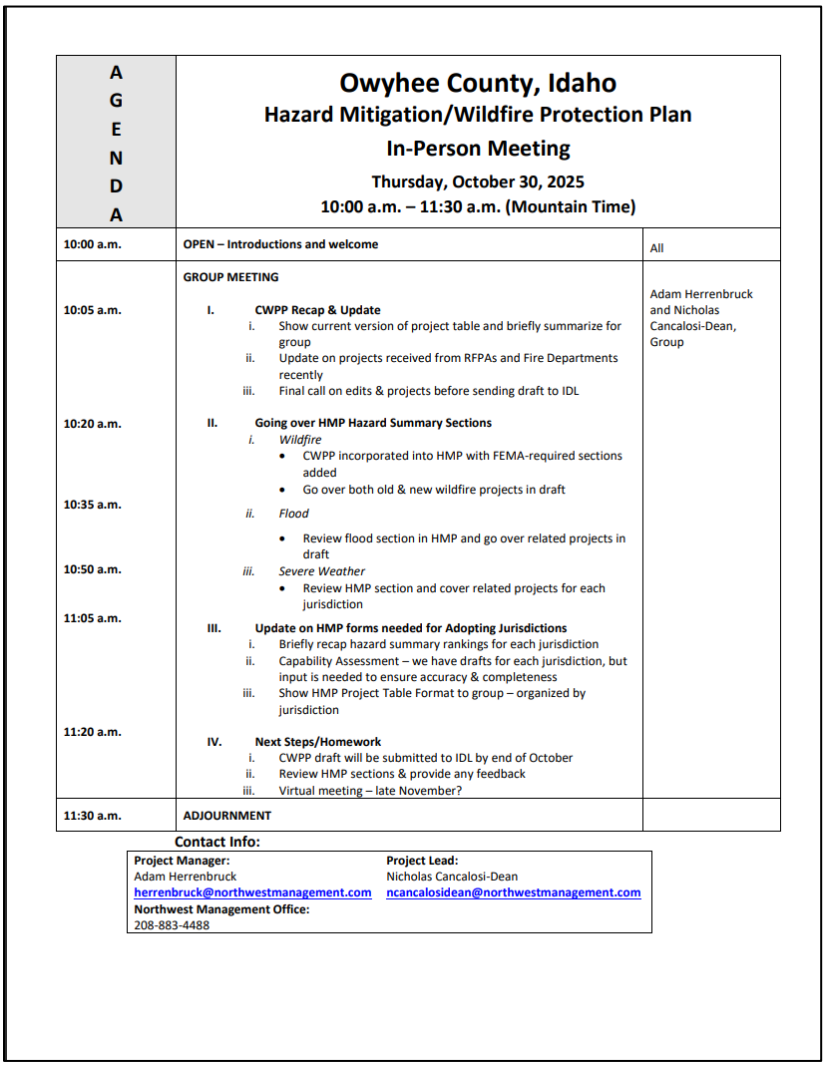
Name	Signature	Title
Adam Herrenbruck		Northwest Management, Inc
Alice Pegram		City of Homedale Clerk
Ammon Wilhelm		BLM Owyhee Field Office
Angie Barkell		Owyhee County Clerk
Aaron Rasmussen		BLM Bruneau Field Office
Chuck Cooley	C. Cooley	Fire - MRW
Hayzen Corder		City of Marsing Mayor
Jacob Hyer		City of Homedale Public Works
JD Phipps		City of Marsing Ambulance
Jim Desmond		Owyhee County Emergency Manager
Jolyn Thompson		City of Marsing Clerk
Joanna Tjaden		BLM Jarbidge Field Office
Jordan Jones		Boise County Emergency Manager
Larry Kendrick		Owyhee County Sheriff
Lorrie Pahl		Idaho Office of Emergency Management
Louis Monson		Fire - MRW
Mary Huff		Owyhee County P&Z
Tyre Holfeltz		Idaho Department of Lands
Kirby Cook	Present - JHD	City of Marsing + County Engineer

Owyhee County Multi-Hazard Mitigation Plan and Community Wildfire Protection Plan Meeting 09/11/2025

Name	Signature	Title
Jerry Mayer		MARSing Fire Chief
Lynette Enrico		Marsing City Council
Jim Hyder		Silver City Fire & Rescue, Inc

Figure 57) Meeting #7 Sign-in Sheet

A.8 OCTOBER 30, 2025 - MEETING #8



AGENDA	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
10:05 a.m. 10:20 a.m. 10:35 a.m. 10:50 a.m. 11:05 a.m. 11:20 a.m.	GROUP MEETING 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 II. Going over HMP Hazard Summary Sections i. *Wildfire* • CWPP incorporated into HMP with FEMA-required sections added • Go over both old & new wildfire projects in draft ii. *Flood* • Review flood section in HMP and go over related projects in draft iii. *Severe Weather* • Review HMP section and cover related projects for each jurisdiction 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 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?	Adam Herrenbruck and Nicholas Cancalosi-Dean, Group
11:30 a.m.	ADJOURNMENT	

Contact Info:

Project Manager: Adam Herrenbruck herrenbruck@northwestmanagement.com **Northwest Management Office:** 208-883-4488	**Project Lead:** Nicholas Cancalosi-Dean ncancalosidean@northwestmanagement.com

Figure 58) Meeting #8 Agenda

A.8.1 MULTI-JURISDICTIONAL PARTICIPATION

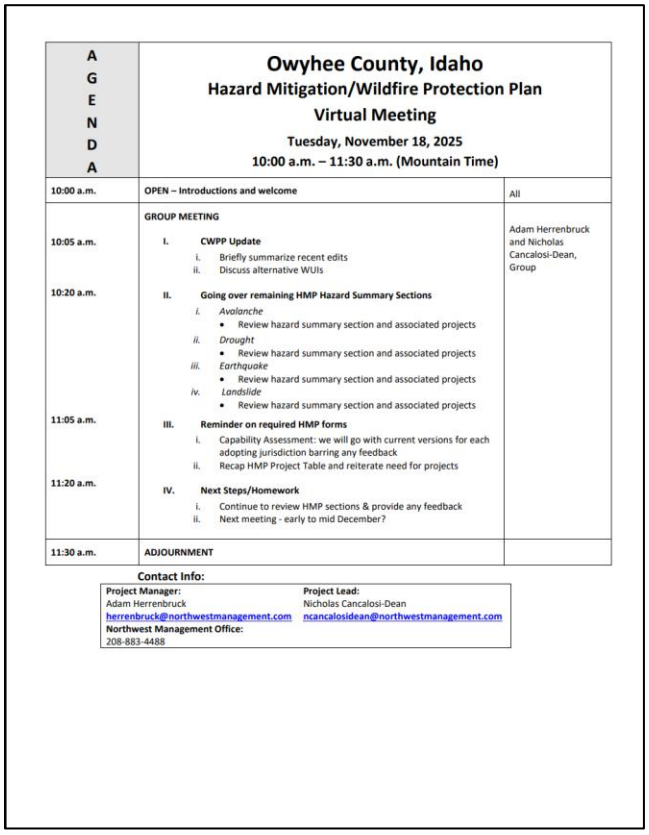
The county as well as representatives from federal, state, and tribal partners attended the meeting.

Table 48) Meeting #8 Participants

Name	Affiliation
Nicholas Cancalosi-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

Name	Affiliation
Mary Huff	Owyhee County Planning and Zoning
Rachele King	Owyhee County Clerk's Office
Guy Dodson	Shoshone-Paiute Fire

A.9 NOVEMBER 18, 2025 - MEETING #9



AGENDA

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
10:05 a.m. 10:20 a.m. 11:05 a.m. 11:20 a.m.	GROUP MEETING I. CWPP Update i. Briefly summarize recent edits ii. Discuss alternative WUIs II. Going over remaining HMP Hazard Summary Sections i. *Avalanche* • Review hazard summary section and associated projects ii. *Drought* • Review hazard summary section and associated projects iii. *Earthquake* • Review hazard summary section and associated projects iv. *Landslide* • Review hazard summary section and associated projects 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 IV. Next Steps/Homework i. Continue to review HMP sections & provide any feedback ii. Next meeting - early to mid December?	Adam Herrenbruck and Nicholas Cancalosi-Dean, Group
11:30 a.m.	ADJOURNMENT	

Contact Info:

Project Manager: Adam Herrenbruck herrenbruck@northwestmanagement.com **Northwest Management Office:** 208-883-4488	**Project Lead:** Nicholas Cancalosi-Dean ncancalosidean@northwestmanagement.com

Figure 59) Meeting #9 Agenda

MULTI-JURISDICTIONAL PARTICIPATION

The county as well as representatives from federal and state partners attended the meeting.

Table 49) 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

Name	Affiliation
Ammon Wilhelm	Bureau of Land Management
Larry Kendrick	Owyhee County Sheriff
Chuck Cooley	Murphy-Reynolds-Wilson Fire
Lorrie Pahl	Idaho Office of Emergency Management

APPENDIX B: PUBLIC INVOLVEMENT

B.1 JUNE 8, 2025 - OWYHEE COUNTY OUTPOST DAYS

Thank you to MRW Fire, Angie, the Sheriff's Office, and all others who assisted with our public outreach at the Owyhee County Outpost Days on Sunday, June 8th. 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.

B.1.1 ONLINE SURVEY RESULTS

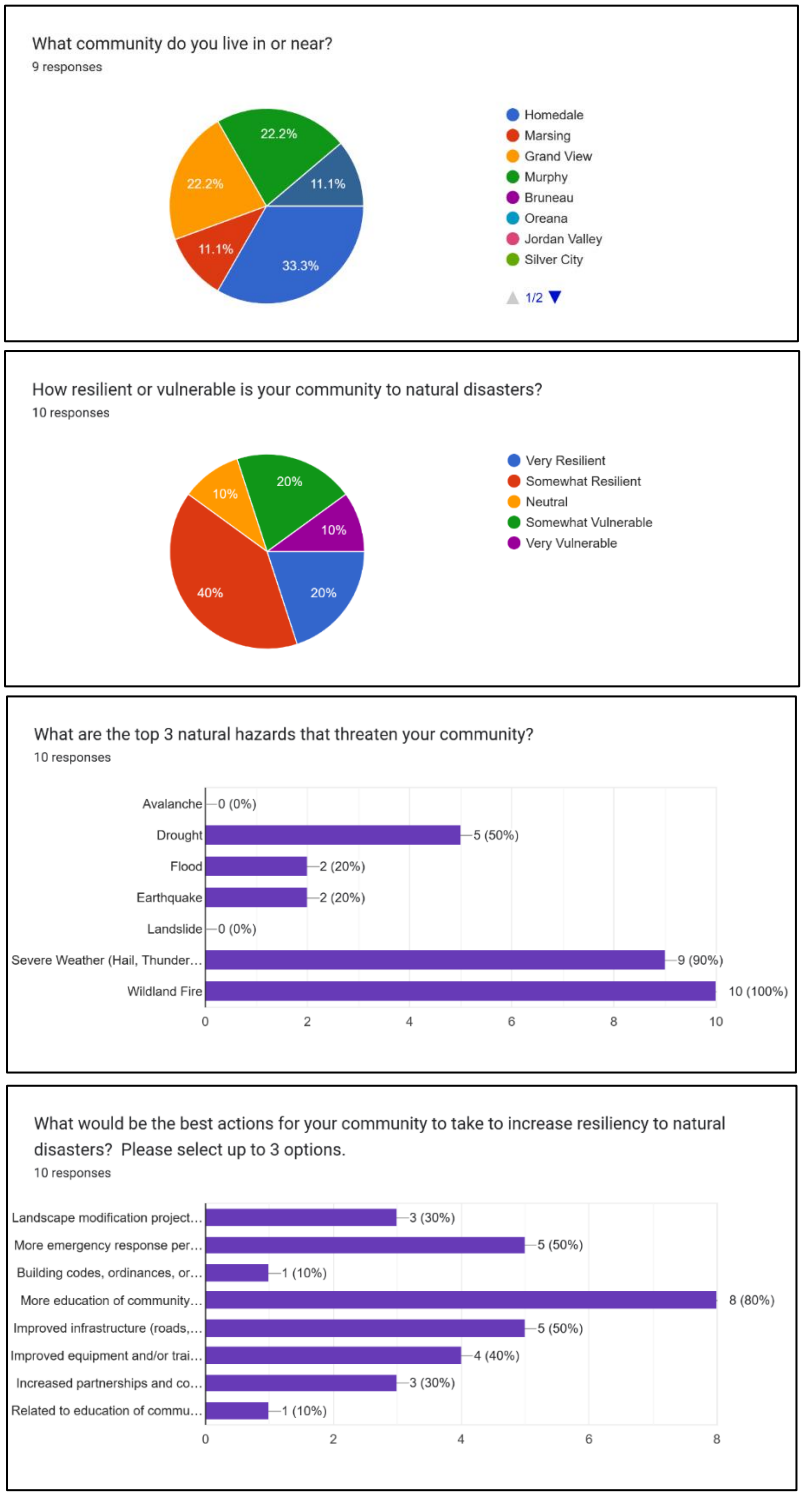


Figure 60) Results from the online Google survey.

B.1.2 PUBLIC OUTREACH MATERIALS

The following materials were used to inform members of the Owyhee County public about the ongoing HMP and CWPP updates at the Owyhee County Outpost Days in Murphy as well as several Snake River Country Markets in Marsing.

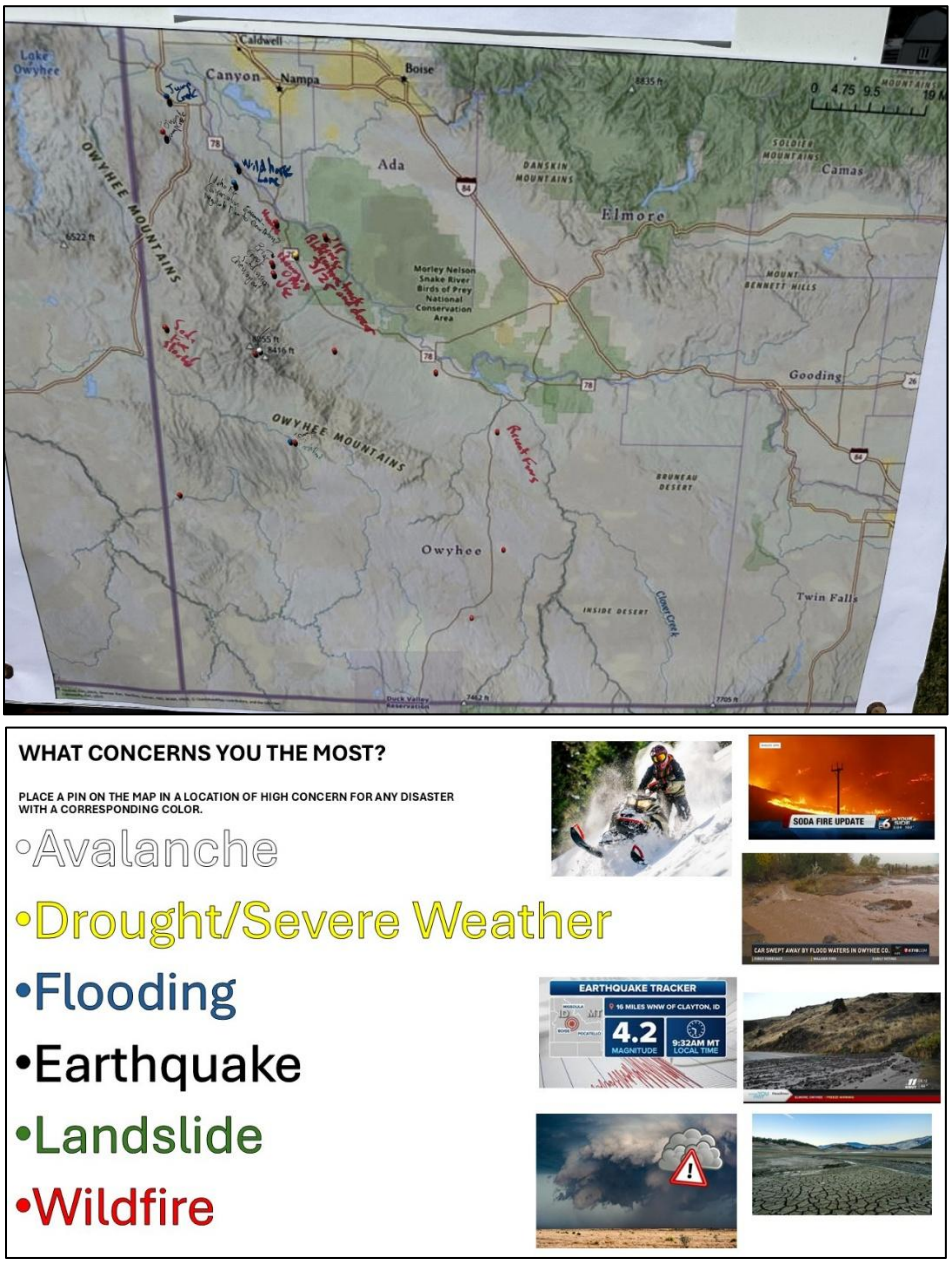
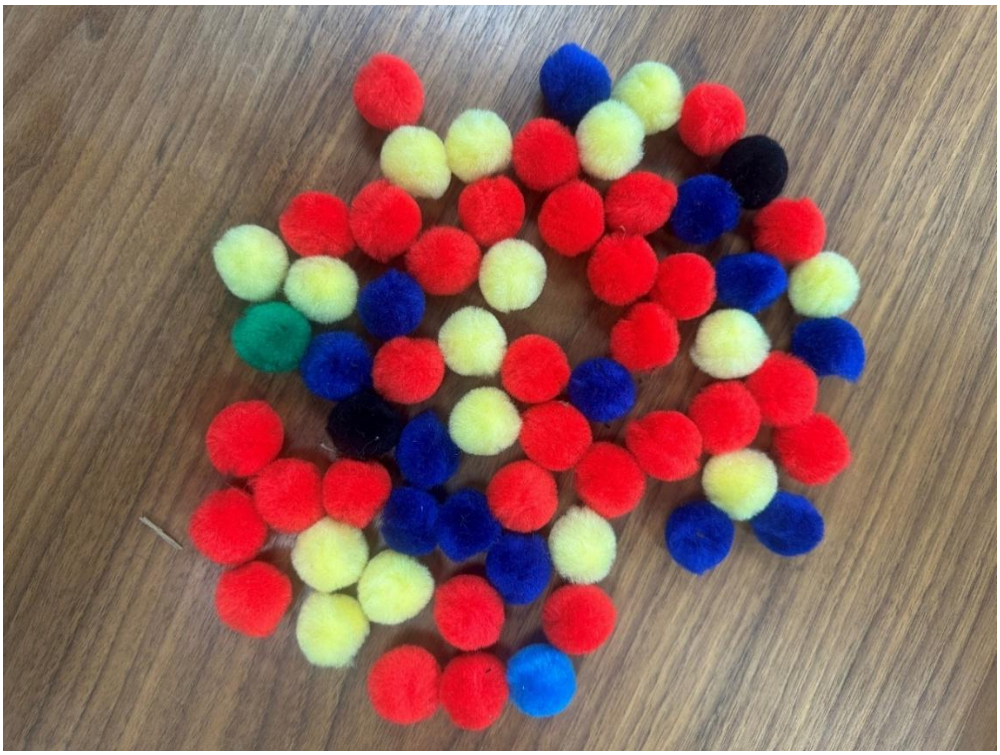


Figure 61) The top image is a map of Owyhee County with past hazard occurrences as well as locations identified by the public and local stakeholders as high-risk for various hazards. The bottom image shows the instructions that were given to the public for the exercise.



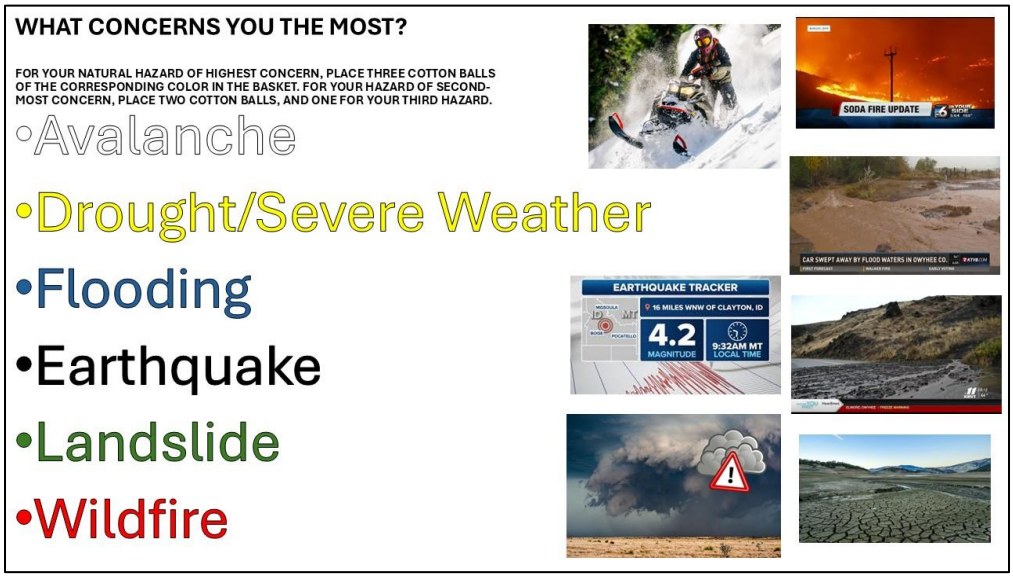


Figure 62) Results of the public conveying their hazard of top concern with cotton balls of corresponding colors are shown in the top image, with the instructions underneath.

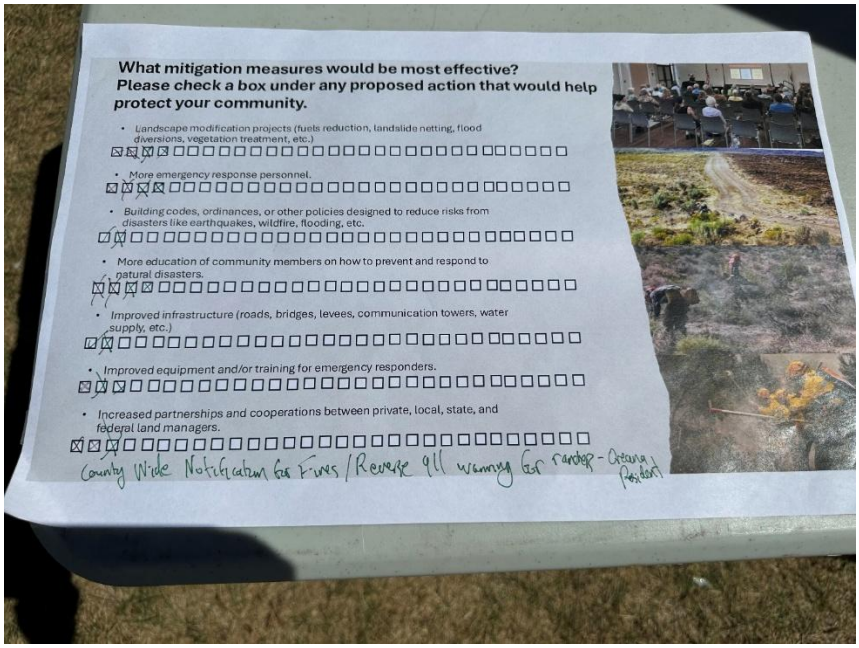


Figure 63) The results of the public voting on suggested mitigation measures for natural disasters from the Owyhee County Outpost Days. An additional suggestion for a county-wide emergency notification system was also made by an Oreana resident, which is noted at the bottom of the page.

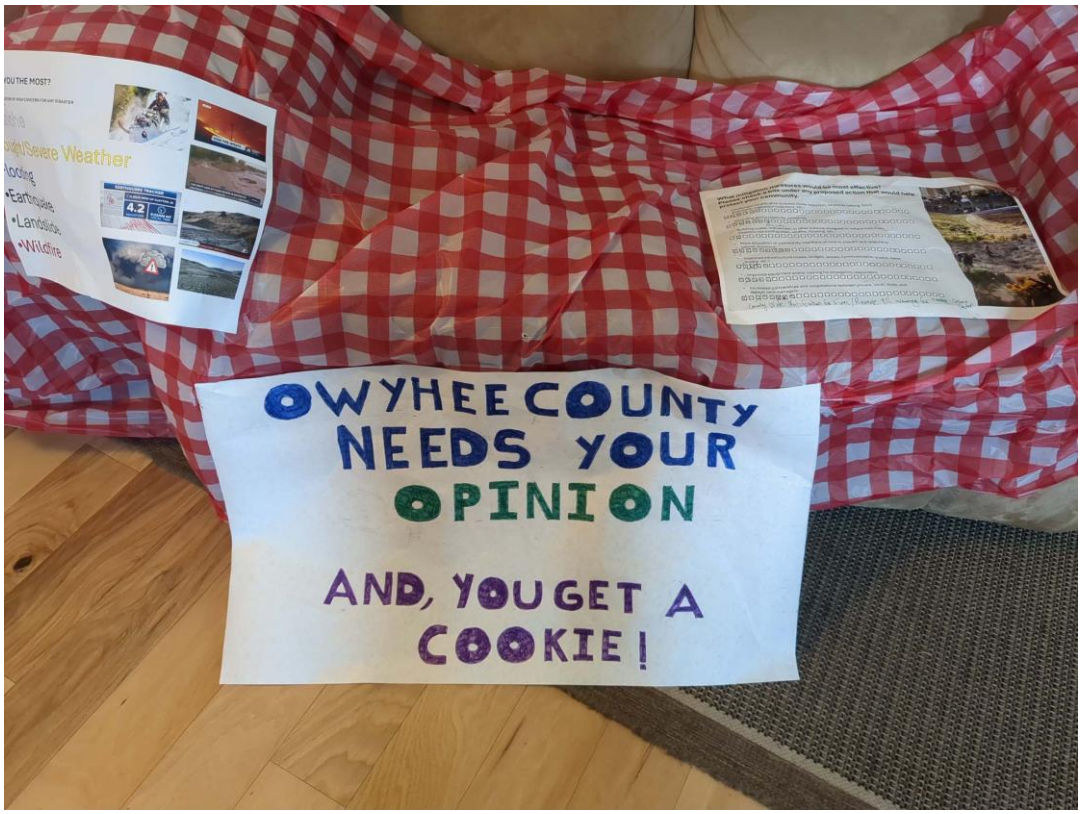


Figure 64) A huge thank you goes out to Marsing City Councilperson Lynette Enrico, who adapted and used the Outpost Days public outreach materials to continue engaging Owyhee County residents during a Snake River Country Market in Marsing on June 21 as well as a 4th of July celebration on July 3. The materials used for these outreach efforts are pictured above.

APPENDIX C: CAPABILITIES ASSESSMENTS

The capabilities assessment was conducted to document the existing planning, regulatory, administrative, technical, and fiscal capacities of Owyhee County and each participating jurisdiction. Rather than serving as a standalone project-generation exercise, the assessment was used to evaluate each jurisdiction's ability to implement and sustain the mitigation actions identified in this plan. Capability information informed the assignment of lead agencies, identification of realistic funding sources, and determination of whether mitigation actions were best implemented at the countywide, regional, or local level. In jurisdictions with limited staffing or technical resources, mitigation actions largely emphasize coordination, partnership, and integration into existing programs rather than creation of new standalone initiatives. This approach ensures that mitigation actions are aligned with actual institutional capacity and governance structures, thereby improving long-term implementation potential.

C.1 OWYHEE COUNTY

CAPABILITY ASSESSMENT		**JURISDICTION: Owyhee County**
Category	**Planning Tool/Capability**	**Yes/No; Year; Comments**
Planning and Regulatory	Comprehensive or Master Plan	Yes: 2010 Comprehensive Plan; currently being updated (2024–2025).
	Capital Improvements Plan	Yes: 2024 Master Facilities Plan & Comprehensive Financial Plan
	Economic Development Plan	Yes: Incorporated within the 2024 Master Facilities Plan & Comprehensive Financial Plan and within the Comprehensive Plan.
	Local Emergency Operations Plan	Yes: 2007 EOP; currently being updated as of 2025
	Continuity of Operations Plan	No
	Transportation Plan	Yes: 2024 Owyhee County Transportation Master Plan Update
	Stormwater Management Plan	No
	Community Wildfire Protection Plan	Yes: 2005 Owyhee County CWPP; currently being updated as of 2025
	Other	2009 Natural Resource Plan - Guides federal coordination and land-use policy with BLM/USFS.
Administrative	Maintenance programs (tree trimming, drain cleaning, etc.)	Yes: Road & Bridge Department performs road maintenance, drainage clearing, culvert work, and seasonal operations.

	Mutual aid agreements	Yes: Includes local Rural Fire Districts (RFDs), Rangeland Fire Protection Associations (RFPAs), BLM, Idaho Department of Lands, and Sheriff's Office coordination.
	Memorandums of understanding	BLM, IDL, RFDs, RFPAs
	Other	
Technical	Warning systems/services	Yes: Alert Sense text alert warnings, regional 911 dispatch
	Hazard data and information	Yes: County maintains disaster declaration records, historical event data, and hazard analyses through the HMP and CWPP.
	GIS capabilities	County Cartographer (Kasey Freelove) and Assessor's Office (Tiffany Nettleton) maintain GIS parcel, addressing, and land-use mapping.
	Grant Writing	Mary Huff (Planning Director); other staff as needed
	Flood Plain Manager	No: County does not participate in NFIP
	Other	
Category	**Planning Tool/Capability**	**Yes/No; Year; Comments**
Codes and Ordinances	Building code	Yes: 2012 IBC, IRC (minus Parts V & VI), IECC, IEBC; adopted Feb. 9, 2015; Ordinance 2015-01. Local amendments include snow-load requirements, exemption rules, submittal requirements, and agricultural building provisions.
	Zoning ordinance	Yes: 2009 County Zoning Ordinance (amended through at least 2019).
	Subdivision ordinance	Yes: Owyhee County Title 10 Subdivision Ordinance (amended through at least 2019).
	Floodplain ordinance	No
	Natural hazard specific ordinance	Yes: Conditional use permit for construction in fire-prone areas, as noted by P & Z; Silver City Historic District regulations (Title 9 Ch. H) impose strict construction & land-use protections in hazard-prone historical area.
	Flood insurance rate maps	No
	Other	Owyhee County Agricultural Protection Area Ordinance

Project Funding Sources	Capital improvements project funding	Yes: guided by 2024 Master Facilities & Financial Plan. Includes county buildings, emergency facilities, and transportation assets
	Community Development Block Grant	Yes: County uses Idaho CDBG for facility & infrastructure upgrades
	Other federal funding program	FEMA HMA programs, USDA Rural Development, BLM/IDL fire funding, FHWA/LHTAC transportation funds.
	State funding programs	ITD, LHTAC, Idaho Department of Lands, Idaho Office of Emergency Management.
	Other	County general fund, Road & Bridge levies, PILT payments, RFPA partner funding.
Education and Outreach	Ongoing public education or information programs	News on County website, Facebook page
	Firewise Communities certification	No
	StormReady certification	No
	Other	
Other Comments:		

C.2 CITY OF HOMEDALE

CAPABILITY ASSESSMENT		JURISDICTION: City of Homedale, ID
Category	**Planning Tool/Capability**	**Yes/No; Year; Comments**
Planning and Regulatory	Comprehensive or Master Plan	Adopted 2010 Owyhee County Comprehensive Plan with Homedale Area of City Impact
	Capital Improvements Plan	No
	Economic Development Plan	Homedale, ID Comprehensive Economic Development Strategy Plan (2025) – Acorn Economic Development Advisors
	Local Emergency Operations Plan	Wastewater Treatment Facility Emergency Response Plan Owyhee County 2007 EOP
	Continuity of Operations Plan	No
	Transportation Plan	Homedale Municipal Airport Summary Report (2020) – ITD City Transportation Plan
	Stormwater Management Plan	No
	Community Wildfire Protection Plan	2005 Owyhee County CWPP
	Other	2018 Owyhee County Multi-Hazard Mitigation Plan
Administrative	Maintenance programs (tree trimming, drain cleaning, etc.)	Yes
	Mutual aid agreements	No
	Memorandums of understanding	Homedale Rural Fire District, Homedale School District
	Other	
Technical	Warning systems/services	County 911
	Hazard data and information	Not formally tracked at city-level
	GIS capabilities	Has been supported by Great West Engineering
	Grant Writing	Yes, but not a dedicated staff grant writer
	Flood Plain Manager	Alice Pegram - Floodplain Administrator

	Other	
Category	**Planning Tool/Capability**	**Yes/No; Year; Comments**
Codes and Ordinances	Building code	Included in City Code – Last Updated July 10, 2019; adopts flood maps from 1980, but no floodplain restrictions as far as I can tell.
	Zoning ordinance	Included in City Code (Title 17) - Last Updated July 10, 2019
	Subdivision ordinance	Included in City Code (Title 16) - Last Updated July 10, 2019
	Floodplain ordinance	Flood Hazard section in City Code (title 15) - Last Updated July 10, 2019 – based on 1980 flood map, includes some restrictions and requirements for building in flood prone areas.
	Natural hazard specific ordinance	No
	Flood insurance rate maps	Yes: Effective 03/18/1987
	Other	
Project Funding Sources	Capital improvements project funding	2022-2023 - USDA RD & Idaho DEQ water improvement funding
	Community Development Block Grant	2020 - Riverside Park expansion and Bette Uda Park ADA upgrades
	Other federal funding program	
	State funding programs	Idaho DEQ SRF & LHTAC funds
	Other	Local utility fees & sewer rate adjustments
Education and Outreach	Ongoing public education or information programs	Homedale Fire Department Fire Prevention Week activities
	Firewise Communities certification	No
	StormReady certification	No
	Other	
Other Comments:		

C.3 CITY OF MARSING

CAPABILITY ASSESSMENT		JURISDICTION: City of Marsing
Category	**Planning Tool/Capability**	**Yes/No; Year; Comments**
Planning and Regulatory	Comprehensive or Master Plan	Yes: 2012 City of Marsing Comprehensive Plan
	Capital Improvements Plan	Part of 2012 Comprehensive Plan
	Economic Development Plan	Yes: Plan under development as of 2025
	Local Emergency Operations Plan	Yes: Adopted 2007 Owyhee County EOP in 2015
	Continuity of Operations Plan	No
	Transportation Plan	2024 Owyhee County Transportation Master Plan Update
	Stormwater Management Plan	No specific plan; stormwaters end up in wastewater treatment plant
	Community Wildfire Protection Plan	Yes: 2005 County CWPP; currently being updated
	Other	
Administrative	Maintenance programs (tree trimming, drain cleaning, etc.)	Yes: Maintenance on water, sewer, irrigation, roads and streets, weed maintenance
	Mutual aid agreements	Yes: BLM, Marsing Rural Fire District, Marsing Ambulance
	Memorandums of understanding	Yes: Handshake MOU with Marsing Rural Fire District
	Other	
Technical	Warning systems/services	Fire dept. has airhorn - blind spots, 911/511 contracted with Town Cloud – broadcast, 311, broadcast – citizens can text or email – text my gov for county
	Hazard data and information	County tracks hazard data
	GIS capabilities	No GIS Technician for the City - relies on county, state, outside consultants for GIS analysis
	Grant Writing	Yes: Supported by Civil Engineer Kirby Cook

	Flood Plain Manager	No
	Other	
Category	**Planning Tool/Capability**	**Yes/No; Year; Comments**
Codes and Ordinances	Building code	Yes: International Building Code, International Residential Code (Parts I–IV, IX), and International Energy Conservation Code, as adopted by the Idaho Building Code Board
	Zoning ordinance	Yes: Included in Title 8 of City Code; maintains ADA accessibility to adhere to block grants – mostly multiuse zoning except for one small zoning for agriculture. Code Enforcement Officer enforces city ordinances.
	Subdivision ordinance	Yes: Subdivision Regulations (Marsing City Code, Title 9, Ch. 1)
	Floodplain ordinance	No
	Natural hazard specific ordinance	2015 International Fire Code as adopted by the International Code Council
	Flood insurance rate maps	No
	Other	Marsing Rural Fire implementing impact fees for new construction
Project Funding Sources	Capital improvements project funding	Funded through USDA Rural Development (grants/loans), Community Development Block Grants (2018–2019), ARPA/SLFRF funds (2021–2023), Idaho Transportation Department grants (LSIP, Child Pedestrian Safety, LHRIP), DEQ Drinking Water and Clean Water State Revolving Loan Funds, municipal bonds, and local utility revenues. Projects primarily include water system upgrades, wastewater improvements, and roadway infrastructure upgrades; matching funds for utility extensions and wells.
	Community Development Block Grant	2018-19: Marsing City Hall (CDBG and other grant; City bought them out for loan) 2022: GEM grant to improve fitness court (Owyhee Health coalition)
	Other federal funding program	2021-22: Water System Improvements – HECO Engineers 2021-23: USDA – ARPA to SLRF funds – drinking water and new piping to school, wastewater facility plan, new water tank, Idaho CDBG Idaho

		Bond for water improvement: paid off bond for sewer improvement and increased capacity to sewer lagoon and service of lines; added wells to service lines
	State funding programs	2020: ITD road grants for Bruneau Highway: Local Strategic Initiatives Grant - $2 million to improve old Bruneau Hwy 2021-2022: Child Pedestrian Safety Grant 2022-2023: LHRIP.
	Other	
Education and Outreach	Ongoing public education or information programs	Ongoing Marsing Rural Fire District Public Safety Messaging
	Firewise Communities certification	No
	StormReady certification	No
	Other	
Other Comments:		

C.4 CITY OF GRAND VIEW

CAPABILITY ASSESSMENT		JURISDICTION: City of Grand View
Category	**Planning Tool/Capability**	**Yes/No; Year; Comments**
Planning and Regulatory	Comprehensive or Master Plan	Yes: 2015 City of Grand View Comprehensive Plan
	Capital Improvements Plan	No
	Economic Development Plan	No
	Local Emergency Operations Plan	Emergency Action Plan for the CJ Strike Dam and Power Plant: Idaho Power Issued September 28, 2009, revised and addended December 2024; otherwise relies on 2007 Owyhee County EOP
	Continuity of Operations Plan	
	Transportation Plan	Yes: 2024 City of Grand View Transportation Master Plan Developed with LRAP State Grant and LHTAC; informed by 2010 Owyhee County Transportation Master Plan
	Stormwater Management Plan	No
	Community Wildfire Protection Plan	2005 Owyhee County CWPP
	Other	2023 Wastewater Facility Plan
Administrative	Maintenance programs (tree trimming, drain cleaning, etc.)	Yes: Public Works maintains and clears roads, manages utilities, and performs routine seasonal maintenance
	Mutual aid agreements	Participates in Owyhee County Emergency Response structure
	Memorandums of understanding	No formal MOUs identified
	Other	
Technical	Warning systems/services	PA system for evacuation, county 911
	Hazard data and information	Not formally tracked at city-level

	GIS capabilities	City does not employ in-house GIS; relies on county, Idaho Power (for dam inundation modeling), state agencies, and consultants (HECO Engineers).
	Grant Writing	HECO Engineering manages most grant applications and technical submissions
	Flood Plain Manager	No
	Other	
Category	**Planning Tool/Capability**	**Yes/No; Year; Comments**
Codes and Ordinances	Building code	City code of the City of Grand View – passed Dec 2019; County codes or revert to State of Idaho code
	Zoning ordinance	Yes: Multi-use zoning; ADA compliance maintained for block-grant eligibility; zoning housed in the City Code (latest recodification 2019).
	Subdivision ordinance	Part of City Code: SUBDIVISION ORDINACE OF THE CITY OF GRAND VIEW (Ord. 25, 10-2-1996)
	Floodplain ordinance	No
	Natural hazard specific ordinance	2015 International Fire code
	Flood insurance rate maps	FIRMs exist (04/03/1979), but the city does not participate in the NFIP program
	Other	
Project Funding Sources	Capital improvements project funding	2023: USDA RD, ARPA/SLRF funds
	Community Development Block Grant	Yes: 2021-22 CDBG Block Grant - $500,000 – CSI – community center
	Other federal funding program	Water System Improvements: HEOC Engineers - USDA – ARPA to SLRF funds: drinking water and new piping to school, wastewater facility plan, new water tank, Idaho CDBG Idaho Drinking Water State Revolving Loan Fund (DWSRF) – relining water tank is needed too
	State funding programs	Yes: Idaho DEQ (DWSRF/WWSRF), USDA (state-administered rural programs), and coordination with LHTAC for transportation planning.
	Other	

Education and Outreach	Ongoing public education or information programs	Yes: School evacuation drills in case of CJ Strike Dam Failure
	Firewise Communities certification	No
	StormReady certification	No
	Other	
Other Comments:		

APPENDIX D: ANCILLARY/OMITTED NATURAL HAZARDS

D.1 MORMON CRICKET INFESTATIONS

The Mormon cricket (Anabrus simplex) has been included in this plan as an ancillary natural hazard to recognize its documented occurrence and potential to disrupt agriculture, transportation, and emergency response operations in Owyhee County. Although Mormon cricket infestations have led to declared county emergencies and localized economic impacts, they differ from the primary natural hazards in this plan in that their risk profile is episodic and primarily agricultural, with impacts that are generally short-term and not systematically mapped across the built environment. For purposes of hazard scoring, prioritization, and mitigation action development, this plan focuses on natural hazards such as severe weather and wildfire that have can have broader and more consistent impacts on the population, critical infrastructure, and built environment. Including Mormon cricket in Appendix D acknowledges its significance to the community and its potential to affect travel and emergency services, but the plan treats it as ancillary because available data do not support quantitative risk modeling or typical mitigation planning approaches for property or life safety.

D.1.1 DESCRIPTION

Mormon cricket *(Anabrus simplex)* outbreaks are episodic but can rapidly reach damaging densities across rangelands and croplands. Infestations can strip vegetation, affect forage for livestock and wildlife, damage small grains and specialty crops, trigger nuisance and sanitation issues in towns, and create traffic hazards: crushed insects can make road surfaces slick. See **Figure 65** for an example of local impacts to Owyhee County. Outbreak extent and severity vary year to year with weather, habitat conditions, and natural population cycles.

Mormon crickets overrun county

Commissioners declare disaster; residents have little help in battle

The "eruption" of Mormon crickets has led Owyhee County commissioners to issue a disaster declaration.

The commissioners ratified Resolution 2023-27, declaring disaster conditions in the county, during their July 17 meeting in Murphy.

After a conference call with state government officials, relief for ranchers and land owners may be hard to come by, though.

For the county's cattle producers, the story may be a familiar one.

The federal government has been slow to act in controlling the insect that devastates crops and rangeland and domestic gardens and makes a general mess on other surfaces.

Thursday's conference call was arranged to determine if there were any mitigation avenues — treatment or financial assistance — to help curb the 2023 infestation.

The answers were limited. Dist. 2 Commissioner Kelly Aberasturi said in Monday's Board of County

— See **Crickets,** page **8**

A Murphy resident sweeps hundreds of Mormon crickets from a patio. The scene is being repeated throughout parts of Owyhee County. Submitted photo

Figure 65) An excerpt from the July 26, 2023 edition of the Owyhee Avalanche discussing the outbreak of Mormon Crickets in the region.

D.1.2 MORMON CRICKET INFESTATIONS SUMMARY

Table 50) A summary of documented Mormon Cricket infestations affecting Owyhee County

	Before 2018	2018–Present	Total
Occurrences	–	Episodic (countywide bands; data not systematized)	–
County Disaster Declarations	–	**2** (Jul 17, 2023; Jun 17, 2024)	**2**
Casualties	–	None documented in declarations	–
Property/Operational Impacts	–	Crop/forage loss; facility/road cleanup; fouled waters; public facility impacts (e.g., courthouse drains, 2018)	
Repetitive Losses	–	Not systematically tracked	–

(Note: Localized crop/forage loss, roadside cleanup, and bait-treatment costs are common but not consistently recorded at the county level; populate as data become available.)

D.1.3 HAZARD IMPACTS

Mormon crickets are large, flightless shield-backed katydids that form bands and migrate across landscapes in warm, dry years. Key impacts include:

- **Agriculture & rangeland:** defoliation of crops and native plants; competition with livestock for forage and otherwise disrupting ranching operations; potential replanting costs for small grains, alfalfa, gardens, and orchards; fencing/irrigation damage from mass movement.
- **Public safety & operations:** roadway slickness and visibility issues during band crossings; increased demand for road and facility cleanup; occasional short-term service disruptions (e.g., building entries, HVAC intakes, circuit boards, etc.).
- **Environmental:** short-term vegetation loss and soil exposure that can increase erosion potential on disturbed sites.

D.1.4 HAZARD EXTENT, MAGNITUDE, & PROBABILITY

Outbreaks typically occur in bands spanning miles, with densities ranging from nuisance levels to severe, landscape-scale events. Probability is seasonal (late spring through summer) and variable year to year, influenced by preceding weather (mild winters, warm/dry springs), habitat condition, and natural cycles. Magnitude ranges from localized garden/crop loss to widespread rangeland impacts and recurring roadway crossings over several weeks.

D.1.5 HAZARD OCCURRENCES

Formal county tallies are limited. The County issued disaster declarations for cricket/grasshopper eruptions on July 17, 2023 *(Resolution 2023-27)* and June 17, 2024 *(Resolution 2024-17),* with attachments referencing past public-facility impacts (2018 courthouse drains), cross-jurisdictional spread, and neighboring county declarations (e.g., Elmore County). Establishing an annual log (date, location, band width, roadway/facility impacts, treatment actions/costs) would support future plan updates and funding justifications.

D.1.6 HAZARD EXPOSURE & VULNERABILITY

Highest exposure occurs along rangeland/cropland edges, dryland grains/alfalfa, and road corridors intersecting migratory bands. Vulnerable assets include crops/pasture, stock waters, public facilities, and roads. Declarations also note limitations on effective treatments on federal lands, primarily due to environmental concerns over insecticide treatment, which can prolong impacts where bands traverse mixed jurisdictions.

D.1.7 LAND USE & FUTURE DEVELOPMENT

Expansion of dryland or irrigated agriculture near rangeland edges, along with new roads, subdivisions, and facilities in outbreak-prone zones, can increase exposure (more assets within migratory pathways and more road crossings). Integrating monitoring, timely bait applications, vegetation management, and roadside response protocols into routine operations can reduce future impacts.

APPENDIX E: BIBLIOGRAPHY

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