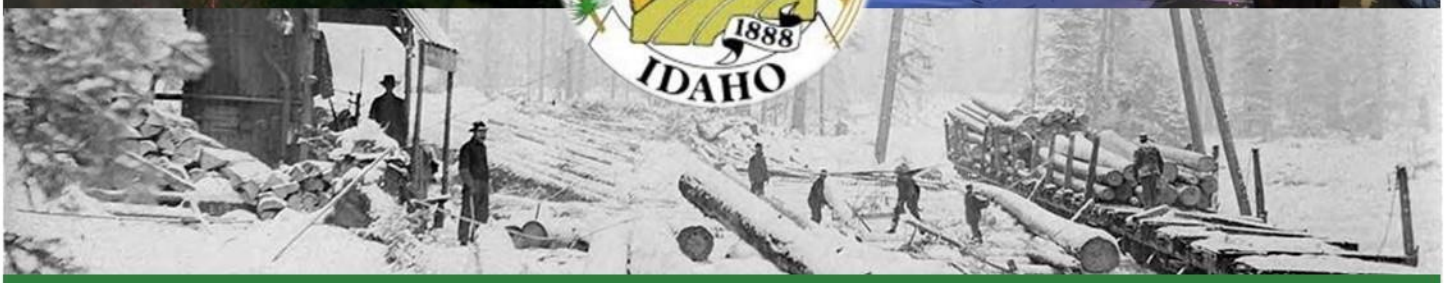
Latah County

— IDAHO —



Multi-Jurisdictional

ALL HAZARD MITIGATION PLAN

2025

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PART I: PLANNING PROCESS

CHAPTER 1 INTRODUCTION

1.1 INTRODUCTION

Latah County, Idaho and the incorporated communities that lie within the county boundaries are vulnerable to natural, technological, and manmade hazards that have the possibility of causing serious threats to the health, welfare, and security of its residents. The cost of response to and recovery from potential disasters, in terms of potential loss of life or property, can be lessened when attention is turned to mitigating their impacts and effects before they occur or reoccur.

This Multi-Jurisdictional All Hazard Mitigation Plan seeks to identify the county's and individual communities' hazards and understand their impact on vulnerable populations and infrastructure. With that understanding, the plan sets forth solutions that, if implemented, have the potential to significantly reduce threat to life and property. The plan is based on the premise that hazard mitigation works. With increased attention to managing natural, technological, and manmade hazards, communities can reduce the threats to citizens and through proper land use and emergency planning can avoid creating new problems in the future. Many solutions can be implemented at minimal cost and social impact.

This is not an emergency response or management plan. Certainly, the plan can be used to identify weaknesses and refocus emergency response planning. Enhanced emergency response planning is an important mitigation strategy. However, the focus of this plan is to support better decision-making directed toward avoidance of future risk and the implementation of activities or projects that will eliminate or reduce the risk for those that may already have exposure to a hazard threat.

The Latah County Multi-Jurisdictional All Hazard Mitigation Plan was created with the goal of substantially and permanently reducing the county's vulnerability to hazards through sound public policy. By increasing public awareness of potential harm, documenting resources for risk reduction and loss prevention, and identifying activities to guide the development of less vulnerable and more sustainable communities, this plan aims to protect citizens, critical facilities, infrastructure, private property, and the natural environment.

1.2 PLAN ORGANIZATION

Part I of the plan provides a general overview of the plan and its planning process and identifies who was involved in revisions of the plan and the process used to develop this particular revision.

Part II contains a community profile of the county.

Part III provides a brief definition for each natural and manmade hazard. All hazards identified as affecting the county are analyzed at the county and incorporated city levels and then summarized in a hazard profile.

Part IV outlines the Mitigation Strategy and identifies the goals, objectives, and mitigation projects.

Part V details the plan maintenance process and provides a tentative timeline for updating the plan in the future.

The **Appendix** contains contact information for the planning team, meeting minutes, meeting invites, worksheets, agendas, public participation social media advertisements, website screenshots, digital FIRMs, plan adoption and endorsement forms, and references.

1.3 PURPOSE

This plan exists to identify natural and manmade hazard threats to the community, prepare mitigation management strategies to address those threats, develop short-term and long-term goals and objectives for mitigation planning, and to fulfill federal, state, and local hazard mitigation planning obligations. The intention of this plan is to enhance awareness of and provide mitigation strategies for elected officials, agencies, and the public and develop actions which will minimize negative outcomes to Latah County's citizens, the economy, and the environment due to potential natural and manmade hazard threats. The well-being of the county and local communities rests on reducing risks to life and property in the event of a hazard event or emergency/disaster.

1.4 HAZARD MITIGATION & HAZARDS

Hazard mitigation is defined as cost-effective actions that have the effect of reducing, limiting, or preventing the vulnerability of people, culture, property, and the environment to potentially damaging, harmful, or costly hazards. Hazard mitigation measures, which can be used to eliminate or minimize the risk to life, culture, and property, fall into three categories:

1. Those that keep the hazard away from people, property, and structures;
2. Those that keep people, property, or structures away from the hazard; and
3. Those that reduce the impact of the hazard on victims, e.g., insurance.

Hazard mitigation measures must be practical, cost effective, and culturally, environmentally, and politically acceptable. Actions taken to limit the vulnerability of society to hazards must not, in themselves, be costlier than the anticipated damages.

Hazard mitigation planning must be based on vulnerabilities and its primary focus must be on the point where capital investment and land use decisions are made. The placement of capital investments, whether for homes, roads, public utilities, pipelines, or public works, determine to a large extent the nature and degree of a community's hazard vulnerability. Once a capital

facility is in place, there is little opportunity to reduce hazard vulnerability through correction of errors in location or construction. It is for this reason that often the most effective mitigation tools are zoning and other ordinances that manage development in high vulnerability areas and building codes that ensure new buildings are constructed to withstand the damaging forces of anticipated hazards.

Because disaster events are generally infrequent, the nature and magnitude of the threat is often ignored or poorly understood. Thus, the priority to implement mitigation measures is low and implementation is slowed. Mitigation success can be achieved, however, if accurate information is portrayed through complete hazard identification and impact studies, followed by effective mitigation management.

The hazards analyzed in this plan include the following:

Natural Hazards

- Severe Summer Weather
    - Extreme Heat
    - Thunderstorm/Lightning
    - Hail
    - Tornado
    - Straight-line Wind
- Severe Winter Weather
    - Extreme Cold
    - Winter Storm
- Wildfire
- Flood
    - River or Stream Flood
    - Urban/Flash Flood
- Dam/Levee Failure
- Drought

Geological Hazards

- Earthquake
- Landslide
- Volcanic Activity

Other Hazards of Concern

Although non-natural hazards are not required by FEMA for inclusion in a hazard mitigation plan, Latah County wishes to rank and mitigate against a comprehensive list of hazard events that could impact the county. Due to both the nature of non-natural hazards and the discretionary status regarding their inclusion, the following hazards of interest have been

briefly and qualitatively assessed for the sake of public education and informing their inclusion within the hazard ranking and mitigation process.

Biological Hazards

- Communicable Disease Outbreak

Technological (Manmade) Hazards

- Hazardous Material Incident
- Major Transportation Incident
- Prolonged Power Outage
- Cybersecurity Incident

Per FEMA's mandate to address all natural hazards, the following natural hazards were not included because these hazards do not directly impact Latah County or the cities of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts (North Latah County Highway District, South Latah Highway District, Bovill Fire Protection District, Deary Rural Fire District, Genesee Rural Fire Protection District, Moscow Rural Fire District, Potlatch Rural Fire District, and Troy Rural Fire District) due to geographic location:

- Hurricane
- Sea Level Rise
- Storm Surge
- Tsunami

1.5 SCOPE

The plan provides comprehensive hazard identification, risk assessment, vulnerability and impact analyses, mitigation actions, and an implementation schedule.

1.6 PLAN GOALS & OBJECTIVES

The goals of the Latah County Multi-Jurisdictional All Hazard Mitigation Plan include coordinating with local governments to develop Latah County's plans and processes that meet the planning components identified in the FEMA Region 10 Crosswalk document, as well as the Idaho Office of Emergency Management planning expectations and public input from the local community. The overall objective is risk reduction from natural hazards in the state of Idaho through implementing and updating county, regional, and the state of Idaho mitigation plans.

1.7 AUTHORITIES

Federal

Public Law 93-288, as amended, established the basis for federal hazard mitigation activity in 1974. A section of this Act requires—as prerequisite for state receipt of future disaster assistance outlays—the identification, evaluation, and mitigation of hazards. Since 1974, many additional programs, regulations, and laws have expanded on the original legislation to establish hazard mitigation as a priority at all levels of government.

Several additional provisions were also included when PL 93-288 was amended by the Stafford Act that provide for the availability of significant mitigation measures in the aftermath of a presidentially declared disaster. Civil Preparedness Guide 1-3, Chapter 6—Hazard Mitigation Assistance Programs places emphasis on hazard mitigation planning directed toward hazards with a high impact and threat potential.

The Disaster Mitigation Act of 2000 (DMA 2000) was signed into law on October 30, 2000 by President Bill Clinton. Section 322 defines mitigation planning requirements for state, local, and tribal governments. Under Section 322, if states submit a mitigation plan (a summary of local/regional mitigation plans) identifying natural hazards, risks, vulnerabilities, and proposed actions to reduce those risks and vulnerabilities, the state is eligible for an increase in the federal share of hazard mitigation.

State

The Governor's Emergency Operation Directive, the Robert T. Stafford Disaster Relief and Emergency Assistance Act, amendments to Public Law 93-288, as amended, Title 44, CFR, Federal Emergency Management Agency Regulations, as amended, State Emergency Management Act of 1981, Idaho Codes 46-1008, 46-1011, 46-601, 46-1018A, 46-1027, Disaster Response Recovery Act, 63-5A, Executive Order of the Governor, and Executive Order 11.

Local

Effective natural hazard mitigation is dependent upon local governments assuming a vital role. As such, each local government will review all present or potential damages, losses, and related impacts associated with natural hazards to determine what is required for mitigation action and planning. For Latah County and the cities of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts (North Latah County Highway District, South Latah Highway District, Bovill Fire Protection District, Deary Rural Fire District, Genesee Rural Fire Protection District, Moscow Rural Fire District, Potlatch Rural Fire District, and Troy Rural Fire District), the local executives responsible for implementing plans and policies are the county commission members and mayors. It is critical that local governments be prepared to participate in the post-disaster Hazard Mitigation Team process, as well as the pre-mitigation planning outlined in the Multi-Jurisdictional All Hazard Mitigation Plan.

CHAPTER 2 PLANNING PROCESS

2.1 PLANNING PROCESS

The 2025 Latah County Multi-Jurisdictional All Hazard Mitigation Plan was completed through the collaborative efforts of the Idaho Office of Emergency Management, Latah County Disaster Services, Fire Departments, Sheriff's Office, Police Departments, Idaho State Fire Marshal's Office, Latah County EMS, Highway Districts, Water & Sewer Agency, Public Works Department, Planning and Building Department, Assessor's Offices, City, County, and State GIS Departments, Elected Officials, Public Employees, NOAA, National Weather Service, Idaho Division of Forestry, Idaho Department of Lands, Bureau of Land Management, Idaho Health Department, Idaho Department of Environmental Quality, Idaho Department of Workforce Services, USDA, University of Idaho, Idaho Transportation Department, Idaho Firewise, North Idaho Healthcare Coalition, and citizens of the city and town within Latah County. Feedback was solicited through the Latah County Local Emergency Planning Committee (LEPC). During the plan development, the draft plan was posted on Latah County's website on the Disaster Services page for public comments. Public participation was encouraged through public meetings and review of the 2025 plan on the Latah County website. All comments, questions, and discussions resulting from these activities were given thoughtful consideration as the plan was developed.

Additionally, many of the hazards described in this mitigation plan also affect counties adjacent to Latah County. The draft of this plan was sent to each of these neighboring counties, and their input was considered and implemented. The five adjacent counties are listed below:

- Benewah County, ID
- Shoshone County, ID
- Clearwater County, ID
- Nez Perce County, ID
- Whitman County, WA

2.2 PARTICIPATING JURISDICTIONS

This plan covers Latah County, Idaho; the cities of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy; and the special participating districts of North Latah County Highway District, South Latah Highway District, Bovill Fire Protection District, Deary Rural Fire District, Genesee Rural Fire Protection District, Moscow Rural Fire District, Potlatch Rural Fire District, and Troy Rural Fire District. Each of these jurisdictions participated in the update of the plan.

Table 2-1. Participating Jurisdictions Involvement

Jurisdiction	Attended at least one meeting	Represented at Mitigation Workshop	Met with Core Planning Team	Submitted at least one new mitigation action	Reviewed past mitigation actions
Latah County	Yes	Yes	Yes	Yes	Yes
City of Bovill	Yes	Yes	Yes	Yes	Yes
City of Deary	Yes	Yes	Yes	Yes	Yes
City of Genesee	Yes	Yes	Yes	Yes	Yes
City of Juliaetta	Yes	Yes	Yes	Yes	Yes
City of Kendrick	Yes	Yes	Yes	Yes	Yes
City of Moscow	Yes	Yes	Yes	Yes	Yes
City of Potlatch	Yes	Yes	Yes	Yes	Yes
City of Troy	Yes	Yes	Yes	No	Yes
North Latah County Highway District	Yes	Yes	Yes	Yes	Yes
South Latah Highway District	Yes	Yes	Yes	Yes	Yes
Bovill Fire Protection District	Yes	Yes	Yes	No	Yes
Deary Rural Fire District	Yes	Yes	Yes	Yes	Yes
Genesee Rural Fire Protection District	Yes	Yes	Yes	Yes	Yes
Moscow Rural Fire District	Yes	Yes	Yes	Yes	Yes
Potlatch Rural Fire District	Yes	Yes	Yes	Yes	Yes
Troy Rural Fire District	Yes	Yes	Yes	Yes	Yes

For reference, the address and contact information for each participating jurisdiction is included in the table below.

Table 2-2. Participating Jurisdictions Contact Information

Jurisdiction	Address	Phone Number
Latah County	522 S Adams St Moscow, ID 83843	208-883-7208
City of Bovill	100 Railroad Ave Bovill, ID 83806	208-826-3603
City of Deary	401 Line St Deary, ID 83823	208-877-1582
City of Genesee	140 E Walnut Ave Genesee, ID 83832	208-285-1621
City of Juliaetta	PO Box 229	208-276-7791

Jurisdiction	Address	Phone Number
	Juliaetta, ID 83535	
City of Kendrick	PO Box 195 Kendrick, ID 83537	208-289-5157
City of Moscow	206 E 3rd St Moscow, ID 83843	208-883-7000
City of Potlatch	PO Box 525 Potlatch, ID 83855	208-875-0708
City of Troy	519 S Main St Troy, ID 83871	208-835-2741
North Latah County Highway District	1132 White Ave Moscow, ID 83843	208-882-7490
South Latah Highway District	154 W Chestnut St Genesee, ID 83832	208-285-1412
Bovill Fire Protection District	205 3rd Ave Bovill, ID 83806	208-826-3540
Deary Rural Fire District	301 2nd Ave Deary, ID	208-877-1515
Genesee Rural Fire Protection District	235 W Chestnut St Genesee, ID 83832	208-285-1762
Moscow Rural Fire District	229 Pintail Ln Moscow, ID 83843	208-882-2831
Potlatch Rural Fire District	PO Box 63 Potlatch, ID 83855	208-875-0139
Troy Rural Fire District	109 W 6th St Troy, ID 83871	208-835-2601

2.3 LATAH COUNTY LOCAL HAZARD MITIGATION PLANNING TEAM

The Latah County local hazard mitigation planning team is comprised of representatives from the Latah County Local Emergency Planning Committee (LEPC). The name and title/agency of each member of the LEPC are provided below. Descriptions of the planning meetings follow in the next section below as well as with the meeting agendas in Appendix B.

Table 2-3. LEPC & Local Hazard Mitigation Planning Team

Representative	Agency	Position
Steve Risken	Latah County Disaster Services	Coordinator; LEPC Secretary
Tom Lamar	Latah County Board of Commissioners	Chair, District II
Tony Johnson	Latah County Board of Commissioners	Commissioner, District I
Jason Stooks	Latah County Board of Commissioners	Commissioner, District III
John Bohman	Latah County Board of Commissioners	Commissioner
Dave Glasebrook	LEPC	Chair
Chris Blankenship	Latah County Planning & Building	Associate Planner
Laurel Caldwell	Latah County ITS	Chief Information Officer

Representative	Agency	Position
Austin Cole	Latah County ITS/Latah County CERT	Deputy IT Director/CISO; LEPC Vice-Chair
Richie Skiles	Latah County Sheriff's Office	Sheriff
Tim Besst	Latah County Sheriff's Office	Chief Deputy
Alan Martinson	Latah County Noxious Weed Control	Noxious Weed Superintendent
Will Stokes	City of Bovill	Mayor
Jason Johnson	City of Deary	Mayor
Tim Jones	Deary Rural Fire District	Deputy Fire Chief
John Hermann	City of Genesee	Mayor
Debi Zenner	City of Genesee	Deputy Clerk/Treasurer
Nick Anderson	City of Juliaetta	Mayor
Mike McGee	Juliaetta Volunteer Fire Department	Fire Chief
Rose Norris	City of Kendrick	Mayor
Val Norris	Kendrick Volunteer Fire Department	Fire Chief
Laurie M. Hopkins	City of Moscow	City Clerk
Alisa Anderson	City of Moscow	Grants Manager
Brian Nickerson	Moscow Volunteer Fire & EMS	Fire Chief
Debby Carscallen	Moscow Volunteer Fire & EMS	Paramedic/Firefighter
Dan Ellinwood	Moscow Volunteer Fire & EMS	Division Chief/Fire Marshal
Scott Williams	Moscow Volunteer Fire & EMS	Instructor
James Fry	Moscow Police Department	Retired Chief of Police
Roger Lanier	Moscow Police Department	Retired Police Captain
Potlatch Ambulance	N/A	N/A
David Brown	City of Potlatch	Mayor
Harmony Nowack	City of Potlatch	Clerk-Treasurer
Brad Rode	City of Potlatch	N/A
Bill Abbott	City of Troy	Mayor
Ron Stearns	Troy Volunteer Fire Department	Fire Chief
Dan Carscallen	North Latah County Highway District	Clerk
Kevin Renfrow	South Latah Highway District	Commissioner
Ryan Bender	Idaho Emergency Management	North Central Area Field Officer
Yolandi Faulkner	Idaho Emergency Management	HazMat Cost Recovery and Regulatory Compliance
Alan Carlson	USDA, Palouse Ranger District	Fire Management Officer
Andrew Brown	NOAA	Meteorologist
Autumn Gibson	American Red Cross	Disaster Program Specialist
Bill Krick	McGregor Company	Business Unit Manager
Bill Tensfeld	Whitman County WA Emergency Management	Emergency Management Director
Robin Cocking	Whitman County WA Emergency Management	Deputy Director
Case Family	N/A	N/A
Casey Strong	Lewiston Code Compliance	Inspector
Cathy Mabbutt	Mabbutt Law Office	Attorney
Dean Neufeld	Idaho Public Health District 2	Idaho North Central District

Representative	Agency	Position
Ed Button	Idaho Firewise	Board Member
Eric Anderson	University of Idaho	Associate Director for Employer Relations
Chris Schreiber	University of Idaho	College Advisory Board Member
Victoria Seever	University of Idaho	Retired Employee
James Pickard	Disability Action Center NW	Independent Living Advocate, Benefits Planner, Ramps Program
James Wotring	Idaho Transportation Department	N/A
Jeff Odland	Paradigm Consulting	Founder
Mike McManus	Idaho Department of Lands	Lands Resource Supervisor
Jason Svancara	Idaho Department of Lands	Northern Operations Chief
William Ward	Amateur Radio Relay League	N/A
Thomas Storer	Washington State Amateur Emergency Communication	Region 9, Whitman County
Mark Feddersen	Idaho School Safety & Security	Analyst--North Idaho
Nick Mechikoff	North Idaho Healthcare Coalition	Emergency Management Coordinator
Steven Turcott	North Idaho Healthcare Coalition	Safety Coordinator
Mike Heston	Pullman Fire Department	Retired Fire Chief
Monte Walker	Northwestern Mutual	Financial Representative
Natalie Chiles	Ziply Fiber	Strategic Account Executive
Paul Kimmell	Avista Corp	Palouse Area Regional Business Manager
Robert Isenberg	Idaho American Legion	Retired Moscow Post Commander
Scott Becker	Hodge & Associates	President
Brenda Robb	Williams Northwest Pipeline	N/A
Rachel Denzin	Williams Northwest Pipeline	N/A
Tom Grant	Williams Northwest Pipeline	N/A
Alice Barbut	N/A	N/A
Vin Benin	N/A	N/A
Integrated Solutions Consulting	Micheal Kemp	Consultant

2.4 LOCAL HAZARD MITIGATION PLANNING SCHEDULE, MEETINGS, & MITIGATION WORKSHOPS

The mitigation plan update process commenced in November 2024. The Risk Assessment section was updated during the months of November, December, and January. The Capability Assessment section was updated during the months of February and March. The Mitigation Strategy section was updated during the months of April and May. The plan was completed and submitted to the Idaho Office of Emergency Management on [insert date].

Latah County Hazard Mitigation Plan Update Kickoff Meeting—November 12, 14, & 21, 2024

The Core Planning Team held the Hazard Mitigation Plan Update kickoff meeting in November 2024 virtually as an online webinar. This meeting served to provide an overview of the 2025 update process, provide roles and expectations, discuss public and stakeholder involvement,

review project timelines, and discuss needed data requests. See Appendix B for the meeting's agenda.

Hazard Mitigation Planning Workshop—January 15 & 16, 2025

A mitigation workshop, which included members of the LEPC, was held at the Latah County Courthouse in Moscow, ID to familiarize attendees with the topic of disaster mitigation, review current updates being made to the plan, and identify additional hazards of concern in the county. Members also submitted new mitigation projects for each jurisdiction in the county. See Appendix B for the meeting's agenda.

Public and Stakeholder Meeting—January 15, 2025

The Core Planning Team hosted a public meeting with the jurisdictions of Latah County and the participating jurisdictions at the Latah County Courthouse in Moscow, ID to gather input from county residents regarding potential natural hazards and disasters that could impact the county. Participation in the public survey was also encouraged. The meeting was voluntary and open to any member of the public. Stakeholders and the public were invited via email, a press release distributed to the media, and on the Latah County ID Facebook page, as seen in Appendix C and E.

2.5 PUBLIC & STAKEHOLDER INVOLVEMENT

The general public must be given an opportunity to be involved in the planning process. As such, a number of public outreach activities were organized to ensure public participation and input was obtained. Additionally, a draft of the 2025 Latah County Multi-Jurisdictional All Hazard Mitigation Plan was made available to the public and linked on the Latah County website on the Disaster Services page beginning on [insert date]. The link was updated with the completed version of the plan in [insert date] and is still available for review. This allowed the public the opportunity to comment or provide feedback on the updated plan before completion.

2.5.1 Public Meetings

One meeting that took place on 01/15/2025 in Moscow was advertised publicly and open to public participation. Advertisements/invites are available in Appendix C and E. Minor editing comments were received and incorporated within the plan document. During the public meeting, the results from the survey were discussed to demonstrate that all public feedback was incorporated into the draft plan and continued participation was encouraged. Adjustments to the draft plan, and specifically to the hazard ranking and validation of new and ongoing actions, resulted from the meeting.

2.5.2 Public Survey

An emergency preparedness study and survey was distributed to the public through coordination with the local newspaper, Facebook, and Latah County's website beginning in February 2025 until March 2025. The purpose of the survey was to allow Latah County residents and businesses to help the county update its emergency preparedness plans by providing feedback on how they respond to emergencies in the county and how the county can better serve them during an emergency. The post about the survey was made on the Latah County ID Facebook page. The post can be found in Appendix E. The survey remained easily accessible and available to the public on the Latah County website on the Disaster Services page until March 2025 and received 116 responses in total.

The survey specifically asked residents to provide feedback on areas within their community that needed mitigation. The following question garnered 30 open-ended responses that informed and validated the new and ongoing mitigation projects in the plan: "Please provide specific recommendations for mitigation in your area. For example, please indicate the hazard(s) in which your community/location is uniquely vulnerable and provide a brief explanation of the possible solutions (i.e., mitigation) that would address the issue(s)."

2.5.3 Stakeholder Participation

Additional local, state, and regional stakeholders were given an opportunity to participate in the 2025 update of the Latah County Multi-Jurisdictional All Hazard Mitigation Plan. Stakeholders were invited to attend the hazard mitigation plan workshop, stakeholder and public meeting, and to review the draft plan. Some stakeholders, which are listed below, provided specific expertise and information.

- NOAA/National Weather Service
- Latah County CERT
- Whitman County WA Emergency Management
- Idaho Public Health District 2
- Idaho Firewise
- University of Idaho
- Idaho Transportation Department
- Idaho Department of Lands
- Idaho School Safety & Security
- U.S. Forest Service
- North Idaho Healthcare Coalition
- Avista Corporation
- CommUnity Nexus, Inc.
- Hills and Rivers Housing Trust

Beyond the participating jurisdictions, there are 24 unincorporated communities in the county that the planning committee engaged with and included in the plan to address risk. These stakeholder communities contributed to a collaborative strategy that enhances resilience through risk assessments, infrastructure upgrades, and community-driven mitigation actions, ultimately ensuring a comprehensive hazard mitigation approach across the county's diverse rural landscape. These communities are listed below:

- Aspendale
- Avon
- Blaine
- Cameron
- Cora
- Crescent
- Elmore
- Estes
- Freeze
- Hampton
- Harvard
- Helmer
- Howell
- Joel
- Leland
- Lenville
- Nora
- Onaway
- Princeton
- Slabtown
- Southwick
- Stanford
- Vassar
- Viola

2.6 EXISTING PLANS, STUDIES, REPORTS, AND TECHNICAL INFORMATION REVIEWED FOR THE DEVELOPMENT OF THE PLAN

Chapter 19: Capability Assessment provides a review of key studies, plans, laws, and ordinances in effect within the planning area that can affect hazard mitigation actions. All these documents were reviewed and incorporated into this plan as part of the update process, including the following:

- Latah County 2010 Comprehensive Plan and Land Use Map
- Community Wildfire Protection Plan
- 2016 Emergency Operations Plan
- Land Use Code/Ordinances
- North Latah County Highway District Transportation Plan
- South Latah Highway District Transportation Plan
- Building Permits/Code
- City Ordinances
- Landownership/Parcel/Zoning Maps
- Floodplain Management Ordinances/Maps/FIRM
- City of Deary 2016 Comprehensive Plan
- 2018 Juliaetta/Kendrick Joint Transportation Plan Update
- Kendrick-Juliaetta Comprehensive Plan
- City of Moscow Strategic Plan
- 2024-2033 Moscow Capital Improvement Plan
- City of Moscow 2019 Comprehensive Plan
- City of Potlatch 2018 Comprehensive Plan

- City of Troy 2021 Comprehensive Plan

Appendix H: References provides additional sources that were used to provide the technical information in this plan.

PART II: COMMUNITY PROFILE

CHAPTER 3 LATAH COUNTY PROFILE

3.1 LOCATION

Latah County, Idaho is located in the southwestern part of the Idaho Panhandle and home to the University of Idaho. The county borders five other counties. It is bordered on the north by Benewah County; on the northeast by Shoshone County; on the east by Clearwater County; on the south by Nez Perce County; and on the west by Whitman County, WA. Latah County's total land area of the county is roughly 1,075.897 square miles (689,209.6 acres), of which 0.9 square miles is water (U.S. Census QuickFacts, 2023). It is the 29th largest county by area in Idaho.

The incorporated communities include the cities of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy. Census-designated places include Princeton and Viola. Unincorporated communities include Avon, Harvard, Helmer, Joel, Onaway, and other smaller communities. All census-designated places and unincorporated communities that are not participating jurisdictions in this plan are included in the list below:

- Aspendale
- Avon
- Blaine
- Cameron
- Cora
- Crescent
- Elmore
- Estes
- Freeze
- Hampton
- Harvard
- Helmer
- Howell
- Joel
- Leland
- Lenville
- Nora
- Onaway
- Princeton
- Slabtown
- Southwick
- Stanford
- Vassar
- Viola

3.2 TOPOGRAPHY & VEGETATION

Latah County is located in the eastern portion of the Palouse, which is a region of rolling hills and rich agriculture in parts of north central Idaho and southeastern Washington. Elevation ranges from about 1,000 feet above sea level along the Potlatch River to nearly 5,000 feet in the Palouse Range. Wooded ridges and low mountains occur above the loess-covered plain along Paradise Ridge, Tomer Butte, and the Palouse Range and in the northern area. The highest elevation in Latah County is Moscow Mountain, which is 4,983 feet above sea level.

A large part of this area is cultivated with the main crops being wheat, barley, and peas. Woodland areas are mostly in the higher rainfall zones in the northern and eastern regions. The western part of Latah County includes the dune-like topography of the Palouse hills. Bisecting the loess covered plains are deep canyons along the Potlatch River and its tributaries on the southern end of the county, with much of the canyons forested. Rangeland predominates on south-facing slopes near Juliaetta and Kendrick.

The Potlatch River flows southwesterly along the bottom southeast border of Latah County, eventually flowing into the Clearwater River in Nez Perce County. Cottonwood, quaking aspen, maple, alder, Idaho fescue, and bluebunch wheatgrass are common plant species along this river. The Palouse River flows southwestward from the northeastern corner of Latah County to the west through the city of Potlatch and into Washington. Conifer and ponderosa pine trees can be found along the Palouse River. Many other tributaries, streams, and creeks exist throughout Latah County, as well.

In the early 1800s (pre-European settlement), the landscape in Latah County was strikingly different than that which is seen today. Conditions mirrored those found throughout the Palouse region and northern Idaho. At that time the major vegetation types which occurred in the area were prairie grasslands, meadows, riparian forest and wetlands, open woodland, and upland forest. Open grasslands dominated the vegetation throughout the western portion of Latah County. Isolated groves of trees within this area were primarily ponderosa pine and Douglas-fir. Throughout the central portion of the county, forested lands intermingled with meadows and prairies ultimately giving way to a forest-dominated landscape throughout the eastern portion of the county. The forested areas contained a wide diversity of tree species, the most predominant of which were ponderosa pine, Douglas-fir, lodgepole pine, western larch, western white pine, grand fir, and western red cedar.

3.3 NATURAL RESOURCES

Oil and gas production in Idaho is scarce, and Latah County does not produce any oil or gas. Instead, the county has some of the best dryland farming in the United States due to the rich soils of the Palouse Prairie. Soft white wheat, spring wheat, barley, lentils, peas, oats, canola, and grass seed are some of the primary crops grown throughout the county (Latah SWCD, 2025). Latah County is the first largest producer in lentils and dry peas in Idaho and the third largest producer in Idaho for wheat grain, with up to 110 bushels per acre (Latah County Comprehensive Plan, 2010). There are also an estimated 402,300 acres of forest land in the county, making timber extraction and lumber processing a significant part of the economy. Other natural resources that are regularly utilized in Latah County are ranching, groundwater, and fishing.

Grazing rangeland is a significant resource for Latah County, as well, with about 196,000 acres of grazing land throughout the county. 15,000 of these acres are referred to as rangeland, and 181,000 acres is grazable woodland. Annual brome grasses and sod-forming bluegrass are the most common vegetation found on the rangeland. Rangeland is primarily located on the south-facing slopes in the canyons adjacent to the lower portions of the Potlatch River and its tributaries. Livestock products make up about five percent of the agricultural income in Latah County (Latah SWCD, 2025).

3.4 CLIMATE

The climate in Latah County is primarily continental with cold winters and dry, warm summers. The southeast corner of the county along the Potlatch River has an arid to temperate climate (National Geographic, 2025). In the summer, the average daily temperature in Moscow is 64.2°F with the warmest month of each year typically being July (NOWData, 2025). In the winter, the average daily temperature is 30.9°F in Moscow, and the coldest month is typically January (NOWData, 2025).

Average annual precipitation is approximately 24.2 inches in Moscow (NOWData, 2025). The wettest month in Moscow is December, and the driest month is July. However, because the county's land area is quite large, averages can vary from one community to another. The growing season lasts approximately 150-200 days, which is the longest in the state. The southwest region of the county near the city of Lewiston in Nez Perce County has the longest growing season (Climate of Idaho, 2025). During this time the county receives approximately seven to eight inches of precipitation, depending on location. The table below outlines monthly average maximum and minimum temperatures and average precipitation and snowfall recorded at Moscow and Potlatch.

Table 3-1. Moscow and Potlatch Monthly Climate Summary

Moscow, ID												
Average Maximum Temperature												
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
48	52	62	74	83	89	97	97	90	78	59	49	73
Average Minimum Temperature												
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
1	8	18	25	29	35	39	38	31	23	15	5	22
Average Total Precipitation												
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
2.98	2.26	2.41	2.02	2.09	1.67	0.67	0.75	1.18	1.94	3.12	3.09	24.15
Average Total Snowfall												
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
4	2	0	0	0	0	0	0	0	0	0	2	1
Potlatch, ID												
Average Maximum Temperature												
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
49	54	64	75	83	89	96	97	90	78	60	51	74
Average Minimum Temperature												
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
-2	7	14	23	27	33	36	34	27	20	12	2	19
Average Total Precipitation												
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
2.85	2.37	2.40	2.08	2.12	1.83	0.73	0.76	1.30	1.92	2.92	3.06	24.05
Average Total Snowfall												
Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual

3	2	0	0	0	0	0	0	0	0	0	2	1
Source: NOWData, 2025; Western Regional Climate Center, 2025												

3.5 LAND OWNERSHIP, LAND USE, & FUTURE DEVELOPMENT

20.8% of the land in Latah County is public land (federal and state), and 79.1% of the land is privately owned (Headwaters, 2025). Public lands in Latah County are administered by the U.S. Forest Service. Tribal land makes up 0% of land ownership. Of the 545,032 acres of private land in Latah County, over 13,000 acres are residential (Headwaters, 2025).

The figure below shows the land ownership statistics for Latah County, as taken from the Headwaters Economic Profile System:

Land Ownership

	Latah County, ID
Total Acres*	689,007
Private Lands	545,032
Conservation Easement	220
Federal Lands	109,064
Forest Service	108,868
BLM	196
National Park Service	0
USFWS	0
Military	0
Other Federal	0
State Lands	34,776
State Trust Lands*	31,095
Other State	3,681
Tribal Lands	23
City, County, Other	112
Percent of Total	
Private Lands	79.1%
Conservation Easement	0.0%
Federal Lands	15.8%
Forest Service	15.8%
BLM	0.0%
National Park Service	0.0%
USFWS	0.0%
Military	0.0%
Other Federal	0.0%
State Lands	5.0%
State Trust Lands**	4.5%
Other State	0.5%
Tribal Lands	0.0%
City, County, Other	0.0%

Figure 3-1. Land Ownership in Latah County

In Latah County, there are five land use designations. These land use designations are shown in the figure below. The map from the 2010 Latah County Comprehensive Plan is partially based on existing land use patterns but is also designed as a projection for suitable potential growth patterns of Latah County. The following describes the land use designations:

- Productive areas are generally comprised of the most productive agricultural and forest lands in the county. This area should be protected from residential, commercial, and

industrial uses which are not directly related to agriculture or forestry and which may intrude upon the existing use of the land for normal agricultural or forest practices.

- Rural areas are generally composed of less productive agricultural and forest lands and contain low density residential development not directly related to agriculture. This area should be protected from conversion to more concentrated residential, commercial, or industrial development; however, sites within this area may be suitable for consideration for further low-density residential development.
- Agriculture/forest/residential areas are generally composed of existing higher density residential with some agriculture and forestry activities. This area should be protected from conversion to industrial and commercial; however, this area should be considered the most suitable for future higher density residential development. Development requests must be reviewed for specific site considerations prior to any land use change.
- Residential/commercial/industrial areas are generally composed of less productive agricultural and forest lands and contain some commercial, industrial, and residential development. This area should be considered the most suitable for future commercial, industrial, and higher density residential development; however, development requests must be reviewed for specific site considerations prior to any land use change.
- Areas of City Impact are those areas that essentially act as place holders for future annexation and eventual urban development.

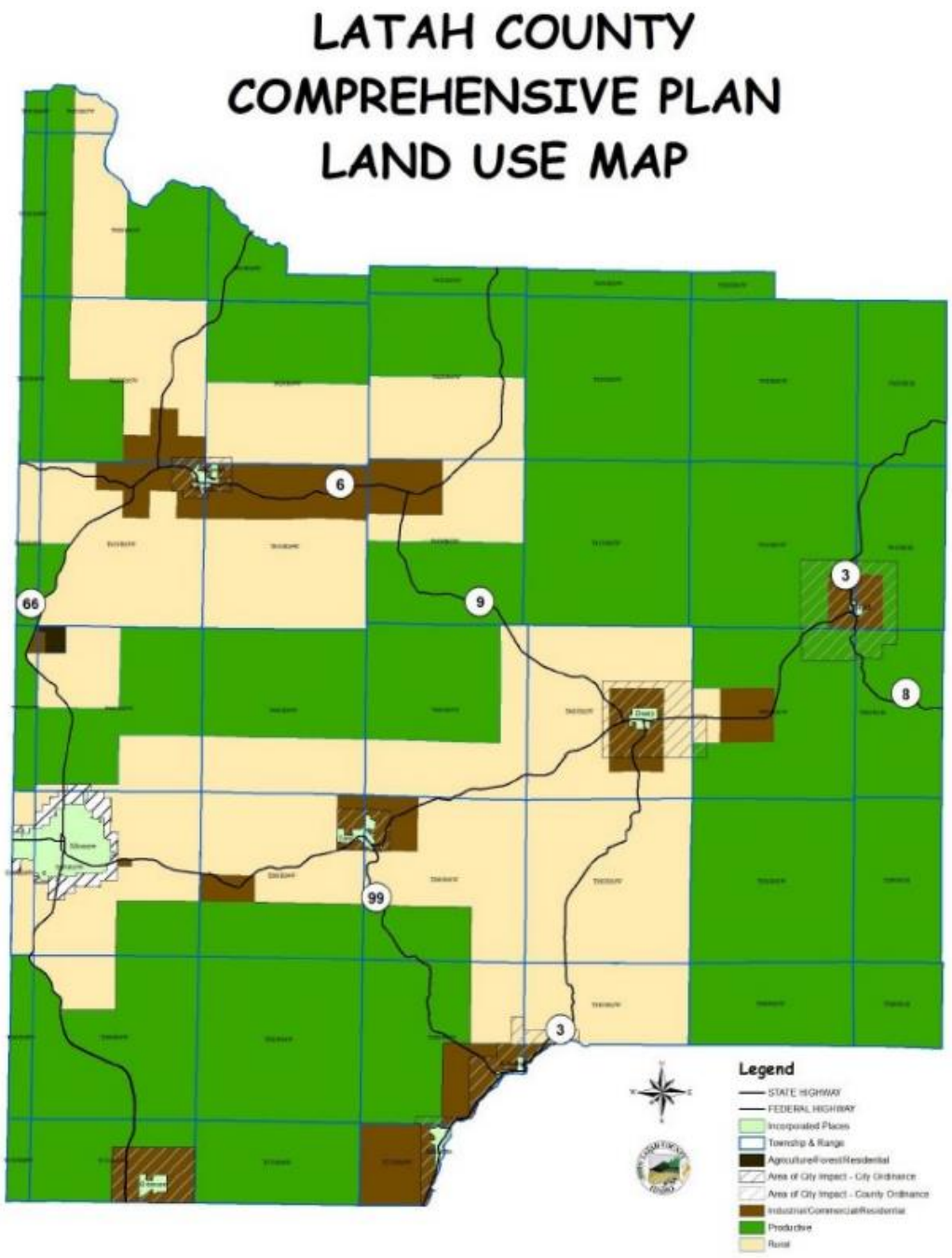


Figure 3-2. Latah County Land Use Map

According to the USDA 2022 Census of Agriculture for Idaho, Latah County has 989 farms covering 324,990 acres (USDA, 2022). 228,085 acres of this land is cropland, and 424 acres is irrigated land. 39,936 acres are woodland. The primary crops grown in the county include grains, oilseeds, dry beans, dry peas, nursery, greenhouse, floriculture, sod, and hay (USDA, 2017). A portion of land in the county is used for grazing, as well.

3.6 HISTORY

The Nez Perce, Palouse, and Coeur d'Alene people originally inhabited what is now Latah County. Explorers made their way throughout the region through the 1600s to 1800s but did not settle until gold was found in many parts of Idaho and Montana. Idaho Territory was created in 1863, and in 1864, the Idaho Territorial Legislature established Lah-Toh and Kootenai Counties (Idaho State Historical Society, 1969). However, in 1867 Lah-Toh County was abolished and split into Nez Perce and Kootenai Counties, unbeknownst to the people of Moscow. More American settlers arrived in the Palouse region in 1871 to permanently settle the area and began to form and populate the cities of Genesee and Moscow. Moscow was initially named "Paradise Valley" but was soon changed to Moscow in 1875. Juliaetta and Kendrick soon followed, and the arrival of the railroad in Moscow in 1885 led to Moscow becoming the primary population center of the county. Latah County was finally created with the county seat of Moscow in 1888 as the first and only county created by the United States Congress. Moscow continued to grow after the University of Idaho was established in Moscow in 1889. Bovill and Deary developed next, with Potlatch being the last city to become incorporated in Latah County (Idaho Genealogy Trails, 2025).

3.7 POPULATION & DEMOGRAPHICS

In 2024, Latah County had a population of 42,180 (U.S. Census QuickFacts, 2024). This is an increase of 6.7% from the population taken during the 2020 Census, which was 39,517. According to the 2023 American Community Survey, Latah County ranks 11th in total population among all 44 of Idaho's counties (Idaho Demographics, 2024). From decennial census to decennial census, the population in Latah County has been trending up since its inception in 1890, with the exception of one period of decline throughout 1910–1930.

The population trends for Latah County and the cities of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy are shown in the table below.

Table 3-2. Latah County Population Trends

County Location	2010	2020	Percent Change 2010–2020
Entire County	37,244	39,517	6.1%
Bovill	260	191	-26.5%
Deary	506	508	0.4%
Genesee	955	1,030	7.9%
Juliaetta	579	624	7.8%
Kendrick	303	288	-5.0%
Moscow	23,800	25,435	6.9%
Potlatch	804	763	-5.1%
Troy	862	890	3.2%
Source: U.S. Census Bureau, 2010, 2020			

Between 2010 and 2020, the county as a whole increased in population by 6.1%. The cities of Deary, Genesee, Juliaetta, Moscow, and Troy increased in population, as well, while the cities of Bovill, Kendrick, and Potlatch declined.

Of the total population in the county, 48.8% are female (U.S. Census QuickFacts, 2024). 19.4% of the total population are under 18 years of age. 4.2% of residents were foreign born. The population is mainly homogenous with 92.3% of county residents listed as white alone. The county's racial and ethnic distribution is listed in the table below. Only the six most common ethnicities in the county are included, and some members of the population may identify as more than one race, which results in a total percentage of more than 100%.

Table 3-3. Latah County Racial and Ethnic Distribution

Race	Percent of Population
White	92.3%
Black or African American	0.9%
American Indian and Alaska Native	0.9%
Asian	2.4%
Native Hawaiian and Other Pacific Islander	0.2%
Hispanic or Latino	5.1%
Source: U.S. Census Bureau, 2020	

In addition to the incorporated communities in Latah County, there are 24 unincorporated communities in the county that are stakeholders in this plan. These communities are listed below for reference:

- Aspendale
- Avon
- Blaine
- Cameron
- Cora
- Crescent
- Elmore
- Estes
- Freeze
- Hampton
- Harvard
- Helmer
- Howell
- Joel
- Leland
- Lenville
- Nora
- Onaway
- Princeton
- Slabtown
- Southwick
- Stanford
- Vassar
- Viola

3.8 HOUSING

According to the U.S. Census 2024 Population Estimates, Latah County has a total of 17,903 housing units, 6.9% of which are vacant (U.S. Census QuickFacts, 2024). Between 2019–2023, the owner-occupied housing unit rate in the county was 60.6%. An estimated 22.8% of occupied housing units were built since the year 2000. Of the total occupied housing units, 60.1% were single-unit structures, 29.5% were multi-unit structures, and 10.5% were mobile homes or another type of unit (American Community Survey, 2023). The median value of a home is $342,500, which is lower than the median home value of $376,000 for the state of

Idaho (U.S. Census QuickFacts, 2024). This is also a 39.7% increase in the median home value in Latah County from 2020. Latah County has a homeownership rate of 60.6%, which is similar to the national average of 65% (Data USA, 2024). Median gross rent was $905 from 2019 to 2023 (U.S. Census QuickFacts, 2024). 99.5% of households were estimated to have telephone service, and 3.9% had no vehicles available (American Community Survey, 2023).

3.9 ECONOMY

The University of Idaho provides a fourth of the county's jobs. Enrollment at the university is a major driver of retail, tourism, construction, and service jobs in the Moscow area. Its relatively slow enrollment growth has slowed economic growth in the county over the last 10 years.

Farming and related services are major drivers for the local economy. Logging, the Bennett Lumber Mill in Princeton, and a variety of small manufacturing operations employ over 500 people. Many county residents work at the fast-growing Schweitzer Engineering Laboratories, which employs more than 2,300 in nearby Pullman, Washington with plans to employ about 240 more in the coming year in Pullman, Moscow, and Lewiston (Schweitzer, 2024). Technology transfer, which takes new ideas developed by university researchers and turns them into practical applications, has created about 210 manufacturing and professional services in the last 10 years.

Increased retail offerings in Pullman and the growing popularity of online shopping have reduced shopping in Moscow. Retail employment has remained the same for more than two decades. Leisure and hospitality have grown slowly over the last 10 years, as more people visit the university for family occasions or for conferences. Health care added more than 100 jobs over the last 10 years.

Outside the University of Idaho, Latah County's major employers include Bennett Lumber Products, City of Moscow, Economic Modeling Specialists International, Good Samaritan Society (nursing home), Gritman Medical Center, Latah County, Moscow School District 281, Northwest River Supplies, Winco Foods, University Inn Best Western, and the U.S. Forest Service.

A new economic development organization, Partnership for Economic Prosperity, opened its doors in early 2017 to help local businesses grow and to attract new businesses. It is working with the University of Idaho and the City of Moscow to develop the local economy. It seeks to create innovative and sustainable solutions to improve the economic vitality of communities throughout the county. The county's per capita income in 2023 was $35,157, which was 95% of the state's average and 81% of the national average. Latah County ranked 13th of the 44 counties in this metric (U.S. Census QuickFacts, 2024).

An estimated 62.6% of the population 16 years or older in Latah County is in the civilian labor force (21,073 people). An estimated 67.2% of the people employed in 2023 were private wage and salary workers; 27.1% were federal, state, or local government workers; and 5.6% were self-employed (American Community Survey, 2023). The educational services (4,552 people);

retail trade (2,113 people); and health care and social assistance (1,961 people) industries currently hold the highest number of employees of any other industry in the county (American Community Survey, 2023). The most common job groups, regardless of industry, are management (2,211 people); office and administrative support (2,159 people); and education instruction and library (1,879 people).

The adjusted unemployment rate is 3.5% for Latah County as of March 2025 compared to the state of Idaho unemployment rate of 3.7% and the United States unemployment rate of 4.2% for the same period (Idaho Department of Labor, 2025).

The median household income in 2023 in Latah County was $65,179. An estimated 79.2% of households received earnings, and 21.5% received retirement income. 27.9% of households received Social Security income (American Community Survey, 2023). In December 2023, 520 people in the county received Supplemental Security Income (SSI) (SSA, 2023). These income sources are not mutually exclusive; that is, some households received income from more than one source. The poverty rate in the county is 14.3% (U.S. Census QuickFacts, 2024).

In addition to the incorporated communities in Latah County, there are 24 unincorporated communities in the county that are stakeholders in this plan, which are listed earlier in this chapter. These stakeholder communities make up a portion of the overall hazard risks in Latah County, and while they are smaller than the incorporated cities, they contribute to the economy with large agricultural harvests and other small businesses, thus promoting the overall productivity in the county.

3.10 EDUCATION

The total school enrollment from kindergarten to 12th grade in Latah County was 5,313 students in 2023 (American Community Survey, 2023). Nursery school and preschool enrollment was 459. There are six school districts in Latah County. Genesee Joint School District #282 serves 277 students in grades kindergarten through 12th grade within one school in the city of Genesee. Kendrick Joint School District #283 serves 267 students in the Juliaetta and Kendrick region in grades kindergarten through 12th through one elementary school and one combined middle and high school. Moscow School District #281 serves 2,136 students in three elementary schools, one middle school, one high school, and one regional alternative high school. Potlatch School District #285 serves 445 students in the city of Potlatch through one elementary school and one junior-senior high school in grades kindergarten through 12th. Troy School District #287 serves 339 students in the Troy area in one elementary school and a combined middle and high school. Whitepine Joint School District #288 serves 206 students in grades Pre-K through 12th, including in two elementary schools and one combined middle and high school (Idaho Department of Education, 2025). The district makes up the communities of Deary, Helmer, and Bovill in eastern Latah County and incorporates Elk River in Clearwater County (Idaho Schools, 2025).

There are also two charter schools in Latah County, both located in Moscow. Moscow Charter School focuses on STEAM curriculum and serves 185 students in grades kindergarten through eighth. Palouse Prairie School serves 186 students in grades kindergarten through eighth and follows the Expeditionary Learning model of curriculum. Five non-profit private schools are located in the county, as well. Four of them (Logos School K-12, Palouse Hills Christian School 1-8, St. Mary's Parish School PreK-8, and The Jubilee School PreK-12) are located in Moscow. Wild Rose Christian School in the census-designated place of Viola serves 36 students in grades kindergarten through eighth (Idaho SDE, 2025).

College and graduate school enrollment for residents in the county was 9,459 in 2023 (American Community Survey, 2023). The University of Idaho is a public land-grant research university with its main campus in Moscow and offers a number of associates, bachelor's, master's, doctorate, certificate, and technical programs. Specifically, the university offers 105 undergraduate degrees and 69 graduate degrees with 12,286 students currently enrolled. U of I also has extension locations in Boise, Coeur d'Alene, and Idaho Falls, including an online campus (U of I, 2025).

3.11 BRIDGES

The following table provides a list of all 115 Latah County bridge locations, lengths, years constructed, and daily traffic counts, taken from the National Bridge Inventory.

Table 3-4. Latah County Bridges

Location	Length (meters)	Year Built	Average Daily Traffic Count
Juliaetta NCL	32.3	2021	2900
Kendrick NCL	43	1954	2500
3.5 N. Bovill	14	2020	440
East Side of Moscow	10.7	1983	11500
2.2 E. Moscow ECL	16.8	2002	5100
7.8 E. Moscow ECL	8.2	2004	3300
Troy WCL	7	1948	3300
0.2 E. Troy CL	7.9	1979	2800
2.0 W. Deary	30.5	1968	2100
0.1 W. Bovill	15.8	1958	1000
1.9 S. Bovill	12.2	1955	660
2.3 NW Deary	19.8	1982	1600
3.2 NW Deary	15.5	1982	920
9.1 NW Deary	7	1959	920
13.6 NW Deary	34.4	1953	920
13.3 S. Moscow	7.9	2006	6000
Moscow SCL	19.5	2004	7100
Moscow	8.2	2000	10500
6.9 N. Moscow	17.7	2018	6400
14.3 N. Moscow	41.8	2002	5400
14.5 N. Moscow	29.5	2022	5500

Location	Length (meters)	Year Built	Average Daily Traffic Count
15.6 N. Moscow	20.5	2022	5500
1.2 E. Potlatch	16.5	2019	2900
1.5 N. Harvard	24.8	1974	710
3.7 N. Harvard	24.1	1991	710
6.3 N. Harvard	6.4	1991	710
0.7 N. 0.6 E. Kendrick	44.2	1995	670
3.4 N. 3.7 W. Genesee	7.9	2013	320
Chestnut St. Genesee	12.2	1977	210
3.9 N. 6.2 E. Genesee	12.2	1977	30
0.5 N. 2.8 E. Moscow	14.9	2018	670
Moscow	8.2	1950	1500
W. 6th St. Moscow	11.6	1916	7300
E. 6th St. Moscow	8.5	2023	4400
6th & Mtn View Moscow	7.9	1993	7100
Hillcrest Mtn View Moscow	8.8	1992	6200
Mtn View at White Ave	8.2	1997	5700
U of I Access SH 8 Moscow	9.1	1953	6900
Joseph St. Moscow	9.1	2009	1400
1.5 S. 0.3 E. Princeton	13.7	1991	30
3.6 S. 0.6 E. Princeton	8.5	1984	30
3.8 N. 2.9 E. Harvard	9.4	1970	20
1.0 S. 1.8 W. Deary	23.8	1940	30
1.7 W. Harvard	24.4	1980	30
1.5 N. 1.6 E. Genesee	11.3	1970	50
0.2 S. Genesee	10.4	1935	50
Genesee	14	2005	50
0.3 N. 1.0 W. Potlatch	24.4	1940	210
0.4 S. 2.5 W. Deary	14.9	1975	50
5.4 N. 1.1 W. Potlatch	8.5	1940	10
0.8 S. 0.2 W. Princeton	11	1975	30
6.4 N. 3.8 E. Genesee	7.9	1959	70
2.8 N. 9.8 E. Juliaetta	16.2	1940	30
1.3 S. 1.1 W. Moscow	10.7	1955	550
2.3 S. 1.8 W. Moscow	8.5	2000	50
Moscow	15.5	1971	550
4.7 N. 0.8 E. Viola	25.9	2000	50
0.4 S. 0.1 E. Potlatch	58.8	1965	550
2.5 N. 1.6 E. Genesee	7.9	1935	30
0.1 S. 2.1 E. Helmer	15.8	1977	20
1.1 N. 2.8 E. Kendrick	18.6	1989	310
1.6 S. 0.6 E. Helmer	10.7	1973	70
2.4 N. 2.8 E. Harvard	9.1	1993	30
1.9 S. 0.7 E. Helmer	27.4	2018	70
2.3 N. 4.8 W. Genesee	8.5	1935	30
2.7 N. 1.6 W. Potlatch	9.1	1970	200
4.9 N. 1.1 W. Potlatch	12.2	1970	150

Location	Length (meters)	Year Built	Average Daily Traffic Count
1.6 N. 4.1 E. Kendrick	46.6	1992	310
1.7 N. 1.6 W. Potlatch	9.1	1965	30
1.5 N. 0.1 E. Kendrick	14	1959	60
5.2 E. 2.5 N. Kendrick	21.3	1978	310
3.5 N. 0.6 E. Genesee	6.7	1930	120
4.9 N. 0.4 W. Genesee	6.7	1930	120
4.5 N. 6.0 E. Genesee	8.2	1973	110
1.3 S. 1.5 E. Moscow	9.1	1987	50
4.1 S. 0.5 E. Princeton	7.3	1970	30
5.4 N. 4.9 E. Genesee	10.7	1965	110
3.2 S. 0.5 E. Princeton	8.5	1982	30
6.0 N. 4.3 E. Genesee	13.1	1940	110
2.6 S. 0.4 E. Princeton	7.9	1965	30
2.3 S. 0.4 E. Princeton	9.1	1970	30
2.3 S. 0.4 E. Princeton	9.1	1970	30
7.9 N. 4.1 E. Genesee	7.9	1936	110
0.3 S. Princeton	24.4	1974	870
1.3 S. 2.0 E. Moscow	9.1	1935	970
0.1 N. Viola	11	2010	130
0.2 S. 0.1 W. Viola	8.5	2015	80
1.1 E. Onaway	6.7	1975	40
1.2 S. 0.6 E. Potlatch	6.1	1975	330
0.8 S. Princeton	9.8	1970	30
2.4 N. 1.5 E. Moscow	7.9	1935	320
0.8 N. 3.0 E. Moscow	7	1970	30
0.7 N. 2.8 E. Moscow	7.6	1996	80
1.3 S. 0.5 E. Moscow	9.4	1978	50
0.9 S. 2.3 W. Deary	9.1	1978	50
Blaine at White Moscow	9.1	1972	3200
Bridge St. ECL Moscow	9.1	1972	150
N. of D St. Moscow	12.2	1975	400
College St. Moscow	9.1	1915	2600
U of I Moscow	323.4	1967	4200
U of I Moscow	19.5	2010	4300
Moscow WCL	9.8	1953	20
Troy	11	1997	50
0.8 S. 0.8 E. Joel	9.1	1994	200
0.1 N. 2.0 E. Troy	6.1	1965	350
U of I Moscow	9.1	2010	7000
U of I Moscow	8.2	2010	7000
Troy	17.7	2020	50
2 mi. W. of State Hwy	15.3	1981	5
2 mi. W of State Hwy 6	12.3	1959	20
23 mi. from Potlatch RS	8.5	1963	10
13 mi. from Potlatch ID	22.6	1979	15
17 mi. from Potlatch ID	17.1	1998	20
N/A	10.8	2017	50
19 mi. from Potlatch ID	14.6	2021	15

Location	Length (meters)	Year Built	Average Daily Traffic Count
Source: National Bridge Inventory, 2024			

3.12 CULTURAL & HISTORICAL SITES

Sites in Latah County listed on the National Register of Historic Places can be found in the table below.

Table 3-5. Historic Sites in Latah County

Site	Address	Nearest City/Location
Adams, Abram A., House	191 State St.	Juliaetta
Administration Building, University of Idaho	University of Idaho campus	Moscow
American Legion Cabin	745 6th St.	Potlatch
Bank of Juliaetta	301 Main St.	Juliaetta
Bethany Memorial Chapel	Kendrick-Deary Hwy.	Kendrick
Boarding House	850 Pine St.	Potlatch
Bohman, Axel, House	116 N. Main St.	Troy
Bohman, Ole, House	114 N. Main St.	Troy
Bovill Opera House	412 2nd Ave.	Bovill
Campbell, Harry and Fern, House	101 E 4th St.	Troy
Commercial Historic District	Roughly Pine St. between Seventh and Fifth Sts.	Potlatch
Cordelia Lutheran Church	S. of the jct. of Genesee-Troy and Danielson Rds.	Moscow
Cornwall, Mason, House	308 S. Hayes St.	Moscow
Cox Barn	1290 American Ridge Rd.	Kendrick
Davids' Building	3rd and Main Sts.	Moscow
Deary Garage	307 Main Street	Deary
Deesten Farmstead	3611 US 95 S	Moscow
First Methodist Church	322 E. 3rd St.	Moscow
Fort Russell Neighborhood Historic District	Roughly bounded by Jefferson, Monroe, 2nd and D Sts.	Moscow
Fort Russell Neighborhood Historic District (Boundary Increase)	Roughly bounded by Jefferson, E. D, Hays & E. 3rd Sts..	Moscow
Four-Room House	1015 Pine St.	Potlatch
Freeze Community Church	1 mi. W of US 95	Potlatch
Genesee Exchange Bank	Walnut St.	Genesee
Hotel Bovill	602 Park St. (ID 3)	Bovill
Hotel Moscow	4th and Main Sts.	Moscow
Hotel Rietmann	525 and 529 S. Main St.	Troy
Kappa Sigma Fraternity, Gamma Theta Chapter	918 Blake St.	Moscow
Kendrick Downtown Historic District	Generally bounded by 3rd, & S Kirby Sts., original NPRR alignment & grade rising N of E Main St.	Kendrick
Kendrick Fraternal Temple	614 E. Main	Kendrick
Kenworthy Theatre	508 S. Main St.	Moscow

Site	Address	Nearest City/Location
Kirby, Thomas, House	102 N. 9th St.	Kendrick
Lawrence, Russell, Farmstead	5471 ID 8	Deary
Lieuallen, Almon Asbury, House	101 S. Almon St.	Moscow
McConnell, W. J., House	110 S. Adams St.	Moscow
McConnell-McGuire Building	Main and 1st Sts.	Moscow
Memorial Gymnasium	University of Idaho campus	Moscow
Moscow Carnegie Library	110 S. Jefferson St.	Moscow
Moscow Downtown Historic District	Generally bounded by 1st St., 6th St., Washington St., and the alley bet. Main and Jackson	Moscow
Moscow High School	410 3rd E.	Moscow
Moscow Post Office and Courthouse	Washington and 3rd Sts.	Moscow
Mountain Home Grange Hall	1044 Mountain Home Rd.	Potlatch
Nob Hill Historic District	Roughly bounded by Fourth, Spruce, Third, and Cedar Sts.	Potlatch
Nordby Farmstead	1301 Old Highway 95	Genesee
Nu Art Theatre	516 S. Main St.	Moscow
Ridenbaugh Hall	University of Idaho campus	Moscow
Sigma Alpha Epsilon Fraternity House	920 Deakin St.	Moscow
Skattaboe Block	Main and 4th Sts.	Moscow
Snow, Arthur, House	2949 Clyde Rd.	Moscow
Soncarty, Edward and Ida, Barn	1671 Deep Creek Rd.	Potlatch
St. Joseph's Catholic Church	1st and Cedar	Bovill
Terteling, Joseph A., House	1015 Fir St.	Potlatch
Three-Room House	940 Cedar St.	Potlatch
Troy Downtown Historic District	339 S. Main St. through 527 S. Main St.	Troy
Troy Hospital	604 S. Main St.	Troy
University of Idaho Gymnasium and Armory	University of Idaho campus	Moscow
Vollmer Building	Walnut St.	Genesee
White Spring Ranch	1004 Lorang Rd.	Genesee
Workers' Neighborhood Historic District	Roughly Spruce St. between Eighth and Fifth	Potlatch

Source: National Register of Historic Places, 2025

PART III: RISK ASSESSMENT

CHAPTER 4 HAZARD RISK SUMMARY

Risk assessment is the process of measuring the potential loss of life, personal injury, economic injury, and property damage resulting from natural hazards. It allows emergency management personnel to establish early response priorities by identifying potential hazards and vulnerable assets. The process focuses on the following elements:

- Hazard identification—Use all available information to determine what types of disasters may affect a jurisdiction, how often they can occur, and their potential severity.
- Vulnerability identification—Determine the impact of natural hazard events on the people, property, environment, economy, and lands of the region.
- Cost evaluation—Estimate the cost of potential damage or cost that can be avoided by mitigation.

The risk assessment for this hazard mitigation plan update evaluates the risk of natural hazards prevalent in the planning area and meets requirements of the DMA (44 CFR, Section 201.6(c)(2)).

4.1 IDENTIFIED HAZARDS

There are countless hazards that pose a threat to human life, health, and well-being, and no attempt is made here to compile an exhaustive list. Those that are addressed in disaster planning are generally categorized as “natural” or “technological” (sometimes “manmade”). The FEMA website contains a thorough discussion and list of hazards in the section entitled “National Risk Index for Natural Hazards” (FEMA, 2022). Some hazards are a threat to all geographic areas while others (e.g., flooding) are more limited in their extent. Studies were conducted to determine which hazards are of concern in Latah County.

Latah County hazards were identified and their frequency of occurrence evaluated using a number of resources, including:

- 2020 Latah County Multi-Jurisdictional Hazard Mitigation Plan
- 2010 Latah County Comprehensive Plan and Land Use Map
- Hazard planning documents developed by state, federal, and private agencies
- NOAA weather data from the past 75 years
- Data from the United States Geological Survey (USGS) and the Idaho Geological Survey (UGS)

Hazards that have been identified as significant in this county and that will be considered in this plan are listed below.

Natural Hazards

- Severe Summer Weather
    - Extreme Heat
    - Thunderstorm/Lightning
    - Hail
    - Tornado
    - Straight-line Wind
- Severe Winter Weather
    - Extreme Cold
    - Winter Storm
- Wildfire
- Flood
    - River or Stream Flood
    - Urban/Flash Flood
- Dam/Levee Failure
- Drought

Geological Hazards

- Earthquake
- Landslide
- Volcanic Activity

Other Hazards of Concern

Although non-natural hazards are not required by FEMA for inclusion in a hazard mitigation plan, Latah County wishes to rank and mitigate against a comprehensive list of hazard events that could impact the county. Due to both the nature of non-natural hazards and the discretionary status regarding their inclusion, the following hazards of interest have been briefly and qualitatively assessed for the sake of public education and informing their inclusion within the hazard ranking and mitigation process.

Biological Hazards

- Communicable Disease Outbreak

Technological (Manmade) Hazards

- Hazardous Material Incident
- Major Transportation Incident
- Prolonged Power Outage
- Cybersecurity Incident

Per FEMA's mandate to address all natural hazards, the following natural hazards were not included because these hazards do not directly impact Latah County or the cities of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy due to geographic location:

- Hurricane
- Sea Level Rise
- Storm Surge
- Tsunami

4.2 HAZARD PROFILE

The risk assessments in the following chapters describe the risks associated with each identified hazard of concern. The following sections were used to describe each hazard and communicate each respective level of risk:

- **Hazard Description**—Each hazard profile contains a description of the general definition and causes of the hazard. It may also include background information for understanding the context of the hazard within Latah County.
- **Location**—The location or region in Latah County where each hazard may occur is described.
- **Historical Frequency & Probability of Future Occurrence**—This section identifies past hazard events of note that have occurred in Latah County. It also includes the likelihood of each hazard occurring again if available.
- **Extent**—The strength or magnitude of each hazard is defined, usually through a form of measurement, such as a formula, scale, chart, or graph.
- **Impacts & Loss Estimates**—The potential impacts of each hazard on the county are discussed. This section also outlines the potential economic/monetary loss from a hazard event, in addition to loss of property, structures, facilities, systems, livestock, and life.
- **FEMA NRI Score**—The hazard-specific FEMA National Risk Index scores for each natural hazard is included.
- **Related Hazards**—The hazard profiles that fall under a greater hazard category can be found within this section.

4.3 RISK ASSESSMENT METHODOLOGY

Each hazard included in this plan was assessed and ranked based on a pre-defined hazard risk methodology consistent with FEMA's mitigation plan requirements. Information from the hazard profiles and input from subject matter experts were used to inform the hazard risk assessment process. The following is a description of the key factors.

4.3.1 Probability/Likelihood of Occurrence

The probability of occurrence of a hazard is indicated by a probability factor based on the likelihood of annual occurrence:

- **High**—Significant hazard event is likely to occur annually (Probability Factor = 3)
- **Medium**—Significant hazard event is likely to occur within 25 years (Probability Factor = 2)
- **Low**—Significant hazard event is likely to occur within 100 years (Probability Factor = 1)
- **Unlikely**—There is little to no probability of significant occurrence, or the recurrence interval is greater than every 100 years (Probability Factor = 0)

The assessment of hazard frequency is generally based on past hazard events in the area.

4.3.2 Extent

Extent was assessed in two categories: extent/intensity and catastrophic potential of the hazard. Numerical impact factors were assigned as follows:

Extent/Intensity—Extent is defined as the range of anticipated intensities of the identified hazards. Extent is most commonly expressed using various scientific scales, such as the Enhanced Fujita scale.

- **High**—Historical and/or probabilistic models/studies for this hazard indicate the possibility of a high-intensity incident (Extent Factor = 3)
- **Medium**—Historical and/or probabilistic models/studies for this hazard indicate the possibility of a medium-intensity incident (Extent Factor = 2)
- **Low**—Historical and/or probabilistic models/studies for this hazard indicate the possibility of a low-intensity incident (Extent Factor = 1)
- **Unlikely**—Historical and/or probabilistic models/studies for this hazard indicate the possibility of little to no intensity (Extent Factor = 0)

Catastrophic—The potential that an occurrence of this hazard could be catastrophic.

- **High**—High potential that this hazard could be catastrophic (Extent Factor = 3)
- **Medium**—Medium potential that this hazard could be catastrophic (Extent Factor = 2)
- **Low**—Low potential that this hazard could be catastrophic (Extent Factor = 1)
- **Unlikely**—Virtually no potential that this hazard could be catastrophic (Extent Factor = 0)

Each category was assigned a weighting factor to reflect its significance, consistent with those typically used for measuring the benefits of hazard mitigation actions: a weighting factor of 3 was assigned for *Extent/Intensity* and its potential to be *Catastrophic*.

4.3.3 Vulnerability

Vulnerabilities were assessed in three categories: population exposure, property exposure, and exposure based on changes in development. Numerical impact factors were assigned as follows:

People—Values were assigned based on the percentage of the total population exposed to the hazard event.

- **High**—30% or more of the population is exposed to this hazard (Vulnerability Factor = 3)
- **Medium**—15% to 29% of the population is exposed to this hazard (Vulnerability Factor = 2)
- **Low**—14% or less of the population is exposed to this hazard (Vulnerability Factor = 1)
- **No Vulnerability**—None of the population is exposed to this hazard (Vulnerability Factor = 0)

Property Exposed—Values were assigned based on the percentage of the total property value exposed to the hazard event.

- **High**—25% or more of the total assessed property value is exposed to the hazard (Vulnerability Factor = 3)
- **Medium**—10% to 24% of the total assessed property value is exposed to the hazard (Vulnerability Factor = 2)
- **Low**—9% or less of the total assessed property value is exposed to the hazard (Vulnerability Factor = 1)
- **No Vulnerability**—None of the total assessed property value is exposed to the hazard (Vulnerability Factor = 0)

Changes in Development—Changes in development since the previous plan was approved have increased or decreased the community's vulnerability/exposure to this hazard.

- **High**—Changes in development have significantly increased the vulnerability/exposure of the community to this hazard (Vulnerability Factor = 3)
- **Medium**—Changes in development have increased the vulnerability/exposure of the community to this hazard, but not significantly (Vulnerability Factor = 2)
- **Low**—Changes in development have minimally increased the vulnerability/exposure of the community to this hazard (Vulnerability Factor = 1)
- **No Vulnerability**—Changes in development have had no effect and/or have decreased the vulnerability/exposure of the community to this hazard (Vulnerability Factor = 0)

Each category was assigned a weighting factor to reflect its significance, consistent with those typically used for measuring the benefits of hazard mitigation actions: a weighting factor of 3 was assigned for *People*, and a weighting factor of 1 was assigned for *Property Exposed* and *Changes in Development*.

4.3.4 Impact

Hazard impacts were assessed in eight categories: population and life/safety, underserved/equity, property damages, economic, environmental, essential operations, future development, and climate change. Numerical impact factors were assigned as follows:

Population and Life/Safety: Values were assigned based on (1) best available historical and probabilistic data for individuals who are vulnerable to the hazard event and (2) the likelihood to experience adverse impacts in the event of its occurrence.

- **High**: Populations exposed to this hazard are likely to experience significant adverse impacts (Impact Factor = 3)
- **Medium**: Populations exposed to this hazard are likely to experience some adverse impacts (Impact Factor = 2)
- **Low**: Populations exposed to this hazard are likely to experience minimal adverse impacts (Impact Factor = 1)
- **No impact**: Populations exposed to this hazard are not likely to experience significant adverse impacts (Impact Factor = 0)

Underserved/Equity—Values were (1) assigned based on best available data for underserved populations vulnerable to the hazard event and (2) are likely to experience adverse/disproportionate impacts from the hazard incident resulting in greater disparity in equity.

- **High**—Underserved populations exposed to this hazard are likely to experience significant adverse/disproportionate impacts (Impact Factor = 3)
- **Medium**—Underserved populations exposed to this hazard are likely to experience some adverse/disproportionate impacts (Impact Factor = 2)
- **Low**—Underserved populations exposed to this hazard are likely to experience minimal adverse/disproportionate impacts (Impact Factor = 1)
- **No impact**—Underserved populations exposed to this hazard are not likely to experience significant adverse/disproportionate impacts (Impact Factor = 0)

Property Damages—Values were assigned based on the expected total property damages incurred from a hazard incident. It is important to note that values represent estimates of the loss from a major incident based on historical data or probabilistic models/studies.

- **High**—More than $5,000,000 in property damages is expected from a single major hazard event, or damages are expected to occur to 15% or more of the property value within the jurisdiction (Impact Factor = 3)
- **Medium**—More than $500,000 but less than $5,000,000 in property damages is expected from a single major hazard event, or expected damages are expected to more than 5%, but less than 15% of the property value within the jurisdiction (Impact Factor = 2)

- **Low**—Less than $500,000 in property damages is expected from a single major hazard event, or less than 5% of the property value within the jurisdiction (Impact Factor = 1)
- **No impact**—Little to no property damage is expected from a single major hazard event (Impact Factor = 0)

Economic—An estimation of the impact, expressed in terms of dollars, on the local economy is based on a loss of business revenue, crops, worker wages, and local tax revenues or on the impact on the local gross domestic product (GDP).

- **High**—Total economic impact is likely to be greater than $10,000,000 (Impact Factor = 3)
- **Medium**—Total economic impact is likely to be greater than $100,000 but less than or equal to $10,000,000 (Impact Factor = 2)
- **Low**—Total economic impact is not likely to be greater than $100,000 (Impact Factor = 1)
- **No Impact**—Virtually no significant economic impact (Impact Factor = 0)

Environmental Factor: Environmental impact from a major hazard event requiring outside resources and support; and/or repair, clean-up, restoration, and/or preservation work.

- **High**: Environmental impact from a single major hazard event is likely to be significant, requiring extensive outside resources and support; and/or repair, clean-up, restoration, and/or preservation work (Impact Factor = 3)
- **Medium**: Environmental impact from a single major hazard event is likely to be localized, requiring some outside resources and support; and/or repair, clean-up, restoration, or preservation work (Impact Factor = 2)
- **Low**: Environmental impact from a single major hazard event is likely to be minimal, requiring little to no outside resources and support, and/or minimal repair, clean-up, restoration, or preservation work (Impact Factor = 1)
- **No impact**: No environmental impacts from a single major hazard event is likely (Impact Factor = 0)

Essential Operations Factor: Impact on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single major hazard event.

- **High**: Significant impact on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single major hazard event (Impact Factor = 3)
- **Medium**: Some impact on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single major hazard event (Impact Factor = 2)

- **Low**: Minimal impact on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single major hazard event (Impact Factor = 1)
- **No Impact**: No impact on the ability of the jurisdiction to meet the essential day-to-day operational demands and needs of the community from a single major hazard event (Impact Factor = 0)

Future Development—The potential that future development will have on increasing or decreasing the impact/consequence of this hazard.

- **High**—Future development trends will significantly increase the impact/consequence of this hazard (Impact Factor = 3)
- **Medium**—Future development trends will increase the impact/consequence of this hazard, but not significantly (Impact Factor = 2)
- **Low**—Future development trends will minimally increase impact/consequence of this hazard (Impact Factor = 1)
- **No Impact**—Future development trends will not increase the impact/consequence of this hazard and/or may even decrease the impact/consequence of this hazard (Impact Factor = 0)

Climate Change—The potential that climate change will increase the risk of this hazard (e.g., type, location, and range of anticipated intensities of the identified hazard and impacts).

- **High**—Climate change trends will significantly increase the risk of this hazard and its impacts (Impact Factor = 3)
- **Medium**—Climate change trends will increase the risk of this hazard and its impacts, but not significantly (Impact Factor = 2)
- **Low**—Climate change trends will minimally increase the risk of this hazard and its impacts (Impact Factor = 1)
- **No Impact**—Climate change trends will not increase the risk of this hazard and its impacts (Impact Factor = 0)

Each category was assigned a weighting factor to reflect its significance, consistent with those typically used for measuring the benefits of hazard mitigation actions: a weighting factor of 3 was assigned for *Population and Life Safety* and *Underserved/Equity*, and a weighting factor of 2 was assigned for *Property Damages.* In addition, a weighting factor of 1 was assigned for *Economic*, *Environmental, Essential Operations*, *Future Development,* and *Climate Change*.

4.4 FEMA NRI RISK SCORES

The National Risk Index (NRI) is a dataset and online tool to help illustrate the United States communities most at risk for 18 natural hazards: Avalanche, Coastal Flooding, Cold Wave, Drought, Earthquake, Hail, Heat Wave, Hurricane, Ice Storm, Landslide, Lightning, Riverine

Flooding, Strong Wind, Tornado, Tsunami, Volcanic Activity, Wildfire, and Winter Weather. Because not all hazards are applicable to Latah County, only those hazards with a defined risk to the county are included.

The National Risk Index leverages available source data for Expected Annual Loss due to these 18 hazard types, Social Vulnerability, and Community Resilience to develop a baseline relative risk measurement for each United States county and census tract (National Risk Index, 2025d). These measurements are calculated using average past conditions, but they cannot be used to predict future outcomes for a community. The National Risk Index is intended to fill gaps in available data and analyses to better inform federal, state, local, tribal, and territorial decision makers as they develop risk reduction strategies.

4.4.1 Social Vulnerability

Social Vulnerability measures the susceptibility of social groups to the adverse impacts of natural hazards, including disproportionate death, injury, loss, or disruption of livelihood.

Table 4-1. Social Vulnerability for Latah County, ID | FEMA National Risk Index

Census Tract	Communities in Census Tract	Social Vulnerability Score	Rating
005600	City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County	21.0	Relatively Low
005700	City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County	32.3	Relatively Low
005500	City of Potlatch and Unincorporated Latah County	58.4	Relatively Moderate
005102	City of Moscow and Unincorporated Latah County	49.1	Relatively Moderate
005200	City of Moscow and Unincorporated Latah County	38.1	Relatively Low
005400	City of Moscow and Unincorporated Latah County	39.0	Relatively Low
005302	City of Moscow	43.8	Relatively Moderate
005101	City of Moscow	58.2	Relatively Moderate
005301	City of Moscow and Unincorporated Latah County	7.0	Very Low
Social Vulnerability is measured using the Social Vulnerability Index (SoVI) published by the University of South Carolina's Hazards and Vulnerability Research Institute (HVRI). Source: National Risk Index, 2025d; 2023e			

4.4.2 Community Resilience

Community Resilience measures a community's ability to prepare for anticipated natural hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions.

Table 4-2. Community Resilience for Latah County, ID | FEMA National Risk Index

Census Tract	Communities in Census Tract	Community Resilience Score	Rating
005600	City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County	36.5	Relatively Low
005700	City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County	36.5	Relatively Low
005500	City of Potlatch and Unincorporated Latah County	36.5	Relatively Low
005102	City of Moscow and Unincorporated Latah County	36.5	Relatively Low
005200	City of Moscow and Unincorporated Latah County	36.5	Relatively Low
005400	City of Moscow and Unincorporated Latah County	36.5	Relatively Low
005302	City of Moscow	36.5	Relatively Low
005101	City of Moscow	36.5	Relatively Low
005301	City of Moscow and Unincorporated Latah County	36.5	Relatively Low
Community Resilience is measured using the Baseline Resilience Indicators for Communities (HVRI BRIC) published by the University of South Carolina's Hazards and Vulnerability Research Institute (HVRI). Source: National Risk Index, 2025a; 2025d			

4.4.3 Expected Annual Loss

The table below shows the overall expected annual loss score for the entire county based on all natural hazards. Hazard-specific scores are included in each hazard chapter under *Impacts & Loss Estimates.*

Table 4-3. Expected Annual Loss for Latah County, ID | FEMA National Risk Index

Census Tract	Communities in Census Tract	Expected Annual Loss Score	Rating
005600	City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County	57.94	Relatively Low
005700	City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County	47.51	Relatively Low
005500	City of Potlatch and Unincorporated Latah County	38.24	Relatively Low
005102	City of Moscow and Unincorporated Latah County	24.39	Very Low
005200	City of Moscow and Unincorporated Latah County	24.74	Very Low
005400	City of Moscow and Unincorporated Latah County	18.43	Very Low
005302	City of Moscow	15.6	Very Low
005101	City of Moscow	1.93	Very Low

Census Tract	Communities in Census Tract	Expected Annual Loss Score	Rating
005301	City of Moscow and Unincorporated Latah County	4.29	Very Low
Expected Annual Loss scores are calculated using an equation that combines values for exposure, annualized frequency, and historic loss ratios (Expected Annual Loss = Exposure × Annualized Frequency × Historic Loss Ratio). Source: National Risk Index, 2025c; 2025d			

4.4.4 Overall NRI Score

The table below shows the overall FEMA National Risk Index Score for the entire county based on all natural hazards. Hazard-specific scores are included in each hazard chapter under FEMA NRI Score.

Table 4-4. Overall National Risk Index Score for Latah County, ID

Census Tract	Communities in Census Tract	FEMA National Risk Index Score	Rating
005600	City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County	50.92	Relatively Low
005700	City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County	44.54	Relatively Low
005500	City of Potlatch and Unincorporated Latah County	43.34	Relatively Low
005102	City of Moscow and Unincorporated Latah County	26.1	Very Low
005200	City of Moscow and Unincorporated Latah County	23.93	Very Low
005400	City of Moscow and Unincorporated Latah County	17.81	Very Low
005302	City of Moscow	15.88	Very Low
005101	City of Moscow	2.71	Very Low
005301	City of Moscow and Unincorporated Latah County	2.13	Very Low
Risk Index scores are calculated using an equation that combines scores for Expected Annual Loss due to natural hazards, Social Vulnerability, and Community Resilience (Expected Annual Loss x Social Vulnerability / Community Resilience = Risk Index). Source: National Risk Index, 2025b; 2025d			

4.5 HAZARD RISK RANKING

The following table represents the new hazard rankings and risk scores for Latah County based on the described methodology. Following a data-driven quantitative assessment, the planning team utilized subject matter knowledge and expertise and further refined the ranking and scores.

Double click the Microsoft Excel icon below to access the full assessment and tool (this is only accessible when utilizing the Microsoft Word version of the plan).

Latah County HMP
Hazard Rankings

Table 4-5. 2025 Hazard Risk Scores for Latah County

Hazard Event	Probability	Consequence				Total Risk Score (Probability x Consequence)
	Probability Factor	Sum of Weighted Extent Factors	Sum of Weighted Vulnerability Factors	Sum of Weighted Impact Factors	Consequence Score	
Drought	2	8	9	19	36	65
Thunderstorm /Lightning	3	8	14	28	50	89
Wildfire	3	12	16	33	61	99
Flood	3	12	16	32	60	99
Cybersecurity Incident	2	8	13	18	41	82
Communicable Disease Outbreak	2	8	9	21	40	65
Major Transportation Incident	2	6	11	18	37	68
Winter Storm	3	12	16	26	54	95
Straight-Line Wind	3	8	11	26	45	89
Hazardous Materials Incident	3	8	8	20	39	85
Earthquake	1	1	6	15	23	23
Prolonged Power Outage	2	8	16	22	48	65
Hail	2	4	11	17	32	60
Volcanic Activity	1	1	6	12	20	20
Extreme Heat	1	4	9	18	32	32
Landslide	1	4	6	13	24	24
Extreme Cold	3	12	14	23	49	92
Dam/Levee Failure	1	5	6	16	27	27
Tornado	1	4	11	16	31	31

Table 4-6. Hazard Risk Scores Legend

Probability Factor		**Sum of Weighted Extent Factors**		**Sum of Weighted Vulnerability Factors**		**Sum of Weighted Impact Factors**		**Consequence Score**		**Total Risk Score**	
1	Low (L)	0–6	Low (L)	0–6	Low (L)	0–12	Low (L)	0–25	Low (L)	0–24	Low (L)
2	Medium (M)	7–12	Medium (M)	7–12	Medium (M)	13–26	Medium (M)	26–50	Medium (M)	25–59	Medium (M)
3	High (H)	13–18	High (H)	13–18	High (H)	27–39	High (H)	51–75	High (H)	60–100	High (H)

The **Legend—specifically the assignment of low, medium, and high—provides an additional means to qualitatively assess the probability factor, sum of weighted factors, and the total risk scores for each hazard. The **Consequence Score** represents the sum of the Extent, Vulnerability, and Impact Factors. The **Total Risk Score** is a measure of Probability and Consequence.*

CHAPTER 5 SEVERE SUMMER WEATHER

5.1 HAZARD DESCRIPTION

Severe summer weather includes those hazards that are typically found during the spring, summer, and early fall season of the year in Latah County. Severe summer weather can and does affect the entire county, and all critical facilities are susceptible to severe weather. Included in this category are extreme heat, thunderstorm/lightning, hail, tornado, and straight-line wind. Each hazard is examined independently; however, it is recognized that these hazards typically occur together.

5.2 RELATED HAZARDS

5.2.1 Extreme Heat

Hazard Description

The term “extreme heat,” sometimes called “heat wave,” is to some extent a relative one describing a period when weather conditions include temperatures and humidity significantly higher than those usual for a particular geographic area.

Location

Due to the continental and semi-arid climate of Latah County, the entire county may be affected by extreme heat, including the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy.

Extent

The National Weather Service (NWS) issues alerts to the public based on its Heat Index (HI), which takes both temperature and humidity into account. The NWS will initiate alert procedures when the HI is expected to exceed 105°–110°F (depending on local climate) for at least two consecutive days (NWS, 2025).

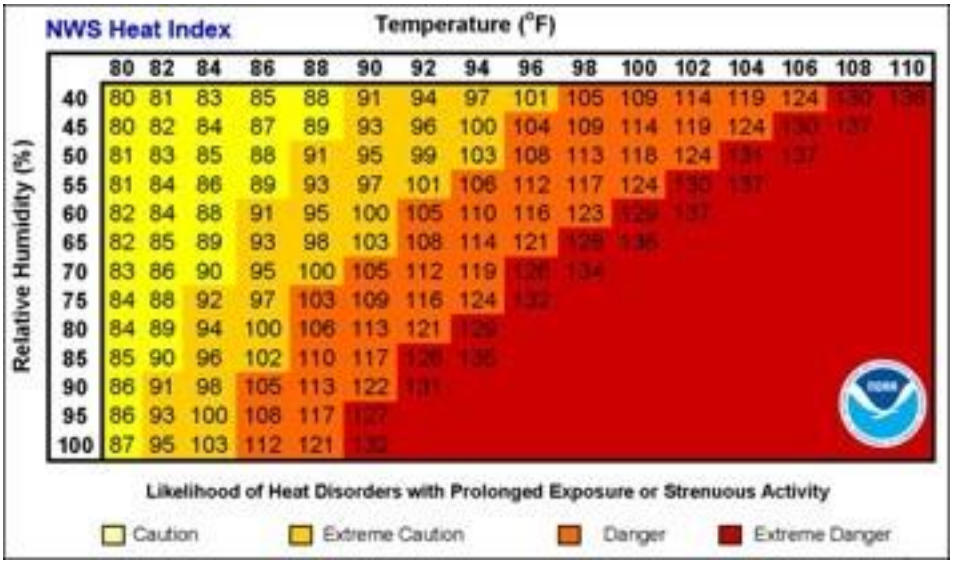


Figure 5-1. NOAA National Weather Service Heat Index (NWS, 2025)

The NWS also maintains a color-numeric-based index called HeatRisk that provides a forecast risk of heat-related impacts to occur over a 24-hour period. HeatRisk takes into consideration how unusual the heat is for the time of year; the duration of the heat including both daytime and nighttime temperatures; and if those temperatures pose an elevated risk of heat-related impacts based on data from the CDC. The index is supplementary to official NWS heat products and provides additional guidance for decision makers in heat-sensitive areas (NWS, 2025). The index scale can be seen below.

Category	Risk of Heat-Related Impacts
Green 0	Little to no risk from expected heat.
Yellow 1	Minor - This level of heat affects primarily those individuals extremely sensitive to heat, especially when outdoors without effective cooling and/or adequate hydration.
Orange 2	Moderate - This level of heat affects most individuals sensitive to heat, especially those without effective cooling and/or adequate hydration. Impacts possible in some health systems and in heat-sensitive industries.
Red 3	Major - This level of heat affects anyone without effective cooling and/or adequate hydration. Impacts likely in some health systems, heat-sensitive industries and infrastructure.
Magenta 4	Extreme - This level of rare and/or long-duration extreme heat with little to no overnight relief affects anyone without effective cooling and/or adequate hydration. Impacts likely in most health systems, heat-sensitive industries and infrastructure.

Figure 5-2. National Weather Service HeatRisk Index (NWS, 2025)

Historical Frequency & Probability of Future Occurrence

According to NWS available data, the record high temperature in the city of Moscow, Idaho is 109°F in August 1961. The record high temperature in the city of Potlatch is 110°F in August 1961 (NOWData, 2025). July is historically the hottest month of the year in Latah County, with an average daily temperature of 66.6°F in Moscow and 64.8°F in Potlatch (NOWData, 2025). Moscow has had five instances of extreme heat of 105°F or higher since June 2000, averaging less than one extreme heat day each summer. Potlatch has had three instances of extreme heat since June 2000. The cities of Moscow and Potlatch are the only jurisdictions in Latah County with available climate data from the National Weather Service and thus were the only communities in Latah County analyzed for regular extreme heat events. However, most locations in the county experience similar levels of extreme heat and are likely to have zero or one instance of extreme heat over 105°F each summer.

Impacts & Loss Estimates

Latah County and the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy may be impacted by extreme heat, as presented in the table below.

Table 5-1. Impacts of Extreme Heat by Jurisdiction

Jurisdiction	Impacted by Heat Events (95–104°F) Within Last 100 Years	Impacted by Extreme Heat Events (105+°F) Within Last 100 Years	Potential Impacts of Extreme Heat
Latah County	Yes	Yes	Sunstroke, heat exhaustion, heat cramps, death, loss of crops/vegetation/livestock, wildfires, utility losses, economic losses (decreased tourism, increased energy costs, crop losses, etc.)
City of Bovill	Yes	Yes	Sunstroke, heat exhaustion, heat cramps, death, loss of crops/vegetation/livestock, wildfires, utility losses, economic losses (decreased tourism, increased energy costs, crop losses, etc.)
City of Deary	Yes	Yes	Sunstroke, heat exhaustion, heat cramps, death, loss of crops/vegetation/livestock, wildfires, utility losses, economic losses (decreased tourism, increased energy costs, crop losses, etc.)
City of Genesee	Yes	Yes	Sunstroke, heat exhaustion, heat cramps, death, loss of crops/vegetation/livestock, wildfires, utility losses, economic losses (decreased tourism,

Jurisdiction	Impacted by Heat Events (95–104°F) Within Last 100 Years	Impacted by Extreme Heat Events (105+°F) Within Last 100 Years	Potential Impacts of Extreme Heat
			increased energy costs, crop losses, etc.)
City of Juliaetta	Yes	Yes	Sunstroke, heat exhaustion, heat cramps, death, loss of crops/vegetation/livestock, wildfires, utility losses, economic losses (decreased tourism, increased energy costs, crop losses, etc.)
City of Kendrick	Yes	Yes	Sunstroke, heat exhaustion, heat cramps, death, loss of crops/vegetation/livestock, wildfires, utility losses, economic losses (decreased tourism, increased energy costs, crop losses, etc.)
City of Moscow	Yes	Yes	Sunstroke, heat exhaustion, heat cramps, death, loss of crops/vegetation/livestock, wildfires, utility losses, economic losses (decreased tourism, increased energy costs, crop losses, etc.)
City of Potlatch	Yes	Yes	Sunstroke, heat exhaustion, heat cramps, death, loss of crops/vegetation/livestock, wildfires, utility losses, economic losses (decreased tourism, increased energy costs, crop losses, etc.)
City of Troy	Yes	Yes	Sunstroke, heat exhaustion, heat cramps, death, loss of crops/vegetation/livestock, wildfires, utility losses, economic losses (decreased tourism, increased energy costs, crop losses, etc.)

The primary impact of extreme heat is on human health, with disorders such as sunstroke, heat exhaustion, and heat cramps. Particularly susceptible are the elderly, small children, and persons with chronic illnesses. There are also undoubtedly indirect and chronic health effects from extreme heat, the magnitude of which are difficult or impossible to estimate. Environmental effects can include loss of wildlife and vegetation and increased probability of wildfires.

Economic impacts result from such factors as increased energy prices and loss of business as people avoid leaving their homes to avoid the heat. Agricultural losses can also occur. During

the years 1995–2023, the EWG reported $9,410,675 in crop insurance indemnities due to heat in Latah County (EWG, 2024). The magnitude of these and other, more indirect impacts is, again, difficult to assess, but for severe heat waves, the economic impact has been estimated to be significant.

Table 5-2. Heat Wave: Expected Annual Loss for Latah County, ID | FEMA National Risk Index

Annualized Frequency	Population	Population Equivalence	Building Value	Agriculture Value	Total Value	Expected Annual Loss Score	Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County							
0.7 events per year	0.0	$12,308	$634	$706	$17,423	65.6	Relatively Moderate
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County							
0.9 events per year	0.0	$15,814	$645	$1,973	$18,432	66.7	Relatively Moderate
Census Tract 005500: City of Potlatch and Unincorporated Latah County							
0.8 events per year	0.0	$19,134	$721	$1,335	$21,190	69.4	Relatively Moderate
Census Tract 005102: City of Moscow and Unincorporated Latah County							
1.1 events per year	0.0	$25,851	$642	$172	$26,665	74.0	Relatively Moderate
Census Tract 005200: City of Moscow and Unincorporated Latah County							
1.1 events per year	0.0	$34,803	$724	$184	$35,711	79.6	Relatively High
Census Tract 005400: City of Moscow and Unincorporated Latah County							
1.1 events per year	0.0	$31,671	$1,072	$273	$33,016	78.1	Relatively High
Census Tract 005302: City of Moscow							
1.1 events per year	0.0	$29,330	$473	$1	$29,805	76.1	Relatively High
Census Tract 005101: City of Moscow							
1.1 events per year	0.0	$15,910	$289	$31	$16,231	64.2	Relatively Moderate
Census Tract 005301: City of Moscow and Unincorporated Latah County							
1.1 events per year	0.0	$13,642	$323	$277	$14,242	57.5	Relatively Low

Annualized Frequency: The natural hazard annualized frequency is defined as the expected frequency or probability of a hazard occurrence per year. Annualized frequency is derived either from the number of recorded hazard occurrences each year over a given period or the modeled probability of a hazard occurrence each year.
Population: Population exposure is defined as the estimated number of people determined to be exposed to a hazard according to a hazard type-specific methodology.
Expected Annual Loss scores are calculated using an equation that combines values for exposure, annualized frequency, and historic loss ratios (Expected Annual Loss = Exposure x Annualized Frequency x Historic Loss Ratio).
Source: National Risk Index, 2025c; 2025d

Vulnerable Populations

There are many vulnerable populations in Latah County, including those in the table below. People particularly susceptible to extreme heat are the elderly, small children, and persons with chronic illnesses.

Table 5-3. Vulnerable Populations in Latah County

Vulnerability Category	Number	Percent
Families in poverty	665	8.8%
People with disabilities	4,862	12.3%
People over 65 years & living alone	1,521	9.5%
Single female households with children > 18 years	660	4.1%
Difficulty with English	87	0.2%
Households with no car	646	4.1%
Mobile homes	1,551	9.7%
Source: Headwaters Economics, 2025		

As demonstrated in blue in the following map, Latah County's northern region is especially disadvantaged, and the southern portion of the county is seen as partially disadvantaged (Climate and Economic Justice Screening Tool, 2025). This area has a large population of people living in rural communities, the majority of whom are low income and may lack resources to effectively stay cool during extreme heat events.

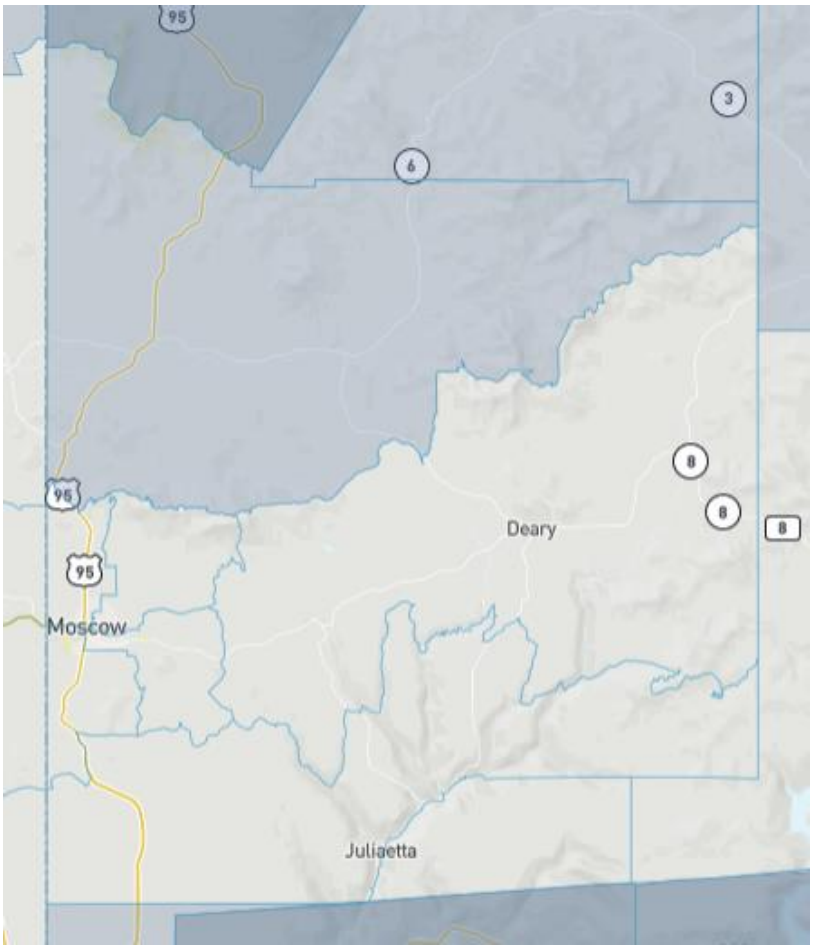
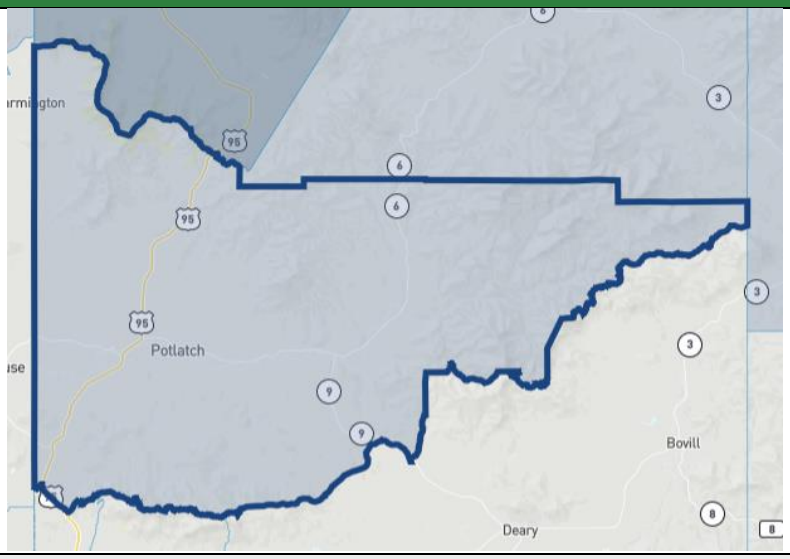


Figure 5-3. Map of Disadvantaged Communities in Latah County

The following table details the one completely disadvantaged census tract in Latah County along with the specific burdens and disadvantages the census tract experiences.

Table 5-4. Disadvantaged Communities in Latah County

LATAH COUNTY, ID		
CLIMATE & ECONOMIC JUSTICE SCREENING TOOL—DISADVANTAGED CENSUS TRACT		
CENSUS TRACT 2010 ID	**CENSUS TRACT POPULATION**	**LOW INCOME TRACT?**
16057005500	3,986	YES

LATAH COUNTY, ID	
	
CENSUS TRACT BURDENS: Transportation	
***97th** % (above 90th percentile)*	*Average of relative cost and time spent on transportation*
***65th** % (above 65th percentile)*	*People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed*
Source: U.S. Council on Environmental Quality—Climate & Economic Justice Screening Tool (2025)	

Extreme heat places high demands on electrical power supplies that can lead to blackouts or brownouts. Large electrical panels and motors used in water production may also be negatively affected by extreme heat. The following table lists types of critical facilities that could be negatively affected by power outages during extreme heat, including places like hospitals and dialysis centers that rely on power to operate life-saving equipment.

Table 5-5. Critical Facility Types in Latah County

Critical Facility Type	Location
Fire Station	Potlatch
3 Fire Stations	Moscow
Fire Station	Genesee
Fire Station	Troy
Fire Station	Deary
Fire Station	Kendrick
Fire Station	Juliaetta
Fire Station	Bovill
3 Local Law Enforcement	Moscow
Local Law Enforcement	Troy
Hospital	Moscow
5 Nursing Homes	Moscow
2 Dialysis Centers	Moscow
7 Pharmacies	Moscow
Pharmacy	Potlatch
Public Health Department	Moscow

Critical Facility Type	Location
Wastewater Treatment Plant	Potlatch
Wastewater Treatment Plant	Viola
Wastewater Treatment Plant	Moscow
Wastewater Treatment Plant	Troy
Wastewater Treatment Plant	Juliaetta
Wastewater Treatment Plant	Kendrick
Wastewater Treatment Plant	Deary
Wastewater Treatment Plant	Bovill
Source: Resilience Analysis and Planning Tool, 2025	

Additionally, over 2.9 million Medicare beneficiaries in the U.S. rely on electricity-dependent durable medical and assistive equipment (DME) and devices to live independently in their homes, and some of those individuals also have health care service dependencies (HHS Empower Program, 2025). In Latah County, 7,203 people are beneficiaries of Medicare, and 323 of these beneficiaries are considered at-risk and would be vulnerable during a power outage.

Changes in Development and Impact to Future Development

According to NOAA, extreme heat events can impact changes in development and future urban planning and construction. As temperatures rise, cities and developers are increasingly considering the heat resilience of buildings and infrastructure. Currently, there's an increasing emphasis on designing structures that can withstand high temperatures while minimizing the need for energy-intensive cooling methods. This includes integrating materials that reflect rather than absorb heat, enhancing natural ventilation, and increasing green spaces to reduce the urban heat island effect. Additionally, there's a trend toward “cool roofs,” urban tree canopies, and permeable pavements to manage heat.

In many areas, climate-resilient urban planning is becoming a priority to accommodate the anticipated increase in frequency and severity of heatwaves due to climate change. This planning involves the creation of heat action plans, the development of early warning systems, and the construction of cool refuges to protect vulnerable populations. Water resource management also becomes more critical in the design of new developments, as extreme heat can exacerbate water scarcity. Communities are also re-evaluating building codes, zoning laws, and development policies to ensure that new constructions and city expansions are both sustainable and resilient in the face of rising temperatures.

Effects of Climate Change on Probability of Future Events and Severity of Impacts

According to the NOAA, climate change impacts the severity and frequency of extreme heat events. As global temperatures rise due to increasing greenhouse gas emissions, extreme heat events are becoming more intense, frequent, and prolonged. NOAA data indicates that heatwaves are occurring earlier in the year and lasting longer, leading to higher temperatures than historically recorded. This increase in temperature exacerbates the urban heat island

effect in cities, where concrete and asphalt store and re-radiate heat, further intensifying the impact of extreme heat events in these areas.

The compounding effects of climate change on extreme heat also have broader ecological impacts, such as altering natural ecosystems and increasing the risk of wildfires. Higher temperatures contribute to more significant evaporation and soil dryness, which in turn can lead to drought conditions, affecting water supplies and agriculture. Additionally, the changing patterns of extreme heat are impacting public health, with increases in heat-related illnesses and deaths, particularly among vulnerable populations such as the elderly, children, and those with pre-existing health conditions.

No jurisdictions in Latah County are uniquely affected by extreme heat, and all are adequately addressed at the county level.

The table below illustrates 25-year heat projections for Latah County, which may contribute to increased extreme heat events.

Table 5-6. Climate Projections for Latah County, ID | Neighborhoods at Risk 2025

Heat Projections	By 2050, Latah County is expected to experience 9 more days that reach above 95°F (from 10 days to 19 days per year).
	By 2050, Latah County is expected to have a 2°F increase (from 48°F to 50°F) in average annual temperatures.
	Increasing annual temperatures can contribute to more frequent extreme heat events.
Source: Neighborhoods at Risk, 2025	

FEMA NRI Score

Table 5-7. Heat Wave: Overall National Risk Index Score for Latah County, ID | FEMA National Risk Index

Risk Index Score	Risk Index Rating	Social Vulnerability Rating	Community Resilience Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County			
60.5	Relatively Moderate	Relatively Low	Relatively Low
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County			
63.7	Relatively Moderate	Relatively Low	Relatively Low
Census Tract 005500: City of Potlatch and Unincorporated Latah County			
70.6	Relatively Moderate	Relatively Moderate	Relatively Low
Census Tract 005102: City of Moscow and Unincorporated Latah County			
73.6	Relatively Moderate	Relatively Moderate	Relatively Low
Census Tract 005200: City of Moscow and Unincorporated Latah County			
77.5	Relatively Moderate	Relatively Low	Relatively Low
Census Tract 005400: City of Moscow and Unincorporated Latah County			
76.2	Relatively Moderate	Relatively Low	Relatively Low
Census Tract 005302: City of Moscow			
75.0	Relatively Moderate	Relatively Moderate	Relatively Low
Census Tract 005101: City of Moscow			
65.2	Relatively Moderate	Relatively Moderate	Relatively Low
Census Tract 005301: City of Moscow and Unincorporated Latah County			

Risk Index Score	Risk Index Rating	Social Vulnerability Rating	Community Resilience Rating
52.3	Relatively Moderate	Very Low	Relatively Low
Risk Index scores are calculated using an equation that combines scores for Expected Annual Loss due to natural hazards, Social Vulnerability, and Community Resilience (Expected Annual Loss x Social Vulnerability / Community Resilience = Risk Index). Source: National Risk Index, 2025b; 2025d			

5.2.2 Thunderstorm/Lightning

Hazard Description

Lightning is defined by the NWS as "a visible electrical discharge produced by a thunderstorm. The discharge may occur within or between clouds, between the cloud and air, between a cloud and the ground, or between the ground and a cloud." A lightning discharge may be over five miles in length, generate temperatures upwards of 50,000°F, and carry 50,000 volts of electrical potential. Lightning is most often associated with thunderstorm clouds, but lightning can strike as far as five to 10 miles from a storm. Thunder is caused by the rapid expansion of air heated by a lightning strike. Cloud-to-ground lightning strikes occur with much less frequency in the northwestern U.S. than in other parts of the country.

Location

This hazard can affect the entire county and the state of Idaho, but the risk to the county is relatively low. The individual jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy may experience lightning, as well.

Extent

A lightning flash is created by a transfer of significant charge between two charged objects. Lightning discharges can occur inter-cloud, cloud-to-cloud, cloud-to-air, and cloud-to-ground. Cloud-to-ground (CG) lightning has the greatest risk to society. A CG stroke can kill, destroy equipment, start fires, and disturb power delivery systems.

Lightning is commonly measured using the Lightning Activity Level (LAL), which is a scale that describes the frequency of lightning strikes in a specific area (NWS, 2025).

Lightning Activity Level (LAL)	
Is a scale which describes lightning activity. Values are labeled 1-6:	
LAL 1	No thunderstorms
LAL 2	Isolated thunderstorms. Light rain will occasionally reach the ground. Lightning is very infrequent, 1 to 5 cloud to ground strikes in a five minute period.
LAL 3	Widely scattered thunderstorms. Light to moderate rain will reach the ground. Lightning is infrequent, 6 to 10 cloud to ground strikes in a 5 minute period.
LAL 4	Scattered thunderstorms. Moderate rain is commonly produced Lightning is frequent, 11 to 15 cloud to ground strikes in a 5 minute period.
LAL 5	Numerous thunderstorms. Rainfall is moderate to heavy. Lightning is frequent and intense, greater then 15 cloud to ground strikes in a 5 minute period.
LAL 6	Dry lightning (same as LAL 3 but without rain). This type of lightning has the potential for extreme fire activity and is normally highlighted in fire weather forecasts with a Red Flag Warning.

Figure 5-4. NWS Lightning Activity Level

Historical Frequency & Probability of Future Occurrence

Lightning is common in Idaho, with an average of 531,612 lightning strikes per year in the state from 2015 to 2019 (Vaisala, 2020). However, this average is much less compared to other states, such as those in the Midwest and Southeast. For example, Florida received an average of 13,989,300 strikes per year within the same time period.

The area of Juliaetta and Kendrick is known to experience significant lightning strikes. One such lightning event ignited the Gwen Fire on July 24, 2024 and burned 28,820 acres in Latah and Nez Perce Counties. Lightning struck just south of Juliaetta, causing the fire that lasted nearly two weeks, destroying 38 homes and 122 outbuildings. No fatalities occurred (Big Country News, 2024). The area also recently experienced a lightning storm with more than a dozen ground strikes in early 2025.

The Storm Events Database records one significant lightning event in Latah County as seen in the table below. Although only one is recorded, lightning strikes cause multiple fires every year in Latah County. Significant lightning strikes causing significant damage and/or injuries or fatalities are likely to occur again within the next 10 years. Damage-causing lightning is more likely in Moscow than in other parts of the county due to Moscow's population.

Table 5-8. Significant Lightning Events in Latah County, ID

Location Within County	Date	Fatalities/ Injuries	Property Damage	Description
Moscow, ID	05/17/1996	0	N/A	Lightning struck a home in Moscow and blew a hole in the roof and started a fire.
Source: Storm Events Database, 2025				

Impacts & Loss Estimates

Latah County and the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy may be impacted by lightning, as presented in the table below.

Table 5-9. Impacts of Lightning by Jurisdiction

Jurisdiction	Impacted by Lightning	Experienced Significant Lightning Strike with $1,000+ in Damage Since 2000	Fatalities Due to Lightning	Potential Impacts of Lightning
Latah County	Yes	Yes	0	Burns, nerve damage, cardiac effects, hearing loss, trauma, mental disorders, death, wildfires, property damage, loss of utilities
City of Bovill	Yes	Yes	0	Burns, nerve damage, cardiac effects, hearing loss, trauma, mental disorders, death, wildfires, property damage, loss of utilities
City of Deary	Yes	Yes	0	Burns, nerve damage, cardiac effects, hearing loss, trauma, mental disorders, death, wildfires, property damage, loss of utilities
City of Genesee	Yes	Yes	0	Burns, nerve damage, cardiac effects, hearing loss, trauma, mental disorders, death, wildfires, property damage, loss of utilities
City of Juliaetta	Yes	Yes	0	Burns, nerve damage, cardiac effects, hearing loss, trauma, mental disorders, death, wildfires, property damage, loss of utilities
City of Kendrick	Yes	Yes	0	Burns, nerve damage, cardiac effects, hearing loss, trauma, mental disorders, death,

Jurisdiction	Impacted by Lightning	Experienced Significant Lightning Strike with $1,000+ in Damage Since 2000	Fatalities Due to Lightning	Potential Impacts of Lightning
				wildfires, property damage, loss of utilities
City of Moscow	Yes	Yes	0	Burns, nerve damage, cardiac effects, hearing loss, trauma, mental disorders, death, wildfires, property damage, loss of utilities
City of Potlatch	Yes	Yes	0	Burns, nerve damage, cardiac effects, hearing loss, trauma, mental disorders, death, wildfires, property damage, loss of utilities
City of Troy	Yes	Yes	0	Burns, nerve damage, cardiac effects, hearing loss, trauma, mental disorders, death, wildfires, property damage, loss of utilities

Lightning is the second most deadly weather phenomenon in the U.S., being second only to floods. On average, 20 to 50 deaths per year are attributed to lightning nationally, and in Idaho the average is much lower at approximately one every 10 years. The last fatality in Idaho due to lightning was in 2010, with no other fatalities since then (Storm Events Database, 2024). Despite the enormous energy carried by lightning, only about 10% of strikes are fatal (NWS, 2025). Injuries include central nervous system damage, burns, cardiac effects, hearing loss, and trauma. The effects of central nervous system injuries tend to be long-lasting and severe, leading to such disorders as depression, alcoholism, chronic fatigue, and in some cases suicide. Lightning also strikes structures, causing fires and damaging electrical equipment. Wildland fires are often initiated by lightning strikes as are petroleum storage tank fires. About one third of all power outages are lightning-related.

The magnitude of economic losses is difficult to estimate. Between 2007 to 2011, $451 million in property damage was reported due to fires caused by lightning strikes in the U.S. (NFPA, 2013). The state of Idaho experienced 301 fires caused by lightning strikes in 2022 alone (NIFC, 2023).

Table 5-10. Lightning: Expected Annual Loss for Latah County, ID | FEMA National Risk Index

Annualized Frequency	Population	Population Equivalence	Building Value	Agriculture Value	Total Value	Expected Annual Loss Score	Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County							
3 events per year	0.0	$1,476	$403	N/A	$1,880	25.4	Relatively Low
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County							
2.9 events per year	0.0	$1,223	$341	N/A	$1,564	22.6	Relatively Low
Census Tract 005500: City of Potlatch and Unincorporated Latah County							
3.1 events per year	0.0	$1,594	$424	N/A	$2,018	26.6	Relatively Low
Census Tract 005102: City of Moscow and Unincorporated Latah County							
2.5 events per year	0.0	$1,299	$224	N/A	$1,524	22.2	Relatively Low
Census Tract 005200: City of Moscow and Unincorporated Latah County							
2.7 events per year	0.0	$1,742	$253	N/A	$1,995	26.4	Relatively Low
Census Tract 005400: City of Moscow and Unincorporated Latah County							
2.4 events per year	0.0	$1,584	$385	N/A	$1,968	26.2	Relatively Low
Census Tract 005302: City of Moscow							
2 events per year	0.0	$1,485	$160	N/A	$1,645	23.3	Relatively Low
Census Tract 005101: City of Moscow							
2.2 events per year	0.0	$774	$96	N/A	$870	15.7	Very Low
Census Tract 005301: City of Moscow and Unincorporated Latah County							
2.9 events per year	0.0	$805	$135	N/A	$939	16.5	Very Low

Annualized Frequency: The natural hazard annualized frequency is defined as the expected frequency or probability of a hazard occurrence per year. Annualized frequency is derived either from the number of recorded hazard occurrences each year over a given period or the modeled probability of a hazard occurrence each year.
Population: Population exposure is defined as the estimated number of people determined to be exposed to a hazard according to a hazard type-specific methodology.
Expected Annual Loss scores are calculated using an equation that combines values for exposure, annualized frequency, and historic loss ratios (Expected Annual Loss = Exposure x Annualized Frequency x Historic Loss Ratio).
Source: National Risk Index, 2025c; 2025d

Vulnerable Populations

There are many vulnerable populations in Latah County, including those in the table below. Any community, whether vulnerable or not, may experience lightning. However, those with inadequate living conditions or shelter may be more vulnerable to a strike.

Table 5-11. Vulnerable Populations in Latah County

Vulnerability Category	Number	Percent
Families in poverty	665	8.8%
People with disabilities	4,862	12.3%
People over 65 years & living alone	1,521	9.5%
Single female households with children > 18 years	660	4.1%
Difficulty with English	87	0.2%
Households with no car	646	4.1%
Mobile homes	1,551	9.7%
Source: Headwaters Economics, 2025		

As demonstrated in blue in the following map, Latah County's northern region is especially disadvantaged, and the southern portion of the county is seen as partially disadvantaged (Climate and Economic Justice Screening Tool, 2025). This area has a large population of people living in rural communities, the majority of whom are low income and may lack resources to adequately shelter during thunderstorms and/or lightning.

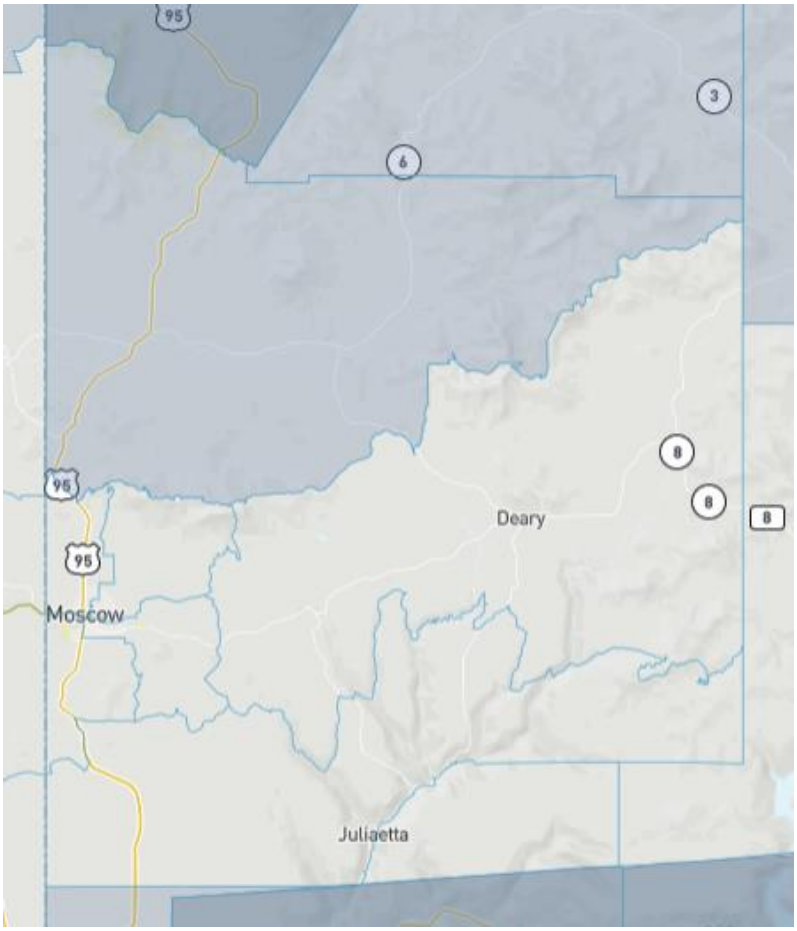
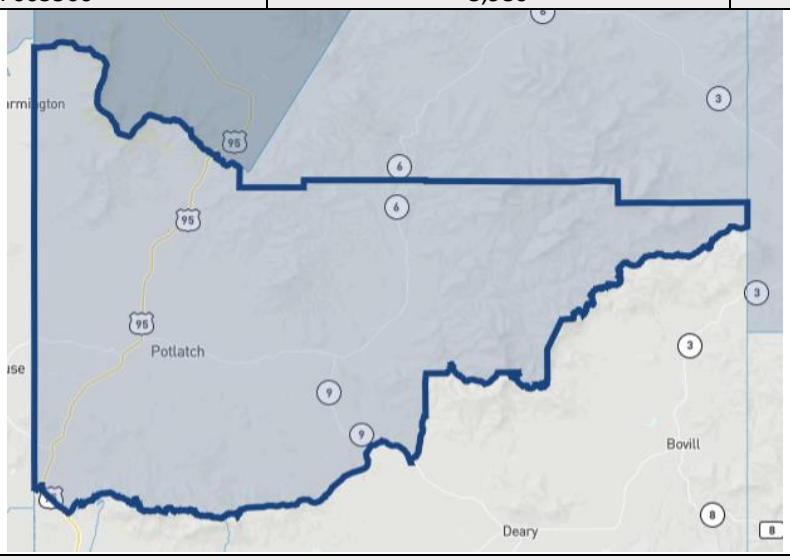


Figure 5-5. Map of Disadvantaged Communities in Latah County

The following table details the one completely disadvantaged census tract in Latah County along with the specific burdens and disadvantages the census tract experiences.

Table 5-12. Disadvantaged Communities in Latah County

LATAH COUNTY, ID		
CLIMATE & ECONOMIC JUSTICE SCREENING TOOL—DISADVANTAGED CENSUS TRACT		
CENSUS TRACT 2010 ID	**CENSUS TRACT POPULATION**	**LOW INCOME TRACT?**
16057005500	3,986	YES
		
CENSUS TRACT BURDENS: Transportation		
***97th** % (above 90th percentile)*	*Average of relative cost and time spent on transportation*	
***65th** % (above 65th percentile)*	*People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed*	
Source: U.S. Council on Environmental Quality—Climate & Economic Justice Screening Tool (2025)		

Lightning strikes may lead to power outages depending on the location of the strike and amount of damage inflicted. The following table lists types of critical facilities that could be negatively affected by power outages, including places like hospitals and dialysis centers that rely on power to operate life-saving equipment. Any damage to any of these locations due to lightning could delay critical resources to those in need.

Table 5-13. Critical Facility Types in Latah County

Critical Facility Type	Location
Fire Station	Potlatch
3 Fire Stations	Moscow
Fire Station	Genesee
Fire Station	Troy
Fire Station	Deary
Fire Station	Kendrick
Fire Station	Juliaetta
Fire Station	Bovill

Critical Facility Type	Location
3 Local Law Enforcement	Moscow
Local Law Enforcement	Troy
Hospital	Moscow
5 Nursing Homes	Moscow
2 Dialysis Centers	Moscow
7 Pharmacies	Moscow
Pharmacy	Potlatch
Public Health Department	Moscow
Wastewater Treatment Plant	Potlatch
Wastewater Treatment Plant	Viola
Wastewater Treatment Plant	Moscow
Wastewater Treatment Plant	Troy
Wastewater Treatment Plant	Juliaetta
Wastewater Treatment Plant	Kendrick
Wastewater Treatment Plant	Deary
Wastewater Treatment Plant	Bovill
Source: Resilience Analysis and Planning Tool, 2025	

Additionally, over 2.9 million Medicare beneficiaries in the U.S. rely on electricity-dependent durable medical and assistive equipment (DME) and devices to live independently in their homes, and some of those individuals also have health care service dependencies (HHS Empower Program, 2025). In Latah County, 7,203 people are beneficiaries of Medicare, and 323 of these beneficiaries are considered at-risk and would be vulnerable during a power outage.

Changes in Development and Impact to Future Development

According to the NOAA, thunderstorm events (with the accompanying hazards such as high winds, heavy rainfall, and lightning), can impact changes in current and future development practices. Currently, there is an increasing focus on the resilience of buildings and infrastructure to withstand storm-related stresses. For existing structures, this may involve retrofitting to enhance durability against wind and water damage. New construction standards are evolving to incorporate design elements that can tolerate severe weather, such as reinforced roofing, flood-resistant materials, and lightning protection systems. Urban planning also takes into account the management of stormwater runoff to prevent flooding, employing green infrastructure like rain gardens, permeable pavements, and enhanced drainage systems.

NOAA also analyzes thunderstorm patterns and risks to better inform long-term and future planning decisions. Municipalities are considering the placement and construction of critical infrastructure, ensuring that hospitals, emergency services, and utilities have the resilience to function during and after thunderstorm and lightning events. Additionally, zoning laws may be adjusted to discourage development in areas prone to severe thunderstorms or to mandate that any development in such areas includes appropriate safety measures.

Effects of Climate Change on Probability of Future Events and Severity of Impacts

According to the NOAA, climate change is influencing the severity and characteristics of thunderstorm and lightning events. As the climate warms, the atmosphere holds more moisture, which can lead to increased instability and the potential for more severe thunderstorms. This increased atmospheric moisture, coupled with higher temperatures, creates conditions that are conducive to the development of stronger and more frequent thunderstorms.

One of the primary effects of climate change on thunderstorms is the potential for more intense rainfall. Warmer air can hold more water vapor, which can lead to heavier precipitation during thunderstorm events. This heightened rainfall can increase the risk of flash flooding, particularly in urban areas with inadequate drainage systems. Additionally, climate change may influence the dynamics of thunderstorm development, potentially leading to more severe manifestations, such as increased lightning activity and the possibility of stronger wind gusts and hail events.

No jurisdictions in Latah County are uniquely affected by thunderstorms or lightning, and all are adequately addressed at the county level.

The table below illustrates 25-year participation projections for Latah County, which may contribute to increased thunderstorms and lightning events.

Table 5-14. Climate Projections for Latah County, ID | Neighborhoods at Risk 2025

Lightning Projections	By 2050, Latah County is expected to experience 0.3 more days of heavy precipitation per year (from 1.3 days to 1.6 days per year).
	By 2050, Latah County is expected to have a 1" increase (from 31" to 32") in average annual precipitation.
	If increased participation leads to additional thunderstorms, the risk of lightning may increase.
Source: Neighborhoods at Risk, 2025	

FEMA NRI Score

Table 5-15. Lightning: Overall National Risk Index Score for Latah County, ID | FEMA National Risk Index

Risk Index Score	Risk Index Rating	Social Vulnerability Rating	Community Resilience Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County			
22.2	Relatively Low	Relatively Low	Relatively Low
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County			
21.0	Relatively Low	Relatively Low	Relatively Low
Census Tract 005500: City of Potlatch and Unincorporated Latah County			
28.5	Relatively Low	Relatively Moderate	Relatively Low
Census Tract 005102: City of Moscow and Unincorporated Latah County			
22.5	Relatively Low	Relatively Moderate	Relatively Low
Census Tract 005200: City of Moscow and Unincorporated Latah County			
25.5	Relatively Low	Relatively Low	Relatively Low
Census Tract 005400: City of Moscow and Unincorporated Latah County			

Risk Index Score	Risk Index Rating	Social Vulnerability Rating	Community Resilience Rating
25.3	Relatively Low	Relatively Low	Relatively Low
Census Tract 005302: City of Moscow			
23.0	Relatively Low	Relatively Moderate	Relatively Low
Census Tract 005101: City of Moscow			
16.2	Very Low	Relatively Moderate	Relatively Low
Census Tract 005301: City of Moscow and Unincorporated Latah County			
12.1	Very Low	Very Low	Relatively Low
Risk Index scores are calculated using an equation that combines scores for Expected Annual Loss due to natural hazards, Social Vulnerability, and Community Resilience (Expected Annual Loss x Social Vulnerability / Community Resilience = Risk Index). Source: National Risk Index, 2025b; 2025d			

5.2.3 Hail

Hazard Description

The NWS definition of hail is "showery precipitation in the form of irregular pellets or balls of ice more than 5 mm in diameter, falling from a cumulonimbus cloud. Its size can vary from the defined minimum, a little over a quarter of an inch, up to 4.5 inches or larger." Severe hail is defined as being 0.75 inches or more in diameter. The largest hailstones are formed in supercell thunderstorms because of their sustained updrafts and long duration.

Location

Latah County can experience hailstorms countywide, including in the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy.

Extent

The TORRO Hailstorm Intensity Scale was developed by Jonathan Webb to measure and categorize hailstorms (TORRO, 2025). It extends from H0 (hard hail, no damage) to H10 (super hailstorm, extensive structural damage, risk of severe/fatal injuries) with its increments of intensity or damage potential related to hail size (distribution and maximum), texture, numbers, fall speed, speed of storm translation, and strength of the accompanying wind. The scale could be modified depending on factors such as building materials and types (e.g., whether roofing tiles are predominantly slate, shingle, or concrete). See the scale in the figure below (TORRO, 2025).

Scale	Intensity category	Typical hail diameter (mm)*	Probable kinetic energy J m^{-2}	Typical damage impacts
H0	Hard hail	5	0-20	No damage
H1	Potentially damaging	5-**15**	>20	Slight general damage to plants, crops
H2	Significant	10-**20**	>100	Significant damage to fruit, crops, vegetation
H3	Severe	20-**30**	>300	Severe damage to fruit and crops, damage to glass and plastic structures, paint and wood scored
H4	Severe	25-**40**	>500	Widespread glass damage, vehicle bodywork damage
H5	Destructive	30-**50**	>800	Wholesale destruction of glass, damage to tiled roofs, significant risk of injuries
H6	Destructive	40-**60**		Bodywork of grounded aircraft dented, brick walls pitted
H7	Destructive	50-**75**		Severe roof damage, risk of serious injuries
H8	Destructive	60-**90**		(Severest recorded in the British Isles) Severe damage to aircraft bodywork
H9	Super Hailstorms	75-**100**		Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open
H10	Super Hailstorms	>100		Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open

Figure 5-6. TORRO Hailstorm Intensity Scale

Hail is considered severe when reaching a size of 0.75 inches in diameter or greater. The following figure shows different hail sizes with a description for comparison (TORRO, 2025).

Size code	Maximum diameter (mm)	Description
0	5-9	Pea
1	10-15	Mothball
2	16-20	Marble, grape
3	21-30	Walnut
4	31-40	Pigeon's egg > squash ball
5	41-50	Golf ball > Pullet's egg
6	51-60	Hen's egg
7	61-75	Tennis ball > cricket ball
8	76-90	Large orange > soft ball
9	91-100	Grapefruit
10	>100	Melon

Figure 5-7. TORRO Hail Size and Diameter

As demonstrated below, the National Weather Service also defines the local threat of severe hail for specified areas based on the likelihood that severe hail will occur combined with the anticipated size or diameter of the largest hailstones (NWS, 2025).

Severe Hail Threat Level	Threat Level Descriptions
Extreme	**"An Extreme Threat to Life and Property from Severe Hail."** Within 12 miles of a location, a moderate likelihood or greater (16% probability or greater) of severe hail, with storms capable of baseball to softball sized stones. *See diameter description below.* AND/OR...a high likelihood or greater (26% probability or greater) of severe hail, with storms capable of golf ball to baseball sized hail stones. *See diameter description below.* AND/OR...a very high likelihood (36% or greater) of severe hail, with storms capable of nickel to golf ball sized hail stones. *See diameter description below.*
High	**"A High Threat to Life and Property from Severe Hail."** Within 12 miles of a location, a low likelihood (6% to 15% probability) of severe hail with storms capable of baseball to softball sized stones. *See diameter description below.* AND/OR...a moderate likelihood (16% to 25% probability) of very large hail (golf ball to baseball sized hail stones). *See diameter description below.* AND/OR...a high likelihood (26% to 35% probability) of large hail (nickel to golf ball sized hail stones). *See diameter description below.*
Moderate	**"A Moderate Threat to Life and Property from Severe Hail."** Within 12 miles of a location, a very low likelihood (2% to 5% probability) of severe hail, with storms capable of baseball to softball sized stones. *See description below.* AND/OR...a low likelihood (6% to 15% probability) of severe hail, with storms capable of golf ball to baseball sized hail stones. *See description below.* AND/OR...a moderate likelihood (16% to 25% probability) of severe hail, with storms capable of nickel to golf ball sized hail stones. *See diameter description below.*
Low	**"A Low Threat to Life and Property from Severe Hail."** Within 12 miles of a location, a very low likelihood (2% to 5% probability) of severe hail, with storms capable of golf ball to baseball sized hail stones. *See diameter description below.* AND/OR...a low likelihood (6% to 15% probability) of severe hail, with storms capable of nickel to golf ball sized hail stones. *See diameter description below.*
Very Low	**" A Very Low Threat to Life and Property from Severe Hail."** Within 12 miles of a location, a very low likelihood (2% to 5% probability) of severe hail, with storms capable of nickel to golf ball sized hail stones. *See diameter description below.* AND/OR...a low likelihood or greater (6% or greater) of small hail (less than 3/4 inch). *See diameter description below.*
Non-Threatening	**" No Discernable Threat to Life and Property from Severe Hail."** Within 12 miles of a location, environmental conditions do not support the occurrence of severe hail.

Note: To be considered severe, hail stones must be at least 3/4 inch in diameter.

Figure 5-8. Severe Hail Threat Level

Historical Frequency & Probability of Future Occurrence

In the 10-year period from 1986 to 1995, the NWS recorded severe hail in Idaho on 113 occasions, while in the same time period, severe hail was recorded in Colorado nearly 1,400 times (Weather on the Web, 2025).

Hail has been recorded throughout the county and in the cities of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy. The Storm Events Database recorded 11 instances of severe hail in Latah County since 1995. The hailstones from these events range in

size from 0.75 inches to 1.75 inches. These hail events occurred in Bovill, Potlatch, Deary, Moscow, Juliaetta, and parts of unincorporated Latah County (Storm Events Database, 2023). Hail is likely to occur again in the future in any part of the county, including the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy.

Impacts & Loss Estimates

Latah County and the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy may be impacted by hail, as presented in the table below.

Table 5-16. Impacts of Hail by Jurisdiction

Jurisdiction	Impacted by Hail	Experienced Significant Hail Damage ($1,000+) Since 2000	Fatalities Due to Hail	Potential Impacts of Hail
Latah County	Yes	Yes	0	Injury, death, crop/livestock losses, property damage, automobile accidents, road closures, damage to vegetation
City of Bovill	Yes	No	0	Injury, death, crop/livestock losses, property damage, automobile accidents, road closures, damage to vegetation
City of Deary	Yes	No	0	Injury, death, crop/livestock losses, property damage, automobile accidents, road closures, damage to vegetation
City of Genesee	Yes	No	0	Injury, death, crop/livestock losses, property damage, automobile accidents, road closures, damage to vegetation
City of Juliaetta	Yes	Yes	0	Injury, death, crop/livestock losses, property damage, automobile accidents, road closures, damage to vegetation
City of Kendrick	Yes	No	0	Injury, death, crop/livestock losses, property damage, automobile accidents, road closures, damage to vegetation
City of Moscow	Yes	Yes	0	Injury, death, crop/livestock losses, property damage, automobile accidents, road closures, damage to vegetation
City of Potlatch	Yes	No	0	Injury, death, crop/livestock losses, property damage, automobile accidents, road closures, damage to vegetation
City of Troy	Yes	No	0	Injury, death, crop/livestock losses, property damage,

Jurisdiction	Impacted by Hail	Experienced Significant Hail Damage ($1,000+) Since 2000	Fatalities Due to Hail	Potential Impacts of Hail
				automobile accidents, road closures, damage to vegetation

Deaths and injuries due to hail have occurred in the U.S. but are rare. Most impacts are economic, but hailstorms can also cause utility failure through damage to critical infrastructure. Hailstorms may also lead to car accidents and road closures.

Economic loss can be extensive, especially to agriculturally based economies. Hail is very damaging to crops. Severe hail may also cause extensive property damage, including damage to vehicle paint and bodywork, glass, shingles and roofs, plastic surfaces, etc. During the years 1995–2023, the EWG reported $998,421 in crop insurance indemnities due to hail in Latah County (EWG, 2024). Hail-related insured losses averaged between $8 billion to $14 billion each year in the years 2000–2019 in the U.S. (III, 2023).

Table 5-17. Hail: Expected Annual Loss for Latah County, ID | FEMA National Risk Index

Annualized Frequency	Population	Population Equivalence	Building Value	Agriculture Value	Total Value	Expected Annual Loss Score	Rating
0.3 events per year	0.0	$361	$325	$4,863	$5,549	67.0	Relatively Low
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County							
0.4 events per year	0.0	$305	$285	$12,645	$13,235	77.0	Relatively Moderate
Census Tract 005500: City of Potlatch and Unincorporated Latah County							
0.3 events per year	0.0	$396	$341	$8,382	$9,119	72.8	Relatively Low
Census Tract 005102: City of Moscow and Unincorporated Latah County							
0.4 events per year	0.0	$486	$270	$1,065	$1,821	52.1	Relatively Low
Census Tract 005200: City of Moscow and Unincorporated Latah County							
0.4 events per year	0.0	$654	$304	$1,140	$2,098	54.3	Relatively Low
Census Tract 005400: City of Moscow and Unincorporated Latah County							
0.4 events per year	0.0	$595	$541	$1,695	$2,740	58.2	Relatively Low
Census Tract 005302: City of Moscow							
0.4 events per year	0.0	$551	$199	$8	$757	39.6	Very Low
Census Tract 005101: City of Moscow							
0.4 events per year	0.0	$299	$122	$31	$612	37.3	Very Low
Census Tract 005301: City of Moscow and Unincorporated Latah County							

Annualized Frequency	Population	Population Equivalence	Building Value	Agriculture Value	Total Value	Expected Annual Loss Score	Rating
0.4 events per year	0.0	$256	$136	$1,719	$2,112	54.4	Relatively Low

Annualized Frequency: The natural hazard annualized frequency is defined as the expected frequency or probability of a hazard occurrence per year. Annualized frequency is derived either from the number of recorded hazard occurrences each year over a given period or the modeled probability of a hazard occurrence each year.
Population: Population exposure is defined as the estimated number of people determined to be exposed to a hazard according to a hazard type-specific methodology.
Expected Annual Loss scores are calculated using an equation that combines values for exposure, annualized frequency, and historic loss ratios (Expected Annual Loss = Exposure x Annualized Frequency x Historic Loss Ratio).
Source: National Risk Index, 2025c; 2025d

Vulnerable Populations

There are many vulnerable populations in Latah County, including those in the table below. People with inadequate living conditions or shelter or those who cannot move to shelter quickly enough may be more vulnerable to hailstorms.

Table 5-18. Vulnerable Populations in Latah County

Vulnerability Category	Number	Percent
Families in poverty	665	8.8%
People with disabilities	4,862	12.3%
People over 65 years & living alone	1,521	9.5%
Single female households with children > 18 years	660	4.1%
Difficulty with English	87	0.2%
Households with no car	646	4.1%
Mobile homes	1,551	9.7%

Source: Headwaters Economics, 2025

As demonstrated in blue in the following map, Latah County's northern region is especially disadvantaged, and the southern portion of the county is seen as partially disadvantaged (Climate and Economic Justice Screening Tool, 2025). This area has a large population of people living in rural communities, the majority of whom are low income and may lack resources to adequately shelter during hailstorms.

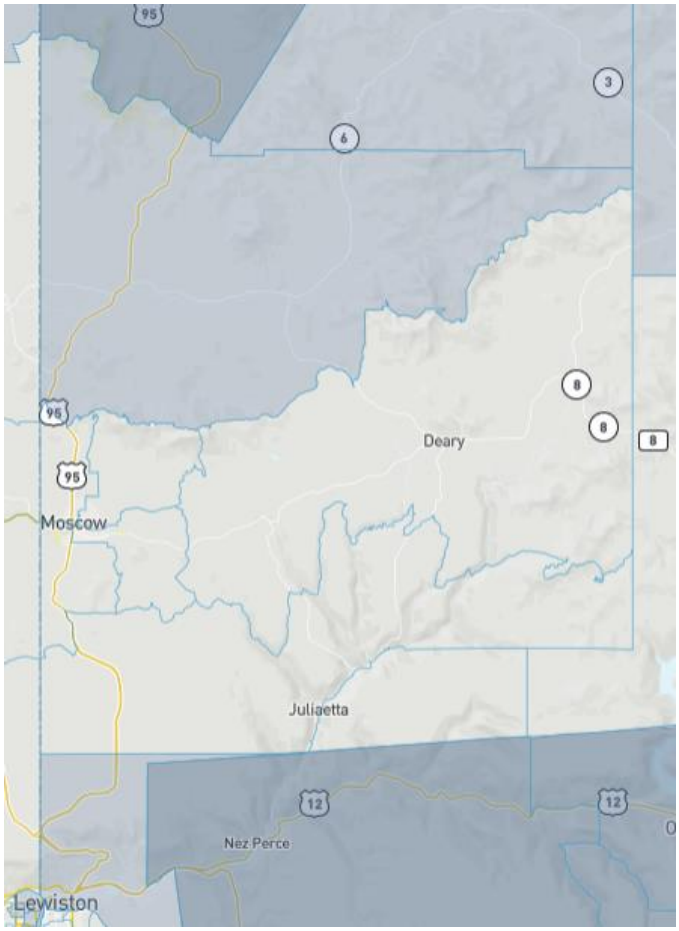
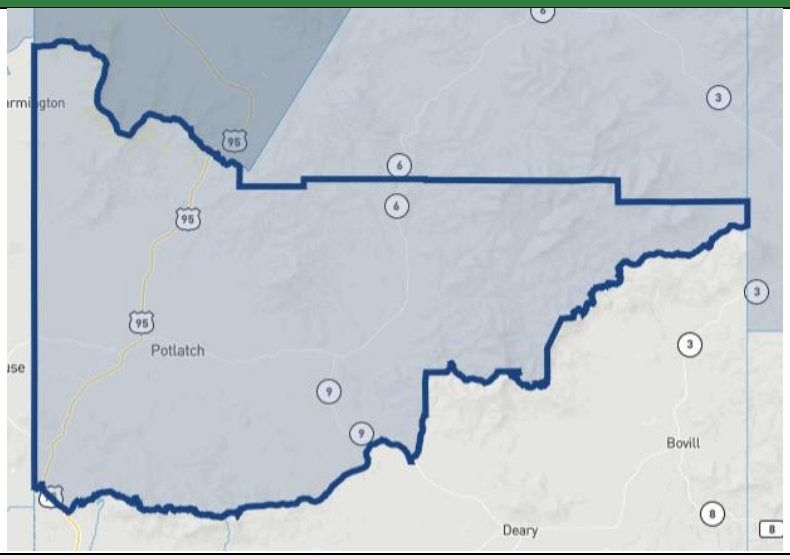


Figure 5-9. Map of Disadvantaged Communities in Latah County

The following table details the one completely disadvantaged census tract in Latah County along with the specific burdens and disadvantages the census tract experiences.

Table 5-19. Disadvantaged Communities in Latah County

LATAH COUNTY, ID		
CLIMATE & ECONOMIC JUSTICE SCREENING TOOL—DISADVANTAGED CENSUS TRACT		
CENSUS TRACT 2010 ID	**CENSUS TRACT POPULATION**	**LOW INCOME TRACT?**
16057005500	3,986	YES

LATAH COUNTY, ID	
	
CENSUS TRACT BURDENS: Transportation	
***97th** % (above 90th percentile)*	*Average of relative cost and time spent on transportation*
***65th** % (above 65th percentile)*	*People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed*
Source: U.S. Council on Environmental Quality—Climate & Economic Justice Screening Tool (2025)	

Severe hailstorms may cause significant damage to critical facilities in the county and could even bring down power lines, causing power outages. The following table lists types of critical facilities that could be negatively affected by damage from hailstorms or power outages, including places like hospitals and dialysis centers that rely on power to operate life-saving equipment.

Table 5-20. Critical Facility Types in Latah County

Critical Facility Type	Location
Fire Station	Potlatch
3 Fire Stations	Moscow
Fire Station	Genesee
Fire Station	Troy
Fire Station	Deary
Fire Station	Kendrick
Fire Station	Juliaetta
Fire Station	Bovill
3 Local Law Enforcement	Moscow
Local Law Enforcement	Troy
Hospital	Moscow
5 Nursing Homes	Moscow
2 Dialysis Centers	Moscow
7 Pharmacies	Moscow
Pharmacy	Potlatch
Public Health Department	Moscow

Critical Facility Type	Location
Wastewater Treatment Plant	Potlatch
Wastewater Treatment Plant	Viola
Wastewater Treatment Plant	Moscow
Wastewater Treatment Plant	Troy
Wastewater Treatment Plant	Juliaetta
Wastewater Treatment Plant	Kendrick
Wastewater Treatment Plant	Deary
Wastewater Treatment Plant	Bovill
Source: Resilience Analysis and Planning Tool, 2025	

Additionally, over 2.9 million Medicare beneficiaries in the U.S. rely on electricity-dependent durable medical and assistive equipment (DME) and devices to live independently in their homes, and some of those individuals also have health care service dependencies (HHS Empower Program, 2025). In Latah County, 7,203 people are beneficiaries of Medicare, and 323 of these beneficiaries are considered at-risk and would be vulnerable during a power outage.

Changes in Development and Impact to Future Development

According to NOAA, hail events can impact development and construction practices, particularly in hail-prone regions. The frequency and intensity of hailstorms can influence the choice of building materials or design considerations in new constructions. In addition, there is an increasing emphasis on using hail-resistant materials, especially for roofing and siding. For instance, the adoption of impact-resistant shingles and reinforced glass is becoming more common to reduce damage and subsequent repair costs. Lastly, architectural designs are evolving to include features that can minimize hail damage, such as protective overhangs and the strategic placement of vulnerable elements like windows and skylights.

Urban and regional planning also accounts for the risk of hail events. This involves selecting appropriate materials and designs for buildings and considering the broader impact on infrastructure, such as transportation and utilities. Finally, the agricultural sector is particularly vulnerable to hail and is also adapting through the use of protective structures like hail nets over crops.

Effects of Climate Change on Probability of Future Events and Severity of Impacts

According to the NOAA, climate change may impact the severity of hail events. One impact is the increase in the intensity of hailstorms. As global temperatures rise, the atmosphere can hold more moisture, leading to greater instability and energy, which are critical factors for the formation of thunderstorms that produce hail. This can result in stronger updrafts in thunderstorms, essential for the formation of larger hailstones. Consequently, while the frequency of hail events may not necessarily increase, the intensity and size of the hail produced during these events could also escalate, leading to more significant damage.

According to the NOAA, the relationship between climate change and hail is intricate and varies by region. In some areas, warming temperatures might actually reduce the likelihood of hail by increasing the height at which hail melts before reaching the ground. This could lead to a decrease in the number of hail events or a shift in their geographical distribution. Finally, climate change may affect the seasonality of hail, potentially altering the timing of hailstorms and impacting agricultural planning and preparedness.

No jurisdictions in Latah County are uniquely affected by hail, and all are adequately addressed at the county level.

The table below illustrates 25-year precipitation projections for Latah County, which may contribute to increased hail events.

Table 5-21. Climate Projections for Latah County, ID | Neighborhoods at Risk 2025

Hail Projections	By 2050, Latah County is expected to experience 0.3 more days of heavy precipitation per year (from 1.3 days to 1.6 days per year).
	By 2050, Latah County is expected to have a 1" increase (from 31" to 32") in average annual precipitation.
	If increased precipitation leads to additional thunderstorms, the risk of hail may increase.
Source: Neighborhoods at Risk, 2025	

FEMA NRI Score

Table 5-22. Hail: Overall National Risk Index Score for Latah County, ID | FEMA National Risk Index

Risk Index Score	Risk Index Rating	Social Vulnerability Rating	Community Resilience Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County			
64.0	Relatively Low	Relatively Low	Relatively Low
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County			
75.3	Relatively Moderate	Relatively Low	Relatively Low
Census Tract 005500: City of Potlatch and Unincorporated Latah County			
73.3	Relatively Moderate	Relatively Moderate	Relatively Low
Census Tract 005102: City of Moscow and Unincorporated Latah County			
51.9	Relatively Low	Relatively Moderate	Relatively Low
Census Tract 005200: City of Moscow and Unincorporated Latah County			
52.8	Relatively Low	Relatively Low	Relatively Low
Census Tract 005400: City of Moscow and Unincorporated Latah County			
56.9	Relatively Low	Relatively Low	Relatively Low
Census Tract 005302: City of Moscow			
39.0	Very Low	Relatively Moderate	Relatively Low
Census Tract 005101: City of Moscow			
37.8	Very Low	Relatively Moderate	Relatively Low
Census Tract 005301: City of Moscow and Unincorporated Latah County			
47.4	Relatively Low	Very Low	Relatively Low

Risk Index Score	Risk Index Rating	Social Vulnerability Rating	Community Resilience Rating
Risk Index scores are calculated using an equation that combines scores for Expected Annual Loss due to natural hazards, Social Vulnerability, and Community Resilience (Expected Annual Loss x Social Vulnerability / Community Resilience = Risk Index). Source: National Risk Index, 2025b; 2025d			

5.2.4 Tornado

Hazard Description

The NWS describes a tornado as "a violently rotating column of air, usually pendant to a cumulonimbus, with circulation reaching the ground. It nearly always starts as a funnel cloud and may be accompanied by a loud roaring noise. On a local scale, it is the most destructive of all atmospheric phenomena" (NWS, 2025). Like hail, most tornadoes are spawned by supercell thunderstorms. They usually last only a few minutes, although some have lasted more than an hour and traveled several miles.

Location

Although the risk is low, a tornado event is possible anywhere in the county, including in the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy.

Extent

Wind speeds within tornadoes are estimated based on the damage caused and expressed using the Enhanced Fujita (EF) Scale.

Table 5-23. Enhanced Fujita (EF) Scale for Estimation of Tornado Wind Speeds

EF Scale	Class	Windspeed (mph)	Windspeed (km/h)	Description
EF0	Weak	65–85	105–137	Gale
EF1	Weak	86–110	138–177	Weak
EF2	Strong	111–135	178–217	Strong
EF3	Strong	136–165	218–266	Severe
EF4	Violent	166–200	267–322	Devastating
EF5	Violent	> 200	> 322	Incredible
Source: NOAA, 2025				

Historical Frequency & Probability of Future Occurrence

Tornado occurrence in Latah County is extremely low. The Storm Events Database records four tornadoes in the county since 1950, as seen in the table below. Future tornadoes are possible but unlikely, and significant damage is improbable.

Table 5-24. Tornado Events in Latah County, ID

Location Within County	Date	EF Scale	Property Damage	Description
Moscow, ID	05/02/1973	EF1	$2,500	N/A
Troy, ID	05/19/1986	EF1	$25,000	A funnel tornado touched down one mile north of Troy with a narrow path of 1-2 miles. Many trees were uprooted and a barn roof was blown off, in addition to other structural damages.
Genesee, ID	05/01/1991	EF0	N/A	A funnel cloud touched down briefly, stirring up dust.
Genesee, ID	06/01/1991	EF0	N/A	N/A
Source: Storm Events Database, 2024				

Impacts & Loss Estimates

Latah County and the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy may be impacted by tornadoes, as presented in the table below.

Table 5-25. Impacts of Tornado by Jurisdiction

Jurisdiction	May Be Impacted by Tornado	Experienced Significant Tornado Damage ($1,000+) Since 2000	Fatalities Due to Tornadoes	Potential Impacts of Tornadoes
Latah County	Yes	No	0	Injury, death, property damage, loss of utilities, crop/vegetation/livestock losses, car accidents, road closures, fallen trees, risk to emergency services
City of Bovill	Yes	No	0	Injury, death, property damage, loss of utilities, crop/vegetation/livestock losses, car accidents, road closures, fallen trees, risk to emergency services
City of Deary	Yes	No	0	Injury, death, property damage, loss of utilities, crop/vegetation/livestock losses, car accidents, road closures, fallen trees, risk to emergency services
City of Genesee	Yes	No	0	Injury, death, property damage, loss of utilities, crop/vegetation/livestock losses, car accidents, road closures, fallen trees, risk to emergency services
City of Juliaetta	Yes	No	0	Injury, death, property damage, loss of utilities, crop/vegetation/livestock losses,

Jurisdiction	May Be Impacted by Tornado	Experienced Significant Tornado Damage ($1,000+) Since 2000	Fatalities Due to Tornadoes	Potential Impacts of Tornadoes
				car accidents, road closures, fallen trees, risk to emergency services
City of Kendrick	Yes	No	0	Injury, death, property damage, loss of utilities, crop/vegetation/livestock losses, car accidents, road closures, fallen trees, risk to emergency services
City of Moscow	Yes	No	0	Injury, death, property damage, loss of utilities, crop/vegetation/livestock losses, car accidents, road closures, fallen trees, risk to emergency services
City of Potlatch	Yes	No	0	Injury, death, property damage, loss of utilities, crop/vegetation/livestock losses, car accidents, road closures, fallen trees, risk to emergency services
City of Troy	Yes	No	0	Injury, death, property damage, loss of utilities, crop/vegetation/livestock losses, car accidents, road closures, fallen trees, risk to emergency services

Loss of utilities (primarily due to fallen trees) is common following tornadoes, and depending on circumstances, communities might be deprived of almost any kind of goods and services including food, water, and medical care. Agriculturally, crop and livestock loss are also possible.

Since 1950, there has been $27,500 in property damage due to tornadoes in Latah County, primarily from an F1 tornado near Troy in 1986 that caused several trees to become uprooted and a barn roof to blow off.

Table 5-26. Tornado: Expected Annual Loss for Latah County, ID | FEMA National Risk Index

Annualized Frequency	Population	Population Equivalence	Building Value	Agriculture Value	Total Value	Expected Annual Loss Score	Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County							
0 events per year	0.0	$3,547	$2,531	$20	$6,098	18.4	Very Low
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County							
0 events per year	0.0	$3,235	$2,325	$44	$5,604	17.0	Very Low
Census Tract 005500: City of Potlatch and Unincorporated Latah County							

Annualized Frequency	Population	Population Equivalence	Building Value	Agriculture Value	Total Value	Expected Annual Loss Score	Rating
0 events per year	0.0	$4,391	$2,945	$37	$7,373	21.4	Very Low
Census Tract 005102: City of Moscow and Unincorporated Latah County							
0 events per year	0.0	$5,247	$2,242	$3	$7,493	21.7	Very Low
Census Tract 005200: City of Moscow and Unincorporated Latah County							
0 events per year	0.0	$7,065	$2,528	$4	$9,597	25.3	Very Low
Census Tract 005400: City of Moscow and Unincorporated Latah County							
0 events per year	0.0	$6,428	$3,741	$6	$10,175	26.0	Very Low
Census Tract 005302: City of Moscow							
0 events per year	0.0	$5,954	$1,651	$0	$7,604	21.9	Very Low
Census Tract 005101: City of Moscow							
0 events per year	0.0	$3,230	$1,011	$1	$4,241	12.7	Very Low
Census Tract 005301: City of Moscow and Unincorporated Latah County							
0 events per year	0.0	$2,769	$1,128	$5	$3,903	11.5	Very Low

Annualized Frequency: The natural hazard annualized frequency is defined as the expected frequency or probability of a hazard occurrence per year. Annualized frequency is derived either from the number of recorded hazard occurrences each year over a given period or the modeled probability of a hazard occurrence each year.
Population: Population exposure is defined as the estimated number of people determined to be exposed to a hazard according to a hazard type-specific methodology.
Expected Annual Loss scores are calculated using an equation that combines values for exposure, annualized frequency, and historic loss ratios (Expected Annual Loss = Exposure x Annualized Frequency x Historic Loss Ratio).
Source: National Risk Index, 2025c; 2025d

Vulnerable Populations

There are many vulnerable populations in Latah County, including those in the table below. People with inadequate living conditions or shelter or those who cannot move to shelter quickly enough may be more vulnerable to tornadoes.

Table 5-27. Vulnerable Populations in Latah County

Vulnerability Category	Number	Percent
Families in poverty	665	8.8%
People with disabilities	4,862	12.3%
People over 65 years & living alone	1,521	9.5%
Single female households with children > 18 years	660	4.1%
Difficulty with English	87	0.2%
Households with no car	646	4.1%
Mobile homes	1,551	9.7%

Vulnerability Category	Number	Percent
Source: Headwaters Economics, 2025		

As demonstrated in blue in the following map, Latah County's northern region is especially disadvantaged, and the southern portion of the county is seen as partially disadvantaged (Climate and Economic Justice Screening Tool, 2025). This area has a large population of people living in rural communities, the majority of whom are low income and may lack resources to adequately shelter during tornadoes.

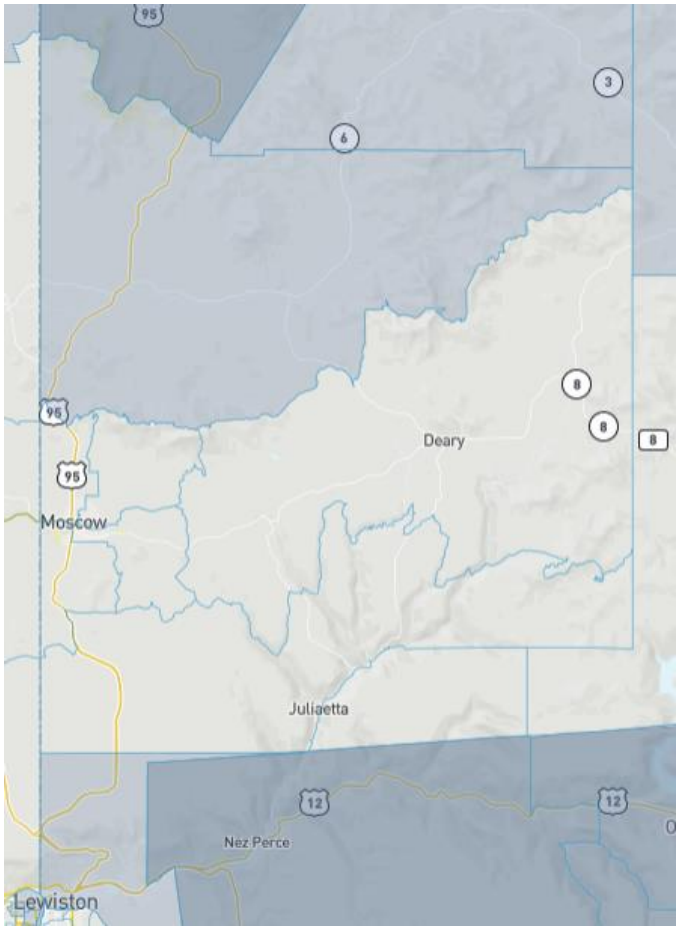
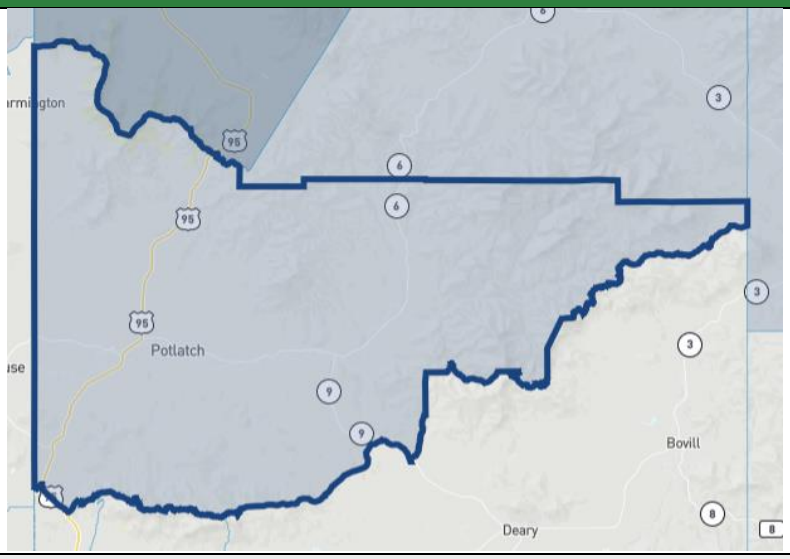


Figure 5-10. Map of Disadvantaged Communities in Latah County

The following table details the one completely disadvantaged census tract in Latah County along with the specific burdens and disadvantages the census tract experiences.

Table 5-28. Disadvantaged Communities in Latah County

LATAH COUNTY, ID		
CLIMATE & ECONOMIC JUSTICE SCREENING TOOL—DISADVANTAGED CENSUS TRACT		
CENSUS TRACT 2010 ID	CENSUS TRACT POPULATION	LOW INCOME TRACT?
16057005500	3,986	YES

LATAH COUNTY, ID	
	
CENSUS TRACT BURDENS: Transportation	
***97th** % (above 90th percentile)*	*Average of relative cost and time spent on transportation*
***65th** % (above 65th percentile)*	*People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed*
Source: U.S. Council on Environmental Quality—Climate & Economic Justice Screening Tool (2025)	

A tornado may cause significant damage to critical facilities in the county and could even bring down power lines, causing power outages. The following table lists types of critical facilities that could be negatively affected by damage from a tornado or power outages, including places like hospitals and dialysis centers that rely on power to operate life-saving equipment.

Table 5-29. Critical Facility Types in Latah County

Critical Facility Type	Location
Fire Station	Potlatch
3 Fire Stations	Moscow
Fire Station	Genesee
Fire Station	Troy
Fire Station	Deary
Fire Station	Kendrick
Fire Station	Juliaetta
Fire Station	Bovill
3 Local Law Enforcement	Moscow
Local Law Enforcement	Troy
Hospital	Moscow
5 Nursing Homes	Moscow
2 Dialysis Centers	Moscow
7 Pharmacies	Moscow
Pharmacy	Potlatch
Public Health Department	Moscow
Wastewater Treatment Plant	Potlatch

Critical Facility Type	Location
Wastewater Treatment Plant	Viola
Wastewater Treatment Plant	Moscow
Wastewater Treatment Plant	Troy
Wastewater Treatment Plant	Juliaetta
Wastewater Treatment Plant	Kendrick
Wastewater Treatment Plant	Deary
Wastewater Treatment Plant	Bovill
Source: Resilience Analysis and Planning Tool, 2025	

Additionally, over 2.9 million Medicare beneficiaries in the U.S. rely on electricity-dependent durable medical and assistive equipment (DME) and devices to live independently in their homes, and some of those individuals also have health care service dependencies (HHS Empower Program, 2025). In Latah County, 7,203 people are beneficiaries of Medicare, and 323 of these beneficiaries are considered at-risk and would be vulnerable during a power outage.

Changes in Development and Impact to Future Development

According to the NOAA, tornadic events can impact changes in development and future construction practices, particularly in tornado-prone regions. Historical patterns and frequency of occurrence have also led to a focus on building resilience, with an emphasis on stronger construction standards to withstand high winds. This includes reinforcing the structural integrity of buildings, using wind-resistant materials, and incorporating tornado-safe rooms or shelters in both new and existing structures. Architects and engineers are increasingly adopting these enhanced safety measures in building designs, considering factors such as roof shapes and anchoring methods that can reduce wind damage. Finally, there's a growing trend towards community-wide tornado preparedness planning, which includes the development of emergency response strategies and the establishment of public storm shelters.

For future development, understanding and mapping tornado risk areas play a crucial role in urban planning decisions. This can influence zoning regulations, with potential restrictions on development in high-risk areas or requirements for specific building codes in such regions. The increasing frequency and intensity of tornadoes, possibly linked to climate change, also necessitate the integration of tornado risk assessments in long-term development plans.

Effects of Climate Change on Probability of Future Events and Severity of Impacts

According to the NOAA, climate change may impact the severity and behavior of tornadic events, although the exact nature of these effects is complex and still a subject of ongoing research. One of the primary challenges in understanding the relationship between climate change and tornadoes is the complexity of tornado formation. Tornadoes require specific atmospheric conditions, including a combination of high instability and strong wind shear. Climate change may affect these conditions, but how these changes will influence tornado occurrence and intensity is not yet fully understood.

Climate change is expected to increase atmospheric instability by warming the Earth's surface and may also lead to a decrease in wind shear, particularly in areas where tornadoes are most common. This could potentially lead to a change in the number or intensity of tornadoes, but the evidence is not yet conclusive. Second, shifts in climate patterns could affect the geographical distribution and seasonality of tornadoes, potentially leading to tornadoes in regions where they were previously less common or during times of the year when they were less expected.

No jurisdictions in Latah County are uniquely affected by tornadoes, and all are adequately addressed at the county level.

The table below illustrates 25-year heat projections for Latah County, which may contribute to increased tornado events.

Table 5-30. Climate Projections for Latah County, ID | Neighborhoods at Risk 2025

Heat Projections	By 2050, Latah County is expected to experience 9 more days that reach above 95°F (from 10 days to 19 days per year).
	By 2050, Latah County is expected to have a 2°F increase (from 48°F to 50°F) in average annual temperatures.
	Increasing annual temperatures can contribute to more frequent tornadoes in the fall and winter due to the increased warm air.
Source: Neighborhoods at Risk, 2025	

FEMA NRI Score

Table 5-31. Tornado: Overall National Risk Index Score for Latah County, ID | FEMA National Risk Index

Risk Index Score	Risk Index Rating	Social Vulnerability Rating	Community Resilience Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County			
13.2	Very Low	Relatively Low	Relatively Low
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County			
13.5	Very Low	Relatively Low	Relatively Low
Census Tract 005500: City of Potlatch and Unincorporated Latah County			
21.1	Very Low	Relatively Moderate	Relatively Low
Census Tract 005102: City of Moscow and Unincorporated Latah County			
20.1	Very Low	Relatively Moderate	Relatively Low
Census Tract 005200: City of Moscow and Unincorporated Latah County			
22.8	Very Low	Relatively Low	Relatively Low
Census Tract 005400: City of Moscow and Unincorporated Latah County			
23.8	Very Low	Relatively Low	Relatively Low
Census Tract 005302: City of Moscow			
19.7	Very Low	Relatively Moderate	Relatively Low
Census Tract 005101: City of Moscow			
12.3	Very Low	Relatively Moderate	Relatively Low
Census Tract 005301: City of Moscow and Unincorporated Latah County			
6.6	Very Low	Very Low	Relatively Low

Risk Index Score	Risk Index Rating	Social Vulnerability Rating	Community Resilience Rating
Risk Index scores are calculated using an equation that combines scores for Expected Annual Loss due to natural hazards, Social Vulnerability, and Community Resilience (Expected Annual Loss x Social Vulnerability / Community Resilience = Risk Index). Source: National Risk Index, 2025b; 2025d			

5.2.5 Straight-line Wind

Hazard Description

The term "straight-line wind" is used to describe any wind not associated with rotation, particularly tornadoes. Of concern is high wind, defined by the NWS as "sustained wind speeds of 40 mph or greater, lasting for one hour or longer, or winds of 58 mph or greater for any duration." Like tornadoes, strong, straight-line winds are generated by thunderstorms, and they can cause similar damage. Straight-line wind speeds can approach 150 mph, equivalent to those in an EF3 tornado. Additionally, derechos—which are widespread, long-lived, straight-line windstorms—may occur in Latah County, although less common.

Location

Straight-line wind events affect the entire county, including the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy.

Extent

The Beaufort Wind Scale explains different wind speeds based on how they would affect land conditions and sea conditions (NOAA, 2025).

Table 5-32. Beaufort Wind Scale

Force	Wind (Knots)	WMO Classification	Appearance of Wind Effects on Land
0	Less than 1	Calm	Calm, smoke rises vertically
1	1–3	Light Air	Smoke drift indicates wind direction, still wind vanes
2	4–6	Light Breeze	Wind felt on face, leaves rustle, vanes begin to move
3	7–10	Gentle Breeze	Leaves and small twigs constantly moving, light flags extended
4	11–16	Moderate Breeze	Dust, leaves, and loose paper lifted, small tree branches move
5	17–21	Fresh Breeze	Small trees in leaf begin to sway
6	22–27	Strong Breeze	Larger tree branches moving, whistling in wires
7	28–33	Near Gale	Whole trees moving, resistance felt walking against wind
8	34–40	Gale	Twigs breaking off trees, generally impedes progress
9	41–47	Strong Gale	Slight structural damage occurs, slate blows off roofs
10	48–55	Storm	Seldom experienced on land, trees broken or uprooted, "considerable structural damage"
11	56–63	Violent Storm	
12	64+	Hurricane	
Source: NOAA, 2025			

Historical Frequency & Probability of Future Occurrence

High straight-line wind events are frequent in Latah County, including in the cities of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy. According to the Storm Events Database, there have been 30 reported high wind, strong wind, or thunderstorm wind events 40 mph or greater in Latah County between 2010–2025, as seen in the table below. Nine of these high wind events occurred in Moscow, three in Genesee, two in Potlatch, one in Bovill, one in Deary, and one in Troy. The majority of the high wind events in the county occur in the Central Panhandle Mountains and the Idaho Palouse. Future significant straight-line wind events are likely to occur multiple times each year throughout the entire county, including in Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy.

Table 5-33. High Wind Events in Latah County, ID

Location Within County	Date	Wind Speed (kts.)
Idaho Palouse, Moscow	04/08/2010	48 kts.
Central Panhandle Mountains	04/08/2010	45 kts.
Idaho Palouse, Moscow	05/03/2010	50 kts.
Central Panhandle Mountains, Bovill, Deary	05/03/2010	52 kts.
Idaho Palouse, Moscow	05/19/2010	56 kts.
Idaho Palouse, Moscow, Potlatch, Troy, Genesee	11/15/2010	78 kts.
Moscow	11/16/2010	78 kts.
Idaho Palouse, Genesee	03/13/2012	48 kts.
Idaho Palouse, Moscow	10/02/2012	39 kts.
Idaho Palouse	10/16/2012	41 kts.
Central Panhandle Mountains	12/17/2012	44 kts.
Central Panhandle Mountains	04/29/2013	43 kts.
Central Panhandle Mountains	10/27/2013	43 kts.
Central Panhandle Mountains	01/11/2014	51 kts.
Kennedy Ford, Onaway	07/23/2014	56 kts.
Genesee, Moscow, Onaway	08/12/2014	52 kts.
Linden	06/01/2015	48 kts.
Idaho Palouse	11/17/2015	52 kts.
Central Panhandle Mountains	11/17/2015	71 kts.
Idaho Palouse	11/17/2015	70 kts.
Moscow	04/07/2017	52 kts.
Idaho Palouse	01/13/2021	50 kts.
Central Panhandle Mountains	01/13/2021	52 kts.
Central Panhandle Mountains	11/15/2021	71 kts.

Location Within County	Date	Wind Speed (kts.)
Central Panhandle Mountains	04/04/2022	46 kts.
Central Panhandle Mountains	11/04/2022	57 kts.
Yale	05/02/2023	60 kts.
Harvard	06/09/2023	26 kts.
Idaho Palouse	11/11/2023	30 kts.
Central Panhandle Mountains	01/09/2024	43 kts.
Idaho Palouse	06/03/2024	48 kts.
Howell	09/25/2024	58 kts.
Moscow	09/25/2024	58 kts.
Yale	09/25/2024	44 kts.
Potlatch	09/25/2024	36 kts.
Central Panhandle Mountains	10/04/2024	50 kts.
Central Panhandle Mountains	12/18/2024	46 kts.
Source: Storm Events Database, 2025		

Impacts & Loss Estimates

Latah County and the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy may be impacted by straight-line wind, as presented in the table below.

Table 5-34. Impacts of Straight-Line Wind by Jurisdiction

Jurisdiction	Impacted by Straight-Line Wind	Experienced Significant Straight-Line Wind Damage ($1,000+) Since 2000	Potential Impacts of Straight-Line Wind
Latah County	Yes	Yes	Injury from flying objects, death, automobile accidents, property damage, aircraft accidents, crop/vegetation/livestock losses, road closures, fallen trees, loss of utilities
City of Bovill	Yes	Yes	Injury from flying objects, death, automobile accidents, property damage, aircraft accidents, crop/vegetation/livestock losses, road closures, fallen trees, loss of utilities
City of Deary	Yes	Yes	Injury from flying objects, death, automobile accidents, property damage, aircraft accidents, crop/vegetation/livestock losses, road closures, fallen trees, loss of utilities
City of Genesee	Yes	Yes	Injury from flying objects, death, automobile accidents, property damage, aircraft accidents,

Jurisdiction	Impacted by Straight-Line Wind	Experienced Significant Straight-Line Wind Damage ($1,000+) Since 2000	Potential Impacts of Straight-Line Wind
			crop/vegetation/livestock losses, road closures, fallen trees, loss of utilities
City of Juliaetta	Yes	Yes	Injury from flying objects, death, automobile accidents, property damage, aircraft accidents, crop/vegetation/livestock losses, road closures, fallen trees, loss of utilities
City of Kendrick	Yes	Yes	Injury from flying objects, death, automobile accidents, property damage, aircraft accidents, crop/vegetation/livestock losses, road closures, fallen trees, loss of utilities
City of Moscow	Yes	Yes	Injury from flying objects, death, automobile accidents, property damage, aircraft accidents, crop/vegetation/livestock losses, road closures, fallen trees, loss of utilities
City of Potlatch	Yes	Yes	Injury from flying objects, death, automobile accidents, property damage, aircraft accidents, crop/vegetation/livestock losses, road closures, fallen trees, loss of utilities
City of Troy	Yes	Yes	Injury from flying objects, death, automobile accidents, property damage, aircraft accidents, crop/vegetation/livestock losses, road closures, fallen trees, loss of utilities

The impacts of straight-line winds are virtually the same as those from tornadoes with similar wind speeds. The damage is distinguishable from that of a tornado only in that the debris is generally deposited in nearly parallel rows. Downbursts are particularly hazardous to aircraft in flight. Windstorms can create loose dust storms in the county, which reduces visibility and makes driving on highways dangerous.

Since 2010 there has been $562,800 in reported losses due to high wind, strong wind, and thunderstorm wind damage in Latah County (Storm Events Database, 2025). During the years 1995–2023, the EWG reported $326,960 in crop insurance indemnities due to wind/excess wind and hot wind in Latah County (EWG, 2024). Though losses aren't regularly reported, it is known that they occur because of the frequency and magnitude of high wind events.

Table 5-35. Strong Wind: Expected Annual Loss for Latah County, ID | FEMA National Risk Index

Annualized Frequency	Population	Population Equivalence	Building Value	Agriculture Value	Total Value	Expected Annual Loss Score	Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County							
0.3 events per year	0.0	$531	$5,955	$471	$6,956	44.6	Relatively Low
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County							
0.3 events per year	0.0	$400	$5,093	$1,211	$6,744	44.1	Relatively Low
Census Tract 005500: City of Potlatch and Unincorporated Latah County							
0.3 events per year	0.0	$588	$6,381	$889	$7,858	47.0	Relatively Low
Census Tract 005102: City of Moscow and Unincorporated Latah County							
0.3 events per year	0.0	$702	$4,853	$103	$5,657	40.9	Relatively Low
Census Tract 005200: City of Moscow and Unincorporated Latah County							
0.3 events per year	0.0	$945	$5,472	$110	$6,527	43.4	Relatively Low
Census Tract 005400: City of Moscow and Unincorporated Latah County							
0.3 events per year	0.0	$860	$8,099	$163	$9,121	50.0	Relatively Low
Census Tract 005302: City of Moscow							
0.3 events per year	0.0	$796	$3,573	$1	$4,370	36.8	Relatively Low
Census Tract 005101: City of Moscow							
0.3 events per year	0.0	$432	$2,187	$18	$2,637	29.7	Relatively Low
Census Tract 005301: City of Moscow and Unincorporated Latah County							
0.3 events per year	0.0	$370	$2,443	$165	$2,978	31.2	Relatively Low

Annualized Frequency: The natural hazard annualized frequency is defined as the expected frequency or probability of a hazard occurrence per year. Annualized frequency is derived either from the number of recorded hazard occurrences each year over a given period or the modeled probability of a hazard occurrence each year.
Population: Population exposure is defined as the estimated number of people determined to be exposed to a hazard according to a hazard type-specific methodology.
Expected Annual Loss scores are calculated using an equation that combines values for exposure, annualized frequency, and historic loss ratios (Expected Annual Loss = Exposure x Annualized Frequency x Historic Loss Ratio).
Source: National Risk Index, 2025c; 2025d

Vulnerable Populations

There are many vulnerable populations in Latah County, including those in the table below. People with inadequate living conditions or shelter or those who cannot move to shelter quickly enough may be more vulnerable to severe straight-line wind conditions.

Table 5-36. Vulnerable Populations in Latah County

Vulnerability Category	Number	Percent
Families in poverty	665	8.8%
People with disabilities	4,862	12.3%
People over 65 years & living alone	1,521	9.5%
Single female households with children > 18 years	660	4.1%
Difficulty with English	87	0.2%
Households with no car	646	4.1%
Mobile homes	1,551	9.7%
Source: Headwaters Economics, 2025		

As demonstrated in blue in the following map, Latah County's northern region is especially disadvantaged, and the southern portion of the county is seen as partially disadvantaged (Climate and Economic Justice Screening Tool, 2025). This area has a large population of people living in rural communities, the majority of whom are low income and may lack resources to adequately shelter during straight-line wind events.

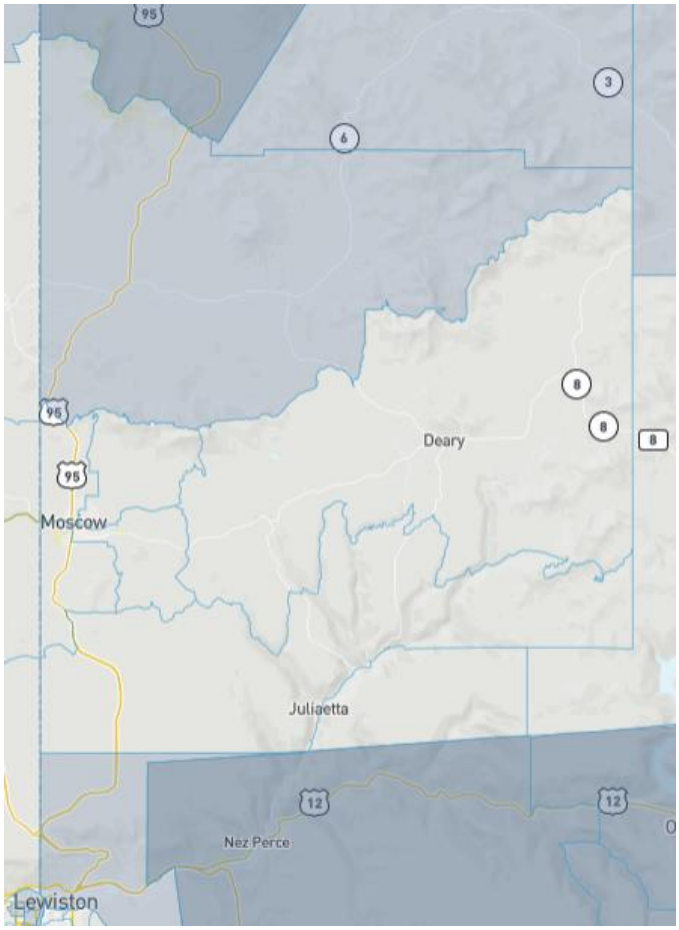
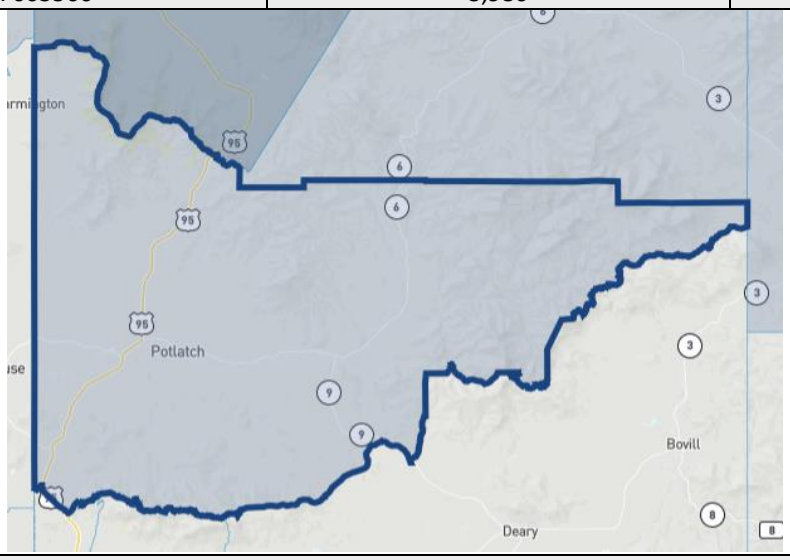


Figure 5-11. Map of Disadvantaged Communities in Latah County

The following table details the one completely disadvantaged census tract in Latah County along with the specific burdens and disadvantages the census tract experiences.

Table 5-37. Disadvantaged Communities in Latah County

LATAH COUNTY, ID		
CLIMATE & ECONOMIC JUSTICE SCREENING TOOL—DISADVANTAGED CENSUS TRACT		
CENSUS TRACT 2010 ID	**CENSUS TRACT POPULATION**	**LOW INCOME TRACT?**
16057005500	3,986	YES
		
CENSUS TRACT BURDENS: Transportation		
***97th** % (above 90th percentile)*	*Average of relative cost and time spent on transportation*	
***65th** % (above 65th percentile)*	*People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed*	
Source: U.S. Council on Environmental Quality—Climate & Economic Justice Screening Tool (2025)		

Straight-line wind may cause significant damage to critical facilities in the county and could even bring down power lines, causing power outages. The following table lists types of critical facilities that could be negatively affected by damage from straight-line wind or power outages, including places like hospitals and dialysis centers that rely on power to operate life-saving equipment.

Table 5-38. Critical Facility Types in Latah County

Critical Facility Type	Location
Fire Station	Potlatch
3 Fire Stations	Moscow
Fire Station	Genesee
Fire Station	Troy
Fire Station	Deary
Fire Station	Kendrick
Fire Station	Juliaetta
Fire Station	Bovill

Critical Facility Type	Location
3 Local Law Enforcement	Moscow
Local Law Enforcement	Troy
Hospital	Moscow
5 Nursing Homes	Moscow
2 Dialysis Centers	Moscow
7 Pharmacies	Moscow
Pharmacy	Potlatch
Public Health Department	Moscow
Wastewater Treatment Plant	Potlatch
Wastewater Treatment Plant	Viola
Wastewater Treatment Plant	Moscow
Wastewater Treatment Plant	Troy
Wastewater Treatment Plant	Juliaetta
Wastewater Treatment Plant	Kendrick
Wastewater Treatment Plant	Deary
Wastewater Treatment Plant	Bovill
Source: Resilience Analysis and Planning Tool, 2025	

Additionally, over 2.9 million Medicare beneficiaries in the U.S. rely on electricity-dependent durable medical and assistive equipment (DME) and devices to live independently in their homes, and some of those individuals also have health care service dependencies (HHS Empower Program, 2025). In Latah County, 7,203 people are beneficiaries of Medicare, and 323 of these beneficiaries are considered at-risk and would be vulnerable during a power outage.

Changes in Development and Impact to Future Development

According to the NOAA, straight-line wind events (including derechos and severe thunderstorm winds) can impact current and future development practices. Physical damage from historical straight-line wind events are prompting changes in building design and construction. There is also a focus on wind-resistant construction techniques, such as strengthening building envelopes, using more durable roofing materials, and securing outdoor objects to prevent them from becoming airborne projectiles. In areas frequently affected by straight-line winds, there is a growing emphasis on adopting building codes that require wind-resistant features, aiming to reduce damage and ensure the safety of structures.

For future development, urban and regional planning are evaluating this placement and orientation of buildings to minimize wind impact, enhancing vegetation cover to serve as windbreaks, and implementing robust infrastructure designs, especially for utilities and transportation networks. Planning also includes the development of emergency response strategies and the installation of early warning systems to mitigate the impact of such events on communities.

Effects of Climate Change on Probability of Future Events and Severity of Impacts

According to the NOAA, climate change impacts the severity of straight-line wind events, although the specific effects are complex and subject to ongoing research. Straight-line winds, such as those associated with severe thunderstorms, derechos, and downbursts, can be influenced by atmospheric conditions that are affected by climate change. As global temperatures rise, the atmosphere can hold more moisture and become more unstable, potentially leading to more powerful and frequent thunderstorms capable of producing severe straight-line winds. This increased instability may contribute to the intensity of storm systems and the energy available for severe weather events, including those with damaging winds.

According to the NOAA, the relationship between climate change and straight-line wind events is not straightforward. Factors such as changes in the jet stream, regional variations in temperature and moisture patterns, and the complex dynamics of storm formation all play a role in determining how these events may change in a warming climate. While some models suggest an increase in the frequency and intensity of storms capable of producing strong straight-line winds, there is still uncertainty regarding the extent and geographical distribution of these changes.

No jurisdictions in Latah County are uniquely affected by straight-line wind, and all are adequately addressed at the county level.

The table below illustrates 25-year heat projections for Latah County, which may contribute to increased high wind events.

Table 5-39. Climate Projections for Latah County, ID | Neighborhoods at Risk 2025

Wind Projections	By 2050, Latah County is expected to experience 9 more days that reach above 95°F (from 10 days to 19 days per year).
	By 2050, Latah County is expected to have a 2°F increase (from 48°F to 50°F) in average annual temperatures.
	Increasing annual temperatures can contribute to more frequent straight-line wind events as more powerful storms develop.
Source: Neighborhoods at Risk, 2025	

FEMA NRI Score

Table 5-40. Strong Wind: Overall National Risk Index Score for Latah County, ID | FEMA National Risk Index

Risk Index Score	Risk Index Rating	Social Vulnerability Rating	Community Resilience Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County			
40.6	Relatively Low	Relatively Low	Relatively Low
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County			
41.9	Relatively Low	Relatively Low	Relatively Low
Census Tract 005500: City of Potlatch and Unincorporated Latah County			
48.5	Relatively Low	Relatively Moderate	Relatively Low
Census Tract 005102: City of Moscow and Unincorporated Latah County			
41.0	Relatively Low	Relatively Moderate	Relatively Low
Census Tract 005200: City of Moscow and Unincorporated Latah County			

Risk Index Score	Risk Index Rating	Social Vulnerability Rating	Community Resilience Rating
42.0	Relatively Low	Relatively Low	Relatively Low
Census Tract 005400: City of Moscow and Unincorporated Latah County			
48.5	Relatively Low	Relatively Low	Relatively Low
Census Tract 005302: City of Moscow			
35.8	Relatively Low	Relatively Moderate	Relatively Low
Census Tract 005101: City of Moscow			
30	Relatively Low	Relatively Moderate	Relatively Low
Census Tract 005301: City of Moscow and Unincorporated Latah County			
25.4	Very Low	Very Low	Relatively Low
Risk Index scores are calculated using an equation that combines scores for Expected Annual Loss due to natural hazards, Social Vulnerability, and Community Resilience (Expected Annual Loss x Social Vulnerability / Community Resilience = Risk Index). Source: National Risk Index, 2025b; 2025d			

5.2.6 Summary Assessment of Severe Summer Weather Vulnerability and Potential Losses

It is very difficult to estimate potential losses by jurisdiction for severe summer weather. Several factors limit the planning team's ability to determine potential vulnerability and losses including:

- Lack of location research
- Most hazards are tied to weather and cannot be predicted by location
- Limited GIS data is available for severe summer weather in Idaho

Latah County and Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy's vulnerability to severe summer weather, to some extent, includes all structures, people, and businesses. Of note, those most vulnerable (see figure below) are at greatest risk to severe summer weather.

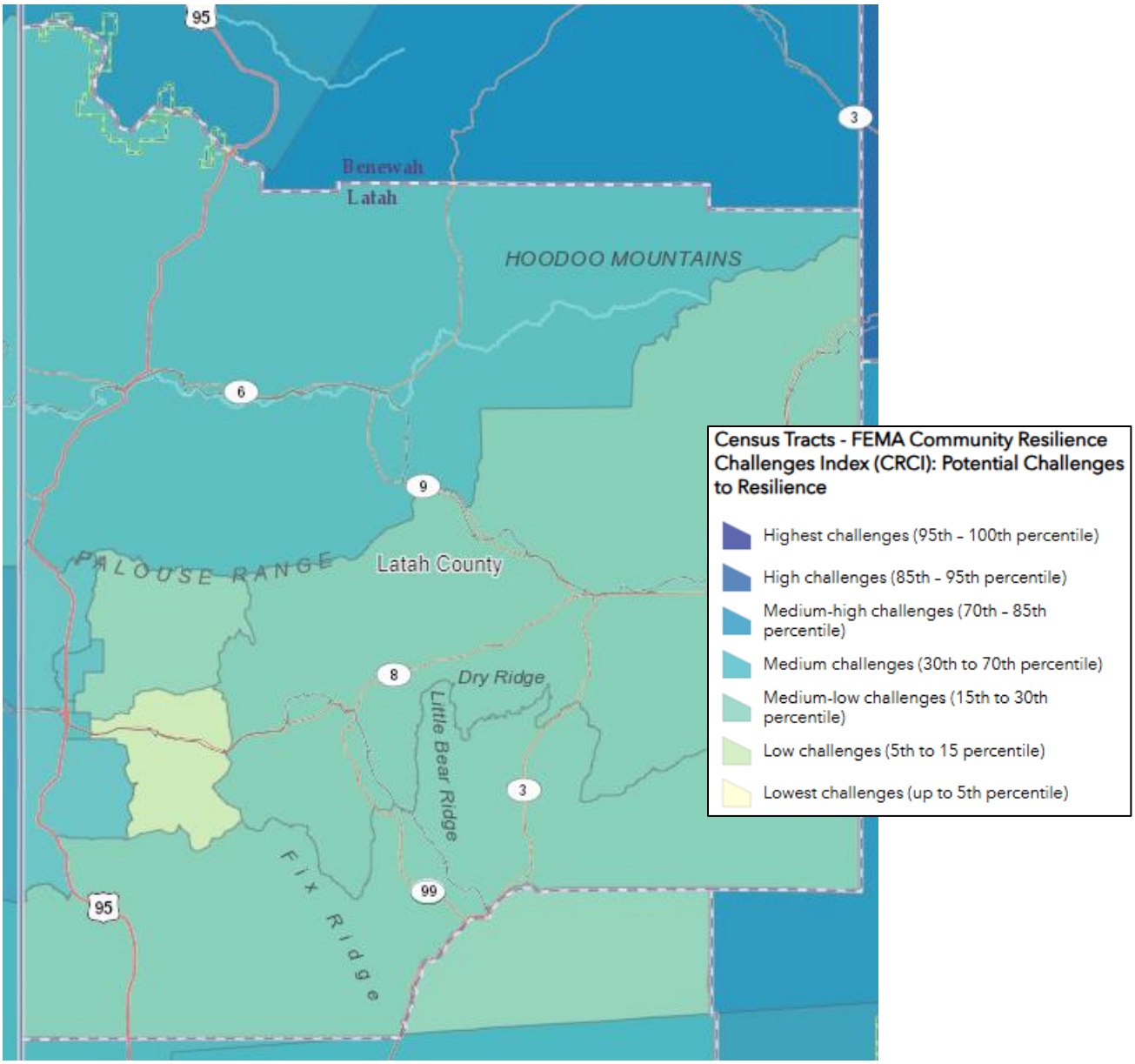


Figure 5-12. Populations with Potential Challenges to Severe Summer Weather

Table 5-41. Resilience and Analysis Planning Tool Challenge Variables

22 CHALLENGE VARIABLES			
Population, Household, Housing Characteristics	**Economic**	**Healthcare**	**Connection to Community**
Population without a High School Diploma Population 65 and Older Population with a Disability Households without a Vehicle Households with Limited English	Population Below Poverty Level Median Household Income Unemployed Labor Force Unemployed Women Labor Force	Number of Hospitals Medical Professional Capacity	Presence of Civic and Social Organizations Population without Religious Affiliation

Single-parent Households Households without a Smartphone Mobile Homes as Percentage of Housing Owner-Occupied Housing	Income Inequality Workforce in Predominant Sector	Population without Health Insurance	Percent of Inactive Voters Population Change
Source: FEMA Resilience Analysis and Planning Tool (RAPT) 2025			

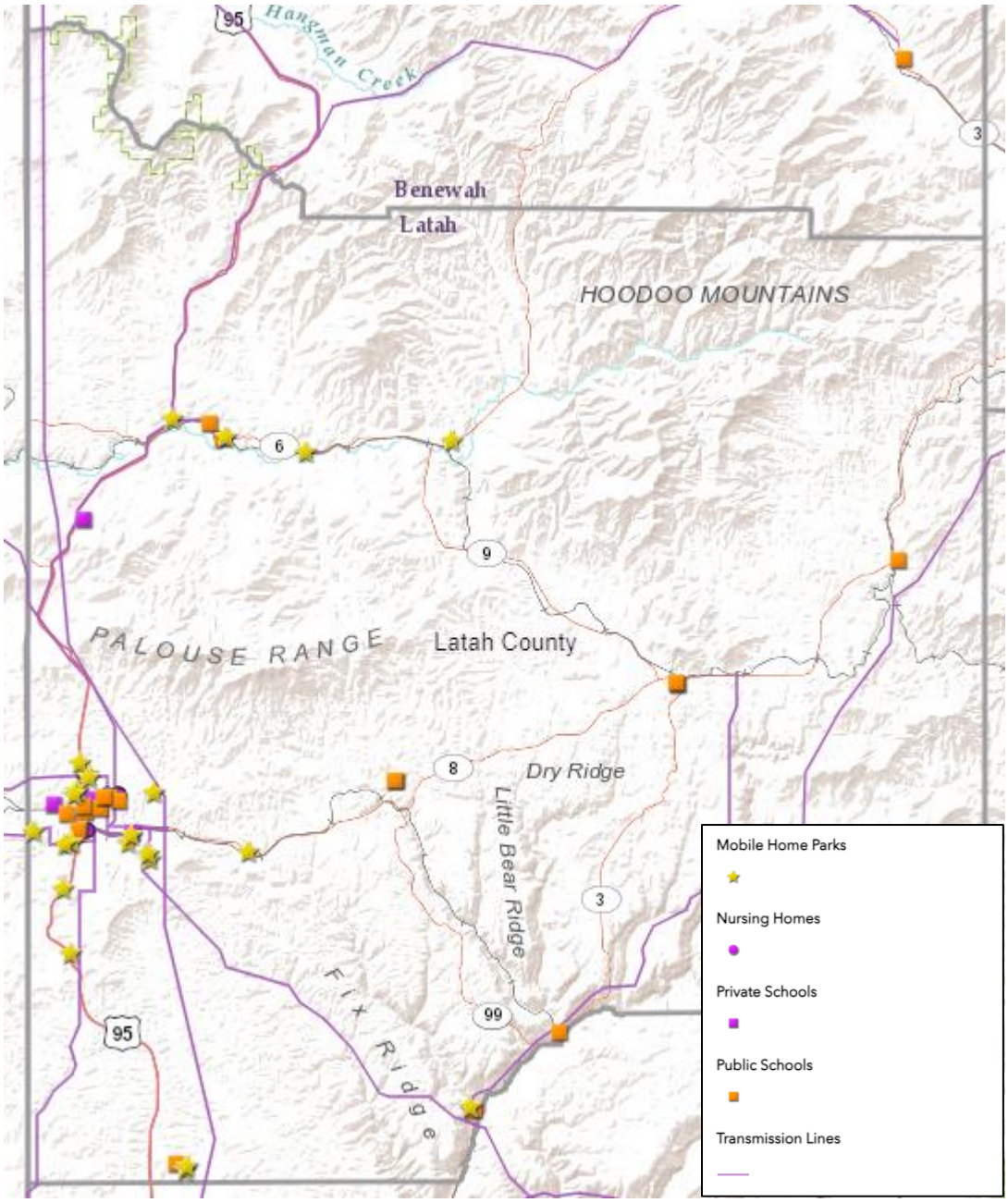


Figure 5-13. Key Assets Vulnerable to Severe Summer Weather

CHAPTER 6 SEVERE WINTER WEATHER

6.1 HAZARD DESCRIPTION

Severe winter weather includes extreme cold, winter storm, and avalanche. Severe winter weather can and does affect the entire county, and all critical facilities are susceptible to severe weather. It should be noted that straight-line wind is also associated with severe winter storms, commonly referred to as blizzard conditions, where snow is driven by wind-caused drifting.

6.2 RELATED HAZARDS

6.2.1 Extreme Cold

Hazard Description

"Extreme cold" is another of the terms describing hazards that must be defined relative to what is considered normal in a given locale. Extreme cold events are a concern, especially during the winter months, and can vary in intensity based on geographical location and local climate. Very cold temperatures become a particular hazard when accompanied by winds of 10 mph or greater. As with extreme heat, extreme cold is of greatest concern when the condition persists for an extended period of time.

Location

Extreme cold temperatures affect the entire county, including the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts.

Extent

The NWS has developed a formula for calculating wind chill based on temperature and wind speed and issues wind chill advisories in this region when the wind chill temperature is predicted to be -10°F or less with winds of 10 mph or higher for one hour or more. Wind chill warnings are issued when wind chill temperature will be -20°F or less with winds of 10 mph or higher for one hour or more (see the figure below).

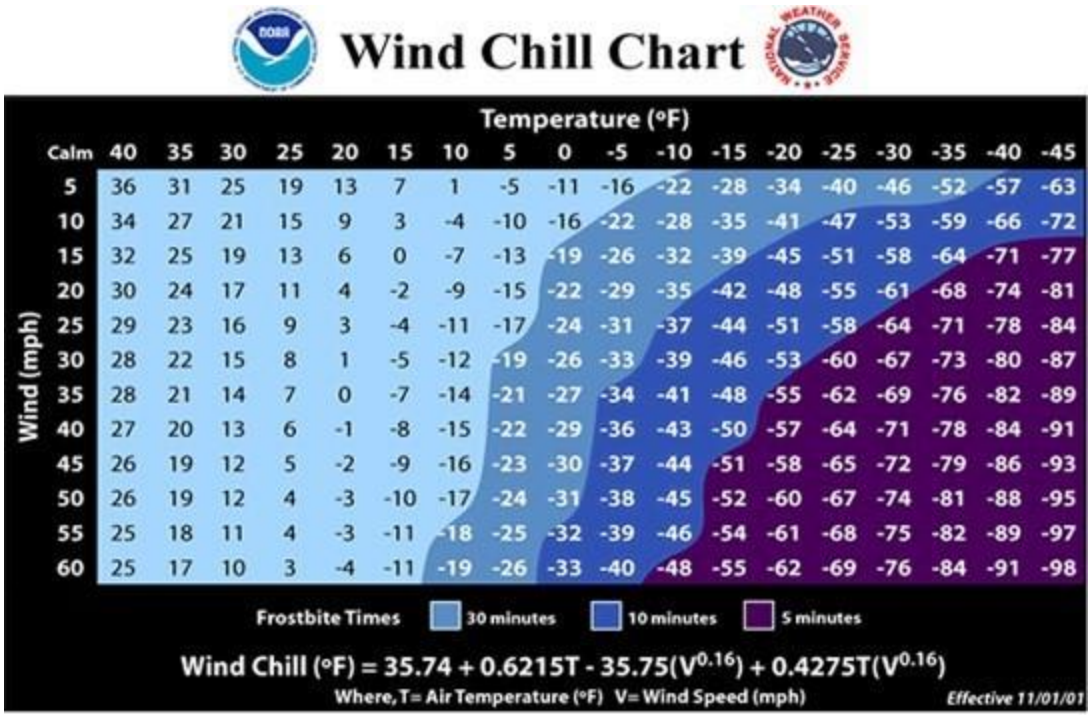


Figure 6-1. National Weather Service Wind Chill Chart

Historical Frequency & Probability of Future Occurrence

According to NWS available data, the record low temperature in the city of Moscow is -42°F, which was recorded in December 1968. The record low temperature in the city of Potlatch is -36°F in January 1937 (NOWData, 2025). January is historically the coldest month of the year in Latah County with an average temperature of 28.9°F in both Moscow and Potlatch (NOWData, 2025). Cold clusters are particularly damaging. In January 2017, Moscow experienced 11 days of the month with a low of 10°F or less. During the 25-year period from 2000–2024, Moscow recorded a total of 195 extreme cold days of 10°F or less (NOWData, 2025). The cities of Moscow and Potlatch are the only jurisdictions in Latah County with available climate data from the National Weather Service and thus were the only communities in Latah County analyzed for regular extreme cold events. However, most locations in the county experience similar levels of extreme cold and are likely to have multiple instances of extreme cold of 10°F or less each winter.

Impacts & Loss Estimates

Latah County and the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts may be impacted by extreme cold, as presented in the table below.

Table 6-1. Impacts of Extreme Cold by Jurisdiction

Jurisdiction	Impacted by Extreme Cold Events (≤ 10°F) Within Last 100 Years	Potential Impacts of Extreme Cold
Latah County	Yes	Hypothermia, frostbite, death, loss of crops/vegetation/livestock, burst pipes, flooding, utility losses, increased maintenance to infrastructure, school closures, economic losses (decreased tourism, increased energy costs, crop losses, etc.)
City of Bovill	Yes	Hypothermia, frostbite, death, loss of crops/vegetation/livestock, burst pipes, flooding, utility losses, increased maintenance to infrastructure, school closures, economic losses (decreased tourism, increased energy costs, crop losses, etc.)
City of Deary	Yes	Hypothermia, frostbite, death, loss of crops/vegetation/livestock, burst pipes, flooding, utility losses, increased maintenance to infrastructure, school closures, economic losses (decreased tourism, increased energy costs, crop losses, etc.)
City of Genesee	Yes	Hypothermia, frostbite, death, loss of crops/vegetation/livestock, burst pipes, flooding, utility losses, increased maintenance to infrastructure, school closures, economic losses (decreased tourism, increased energy costs, crop losses, etc.)
City of Juliaetta	Yes	Hypothermia, frostbite, death, loss of crops/vegetation/livestock, burst pipes, flooding, utility losses, increased maintenance to infrastructure, school closures, economic losses (decreased tourism, increased energy costs, crop losses, etc.)
City of Kendrick	Yes	Hypothermia, frostbite, death, loss of crops/vegetation/livestock, burst pipes, flooding, utility losses, increased maintenance to infrastructure, school closures, economic losses (decreased tourism, increased energy costs, crop losses, etc.)
City of Moscow	Yes	Hypothermia, frostbite, death, loss of crops/vegetation/livestock, burst pipes, flooding, utility losses, increased maintenance to infrastructure, school closures, economic losses (decreased tourism, increased energy costs, crop losses, etc.)
City of Potlatch	Yes	Hypothermia, frostbite, death, loss of crops/vegetation/livestock, burst pipes, flooding, utility losses, increased maintenance to infrastructure, school closures, economic losses (decreased tourism, increased energy costs, crop losses, etc.)
City of Troy	Yes	Hypothermia, frostbite, death, loss of crops/vegetation/livestock, burst pipes, flooding, utility losses, increased maintenance to infrastructure, school closures, economic losses (decreased tourism, increased energy costs, crop losses, etc.)

Health effects of exposure to extreme cold include hypothermia and frostbite, both of which can be life-threatening. Infants and the elderly are most susceptible. In the United States, approximately 1,300 deaths are attributed to hypothermia or cold exposure annually (Lane, 2018).

Extreme cold may cause loss of wildlife and vegetation and kill livestock and other domestic animals. Economic loss may result from flooding due to burst pipes, large demands on energy resources, and diminished business activity. River flooding may take place as a result of the formation of ice jams.

Extreme cold affects the individual, families, cities, and the county. Damage typically occurs to individual properties; however, city water systems are usually vulnerable to extreme cold. Repairs to water line freeze-ups and breaks typically require the roadways to be excavated, necessitating additional maintenance and repairs during the warmer months.

Extreme cold can cause death and injury especially to those working or stranded outside for prolonged periods. Economic loss is related to private individuals, businesses, and government agencies in heating homes and facilities. Additional losses can be expected to the livestock industry. During extreme cold periods the schools are closed to protect children traveling to and from school.

During the spring, summer, and fall, temperatures can drop low enough to produce frost. While such temperatures are not low enough to damage infrastructure or require extra heating costs, it can be devastating to crops. According to the EWG, $2,161,410 in crop indemnity payments were due to cold wet weather, cold winter, freeze, and frost in Latah County for the period of 1995–2023 (EWG, 2024). Extreme minimum temperatures can fall below freezing much of the fall, winter, and spring.

Table 6-2. Cold Wave: Expected Annual Loss for Latah County, ID | FEMA National Risk Index

Annualized Frequency	Population	Population Equivalence	Building Value	Agriculture Value	Total Value	Expected Annual Loss Score	Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County							
0.2 events per year	0.0	$12,308	$168	$5,403	$17,879	85.8	Relatively Moderate
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County							
0.1 events per year	0.0	$4,586	$73	$8,992	$13,651	82.3	Relatively Moderate
Census Tract 005500: City of Potlatch and Unincorporated Latah County							
0.2 events per year	0.0	$9,071	$126	$6,983	$16,180	84.5	Relatively Moderate
Census Tract 005102: City of Moscow and Unincorporated Latah County							
0.1 events per year	0.0	$5,467	$43	$553	$6,063	71.7	Relatively Moderate
Census Tract 005200: City of Moscow and Unincorporated Latah County							

Annualized Frequency	Population	Population Equivalence	Building Value	Agriculture Value	Total Value	Expected Annual Loss Score	Rating
0.1 events per year	0.0	$7,361	$49	$591	$8,000	75.1	Relatively Moderate
Census Tract 005400: City of Moscow and Unincorporated Latah County							
0.1 events per year	0.0	$6,698	$72	$879	$7,648	74.5	Relatively Moderate
Census Tract 005302: City of Moscow							
0.1 events per year	0.0	$6,203	$32	$4	$6,239	72.0	Relatively Moderate
Census Tract 005101: City of Moscow							
0.1 events per year	0.0	$3,365	$19	$99	$3,484	64.6	Relatively Low
Census Tract 005301: City of Moscow and Unincorporated Latah County							
0.1 events per year	0.0	$2,885	$22	$892	$3,799	65.7	Relatively Low

Annualized Frequency: The natural hazard annualized frequency is defined as the expected frequency or probability of a hazard occurrence per year. Annualized frequency is derived either from the number of recorded hazard occurrences each year over a given period or the modeled probability of a hazard occurrence each year.
Population: Population exposure is defined as the estimated number of people determined to be exposed to a hazard according to a hazard type-specific methodology.
Expected Annual Loss scores are calculated using an equation that combines values for exposure, annualized frequency, and historic loss ratios (Expected Annual Loss = Exposure x Annualized Frequency x Historic Loss Ratio).
Source: National Risk Index, 2025c; 2025d

Vulnerable Populations

There are many vulnerable populations in Latah County, including those in the table below. People with inadequate living conditions or shelter from the cold may be more vulnerable to extreme cold conditions. Additionally, those who cannot afford to sufficiently heat their homes may be at risk.

Table 6-3. Vulnerable Populations in Latah County

Vulnerability Category	Number	Percent
Families in poverty	665	8.8%
People with disabilities	4,862	12.3%
People over 65 years & living alone	1,521	9.5%
Single female households with children > 18 years	660	4.1%
Difficulty with English	87	0.2%
Households with no car	646	4.1%
Mobile homes	1,551	9.7%

Source: Headwaters Economics, 2025

As demonstrated in blue in the following map, Latah County's northern region is especially disadvantaged, and the southern portion of the county is seen as partially disadvantaged

(Climate and Economic Justice Screening Tool, 2025). This area has a large population of people living in rural communities, the majority of whom are low income and may lack resources to adequately shelter during extreme cold events or keep their home sufficiently heated.

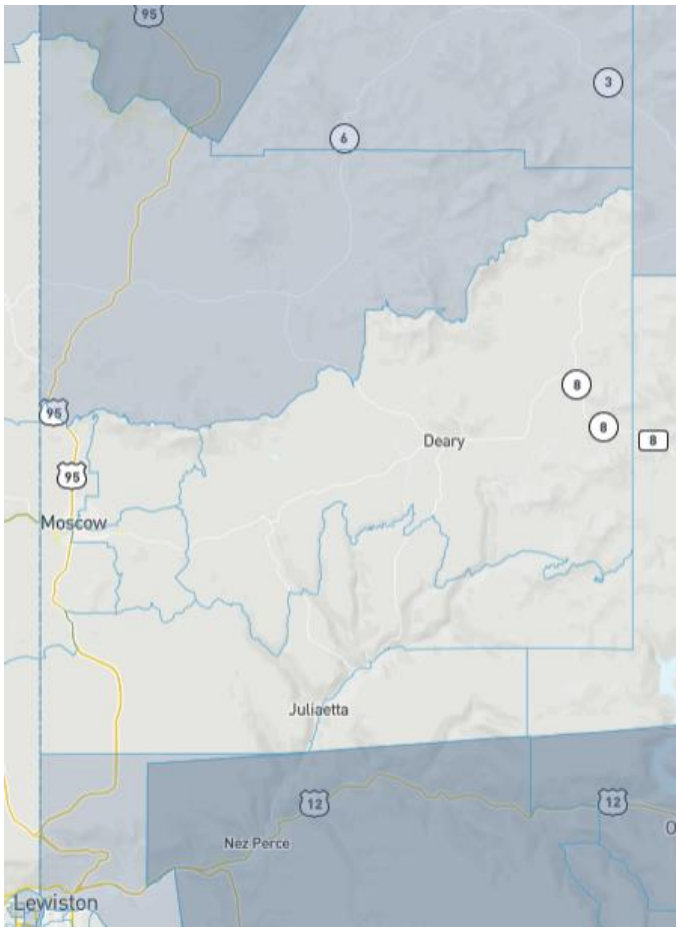
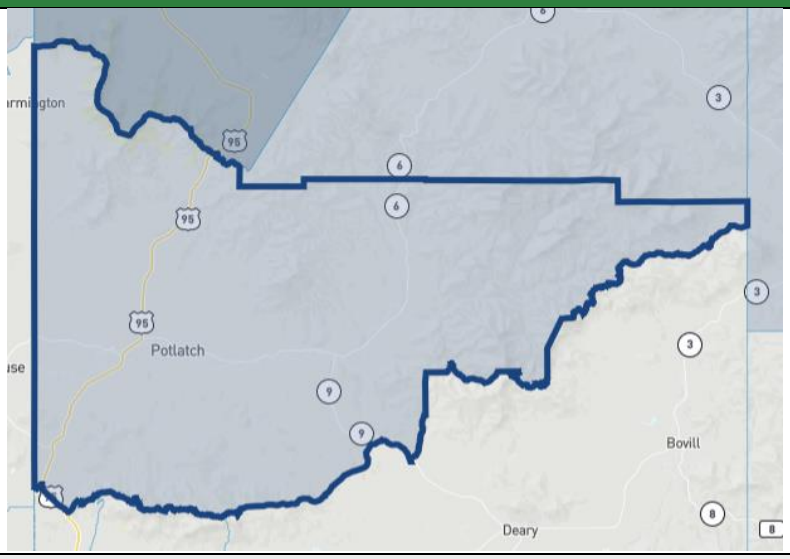


Figure 6-2. Map of Disadvantaged Communities in Latah County

The following table details the one completely disadvantaged census tract in Latah County along with the specific burdens and disadvantages the census tract experiences.

Table 6-4. Disadvantaged Communities in Latah County

LATAH COUNTY, ID		
CLIMATE & ECONOMIC JUSTICE SCREENING TOOL—DISADVANTAGED CENSUS TRACT		
CENSUS TRACT 2010 ID	**CENSUS TRACT POPULATION**	**LOW INCOME TRACT?**
16057005500	3,986	YES

LATAH COUNTY, ID	
	
CENSUS TRACT BURDENS: Transportation	
97th *% (above 90th percentile)*	*Average of relative cost and time spent on transportation*
65th *% (above 65th percentile)*	*People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed*
Source: U.S. Council on Environmental Quality—Climate & Economic Justice Screening Tool (2025)	

Extreme cold may cause significant damage to critical facilities in the county due to frozen or burst water lines. The following table lists types of critical facilities that could be negatively affected by damage from freeze-ups, which could delay emergency response.

Table 6-5. Critical Facility Types in Latah County

Critical Facility Type	Location
Fire Station	Potlatch
3 Fire Stations	Moscow
Fire Station	Genesee
Fire Station	Troy
Fire Station	Deary
Fire Station	Kendrick
Fire Station	Juliaetta
Fire Station	Bovill
3 Local Law Enforcement	Moscow
Local Law Enforcement	Troy
Hospital	Moscow
5 Nursing Homes	Moscow
2 Dialysis Centers	Moscow
7 Pharmacies	Moscow
Pharmacy	Potlatch
Public Health Department	Moscow
Wastewater Treatment Plant	Potlatch
Wastewater Treatment Plant	Viola
Wastewater Treatment Plant	Moscow

Critical Facility Type	Location
Wastewater Treatment Plant	Troy
Wastewater Treatment Plant	Juliaetta
Wastewater Treatment Plant	Kendrick
Wastewater Treatment Plant	Deary
Wastewater Treatment Plant	Bovill
Source: Resilience Analysis and Planning Tool, 2025	

Additionally, over 2.9 million Medicare beneficiaries in the U.S. rely on electricity-dependent durable medical and assistive equipment (DME) and devices to live independently in their homes, and some of those individuals also have health care service dependencies (HHS Empower Program, 2025). In Latah County, 7,203 people are beneficiaries of Medicare, and 323 of these beneficiaries are considered at-risk and would be vulnerable during a power outage.

Changes in Development and Impact to Future Development

According to the NOAA, extreme cold events can impact current and future development. In areas prone to such conditions, there is an increasing emphasis on constructing buildings and infrastructure that can withstand the rigors of extreme cold. This includes enhanced insulation, robust heating systems, and materials resistant to freezing and thawing cycles. Building codes are also being revised to incorporate these considerations, ensuring structures are not only energy-efficient but also resilient to cold-related damages, like burst pipes and ice accumulation. Urban planning is also focusing on ensuring essential services and transportation remain operational during severe cold events, and that communities (especially vulnerable populations) have access to adequate heating and emergency services.

The frequency and intensity of extreme cold events can potentially be exacerbated by climate change and are being factored into long-term development strategies. This involves planning for increased energy demands during cold snaps, incorporating sustainable and renewable energy sources, and developing emergency response protocols for cold weather events. Additionally, environmental considerations, such as the ecological impact of road salt and other ice-melting agents, are becoming a part of the planning process.

Effects of Climate Change on Probability of Future Events and Severity of Impacts

Climate change can lead to various effects on the severity of extreme cold events. While global temperatures are generally rising, shifts in atmospheric circulation patterns and disruptions in polar vortex behavior can contribute to more variable and severe cold weather in specific regions. These changes can result in intense cold snaps and frigid conditions, even during overall warming trends. Extreme cold events can have adverse effects on public safety, infrastructure, and agriculture (NOAA, 2021).

No jurisdictions in Latah County are uniquely affected by extreme cold, and all are adequately addressed at the county level.

The table below illustrates 25-year heat projections for Latah County, which may contribute to less frequent extreme cold events.

Table 6-6. Climate Projections for Latah County, ID | Neighborhoods at Risk 2025

Cold Projections	By 2050, Latah County is expected to experience 9 more days that reach above 95°F (from 10 days to 19 days per year).
	By 2050, Latah County is expected to have a 2°F increase (from 48°F to 50°F) in average annual temperatures.
	Increasing annual temperatures can contribute to less frequent extreme cold events.
Source: Neighborhoods at Risk, 2025	

FEMA NRI Score

Table 6-7. Cold Wave: Overall National Risk Index Score for Latah County, ID | FEMA National Risk Index

Risk Index Score	Risk Index Rating	Social Vulnerability Rating	Community Resilience Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County			
82.9	Relatively Moderate	Relatively Low	Relatively Low
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County			
80.7	Relatively Moderate	Relatively Low	Relatively Low
Census Tract 005500: City of Potlatch and Unincorporated Latah County			
85.5	Relatively Moderate	Relatively Moderate	Relatively Low
Census Tract 005102: City of Moscow and Unincorporated Latah County			
71.9	Relatively Moderate	Relatively Moderate	Relatively Low
Census Tract 005200: City of Moscow and Unincorporated Latah County			
74.4	Relatively Moderate	Relatively Low	Relatively Low
Census Tract 005400: City of Moscow and Unincorporated Latah County			
73.9	Relatively Moderate	Relatively Low	Relatively Low
Census Tract 005302: City of Moscow			
71.7	Relatively Moderate	Relatively Moderate	Relatively Low
Census Tract 005101: City of Moscow			
65.4	Relatively Low	Relatively Moderate	Relatively Low
Census Tract 005301: City of Moscow and Unincorporated Latah County			
60.1	Relatively Low	Very Low	Relatively Low
Risk Index scores are calculated using an equation that combines scores for Expected Annual Loss due to natural hazards, Social Vulnerability, and Community Resilience (Expected Annual Loss x Social Vulnerability / Community Resilience = Risk Index). Source: National Risk Index, 2025b; 2025d			

6.2.2 Winter Storm

Hazard Description

The NWS describes winter storm as weather conditions that produce heavy snow or significant ice accumulations. For the purposes of this analysis, a severe winter storm is defined as any winter condition where the potential exists for a blizzard (winds >/= 35mph and falling/drifting snow frequently reduce visibility < ¼ mile, for two hours or more), heavy snowfall (six inches or

more snowfall in 24 hours in the valleys; nine inches or more snowfall in 24 hours in the mountains), ice storm, and/or strong winds.

Location

Severe winter storms are a risk countywide and occur frequently, including in the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts.

Extent

The magnitude or severity of a severe winter storm depends on several factors, including a region's climatological susceptibility to snowstorms, snowfall amounts, snowfall rates, wind speeds, temperatures, visibility, storm duration, topography, time of occurrence during the day and week (e.g., weekday versus weekend), and time of season. Typically, the NOAA produces the Regional Snowfall Index (RSI) for significant snowstorms that impact the eastern two thirds of the U.S., but Idaho is not included in this scale and therefore not utilized in this assessment for Latah County.

Historical Frequency & Probability of Future Occurrence

According to the Storm Events Database, Latah County has had 356 instances of severe winter storm since 2010 (classified under "blizzard," "heavy snow," "winter storm," and "winter weather"). In the last five years (February 2020–February 2025), the county has experienced 45 winter storm events, many of which have occurred in the cities of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy and affected all participating special districts. The Central Panhandle Mountains receive the most winter storms in the county. Latah County will continue to experience multiple winter storms every year throughout the county, including in Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts.

Impacts & Loss Estimates

Latah County and the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts may be impacted by winter storms, as presented in the table below.

Table 6-8. Impacts of Winter Storm by Jurisdiction

Jurisdiction	Impacted by Winter Storms	Experienced Significant Winter Storm with $1,000+ in Damage Since 2010	Potential Impacts of Winter Storms
Latah County	Yes	Yes	Hypothermia, frostbite, death, low visibility, stranded vehicles/people, loss of crops/vegetation/livestock, burst pipes, flooding, utility losses, carbon monoxide poisoning, frozen

Jurisdiction	Impacted by Winter Storms	Experienced Significant Winter Storm with $1,000+ in Damage Since 2010	Potential Impacts of Winter Storms
			water, structure collapse, structure fire, increased maintenance to infrastructure, school/business closures, economic losses (decreased tourism, increased energy costs, crop losses, etc.), risk to emergency services
City of Bovill	Yes	No	Hypothermia, frostbite, death, low visibility, stranded vehicles/people, loss of crops/vegetation/livestock, burst pipes, flooding, utility losses, carbon monoxide poisoning, frozen water, structure collapse, structure fire, increased maintenance to infrastructure, school/business closures, economic losses (decreased tourism, increased energy costs, crop losses, etc.), risk to emergency services
City of Deary	Yes	No	Hypothermia, frostbite, death, low visibility, stranded vehicles/people, loss of crops/vegetation/livestock, burst pipes, flooding, utility losses, carbon monoxide poisoning, frozen water, structure collapse, structure fire, increased maintenance to infrastructure, school/business closures, economic losses (decreased tourism, increased energy costs, crop losses, etc.), risk to emergency services
City of Genesee	Yes	No	Hypothermia, frostbite, death, low visibility, stranded vehicles/people, loss of crops/vegetation/livestock, burst pipes, flooding, utility losses, carbon monoxide poisoning, frozen water, structure collapse, structure fire, increased maintenance to infrastructure, school/business closures, economic losses (decreased tourism, increased energy costs, crop losses, etc.), risk to emergency services
City of Juliaetta	Yes	No	Hypothermia, frostbite, death, low visibility, stranded vehicles/people, loss of crops/vegetation/livestock, burst pipes, flooding, utility losses, carbon monoxide poisoning, frozen water, structure collapse, structure fire, increased maintenance to infrastructure, school/business closures, economic losses (decreased tourism, increased energy costs, crop losses, etc.), risk to emergency services
City of Kendrick	Yes	No	Hypothermia, frostbite, death, low visibility, stranded vehicles/people, loss of crops/vegetation/livestock, burst pipes, flooding, utility losses, carbon monoxide poisoning, frozen water, structure collapse, structure fire, increased maintenance to infrastructure, school/business

Jurisdiction	Impacted by Winter Storms	Experienced Significant Winter Storm with $1,000+ in Damage Since 2010	Potential Impacts of Winter Storms
			closures, economic losses (decreased tourism, increased energy costs, crop losses, etc.), risk to emergency services
City of Moscow	Yes	No	Hypothermia, frostbite, death, low visibility, stranded vehicles/people, loss of crops/vegetation/livestock, burst pipes, flooding, utility losses, carbon monoxide poisoning, frozen water, structure collapse, structure fire, increased maintenance to infrastructure, school/business closures, economic losses (decreased tourism, increased energy costs, crop losses, etc.), risk to emergency services
City of Potlatch	Yes	No	Hypothermia, frostbite, death, low visibility, stranded vehicles/people, loss of crops/vegetation/livestock, burst pipes, flooding, utility losses, carbon monoxide poisoning, frozen water, structure collapse, structure fire, increased maintenance to infrastructure, school/business closures, economic losses (decreased tourism, increased energy costs, crop losses, etc.), risk to emergency services
City of Troy	Yes	No	Hypothermia, frostbite, death, low visibility, stranded vehicles/people, loss of crops/vegetation/livestock, burst pipes, flooding, utility losses, carbon monoxide poisoning, frozen water, structure collapse, structure fire, increased maintenance to infrastructure, school/business closures, economic losses (decreased tourism, increased energy costs, crop losses, etc.), risk to emergency services

The impacts of the very cold temperatures that may accompany a severe winter storm are discussed in the previous section. Other life-threatening impacts are numerous. Motorists may be stranded by road closures or may become trapped in their automobiles in heavy snow and/or low visibility conditions. Bad road conditions cause automobiles to go out of control. People can be trapped in homes or buildings for long periods of time without food, heat, and utilities. Those who are ill may be deprived of medical care by being stranded or through loss of utilities and lack of personnel at care facilities. Use of heaters in automobiles and buildings by those who are stranded may result in fires or carbon monoxide poisoning. Fires during winter storm conditions are a particular hazard because fire service response is hindered or prevented by road conditions and because water supplies may be frozen. Emergency Services may also not be available if telephone service is lost. People who attempt to walk to safety through winter storm conditions often become disoriented and lost. Downed power lines not only deprive the

community of electricity for heat and light but pose an electrocution hazard. Death and injury may also occur if heavy snow accumulation causes roofs to collapse. About 70% of winter storm-related fatalities occur in automobiles, while 25% are a result of people caught out in the elements.

The total economic impact in Idaho due to a winter storm is difficult to calculate, but the Storm Events Database records over $100 million in property damage in the state from winter storms since 1950. Economic impacts arise from numerous sources, including hindered transportation of goods and services; flooding due to burst water pipes; forced closing of businesses; inability of employees to reach the workplace; damage to homes and structures, automobiles, and other belongings by downed trees and branches; loss of livestock and vegetation; and many others. Loss of crops is also common. During the years 1995–2023, the EWG reported $4,560,999 in crop insurance indemnities due to cold wet weather, frost, freeze, and snow in Latah County (EWG, 2024).

Table 6-9. Ice Storm: Expected Annual Loss for Latah County, ID | FEMA National Risk Index

Annualized Frequency	Population	Population Equivalence	Building Value	Agriculture Value	Total Value	Expected Annual Loss Score	Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County							
0 events per year	0.0	$458	$62	N/A	$520	17.6	Very Low
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County							
0 events per year	0.0	$375	$53	N/A	$427	15.1	Very Low
Census Tract 005500: City of Potlatch and Unincorporated Latah County							
0.1 events per year	0.0	$1,426	$240	N/A	$1,666	41.4	Relatively Low
Census Tract 005102: City of Moscow and Unincorporated Latah County							
0 events per year	0.0	$592	$49	N/A	$641	20.5	Very Low
Census Tract 005200: City of Moscow and Unincorporated Latah County							
0 events per year	0.0	$797	$56	N/A	$853	25.6	Very Low
Census Tract 005400: City of Moscow and Unincorporated Latah County							
0 events per year	0.0	$725	$82	N/A	$807	24.6	Very Low
Census Tract 005302: City of Moscow							
0 events per year	0.0	$672	$36	N/A	$708	22.2	Very Low
Census Tract 005101: City of Moscow							
0 events per year	0.0	$364	$22	N/A	$387	14.0	Very Low
Census Tract 005301: City of Moscow and Unincorporated Latah County							
0 events per year	0.0	$312	$25	N/A	$337	12.5	Very Low

Annualized Frequency	Population	Population Equivalence	Building Value	Agriculture Value	Total Value	Expected Annual Loss Score	Rating
Annualized Frequency: The natural hazard annualized frequency is defined as the expected frequency or probability of a hazard occurrence per year. Annualized frequency is derived either from the number of recorded hazard occurrences each year over a given period or the modeled probability of a hazard occurrence each year. *Population: Population exposure is defined as the estimated number of people determined to be exposed to a hazard according to a hazard type-specific methodology.* *Expected Annual Loss scores are calculated using an equation that combines values for exposure, annualized frequency, and historic loss ratios (Expected Annual Loss = Exposure x Annualized Frequency x Historic Loss Ratio). Source: National Risk Index, 2025c; 2025d*							

Table 6-10. Winter Weather: Expected Annual Loss for Latah County, ID | FEMA National Risk Index

Annualized Frequency	Population	Population Equivalence	Building Value	Agriculture Value	Total Value	Expected Annual Loss Score	Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County							
14.8 events per year	0.0	$1,098	$2,807	$239	$4,143	72.5	Relatively Moderate
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County							
10 events per year	0.0	$567	$1,573	$484	$2,624	63.6	Relatively Moderate
Census Tract 005500: City of Potlatch and Unincorporated Latah County							
12.8 events per year	0.0	$926	$2,340	$354	$3,620	69.9	Relatively Moderate
Census Tract 005102: City of Moscow and Unincorporated Latah County							
6.6 events per year	0.0	$789	$1,188	$35	$2,013	58.1	Relatively Low
Census Tract 005200: City of Moscow and Unincorporated Latah County							
6.6 events per year	0.0	$1,062	$1,341	$38	$2,441	62.1	Relatively Moderate
Census Tract 005400: City of Moscow and Unincorporated Latah County							
6.6 events per year	0.0	$966	$1,984	$56	$3,006	66.3	Relatively Moderate
Census Tract 005302: City of Moscow							
6.6 events per year	0.0	$895	$875	$0	$1,771	55.5	Relatively Low
Census Tract 005101: City of Moscow							
6.6 events per year	0.0	$486	$536	$6	$1,028	45.2	Relatively Low
Census Tract 005301: City of Moscow and Unincorporated Latah County							
6.6 events per year	0.0	$416	$598	$57	$1,072	45.9	Relatively Low
Annualized Frequency: The natural hazard annualized frequency is defined as the expected frequency or probability of a hazard occurrence per year. Annualized frequency is derived either from the number of recorded hazard occurrences each year over a given period or the modeled probability of a hazard occurrence each year.							

Annualized Frequency	Population	Population Equivalence	Building Value	Agriculture Value	Total Value	Expected Annual Loss Score	Rating
Population: Population exposure is defined as the estimated number of people determined to be exposed to a hazard according to a hazard type-specific methodology. *Expected Annual Loss scores are calculated using an equation that combines values for exposure, annualized frequency, and historic loss ratios (Expected Annual Loss = Exposure x Annualized Frequency x Historic Loss Ratio).* *Source: National Risk Index, 2025c; 2025d*							

Vulnerable Populations

There are many vulnerable populations in Latah County, including those in the table below. People with inadequate living conditions or shelter from the cold and winter storms may be more vulnerable to winter conditions. Additionally, those who cannot afford to sufficiently heat their homes or transport themselves to a safe location may be at risk.

Table 6-11. Vulnerable Populations in Latah County

Vulnerability Category	Number	Percent
Families in poverty	665	8.8%
People with disabilities	4,862	12.3%
People over 65 years & living alone	1,521	9.5%
Single female households with children > 18 years	660	4.1%
Difficulty with English	87	0.2%
Households with no car	646	4.1%
Mobile homes	1,551	9.7%
Source: Headwaters Economics, 2025		

As demonstrated in blue in the following map, Latah County's northern region is especially disadvantaged, and the southern portion of the county is seen as partially disadvantaged (Climate and Economic Justice Screening Tool, 2025). This area has a large population of people living in rural communities, the majority of whom are low income and may lack resources to adequately shelter during winter storms or keep their homes sufficiently heated.

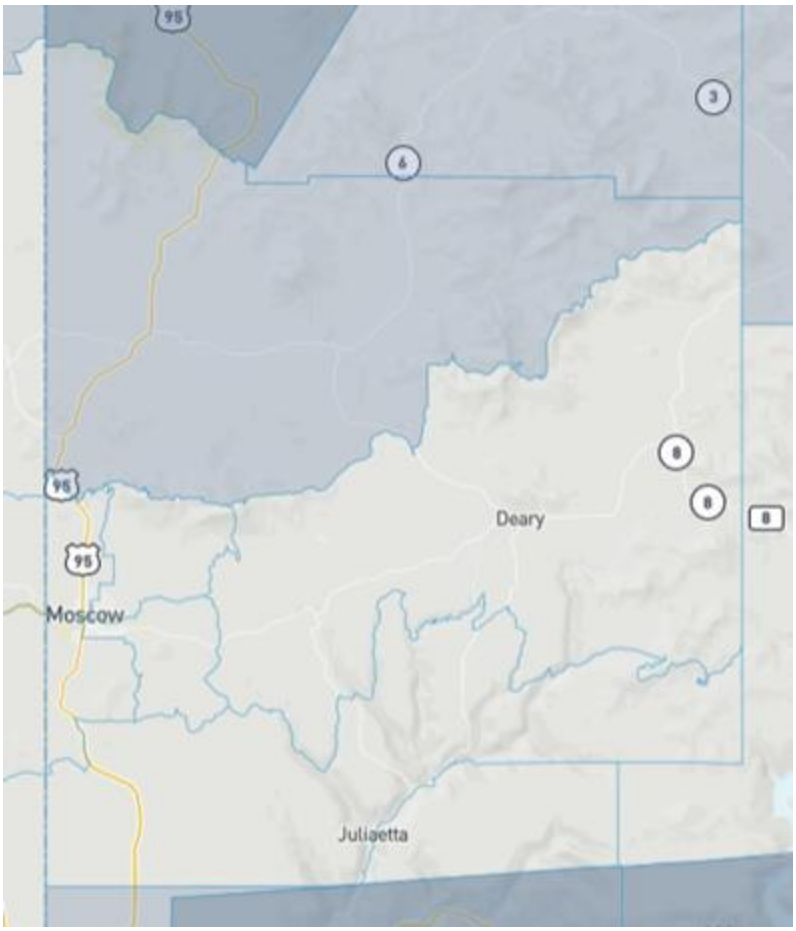
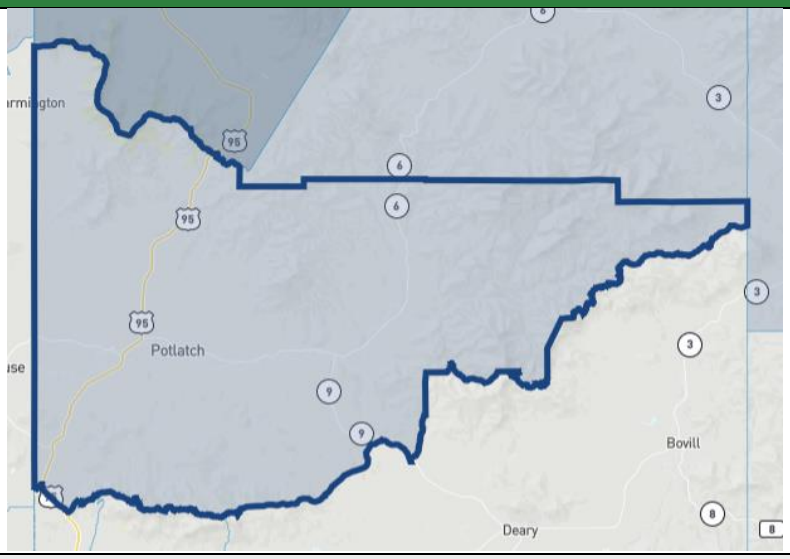


Figure 6-3. Map of Disadvantaged Communities in Latah County

The following table details the one completely disadvantaged census tract in Latah County along with the specific burdens and disadvantages the census tract experiences.

Table 6-12. Disadvantaged Communities in Latah County

LATAH COUNTY, ID		
CLIMATE & ECONOMIC JUSTICE SCREENING TOOL—DISADVANTAGED CENSUS TRACT		
CENSUS TRACT 2010 ID	**CENSUS TRACT POPULATION**	**LOW INCOME TRACT?**
16057005500	3,986	YES

LATAH COUNTY, ID	
	
CENSUS TRACT BURDENS: Transportation	
***97th** % (above 90th percentile)*	*Average of relative cost and time spent on transportation*
***65th** % (above 65th percentile)*	*People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed*
Source: U.S. Council on Environmental Quality—Climate & Economic Justice Screening Tool (2025)	

Winter storms may cause significant damage to critical facilities in the county due to frozen or burst water lines. High wind during winter storms may knock down power lines, as well, causing power outages. The following table lists types of critical facilities that could be negatively affected by damage from freeze-ups or power outages, which could delay emergency response and access to life-saving medical equipment.

Table 6-13. Critical Facility Types in Latah County

Critical Facility Type	Location
Fire Station	Potlatch
3 Fire Stations	Moscow
Fire Station	Genesee
Fire Station	Troy
Fire Station	Deary
Fire Station	Kendrick
Fire Station	Juliaetta
Fire Station	Bovill
3 Local Law Enforcement	Moscow
Local Law Enforcement	Troy
Hospital	Moscow
5 Nursing Homes	Moscow
2 Dialysis Centers	Moscow
7 Pharmacies	Moscow
Pharmacy	Potlatch
Public Health Department	Moscow

Critical Facility Type	Location
Wastewater Treatment Plant	Potlatch
Wastewater Treatment Plant	Viola
Wastewater Treatment Plant	Moscow
Wastewater Treatment Plant	Troy
Wastewater Treatment Plant	Juliaetta
Wastewater Treatment Plant	Kendrick
Wastewater Treatment Plant	Deary
Wastewater Treatment Plant	Bovill
Source: Resilience Analysis and Planning Tool, 2025	

Additionally, over 2.9 million Medicare beneficiaries in the U.S. rely on electricity-dependent durable medical and assistive equipment (DME) and devices to live independently in their homes, and some of those individuals also have health care service dependencies (HHS Empower Program, 2025). In Latah County, 7,203 people are beneficiaries of Medicare, and 323 of these beneficiaries are considered at-risk and would be vulnerable during a power outage.

Changes in Development and Impact to Future Development

According to the NOAA, winter storm events can impact changes in development and necessitate changes in current and future urban planning and construction. Winter storms, characterized by heavy snowfall, ice, freezing rain, and severe cold, can pose substantial challenges to infrastructure and buildings. In response, there is a growing emphasis on designing structures that are resilient to the weight of heavy snow and the potential damage from ice accumulation. This involves reinforcing roofs, using materials that can withstand freezing temperatures, and incorporating designs that minimize the accumulation of snow and ice. Finally, urban infrastructure, including roads, bridges, and public transit systems, needs to be designed or retrofitted to remain operational during and after winter storms, ensuring safety and accessibility.

As climate change potentially impacts the frequency and intensity of winter storms, these considerations become increasingly important in development planning. Communities are recognizing the need for comprehensive snow and ice management strategies, including efficient snow removal and environmentally safe de-icing methods. The planning for energy and heating systems that can cope with increased demand during winter storms is also crucial to prevent outages. Lastly, emergency response plans specific to winter conditions are being integrated into city planning to ensure swift and effective responses to winter storm events.

Effects of Climate Change on Probability of Future Events and Severity of Impacts

Climate change can impact the severity of winter storms in several ways. As the climate warms, it can lead to shifts in atmospheric circulation patterns and alterations in the behavior of jet streams, which influence the development and intensity of winter storms. These changes can result in more variable and extreme weather conditions, potentially leading to more severe

winter storms in some regions. Increased temperatures can also affect the phase of precipitation, causing more events with a higher likelihood of heavy snowfall. Lastly, warmer ocean temperatures can provide more moisture to storms, potentially leading to heavier snowfall or more significant icing in some areas (United Nations Office for Disaster Risk Reduction, 2023).

No jurisdictions in Latah County are uniquely affected by winter storms, and all are adequately addressed at the county level.

The table below illustrates 25-year precipitation projections for Latah County, which may contribute to increased severe winter storms.

Table 6-14. Climate Projections for Latah County, ID | Neighborhoods at Risk 2025

Precipitation Projections	By 2050, Latah County is expected to experience 0.3 more days of heavy precipitation per year (from 1.3 days to 1.6 days per year).
	By 2050, Latah County is expected to have a 1" increase (from 31" to 32") in average annual precipitation.
	Increased participation can lead to more frequent and severe winter storms.
Source: Neighborhoods at Risk, 2025	

FEMA NRI Score

Table 6-15. Ice Storm: Overall National Risk Index Score for Latah County, ID | FEMA National Risk Index

Risk Index Score	Risk Index Rating	Social Vulnerability Rating	Community Resilience Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County			
15.3	Very Low	Relatively Low	Relatively Low
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County			
14.1	Very Low	Relatively Low	Relatively Low
Census Tract 005500: City of Potlatch and Unincorporated Latah County			
43.4	Relatively Low	Relatively Moderate	Relatively Low
Census Tract 005102: City of Moscow and Unincorporated Latah County			
21.1	Very Low	Relatively Moderate	Relatively Low
Census Tract 005200: City of Moscow and Unincorporated Latah County			
24.5	Very Low	Relatively Low	Relatively Low
Census Tract 005400: City of Moscow and Unincorporated Latah County			
23.6	Very Low	Relatively Low	Relatively Low
Census Tract 005302: City of Moscow			
22.0	Very Low	Relatively Moderate	Relatively Low
Census Tract 005101: City of Moscow			
15.3	Very Low	Relatively Moderate	Relatively Low
Census Tract 005301: City of Moscow and Unincorporated Latah County			
8.9	Very Low	Very Low	Relatively Low
Risk Index scores are calculated using an equation that combines scores for Expected Annual Loss due to natural hazards, Social Vulnerability, and Community Resilience (Expected Annual Loss x Social Vulnerability / Community Resilience = Risk Index). Source: National Risk Index, 2025b; 2025d			

Table 6-16. Winter Weather: Overall National Risk Index Score for Latah County, ID | FEMA National Risk Index

Risk Index Score	Risk Index Rating	Social Vulnerability Rating	Community Resilience Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County			
68.5	Relatively Moderate	Relatively Low	Relatively Low
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County			
61.2	Relatively Moderate	Relatively Low	Relatively Low
Census Tract 005500: City of Potlatch and Unincorporated Latah County			
71.7	Relatively Moderate	Relatively Moderate	Relatively Low
Census Tract 005102: City of Moscow and Unincorporated Latah County			
58.3	Relatively Low	Relatively Moderate	Relatively Low
Census Tract 005200: City of Moscow and Unincorporated Latah County			
60.6	Relatively Moderate	Relatively Low	Relatively Low
Census Tract 005400: City of Moscow and Unincorporated Latah County			
65.1	Relatively Moderate	Relatively Low	Relatively Low
Census Tract 005302: City of Moscow			
54.8	Relatively Low	Relatively Moderate	Relatively Low
Census Tract 005101: City of Moscow			
46.5	Relatively Low	Relatively Moderate	Relatively Low
Census Tract 005301: City of Moscow and Unincorporated Latah County			
38.7	Relatively Low	Very Low	Relatively Low
Risk Index scores are calculated using an equation that combines scores for Expected Annual Loss due to natural hazards, Social Vulnerability, and Community Resilience (Expected Annual Loss x Social Vulnerability / Community Resilience = Risk Index). Source: National Risk Index, 2025b; 2025d			

6.2.3 Summary Assessment of Severe Winter Weather Vulnerability and Potential Losses

It is very difficult to estimate potential losses by jurisdiction for severe winter weather with the exception of avalanche. Several factors limit the planning team's ability to determine potential vulnerability and losses including:

- Lack of location research
- Most hazards are tied to weather and cannot be predicted by location
- Limited GIS data is available for severe winter weather in Idaho

Latah County and Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy's vulnerability to severe winter weather, to some extent, includes all structures, people, and businesses. Of note, those most vulnerable (see figure below) are at greatest risk to severe winter weather.

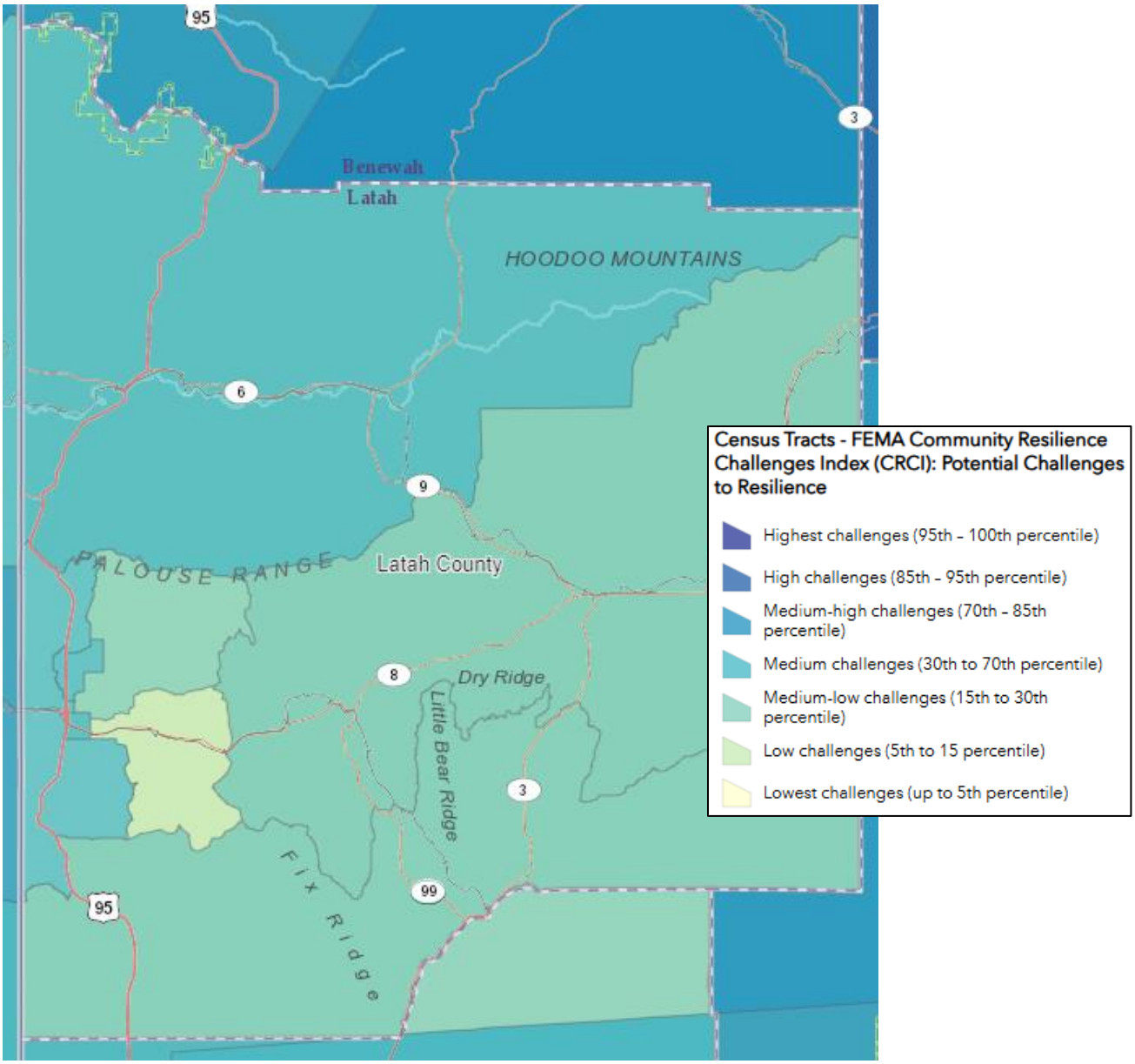


Figure 6-4. Populations with Potential Challenges to Severe Winter Weather

Table 6-17. Resilience and Analysis Planning Tool Challenge Variables

22 CHALLENGE VARIABLES			
Population, Household, Housing Characteristics	**Economic**	**Healthcare**	**Connection to Community**
Population without a High School Diploma Population 65 and Older Population with a Disability Households without a Vehicle Households with Limited English	Population Below Poverty Level Median Household Income Unemployed Labor Force Unemployed Women Labor Force	Number of Hospitals Medical Professional Capacity	Presence of Civic and Social Organizations Population without Religious Affiliation

Single-parent Households Households without a Smartphone Mobile Homes as Percentage of Housing Owner-Occupied Housing	Income Inequality Workforce in Predominant Sector	Population without Health Insurance	Percent of Inactive Voters Population Change
Source: FEMA Resilience Analysis and Planning Tool (RAPT) 2025			

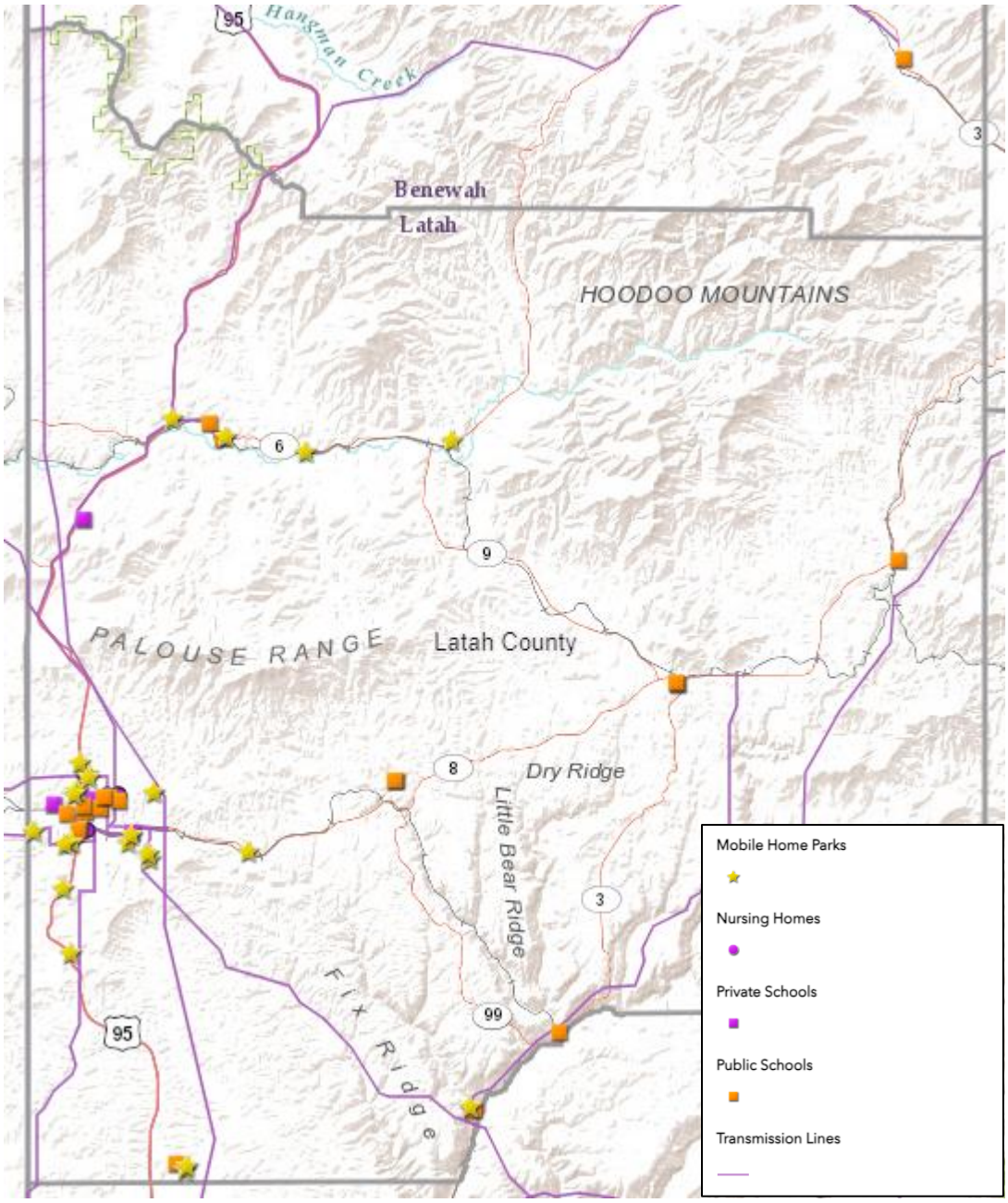


Figure 6-5. Key Assets Vulnerable to Severe Winter Weather

CHAPTER 7 WILDFIRE

7.1 HAZARD DESCRIPTION

Wildfires—uncontrolled fires spreading through both naturally occurring and non-native vegetative fuel sources—are a significant hazard, often beginning unnoticed and spreading quickly while threatening any structures in their path. Wildfires can cover a large geographic area, can be ignited by natural or human sources, and are hard to predict. They help to maintain a healthy ecosystem and have been a natural and fundamental part of the world's forests and grasslands for millions of years. Fires cleanse and regenerate forests, giving new life to the soil and encouraging biodiversity. They are responsible for the evolution of many of the grasses, brushes, and tree species found in Idaho.

Wildfires are classified as Wildland and Wildland-Urban Interface (WUI). Wildland fires occur in areas where development is essentially nonexistent except for roads, railroads, or power lines. WUI fires materialize in a geographical area where structures and other human development adjoins wildlands. A fireshed is an area that will adversely affect a community or high-value resource and/or asset if ignited.

7.2 LOCATION

On average in Idaho, years with more spring rainfall typically have higher wildfire incidents in the summer and fall after vegetation dries out and becomes combustible material. Moscow and the area around the city have the highest risk for wildfire due to its significant wildland-urban interface where structures are built in areas with continuous and abundant vegetative fuel loads. Hot temperatures, high winds, and dry conditions brought on by years of drought have caused high mortality rates in low elevation timber and shrubs, all contributing to prime fire conditions. Wildfires may occur in any part of Latah County, including in or around the cities of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts.

7.3 EXTENT

The National Wildfire Coordinating Group (NWCG) classifies fire sizes using the following standards (NWCG, 2025). These standard data values are included in the data table below.

Figure 7-1. NWCG Size Class of Fire

Historical variability in fire regime is an important indicator of ecosystem sustainability, which helps inform proper fire management and appropriate goals and objectives for an area. According to Latah County's Community Wildfire Protection Plan, "historical fire regimes are a critical component for characterizing the historical range of variability in fire-adapted ecosystems. Land managers need to understand how ecosystem processes and functions have changed prior to developing strategies to maintain or restore sustainable systems." The historic fire regime can be found below. Nearly 75% of Latah County falls within the Fire Regime Groups III and IV, which means most of the fuel types within the county historically burned every 35 to 200 years with low and mixed severity to replacement severity (Latah CWPP, 2023).

Group	Description	Percent of Total
Fire Regime Group I	<= 35 Year Fire Return Interval, Low and Mixed Severity	11%
Fire Regime Group II	<= 35 Year Fire Return Interval, Replacement Severity	14%
Fire Regime Group III	35 - 200 Year Fire Return Interval, Low and Mixed Severity	64%
Fire Regime Group IV	35 - 200 Year Fire Return Interval, Replacement Severity	10%
Fire Regime Group V	> 200 Year Fire Return Interval, Any Severity	<1%
Water	Water	<1%
Barren	Barren	<1%
Sparsely Vegetated	Sparsely Vegetated	0%
Indeterminate	Indeterminate Fire Regime Characteristics	1%

Figure 7-2. Historic Fire Regime

The wildfire hazard potential for each jurisdiction within Latah County, including the cities of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy, is shown in the maps below along with the city/county boundaries.

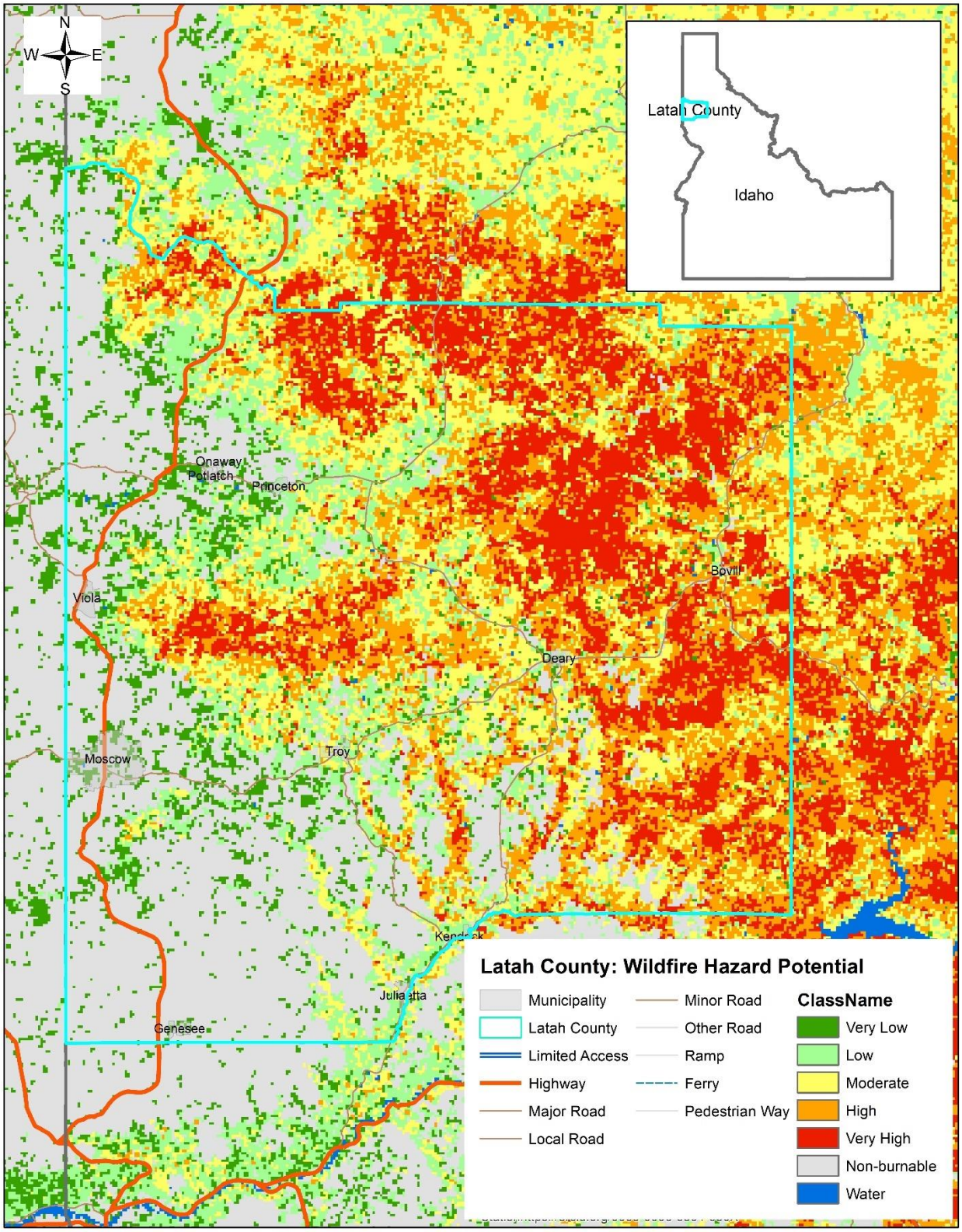


Figure 7-3. Latah County Wildfire Hazard Potential

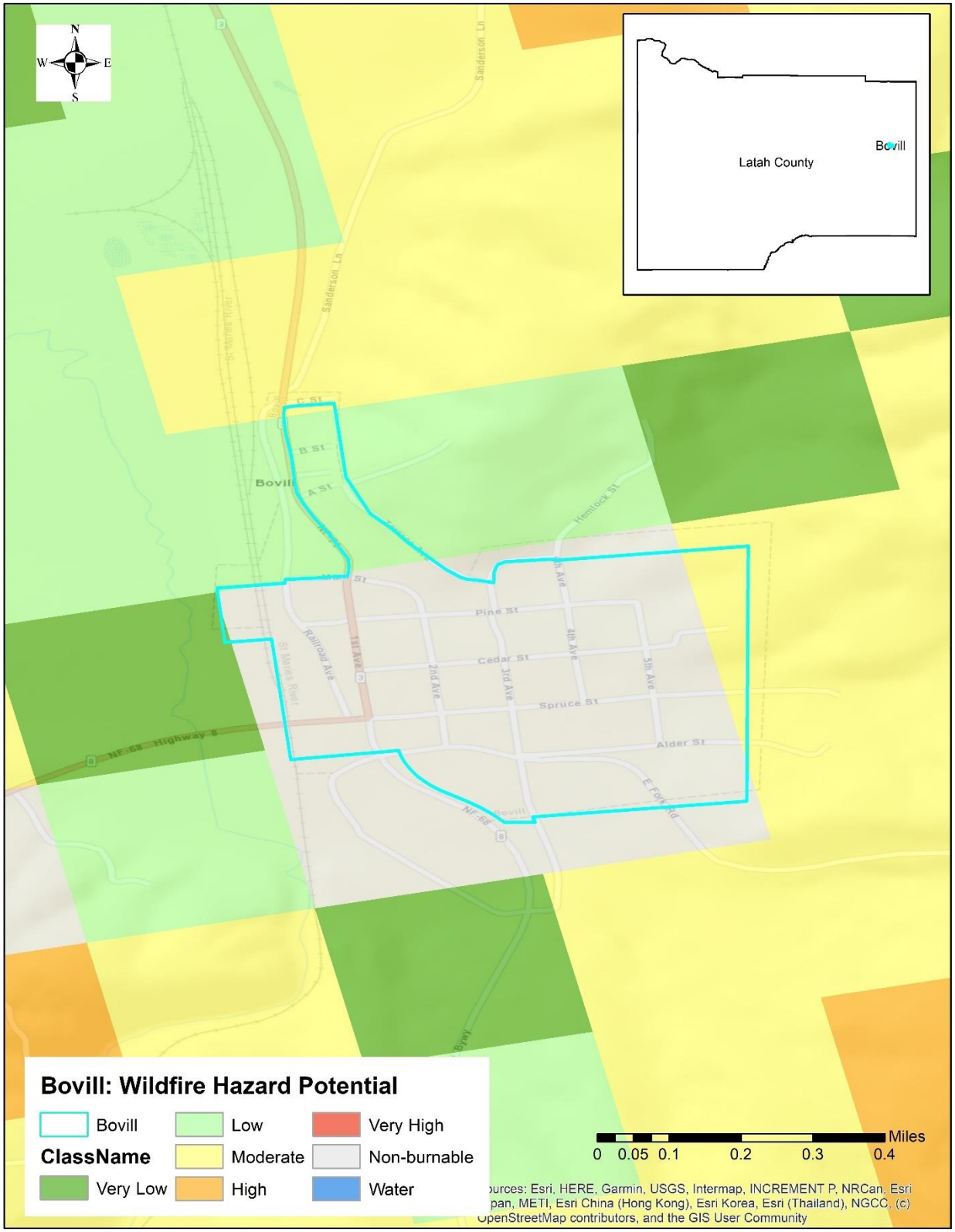


Figure 7-4. City of Bovill Wildfire Hazard Potential

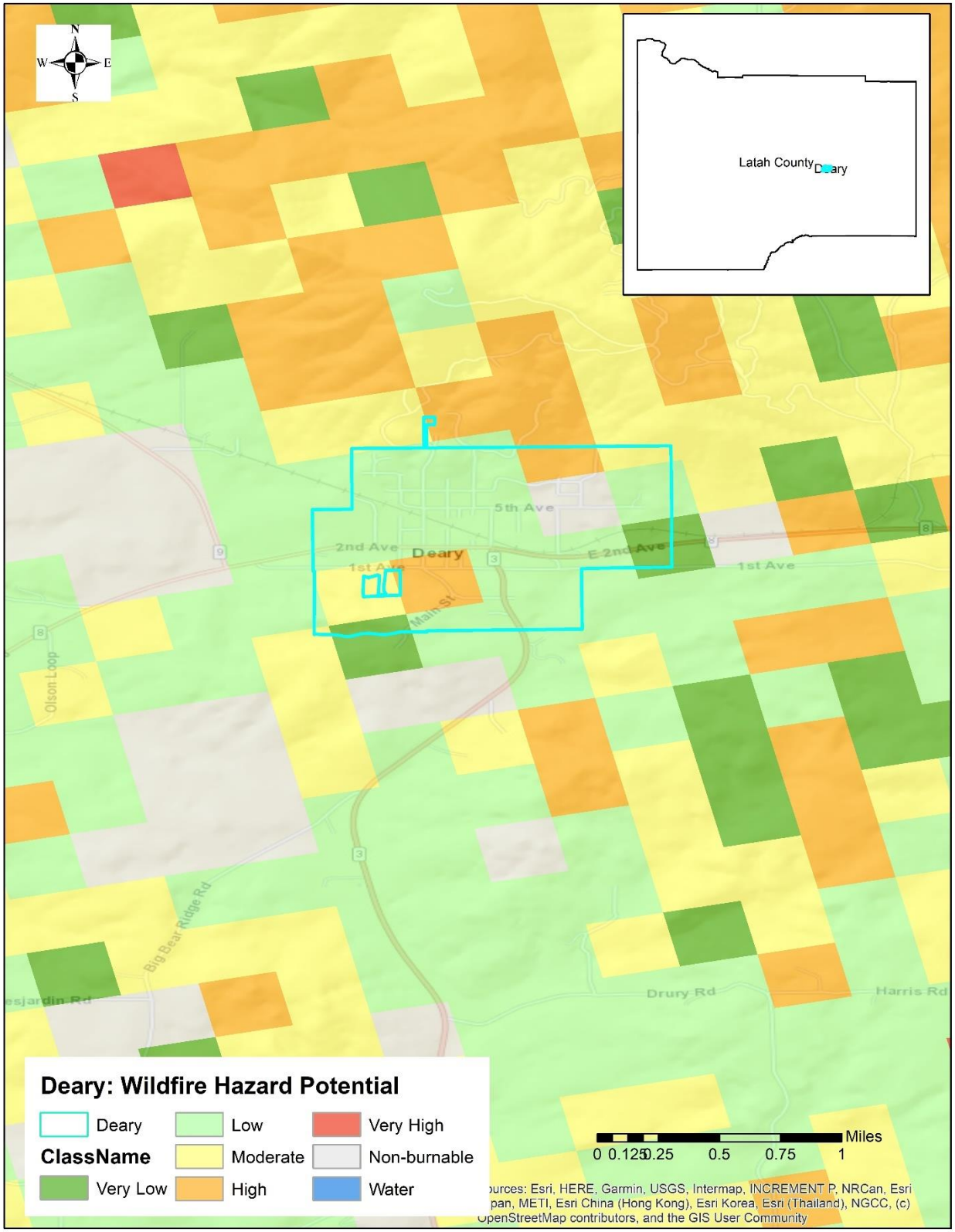


Figure 7-5. City of Deary Wildfire Hazard Potential

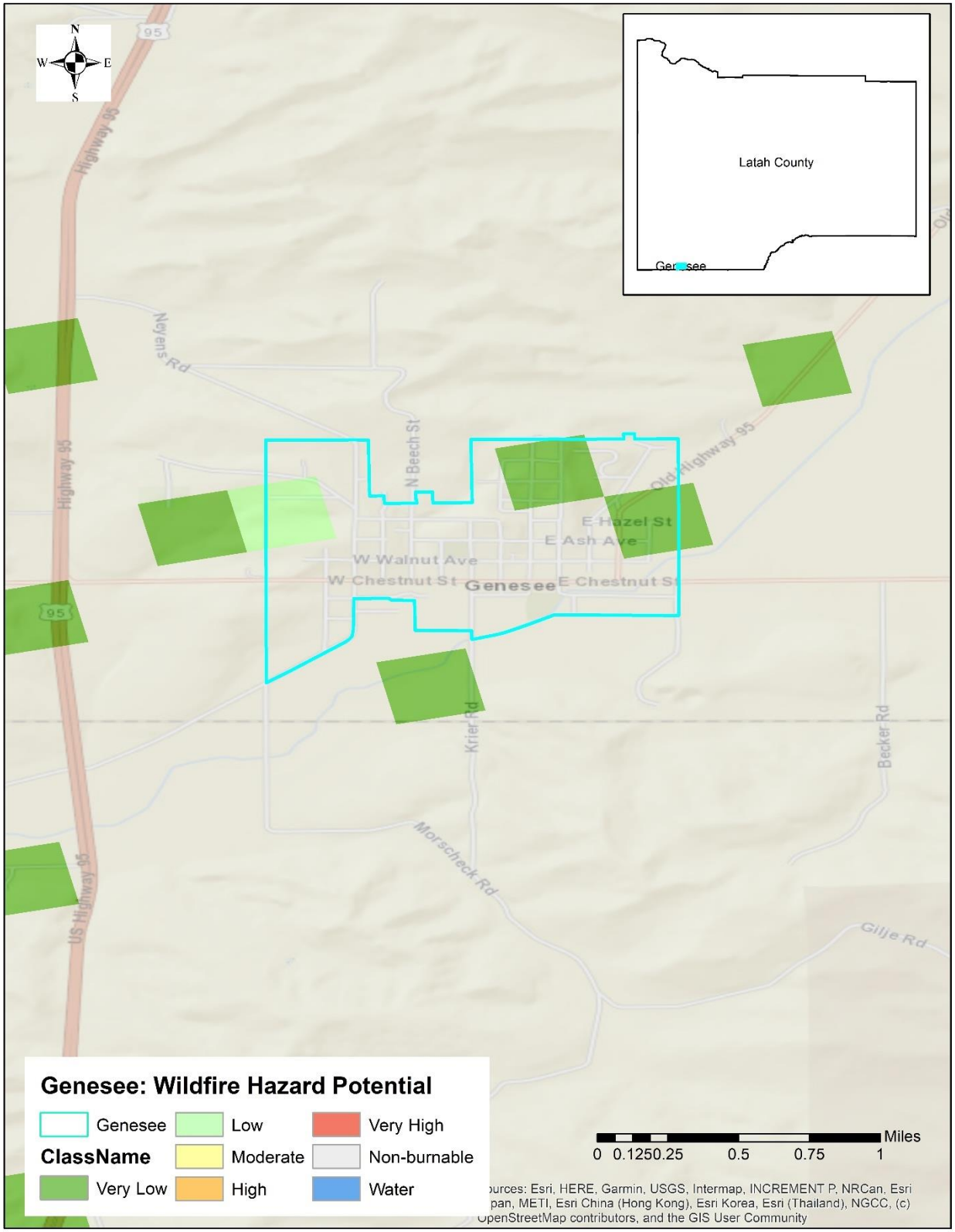


Figure 7-6. City of Genesee Wildfire Hazard Potential

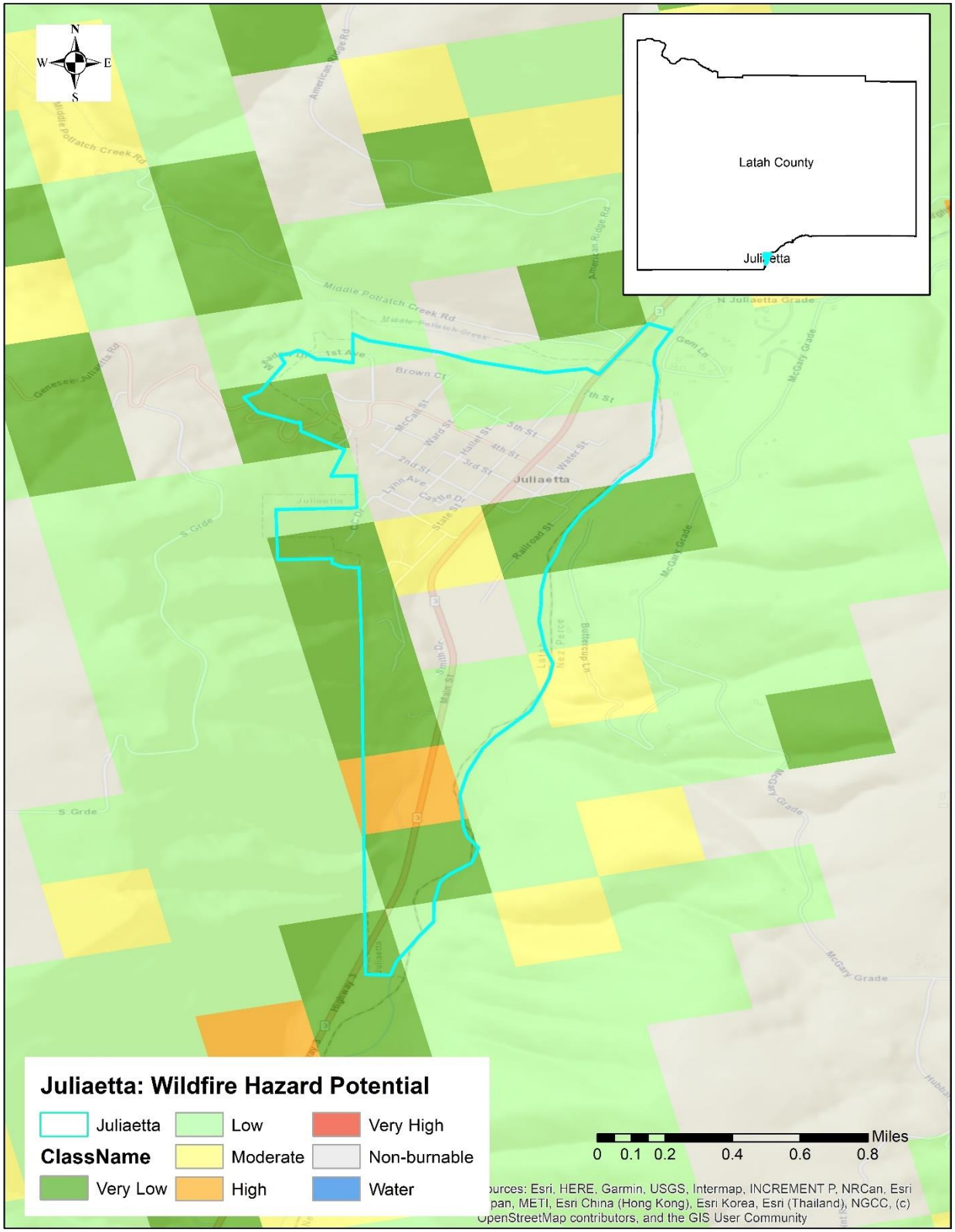


Figure 7-7. City of Juliaetta Wildfire Hazard Potential

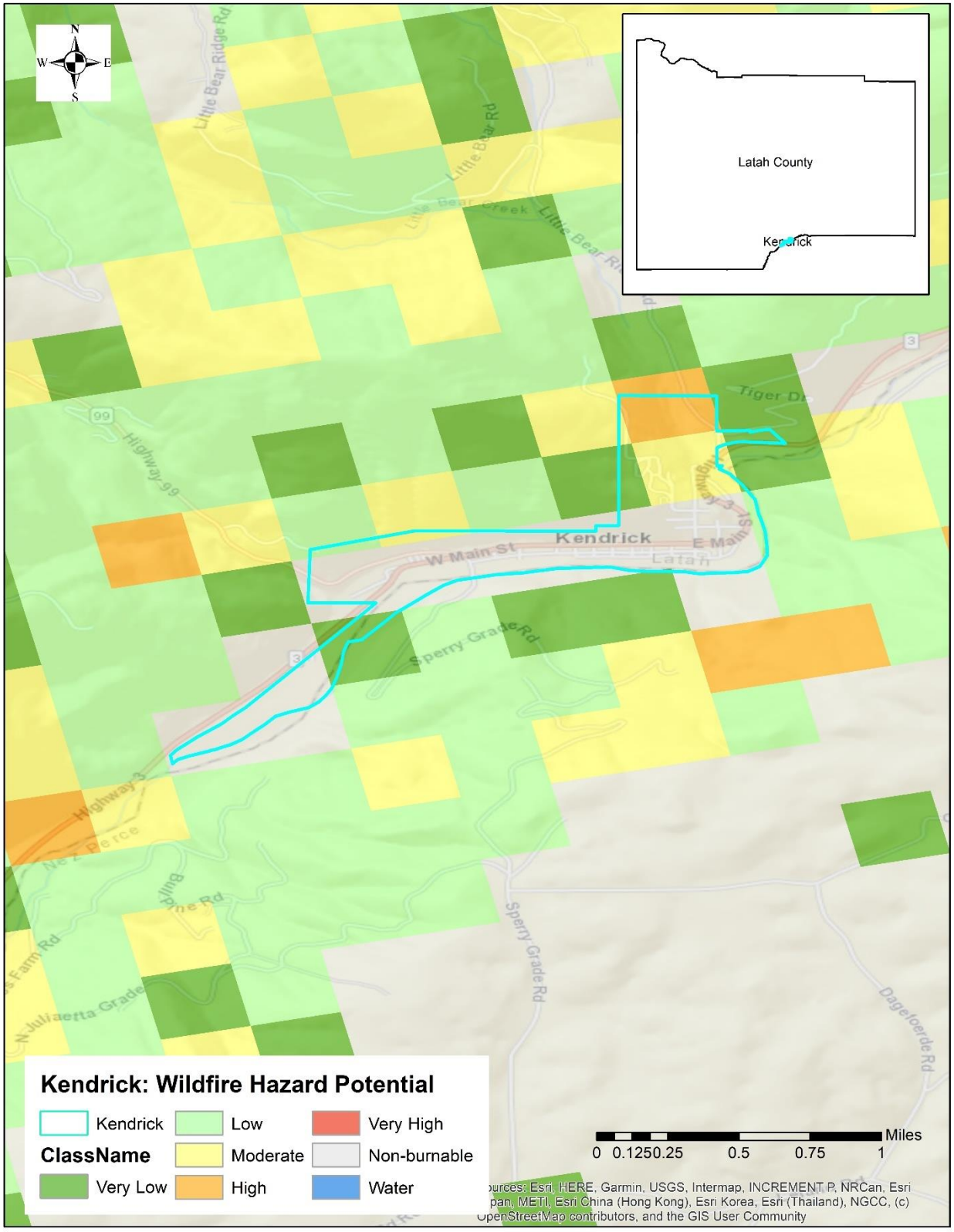


Figure 7-8. City of Kendrick Wildfire Hazard Potential

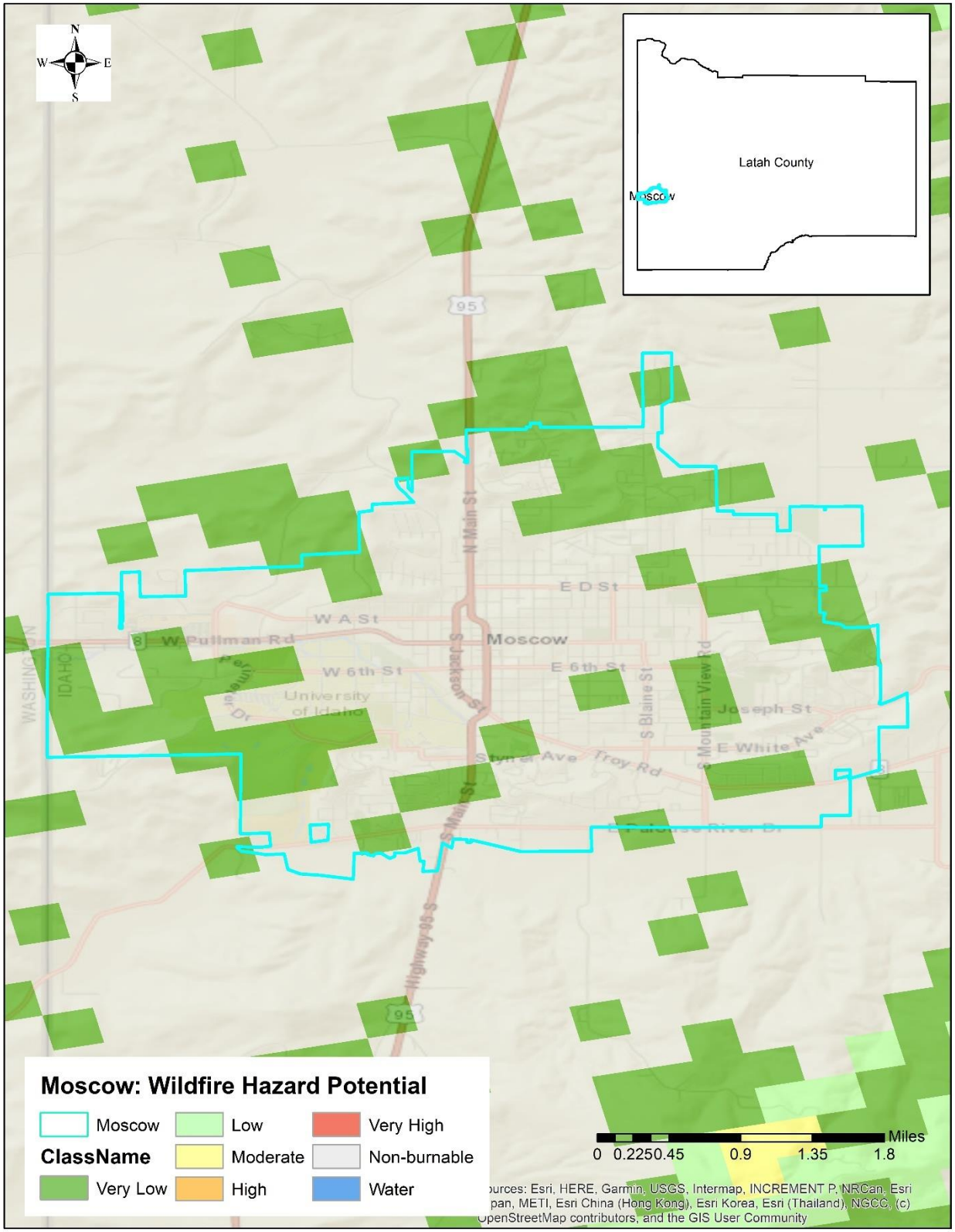


Figure 7-9. City of Moscow Wildfire Hazard Potential

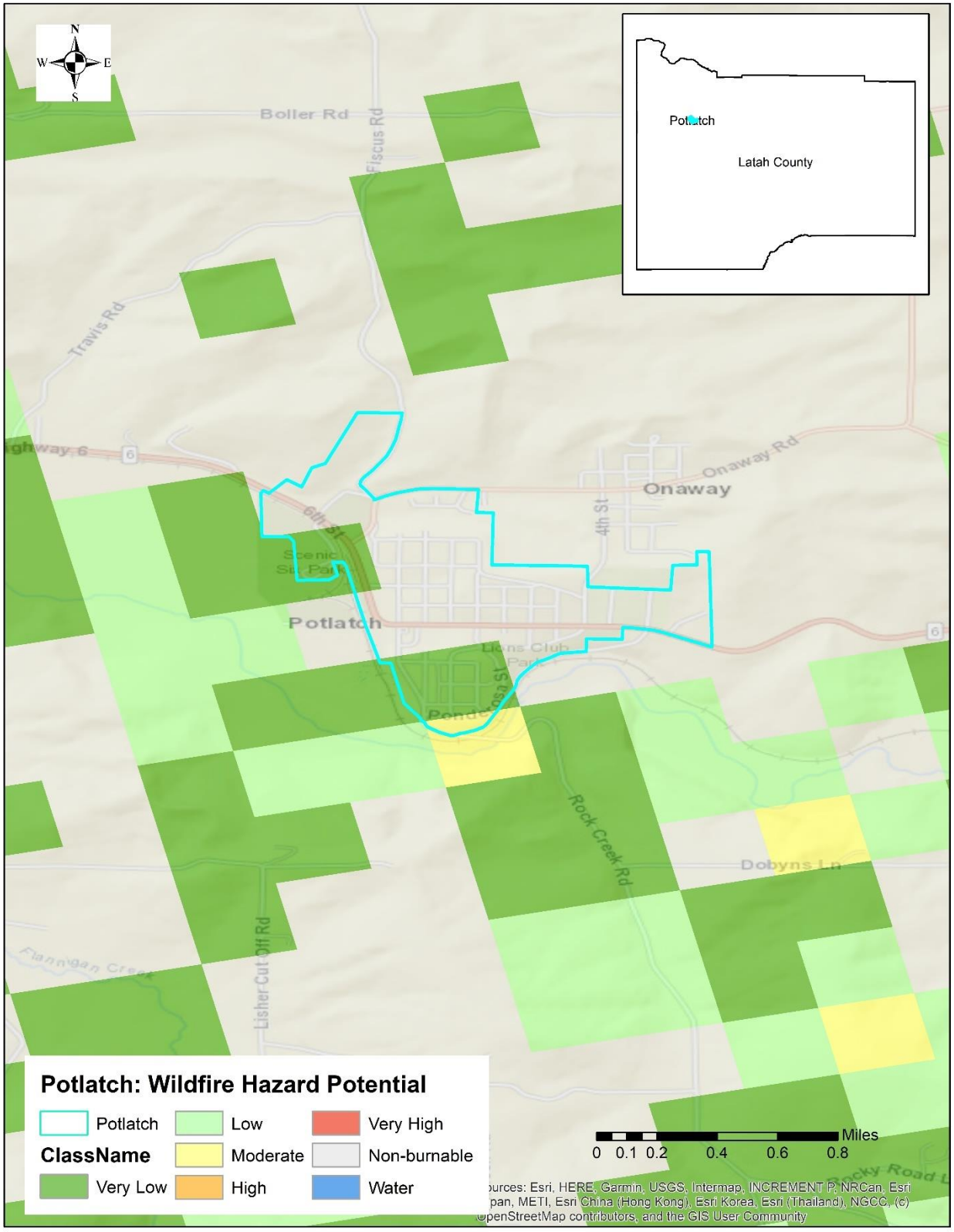


Figure 7-10. City of Potlatch Wildfire Hazard Potential

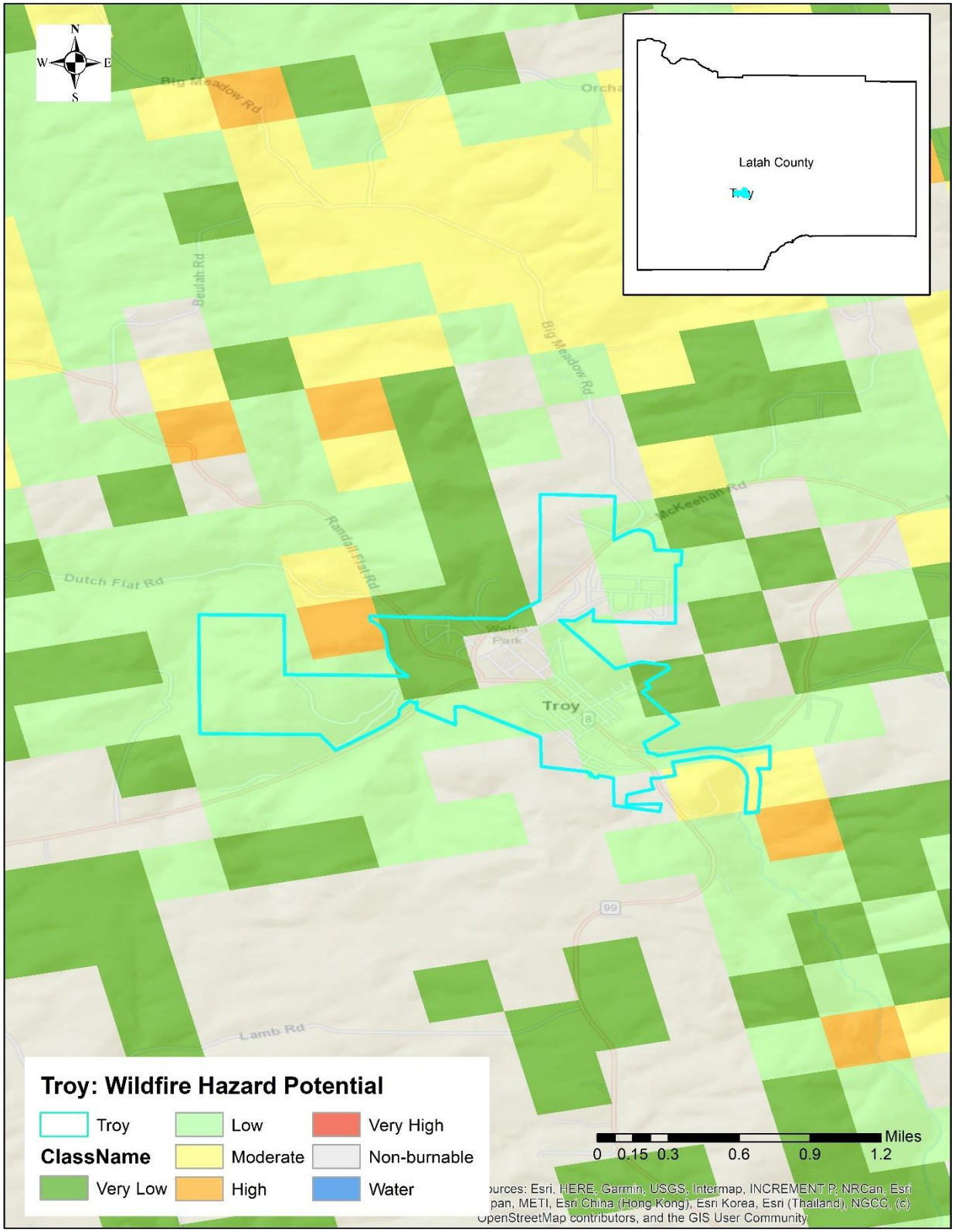


Figure 7-11. City of Troy Wildfire Hazard Potential

7.4 HISTORICAL FREQUENCY & PROBABILITY OF FUTURE OCCURRENCE

The state of Idaho experienced 209 reported wildfires over 97,504 acres in 2023 and 4,835 total fires, including structure and vehicle fires (DEQ, 2024; Idaho Fire Marshal, 2023). This is a 77% decrease in acreage burned compared to 417,000 acres in 2022 (DEQ, 2024). Of the total acreage burned, 53,317.51 acres were timber, 41,787.33 acres were rangeland, and 551.03 acres were cropland. There were 106 total fires in Latah County in 2023 (Idaho Fire Marshal, 2023). Over 51% of wildland fires in Latah County are started by lightning strikes (Latah Mitigation Plan, 2020).

Typically, several small wildfires of less than 100 acres occur each year in Latah County. While devastating wildfires occur less often in Latah County than in other parts of Idaho, one is still possible at any point during the dry season each year. Communities should always be prepared for a significant wildfire event, including the cities of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy, and all participating special districts. The 2024 wildfire season was especially significant for the state of Idaho and Latah County. The Texas Fire near Kendrick burned 1,582 acres, destroying four residences and six outbuildings. This fire was human-caused and began on July 15, 2024, lasting about a week (Big Country News, 2024). The Gwen Fire began July 24, 2024 and burned 28,820 acres in Latah and Nez Perce Counties. The fire was caused by a lightning strike south of Juliaetta and lasted nearly two weeks, destroying 38 homes and 122 outbuildings. No fatalities occurred in either fire (Big Country News, 2024).

Table 7-1. Significant Fires in Latah County

Date Discovered	Wildfire Name	Location	Size in Acres	Cause	Buildings Destroyed
09/03/2022	Prospect Fire	Harvard	291	Lightning	N/A
09/04/2017	N/A	Hoodoo Mountains	915	Unknown	N/A
07/15/2024	Texas Fire	Kendrick	1,582	Human-caused	10
07/24/2024	Gwen Fire	Juliaetta	28,820	Lightning	156
10/04/2024	Wallen Fire	Moscow	138	Unknown	0
Source: Big Country News, 2024					

The following table shows the number of fires and types of fires as well as any injuries and fatalities that occurred in 2023 for each fire department/district in Latah County, according to the Idaho Fire Marshal.

Table 7-2. Latah County 2023 Fires

Fire Department	Structure Fires	Vehicle Fires	Other Fires	Total Fires	Acres Burned	Injuries	Fatalities
Bovill Fire Protection	No reports submitted for 2023						
Deary Rural Fire District	3	0	4	7	41	1	0
Genesee City Fire Department	No reports submitted for 2023						

Fire Department	Structure Fires	Vehicle Fires	Other Fires	Total Fires	Acres Burned	Injuries	Fatalities
Genesee Rural Fire Protection District	No reports submitted for 2023						
Juliaetta Volunteer Fire Department	3	0	2	5	0	0	0
Kendrick Volunteer Fire Department	4	1	2	7	25	0	0
Moscow Rural Fire District	2	1	6	9	12.79	0	0
Moscow Volunteer Fire Department	33	6	11	50	2	0	0
Potlatch Rural Fire District	12	3	8	23	5	0	0
Troy Volunteer Fire Department	3	0	2	5	75	0	0
Source: Idaho Fire Marshal, 2023							

7.5 IMPACTS & LOSS ESTIMATES

Latah County and the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts may be impacted by wildfire, as presented in the table below.

Table 7-3. Impacts of Wildfire by Jurisdiction

Jurisdiction	Impacted by Wildfire	Experienced Significant Wildfire with $1,000+ in Damage Since 2010	Fatalities Due to Wildfire	Potential Impacts of Wildfire
Latah County	Yes	Yes	0	Injury, burns, smoke inhalation, death, property damage, crop/vegetation/livestock losses, road closures, firefighting expenses, loss of utilities, fallen trees, downed power lines, mass evacuations, risk to emergency services, economic losses
City of Bovill	Yes	No	0	Injury, burns, smoke inhalation, death, property damage, crop/vegetation/livestock losses, road closures, firefighting expenses, loss of utilities, fallen trees, downed power lines, mass evacuations, risk to emergency services, economic losses
City of Deary	Yes	No	0	Injury, burns, smoke inhalation, death, property damage, crop/vegetation/livestock losses, road

Jurisdiction	Impacted by Wildfire	Experienced Significant Wildfire with $1,000+ in Damage Since 2010	Fatalities Due to Wildfire	Potential Impacts of Wildfire
				closures, firefighting expenses, loss of utilities, fallen trees, downed power lines, mass evacuations, risk to emergency services, economic losses
City of Genesee	Yes	No	0	Injury, burns, smoke inhalation, death, property damage, crop/vegetation/livestock losses, road closures, firefighting expenses, loss of utilities, fallen trees, downed power lines, mass evacuations, risk to emergency services, economic losses
City of Juliaetta	Yes	Yes	0	Injury, burns, smoke inhalation, death, property damage, crop/vegetation/livestock losses, road closures, firefighting expenses, loss of utilities, fallen trees, downed power lines, mass evacuations, risk to emergency services, economic losses
City of Kendrick	Yes	Yes	0	Injury, burns, smoke inhalation, death, property damage, crop/vegetation/livestock losses, road closures, firefighting expenses, loss of utilities, fallen trees, downed power lines, mass evacuations, risk to emergency services, economic losses
City of Moscow	Yes	Yes	0	Injury, burns, smoke inhalation, death, property damage, crop/vegetation/livestock losses, road closures, firefighting expenses, loss of utilities, fallen trees, downed power lines, mass evacuations, risk to emergency services, economic losses
City of Potlatch	Yes	No	0	Injury, burns, smoke inhalation, death, property damage, crop/vegetation/livestock losses, road closures, firefighting expenses, loss of utilities, fallen trees, downed power lines, mass evacuations, risk to emergency services, economic losses
City of Troy	Yes	No	0	Injury, burns, smoke inhalation, death, property damage, crop/vegetation/livestock losses, road closures, firefighting expenses, loss of utilities, fallen trees, downed power lines, mass evacuations, risk to emergency services, economic losses

Total losses to physical infrastructure as well as widespread destruction of agriculture is possible when a wildfire occurs in an area with favorable conditions. An estimate of potential losses is difficult to determine due to the unpredictability of wildfire behavior and the nature of ignition sources.

Natural resources are also at risk to wildfire, including the 109,064 acres of forest assets. Cheatgrass has encroached on land throughout the county due to development of the land, which is highly flammable and supports fire during months of the year and under conditions that native vegetation would not have sustained. Agriculture accounts for approximately 28% of the land cover within the county and would impact the county's economy significantly if destroyed in a wildfire (Latah CWPP, 2023). The communities and areas surrounding Genesee, Moscow, Potlatch, and Princeton have been almost completely developed for agricultural purposes. Deary, Troy, Harvard, and Bovill are located in the higher forested region in the north, which contains a large amount of both live and dead and down fuels (Latah CWPP, 2023). Drinking water supply may also be affected by wildfire.

Fatalities from wildfire in Idaho are relatively uncommon, with 22 recorded deaths since 1950. Zero deaths have occurred in Latah County due to wildfire, but one firefighter injury was reported in 2023 (Idaho Fire Marshal, 2023).

Specific total dollar loss for wildfires in the county is not known, but the Idaho Fire Marshal reported $1,677,020 in total dollar loss for all fires (structures and vehicles included) in Latah County in 2023. Data was submitted by Deary Rural Fire District, Juliaetta Volunteer Fire Department, Kendrick Volunteer Fire Department, Moscow Rural Fire Department, Moscow Volunteer Fire Department, Potlatch Rural Fire District, and Troy Volunteer Fire Department (Idaho Fire Marshal, 2023).

Table 7-4. Wildfire: Expected Annual Loss for Latah County, ID | FEMA National Risk Index

Annualized Frequency	Population	Population Equivalence	Building Value	Agriculture Value	Total Value	Expected Annual Loss Score	Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County							
0.263% chance per year	0.0	$82	$433,597	$52	$433,732	98.1	Relatively High
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County							
0.125% chance per year	0.0	$16	$125,741	$10	$125,767	94.9	Relatively Moderate
Census Tract 005500: City of Potlatch and Unincorporated Latah County							
0.075% chance	0.0	$24	$121,192	$7	$121,223	94.8	Relatively Moderate
Census Tract 005102: City of Moscow and Unincorporated Latah County							

Annualized Frequency	Population	Population Equivalence	Building Value	Agriculture Value	Total Value	Expected Annual Loss Score	Rating
0.012% chance per year	0.0	$2	$4,665	$0	$4,667	80.6	Relatively Low
Census Tract 005200: City of Moscow and Unincorporated Latah County							
0.043% chance per year	0.0	$3	$13,480	$1	$13,484	85.7	Relatively Moderate
Census Tract 005400: City of Moscow and Unincorporated Latah County							
0.032% chance per year	0.0	$3	$8,195	$0	$8,198	83.4	Relatively Low
Census Tract 005302: City of Moscow							
Less than 0.0001% chance per year	0.0	$0	$587	$0	$587	58.1	Relatively Low
Census Tract 005101: City of Moscow							
0.010% chance per year	0.0	$0	$584	$0	$584	58.0	Relatively Low
Census Tract 005301: City of Moscow and Unincorporated Latah County							
0.049% chance	0.0	$1	$4,348	$1	$4,350	80.3	Relatively Low

Annualized Frequency: The natural hazard annualized frequency is defined as the expected frequency or probability of a hazard occurrence per year. Annualized frequency is derived either from the number of recorded hazard occurrences each year over a given period or the modeled probability of a hazard occurrence each year.
Population: Population exposure is defined as the estimated number of people determined to be exposed to a hazard according to a hazard type-specific methodology.
Expected Annual Loss scores are calculated using an equation that combines values for exposure, annualized frequency, and historic loss ratios (Expected Annual Loss = Exposure x Annualized Frequency x Historic Loss Ratio).
Source: National Risk Index, 2025c; 2025d

Vulnerable Populations

There are many vulnerable populations in Latah County, including those in the table below. Potentially vulnerable populations may experience difficulty preparing for and responding to wildfire.

Table 7-5. Vulnerable Populations in Latah County

Vulnerability Category	Number	Percent
Families in poverty	665	8.8%
People with disabilities	4,862	12.3%
People over 65 years & living alone	1,521	9.5%
Single female households with children > 18 years	660	4.1%
Difficulty with English	87	0.2%

Vulnerability Category	Number	Percent
Households with no car	646	4.1%
Mobile homes	1,551	9.7%
Source: Headwaters Economics, 2025		

As demonstrated in blue in the following map, Latah County's northern region is especially disadvantaged, and the southern portion of the county is seen as partially disadvantaged (Climate and Economic Justice Screening Tool, 2025). This area has a large population of people living in rural communities, the majority of whom are low income and may lack resources to adequately respond to a wildfire. This region is also extremely rural, making quick communication difficult in the event of an evacuation.

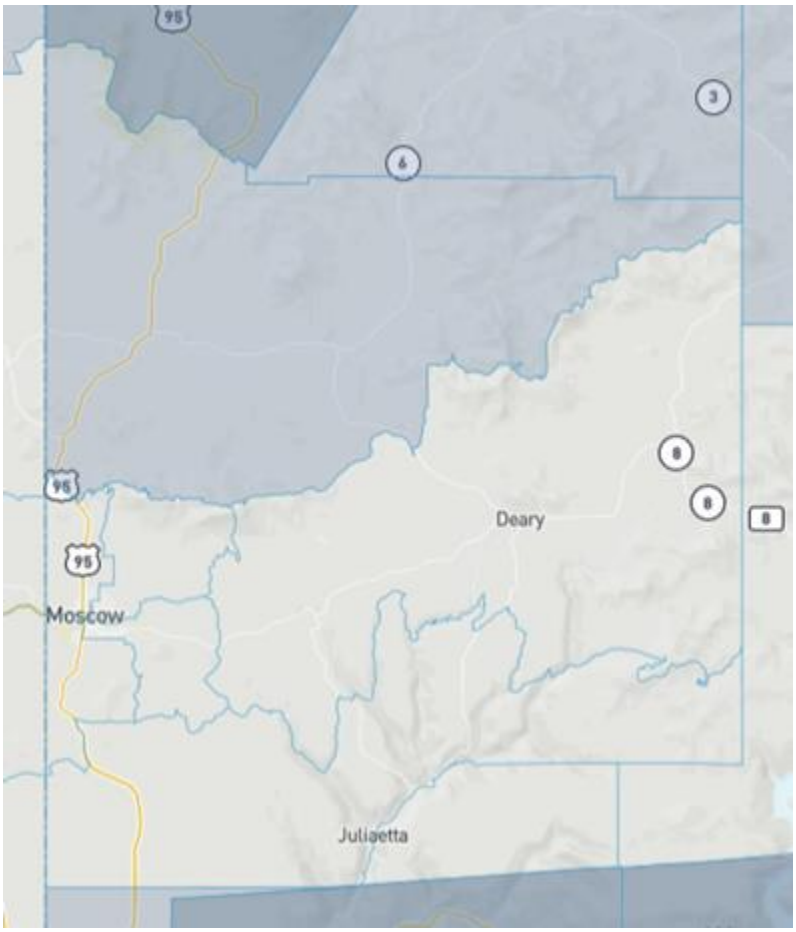
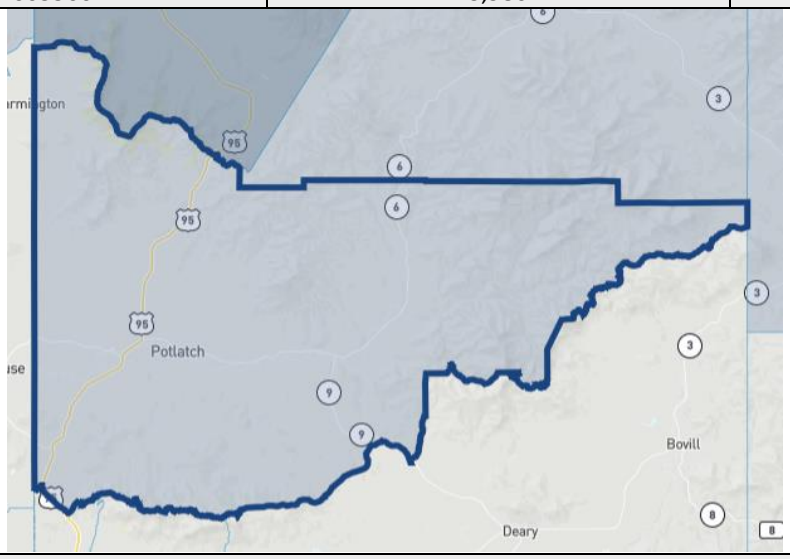


Figure 7-12. Map of Disadvantaged Communities in Latah County

The following table details the one completely disadvantaged census tract in Latah County along with the specific burdens and disadvantages the census tract experiences.

Table 7-6. Disadvantaged Communities in Latah County

LATAH COUNTY, ID		
CLIMATE & ECONOMIC JUSTICE SCREENING TOOL—DISADVANTAGED CENSUS TRACT		
CENSUS TRACT 2010 ID	**CENSUS TRACT POPULATION**	**LOW INCOME TRACT?**
16057005500	3,986	YES
		
CENSUS TRACT BURDENS: Transportation		
***97th** % (above 90th percentile)*	*Average of relative cost and time spent on transportation*	
***65th** % (above 65th percentile)*	*People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed*	
Source: U.S. Council on Environmental Quality—Climate & Economic Justice Screening Tool (2025)		

Wildfire places high demands on electrical power supplies that can lead to blackouts or brownouts. The following table lists types of critical facilities that could be negatively affected by power outages during extreme heat, including places like hospitals and dialysis centers that rely on power to operate life-saving equipment.

Table 7-7. Critical Facility Types in Latah County

Critical Facility Type	Location
Fire Station	Potlatch
3 Fire Stations	Moscow
Fire Station	Genesee
Fire Station	Troy
Fire Station	Deary
Fire Station	Kendrick
Fire Station	Juliaetta
Fire Station	Bovill
3 Local Law Enforcement	Moscow
Local Law Enforcement	Troy
Hospital	Moscow
5 Nursing Homes	Moscow

Critical Facility Type	Location
2 Dialysis Centers	Moscow
7 Pharmacies	Moscow
Pharmacy	Potlatch
Public Health Department	Moscow
Wastewater Treatment Plant	Potlatch
Wastewater Treatment Plant	Viola
Wastewater Treatment Plant	Moscow
Wastewater Treatment Plant	Troy
Wastewater Treatment Plant	Juliaetta
Wastewater Treatment Plant	Kendrick
Wastewater Treatment Plant	Deary
Wastewater Treatment Plant	Bovill
Source: Resilience Analysis and Planning Tool, 2025	

Additionally, over 2.9 million Medicare beneficiaries in the U.S. rely on electricity-dependent durable medical and assistive equipment (DME) and devices to live independently in their homes, and some of those individuals also have health care service dependencies (HHS Empower Program, 2025). In Latah County, 7,203 people are beneficiaries of Medicare, and 323 of these beneficiaries are considered at-risk and would be vulnerable during a power outage.

Changes in Development and Impact to Future Development

Wildfires can significantly impact changes in development and future development in several ways. The effects of wildfires on communities, infrastructure, and ecosystems can influence land use planning and development decisions. After a wildfire, local authorities may reassess land use and zoning regulations, especially in areas prone to wildfires. They may impose stricter building codes, setback requirements, and vegetation management rules to reduce fire risk in future developments.

Wildfires can also expose vulnerabilities in critical infrastructure, such as power lines, roads, and water supply systems. This can lead to investment in infrastructure upgrades to enhance resilience and prevent future damage. Communities affected by wildfires often face the decision of whether to rebuild in the same location or relocate to safer areas. The experience of a wildfire can influence the choices made by property owners and developers. The increased frequency and severity of wildfires may impact the availability and cost of property insurance. Insurers may adjust premiums or coverage terms, affecting property development decisions. Moreover, wildfires can lead to increased community awareness and preparedness efforts, influencing development decisions. Communities may implement Firewise practices and community wildfire protection plans that affect future development.

Wildfires can alter ecosystems and natural landscapes. Land managers and conservationists may adjust their plans for ecological restoration and habitat conservation, which can, in turn, influence land development in affected areas. Lastly, the cumulative impact of wildfires on a

region can inform long-term planning strategies, influencing where and how future development occurs. It may lead to regional development policies that prioritize resilience and fire risk reduction. In summary, wildfires can prompt changes in development and future development by affecting land use regulations, infrastructure investment, community resilience, and long-term planning. These changes are often driven by the need to reduce the risks associated with wildfires and their potential impacts on communities and the environment.

Effects of Climate Change on Probability of Future Events and Severity of Impacts

According to the NOAA, climate change is having a profound influence on wildfires. Climate change can manifest its impact in various ways, significantly intensifying the frequency and severity of wildfires. Firstly, escalating global temperatures lead to heightened evaporation rates, causing vegetation to dry out and become more susceptible to ignition. This prolonged warmth results in an extended fire season, providing more opportunities for wildfires to occur. Secondly, climate change can exacerbate drought conditions in many regions, depleting soil moisture and rendering vegetation more flammable. As a result, severe and extended droughts increase the ease with which wildfires ignite and spread. Additionally, alterations in precipitation patterns, driven by climate change, can lead to more intense rainfall events, followed by prolonged dry periods. This cycle promotes rapid vegetation growth, which, in turn, creates additional fuel for wildfires. The impact of climate change is further exacerbated by an increase in extreme weather events, like thunderstorms and lightning strikes, which often serve as ignition sources for wildfires. Changes in wind patterns, brought about by shifting atmospheric circulation, can result in more frequent and intense wind events, facilitating the rapid spread of wildfires. Warmer temperatures can also contribute to increased insect outbreaks, weakening and killing trees, thus providing more fuel for fires. Lastly, climate change can extend the fire season in many regions, heightening the likelihood of wildfires (NOAA, 2023).

No jurisdictions in Latah County are uniquely affected by wildfire, and all are adequately addressed at the county level.

The table below illustrates 25-year heat projections for Latah County, which may contribute to increased and/or prolonged wildfire seasons.

Table 7-8. Climate Projections for Latah County, ID | Neighborhoods at Risk 2025

Heat Projections	By 2050, Latah County is expected to experience 9 more days that reach above 95°F (from 10 days to 19 days per year).
	By 2050, Latah County is expected to have a 2°F increase (from 48°F to 50°F) in average annual temperatures.
	Increasing annual temperatures can contribute to longer and more catastrophic wildfire seasons.
Source: Neighborhoods at Risk, 2025	

7.6 FEMA NRI SCORE

Table 7-9. Wildfire: Overall National Risk Index Score for Latah County, ID | FEMA National Risk Index

Risk Index Score	Risk Index Rating	Social Vulnerability Rating	Community Resilience Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County			
97.7	Relatively High	Relatively Low	Relatively Low
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County			
94.6	Relatively Moderate	Relatively Low	Relatively Low
Census Tract 005500: City of Potlatch and Unincorporated Latah County			
95.1	Relatively High	Relatively Moderate	Relatively Low
Census Tract 005102: City of Moscow and Unincorporated Latah County			
80.8	Relatively Low	Relatively Moderate	Relatively Low
Census Tract 005200: City of Moscow and Unincorporated Latah County			
85.5	Relatively Moderate	Relatively Low	Relatively Low
Census Tract 005400: City of Moscow and Unincorporated Latah County			
83.1	Relatively Low	Relatively Low	Relatively Low
Census Tract 005302: City of Moscow			
58.5	Relatively Low	Relatively Moderate	Relatively Low
Census Tract 005101: City of Moscow			
60	Relatively Low	Relatively Moderate	Relatively Low
Census Tract 005301: City of Moscow and Unincorporated Latah County			
78.1	Relatively Low	Very Low	Relatively Low
Risk Index scores are calculated using an equation that combines scores for Expected Annual Loss due to natural hazards, Social Vulnerability, and Community Resilience (Expected Annual Loss x Social Vulnerability / Community Resilience = Risk Index). Source: National Risk Index, 2025b; 2025d			

CHAPTER 8 FLOOD

8.1 HAZARD DESCRIPTION

Flooding is defined by the National Weather Service (NWS) as "the inundation of normally dry areas as a result of increased water levels in an established water course." 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. 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 (discussed below) 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.

Flooding is a dynamic natural process. Along rivers and streams, 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 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, and the depth and duration of flooding, velocity of flow, rate of rise, and the amount and type of development in the floodplain.

8.2 TYPES OF FLOODING

Flooding can occur in a number of ways, and many instances are not independent of each other and can occur simultaneously during a flood event. The types of flooding considered for this plan include:

- Heavy rainfall
- Urban stormwater overflow
- Rapid snowmelt
- Rising groundwater (generally in conjunction with heavy prolonged rainfall and saturated conditions)
- Riverine ice jams
- Flash floods
- Alluvial fan flooding
- Flooding from dam failure

Figure 8-1. Street Flooding in Moscow, ID (KHQ, 2019)

8.3 RELATED HAZARDS

8.3.1 River or Stream Flood

Hazard Description

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.

Location

The eastern portion of Latah County is located within the Clearwater River watershed, as seen in the figure below. According to the 2023 Idaho State Hazard Mitigation Plan, this watershed has a high flood risk overall. The Potlatch River feeds into the Clearwater River and passes through the cities of Kendrick and Juliaetta, which are at high risk of flooding during swells in the watershed.

Figure 8-2. Clearwater River Watershed

Riverine flooding occurs in the low-lying areas of the county adjacent to streams and rivers, such as the Potlatch River, Clearwater River, Palouse River, Paradise Creek, Deep Creek, Rock Creek, Flannigan Creek, Gold Creek, Cow Creek, Big Bear Creek, and their tributaries. Erosion along rivers and streams can cause flooding during unusually wet years during spring snowmelt (UGS, 1987). Additionally, during high snowmelt years or high moisture conditions, these rivers can threaten bridges and lead to flooding. The photo below shows the high levels of Paradise Creek under 6th St Bridge in Moscow during the spring of 2019.

Figure 8-3. Paradise Creek High Flow Under Bridge (Moscow, 2019)

The vast majority of the county has a low risk of flooding. Areas of concern include floodplains located along some of the larger waterways in Latah County, such as the Potlatch River, Clearwater River, and Palouse River and larger creeks like Paradise Creek, Deep Creek, Rock Creek, Flannigan Creek, Gold Creek, Cow Creek, and Big Bear Creek. Moscow has several commercial, industrial, and residential areas with public utilities in and around floodplains. The residential areas of the city of Deary occasionally experience a small amount of flooding due to the railroads that sometimes obstruct the drainage due to their size. Certain soils in Deary with high clay content and a high water table tend to flood from February to April (Deary Comprehensive Plan, 2016). In the city of Juliaetta, a wastewater treatment facility and the Northern railroad bed are located within a floodplain. Highway 95 is also susceptible to flooding. Any roads located within Latah County's floodplains are vulnerable.

In Moscow—where the majority of Latah County's population lives—several streets and neighborhoods are at risk for repeat flooding and have flooded at various points in the past. These include:

- Paradise Creek on the north side of East D Street, west of Eisenhower Street
- The east end of Hillcrest Drive and the north end of Bridge Street

- The land south of the creek east of Mountain View Road, west of South Meadow Street, and north of Joseph Street
- South Meadow Street north of Joseph Street
- Ghormley Park and Home Street
- East of Line Street at its intersection with State Highway 8 and Third Street
- South Fork of the Palouse River east of U.S. Highway 95 South at Palouse River Drive
- West of U.S. Highway 95 south of Palouse River Drive
- South Harding Street

Several roads in Latah County are low water crossings that pass over creeks and are often inundated with water during high flow seasons. Emergency repairs are frequently necessary to maintain passage over the roads.

Extent

The NFIP classifies floods through the use of recurrence intervals as seen in the chart below.

Flood Recurrence Interval	Chance of occurrence during any given year
5 year	20%
10 year	10%
50 year	2%
100 year	1%
500 year	0.20%

Figure 8-4. NFIP Flood Recurrence Intervals

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 1% 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. A “500-year floodplain” is an area with at least a .2% chance of flood occurrence in any given year (HUD Exchange, 2025).

Moscow’s 100-year and 500-year floodplains can be seen in the FIRM below along with existing waterways and floodways. For all other city and county FIRMS, see Appendix F.

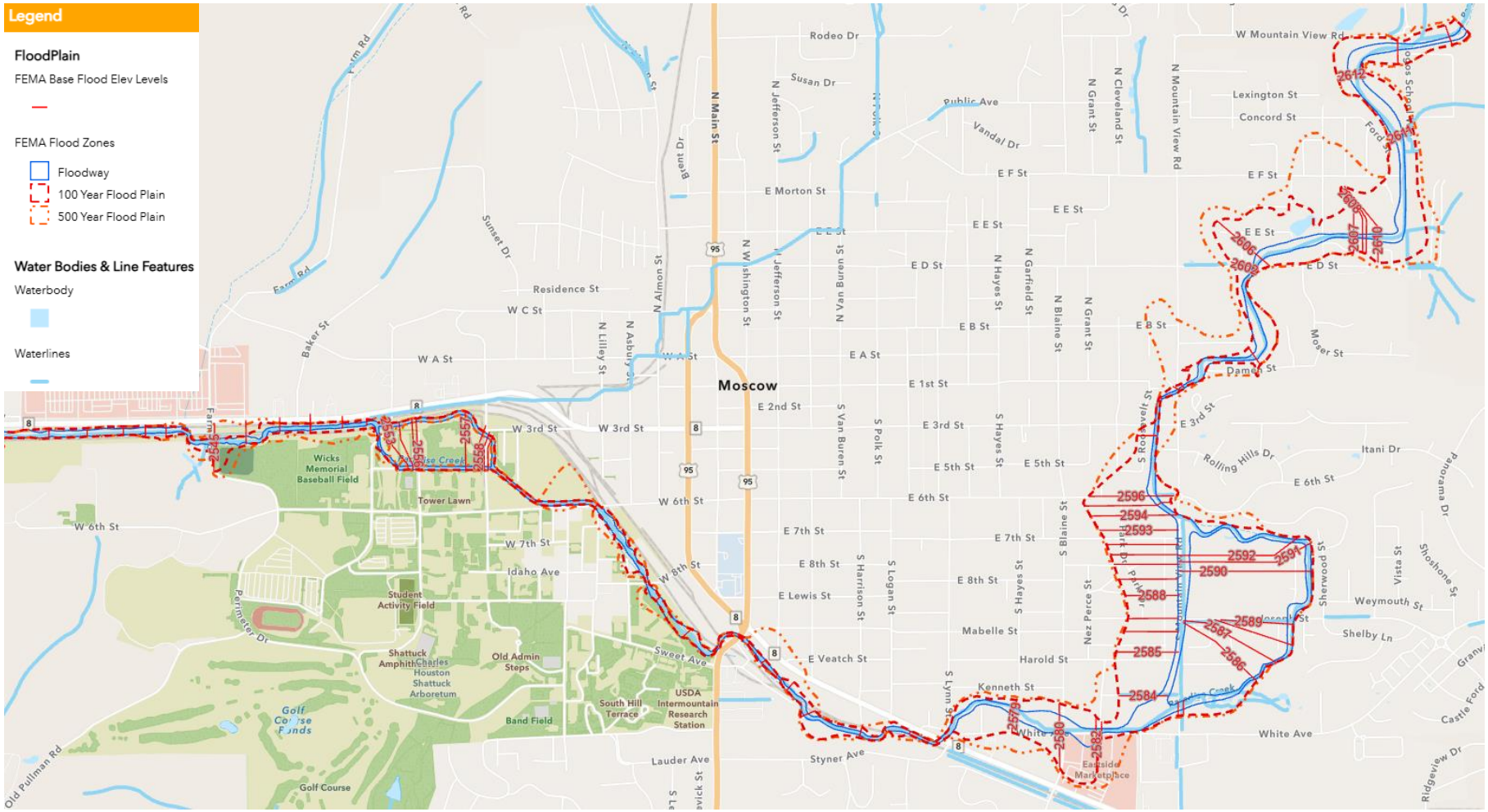


Figure 8-5. City of Moscow FIRM (Moscow, 2025)

Historical Frequency & Probability of Future Occurrence

Changes in climate will likely increase the region's flood risk as the planning area experiences more extreme precipitation events triggering flash flooding, monsoons during late summer to early fall, and runoff from rain falling on snow events, common with warming temperatures.

Latah County has a significant history with flooding across its lower elevations. Streams and rivers (Potlatch River, Clearwater River, Palouse River, Paradise Creek, Deep Creek, Rock Creek, Flannigan Creek, Gold Creek, Cow Creek, Big Bear Creek, and their tributaries) create a very high flood threat and increases the probability of future events. Snowmelt and heavy rain are the top contributors to flood events in Latah County. Flooding is considered a natural hazard that occurs annually; however, there were previously 18 FEMA flood disaster declarations in the state of Idaho from 1956 to 2022, as well as one in June 2024. Seven of these disaster declarations were issued for Latah County.

Roads and areas within Latah County that have experienced repeat flooding are listed in the table below.

Table 8-1. Repeat Flooding Locations in Latah County

Jurisdiction	Road/Bridge/Area
Latah County	Hwy 95
Bovill	Hwy 8
Deary	Hwy 8
Genesee	Hwy 95, Walnut Street, Danielson Road, Swenson Road, Genesee-Troy Road
Juliaetta	3rd Street, McGary Grade Road, Hwy 3
Kendrick	Sperry Grade Road, Hwy 3
Moscow	Hwy 95, Hwy 8, Bridge Street, Eid Road, Genesee-Troy Road, Blaine Street, Hillcrest Street, 5th Street/3rd Street and Roosevelt Street, D Street bridge, Main Street, Mountain View Park, University of Idaho bike path, Blaine Street bridge, South Lynn Street, Sand Road, Perimeter Drive, Pullman Road
Potlatch	South River Road at Wellesley Road
Troy	Hwy 8, Randle Flat Creek Road, Driscoll Ridge Road

The Storm Events Database from the NOAA lists 25 river flood events in Latah County between 2000–2025. One recent significant flooding event began on April 6th and continued through April 10th in 2019 in Moscow and Potlatch. Heavy rain led to swollen rivers and mudslides, particularly in Paradise Creek, which rose to a record 11.4 feet. This caused flooding in downtown Moscow, including a flash flood that ran through residential neighborhoods and business districts located in the lower gullies and ravines of the city, specifically along North Polk Street and East D Street and into downtown. Roads, basements, and first floors were flooded with as much as three feet of water, and many intersections and underpasses became impassable. The flooding caused an estimated $250,000 in property damage (Storm Events Database, 2025).

Table 8-2. River Flood Events in Latah County, ID (2000–2025)

Location Within County	Date	Property Damage ($)	Cause
Moscow	02/02/2000	$15,000	Snowmelt, heavy rain
Central Panhandle Mountains	04/14/2000	$40,000	Snowmelt
Central Panhandle Mountains	04/14/2002	N/A	Snowmelt
Shoshone, East Kootenai, East Benewah, East Latah	05/22/2002	N/A	Snowmelt
Shoshone, East Kootenai, East Benewah, East Latah	06/01/2002	N/A	Snowmelt
Central Panhandle Mountains, Idaho Palouse	02/01/2003	$30,000	Snowmelt, heavy rain
Idaho Palouse	05/21/2004	N/A	Thunderstorms, heavy rain
Potlatch, Kendrick, Juliaetta	01/08/2009	$250,000	Heavy rain, snowmelt
Genesee	01/05/2010	$89,000	Heavy rain
Kennedy Ford, Potlatch, Moscow, Troy, Deary	01/16/2011	N/A	Heavy rain, snowmelt
Moscow	03/10/2011	N/A	Thunderstorms, heavy rain, snowmelt
Princeton, Howell, Troy	03/31/2011	N/A	Heavy rain, snowmelt
Cornwall, Moscow, Onaway, Genesee	03/26/2012	$140,000	Heavy rain, heavy snowfall, snowmelt
Kennedy Ford	04/01/2012	N/A	Heavy rain, snowmelt
Kennedy Ford, Moscow	02/12/2014	$10,000	Heavy rain, snowfall, snowmelt, frozen ground
Kennedy Ford, Moscow	03/15/2017	$800,000	Heavy rain, snowmelt
Moscow, Potlatch	12/29/2017	$500	Heavy snowfall, warm front, heavy rain, snowmelt
Kennedy Ford, Potlatch	02/04/2018	$500	Heavy rain, snowmelt
Moscow, Kennedy Ford, Potlatch	04/09/2019	$50,000	Heavy rain
Moscow	02/07/2020	N/A	Heavy rain
Moscow	05/17/2020	$20,000	Heavy rain
Potlatch	03/03/2022	$5,000	Heavy rain, snowmelt
Moscow	06/12/2022	N/A	Heavy rain
Moscow	12/26/2022	$10,000	Heavy rain, snowmelt
Moscow	02/23/2025	$2,000	Heavy rain, snowmelt
Source: NOAA Storm Events Database, 2000–2025			

Impacts & Loss Estimates

Any area in Latah County along the Potlatch River, Clearwater River, Palouse River, Paradise Creek, Deep Creek, Flannigan Creek, Gold Creek, Cow Creek, Big Bear Creek, and their respective tributaries may be impacted by river flooding, including the jurisdictions of Bovill,

Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts, as presented in the table below.

Table 8-3. Impacts of River Flood by Jurisdiction

Jurisdiction	Impacted by River Floods	Fatalities Due to River Floods	Potential Impacts of River Floods
Latah County	Yes	0	Injury, drowning, death, structure fire, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, disruption to medical care, risk to emergency services, economic losses
City of Bovill	Yes	0	Injury, drowning, death, structure fire, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, disruption to medical care, risk to emergency services, economic losses
City of Deary	Yes	0	Injury, drowning, death, structure fire, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, disruption to medical care, risk to emergency services, economic losses
City of Genesee	Yes	0	Injury, drowning, death, structure fire, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, disruption to medical care, risk to emergency services, economic losses
City of Juliaetta	Yes	0	Injury, drowning, death, structure fire, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, disruption to medical care, risk to emergency services, economic losses
City of Kendrick	Yes	0	Injury, drowning, death, structure fire, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, disruption to medical care, risk to emergency services, economic losses
City of Moscow	Yes	0	Injury, drowning, death, structure fire, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property

Jurisdiction	Impacted by River Floods	Fatalities Due to River Floods	Potential Impacts of River Floods
			damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, disruption to medical care, risk to emergency services, economic losses
City of Potlatch	Yes	0	Injury, drowning, death, structure fire, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, disruption to medical care, risk to emergency services, economic losses
City of Troy	Yes	0	Injury, drowning, death, structure fire, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, disruption to medical care, risk to emergency services, economic losses

Human death and injury sometimes occur as a result of river flooding but are not common. At times, flash floods occur in and along rivers and are more likely to cause fatalities than typical river floods due to the sudden and destructive nature of flash floods. Latah County has had zero fatalities due to flooding at least since 1995. Human hazards during flooding include drowning, electrocution due to downed power lines, leaking gas lines, fires and explosions, hazardous chemicals, and displaced wildlife. Economic loss and disruption of social systems are often enormous. Floods may destroy or damage structures, furnishings, business assets including records, crops, livestock, roads, and highways. According to the EWG, $45,761 in crop indemnity payments were due to flood and $16,935,280 in payments were due to excess moisture and precipitation in Latah County for the period of 1995–2023 (EWG, 2024). Floods also often deprive large areas of electric service, potable water supplies, wastewater treatment, communications, and many other community services, including medical care, and may do so for long periods of time. According to the NOAA Storm Events Database, Latah County has experienced $1,462,000 in losses since 2000 due to river flooding.

Two of the costliest flooding incidents occurred on February 25, 1999 and May 6, 2005, with one million dollars in reported property damage. The city of Moscow's 6th St bridge near Mountain View Ave sustained severe damage in the March 2019 event, to the extent that it needs to be replaced, but is not FEMA-eligible because it is a main collector route. The total project cost to replace is $2,300,000.

Latah County and the cities of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, and Troy all participate in the National Flood Insurance Program (NFIP). The city of Potlatch does not participate. As of May 2025, the county had 11 policies in force and $2,455,000 in total

coverage. Deary had one policy in force and $175,000 in total coverage. Genesee had eight policies in force and $1,662,000 in total coverage. Moscow had 64 policies in force and $16,576,000 in total coverage. Troy had six policies in force and $1,016,000 in total coverage. *Section 19.6 NFIP Continuity Strategy* includes additional NFIP information for the county. *Appendix F* includes each jurisdiction's digital FIRM.

Table 8-4. Riverine Flooding: Expected Annual Loss for Latah County, ID | FEMA National Risk Index

Annualized Frequency	Population	Population Equivalence	Building Value	Agriculture Value	Total Value	Expected Annual Loss Score	Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County							
1 event per year	0.0	$16,030	$33,402	$109	$49,542	Relatively Moderate	77.9
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County							
1 event per year	0.0	$19,826	$34,666	$817	$55,308	Relatively Moderate	79.4
Census Tract 005500: City of Potlatch and Unincorporated Latah County							
1 event per year	0.0	$21,843	$35,934	$1,597	$59,374	Relatively Moderate	80.3
Census Tract 005102: City of Moscow and Unincorporated Latah County							
1 event per year	0.0	$88	$515	$56	$659	Very Low	31.8
Census Tract 005200: City of Moscow and Unincorporated Latah County							
1 event per year	0.0	$31,832	$24,491	$108	$56,432	Relatively Moderate	79.7
Census Tract 005400: City of Moscow and Unincorporated Latah County							
1 event per year	0.0	$6,856	$22,704	$227	$29,788	Relatively Moderate	70.6
Census Tract 005302: City of Moscow							
1 event per year	0.0	$44,579	$36,823	$0	$81,401	Relatively Moderate	84.1
Census Tract 005101: City of Moscow							
1 event per year	0.0	$21	$32	$5	$57	Very Low	27.0
Census Tract 005301: City of Moscow and Unincorporated Latah County							
1 event per year	0.0	$12,387	$13,428	$175	$25,989	Relatively Low	68.6

Annualized Frequency: The natural hazard annualized frequency is defined as the expected frequency or probability of a hazard occurrence per year. Annualized frequency is derived either from the number of recorded hazard occurrences each year over a given period or the modeled probability of a hazard occurrence each year.
Population: Population exposure is defined as the estimated number of people determined to be exposed to a hazard according to a hazard type-specific methodology.
Expected Annual Loss scores are calculated using an equation that combines values for exposure, annualized frequency, and historic loss ratios (Expected Annual Loss = Exposure x Annualized Frequency x Historic Loss Ratio).
Source: National Risk Index, 2025c; 2025d

Vulnerable Populations

There are many vulnerable populations in Latah County, including those in the table below. People with inadequate living conditions, especially those who are homeless or live in mobile homes, may be more vulnerable to river flooding. Structures without foundations are more likely to be swept away or damaged in a flood. Additionally, those who are unable to transport themselves to a safe location may be at risk.

Table 8-5. Vulnerable Populations in Latah County

Vulnerability Category	Number	Percent
Families in poverty	665	8.8%
People with disabilities	4,862	12.3%
People over 65 years & living alone	1,521	9.5%
Single female households with children > 18 years	660	4.1%
Difficulty with English	87	0.2%
Households with no car	646	4.1%
Mobile homes	1,551	9.7%
Source: Headwaters Economics, 2025		

As demonstrated in blue in the following map, Latah County's northern region is especially disadvantaged, and the southern portion of the county is seen as partially disadvantaged (Climate and Economic Justice Screening Tool, 2025). This area has a large population of people living in rural communities, the majority of whom are low income and may lack resources to adequately respond to a flood.

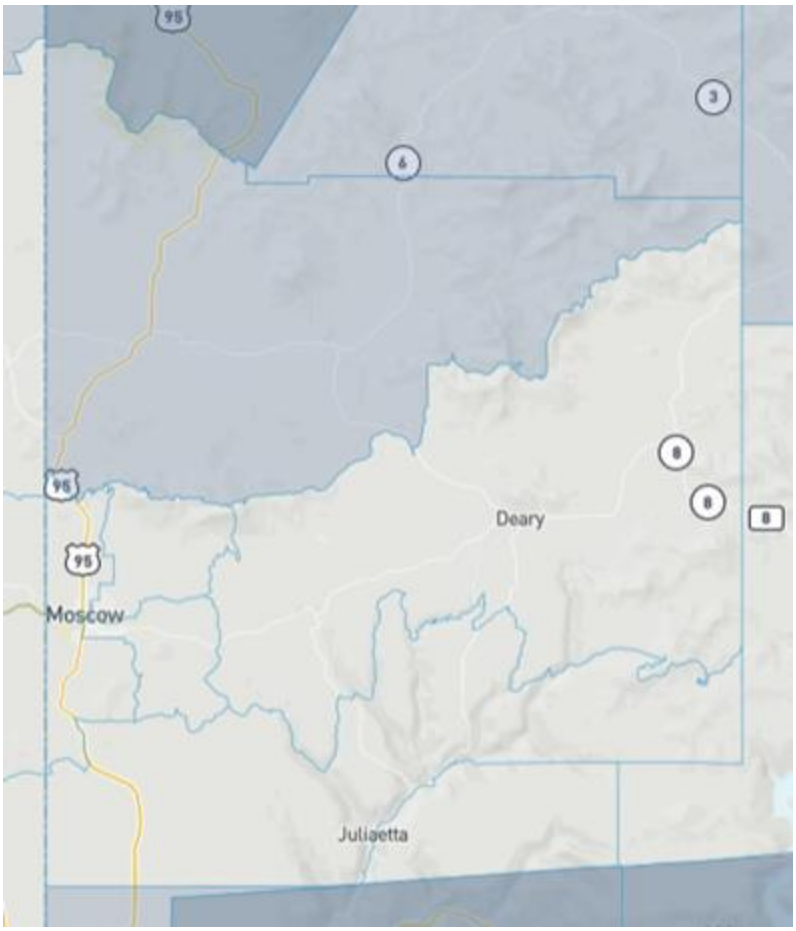
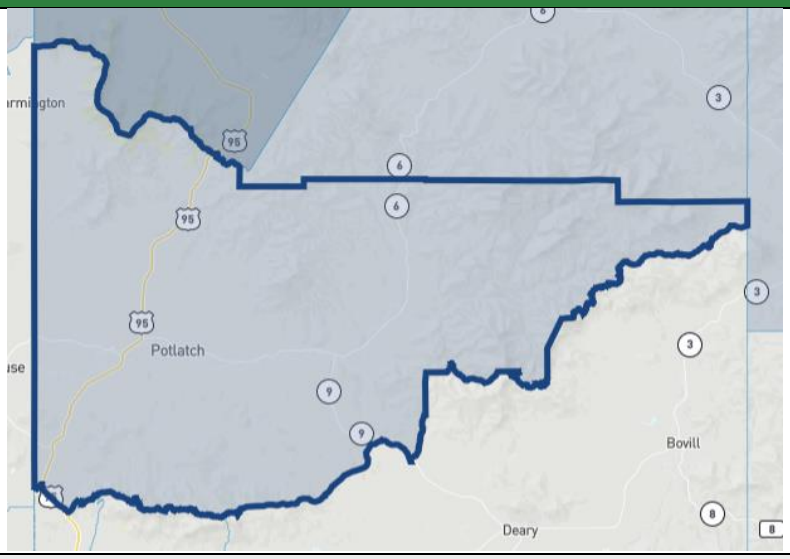


Figure 8-6. Map of Disadvantaged Communities in Latah County

The following table details the one completely disadvantaged census tract in Latah County along with the specific burdens and disadvantages the census tract experiences.

Table 8-6. Disadvantaged Communities in Latah County

LATAH COUNTY, ID		
CLIMATE & ECONOMIC JUSTICE SCREENING TOOL—DISADVANTAGED CENSUS TRACT		
CENSUS TRACT 2010 ID	CENSUS TRACT POPULATION	LOW INCOME TRACT?
16057005500	3,986	YES

LATAH COUNTY, ID	
	
CENSUS TRACT BURDENS: Transportation	
97th *% (above 90th percentile)*	*Average of relative cost and time spent on transportation*
65th *% (above 65th percentile)*	*People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed*
Source: U.S. Council on Environmental Quality—Climate & Economic Justice Screening Tool (2025)	

River floods may cause significant damage to critical facilities in the county. The following table lists types of critical facilities that could be negatively affected by damage from floods, which could delay emergency response and access to life-saving medical equipment.

Table 8-7. Critical Facility Types in Latah County

Critical Facility Type	Location
Fire Station	Potlatch
3 Fire Stations	Moscow
Fire Station	Genesee
Fire Station	Troy
Fire Station	Deary
Fire Station	Kendrick
Fire Station	Juliaetta
Fire Station	Bovill
3 Local Law Enforcement	Moscow
Local Law Enforcement	Troy
Hospital	Moscow
5 Nursing Homes	Moscow
2 Dialysis Centers	Moscow
7 Pharmacies	Moscow
Pharmacy	Potlatch
Public Health Department	Moscow
Wastewater Treatment Plant	Potlatch
Wastewater Treatment Plant	Viola
Wastewater Treatment Plant	Moscow

Critical Facility Type	Location
Wastewater Treatment Plant	Troy
Wastewater Treatment Plant	Juliaetta
Wastewater Treatment Plant	Kendrick
Wastewater Treatment Plant	Deary
Wastewater Treatment Plant	Bovill
Source: Resilience Analysis and Planning Tool, 2025	

Additionally, over 2.9 million Medicare beneficiaries in the U.S. rely on electricity-dependent durable medical and assistive equipment (DME) and devices to live independently in their homes, and some of those individuals also have health care service dependencies (HHS Empower Program, 2025). In Latah County, 7,203 people are beneficiaries of Medicare, and 323 of these beneficiaries are considered at-risk and would be vulnerable during a power outage.

Changes in Development and Impact of Future Development

The risks associated with flooding are directly related to the population and infrastructure located within the boundaries of the riverine floodplains. Development should be limited in these potential impact areas. Infrastructure improvements should also consider potential impacts. Existing floodplain and construction regulations are in place to help reduce the impacts of flooding. Stormwater infrastructure should also be looked at to determine the impact of flash flooding. This infrastructure does not always take into effect the growth of a community. Increasing impervious surfaces (e.g., concrete parking lots) may cause increased stormwater runoff during short rain events.

Effects of Climate Change on Probability of Future Events and Severity of Impacts

Climate change is already impacting water resources, and resource managers have observed the following:

- Historical hydrologic patterns can no longer be solely relied upon to forecast the water's future
- Precipitation and runoff patterns are changing, increasing the uncertainty for water supply and quality, flood management, and ecosystem functions
- Extreme climatic events will become more frequent, necessitating improvement in flood protection, drought preparedness, and emergency response

Records have shown that over the past 100 years, the state of Idaho has seen an increase in temperature of one to two degrees (°F). In the coming years, it is predicted that streams will be warmer, populations of several fish species will decline, wildfires will become more common, deserts may expand, and water may be less available for irrigation (Idaho Hazard Mitigation Plan, 2023).

Much of the water needed for agriculture, public supplies, and other uses throughout Idaho comes from mountain snowpacks. As snowpacks are very important to the state, so is the timing of snowmelt runoff into rivers and streams. Snowpack is melting earlier each year, therefore the flow of meltwater into streams during the summer is declining and affecting water demands for agriculture growing season. Rising snowlines caused by warming temperatures will allow more mountain areas to contribute to peak storm runoff. High frequency flood events will also increase with a changing climate (Idaho Hazard Mitigation Plan, 2023).

Along with reductions in the amount of snowpack and accelerated snowmelt, scientists project greater storm intensity, which would result in more direct runoff and flooding. Changes in watershed vegetation and soil moisture conditions will likely change runoff and recharge patterns. As stream flows and velocities change, erosion patterns will also change, altering channel shapes and depths, and possibly increase sedimentation behind dams, affecting habitat and water quality. As previously stated, climate change may lead to an increase in wildfires, which provides potential for more floods, increasing sediment loads and water quality impacts (Idaho Hazard Mitigation Plan, 2023).

Small changes in rainfall, runoff, and snowpack may also have significant impacts for water resource systems, including dams, levees, and canals. Dams are designed partly based on assumptions about a river's flow behavior, expressed as hydrographs. Changes in weather patterns can have significant effects on the hydrograph used for the design of a dam. If the hydrograph changes, it is conceivable that the dam can lose some designed margin of safety, also known as freeboard. If freeboard is reduced, dam operators may be forced to release increased volumes earlier in a storm cycle to maintain the required margins of safety. Such early releases of increased volumes can also increase flood potential downstream (Idaho Hazard Mitigation Plan, 2023).

The table below illustrates 25-year precipitation projections for Latah County, which may contribute to increased flooding events.

Table 8-8. Climate Projections for Latah County, ID | Neighborhoods at Risk

Precipitation Projections	By 2050, Latah County is expected to experience 0.3 more days of heavy precipitation per year (from 1.3 days to 1.6 days per year).
	By 2050, Latah County is expected to have a 1" increase (from 31" to 32") in average annual precipitation.
	Increasing annual precipitation can contribute to sustained flooding.
Source: Neighborhoods at Risk, 2025	

Latah County 100-Year Flood

Hazus was used to estimate losses for a 100-year flood affecting Latah County. Hazus is a regional multi-hazard loss estimation model that was developed by the Federal Emergency Management Agency (FEMA) and the National Institute of Building Sciences. The primary

purpose of Hazus is to provide a methodology and software application to assess flood losses at a regional scale. These loss estimates would be used primarily by local, state, and regional officials to plan and stimulate efforts to reduce risks from floods and to prepare for emergency response and recovery.

Building Damage

Hazus estimates that about 137 buildings will be at least moderately damaged. This is over 55% of the total number of buildings in the scenario. There are an estimated 25 buildings that will be completely destroyed.

Essential Facility Damage

Seven essential facilities are expected to be moderately or completely damaged, including five fire stations, one hospital, and one school.

Debris Generation

Hazus estimates that a total of 3,175 tons of debris will be generated. Of the total amount, Finishes debris (dry wall, insulation, etc.) comprises 51% of the total, Structural debris (wood, brick, etc.) comprises 23% of the total, and Foundation debris (concrete slab, concrete block, rebar, etc.) comprises 26%.

Shelter Requirements

Hazus estimates 720 households (or 2,159 people) will be displaced due to the flood. Of these, 373 people will seek temporary shelter in public shelters.

Economic Loss

The total economic loss estimated for the flood is 967.12 (millions of dollars), which represents 23.75% of the total replacement value of the scenario buildings.

Building-Related Losses

The total building-related losses were 282.96 (millions of dollars); 71% of the estimated losses were related to the business interruption of the region. Residential occupancies made up 8.16% of the total loss.

FEMA NRI Score

Table 8-9. Riverine Flooding: Overall National Risk Index Score for Latah County, ID | FEMA National Risk Index

Risk Index Score	Risk Index Rating	Social Vulnerability Rating	Community Resilience Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County			
75.0	Relatively Moderate	Relatively Low	Relatively Low
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County			
77.9	Relatively Moderate	Relatively Low	Relatively Low

Risk Index Score	Risk Index Rating	Social Vulnerability Rating	Community Resilience Rating
Census Tract 005500: City of Potlatch and Unincorporated Latah County			
81.3	Relatively Moderate	Relatively Moderate	Relatively Low
Census Tract 005102: City of Moscow and Unincorporated Latah County			
32.0	Very Low	Relatively Moderate	Relatively Low
Census Tract 005200: City of Moscow and Unincorporated Latah County			
78.7	Relatively Moderate	Relatively Low	Relatively Low
Census Tract 005400: City of Moscow and Unincorporated Latah County			
70.0	Relatively Low	Relatively Low	Relatively Low
Census Tract 005302: City of Moscow			
83.6	Relatively Moderate	Relatively Moderate	Relatively Low
Census Tract 005101: City of Moscow			
27.1	Very Low	Relatively Moderate	Relatively Low
Census Tract 005301: City of Moscow and Unincorporated Latah County			
62.9	Relatively Low	Very Low	Relatively Low
Risk Index scores are calculated using an equation that combines scores for Expected Annual Loss due to natural hazards, Social Vulnerability, and Community Resilience (Expected Annual Loss x Social Vulnerability / Community Resilience = Risk Index). Source: National Risk Index, 2025b; 2025d			

8.3.2 Urban/Flash Flood

Hazard Description

Flash flood is defined by the NWS as "a rapid and extreme flow of high water into a normally dry area or a rapid water level rise in a stream or creek above a predetermined flood level, beginning within six hours of the causative event (e.g., intense rainfall, dam failure, ice jam). Ongoing flooding can intensify to flash flooding in cases where intense rainfall results in a rapid surge of rising flood waters." Flash floods differ from floods (discussed above in *River or Stream Flood*) in the rapidity with which they develop. River floods generally develop over a period of several days, providing more warning time and time for preparation and evacuation. Flash floods occur 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 (discussed below).

Flash flooding in urban areas is an increasingly serious problem due to the removal of vegetation, the replacement of ground cover with impermeable surfaces that increase runoff, and the construction of drainage systems that increase the speed of runoff. "Urban flooding is caused by rain that falls on impervious surfaces and overwhelms local stormwater drainage capacity" (NRDC, 2025). It can happen suddenly like a flash flood but is caused by unnatural circumstances. Specifically, urban flooding occurs when excessive runoff in a developed area doesn't have anywhere to go and cannot be absorbed into the ground or redirected by stormwater systems. This overwhelms infrastructure, often flooding basements, backing up sewers, and inundating streets.

Location

Due to Idaho's mountainous and hilly terrain, flash flooding is a frequent occurrence and usually results from a sudden onset on a substantial amount of rain. Consistent wildfires also exacerbate existing flood risks. Swelling or shrinking rocks and soils due to summer thunderstorms can cause favorable conditions for flash flooding in Latah County.

The vast majority of the county has a low risk of flooding. Areas of concern include floodplains located along some of the larger waterways in Latah County, such as the Potlatch River, Clearwater River, and Palouse River and larger creeks like Paradise Creek, Deep Creek, Rock Creek, Flannigan Creek, Gold Creek, Cow Creek, and Big Bear Creek. Highway 3 between Kendrick and Juliaetta is also prone to repeat flooding and debris flows.

In Moscow—where the majority of Latah County's population lives—several streets and neighborhoods are at risk for repeat flooding and have flooded at various points in the past. These include:

- Paradise Creek on the north side of East D Street, west of Eisenhower Street
- The east end of Hillcrest Drive and the north end of Bridge Street
- The land south of the creek east of Mountain View Road, west of South Meadow Street, and north of Joseph Street
- South Meadow Street north of Joseph Street
- Ghormley Park and Home Street
- East of Line Street at its intersection with State Highway 8 and Third Street
- South Fork of the Palouse River east of U.S. Highway 95 South at Palouse River Drive
- West of U.S. Highway 95 south of Palouse River Drive
- South Harding Street

Several roads in Latah County are low water crossings that pass over creeks and can suddenly become inundated with water during high flow seasons. Emergency repairs are frequently necessary to maintain passage over the roads.

Extent

Flash floods occur suddenly within six hours of intense rainfall from a thunderstorm or several thunderstorms. Flash floods are common amongst Latah County's mountainous region and creek beds, making these areas especially hazardous during rainfall.

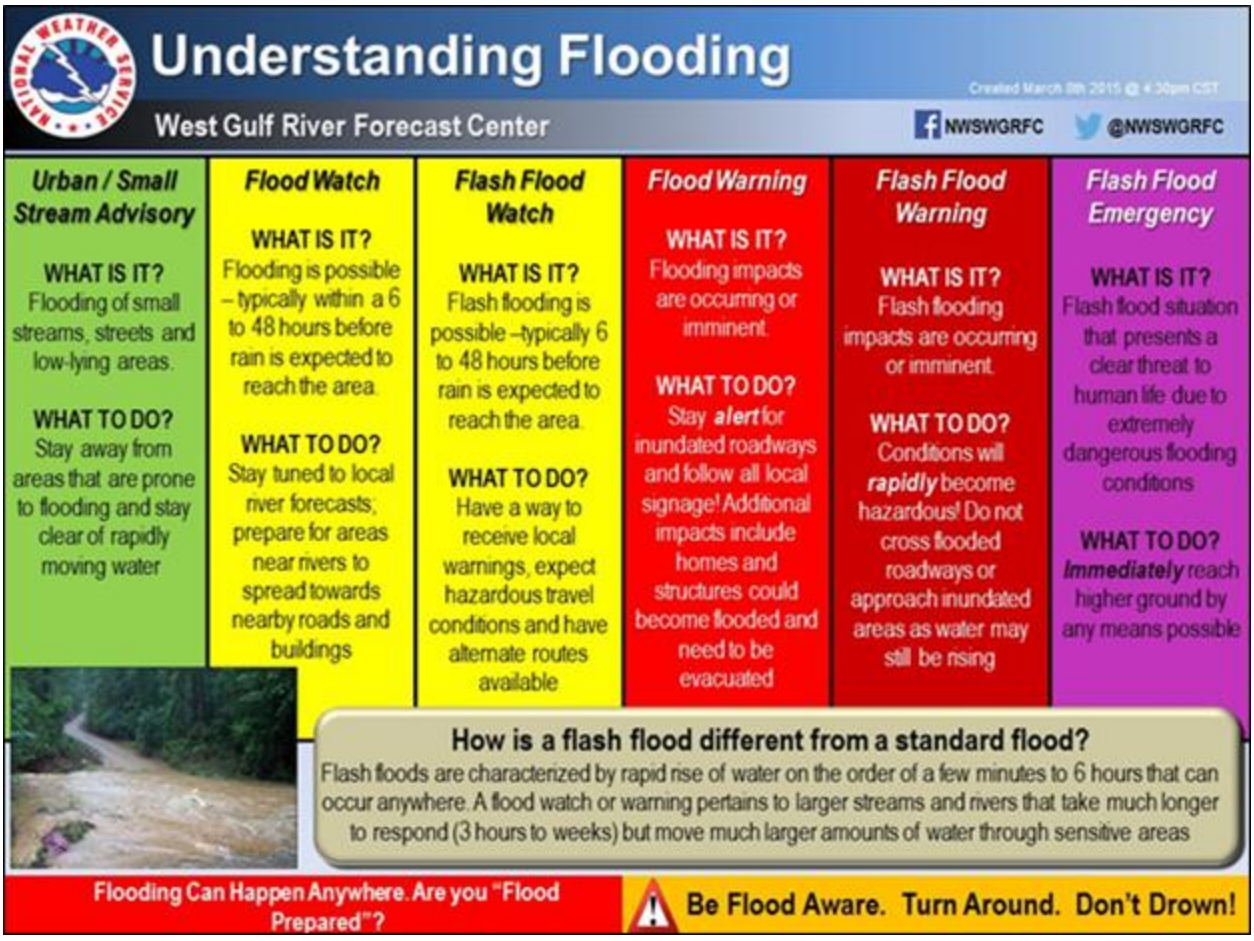


Figure 8-7. Understanding Flooding (NWS, 2015)

Historical Frequency & Probability of Future Occurrence

Streams and rivers (Potlatch River, Clearwater River, Palouse River, Paradise Creek, Deep Creek, Rock Creek, Flannigan Creek, Gold Creek, Cow Creek, Big Bear Creek, and their tributaries) create a very high flood threat and increases the probability of future events. The hills to the north of Moscow can lead to flash flooding in the city during heavy rain events as water quickly travels down the hills through ravines and gullies.

The Storm Events Database from the NOAA lists seven flash flood events and seven debris flow events in Latah County between 2000–2025. The following table lists all flash flood and debris flow events since 2000.

One recent significant flash flood event occurred on April 9, 2019 in Moscow. Heavy rain led to swollen rivers and mudslides, particularly in Paradise Creek, which rose to a record 11.4 feet. This caused flooding in downtown Moscow, including a flash flood and urban flood that ran through residential neighborhoods and business districts located in the lower gullies and ravines of the city, specifically along North Polk Street and East D Street and into downtown. Roads, basements, and first floors were flooded with as much as three feet of water, and many

intersections and underpasses became impassable. The flooding caused an estimated $250,000 in property damage (Storm Events Database, 2025).

Table 8-10. Flood Events in Latah County, ID (2000–2025)

Location Within County	Date	Event Type	Property Damage ($)	Cause
Juliaetta	05/06/2005	Flash Flood	$1,000,000	Thunderstorms, heavy rain
East Portion	05/09/2005	Flash Flood	N/A	Thunderstorms, heavy rain
Shoshone, East Kootenai, East Benewah, East Latah	01/15/2006	Debris Flow	$30,000	Thunderstorms, heavy rain
Central Panhandle Mountains	03/30/2011	Debris Flow	N/A	Heavy rain, snowmelt, saturated soils
Central Panhandle Mountains	04/01/2011	Debris Flow	$75,000	Heavy rain, saturated soils
Idaho Palouse	03/26/2012	Debris Flow	N/A	Heavy rain, snowmelt
Central Panhandle Mountains	03/30/2012	Debris Flow	$773,000	Heavy rain, snowmelt, saturated soils
Juliaetta	05/29/2017	Debris Flow	N/A	Saturated soils
Juliaetta	05/20/2018	Flash Flood, Debris Flow	$500	Thunderstorms, heavy rain
Moscow	04/09/2019	Flash Flood	$200,000	Heavy rain
Moscow	05/30/2019	Flash Flood	$500	Heavy rain
Moscow	05/17/2020	Flash Flood	$10,000	Thunderstorms, heavy rain, hail
Moscow	05/16/2023	Flash Flood	$250	Heavy rain
Source: NOAA Storm Events Database, 2000–2025				

Changes in climate will likely increase the region's flood risk as the planning area experiences more extreme precipitation events triggering flash flooding, monsoons during late summer to early fall, and runoff from rain falling on snow events, common with warming temperatures.

Above Ground Reservoir/Storage Breach

Failure of an above ground reservoir or storage basin would also result in flooding of the surrounding area. Water is often stored in storage tanks or small reservoirs within or just outside city limits to hold municipal water, irrigation water, or wastewater. These types of basins may hold millions of gallons of water that could cause significant damage if released. Regular inspections and maintenance are important to ensure the safety of residents and structures in the surrounding areas.

Most recently on January 18, 2023, an above ground reservoir in the city of Lewiston, just south of Latah County's southwestern border, failed and released about three million gallons of water through nearby streets, homes, and businesses when part of a wall collapsed. The reservoir was reportedly overfilled for an unknown reason, and water began spilling over the side. Within half

an hour or so, the wall finally gave way, and a wall of water rushed out down the hill into the city below. One home's basement was flooded with 4.5 feet of water, destroying everything inside. Damage to landscaping, roads, and other properties occurred, as well. Three million dollars was set aside for an emergency solution to the reservoir, which held much of the city's drinking water, causing a large part of the city to go under a boil order for several days (Big Country News, 2023).

Impacts & Loss Estimates

Any area in Latah County along the Potlatch River, Clearwater River, Palouse River, Paradise Creek, Deep Creek, Rock Creek, Flannigan Creek, Gold Creek, Cow Creek, Big Bear Creek, and their tributaries or along any canyons, gullies, and washes may be impacted by flash flooding, including the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts, as presented in the table below.

Table 8-11. Impacts of Flash Flood by Jurisdiction

Jurisdiction	Impacted by Flash Floods	Experienced Significant Flash Flood with $1,000+ in Damage Since 2010	Fatalities Due to Flash Floods	Potential Impacts of Flash Floods
Latah County	Yes	Yes	0	Injury, drowning, blunt force trauma, death, structure fire, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, disruption to medical care, risk to emergency services, economic losses
City of Bovill	Yes	No	0	Injury, drowning, blunt force trauma, death, structure fire, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, disruption to medical care, risk to emergency services, economic losses
City of Deary	Yes	No	0	Injury, drowning, blunt force trauma, death, structure fire, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in

Jurisdiction	Impacted by Flash Floods	Experienced Significant Flash Flood with $1,000+ in Damage Since 2010	Fatalities Due to Flash Floods	Potential Impacts of Flash Floods
				residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, disruption to medical care, risk to emergency services, economic losses
City of Genesee	Yes	No	0	Injury, drowning, blunt force trauma, death, structure fire, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, disruption to medical care, risk to emergency services, economic losses
City of Juliaetta	Yes	Yes	0	Injury, drowning, blunt force trauma, death, structure fire, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, disruption to medical care, risk to emergency services, economic losses
City of Kendrick	Yes	Yes	0	Injury, drowning, blunt force trauma, death, structure fire, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, disruption to medical care, risk to emergency services, economic losses
City of Moscow	Yes	Yes	0	Injury, drowning, blunt force trauma, death, structure fire, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of

Jurisdiction	Impacted by Flash Floods	Experienced Significant Flash Flood with $1,000+ in Damage Since 2010	Fatalities Due to Flash Floods	Potential Impacts of Flash Floods
				crops/vegetation/livestock, loss of utilities, disruption to medical care, risk to emergency services, economic losses
City of Potlatch	Yes	Yes	0	Injury, drowning, blunt force trauma, death, structure fire, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, disruption to medical care, risk to emergency services, economic losses
City of Troy	Yes	No	0	Injury, drowning, blunt force trauma, death, structure fire, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, disruption to medical care, risk to emergency services, economic losses

Because flash floods develop so rapidly, people on foot or in automobiles may be stranded or may be swept away and injured or drowned. They are characterized by high velocity water flow and large amounts of debris, both of which cause damage to or destroy structures and other objects in their path. There are no fatalities in Latah County due to flooding since 1996, as reported by the NOAA Storm Events Database.

Flash floods in Latah County may result in extensive losses from washed out roads and walkways, rescuing stranded people, water damage in buildings and residences, downed utilities, and damaged pipes, dams, and infrastructure. Dams and bridges are at risk of collapse if they become overrun with debris during flash flooding. According to the NOAA Storm Events Database, Latah County has experienced $2,089,000 in losses since 2000 due to flash floods and debris flows.

Agriculture production may also be impacted by flash flooding, especially if rushing waters wash out entire fields, damage equipment, or overly saturate soils. According to the EWG,

$45,761 in crop indemnity payments were due to flood and $16,935,280 in payments were due to excess moisture and precipitation in Latah County for the period of 1995–2023 (EWG, 2024).

Vulnerable Populations

There are many vulnerable populations in Latah County, including those in the table below. People with inadequate living conditions, especially those who are homeless or live in mobile homes, may be more vulnerable to flash flooding. Structures without foundations are more likely to be swept away or damaged in a flood. Additionally, those who are unable to transport themselves to a safe location may be at risk.

Table 8-12. Vulnerable Populations in Latah County

Vulnerability Category	Number	Percent
Families in poverty	665	8.8%
People with disabilities	4,862	12.3%
People over 65 years & living alone	1,521	9.5%
Single female households with children > 18 years	660	4.1%
Difficulty with English	87	0.2%
Households with no car	646	4.1%
Mobile homes	1,551	9.7%
Source: Headwaters Economics, 2025		

As demonstrated in blue in the following map, Latah County's northern region is especially disadvantaged, and the southern portion of the county is seen as partially disadvantaged (Climate and Economic Justice Screening Tool, 2025). This area has a large population of people living in rural communities, the majority of whom are low income and may lack resources to adequately respond to a flood.

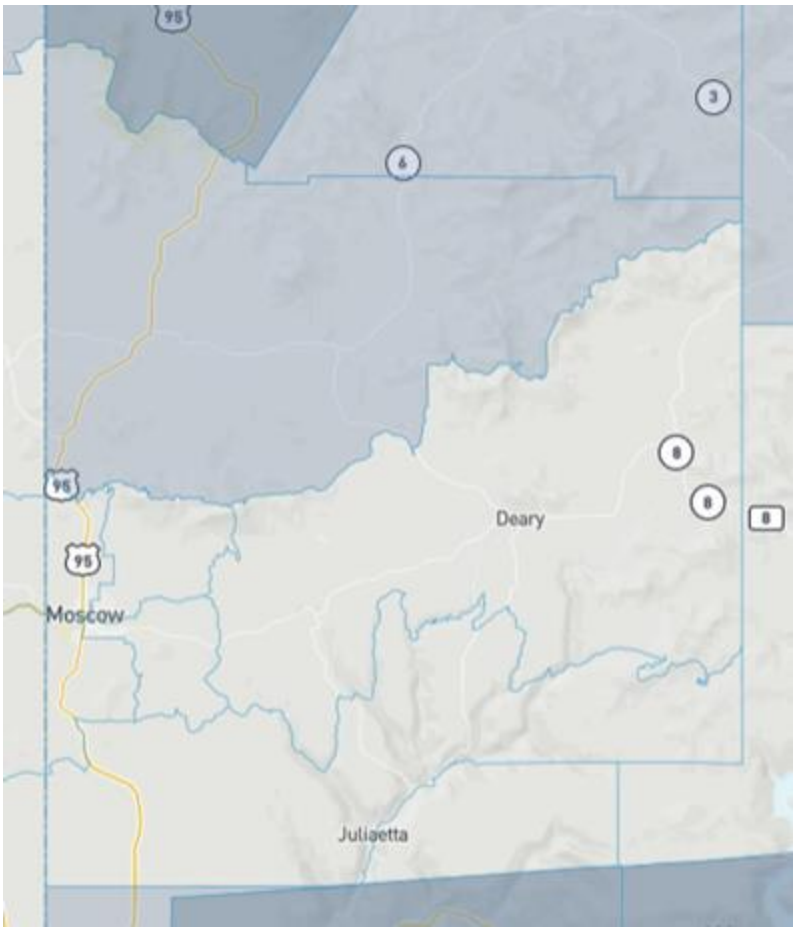
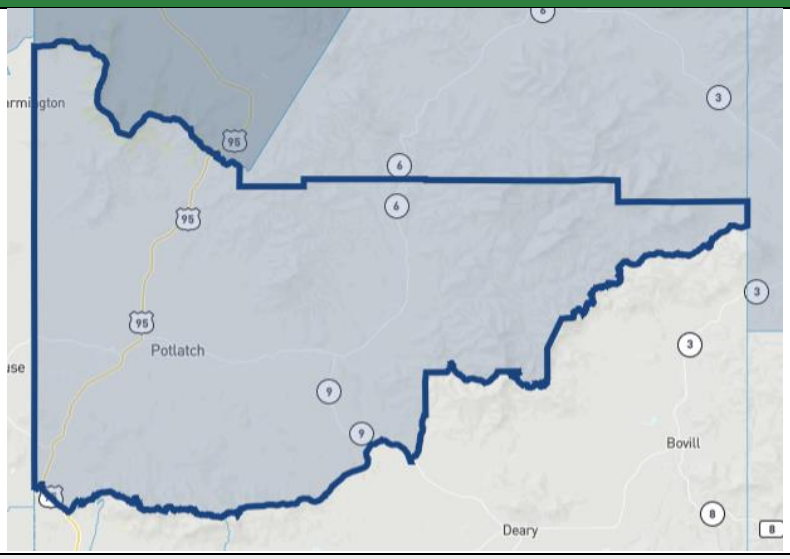


Figure 8-8. Map of Disadvantaged Communities in Latah County

The following table details the one completely disadvantaged census tract in Latah County along with the specific burdens and disadvantages the census tract experiences.

Table 8-13. Disadvantaged Communities in Latah County

LATAH COUNTY, ID		
CLIMATE & ECONOMIC JUSTICE SCREENING TOOL—DISADVANTAGED CENSUS TRACT		
CENSUS TRACT 2010 ID	**CENSUS TRACT POPULATION**	**LOW INCOME TRACT?**
16057005500	3,986	YES

LATAH COUNTY, ID	
	
CENSUS TRACT BURDENS: Transportation	
97th *% (above 90th percentile)*	*Average of relative cost and time spent on transportation*
65th *% (above 65th percentile)*	*People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed*
Source: U.S. Council on Environmental Quality—Climate & Economic Justice Screening Tool (2025)	

Flash floods may cause significant damage to critical facilities in the county. The following table lists types of critical facilities that could be negatively affected by damage from floods, which could delay emergency response and access to life-saving medical equipment.

Table 8-14. Critical Facility Types in Latah County

Critical Facility Type	Location
Fire Station	Potlatch
3 Fire Stations	Moscow
Fire Station	Genesee
Fire Station	Troy
Fire Station	Deary
Fire Station	Kendrick
Fire Station	Juliaetta
Fire Station	Bovill
3 Local Law Enforcement	Moscow
Local Law Enforcement	Troy
Hospital	Moscow
5 Nursing Homes	Moscow
2 Dialysis Centers	Moscow
7 Pharmacies	Moscow
Pharmacy	Potlatch
Public Health Department	Moscow
Wastewater Treatment Plant	Potlatch
Wastewater Treatment Plant	Viola
Wastewater Treatment Plant	Moscow

Critical Facility Type	Location
Wastewater Treatment Plant	Troy
Wastewater Treatment Plant	Juliaetta
Wastewater Treatment Plant	Kendrick
Wastewater Treatment Plant	Deary
Wastewater Treatment Plant	Bovill
Source: Resilience Analysis and Planning Tool, 2025	

Additionally, over 2.9 million Medicare beneficiaries in the U.S. rely on electricity-dependent durable medical and assistive equipment (DME) and devices to live independently in their homes, and some of those individuals also have health care service dependencies (HHS Empower Program, 2025). In Latah County, 7,203 people are beneficiaries of Medicare, and 323 of these beneficiaries are considered at-risk and would be vulnerable during a power outage.

Changes in Development and Impact of Future Development

The risks associated with flooding are directly related to the population and infrastructure located within the boundaries of the riverine floodplains. Development should be limited in these potential impact areas. Infrastructure improvements should also consider potential impacts. Existing floodplain and construction regulations are in place to help reduce the impacts of flooding. Stormwater infrastructure should also be looked at to determine the impact of flash flooding. This infrastructure does not always take into effect the growth of a community. Increasing impervious surfaces (e.g., concrete parking lots) may cause increased stormwater runoff during short rain events.

Effect of Climate Change on Probability of Future Events and Severity of Impacts

Climate change is already impacting water resources, and resource managers have observed the following:

- Historical hydrologic patterns can no longer be solely relied upon to forecast the water's future
- Precipitation and runoff patterns are changing, increasing the uncertainty for water supply and quality, flood management, and ecosystem functions
- Extreme climatic events will become more frequent, necessitating improvement in flood protection, drought preparedness, and emergency response

Records have shown that over the past 100 years the state of Idaho has seen an increase in temperature of one to two degrees (°F). In the coming years, it is predicted that streams will be warmer, populations of several fish species will decline, wildfires will become more common, deserts may expand, and water may be less available for irrigation (Idaho Hazard Mitigation Plan, 2023).

Much of the water needed for agriculture, public supplies, and other uses throughout Idaho comes from mountain snowpacks. As snowpacks are very important to the state, so is the timing of snowmelt runoff into rivers and streams. Snowpack is melting earlier each year, therefore the flow of meltwater into streams during the summer is declining and affecting water demands for agriculture growing season. Rising snowlines caused by warming temperatures will allow more mountain areas to contribute to peak storm runoff. High frequency flood events will also increase with a changing climate (Idaho Hazard Mitigation Plan, 2023).

Along with reductions in the amount of snowpack and accelerated snowmelt, scientists project greater storm intensity, which would result in more direct runoff and flooding. Changes in watershed vegetation and soil moisture conditions will likely change runoff and recharge patterns. As stream flows and velocities change, erosion patterns will also change, altering channel shapes and depths, and possibly increase sedimentation behind dams, affecting habitat and water quality. As previously stated, climate change may lead to an increase in wildfires, which provides potential for more floods, increasing sediment loads and water quality impacts (Idaho Hazard Mitigation Plan, 2023).

Small changes in rainfall, runoff, and snowpack may also have significant impacts for water resource systems, including dams, levees, and canals. Dams are designed partly based on assumptions about a river's flow behavior, expressed as hydrographs. Changes in weather patterns can have significant effects on the hydrograph used for the design of a dam. If the hydrograph changes, it is conceivable that the dam can lose some designed margin of safety, also known as freeboard. If freeboard is reduced, dam operators may be forced to release increased volumes earlier in a storm cycle to maintain the required margins of safety. Such early releases of increased volumes can also increase flood potential downstream (Idaho Hazard Mitigation Plan, 2023).

The table below illustrates 25-year precipitation projections for Latah County, which may contribute to increased flooding events.

Table 8-15. Climate Projections for Latah County, ID | Neighborhoods at Risk

Precipitation Projections	By 2050, Latah County is expected to experience 0.3 more days of heavy precipitation per year (from 1.3 days to 1.6 days per year).
	By 2050, Latah County is expected to have a 1" increase (from 31" to 32") in average annual precipitation.
	Increasing annual precipitation can contribute to sustained flooding.
Source: Neighborhoods at Risk, 2025	

FEMA NRI Score

FEMA does not evaluate urban/flash flooding as part of its National Risk Index.

CHAPTER 9 DAM/LEVEE FAILURE

9.1 HAZARD DESCRIPTION

Dam failure is the unintended release of impounded waters. Dams can fail for one or a combination of the following reasons:

- Overtopping caused by floods that exceed the capacity of the dam
- Deliberate acts of sabotage
- Structural failure of materials used in dam construction
- Poor design and/or construction methods
- Movement and/or failure of the foundation supporting the dam
- Settlement and cracking of concrete or embankment dams
- Piping and internal erosion of soil in embankment dams.
- Inadequate maintenance and upkeep

Failures may be categorized into two types: component failure of a structure that does not result in a significant reservoir release, and uncontrolled breach failure that leads to a significant release. With an uncontrolled breach failure of a manmade dam there is a sudden release of the impounded water, sometimes with little warning. The ensuing flood wave and flooding have enormous destructive power. The Dam Safety Program of the Idaho Department of Water Resources (IDWR) is responsible for dam safety in Idaho.

9.2 LOCATION

According to the IDWR, Latah County has a total of 60 dams throughout the county, with only one high hazard and zero significant hazard dams that have the potential to cause significant loss to property and/or life in the event of a dam failure (the full list of dams and respective hazard ratings is available in *Extent*). However, the National Inventory of Dams (NID) includes one high hazard dam and one significant hazard dam. As listed in the table below, there are several communities in Latah County that would potentially be affected by a dam breach if one occurred.

Table 9-1. Vulnerable Downstream Communities in Latah County, ID

Dam Name	NID Hazard Rating	First Downstream Community	Distance in Miles
Spring Valley	High	Kendrick	16
Hansen	Significant	Moscow	6
Nelson	Low	N/A	N/A
Moose Creek	Low	Bovill	2

Levee failure is also possible in the county. Latah County has four actively inspected levee systems, three of which are sponsored by the city of Kendrick. See the table below for a list of these levees.

Table 9-2. Levee Systems in Idaho

System Name	Sponsor	Length (Miles)
Bear Creek	City of Kendrick, ID	0.22
Kendrick	City of Kendrick, ID	0.69
Kendrick EDA Project	City of Kendrick, ID	0.36
Potlatch Junction (Deep Creek)	Latah County, ID	0.56

9.3 EXTENT

The Dam Safety Program establishes requirements for proper planning, design review, construction oversight, and inspection of regulated dams and reservoirs. Dam Safety Program personnel regularly inspect existing projects according to the potential consequences of the dam's failure on downstream life and property (aka hazard). The frequency of individual dam inspections may also depend on the project's physical condition, method of construction, maintenance record, age, and size and storage capacity. All regulated dams must be inspected by the Department at least every five years (Idaho Hazard Mitigation Plan, 2023).

There are three hazard ratings used by the Dam Safety Program in Idaho: high, significant, and low. The hazard rating assigned to any structure is based solely on the potential consequences to downstream life and property that would result from a failure of the dam and sudden release of water. High hazard dams are located where there are significant consequences downstream if the dam fails, such as loss of human life and extensive property damage. Significant hazard is typically defined as a dam whose failure will cause significant property destruction or that may result in an indirect loss of human life. Low hazard dams are located in sparsely populated areas that would be largely unaffected by a breach of the dam with minimal impacts to existing infrastructure (Idaho Hazard Mitigation Plan, 2023). As growth continues, homes are being built closer to dams, creating "hazard creep," which creates additional urgency to ensure dams meet safety standards and don't put lives and property at unnecessary risk. The National Dam Safety Program breaks out these three hazard ratings even further using the following scale (FEMA, 2015).

Urgency of action	Characteristics and considerations	Potential actions
I – VERY HIGH URGENCY	CRITICALLY NEAR FAILURE: There is direct evidence that failure is in progress, and the dam is almost certain to fail during normal operations if action is not taken quickly. OR EXTREMELY HIGH RISK: Combination of life or economic consequences and likelihood of failure is very high with high confidence.	• Take immediate action to avoid failure. Communicate findings to potentially affected parties. • Implement IRRMs. • Ensure that the emergency action plan is current and functionally tested. • Conduct heightened monitoring and evaluation. Expedite investigations and actions to support long-term risk reduction. • Initiate intensive management and situation reports.
II - HIGH URGENCY	RISK IS HIGH WITH HIGH CONFIDENCE, OR IT IS VERY HIGH WITH LOW TO MODERATE CONFIDENCE: The likelihood of failure from one of these occurrences, prior to taking some action, is too high to delay action.	• Implement IRRMs. • Ensure that the emergency action plan is current and functionally tested. • Give high priority to heightened monitoring and evaluation. Expedite investigations and actions to support long-term risk reduction. • Expedite confirmation of classification.
III - MODERATE URGENCY	MODERATE TO HIGH RISK: Confidence in the risk estimates is generally at least moderate, but can include facilities with low confidence if there is a reasonable chance that risk estimates will be confirmed or potentially increase with further study.	• Implement IRRMs. • Ensure that the emergency action plan is current and functionally tested. • Conduct heightened monitoring and evaluation. Prioritize investigations and actions to support long-term risk reduction. • Prioritize confirmation of classification as appropriate.
IV – LOW TO MODERATE URGENCY	LOW TO MODERATE RISK: The risks are low to moderate with at least moderate confidence, or the risks are low with low confidence, and there is a potential for the risks to increase with further study.	• Ensure that routine risk management measures are in place. • Determine whether action can wait until after the next periodic review. • Before the next periodic review, take appropriate interim measures and schedule other actions as appropriate. • Give normal priority to investigations to validate classification, but do not plan for risk reduction measures at this time.
V – NO URGENCY	LOW RISK: The risks are low and are unlikely to change with additional investigations or studies.	• Continue routine dam safety risk management activities and normal operations and maintenance.

Figure 9-1. Joint Federal Risk Categories for Dam Failure

As seen in the table below, 60 dams are listed by the Idaho Department of Water Resources Dam Safety Program in Latah County, with only one dam listed as having a high threat rating. A high threat rating means there is a possibility of life being lost due to dam failure. Zero dams are listed as having a moderate hazard rating, meaning there would be significant downstream property loss if the dam were to fail. 49 dams have a low hazard rating, which means if a dam failure were to occur, there would be insignificant property loss; however, these dams should still be monitored. The remaining 10 dams do not have a hazard rating but are still listed in the database. The classification of a high hazard dam does not mean that the dam has a high probability of failure. Dam safety hazard classifications simply delineate the downstream consequences if a dam were to fail. Potential dam failure in Latah County is rated as “possible.” If a dam were breached in the county, the communities identified in the table in the *Location* section above would be affected.

The National Inventory of Dams (NID) ranks dams as high, significant, or low. The NID lists four dams in Latah County that have a rating of high, significant, or low. One dam has a rating of high, and one dam has a rating of significant.

In addition to listing all the dams from DWRi Dam Safety in Latah County, the following table notes all four dams from the National Inventory of Dams (NID).

Table 9-3. Dams in Latah County, ID

	Dam Name	IDWR Hazard Rating	NID Hazard Rating
1	Spring Valley	High	High
2	Aiken	Low	
3	Arneberg	Low	
4	Banks	Low	
5	Bower	Low	
6	Caldwell No. 1	Low	
7	Caldwell No. 2	Low	
8	Carbuhn	Low	
9	Carlson No. 1	Low	
10	Carlson No. 2 (Ewert)	Low	
11	Carlson No 3	Low	
12	Carpenter	Low	
13	Carscallen	Low	
14	Crane	Low	
15	Dalton No. 1	Low	
16	Dalton No. 2	Low	
17	Deters	Low	
18	Feldman	Low	
19	Gilbert	Low	
20	Gilder	Low	
21	Greene	Low	
22	Hall	Low	
23	Ham	Low	
24	Hansen	Low	Significant
25	Hellinger	Low	
26	Hites	Low	
27	Hofstrand	Low	
28	Hokanson	Low	
29	Kerley	Low	
30	Kessel	Low	
31	Kingery	Low	
32	Koster	Low	
33	Laird Park	Low	
34	Mariposa Foundation	Low	
35	Moose Creek	Low	Low
36	Moose Meadows	Low	
37	Nearing	Low	
38	Needham	Low	
39	Nelson	Low	Low
40	Olson	Low	

	Dam Name	IDWR Hazard Rating	NID Hazard Rating
41	Presol	Low	
42	Reierson	Low	
43	Schoepflin	Low	
44	Smith	Low	
45	Stauber	Low	
46	Sullivan	Low	
47	Troy	Low	
48	Warren No. 1	Low	
49	Warren No. 2	Low	
50	Winn	Low	
51	Boyle Dam		
52	Charlton		
53	Germer		
54	Hanchett Dam		
55	Larson		
56	Melina		
57	Mordaunt		
58	Patterson		
59	Robinson Lake		
60	Warren No. 3		
Source: Idaho Department of Water Resources, 2025; NID, 2025			

Spring Valley is a high hazard dam located in Latah County. The first downstream community is Kendrick, which is sixteen miles downstream. Although not directly downstream, the city of Troy is located just south of Spring Valley, and the northern outermost parts of the city are within the flood zone. Spring Valley Reservoir is considered to have a high hazard threat. The dam was built in 1962 and is 47 feet high. The normal reservoir storage is 721 acre-feet. The spillway type is controlled, and the maximum dam breach flow is 190 cfs with a 2.7-square mile drainage basin area.

9.4 HISTORICAL FREQUENCY & PROBABILITY OF FUTURE OCCURRENCE

Presently, there is no historical record of dam or levee failure in Latah County. However, dam failure could occur at any time without warning, so it's imperative to continue monitoring each dam in the county, especially those with high or significant hazard ratings. Moscow and Kendrick would be the most likely communities to be affected by dam failure due to their downstream locations from high and significant hazard dams.

9.5 IMPACTS & LOSS ESTIMATES

The cities of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy and parts of unincorporated Latah County may be impacted by dam or levee failure, as presented in the table below.

Table 9-4. Impacts of Dam/Levee Failure by Jurisdiction

Jurisdiction	May Be Impacted by Dam Failure	Potential Impacts of Dam Failure
Latah County	Yes	Injury, drowning, blunt force trauma, death, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, shortage of water storage, disruption to medical care, risk to emergency services, economic losses
City of Bovill	Yes	Injury, drowning, blunt force trauma, death, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, shortage of water storage, disruption to medical care, risk to emergency services, economic losses
City of Deary	No	No impacts likely
City of Genesee	No	No impacts likely
City of Juliaetta	Yes	Injury, drowning, blunt force trauma, death, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, shortage of water storage, disruption to medical care, risk to emergency services, economic losses
City of Kendrick	Yes	Injury, drowning, blunt force trauma, death, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, shortage of water storage, disruption to medical care, risk to emergency services, economic losses
City of Moscow	Yes	Injury, drowning, blunt force trauma, death, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, shortage of water storage, disruption to medical care, risk to emergency services, economic losses
City of Potlatch	Yes	Injury, drowning, blunt force trauma, death, downed power lines, displaced wildlife, hazardous chemicals release, leaking gas lines, property damage, flooding in residences and businesses, road closures, loss of crops/vegetation/livestock, loss of utilities, shortage of water storage, disruption to medical care, risk to emergency services, economic losses
City of Troy	No	No impacts likely

High and significant hazard dams have the potential to cause possible loss of human life (high hazard) or significant property damage (significant hazard) if they were to fail and are therefore of most concern to the county. However, due to strict regulations, frequent monitoring, and periodic inspection of these high and significant hazard dams, the likelihood of a dam failure is low.

The severity of a dam failure depends on the area surrounding the dam, the volume and velocity of water that breaches the structure, and the structures and population in the area. A dam breach will result in flooding of normally protected areas, resulting in impacts similar to those seen that are within the normal floodplain. Impacts include damaged or destroyed essential utilities, homes, major roads, crops, and businesses.

Vulnerable Populations

There are many vulnerable populations in Latah County, including those in the table below. People with inadequate living conditions, especially those who are homeless or live in mobile homes, may be more vulnerable to dam failure. Structures without foundations are more likely to be swept away or damaged in the event of a dam failure and the subsequent flash flood. Additionally, those who are unable to quickly transport themselves to a safe location may be at risk.

Table 9-5. Vulnerable Populations in Latah County

Vulnerability Category	Number	Percent
Families in poverty	665	8.8%
People with disabilities	4,862	12.3%
People over 65 years & living alone	1,521	9.5%
Single female households with children > 18 years	660	4.1%
Difficulty with English	87	0.2%
Households with no car	646	4.1%
Mobile homes	1,551	9.7%
Source: Headwaters Economics, 2025		

As demonstrated in blue in the following map, Latah County's northern region is especially disadvantaged, and the southern portion of the county is seen as partially disadvantaged (Climate and Economic Justice Screening Tool, 2025). This area has a large population of people living in rural communities, the majority of whom are low income and may lack resources to adequately respond to a dam failure.

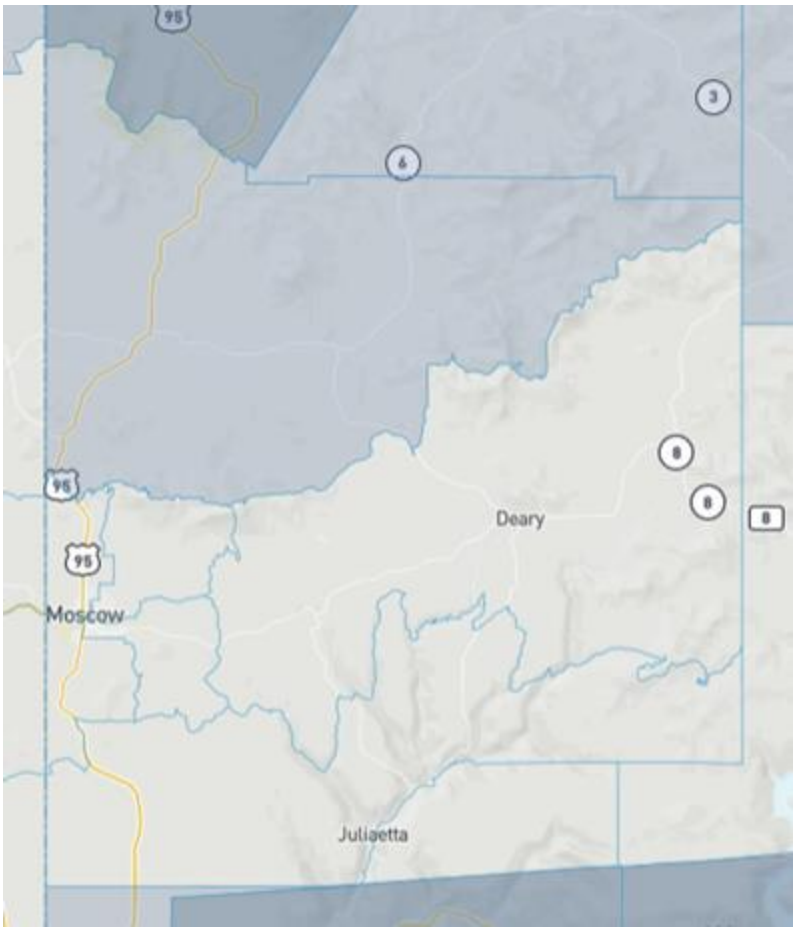
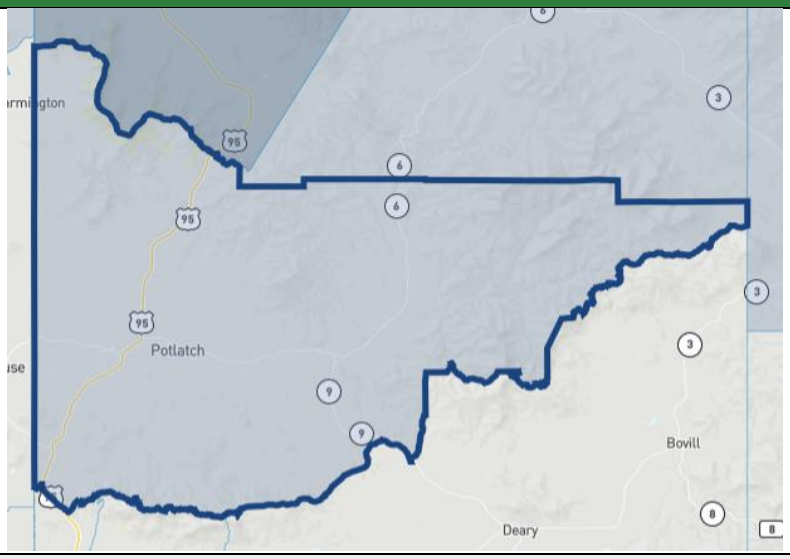


Figure 9-2. Map of Disadvantaged Communities in Latah County

The following table details the one completely disadvantaged census tract in Latah County along with the specific burdens and disadvantages the census tract experiences.

Table 9-6. Disadvantaged Communities in Latah County

LATAH COUNTY, ID		
CLIMATE & ECONOMIC JUSTICE SCREENING TOOL—DISADVANTAGED CENSUS TRACT		
CENSUS TRACT 2010 ID	**CENSUS TRACT POPULATION**	**LOW INCOME TRACT?**
16057005500	3,986	YES

LATAH COUNTY, ID	
	
CENSUS TRACT BURDENS: Transportation	
***97th** % (above 90th percentile)*	*Average of relative cost and time spent on transportation*
***65th** % (above 65th percentile)*	*People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed*
Source: U.S. Council on Environmental Quality—Climate & Economic Justice Screening Tool (2025)	

Dam failure and subsequent flooding may cause significant damage to critical facilities in the county. The following table lists types of critical facilities that could be negatively affected by damage from dam failure, which could delay emergency response and access to life-saving medical equipment.

Table 9-7. Critical Facility Types in Latah County

Critical Facility Type	Location
Fire Station	Potlatch
3 Fire Stations	Moscow
Fire Station	Genesee
Fire Station	Troy
Fire Station	Deary
Fire Station	Kendrick
Fire Station	Juliaetta
Fire Station	Bovill
3 Local Law Enforcement	Moscow
Local Law Enforcement	Troy
Hospital	Moscow
5 Nursing Homes	Moscow
2 Dialysis Centers	Moscow
7 Pharmacies	Moscow
Pharmacy	Potlatch
Public Health Department	Moscow
Wastewater Treatment Plant	Potlatch

Critical Facility Type	Location
Wastewater Treatment Plant	Viola
Wastewater Treatment Plant	Moscow
Wastewater Treatment Plant	Troy
Wastewater Treatment Plant	Juliaetta
Wastewater Treatment Plant	Kendrick
Wastewater Treatment Plant	Deary
Wastewater Treatment Plant	Bovill
Source: Resilience Analysis and Planning Tool, 2025	

Additionally, over 2.9 million Medicare beneficiaries in the U.S. rely on electricity-dependent durable medical and assistive equipment (DME) and devices to live independently in their homes, and some of those individuals also have health care service dependencies (HHS Empower Program, 2025). In Latah County, 7,203 people are beneficiaries of Medicare, and 323 of these beneficiaries are considered at-risk and would be vulnerable during a power outage.

Changes in Development and Impact of Future Development

According to FEMA, dam failure or levee failure can significantly impact current and future development in several ways:

- *Reassessment of Land Use:* After a dam or levee failure, there may be a need to reassess land use in affected areas. This can lead to changes in zoning laws and development regulations, especially in areas deemed high risk for future flooding.
- *Impact on Real Estate Values:* The perceived risk of flooding due to potential dam or levee failure can affect real estate values. Properties in areas identified as high risk may see a decrease in value, which can impact both current and future development decisions.
- *Changes in Insurance and Financing:* The risk of flooding may lead to higher insurance premiums for properties in the affected areas. In some cases, insurance may become difficult to obtain. This can influence development decisions, as the cost and availability of insurance are important factors in real estate development and investment.
- *Infrastructure Redesign and Reinforcement:* Existing and future infrastructure projects may need to be redesigned to withstand potential flood events. This can include strengthening or raising buildings, bridges, and roads, as well as improving drainage systems.
- *Mitigation and Resilience Planning:* There may be an increased focus on mitigation and resilience in future development to reduce the impact of potential flood events. This can include creating more green spaces, implementing better water management practices, and using flood-resistant building materials and techniques.
- *Shift in Development Focus:* In some cases, there might be a shift away from developing in high-risk areas. Development might be directed towards safer areas, potentially leading to changes in urban and regional planning strategies.

- *Emergency Preparedness and Response Planning:* Future development may need to incorporate improved emergency preparedness and response plans, including evacuation routes, emergency shelters, and communication systems.

Effects of Climate Change on Probability of Future Events and Severity of Impacts

Flooding: Providing projections of future climate change for a specific region is challenging. Shorter term projections are more closely tied to existing trends, making longer term projections even more difficult. The further out a prediction reaches the more subject to changing dynamics it becomes. Climate change is already impacting water resources, and resource managers have observed the following:

- Historical hydrologic patterns can no longer be solely relied upon to forecast the water future.
- Precipitation and runoff patterns are changing, increasing the uncertainty for water supply and quality, flood management, and ecosystem functions.
- Extreme climatic events will become more frequent, necessitating improvement in flood protection, drought preparedness, and emergency response.

Records have shown that over the past 100 years, Idaho has seen an increase in temperature of one to two degrees (°F). In the coming years, it is predicted that streams will be warmer, populations of several fish species will decline, wildfires will become more common, deserts may expand, and water may be less available for irrigation (Idaho Hazard Mitigation Plan, 2023).

Much of the water needed for agriculture, public supplies, and other uses throughout Idaho comes from mountain snowpacks. As snowpacks are very important to the state, so is the timing of snowmelt runoff into rivers and streams. Snowpack is melting earlier each year; therefore the flow of meltwater into streams during the summer is declining and affecting water demands for agriculture growing season. Rising snowlines caused by warming temperatures will allow more mountain areas to contribute to peak storm runoff. High frequency flood events will also increase with a changing climate (Idaho Hazard Mitigation Plan, 2023).

Along with reductions in the amount of snowpack and accelerated snowmelt, scientists project greater storm intensity, which would result in more direct runoff and flooding. Changes in watershed vegetation and soil moisture conditions will likely change runoff and recharge patterns. As stream flows and velocities change, erosion patterns will also change, altering channel shapes and depths, and possibly increase sedimentation behind dams, affecting habitat and water quality. As previously stated, climate change may lead to an increase in wildfires, which provides potential for more floods, increasing sediment loads and water quality impacts (Idaho Hazard Mitigation Plan, 2023).

Small changes in rainfall, runoff, and snowpack may also have significant impacts for water resource systems, including dams, levees, and canals. Dams are designed partly based on assumptions about a river's flow behavior, expressed as hydrographs. Changes in weather patterns can have significant effects on the hydrograph used for the design of a dam. If the hydrograph changes, it is conceivable that the dam can lose some designed margin of safety, also known as freeboard. If freeboard is reduced, dam operators may be forced to release increased volumes earlier in a storm cycle to maintain the required margins of safety. Such early releases of increased volumes can also increase flood potential downstream (Idaho Hazard Mitigation Plan, 2023).

Dams: Dams are designed partly based on historical patterns and assumptions about a river's flow behavior. Changes in weather patterns can have significant effects on a river's hydrograph used for the design of a dam. If the hydrograph changes suddenly or spasmodically, it is conceivable that the dam can lose some or all its designed margin of safety. When this happens, dam operators may be forced to release stored water earlier in a storm cycle or during other seasons to maintain the required margins of safety. Such releases can increase flood potential downstream (Idaho Hazard Mitigation Plan, 2023).

Dams are constructed with spillways that serve as safety measures to help prevent overtopping of the dam in the event of the reservoir filling too quickly. Spillway overflow events at many large, high hazard dams often are referred to as "design or operations failures," resulting in discharges downstream that may increase the localized flooding potential. Although climate change will not increase the probability of catastrophic dam failure, it may increase the probability and/or magnitude of spillway releases (aka design failures) (Idaho Hazard Mitigation Plan, 2023).

Levees: According to the National Levee Database (managed by the U.S. Army Corps of Engineers), climate change can increase the severity and likelihood of levee failure in several ways:

1. *Increased Frequency and Severity of Flooding:* Climate change is associated with more extreme weather events, including heavier and more frequent rainfall. This can lead to higher river levels and increased pressure on levees, raising the risk of overtopping and failure.
2. *Sea-Level Rise:* For coastal levees, sea-level rise can lead to more frequent and severe flooding, particularly during storm surges and high tides. This increases the risk of levee failure and the inundation of protected areas. Latah County is not at risk of this type of failure.
3. *Changing Weather Patterns:* Shifts in weather patterns can lead to longer and more severe droughts, followed by intense rainfall. Drought conditions can weaken levee structures, making them more susceptible to failure during subsequent heavy rain events.

4. *Erosion and Sedimentation Changes:* Altered river flows and increased rainfall can affect erosion and sedimentation patterns. This can undermine the structural integrity of levees or necessitate more frequent maintenance and upgrades.
5. *Temperature Changes:* Higher temperatures can affect the moisture content of soils, potentially weakening earthen levees. Freeze-thaw cycles in colder climates can also be damaging to the structure of levees.
6. *Adaptation and Resilience Needs:* As the impacts of climate change become more pronounced, there is a growing need to adapt existing levees to withstand these changes. This may include reinforcing levees, increasing their height, improving drainage systems, and incorporating more resilient design features.

Heavy precipitation leads to both riverine flooding and flash floods as the ground fails to absorb the high volume of precipitation that falls in a short period. Increasing annual precipitation contributes to sustained flooding, as seen in the table below (Neighborhoods At Risk, 2025).

Table 9-8. Climate Projections for Latah County, ID | Neighborhoods at Risk

Precipitation Projections	By 2050, Latah County is expected to experience 0.3 more days of heavy precipitation per year (from 1.3 days to 1.6 days per year).
	By 2050, Latah County is expected to have a 1” increase (from 31” to 32”) in average annual precipitation.
	Increasing annual precipitation can contribute to sustained flooding and threaten reservoir/lake capacities, which may place additional pressure on existing dams.
Source: Neighborhoods at Risk, 2025	

9.6 FEMA NRI SCORE

FEMA does not evaluate dam failure as part of its National Risk Index.

CHAPTER 10 DROUGHT

10.1 HAZARD DESCRIPTION

Drought is an expected phase in the climactic cycle of almost any geographical region. Objective, quantitative definitions for drought exist but most authorities agree that, because of the many factors contributing to it and because its onset and relief are slow and indistinct, none is entirely satisfactory. According to the National Drought Mitigation Center, drought "originates from a deficiency of precipitation over an extended period of time, usually a season or more. This deficiency results in a water shortage for some activity, group, or environmental sector" (NDMC, 2025). What is clear is that a condition perceived as "drought" in a given location is the result of a significant decrease in water supply relative to what is "normal" in that area.

It should be noted that water supply is not only controlled by precipitation (amount, frequency, and intensity) but also by other factors, including evaporation (which is increased by higher-than-normal heat and winds), transpiration, temperature, soil moisture, and human use.

10.2 LOCATION

Latah County is subject to drought events, especially related to the county's groundwater supply. Latah County is partially located over the Clearwater aquifer that creates fertile conditions for agriculture across the Palouse. Drought in Latah County is most often tied to a lack of sufficient winter snowfall for a sustained period. Limited snowpacks result in reduced stream flows and groundwater recharge (Idaho Hazard Mitigation Plan, 2023). Drought affects the county, the incorporated cities of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy, and the unincorporated communities. The largest drought impacts are to agricultural producers, agricultural industries, and the businesses and communities built around agriculture (Idaho Hazard Mitigation Plan, 2023).

10.3 EXTENT

The following figure displays the precipitation conditions for the United States using the Palmer Drought Severity Index, which is taken from the National Weather Service (NWS). The Palmer Drought Severity Index (PDSI) is a means of quantifying drought in terms of prolonged and abnormal moisture deficiency or excess. This index indicates general conditions and not local variations caused by isolated rain. The PDSI is an important climatological tool for evaluating the scope, severity, and frequency of prolonged periods of abnormally dry or wet weather. It can be used to help delineate disaster areas and indicate the availability of irrigation water supplies, reservoir levels, range conditions, amount of stock water, and potential intensity of forest fires (NWS, 2025).

The PDSI expresses this comparison of moisture deficiency and moisture excess on a numerical scale that usually ranges from positive five to negative five. Positive values reflect excess moisture supplies, while negative values indicate moisture demands in excess of supplies.

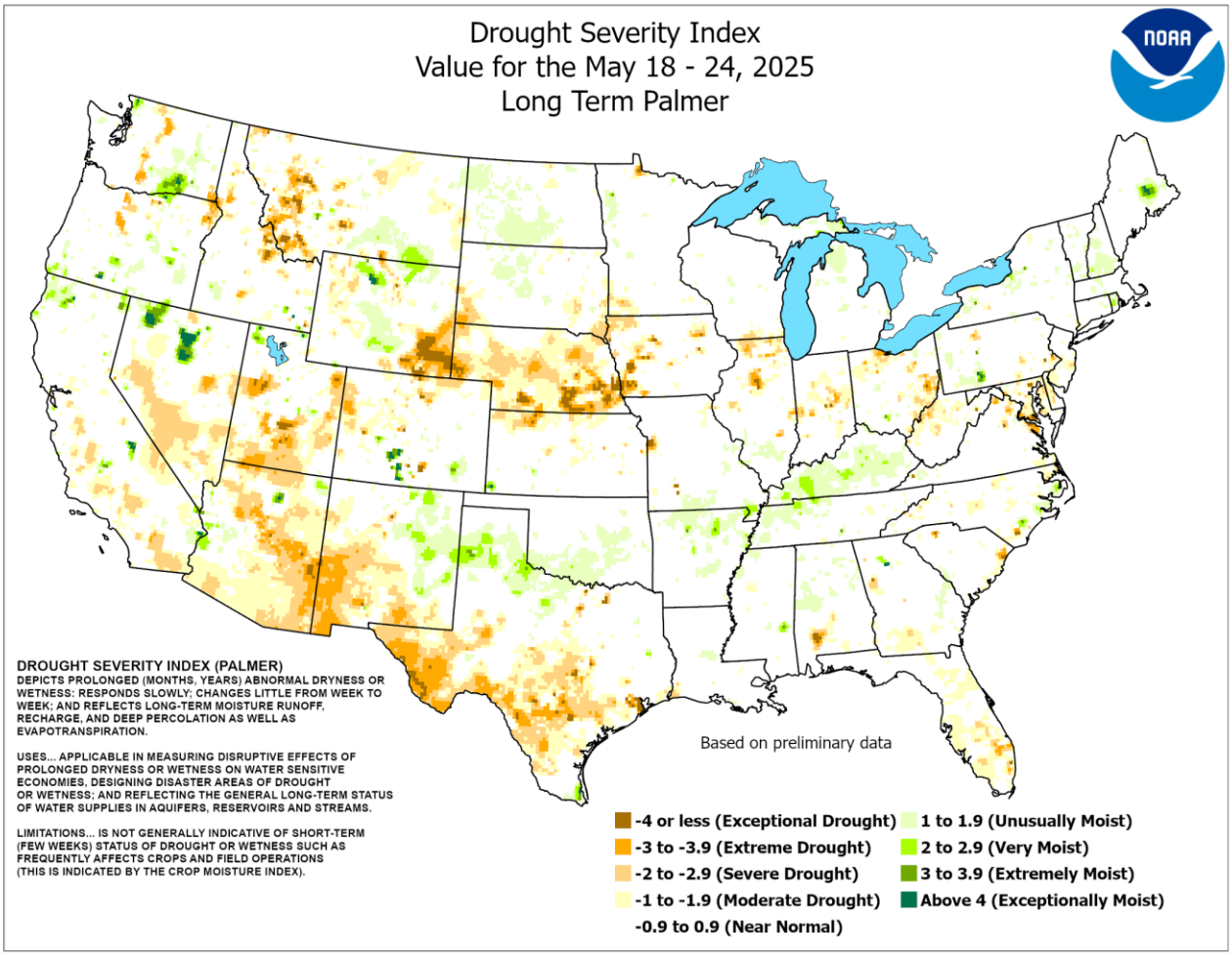


Figure 10-1. Palmer Drought Severity Index (NWS, 2025)

The National Drought Mitigation Center also rates drought throughout the nation by intensity using a D0 (Abnormally Dry) to D4 (Exceptional Drought) scale, as seen in the map of Idaho below. As of May 2025, the eastern half of Latah County was in a state of moderate drought, while the western half was abnormally dry (NDMC, 2025).

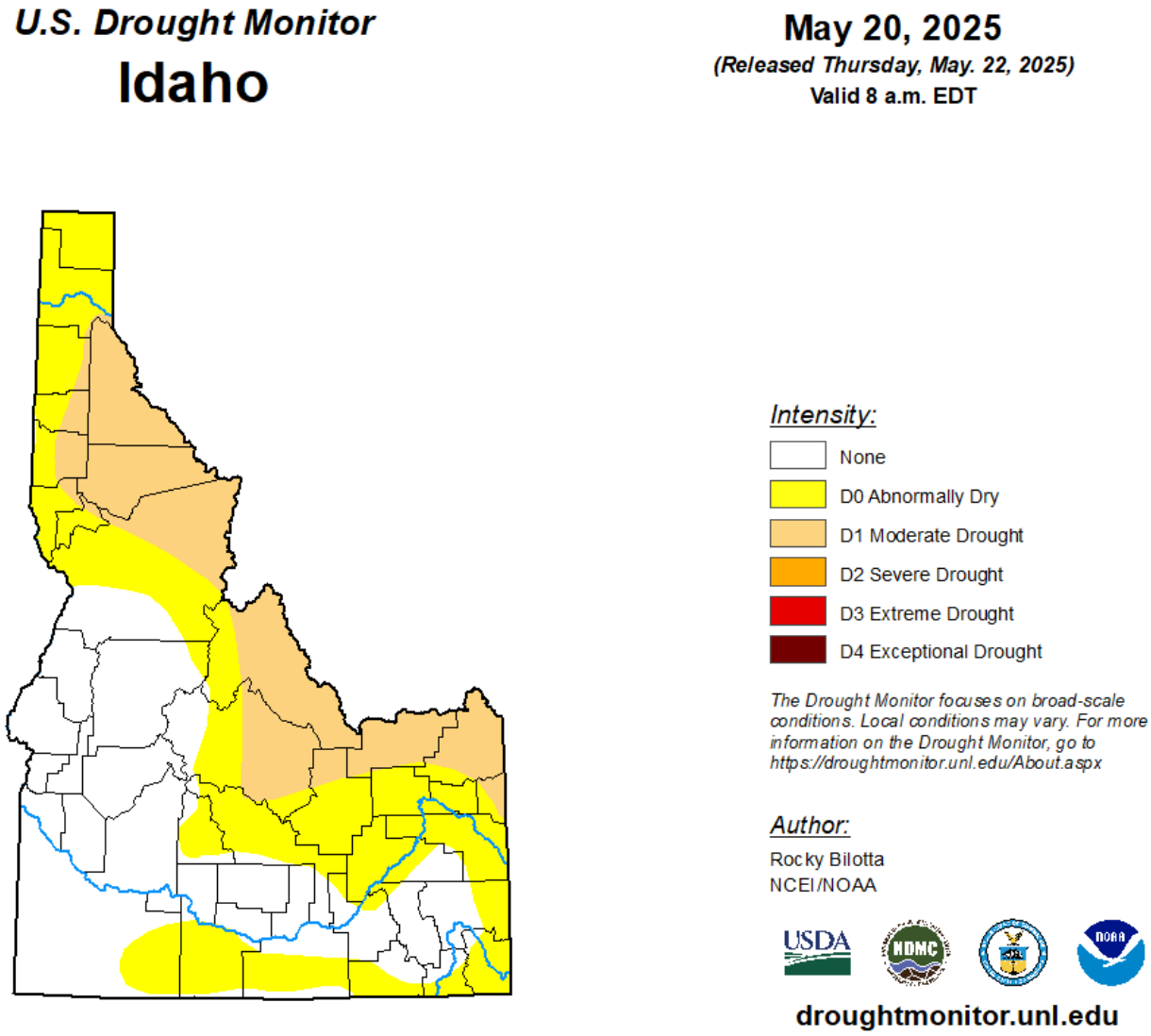


Figure 10-2. U.S. Drought Monitor Idaho

The Standardized Precipitation Index (SPI) is a probability index that considers only precipitation. The SPI is based on the standardized probability of recording a given amount of precipitation in a specific area. The index is negative for drought and positive for wet conditions. The index becomes more positive or negative as conditions become more severe. The 1-month SPI for North America in April 2025 can be seen below (NCEI, 2025).

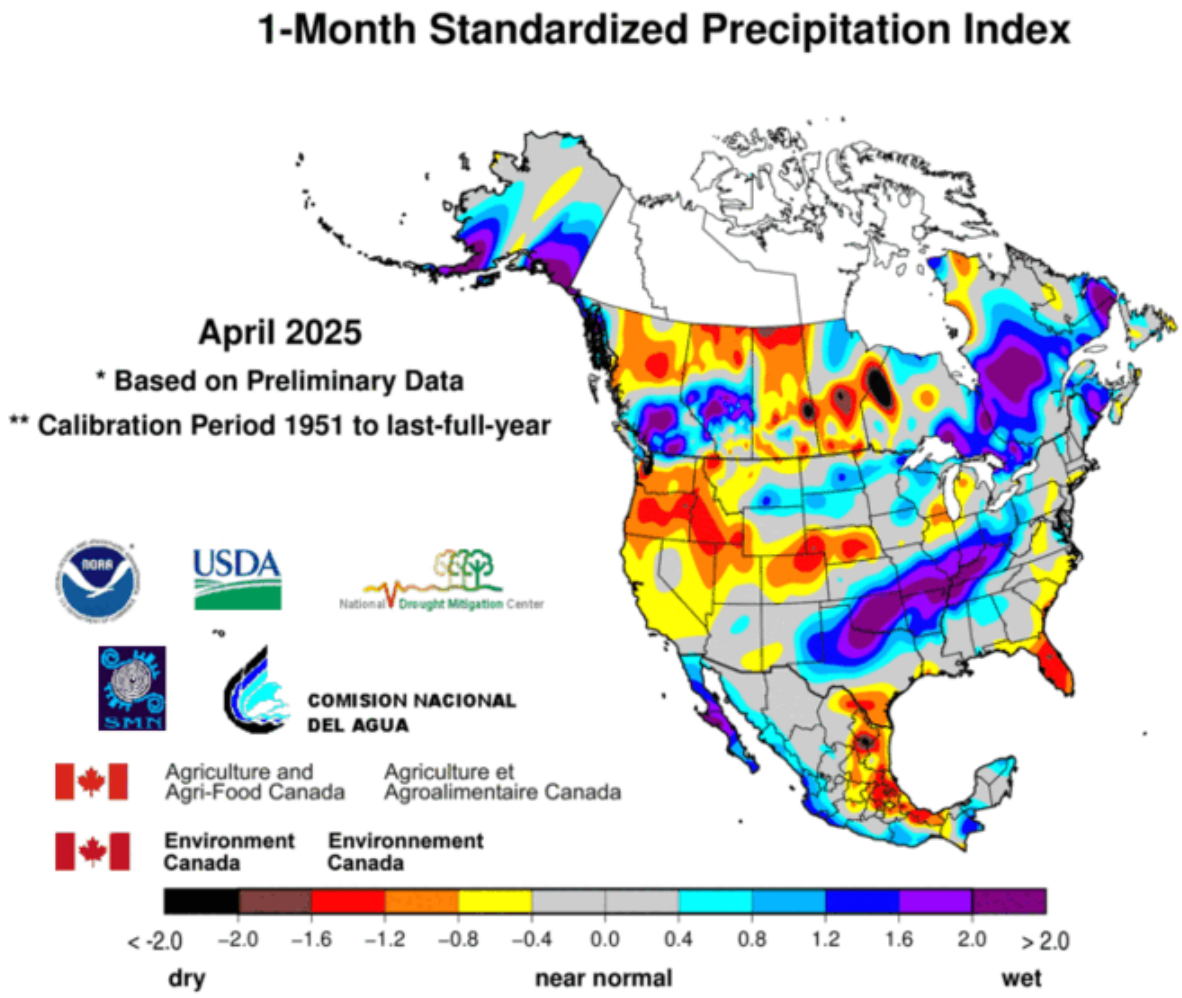


Figure 10-3. 1-Month Standardized Precipitation Index

10.4 HISTORICAL FREQUENCY & PROBABILITY OF FUTURE OCCURRENCE

Droughts are common occurrences in Latah County. There have been several multi-year droughts in Idaho since 2000, which are listed below (RGJ, 2025). Idaho has most recently been in a drought since 2020:

- 2000–2005
- 2007–2009
- 2012–2016
- 2018–2019
- 2020–2025

The last drought declaration for Latah County was issued on July 6, 2021 by the USDA for impacts to agriculture producers. The IDWR has not issued a drought declaration for Latah County in over 25 years (Idaho Hazard Mitigation Plan, 2023).

Latah County has historically experienced relatively short periods of drought of a year or less followed by several years of no drought (RGJ, 2025). The longest period of drought in the county in the last 25 years was from May 2023 to May 2025. As of May 2025, the eastern half of the county was in a state of moderate drought, while the western half was abnormally dry (RGJ, 2025). Another drought is likely to occur again in the future. The list below notes the periods of drought in Latah County since 2000 (RGJ, 2025).

- February 2001–January 2002
- November 2002–January 2003
- July 2003–January 2004
- February 2005–January 2006
- July 2007–January 2008
- February 2010–June 2010
- June 2013–September 2013
- November 2014–January 2015
- April 2015–March 2016
- August 2017–October 2017
- May 2021–May 2022
- May 2023–May 2025

10.5 IMPACTS & LOSS ESTIMATES

Latah County and the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts may be impacted by drought, as presented in the table below. Due to the unpredictability of drought, it is difficult to identify the exact areas most threatened by drought and to provide loss estimate values. Historical drought records demonstrate that agriculture and tourism are typically the economic sectors most impacted by drought.

Table 10-1. Impacts of Drought by Jurisdiction

Jurisdiction	Impacted by Drought	Experienced Exceptional Drought Since 2010	Potential Impacts of Drought
Latah County	Yes	Yes	Water shortages, reduced crop/rangeland/forest productivity, wildfire, livestock/wildlife losses, economic losses (reduced agriculture income, increased food prices, unemployment, increased energy costs, etc.), plant disease, infestation, decreased tourism, food shortages
City of Bovill	Yes	Yes	Water shortages, reduced crop/rangeland/forest productivity, wildfire, livestock/wildlife losses, economic losses (reduced agriculture income, increased food

Jurisdiction	Impacted by Drought	Experienced Exceptional Drought Since 2010	Potential Impacts of Drought
			prices, unemployment, increased energy costs, etc.), plant disease, infestation, decreased tourism, food shortages
City of Deary	Yes	Yes	Water shortages, reduced crop/rangeland/forest productivity, wildfire, livestock/wildlife losses, economic losses (reduced agriculture income, increased food prices, unemployment, increased energy costs, etc.), plant disease, infestation, decreased tourism, food shortages
City of Genesee	Yes	Yes	Water shortages, reduced crop/rangeland/forest productivity, wildfire, livestock/wildlife losses, economic losses (reduced agriculture income, increased food prices, unemployment, increased energy costs, etc.), plant disease, infestation, decreased tourism, food shortages
City of Juliaetta	Yes	Yes	Water shortages, reduced crop/rangeland/forest productivity, wildfire, livestock/wildlife losses, economic losses (reduced agriculture income, increased food prices, unemployment, increased energy costs, etc.), plant disease, infestation, decreased tourism, food shortages
City of Kendrick	Yes	Yes	Water shortages, reduced crop/rangeland/forest productivity, wildfire, livestock/wildlife losses, economic losses (reduced agriculture income, increased food prices, unemployment, increased energy costs, etc.), plant disease, infestation, decreased tourism, food shortages
City of Moscow	Yes	Yes	Water shortages, reduced crop/rangeland/forest productivity, wildfire, livestock/wildlife losses, economic losses (reduced agriculture income, increased food prices, unemployment, increased energy costs, etc.), plant disease, infestation, decreased tourism, food shortages
City of Potlatch	Yes	Yes	Water shortages, reduced crop/rangeland/forest productivity, wildfire, livestock/wildlife losses, economic losses (reduced agriculture income, increased food prices, unemployment, increased energy costs, etc.), plant disease, infestation, decreased tourism, food shortages
City of Troy	Yes	Yes	Water shortages, reduced crop/rangeland/forest productivity, wildfire, livestock/wildlife losses, economic losses (reduced agriculture income, increased food

Jurisdiction	Impacted by Drought	Experienced Exceptional Drought Since 2010	Potential Impacts of Drought
			prices, unemployment, increased energy costs, etc.), plant disease, infestation, decreased tourism, food shortages

Drought is agriculture's most expensive, frequent, and widespread form of natural disaster. Latah County has approximately 989 farms, which ranks among the highest in the state. The majority of the farms consist of about 329 acres each (USDA, 2022).

Drought produces a complex web of impacts that spans many sectors of the economy and reaches well beyond the area experiencing physical drought. This complexity exists because water is integral to our ability to produce goods and provide services.

Impacts are commonly referred to as direct or indirect. Reduced crop, rangeland, and forest productivity; increased fire hazard; reduced water levels; increased livestock and wildlife mortality rates; and damage to wildlife and fish habitat are a few examples of direct impacts. The consequences of these impacts illustrate indirect impacts. For example, a reduction in crop, rangeland, and forest productivity may result in reduced income for farmers and agribusiness, increased prices for food, unemployment, reduced tax revenues because of reduced expenditures, increased crime, foreclosures on bank loans to farmers and businesses, migration, and disaster relief programs. The impacts of drought can be categorized as economic, environmental, or social.

Many economic impacts occur in agricultural and related sectors because of the reliance of these sectors on surface and subsurface water supplies. In addition to obvious losses in yields in crop and livestock production, drought is associated with increases in insect infestations, plant disease, and wind erosion. Droughts also bring increased problems with insects and diseases to forests and reduce growth. According to the EWG, $45,456,804 in crop indemnity payments were due to drought and heat and $398,977 in payments were due to plant disease and insects in Latah County for the period of 1995–2023 (EWG, 2024). The incidence of forest and range fires increases substantially during extended droughts, which in turn places both human and wildlife populations at higher levels of risk.

Income loss is another indicator used in assessing the impacts of drought because so many sectors are affected. Reduced income for farmers has a ripple effect. Retailers and others who provide goods and services to farmers face reduced business. This leads to unemployment, increased credit risk for financial institutions, capital shortfalls, and loss of tax revenue for local, state, and federal government. Less discretionary income affects the recreation and tourism industries. Prices for food, energy, and other products increase as supplies are reduced.

Table 10-2. Drought: Expected Annual Loss for Latah County, ID | FEMA National Risk Index

Annualized Frequency	Population	Population Equivalence	Building Value	Agriculture Value	Total Value	Expected Annual Loss Score	Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County							
14.3 events per year	N/A	N/A	N/A	$2,016	$2,016	86.8	Relatively Low
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County							
15 events per year	0.0	$4,586	$73	$8,992	$13,651	90.6	Relatively Low
Census Tract 005500: City of Potlatch and Unincorporated Latah County							
14.3 events per year	N/A	N/A	N/A	$3,798	$3,798	89.0	Relatively Low
Census Tract 005102: City of Moscow and Unincorporated Latah County							
14.3 events per year	N/A	N/A	N/A	$493	$493	81.9	Relatively Low
Census Tract 005200: City of Moscow and Unincorporated Latah County							
14.3 events per year	N/A	N/A	N/A	$513	$513	82.1	Relatively Low
Census Tract 005400: City of Moscow and Unincorporated Latah County							
15 events per year	N/A	N/A	N/A	$788	$788	83.5	Relatively Low
Census Tract 005302: City of Moscow							
14 events per year	N/A	N/A	N/A	$4	$4	70.5	Very Low
Census Tract 005101: City of Moscow							
14 events per year	N/A	N/A	N/A	$85	$85	76.3	Very Low
Census Tract 005301: City of Moscow and Unincorporated Latah County							
14 events per year	N/A	N/A	N/A	$755	$755	83.4	Relatively Low

Annualized Frequency: The natural hazard annualized frequency is defined as the expected frequency or probability of a hazard occurrence per year. Annualized frequency is derived either from the number of recorded hazard occurrences each year over a given period or the modeled probability of a hazard occurrence each year.
Population: Population exposure is defined as the estimated number of people determined to be exposed to a hazard according to a hazard type-specific methodology.
Expected Annual Loss scores are calculated using an equation that combines values for exposure, annualized frequency, and historic loss ratios (Expected Annual Loss = Exposure x Annualized Frequency x Historic Loss Ratio).
Source: National Risk Index, 2025c; 2025d

Vulnerable Populations

There are many vulnerable populations in Latah County, including those in the table below. People particularly susceptible to drought are farmers who rely on crop revenue, people living in poverty, and those with chronic illnesses, such as asthma.

Table 10-3. Vulnerable Populations in Latah County

Vulnerability Category	Number	Percent
Families in poverty	665	8.8%
People with disabilities	4,862	12.3%
People over 65 years & living alone	1,521	9.5%
Single female households with children > 18 years	660	4.1%
Difficulty with English	87	0.2%
Households with no car	646	4.1%
Mobile homes	1,551	9.7%
Source: Headwaters Economics, 2025		

As demonstrated in blue in the following map, Latah County's northern region is especially disadvantaged, and the southern portion of the county is seen as partially disadvantaged (Climate and Economic Justice Screening Tool, 2025). This area has a large population of people living in rural communities, the majority of whom are low income and may lack resources to effectively stay cool during extreme heat events.

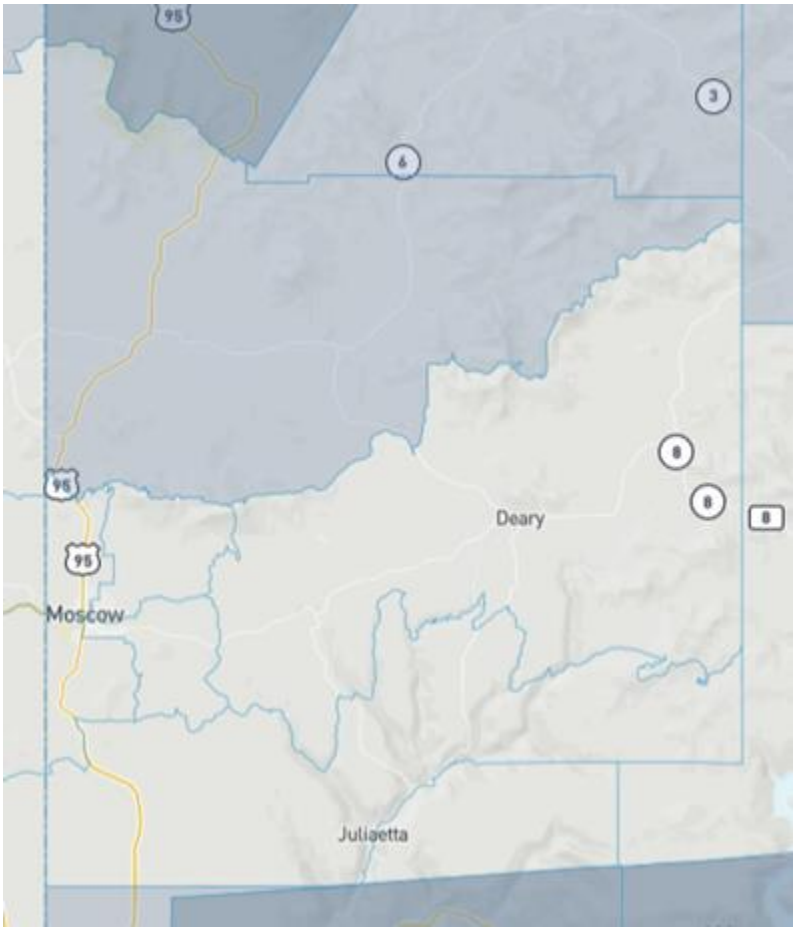
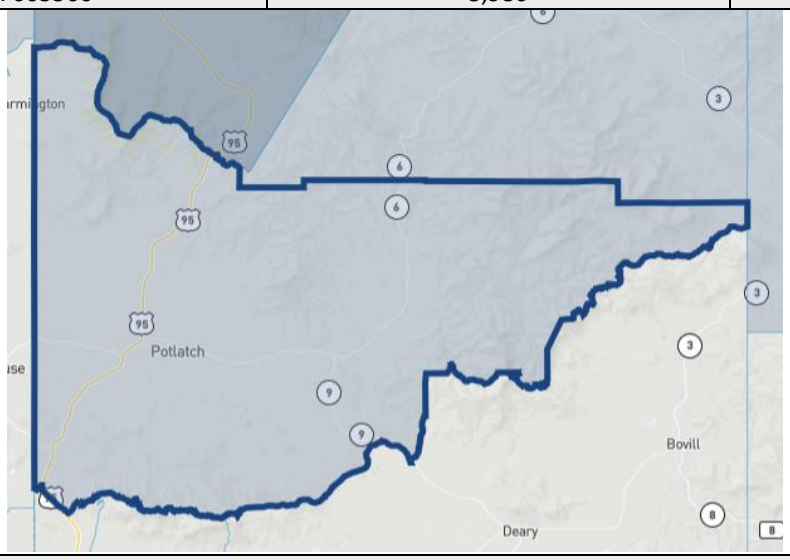


Figure 10-4. Map of Disadvantaged Communities in Latah County

The following table details the one completely disadvantaged census tract in Latah County along with the specific burdens and disadvantages the census tract experiences.

Table 10-4. Disadvantaged Communities in Latah County

LATAH COUNTY, ID		
CLIMATE & ECONOMIC JUSTICE SCREENING TOOL—DISADVANTAGED CENSUS TRACT		
CENSUS TRACT 2010 ID	**CENSUS TRACT POPULATION**	**LOW INCOME TRACT?**
16057005500	3,986	YES
		
CENSUS TRACT BURDENS: Transportation		
***97th** % (above 90th percentile)*	*Average of relative cost and time spent on transportation*	
***65th** % (above 65th percentile)*	*People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed*	
Source: U.S. Council on Environmental Quality—Climate & Economic Justice Screening Tool (2025)		

Drought places high demands on the water supply and sometimes even electrical power supplies that can lead to blackouts or brownouts when accompanied by high heat. The following table lists types of critical facilities that could be negatively affected by power outages or limited water supply, including places like hospitals and dialysis centers that rely on power to operate life-saving equipment.

Table 10-5. Critical Facility Types in Latah County

Critical Facility Type	Location
Fire Station	Potlatch
3 Fire Stations	Moscow
Fire Station	Genesee
Fire Station	Troy
Fire Station	Deary
Fire Station	Kendrick
Fire Station	Juliaetta
Fire Station	Bovill

Critical Facility Type	Location
3 Local Law Enforcement	Moscow
Local Law Enforcement	Troy
Hospital	Moscow
5 Nursing Homes	Moscow
2 Dialysis Centers	Moscow
7 Pharmacies	Moscow
Pharmacy	Potlatch
Public Health Department	Moscow
Wastewater Treatment Plant	Potlatch
Wastewater Treatment Plant	Viola
Wastewater Treatment Plant	Moscow
Wastewater Treatment Plant	Troy
Wastewater Treatment Plant	Juliaetta
Wastewater Treatment Plant	Kendrick
Wastewater Treatment Plant	Deary
Wastewater Treatment Plant	Bovill
Source: Resilience Analysis and Planning Tool, 2025	

Additionally, over 2.9 million Medicare beneficiaries in the U.S. rely on electricity-dependent durable medical and assistive equipment (DME) and devices to live independently in their homes, and some of those individuals also have health care service dependencies (HHS Empower Program, 2025). In Latah County, 7,203 people are beneficiaries of Medicare, and 323 of these beneficiaries are considered at-risk and would be vulnerable during a power outage.

Changes in Development and Impact of Future Development

No data exists demonstrating the impact of drought on future development in Latah County. However, excessive drought can result in water shortages and increased competition for limited water resources, which can limit the ability of developers to expand projects within the county.

Effects of Climate Change on Probability of Future Events and Severity of Impacts

According to the University Corporation for Atmospheric Research (UCAR), climate change is causing more extreme weather events, including severe drought. UCAR explains that warmer temperatures cause more evaporation, turning water into vapor in the air and causing drought in some areas of the world. Places prone to drought are expected to become even drier over the following century (UCAR, 2025).

Providing projections of future climate change for a specific region is challenging. Shorter-term projections are more closely tied to existing trends, making longer-term projections even more challenging. The further a prediction reaches, the more subject it becomes to changing dynamics. Climate change is already impacting water resources, and resource managers have observed the following:

- Historical hydrologic patterns can no longer be solely relied upon to forecast the water's future
- Precipitation and runoff patterns are changing, increasing the uncertainty for water supply and quality, flood management, and ecosystem functions
- Extreme climatic events will become more frequent, necessitating improvement in flood protection, drought preparedness, and emergency response

Higher temperatures, increasing variation in precipitation patterns, and changes in lake levels are likely to increase the vulnerability of cities to extreme events (including flooding, drought, heat waves, and more intense urban heat island effects), compounding already existing stressors.

The climate of Idaho is changing. Over the past 100 years, most of the state has warmed one to two degrees (°F). In the coming years, it is predicted that streams will be warmer, populations of several fish species will decline, wildfires will become more common, deserts may expand, and water may be less available for irrigation (Idaho Hazard Mitigation Plan, 2023).

In addition to a warming climate, Idaho has been impacted by El Niño and La Niña. El Niño is a weather pattern that is characterized by unusually warm ocean temperatures along the equator in the Pacific Ocean and has important consequences for weather and climate over the United States. El Niño in general acts to tilt the odds toward wetter and cooler than average conditions across much of the south and towards drier and warmer conditions in many of the northern regions. El Niño typically brings above normal temperatures and less precipitation to Idaho, impacting the state's water supply (NOAA, n.d.). Drier weather can also lead to an increase in the number of wildfires (Idaho Hazard Mitigation Plan, 2023).

No jurisdictions in Latah County are uniquely affected by drought, and all are adequately addressed at the county level.

The table below illustrates 25-year heat projections for Latah County, which may contribute to increased and/or prolonged drought events.

Table 10-6. Climate Projections for Latah County, ID | Neighborhoods at Risk

Heat Projections	By 2050, Latah County is expected to experience 9 more days that reach above 95°F (from 10 days to 19 days per year).
	By 2050, Latah County is expected to have a 2°F increase (from 48°F to 50°F) in average annual temperatures.
	Increasing annual temperatures can contribute to more frequent extreme heat events.
Source: Neighborhoods at Risk, 2025	

10.6 FEMA NRI SCORE

Table 10-7. Drought: Overall National Risk Index Score for Latah County, ID | FEMA National Risk Index

Risk Index Score	Risk Index Rating	Social Vulnerability Rating	Community Resilience Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County			
86.0	Relatively Low	Relatively Low	Relatively Low
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County			
90.1	Relatively Low	Relatively Low	Relatively Low
Census Tract 005500: City of Potlatch and Unincorporated Latah County			
89.2	Relatively Low	Relatively Moderate	Relatively Low
Census Tract 005102: City of Moscow and Unincorporated Latah County			
81.8	Relatively Low	Relatively Moderate	Relatively Low
Census Tract 005200: City of Moscow and Unincorporated Latah County			
81.6	Relatively Low	Relatively Low	Relatively Low
Census Tract 005400: City of Moscow and Unincorporated Latah County			
83.2	Relatively Low	Relatively Low	Relatively Low
Census Tract 005302: City of Moscow			
70.3	Very Low	Relatively Moderate	Relatively Low
Census Tract 005101: City of Moscow			
76.4	Very Low	Relatively Moderate	Relatively Low
Census Tract 005301: City of Moscow and Unincorporated Latah County			
81.8	Relatively Low	Very Low	Relatively Low
Risk Index scores are calculated using an equation that combines scores for Expected Annual Loss due to natural hazards, Social Vulnerability, and Community Resilience (Expected Annual Loss x Social Vulnerability / Community Resilience = Risk Index). Source: National Risk Index, 2025b; 2025d			

CHAPTER 11 EARTHQUAKE

11.1 HAZARD 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 earthquake are essentially 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; and 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.

11.2 LOCATION

This hazard may affect every community in Latah County, including the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts, although the impact would likely be small. Latah County has several faults running through the county, most of which are normal faults, as seen in the figure to the right (Idaho Hazard Mitigation Plan, 2023). Latah County has no Quaternary faults, but it does have two lesser Tertiary faults that present very little risk (Idaho Geology, 2003). The majority of the county's normal fault lines run diagonally across the region, northwest to southeast. The cities of Kendrick, Juliaetta, Troy, and Moscow are located nearest to fault lines and therefore most at risk of experiencing an earthquake with its epicenter nearby. Latah County's Tertiary faults can be seen below.

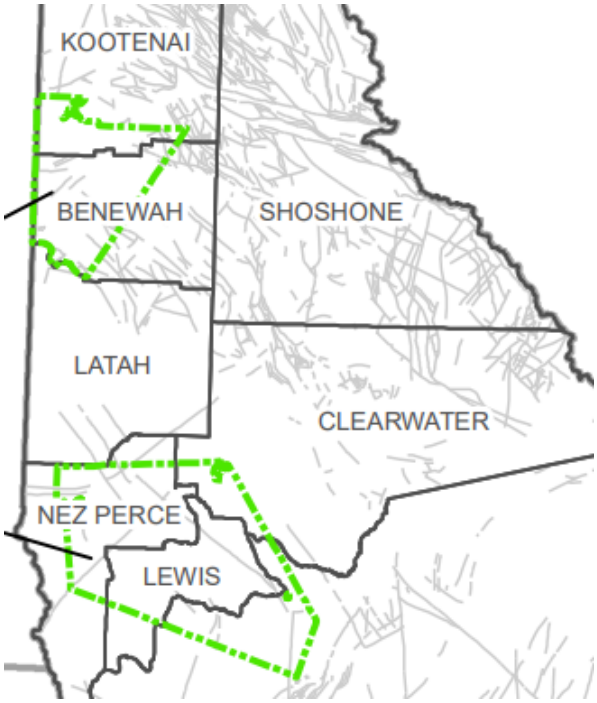


Figure 11-1. Normal Faults in Latah County, ID (Idaho Hazard Mitigation Plan, 2023)

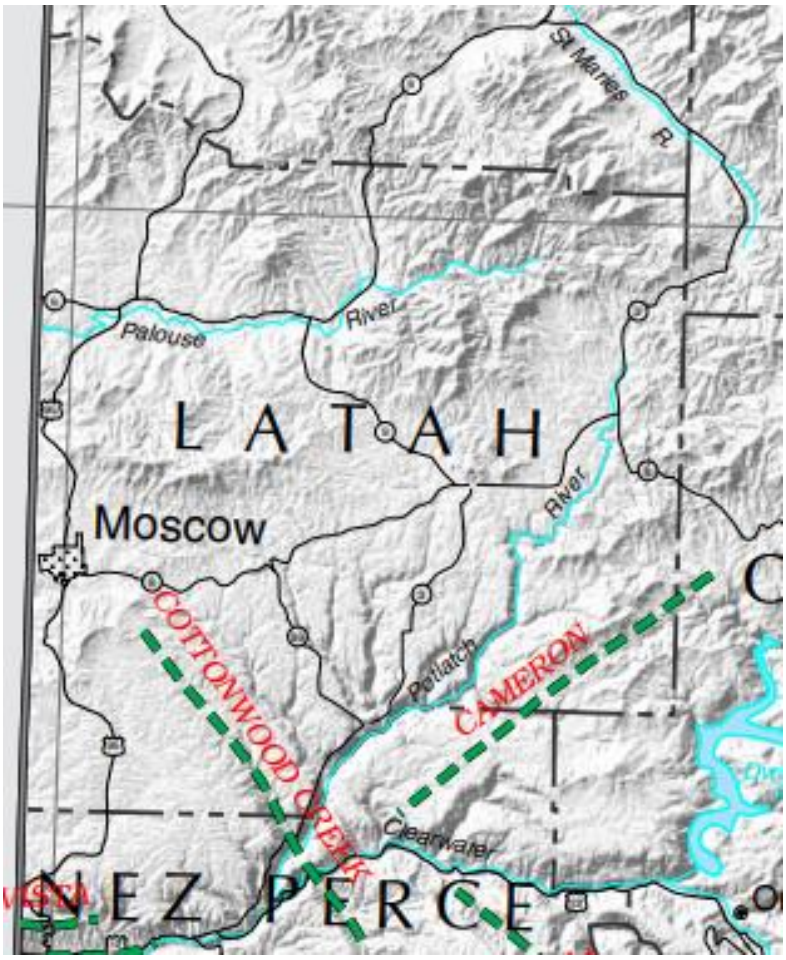


Figure 11-2. Lesser Tertiary Faults in Latah County, ID (Idaho Geology, 2003)

11.3 EXTENT

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. 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 geological features, such as depth of sediment and bedrock layers.

Intensity is most commonly expressed using the "Modified Mercalli Intensity Scale" (MMI). 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.

The following table correlates the MMI intensity with the Richter scale and effects of ground shaking:

Category	Effects	Richter Scale (approximate)
I. Instrumental	Not felt	1-2
II. Just perceptible	Felt by only a few people, especially on upper floors of tall buildings	3
III. Slight	Felt by people lying down, seated on a hard surface, or in the upper stories of tall buildings	3.5
IV. Perceptible	Felt indoors by many, by few outside; dishes and windows rattle	4
V. Rather strong	Generally felt by everyone; sleeping people may be awakened	4.5
VI. Strong	Trees sway, chandeliers swing, bells ring, some damage from falling objects	5
VII. Very strong	General alarm; walls and plaster crack	5.5
VIII. Destructive	Felt in moving vehicles; chimneys collapse; poorly constructed buildings seriously damaged	6
IX. Ruinous	Some houses collapse; pipes break	6.5
X. Disastrous	Obvious ground cracks; railroad tracks bent; some landslides on steep hillsides	7
XI. Very disastrous	Few buildings survive; bridges damaged or destroyed; all services interrupted (electrical, water, sewage, railroad); severe landslides	7.5
XII. Catastrophic	Total destruction; objects thrown into the air; river courses and topography altered	8

Figure 11-3. Modified Mercalli Scale vs. Richter Scale (SMS Tsunami Warning, 2025)

11.4 HISTORICAL FREQUENCY & PROBABILITY OF FUTURE OCCURRENCE

Latah County experiences extremely few earthquakes, with most earthquakes in Latah County occurring at a magnitude of 4.0 or lower. Due to the low magnitude of these earthquakes, there is very little recordable damage, and they are rarely noticeable by residents within this rural and sparsely populated region. Only one earthquake has occurred with its epicenter in the county in the last 30 years, which was recorded in Genesee, ID in 1998. A higher magnitude earthquake in Latah County that causes significant damage is unlikely, but possible.

The USGS keeps a record of earthquakes throughout the world in their Earthquake Catalog. The following table lists all earthquakes felt in Latah County since 1995 with a magnitude of 3.0 or higher.

Table 11-1. Felt Earthquakes with Magnitude 3.0+ in Latah County, ID

Date	Location	Magnitude	MMI Rating (as felt in Latah County)
06/28/1998	3 km SE of Genesee, ID	3.8	N/A
03/12/1999	17 km NW of Malden, WA	3.1	I–II
11/11/2001	3 km NE of Spokane, WA	4.0	II
11/20/2018	21 km SE of Stites, ID	4.1	II
03/31/2020	Stanley, ID	6.5	III
Source: USGS, 2025			

Occasionally, explosions (whether intentional or not) occur and trigger earthquake-like tremors in the earth that oscillate out and are recorded in the USGS Earthquake Catalog. Rock blasts and mine blasts are common reasons for these explosions; however, these blasts are not common in Latah County.

11.5 IMPACTS & LOSS ESTIMATES

Latah County and the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts may be impacted by earthquakes, as presented in the table below.

Table 11-2. Impacts of Earthquake by Jurisdiction

Jurisdiction	May be Impacted by Earthquakes	Experienced Earthquake with Magnitude 3.0+	Potential Impacts of Earthquakes
Latah County	Yes	Yes	Injury, death, falling objects, property damage, building/bridge collapse, fallen trees/power lines, stranded/trapped vehicles/people, loss of utilities, fire, broken gas lines, dam failure, risk to emergency services, disruption in medical care, hazardous materials release, economic losses.
City of Bovill	Yes	No	Injury, death, falling objects, property damage, building/bridge collapse, fallen trees/power lines, stranded/trapped vehicles/people, loss of utilities, fire, broken gas lines, dam failure, risk to emergency services, disruption in medical care, hazardous materials release, economic losses
City of Deary	Yes	No	Injury, death, falling objects, property damage, building/bridge collapse, fallen trees/power lines, stranded/trapped vehicles/people, loss of utilities, fire, broken gas lines, dam failure, risk to emergency services, disruption in medical care, hazardous materials release, economic losses.
City of Genesee	Yes	Yes	Injury, death, falling objects, property damage, building/bridge collapse, fallen trees/power lines, stranded/trapped vehicles/people, loss of utilities,

Jurisdiction	May be Impacted by Earthquakes	Experienced Earthquake with Magnitude 3.0+	Potential Impacts of Earthquakes
			fire, broken gas lines, dam failure, risk to emergency services, disruption in medical care, hazardous materials release, economic losses.
City of Juliaetta	Yes	No	Injury, death, falling objects, property damage, building/bridge collapse, fallen trees/power lines, stranded/trapped vehicles/people, loss of utilities, fire, broken gas lines, dam failure, risk to emergency services, disruption in medical care, hazardous materials release, economic losses.
City of Kendrick	Yes	No	Injury, death, falling objects, property damage, building/bridge collapse, fallen trees/power lines, stranded/trapped vehicles/people, loss of utilities, fire, broken gas lines, dam failure, risk to emergency services, disruption in medical care, hazardous materials release, economic losses.
City of Moscow	Yes	No	Injury, death, falling objects, property damage, building/bridge collapse, fallen trees/power lines, stranded/trapped vehicles/people, loss of utilities, fire, broken gas lines, dam failure, risk to emergency services, disruption in medical care, hazardous materials release, economic losses.
City of Potlatch	Yes	No	Injury, death, falling objects, property damage, building/bridge collapse, fallen trees/power lines, stranded/trapped vehicles/people, loss of utilities, fire, broken gas lines, dam failure, risk to emergency services, disruption in medical care, hazardous materials release, economic losses.
City of Troy	Yes	No	Injury, death, falling objects, property damage, building/bridge collapse, fallen trees/power lines, stranded/trapped vehicles/people, loss of utilities, fire, broken gas lines, dam failure, risk to emergency services, disruption in medical care, hazardous materials release, economic losses.

Earthquakes are capable of catastrophic consequences, especially in urban areas. Worldwide, earthquakes have been known to cost thousands of lives and enormous economic and social losses. In minor earthquakes, damage may be done only to household goods, merchandise, and other building contents, and people are occasionally injured or killed by falling objects. More violent earthquakes may cause the full or partial collapse of buildings, bridges and overpasses, and other structures. A list of all 115 bridges in Latah County is located in the *Bridges* section in the *Latah County Profile*. Fires due to broken gas lines, downed power lines, and other sources are common following an earthquake and often account for much of the damage. Economic losses arise from destruction of structures and infrastructure, interruption of business activity, and innumerable other sources. Latah County has a system of underground pipes that may be subjected to damage from earthquakes. Utilities may be lost for long periods of time, and all

modes of transportation may be disrupted. Emergency Services, including medical, may be both disabled and overwhelmed. In addition to broken gas lines, other hazardous materials may be released.

The *Latah County Profile* lists all the major facilities and critical infrastructure, which may be vulnerable to earthquakes (see *3.12 County Facilities/Critical Infrastructure*). Additionally, some cultural and historic sites are also vulnerable due to the age of the buildings (see 3.*13 Cultural & Historical Sites*).

Table 11-3. Earthquake: Expected Annual Loss for Latah County, ID | FEMA National Risk Index

Annualized Frequency	Population	Population Equivalence	Building Value	Agriculture Value	Total Value	Expected Annual Loss Score	Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County							
0.090% chance per year	0.0	$6,068	$36,466	N/A	$42,534	70.8	Relatively Low
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County							
0.096% chance per year	0.0	$5,286	$30,790	N/A	$36,076	68.9	Relatively Low
Census Tract 005500: City of Potlatch and Unincorporated Latah County							
0.080% chance per year	0.0	$5,691	$31,039	N/A	$36,730	69.2	Relatively Low
Census Tract 005102: City of Moscow and Unincorporated Latah County							
0.094% chance per year	0.0	$7,566	$41,065	N/A	$48,631	72.2	Relatively Low
Census Tract 005200: City of Moscow and Unincorporated Latah County							
0.086% chance per year	0.0	$2,712	$19,401	N/A	$22,113	62.4	Relatively Low
Census Tract 005400: City of Moscow and Unincorporated Latah County							
0.079% chance per year	0.0	$10,336	$60,069	N/A	$70,405	75.5	Relatively Low
Census Tract 005302: City of Moscow							
0.093% chance per year	0.0	$3,391	$24,407	N/A	$27,798	65.7	Relatively Low
Census Tract 005101: City of Moscow							
0.131% chance per year	0.0	$3,462	$20,703	N/A	$24,165	63.7	Relatively Low
Census Tract 005301: City of Moscow and Unincorporated Latah County							

Annualized Frequency	Population	Population Equivalence	Building Value	Agriculture Value	Total Value	Expected Annual Loss Score	Rating
0.085% chance per year	0.0	$1,913	$14,769	N/A	$16,682	57.5	Relatively Low

Annualized Frequency: The natural hazard annualized frequency is defined as the expected frequency or probability of a hazard occurrence per year. Annualized frequency is derived either from the number of recorded hazard occurrences each year over a given period or the modeled probability of a hazard occurrence each year.
Population: Population exposure is defined as the estimated number of people determined to be exposed to a hazard according to a hazard type-specific methodology.
Expected Annual Loss scores are calculated using an equation that combines values for exposure, annualized frequency, and historic loss ratios (Expected Annual Loss = Exposure x Annualized Frequency x Historic Loss Ratio).
Source: National Risk Index, 2025c; 2025d

Vulnerable Populations

There are many vulnerable populations in Latah County, including those in the table below. People living in structures that are not up to current earthquake code, particularly older structures, are more likely to be damaged in an earthquake. Additionally, those who are unable to seek protection during an earthquake or transport themselves to a safe location after an earthquake may be at further risk.

Table 11-4. Vulnerable Populations in Latah County

Vulnerability Category	Number	Percent
Families in poverty	665	8.8%
People with disabilities	4,862	12.3%
People over 65 years & living alone	1,521	9.5%
Single female households with children > 18 years	660	4.1%
Difficulty with English	87	0.2%
Households with no car	646	4.1%
Mobile homes	1,551	9.7%

Source: Headwaters Economics, 2025

As demonstrated in blue in the following map, Latah County's northern region is especially disadvantaged, and the southern portion of the county is seen as partially disadvantaged (Climate and Economic Justice Screening Tool, 2025). This area has a large population of people living in rural communities, the majority of whom are low income and may lack resources to adequately recover after an earthquake.

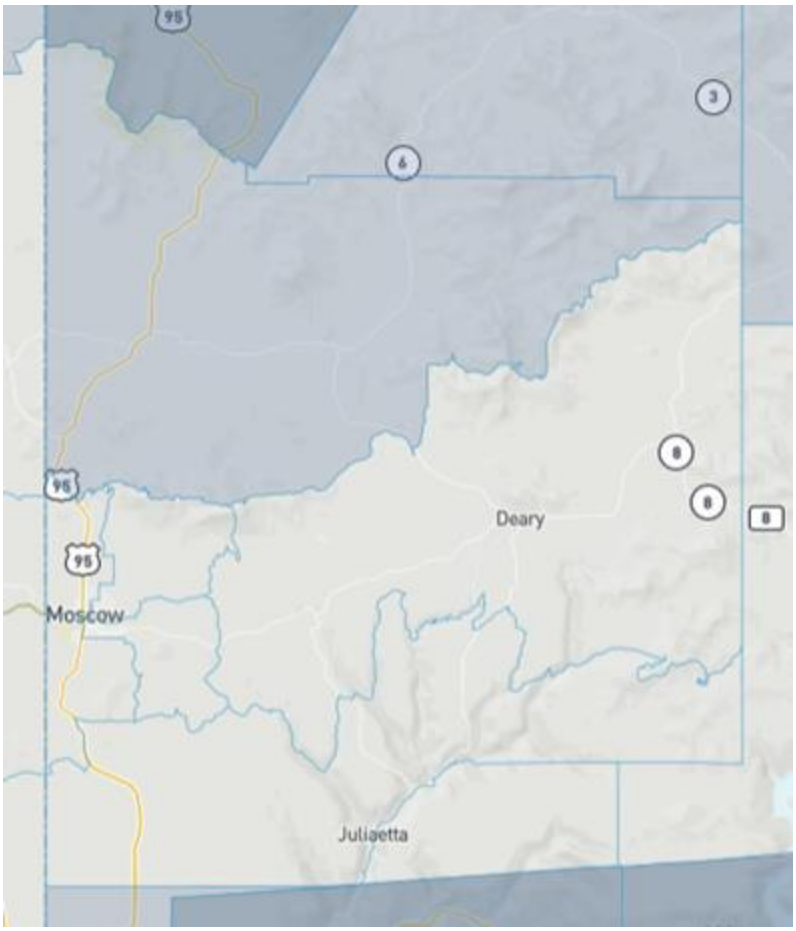
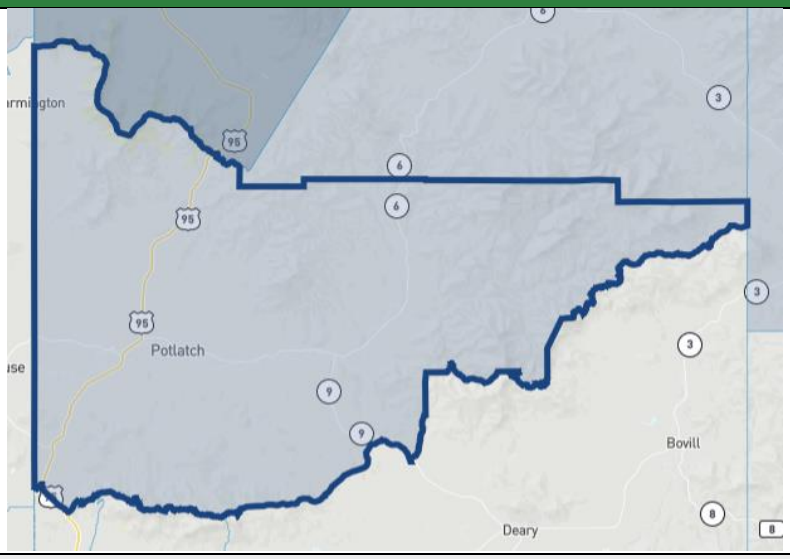


Figure 11-4. Map of Disadvantaged Communities in Latah County

The following table details the one completely disadvantaged census tract in Latah County along with the specific burdens and disadvantages the census tract experiences.

Table 11-5. Disadvantaged Communities in Latah County

LATAH COUNTY, ID		
CLIMATE & ECONOMIC JUSTICE SCREENING TOOL—DISADVANTAGED CENSUS TRACT		
CENSUS TRACT 2010 ID	**CENSUS TRACT POPULATION**	**LOW INCOME TRACT?**
16057005500	3,986	YES

LATAH COUNTY, ID	
	
CENSUS TRACT BURDENS: Transportation	
***97th** % (above 90th percentile)*	*Average of relative cost and time spent on transportation*
***65th** % (above 65th percentile)*	*People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed*
Source: U.S. Council on Environmental Quality—Climate & Economic Justice Screening Tool (2025)	

Earthquakes may cause significant damage to critical facilities, including power outages from downed power lines or damaged power plant facilities. The following table lists types of critical facilities that could be negatively affected by earthquakes, which could delay emergency response and access to life-saving medical equipment.

Table 11-6. Critical Facility Types in Latah County

Critical Facility Type	Location
Fire Station	Potlatch
3 Fire Stations	Moscow
Fire Station	Genesee
Fire Station	Troy
Fire Station	Deary
Fire Station	Kendrick
Fire Station	Juliaetta
Fire Station	Bovill
3 Local Law Enforcement	Moscow
Local Law Enforcement	Troy
Hospital	Moscow
5 Nursing Homes	Moscow
2 Dialysis Centers	Moscow
7 Pharmacies	Moscow
Pharmacy	Potlatch
Public Health Department	Moscow
Wastewater Treatment Plant	Potlatch

Critical Facility Type	Location
Wastewater Treatment Plant	Viola
Wastewater Treatment Plant	Moscow
Wastewater Treatment Plant	Troy
Wastewater Treatment Plant	Juliaetta
Wastewater Treatment Plant	Kendrick
Wastewater Treatment Plant	Deary
Wastewater Treatment Plant	Bovill
Source: Resilience Analysis and Planning Tool, 2025	

Additionally, over 2.9 million Medicare beneficiaries in the U.S. rely on electricity-dependent durable medical and assistive equipment (DME) and devices to live independently in their homes, and some of those individuals also have health care service dependencies (HHS Empower Program, 2025). In Latah County, 7,203 people are beneficiaries of Medicare, and 323 of these beneficiaries are considered at-risk and would be vulnerable during a power outage.

Changes in Development and Impact to Future Development

According to FEMA, earthquake events significantly influence changes in development and future planning strategies, primarily through the lens of enhancing resilience and safety in earthquake-prone areas. In the aftermath of significant seismic activity, there is often a reassessment of building codes and construction practices to reduce the vulnerability of structures to future earthquakes. This includes the adoption of more stringent engineering standards, the use of earthquake-resistant materials, and the incorporation of innovative design techniques that allow buildings and infrastructure to withstand seismic forces. Such measures are crucial in minimizing physical damage and ensuring the safety of occupants during subsequent earthquakes. Lastly, urban planning and zoning regulations may be revised to limit development in high-risk areas, such as fault zones and areas susceptible to soil liquefaction, further mitigating potential damage and loss of life.

According to FEMA, earthquake events also impact long-term planning of communities, through higher building code standards and retrofitting existing structures to improve their earthquake resilience. Efforts to enhance public awareness and preparedness, including earthquake drills and the development of emergency response plans, become integral components of community planning.

Effects of Climate Change on Probability of Future Events and Severity of Impacts

According to NOAA, the relationship between climate change and the severity of earthquake events is not direct, as earthquakes are primarily caused by geophysical processes related to the movement of tectonic plates beneath the Earth's surface. According to the NOAA, earthquakes result from the buildup and release of energy along faults or by volcanic activity, processes that are generally considered to be independent of atmospheric conditions influenced by climate change.

11.5.1 Probabilistic 100-Year Earthquake—Magnitude 5

Hazus was used to estimate losses for a probabilistic 100-year magnitude 5 earthquake affecting Latah County. Hazus is a regional multi-hazard loss estimation model that was developed by the Federal Emergency Management Agency (FEMA) and the National Institute of Building Sciences. The primary purpose of Hazus is to provide a methodology and software application to assess earthquake losses at a regional scale. These loss estimates would be used primarily by local, state, and regional officials to plan and stimulate efforts to reduce risks from earthquakes and to prepare for emergency response and recovery.

Casualties

Hazus estimates that there will be zero casualties.

Building Damage

Hazus estimates that about three buildings will be at least moderately damaged. There are an estimated zero buildings that will be damaged beyond repair.

Essential Facility Damage

Zero essential facilities are expected to be moderately or completely damaged.

Economic Loss

The total economic loss estimated for the earthquake is 0.55 (millions of dollars), which includes building and lifeline related losses based on the region's available inventory.

Transportation and Utility Lifeline Losses

There are no losses computed by Hazus for business interruption due to lifeline outages.

Building-Related Losses

The total building-related losses were 0.53 (millions of dollars); 40% of the estimated losses were related to the business interruption of the region. By far, the largest loss was sustained by the residential occupancies, which made up over 28% of the total loss.

11.6 FEMA NRI SCORE

Table 11-7. Earthquake: Overall National Risk Index Score for Latah County, ID | FEMA National Risk Index

Risk Index Score	Risk Index Rating	Social Vulnerability Rating	Community Resilience Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County			
69.1	Relatively Low	Relatively Low	Relatively Low
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County			
68.3	Relatively Low	Relatively Low	Relatively Low
Census Tract 005500: City of Potlatch and Unincorporated Latah County			
70.9	Relatively Low	Relatively Moderate	Relatively Low

Risk Index Score	Risk Index Rating	Social Vulnerability Rating	Community Resilience Rating
Census Tract 005102: City of Moscow and Unincorporated Latah County			
72.9	Relatively Low	Relatively Moderate	Relatively Low
Census Tract 005200: City of Moscow and Unincorporated Latah County			
61.8	Relatively Low	Relatively Low	Relatively Low
Census Tract 005400: City of Moscow and Unincorporated Latah County			
75.5	Relatively Low	Relatively Low	Relatively Low
Census Tract 005302: City of Moscow			
66.0	Relatively Low	Relatively Moderate	Relatively Low
Census Tract 005101: City of Moscow			
65.7	Relatively Low	Relatively Moderate	Relatively Low
Census Tract 005301: City of Moscow and Unincorporated Latah County			
49.3	Very Low	Very Low	Relatively Low
Risk Index scores are calculated using an equation that combines scores for Expected Annual Loss due to natural hazards, Social Vulnerability, and Community Resilience (Expected Annual Loss x Social Vulnerability / Community Resilience = Risk Index). Source: National Risk Index, 2025b; 2025d			

CHAPTER 12 LANDSLIDE

12.1 HAZARD 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, and freeze-thaw weakening of geologic structures; human causes, such as excavation and mining, deforestation, and vibration from explosions or other source; and geologic causes, such as earthquake 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.

12.2 LOCATION

Landslides typically occur on slopes in areas where they have taken place before. Spring run-off or heavy rain periods may cause expansion of soils, such as clay and large rock. Many of the canyons and valleys in the county contain steep bedrock and talus-covered cliff faces, which can experience landslides and rockfall when weathering of the bedrock, precipitation, freeze and thaw, and increased groundwater occur (UGS, 1987). This is mainly a problem on Highways 3 and 99 and U.S. 95. However, routes that are affected can cause traffic and travel time delays. Two landslide impact zones in Latah County are located at the base of the slope just west of Juliaetta and along Highway 99 at Kendrick.

12.3 EXTENT

Factors that influence landslides are soil type and steepness of slope. Soil type is a key indicator for landslide potential and is used by geologists and geotechnical engineers to determine soil stability for construction standards. Past movements are also a good indicator of where movements might possibly exist.

12.4 HISTORICAL FREQUENCY & PROBABILITY OF FUTURE OCCURRENCE

Historically, many of the past landslides in the county occurred along the southeastern border of the county near Kendrick and Juliaetta, specifically on Highways 3 and 99. Generally, these landslides develop in well-defined, localized areas. Previous landslide areas will most likely be the location of future landslides. Additionally, several small-scale rockslides and landslides occur annually in Latah County, usually due to heavy rain and snowmelt. These rockslides are often classified as debris flows, in which moving water carries mud, rocks, and other debris over the affected areas. The following table from the NOAA Storm Events Database and local news sites lists the debris flows that triggered rockslides/mudslides between 2010–2025 in the county.

Table 12-1. Rockslide/Mudslide Events in Latah County, ID (2010–2025)

Location Within County	Date	Description
Moscow	03/10/2011	Mudslide on Foothill Road north of Moscow caused road closures at the Lewis Road and Idler's Rest Road intersections.
Idaho Palouse	03/26/2012	Excess snowmelt and heavy rain caused a small landslide along Cedar Ridge Road in Latah County. No damage to roadway/structures but debris removal cost about $30,000.
Juliaetta, Kendrick	05/29/2017	Debris flow blocked Highway 3 near Kendrick.
Juliaetta, Kendrick	05/20/2018	Heavy rain resulted in a debris flow across Highway 3 between Juliaetta and Kendrick. Debris was cleared and the road re-opened quickly.
Moscow	03/14/2023	Minor landslide issues on Sand Road after flash flooding in area.
Juliaetta, Kendrick		Landslide at road intersection along Gwen/Texas Ridge
Source: NOAA Storm Events Database, 2010–2025		

The following map depicts additional past landslides in Latah County along with inactive landslide areas where landslides may occur again in the future.

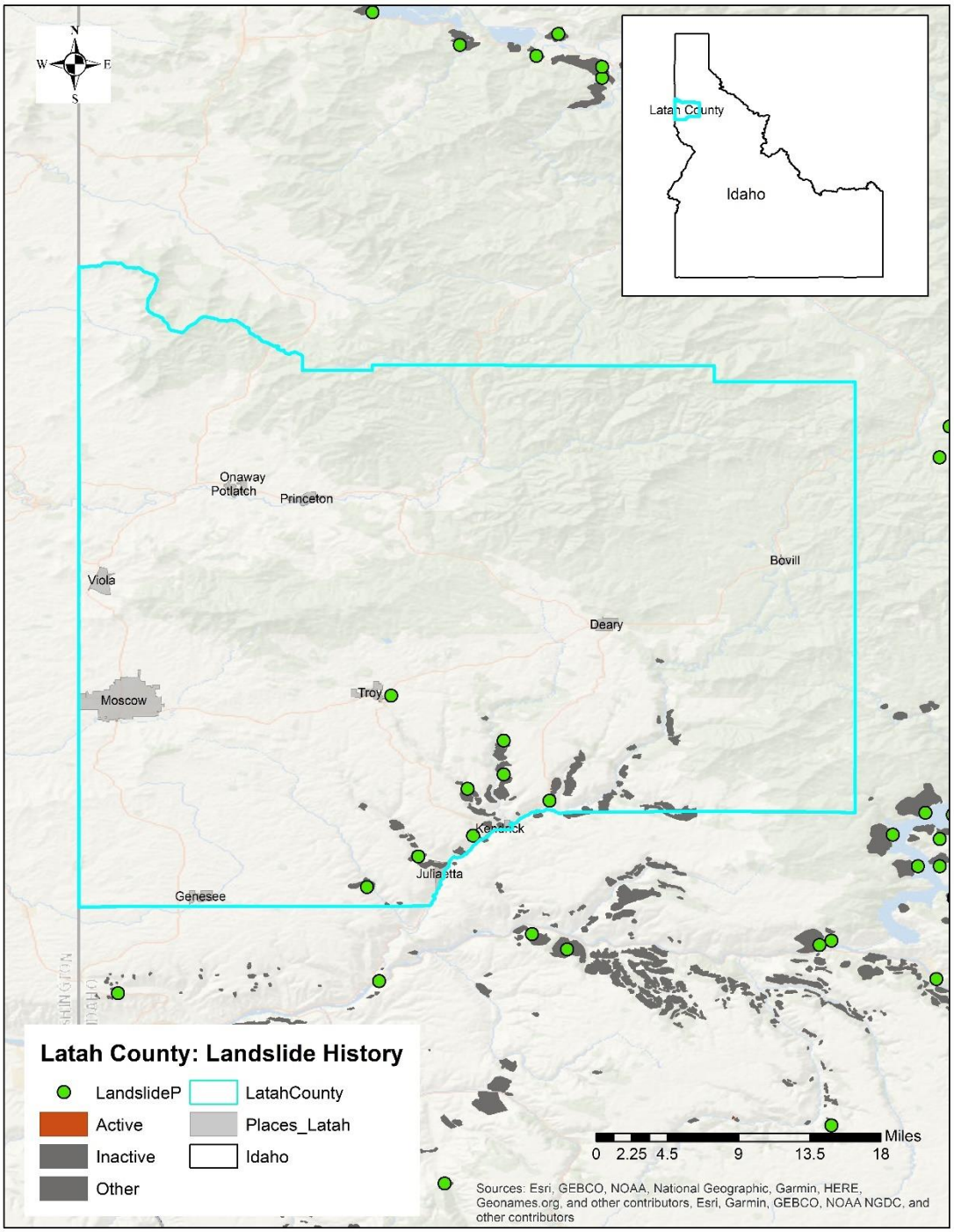


Figure 12-1. Latah County Landslide History

Landslides are influenced by weather and climate events, such as drought, severe weather, wildfire, and flooding, which are expected to increase in severity with climate change. The planning area should anticipate potential for heightened landslide risk because of climate change and changing weather patterns. The planning area is subject to severe storms and weather on an annual basis, with monsoon rains regularly triggering flash flooding or debris

flow events. Where severe storm events are expected to increase in frequency and intensity, landslides are likewise expected to become more frequent. Events such as wildfire and drought can change the landscape of an area as vegetation is damaged or lost with these events. These changes can make landscapes vulnerable to landslides and debris flows.

12.5 IMPACTS & LOSS ESTIMATES

Latah County and the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts may be impacted by landslides, as presented in the table below.

Table 12-2. Impacts of Landslide by Jurisdiction

Jurisdiction	Impacted by Landslides	Potential Impacts of Landslides
Latah County	Yes	Injury, blunt force trauma, death, property damage, road closures, road destruction/blockages, loss of land usage, industrial/agricultural/forest productivity losses, reduced property values, decreased tourism, loss of utilities, unintentional dams, reduced water quality, economic losses, repair expenses, debris removal expenses
City of Bovill	Yes	Injury, blunt force trauma, death, property damage, road closures, road destruction/blockages, loss of land usage, industrial/agricultural/forest productivity losses, reduced property values, decreased tourism, loss of utilities, unintentional dams, reduced water quality, economic losses, repair expenses, debris removal expenses
City of Deary	Yes	Injury, blunt force trauma, death, property damage, road closures, road destruction/blockages, loss of land usage, industrial/agricultural/forest productivity losses, reduced property values, decreased tourism, loss of utilities, unintentional dams, reduced water quality, economic losses, repair expenses, debris removal expenses
City of Genesee	Yes	Injury, blunt force trauma, death, property damage, road closures, road destruction/blockages, loss of land usage, industrial/agricultural/forest productivity losses, reduced property values, decreased tourism, loss of utilities, unintentional dams, reduced water quality, economic losses, repair expenses, debris removal expenses
City of Juliaetta	Yes	Injury, blunt force trauma, death, property damage, road closures, road destruction/blockages, loss of land usage, industrial/agricultural/forest productivity losses, reduced property values, decreased tourism, loss of utilities, unintentional dams, reduced water quality, economic losses, repair expenses, debris removal expenses
City of Kendrick	Yes	Injury, blunt force trauma, death, property damage, road closures, road destruction/blockages, loss of land usage, industrial/agricultural/forest productivity losses, reduced property values, decreased tourism, loss of utilities, unintentional dams,

Jurisdiction	Impacted by Landslides	Potential Impacts of Landslides
		reduced water quality, economic losses, repair expenses, debris removal expenses
City of Moscow	Yes	Injury, blunt force trauma, death, property damage, road closures, road destruction/blockages, loss of land usage, industrial/agricultural/forest productivity losses, reduced property values, decreased tourism, loss of utilities, unintentional dams, reduced water quality, economic losses, repair expenses, debris removal expenses
City of Potlatch	Yes	Injury, blunt force trauma, death, property damage, road closures, road destruction/blockages, loss of land usage, industrial/agricultural/forest productivity losses, reduced property values, decreased tourism, loss of utilities, unintentional dams, reduced water quality, economic losses, repair expenses, debris removal expenses
City of Troy	Yes	Injury, blunt force trauma, death, property damage, road closures, road destruction/blockages, loss of land usage, industrial/agricultural/forest productivity losses, reduced property values, decreased tourism, loss of utilities, unintentional dams, reduced water quality, economic losses, repair expenses, debris removal expenses

Some of the many direct and indirect impacts of landslides are:

- Human and animal deaths and injuries and resulting productivity losses
- Damage or destruction of structures
- Destruction or blockage of roadways and resulting transportation interruption
- Loss of or reduced land usage
- Loss of industrial, agricultural, and forest productivity
- Reduced property values in areas threatened by landslide
- Loss of tourist revenues and recreational opportunities
- Damaged or destroyed infrastructure and utilities
- Damming or alteration of the course of streams and resulting flooding
- Reduced water quality

There is only limited information on the direct and indirect economic costs of geologic hazards in the U.S., such as landslides. According to the 2023 Idaho State Hazard Mitigation Plan, the total replacement value for all state facilities located in the landslide hazard zone is $50,179,914.

Losses due to landslide events are generally tied to the repair of roadways or the removal of debris on roadways. The Idaho Transportation Department (ITD) manages repairs on all state highways in Latah County. Limited course of mitigation may occur because it is not economically feasible for ITD to spend tax dollars to rebuild a new road route or remove the

large facing walls of rock and soil. The North Latah County Highway District and South Latah Highway District are responsible for the maintenance of local roads in the county.

The Expected Annual Loss scores from the National Risk Index can be seen below.

Table 12-3. Landslide: Expected Annual Loss for Latah County, ID | FEMA National Risk Index

Annualized Frequency	Population	Population Equivalence	Building Value	Agriculture Value	Total Value	Expected Annual Loss Score	Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County							
0 events per year	0.0	$1,805	$14,858	N/A	$16,663	98.3	Relatively High
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County							
0.1 events per year	0.0	$10,970	$101,130	N/A	$112,100	99.7	Very High
Census Tract 005500: City of Potlatch and Unincorporated Latah County							
0 events per year	0.0	$1,126	$10,983	N/A	$12,109	97.4	Relatively High
Census Tract 005102: City of Moscow and Unincorporated Latah County							
0.1 events per year	0.0	$20,808	$113,981	N/A	$134,789	99.7	Very High
Census Tract 005200: City of Moscow and Unincorporated Latah County							
0 events per year	0.0	$4,293	$18,101	N/A	$22,394	98.7	Relatively High
Census Tract 005400: City of Moscow and Unincorporated Latah County							
0 events per year	0.0	$1,404	$16,938	N/A	$18,342	98.4	Relatively High
Census Tract 005302: City of Moscow							
0 events per year	0.0	$2,752	$9,249	N/A	$12,001	97.4	Relatively High
Census Tract 005101: City of Moscow							
0 events per year	0.0	$810	$2,810	N/A	$3,620	86.7	Relatively Moderate
Census Tract 005301: City of Moscow and Unincorporated Latah County							
0 events per year	0.0	$1,397	$6,247	N/A	$7,644	95.1	Relatively High

Annualized Frequency: The natural hazard annualized frequency is defined as the expected frequency or probability of a hazard occurrence per year. Annualized frequency is derived either from the number of recorded hazard occurrences each year over a given period or the modeled probability of a hazard occurrence each year.
Population: Population exposure is defined as the estimated number of people determined to be exposed to a hazard according to a hazard type-specific methodology.
Expected Annual Loss scores are calculated using an equation that combines values for exposure, annualized frequency, and historic loss ratios (Expected Annual Loss = Exposure x Annualized Frequency x Historic Loss Ratio).
Source: National Risk Index, 2025c; 2025d

Vulnerable Populations

There are many vulnerable populations in Latah County, including those in the table below. People who are unable to seek immediate protection during a landslide or transport themselves to a safe location after a landslide may be at further risk.

Table 12-4. Vulnerable Populations in Latah County

Vulnerability Category	Number	Percent
Families in poverty	665	8.8%
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Source: Headwaters Economics, 2025		

As demonstrated in blue in the following map, Latah County's northern region is especially disadvantaged, and the southern portion of the county is seen as partially disadvantaged (Climate and Economic Justice Screening Tool, 2025). This area has a large population of people living in rural communities, the majority of whom are low income and may lack resources to adequately recover after a landslide.

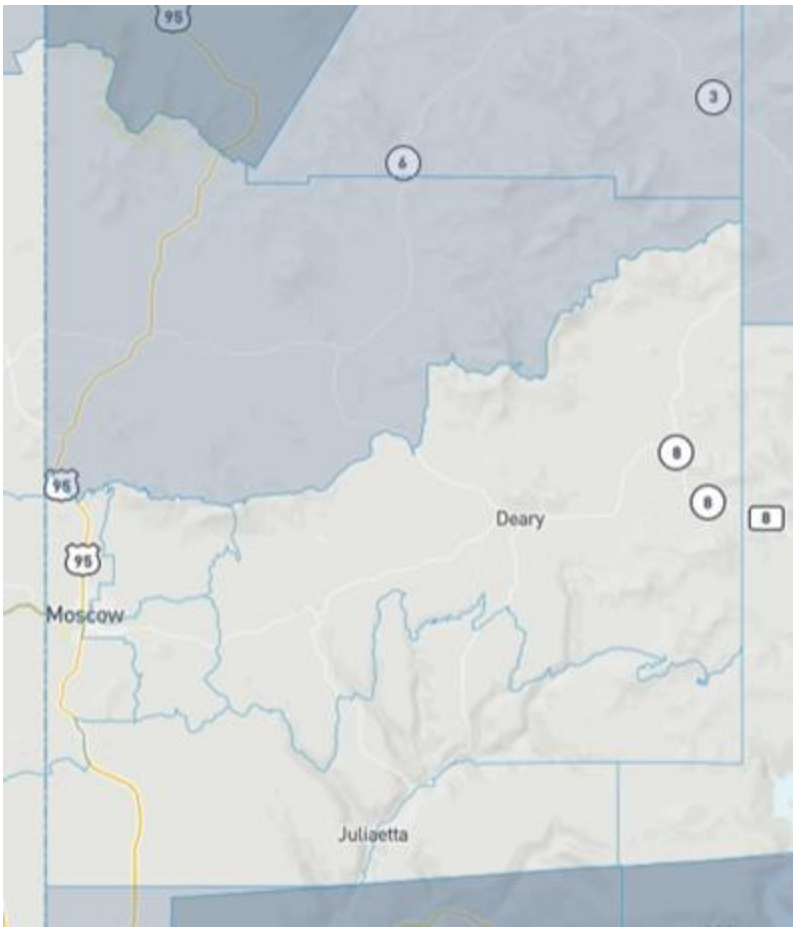
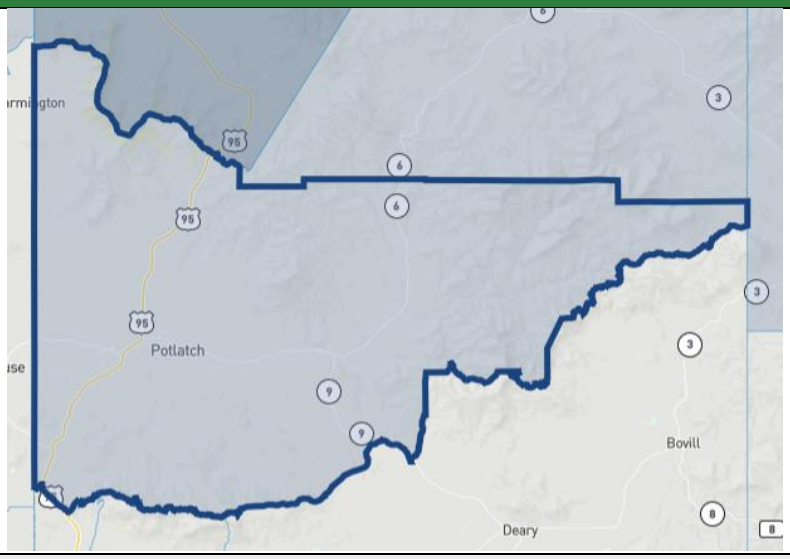


Figure 12-2. Map of Disadvantaged Communities in Latah County

The following table details the one completely disadvantaged census tract in Latah County along with the specific burdens and disadvantages the census tract experiences.

Table 12-5. Disadvantaged Communities in Latah County

LATAH COUNTY, ID		
CLIMATE & ECONOMIC JUSTICE SCREENING TOOL—DISADVANTAGED CENSUS TRACT		
CENSUS TRACT 2010 ID	**CENSUS TRACT POPULATION**	**LOW INCOME TRACT?**
16057005500	3,986	YES

LATAH COUNTY, ID	
	
CENSUS TRACT BURDENS: Transportation	
***97th** % (above 90th percentile)*	*Average of relative cost and time spent on transportation*
***65th** % (above 65th percentile)*	*People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed*
Source: U.S. Council on Environmental Quality—Climate & Economic Justice Screening Tool (2025)	

Landslides may cause significant damage to critical facilities and could take out power or communication lines. The following table lists types of critical facilities that could be negatively affected by landslides, which could delay emergency response and access to life-saving medical equipment.

Table 12-6. Critical Facility Types in Latah County

Critical Facility Type	Location
Fire Station	Potlatch
3 Fire Stations	Moscow
Fire Station	Genesee
Fire Station	Troy
Fire Station	Deary
Fire Station	Kendrick
Fire Station	Juliaetta
Fire Station	Bovill
3 Local Law Enforcement	Moscow
Local Law Enforcement	Troy
Hospital	Moscow
5 Nursing Homes	Moscow
2 Dialysis Centers	Moscow
7 Pharmacies	Moscow
Pharmacy	Potlatch
Public Health Department	Moscow
Wastewater Treatment Plant	Potlatch

Critical Facility Type	Location
Wastewater Treatment Plant	Viola
Wastewater Treatment Plant	Moscow
Wastewater Treatment Plant	Troy
Wastewater Treatment Plant	Juliaetta
Wastewater Treatment Plant	Kendrick
Wastewater Treatment Plant	Deary
Wastewater Treatment Plant	Bovill
Source: Resilience Analysis and Planning Tool, 2025	

Additionally, over 2.9 million Medicare beneficiaries in the U.S. rely on electricity-dependent durable medical and assistive equipment (DME) and devices to live independently in their homes, and some of those individuals also have health care service dependencies (HHS Empower Program, 2025). In Latah County, 7,203 people are beneficiaries of Medicare, and 323 of these beneficiaries are considered at-risk and would be vulnerable during a power outage.

Changes in Development and Impact to Future Development

According to USGS, landslides can impact future development strategies through several mechanisms, including alterations in land-use planning and zoning regulations in landslide-prone areas. Communities may introduce stricter building codes, zoning constraints, and construction guidelines to mitigate the risks associated with landslides for upcoming development initiatives. Additionally, the aftermath of landslide events may necessitate redevelopment and reconstruction efforts, leading to changes in urban landscapes and construction practices. Mitigation measures, like the installation of retaining walls and stabilization techniques, can influence the design and location of future development projects. The protection of critical infrastructure may drive enhancements and structural modifications that affect the positioning of infrastructure initiatives. Heightened community awareness about landslide risks can also sway public perceptions and behaviors, subsequently impacting future development decisions. Furthermore, developments may be relocated to safer areas in response to high landslide risk, ensuring sustainable and secure development. Lastly, geological assessments are conducted in landslide-prone regions to enhance understanding and inform future development choices, collectively shaping development strategies in these areas.

Effects of Climate Change on Probability of Future Events and Severity of Impacts

Climate change can impact on the severity of landslides in several ways. First, climate-induced alterations in precipitation patterns, characterized by more intense and prolonged rainfall events, can saturate the soil, rendering it more susceptible to landslides and elevating their severity. Additionally, rising temperatures linked to climate change can lead to the thawing of permafrost, instigating ground instability and an increased likelihood of landslides, especially in permafrost regions. Glacial retreat due to warming temperatures can expose previously glaciated slopes, making them more vulnerable to landslides. Changes in vegetation patterns,

caused by climate change, can also affect slope stability, as shifts in plant cover and root systems can render slopes more precarious. The heightened risk of wildfires prompted by climate change can strip areas of vegetation and alter soil properties, amplifying landslide susceptibility. Furthermore, the increased occurrence of severe weather events associated with climate change can trigger landslides through rapid water infiltration and slope destabilization. A lengthened thaw season in mountainous and high-latitude regions, driven by warmer temperatures, may intensify freeze-thaw cycles, potentially weakening slopes and contributing to landslides (Gariano, 2016).

The table below illustrates 25-year precipitation projections for Latah County, which may contribute to increased landslides.

Table 12-7. Climate Projections for Latah County, ID | Neighborhoods at Risk

Precipitation Projections	By 2050, Latah County is expected to experience 0.3 more days of heavy precipitation per year (from 1.3 days to 1.6 days per year).
	By 2050, Latah County is expected to have a 1" increase (from 31" to 32") in average annual precipitation.
	Increasing annual precipitation can lead to unstable ground and contribute to landslides.
Source: Neighborhoods at Risk, 2025	

12.6 FEMA NRI SCORE

Table 12-8. Landslide: Overall National Risk Index Score for Latah County, ID | FEMA National Risk Index

Risk Index Score	Risk Index Rating	Social Vulnerability Rating	Community Resilience Rating
Census Tract 005600: City of Bovill, City of Deary, City of Troy, and Unincorporated Latah County			
97.6	Relatively High	Relatively Low	Relatively Low
Census Tract 005700: City of Genesee, City of Juliaetta, City of Kendrick, and Unincorporated Latah County			
99.6	Very High	Relatively Low	Relatively Low
Census Tract 005500: City of Potlatch and Unincorporated Latah County			
97.6	Relatively High	Relatively Moderate	Relatively Low
Census Tract 005102: City of Moscow and Unincorporated Latah County			
99.7	Very High	Relatively Moderate	Relatively Low
Census Tract 005200: City of Moscow and Unincorporated Latah County			
98.6	Relatively High	Relatively Low	Relatively Low
Census Tract 005400: City of Moscow and Unincorporated Latah County			
98.2	Relatively High	Relatively Low	Relatively Low
Census Tract 005302: City of Moscow			
97.1	Relatively High	Relatively Moderate	Relatively Low
Census Tract 005101: City of Moscow			
88.3	Relatively Moderate	Relatively Moderate	Relatively Low
Census Tract 005301: City of Moscow and Unincorporated Latah County			
91.2	Relatively Moderate	Very Low	Relatively Low
Risk Index scores are calculated using an equation that combines scores for Expected Annual Loss due to natural hazards, Social Vulnerability, and Community Resilience (Expected Annual Loss x Social Vulnerability / Community Resilience = Risk Index). Source: National Risk Index, 2025b; 2025d			

CHAPTER 13 VOLCANIC ACTIVITY

13.1 HAZARD DESCRIPTION

A volcano is a vent in the earth's crust through which magma, rock fragments, gases, and ash are ejected from the earth's interior. Over time, accumulation of these erupted products on the earth's surface creates a volcanic mountain. There are a wide variety of hazards related to volcanoes and volcanic eruptions.

Volcanic eruptions can impact communities close to the erupting volcano as well as communities hundreds of miles away. They can cause significant local and regional economic and health impacts and can damage public and private property. The 2023 State of Idaho Hazard Mitigation Plan describes some of the volcano related hazards for Latah County as follows:

- **Eruption Columns and Clouds**—Eruption columns and clouds are created when small fragments (less than about 0.1 inch across) of volcanic glass, minerals, and rock are released during explosive eruptions and rise high into the air. Eruption columns can grow rapidly and reach more than 12 miles above a volcano, forming an eruption cloud. Large eruption clouds can extend hundreds of miles downwind, resulting in falling ash over enormous areas; the wind carries the smallest ash particles the farthest. Recent volcanic eruptions in Iceland caused tens of millions of dollars in losses to European counties due to travel restrictions, airline cancellations, and lost tourism.
- **Ashfall**—As an eruption cloud drifts downwind from the volcano, the material that falls from the cloud typically forms a thinner layer. Though called "ash," volcanic ash is not the product of combustion. Volcanic ash is hard, does not dissolve in water, is extremely abrasive and mildly corrosive, and conducts electricity when wet, such as lightning. Communities far from the actual eruption may be seriously disrupted by ashfall. The volcanic ash in an eruption cloud can pose a serious hazard to aviation; engines of jet aircraft have suddenly failed after flying through clouds of even, thinly dispersed material. The weight of ashfall can collapse buildings. Ashfall blocks sunlight, reducing visibility and sometimes causing darkness.

13.2 LOCATION

Depending on the location of the volcanic eruption and the prevalent wind direction, ashfall from a major volcanic event, borne by winds, can impact Latah County in its entirety. The USGS identifies three active volcano ranges that have the potential to impact communities in Idaho upon eruption (Idaho Hazard Mitigation Plan, 2023):

- The **Snake River Plain**, particularly the Craters of the Moon area in south central Idaho—The Craters of the Moon have been active in the past 15,000 years, with the most recent activity about 2,000 years ago (National Park Service, 2015).

- The **Yellowstone Caldera**, which overlaps Idaho, Wyoming, and Montana—The Yellowstone Caldera's most recent activity was 70,000 years ago and consisted of a lava flow rather than an explosive eruption. The Yellowstone Caldera has a history and potential for explosive eruptions. The last such eruption resulted in ashfall covering much of the western United States (Yellowstone Volcano Observatory, 2012).
- The **Cascade Mountains** to the west—The Cascade Range extends more than 1,000 miles from southern British Columbia into northern California and includes 13 potentially active volcanic peaks in the U.S.

The figures below summarize potentially active volcano locations in the western U.S. and past eruptions in the Cascades.

Figure 13-1. Potentially Active Volcanos in the Western United States

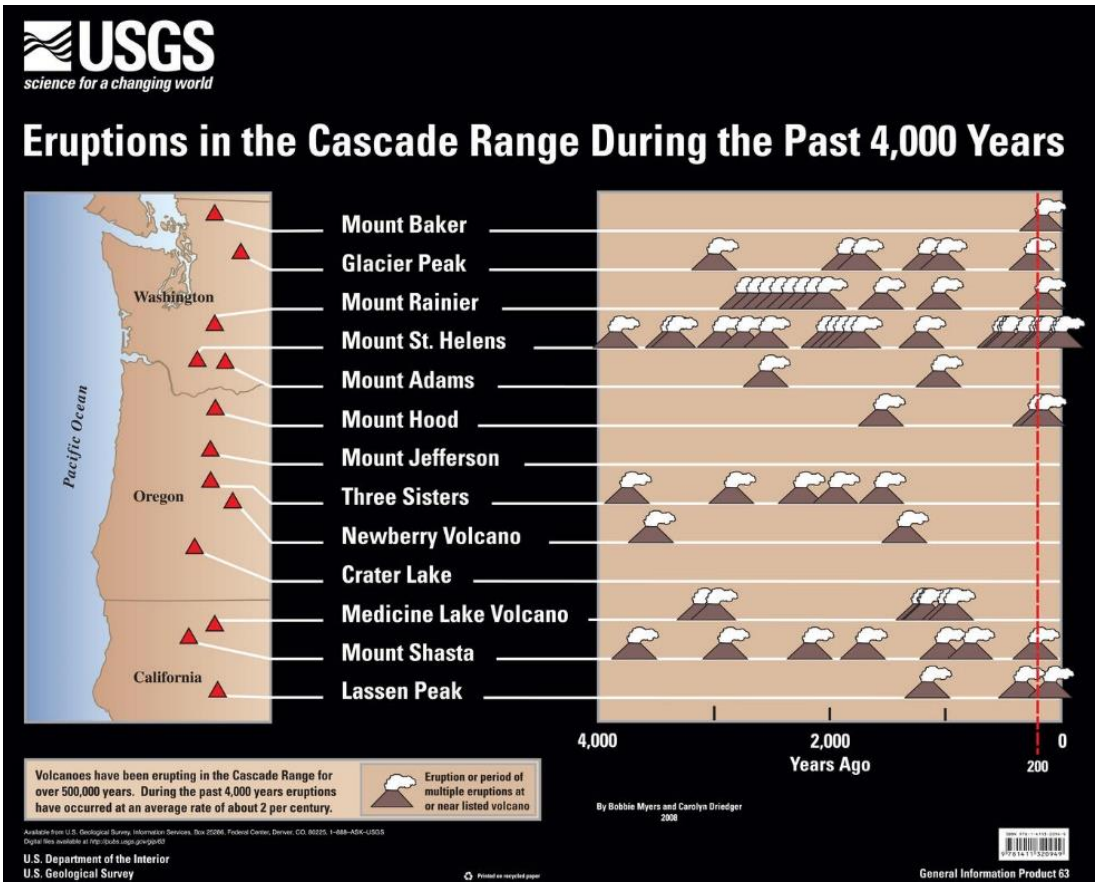


Figure 13-2. Past Eruptions in the Cascade Range (USGS, 2025)

Since there are no active or dormant volcanoes located within Latah County, ashfall from volcanoes in other regions is the primary concern. Mount St. Helens in southern Washington is especially of concern as the most recent volcano to erupt in the mainland U.S. with probability of it erupting again.

13.3 EXTENT

Volcanic eruptions are measured using the Volcanic Explosivity Index (VEI), which is “a scale that describes the size of explosive volcanic eruptions based on magnitude and intensity. The numerical scale (from 0 to 8) is a logarithmic scale, and is generally analogous to the Richter and other magnitude scales for the size of earthquakes” (NPS, 2025). Each interval on the VEI represents a ten-fold increase in the size of the eruption and is based on the volume of magma erupted and the eruption column height of explosive eruptions. The criteria for the VEI can be seen in the figure below.

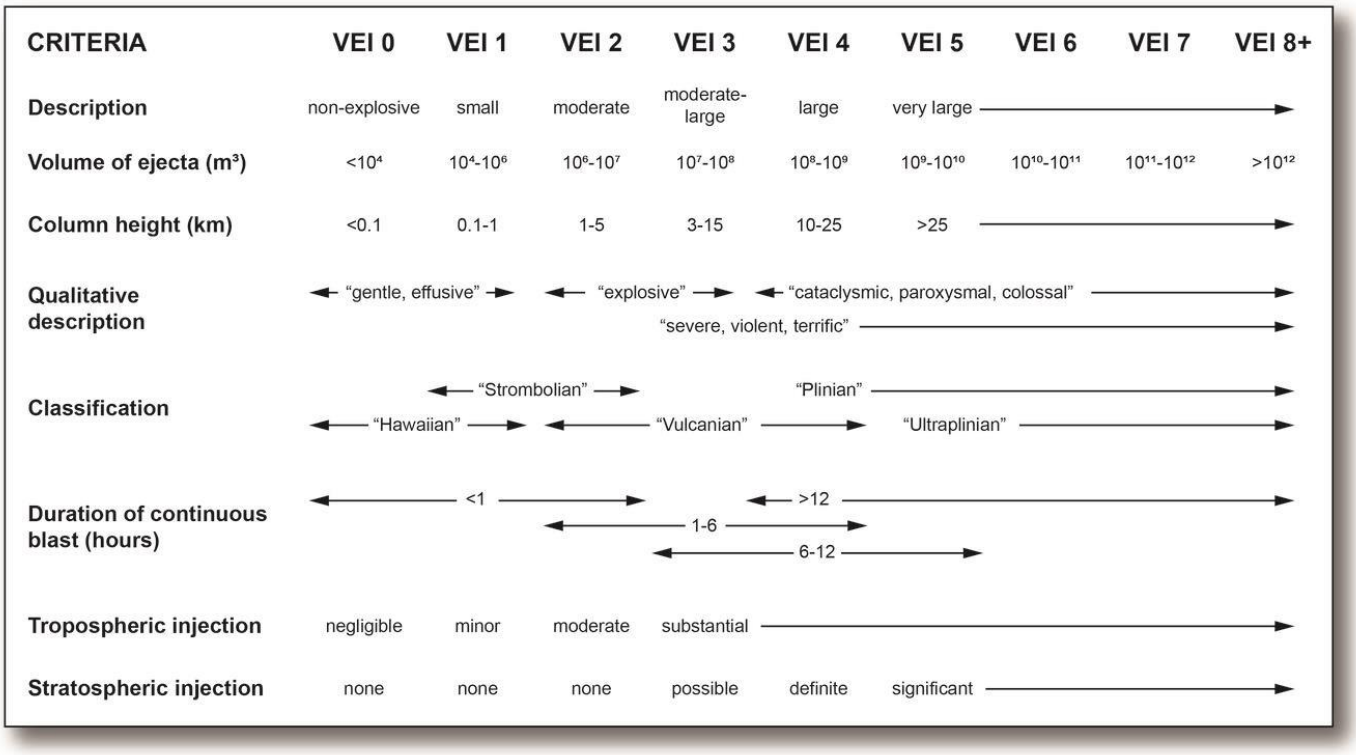


Figure 13-3. Volcanic Explosivity Index

The image below depicts the erupted tephra volume for each interval in the VEI. Tephra is fragmental material produced by a volcanic eruption regardless of composition, fragment size, or emplacement mechanism.

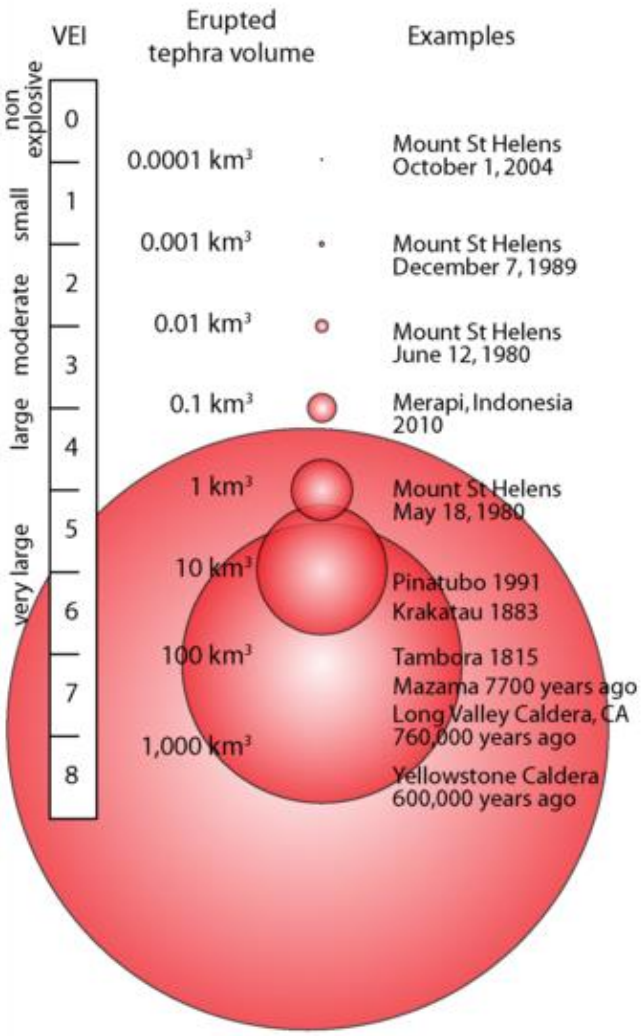


Figure 13-4. Erupted Tephra Volume from VEI

13.4 HISTORICAL FREQUENCY & PROBABILITY OF FUTURE OCCURRENCE

There have been no volcanic eruptions in Latah County, but eruptions in other regions have caused ashfalls within the county. When Mount St. Helens erupted on May 18, 1980 in southern Washington, a plume of ash rose 12 to 16 miles high and spread east over large portions of western North America. The volcano erupted at 8:32am and by noon, the ash plume had reached Moscow, Idaho, dropping a large portion of ash on the city. The ash filled the sky and caused gray-out conditions with visibility of only a few feet, making travel difficult and breathing problematic. This eruption was measured at a 5 on the VEI scale. The distribution of the ash fallout can be seen below.

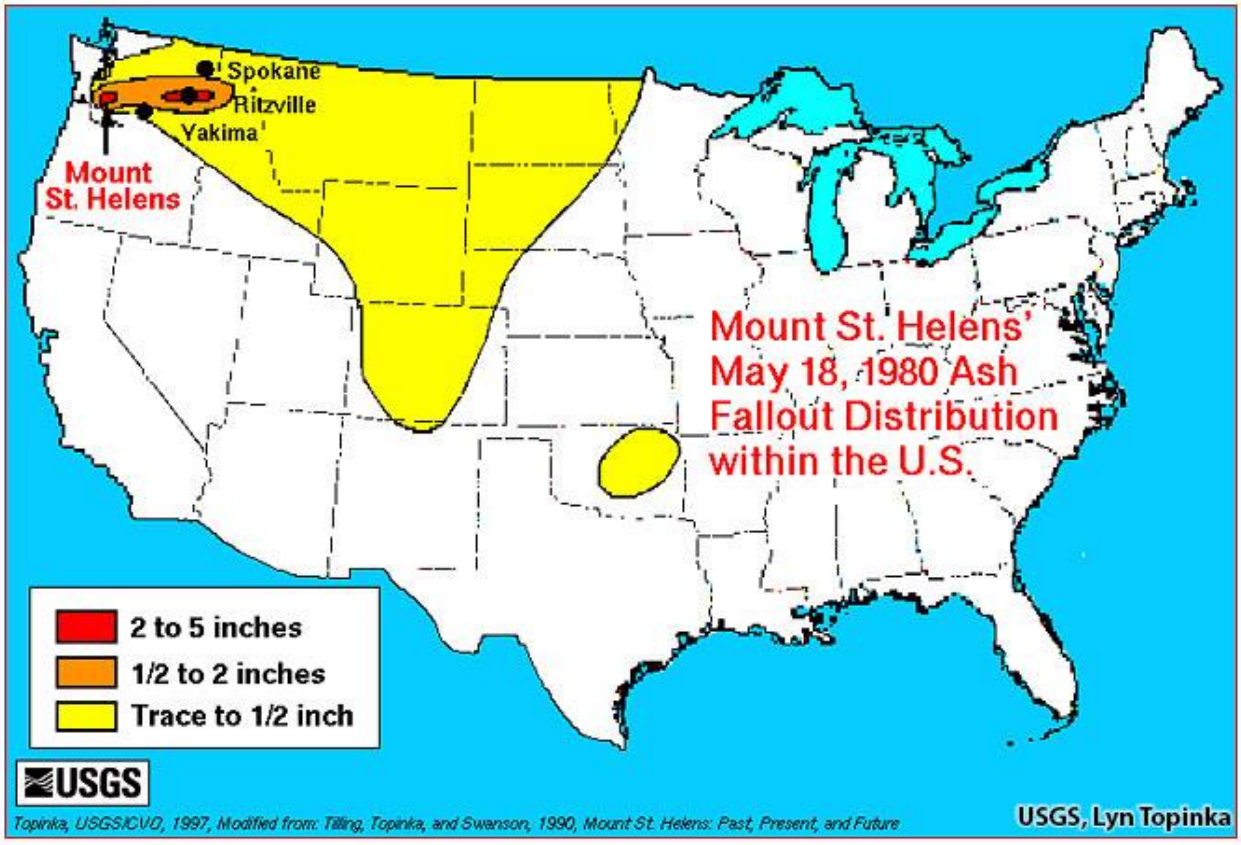


Figure 13-5. Mount St. Helens Ash Fallout Distribution

The most recent volcanic activity in Idaho occurred within the Snake River Plain where the Craters of the Moon lava field had extensive flows up to 2,000 years ago. The last eruption in the Gem Valley area of southeastern Idaho occurred about 30,000 years ago, and the Boise area once experienced large lava flows one million years ago (Idaho Hazard Mitigation Plan, 2023).

13.5 IMPACTS & LOSS ESTIMATES

Latah County and the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts may be impacted by volcanic activity through ashfall, as presented in the table below.

Table 13-1. Impacts of Volcanic Activity by Jurisdiction

Jurisdiction	May Be Impacted by Volcanic Activity	Potential Impacts of Volcanic Activity
Latah County	Yes	Ashfall, mudflow, landslide, seismic activity, disrupted storm patterns, avalanche, lightning, power supply outages, abrasion/corrosion of exposed equipment, disruption/contamination of water supply, hazardous material concerns, communications interruption, respiratory distress,

Jurisdiction	May Be Impacted by Volcanic Activity	Potential Impacts of Volcanic Activity
		irritation from gas, loss of tourism, health impacts on fish and wildlife, agricultural losses, poor air quality
City of Bovill	Yes	Ashfall, mudflow, landslide, seismic activity, disrupted storm patterns, avalanche, lightning, power supply outages, abrasion/corrosion of exposed equipment, disruption/contamination of water supply, hazardous material concerns, communications interruption, respiratory distress, irritation from gas, loss of tourism, health impacts on fish and wildlife, agricultural losses, poor air quality
City of Deary	Yes	Ashfall, mudflow, landslide, seismic activity, disrupted storm patterns, avalanche, lightning, power supply outages, abrasion/corrosion of exposed equipment, disruption/contamination of water supply, hazardous material concerns, communications interruption, respiratory distress, irritation from gas, loss of tourism, health impacts on fish and wildlife, agricultural losses, poor air quality
City of Genesee	Yes	Ashfall, mudflow, landslide, seismic activity, disrupted storm patterns, avalanche, lightning, power supply outages, abrasion/corrosion of exposed equipment, disruption/contamination of water supply, hazardous material concerns, communications interruption, respiratory distress, irritation from gas, loss of tourism, health impacts on fish and wildlife, agricultural losses, poor air quality
City of Juliaetta	Yes	Ashfall, mudflow, landslide, seismic activity, disrupted storm patterns, avalanche, lightning, power supply outages, abrasion/corrosion of exposed equipment, disruption/contamination of water supply, hazardous material concerns, communications interruption, respiratory distress, irritation from gas, loss of tourism, health impacts on fish and wildlife, agricultural losses, poor air quality
City of Kendrick	Yes	Ashfall, mudflow, landslide, seismic activity, disrupted storm patterns, avalanche, lightning, power supply outages, abrasion/corrosion of exposed equipment, disruption/contamination of water supply, hazardous material concerns, communications interruption, respiratory distress, irritation from gas, loss of tourism, health impacts on fish and wildlife, agricultural losses, poor air quality
City of Moscow	Yes	Ashfall, mudflow, landslide, seismic activity, disrupted storm patterns, avalanche, lightning, power supply outages, abrasion/corrosion of exposed equipment, disruption/contamination of water supply, hazardous material concerns, communications interruption, respiratory distress, irritation from gas, loss of tourism, health impacts on fish and wildlife, agricultural losses, poor air quality
City of Potlatch	Yes	Ashfall, mudflow, landslide, seismic activity, disrupted storm patterns, avalanche, lightning, power supply outages, abrasion/corrosion of exposed equipment, disruption/contamination of water supply, hazardous material concerns, communications interruption, respiratory distress,

Jurisdiction	May Be Impacted by Volcanic Activity	Potential Impacts of Volcanic Activity
		irritation from gas, loss of tourism, health impacts on fish and wildlife, agricultural losses, poor air quality
City of Troy	Yes	Ashfall, mudflow, landslide, seismic activity, disrupted storm patterns, avalanche, lightning, power supply outages, abrasion/corrosion of exposed equipment, disruption/contamination of water supply, hazardous material concerns, communications interruption, respiratory distress, irritation from gas, loss of tourism, health impacts on fish and wildlife, agricultural losses, poor air quality

In areas of the state where proximal volcanic hazard exists, a volcanic eruption could cause dramatic environmental effects. Vegetative communities, wildlife, historic and archeological sites, farms, and parks could be buried, crushed and burned by a lava flow. Volcanic eruption would affect geology and soils in areas of Idaho proximal to the event. Long-term effects could include forced changes in land-use patterns. Throughout the state, distal volcanic hazards could reduce air quality, damage historic resources (e.g., ashfall on old roofs), clog streams, disrupt and damage agricultural operations, and have health impacts on fish and wildlife.

All infrastructure could be at risk of ashfall from a major eruption. Power outages, line breakage, and disruption of generation facilities are possible due to ashfall. Ashfall can also disrupt and contaminate the water supply and damage water sources. Ash is highly corrosive so exposed equipment is at risk of abrasion, corrosion, and malfunction when in contact with ash. Telephone and radio communications could experience interruptions. Additionally, the weight of accumulated ash on buildings could cause roofs to collapse, killing or injuring people below. Loss of tourism and a halt of public services are also likely (Idaho Hazard Mitigation Plan, 2023).

Human impacts include respiratory distress, which is of particular concern for those with existing respiratory conditions, such as asthma, bronchitis, and chronic lung or heart disease. Toxic volcanic ash and any related gas discharges may also burn and affect the eyes and skin. Contaminated water, agricultural products, and air may contribute to other health concerns (Idaho Hazard Mitigation Plan, 2023).

Vulnerable Populations

There are many vulnerable populations in Latah County, including those in the table below. People particularly susceptible to volcanic activity include low-income families, those who don't speak English, migrants, indigenous people, elderly, and those with respiratory and other health concerns.

Table 13-2. Vulnerable Populations in Latah County

Vulnerability Category	Number	Percent
Families in poverty	665	8.8%
People with disabilities	4,862	12.3%

Vulnerability Category	Number	Percent
People over 65 years & living alone	1,521	9.5%
Single female households with children > 18 years	660	4.1%
Difficulty with English	87	0.2%
Households with no car	646	4.1%
Mobile homes	1,551	9.7%
Source: Headwaters Economics, 2025		

As demonstrated in blue in the following map, Latah County's northern region is especially disadvantaged, and the southern portion of the county is seen as partially disadvantaged (Climate and Economic Justice Screening Tool, 2025). This area has a large population of people living in rural communities, the majority of whom are low income and may be more susceptible to transport and communication challenges.

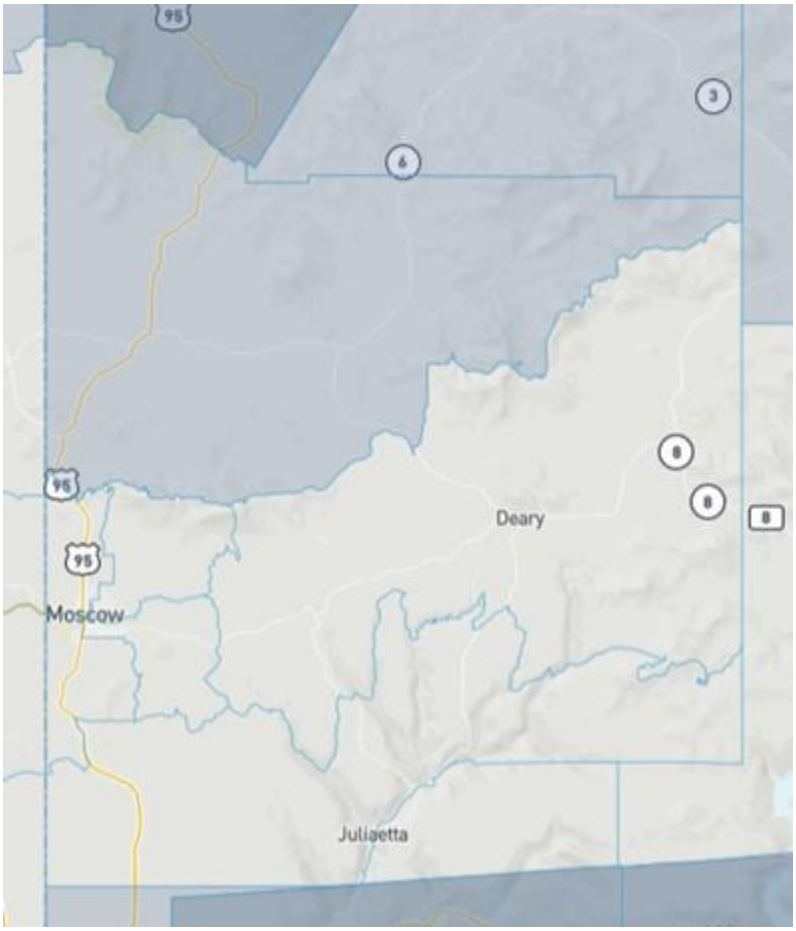
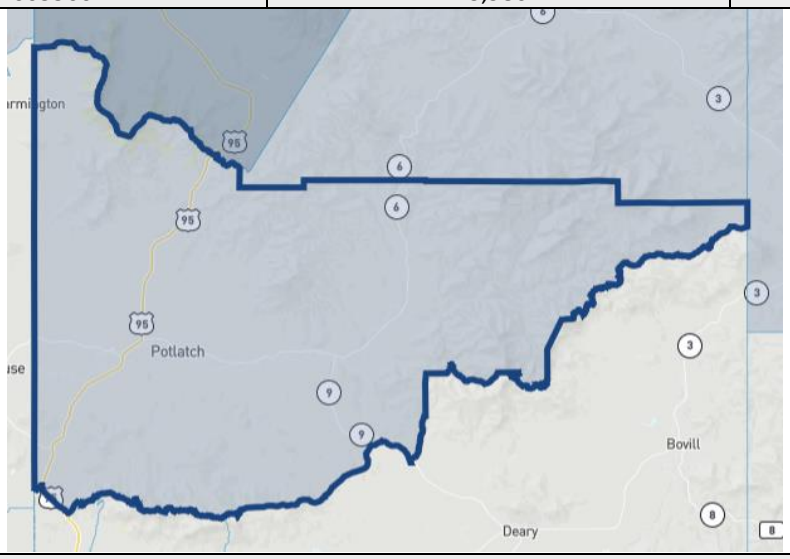


Figure 13-6. Map of Disadvantaged Communities in Latah County

The following table details the one completely disadvantaged census tract in Latah County along with the specific burdens and disadvantages the census tract experiences.

Table 13-3. Disadvantaged Communities in Latah County

LATAH COUNTY, ID		
CLIMATE & ECONOMIC JUSTICE SCREENING TOOL—DISADVANTAGED CENSUS TRACT		
CENSUS TRACT 2010 ID	**CENSUS TRACT POPULATION**	**LOW INCOME TRACT?**
16057005500	3,986	YES
		
CENSUS TRACT BURDENS: Transportation		
***97th** % (above 90th percentile)*	*Average of relative cost and time spent on transportation*	
***65th** % (above 65th percentile)*	*People in households where income is less than or equal to twice the federal poverty level, not including students enrolled in higher ed*	
Source: U.S. Council on Environmental Quality—Climate & Economic Justice Screening Tool (2025)		

Ashfall can disrupt power services and place stress on power lines and generation facilities. The following table lists types of critical facilities that could be negatively affected by power outages due to volcanic activity and ashfall, including places like hospitals and dialysis centers that rely on power to operate life-saving equipment.

Table 13-4. Critical Facility Types in Latah County

Critical Facility Type	Location
Fire Station	Potlatch
3 Fire Stations	Moscow
Fire Station	Genesee
Fire Station	Troy
Fire Station	Deary
Fire Station	Kendrick
Fire Station	Juliaetta
Fire Station	Bovill
3 Local Law Enforcement	Moscow
Local Law Enforcement	Troy
Hospital	Moscow
5 Nursing Homes	Moscow

Critical Facility Type	Location
2 Dialysis Centers	Moscow
7 Pharmacies	Moscow
Pharmacy	Potlatch
Public Health Department	Moscow
Wastewater Treatment Plant	Potlatch
Wastewater Treatment Plant	Viola
Wastewater Treatment Plant	Moscow
Wastewater Treatment Plant	Troy
Wastewater Treatment Plant	Juliaetta
Wastewater Treatment Plant	Kendrick
Wastewater Treatment Plant	Deary
Wastewater Treatment Plant	Bovill
Source: Resilience Analysis and Planning Tool, 2025	

Additionally, over 2.9 million Medicare beneficiaries in the U.S. rely on electricity-dependent durable medical and assistive equipment (DME) and devices to live independently in their homes, and some of those individuals also have health care service dependencies (HHS Empower Program, 2025). In Latah County, 7,203 people are beneficiaries of Medicare, and 323 of these beneficiaries are considered at-risk and would be vulnerable during a power outage.

Changes in Development and Impact to Future Development

All future development in the planning area will be susceptible to the potential impacts from volcanic eruptions causing ashfall within the region. While this potential impact on the built environment is not considered to be significant, the economic impact on industries that rely on machinery and equipment, such as agriculture or civil engineering projects, could be significant. Since the extent and location of this hazard is difficult to gauge because it is dependent upon many variables, the ability to institute land use recommendations based on potential impacts of this hazard is limited. While the impacts of ashfall are sufficient to warrant risk assessment for emergency management purposes, they are not sufficient to dictate land use decisions.

Effects of Climate Change on Probability of Future Events and Severity of Impacts

Climate change is not expected to impact the probability of volcanic eruptions. However, when volcanic eruptions do occur, climate change could impact the consequences of volcanic events. Climate change continues to warm the atmosphere, which would allow plumes of ash and gas emitted by large volcanic eruptions to rise higher, including volcanic sulfate aerosols. These tiny droplets of gas create a haze that blocks sunlight from reaching the Earth's surface and causes a cooling effect on the ground, which would be amplified due to climate change (Idaho Hazard Mitigation Plan, 2023). Additionally, rising temperatures could cause the loss of ice mass on volcanoes that are currently under glaciers, which may lead to future eruptions (Think Hazard, 2025).

No jurisdictions in Latah County are uniquely affected by drought, and all are adequately addressed at the county level.

13.6 FEMA NRI SCORE

The Overall Risk Index score for Volcanic Activity from the National Risk Index is not applicable in Latah County.

Other Hazards of Concern

Although non-natural hazards are not required by FEMA for inclusion in a hazard mitigation plan, Latah County wishes to rank and mitigate against a comprehensive list of hazard events that could impact the county. Due to both the nature of non-natural hazards and the discretionary status regarding their inclusion, the following hazards of interest have been briefly and qualitatively assessed for the sake of public education and informing their inclusion within the hazard ranking and mitigation process.

Biological Hazards

- Communicable Disease Outbreak

Technological (Manmade) Hazards

- Hazardous Material Incident
- Major Transportation Incident
- Prolonged Power Outage
- Cybersecurity Incident

CHAPTER 14 COMMUNICABLE DISEASE OUTBREAK

14.1 HAZARD DESCRIPTION

Communicable disease (or vector-borne disease) is usually discussed in two ways—an epidemic and a pandemic. An epidemic/pandemic is defined as a disease that appears as new cases in the human population at a rate, during a given time period and location, that substantially exceeds the number expected and causes a public health emergency.

It is, thus, a relative term, and there is no quantitative criterion for designating a health crisis as an epidemic. In addition to its application to infectious diseases, the term is sometimes used to describe outbreaks of other adverse health effects, including those stemming from chemical exposure, sociological problems, and psychological disorders. A “pandemic” is a worldwide epidemic, while the term “outbreak” may be applied to a more geographically limited medical problem as, for instance, in a single community rather than statewide or nationwide. The term “cluster” is often used with reference to non-communicable diseases.

Three factors combine to produce an epidemic: an “agent” that causes the disease, a “host” that is susceptible to the disease, and an “environment” that permits the host to be exposed to the agent. The spread of an infectious disease depends on the chain of transmission: a source of the agent, a route of exit from the host, a mode of transmission between the susceptible host and the source, and a route of entry into another susceptible host. Modes of spread may involve direct physical contact between the infected host and the new host or airborne spread, such as coughing or sneezing. Indirect transmission takes place through vehicles such as contaminated water, food, or intravenous fluids; inanimate objects such as bedding, clothes, or surgical instruments; or a biological vector such as a mosquito or flea.

Health agencies closely monitor for diseases with the potential to cause an epidemic and seek to develop immunizations and eliminate vectors. While this effort has been remarkably successful, there are many diseases of concern, and the HIV/AIDS pandemic is still not controlled despite more than 40 years of effort since recognition of the disease in 1981.

14.2 LOCATION

This hazard affects every community in Latah County. Areas of abundant standing water (including areas used for flood irrigation), which provide a breeding site for mosquitos, could be more prone to an outbreak of mosquito-borne diseases. Viruses, such as COVID-19, have spread rapidly at various points through Latah County since 2020.

14.3 EXTENT

The extent of an infected population depends on factors related to the organism, the people or animals affected, and the environment. Factors related to the organism include what species it

affects, how much of an organism is needed to establish an infection, how the organism is transmitted, and how stable it is in the environment. Factors related to people include how susceptible they are to infection.

14.4 HISTORICAL FREQUENCY & PROBABILITY OF FUTURE OCCURRENCE

Pandemic Influenza

A flu pandemic has little or nothing in common with the annual flu season. A pandemic flu would be a new strain and a much more serious and contagious flu virus. Humans would have no natural resistance to a new strain of influenza. There is a vaccine for seasonal flu, but there is no vaccine available at this time for a pandemic flu.

If a new, highly contagious strain of influenza begins to infect humans, it would likely cause widespread illness and death within a matter of months and could last up to two years. The Centers for Disease Control and Prevention (CDC) predict that as much as 25% to 30% of the U.S. population could be sick, hospitalized, and potentially die as a result of severe illness.

Spanish Flu 1918–1920

The first cases of Spanish Flu in Idaho were reported in Canyon County in September 1918 (UIdaho, 2025). Within a few weeks, the disease was raging all across the state in every county, including several cases at the University of Idaho. The number of deaths in the state is estimated to be in excess of 2,300, but the number of deaths in Latah County is unknown. It is estimated that 675,000 Americans died during the epidemic, and that 20 to 40 million died worldwide.

Asian Flu 1957–1958

First identified in China, this virus caused roughly 70,000 deaths in the United States during the 1957–58 seasons. Because this strain has not circulated in humans since 1968, no one under 30 years old has immunity to this strain.

Hong Kong Flu 1968–1969

The Hong Kong Flu was first detected in Hong Kong in early 1968 and spread to the United States later that year. The Hong Kong Flu killed about 34,000 people in the United States and one million people worldwide.

Swine Flu 2009–2010

Novel influenza A (H1N1) was a new flu virus of swine origin that was first detected in April 2009. The virus infected people and spread from person to person, sparking a growing outbreak of illness in the United States and worldwide. Estimates place the number of suspected cases throughout the world between 700 million and 1.4 billion. At least 12,469 deaths occurred in the United States, with 23 deaths in Idaho.

It's thought that novel influenza A (H1N1) flu spreads in the same way that regular seasonal influenza viruses spread—mainly through the coughs and sneezes of people who are sick with the virus.

By November 2009, about three billion doses of the swine flu vaccine were produced and administered in over 16 countries. The vaccine's overall effectiveness was estimated at 56%.

West Nile Virus

West Nile virus (WNV) is transmitted to people, birds, and other animals by the bite of an infected mosquito. This virus can cause serious illness in people of any age but especially in people over the age of 50 or those with other underlying medical conditions**.** The best form of protection is by avoiding mosquito bites.

West Nile virus infections occur in the summer and fall in Idaho when mosquitoes are active. WNV does not occur in northern states when it is too cool for mosquitoes to survive. In southern states with warmer climates and mosquitoes present year-round, the risk of infection may still be present in the winter months.

Surveillance of WNV in Idaho began in 2003 when it was first detected. An average of 14 human cases of WNV have been confirmed in the state each year (Idaho DHW, 2025). In Latah County, there have been zero reported cases of WNV in humans. Specific data for West Nile Virus in Latah County is limited.

Pertussis (Whooping Cough)

Pertussis or "whooping cough" is an endemic (common) disease in the United States, with peaks in disease generally every three to five years and frequent outbreaks. The primary goal of pertussis outbreak control efforts is to decrease morbidity (amount of disease) and mortality (death) among infants; a secondary goal is to decrease morbidity among persons of all ages.

Pertussis is a type of bacteria called Bordetella pertussis. These bacteria exist in the upper respiratory system and release toxins that damage the cilia and airways. Pertussis is usually spread through coughing or sneezing and is most severe among young children or babies (CDC, 2025).

Pertussis outbreaks can be difficult to identify and manage. Other respiratory pathogens often cause clinical symptoms similar to pertussis, and co-circulation with other pathogens (bacterial and viral) does occur.

Institutional outbreaks of pertussis are common. Outbreaks at middle and high schools can occur as protection from childhood vaccines fades. In school outbreaks, prophylaxis is recommended for close classroom and team contacts—and the pertussis booster vaccine (DTaP) depending on age. Pertussis outbreaks in hospitals and other clinical settings can put infants and other patients at risk.

In 2012, the most recent peak year, 48,277 cases of pertussis were reported—and many more cases go unreported (CDC, 2024). In 2024, pertussis cases rose again for a total of 35,435 cases. The incidence of pertussis in Idaho was 54.1 per 100,000 persons with 1,049 cases, which was above the national average (CDC, 2024).

Severe Acute Respiratory Syndrome (SARS)

Severe acute respiratory syndrome (SARS) is a viral respiratory illness caused by a coronavirus, called SARS-associated coronavirus (SARS-CoV). SARS was first reported in Asia in February 2003. Over the next few months, the illness spread to more than two dozen countries in North America, South America, Europe, and Asia before the SARS global outbreak of 2003 was contained (WHO, 2025).

SARS seems to spread primarily through close person-to-person contact. The virus that causes SARS is thought to be transmitted most readily by respiratory droplets (droplet spread) produced when an infected person coughs or sneezes. Droplet spread can happen when droplets from the cough or sneeze of an infected person are propelled a short distance (generally up to three feet) through the air and deposited on the mucous membranes of the mouth, nose, or eyes of persons who are nearby. The virus can also spread when a person touches a surface or object contaminated with infectious droplets and then touches his or her mouth, nose, or eye(s). In addition, it is possible that the SARS virus might spread more broadly through the air (airborne spread) or by other ways that are not now known.

According to the World Health Organization (WHO), a total of 8,098 people worldwide became sick with SARS during the 2003 outbreak (WHO, 2025). Of these, 774 died. In the United States, only eight people had laboratory evidence of SARS-CoV infection. All these people had traveled to other parts of the world with SARS. SARS did not spread more widely in the community in the United States. Since 2004, there have not been any known cases of SARS reported anywhere in the world (CDC, 2017).

COVID-19 Pandemic

COVID-19 is a new severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) that causes respiratory illness in humans and can be spread from person to person through respiratory droplets. These droplets are released when someone infected with the disease sneezes, coughs, or talks. Infectious droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs. COVID-19 was declared a public health emergency nationwide on January 21, 2020. The pandemic began in Wuhan, China in December 2019 and quickly spread around China and the world, lasting well into 2022 and even 2023 in some parts of the world. As of February 20, 2025, more than 777 million cases and over 7 million deaths have been confirmed worldwide. North America has had the highest number of cases with over 103 million (WHO, 2025). These statistics make the COVID-19 pandemic one of the deadliest pandemics in history.

As of February 20, 2025, Latah County has had 7,782 confirmed positive cases of COVID-19 and 62 COVID-related deaths (USA Facts, 2025). The county saw the largest spike in cases in January 2022. There have been over 526,000 cases throughout the state of Idaho with approximately 5,513 deaths. However, since the end of the declared public health emergency in the U.S. and the increased prevalence of at-home testing kits, current COVID-19 data is incomplete and unreliable. Idaho no longer actively monitors cases in the state.

There is no current cure or specific antiviral treatment for COVID-19. However, the first vaccine for COVID-19 was released on December 21, 2020. Since then, more than 11.8 billion doses of the vaccine have been administered in over 197 countries.

Norovirus

Norovirus is a very contagious virus that causes vomiting, diarrhea, nausea, and stomach pain. Norovirus is often called the “stomach flu.” However, the norovirus is not related to or caused by the influenza virus. The norovirus spreads very easily through direct contact with someone with the norovirus, by eating food or drinking liquids that are contaminated with the virus, or by touching surfaces that have been contaminated and then touching the mouth. Washing hands thoroughly and cleaning and disinfecting surfaces regularly can help prevent the spread of the norovirus (CDC, 2025).

Most recently, Idaho experienced two confirmed outbreaks of norovirus during the 2024/2025 winter season, although it’s unclear exactly where these outbreaks occurred (CDC, 2025).

Tickborne Diseases

Ticks are arachnids that feed on the blood of animals and/or humans. They are most known for their potential to transmit disease to humans and other animals. Both hard ticks (Ixodidae) and soft ticks (Aragasidae) may be encountered in Idaho. In Idaho, ticks are usually found on grasses, low plants, and sagebrush, waiting to attach to a host. The most common tick found in Idaho is the Rocky Mountain wood tick, which can transmit Rocky Mountain Spotted Fever, tick-borne relapsing fever, and tularemia. The western blacklegged tick is the only human-attaching tick capable of transmitting Lyme disease in Idaho, and the likelihood of encountering one is very low (UIdaho, 2016). Most cases of Lyme disease in Idaho came from a tick bite while traveling in different states. Ticks are most commonly found from the time the snow melts to roughly mid-July. Data about ticks is limited in Latah County.

Rabies

Rabies is a preventable viral disease of mammals most often transmitted through the bite of a rabid animal. The vast majority of rabies cases reported to the Centers for Disease Control and Prevention (CDC) each year occur in wild animals like raccoons, skunks, bats, and foxes (CDC, 2025). There is a large bat population in Idaho, and bats in Latah County have tested positive for rabies in the past (Big Country News, 2023). Even though only a small percentage of bats

carry rabies, if someone was exposed to rabies and left untreated, the infection almost always leads to death.

14.5 IMPACTS & LOSS ESTIMATES

Latah County and the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts may be impacted by communicable disease outbreaks, as presented in the table below.

Table 14-1. Impacts of Communicable Disease Outbreak by Jurisdiction

Jurisdiction	May Be Impacted by Communicable Disease	Potential Impacts of Communicable Disease
Latah County	Yes	Illness, disability, death, overwhelm of medical resources, depletion of medical supplies and medications, economic impacts, loss of income, closure of schools/businesses, job loss, lack of tourism, supply shortages, mask-wearing, social distancing, decreased social interaction, increased online learning and remote work, anxiety about illness, mass panic
City of Bovill	Yes	Illness, disability, death, overwhelm of medical resources, depletion of medical supplies and medications, economic impacts, loss of income, closure of schools/businesses, job loss, lack of tourism, supply shortages, mask-wearing, social distancing, decreased social interaction, increased online learning and remote work, anxiety about illness, mass panic
City of Deary	Yes	Illness, disability, death, overwhelm of medical resources, depletion of medical supplies and medications, economic impacts, loss of income, closure of schools/businesses, job loss, lack of tourism, supply shortages, mask-wearing, social distancing, decreased social interaction, increased online learning and remote work, anxiety about illness, mass panic
City of Genesee	Yes	Illness, disability, death, overwhelm of medical resources, depletion of medical supplies and medications, economic impacts, loss of income, closure of schools/businesses, job loss, lack of tourism, supply shortages, mask-wearing, social distancing, decreased social interaction, increased online learning and remote work, anxiety about illness, mass panic
City of Juliaetta	Yes	Illness, disability, death, overwhelm of medical resources, depletion of medical supplies and medications, economic impacts, loss of income, closure of schools/businesses, job loss, lack of tourism, supply shortages, mask-wearing, social distancing, decreased social interaction, increased online learning and remote work, anxiety about illness, mass panic
City of Kendrick	Yes	Illness, disability, death, overwhelm of medical resources, depletion of medical supplies and medications, economic impacts, loss of income, closure of schools/businesses, job loss, lack of tourism, supply shortages, mask-wearing, social distancing, decreased social interaction, increased online learning and remote work, anxiety about illness, mass panic

Jurisdiction	May Be Impacted by Communicable Disease	Potential Impacts of Communicable Disease
City of Moscow	Yes	Illness, disability, death, overwhelm of medical resources, depletion of medical supplies and medications, economic impacts, loss of income, closure of schools/businesses, job loss, lack of tourism, supply shortages, mask-wearing, social distancing, decreased social interaction, increased online learning and remote work, anxiety about illness, mass panic
City of Potlatch	Yes	Illness, disability, death, overwhelm of medical resources, depletion of medical supplies and medications, economic impacts, loss of income, closure of schools/businesses, job loss, lack of tourism, supply shortages, mask-wearing, social distancing, decreased social interaction, increased online learning and remote work, anxiety about illness, mass panic
City of Troy	Yes	Illness, disability, death, overwhelm of medical resources, depletion of medical supplies and medications, economic impacts, loss of income, closure of schools/businesses, job loss, lack of tourism, supply shortages, mask-wearing, social distancing, decreased social interaction, increased online learning and remote work, anxiety about illness, mass panic

Pandemic Influenza

The following are potential impacts from a worldwide pandemic event. The impacts in Latah County would be similar on a local level.

1. Rapid worldwide spread
2. Overloaded health care systems
3. Inadequate medical supplies
4. Economic and social disruption

Although the federal government is stockpiling large quantities of medical supplies and antiviral drugs, no country in the world has enough antiviral drugs to protect all of their citizens. Antivirals would be used to treat severe cases as long as there was a reasonable chance that the drugs might help save lives.

Antivirals might also be reserved for people who work in areas that place them at high risk for exposure in an outbreak, such as healthcare workers. Other strategies for slowing the spread of a potentially deadly pandemic influenza virus might include temporarily closing schools, sports arenas, theaters, restaurants, taverns, and other public gathering places and facilities. There currently is no vaccine to protect humans against a pandemic influenza virus; however, vaccine development efforts are under way to protect humans against the current H5N1 bird flu virus.

Historically, epidemics/pandemics have claimed far more lives than any other type of disaster. While modern epidemiology and medical advances make the decimation of populations much less likely, new forms of disease continue to appear. The potential, therefore, exists for an

epidemic to cause widespread loss of life and disability, overwhelm medical resources, and have tremendous economic impacts.

Schools, businesses, and other public areas may be shut down for a period of time to reduce exposure to the disease. This has the potential to completely devastate the local economy.

West Nile Virus

West Nile fever may include a fever, headache, body aches, a rash, and swollen glands. The symptoms of West Nile fever may last for days or linger for weeks to months. Serious illness infecting the brain or spinal cord can occur in some individuals, and although anyone can experience the more severe form of the disease, it tends to occur in people over the age of 50 or those with other underlying medical conditions or weakened immune systems. The severe symptoms may include high fever, headache, neck stiffness, stupor, disorientation, coma, tremors, convulsions, muscle weakness, vision loss, numbness, and paralysis. These symptoms may last several weeks or more, and neurological effects may be permanent. Usually, symptoms occur from five to 15 days after the bite of an infected mosquito. There is no specific treatment for infection, but hospitalization and treatment of symptoms may improve the chances of recovery for severe infections. There is no vaccine available for humans.

Losses brought about by the effects of West Nile Virus are centered on loss of income for those affected by the virus as well as a loss of productivity by businesses. Death has occurred in Idaho from the West Nile Virus in both humans and animals.

Pertussis (Whooping Cough)

Pertussis usually doesn't leave any lasting effects for teenagers and adults, and symptoms are generally mild. Symptoms typically develop five to 10 days after exposure and can include runny nose, low-grade fever, mild cough, apnea, coughing fits, vomiting, and/or exhaustion. Coughing fits can occur up to 10 weeks or more after initial exposure (CDC, 2025). Babies and young children are most at risk and may be hospitalized depending on the severity of the coughing and respiratory conditions. According to the CDC, about half of babies one year old or younger who get pertussis need hospital care (CDC, 2025). Complications arising from pertussis are often serious and/or deadly. The most serious complications are pneumonia, convulsions, apnea, encephalopathy, and death.

An estimated one in 100 babies who contract pertussis will die (CDC, 2025). However, deaths and losses due to pertussis may be significantly mitigated for those who receive the pertussis vaccine (either DTaP or Tdap). Most people who get whooping cough who have had the vaccine do not have serious problems due to the infection.

Severe Acute Respiratory Syndrome (SARS)

In general, SARS begins with a high fever (temperature greater than 100.4°F [>38.0°C]). Other symptoms may include headache, an overall feeling of discomfort, and body aches. Some

people also have mild respiratory symptoms at the outset. About 10% to 20% of patients have diarrhea. After two to seven days, SARS patients may develop a dry cough. Most patients develop pneumonia. Those who develop more serious complications may deal with the effects of the virus for months or years to come.

The fatality rate among people with SARS is around 3% (WHO, 2025). However, losses are small now that the virus has been contained and there have been no more cases since 2004. SARS is closely related to the SARS-CoV-2 virus that caused the COVID-19 pandemic in 2020, so a reappearance of SARS-CoV-1 could have devastating consequences.

COVID-19 Pandemic

Symptoms may appear 2–14 days after exposure, or there may be no symptoms at all (asymptomatic). Symptoms vary from mild to severe and can include headache, loss of smell and taste, nasal congestion, runny nose, cough, sore throat, muscle pain, fever, fatigue, diarrhea, and breathing difficulties. Complications from more severe symptoms can lead to further life-threatening illnesses, such as pneumonia or hypoxia.

The COVID-19 outbreak has severely affected almost all aspects of everyday life all over the world. In terms of the economy, the global stock markets first fell dramatically on February 24, 2020 as cases began to rise. Many experts have predicted that the pandemic will become the costliest disaster to ever occur in human history. Tourism was especially impacted because all non-essential businesses and travel shut down for several months to slow the spread of the virus. In some countries, tourism has not fully reopened three years later. According to a report by Yelp, about 60% of businesses that closed since the beginning of the pandemic will remain closed permanently. There have also been numerous supply shortages during the pandemic, including on essentials such as toilet paper, food, bottled water, lumber, and microchips.

In many countries with a history of food poverty and undernourishment, finding and gaining access to food has become increasingly difficult. Access to food has dwindled as food production has decreased, incomes have fallen, and travel restrictions have prevailed. Even those in first world countries have seen a persistent shortage of food on shelves in grocery stores.

Additionally, schools have been greatly impacted, with most educational institutions switching to online education and shutting down all extracurricular activities. Even some higher learning institutions, such as universities, stopped use of dormitory facilities for students in attendance. Many required negative COVID tests, social distancing, masking, and vaccinations to attend.

Mask-wearing, social distancing, decreased social interaction, increased online learning and remote work, anxiety about illness, and many other impacts will likely impact society for years to come. Countless other industries and factors have been permanently changed, too, such as the medical community, politics, culture, and supply chains.

According to a report by the United Nations Conference on Trade and Development, international tourism lost an estimated $2.4 trillion in 2020 as a result of the pandemic.

During April, May, and June of 2020, the International Labour Organization estimated that approximately 400 million full-time jobs were lost worldwide. Income also decreased by 10% within the first nine months of 2020. A report by Washington University in St. Louis predicted a loss of over $300 billion in the global supply chain (2020). In the U.S., jobs plummeted from 152,523 total jobs in February 2020 to 130,161 in April 2020 (UNH, 2021).

Norovirus

Norovirus is a very contagious virus that causes vomiting, diarrhea, nausea, and stomach pain. There is no specific medicine or vaccine to treat norovirus, so the most common treatment includes drinking plenty of liquids to prevent dehydration. Contagious people should limit contact with others until symptoms have passed, which includes keeping children from school until they are well again. Norovirus is typically not serious or fatal unless intense dehydration occurs, which is why staying hydrated is extremely important (CDC, 2025).

During the event of a widespread outbreak within Latah County, school and business closures may be necessary to further prevent the spread of the virus. Typically, closures may only last for a few days to a week.

Tickborne Diseases

According to the CDC, Lyme disease is caused by the bacterium Borrelia burgdorferi and is transmitted to humans through the bite of infected blacklegged ticks. Typical symptoms include fever, headache, fatigue, and a characteristic skin rash called erythema migrans. If left untreated, infection can spread to joints, the heart, and the nervous system. Lyme disease is diagnosed based on symptoms, physical findings (e.g., rash), and the possibility of exposure to infected ticks. Laboratory testing is helpful if used correctly and performed with validated methods. Most cases of Lyme disease can be treated successfully with a few weeks of antibiotics.

Rocky Mountain spotted fever (RMSF) is a tickborne disease caused by the bacterium *Rickettsia rickettsii*. This organism is a cause of potentially fatal human illness in North and South America and is transmitted to humans by the bite of infected tick species. In the United States, these include the American dog tick (*Dermacentor variabilis*), Rocky Mountain wood tick (*Dermacentor andersoni*), and brown dog tick (*Rhipicephalus sanguineus*). Typical symptoms include fever, headache, abdominal pain, vomiting, and muscle pain. A rash may also develop, but is often absent in the first few days, and in some patients, never develops. Rocky Mountain spotted fever can be a severe or even fatal illness if not treated in the first few days of symptoms. Doxycycline is the first-line treatment for adults and children of all ages and is most effective if started before the fifth day of symptoms. The initial diagnosis is made based on

clinical signs and symptoms, and medical history, and can later be confirmed by using specialized laboratory tests. RMSF and other tickborne diseases can be prevented.

Rabies

The rabies virus infects the central nervous system, ultimately causing disease in the brain and death. The early symptoms of rabies in humans are similar to that of many other illnesses, including fever, headache, and general weakness or discomfort. As the disease progresses, more specific symptoms appear and may include insomnia, anxiety, confusion, slight or partial paralysis, excitation, hallucinations, agitation, hypersalivation (increase in saliva), difficulty swallowing, and hydrophobia (fear of water). Death usually occurs within days of the onset of these symptoms. However, if immediate treatment is sought after rabies exposure, the rabies vaccine can be given in four doses over two weeks and prognosis becomes very good (CDC, 2025).

CHAPTER 15 HAZARDOUS MATERIAL INCIDENT

15.1 HAZARD DESCRIPTION

Substances that, because of their chemical or physical characteristics, are hazardous to humans and living organisms, property, and the environment are regulated by the U.S. Environmental Protection Agency (EPA) and, when transported in commerce, by the U.S. Department of Transportation (DOT). EPA regulations address “hazardous substances” and “extremely hazardous substances.”

The EPA chooses to specifically list hazardous substances and extremely hazardous substances rather than providing objective definitions. Hazardous substances, as listed, are generally materials that, if released into the environment, tend to persist for long periods and pose long-term health hazards for living organisms. They are primarily chronic rather than acute health hazards.

Regulations require that spills of these materials into the environment in amounts at or above their individual “reportable quantities” must be reported to the EPA. Extremely hazardous substances, on the other hand, while also generally toxic materials, are acute health hazards that, when released, are immediately dangerous to the life of humans and animals and can cause serious damage to the environment. There are currently 355 specifically listed extremely hazardous substances listed along with their individual threshold planning quantities (TPQ) (eCFR, 2025).

When facilities have these materials in quantities at or above the TPQ, they must submit “Tier II” information to appropriate state and/or local agencies to facilitate emergency planning.

DOT regulations provide the following definition for the term “hazardous material”: A hazardous material is “a substance or material that the Secretary of Transportation has determined is capable of posing an unreasonable risk to health, safety, and property when transported in commerce” and has been designated as hazardous under section 5103 of federal hazardous materials transportation law (49 U.S.C. 5103). The term includes hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials, materials designated as hazardous in the Hazardous Materials Table (see 49 CFR 172.101), and materials that meet the defining criteria for hazard classes and divisions in part 173 of subchapter C of the same chapter (U.S. Compliance, 2025).

When a substance meets the DOT definition of a hazardous material, it must be transported under safety regulations providing for appropriate packaging, communication of hazards, and proper shipping controls.

In addition to EPA and DOT regulations, the National Fire Protection Association (NFPA) develops codes and standards for the safe storage and use of hazardous materials. These codes and standards are generally adopted locally and include the use of the NFPA 704 standard for

communication of chemical hazards in terms of health, fire, instability (previously called "reactivity"), and other special hazards (such as water reactivity and oxidizer characteristics).

While somewhat differently defined by the above organizations, the term "hazardous material" may be generally understood to encompass substances that have the capability to harm humans and other living organisms, property, and/or the environment. There is also no universally-accepted, objective definition of the term "hazardous material event." A useful working definition, however, might be framed as "any actual or threatened uncontrolled release of a hazardous material, its hazardous reaction products, or the energy released by its reactions that poses a significant risk to human life and health, property, and/or the environment."

15.2 LOCATION

Hazardous materials are widely used, stored, and transported; a hazardous material release incident could take place almost anywhere in the county, including in the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy. Moreover, many hazardous materials are used, stored, and transported in very large quantities, so the impacts of a release incident may be widespread and powerful. Hazardous material incidents usually occur on major highways and railways, thus affecting the North Latah County and South Latah Highway Districts. U.S. 95 is a major hauling route for tankers and semis carrying hazardous materials, and it passes through the center of the city of Moscow and passes nearby Genesee and Potlatch. Highways 8, 99, and 3 are also major highways susceptible to hazardous material incidents. Hazardous farm chemicals and fertilizers are frequently transported on Latah County rural roads, as well.

Facilities covered by The Emergency Planning and Community Right to Know Act (EPCRA) must submit an emergency and hazardous chemical inventory form to the LEPC and the local fire department annually. Tier II forms require basic facility identification information, employee contact information for both emergencies and non-emergencies, and information about chemicals stored or used at the facility.

15.3 EXTENT

Diamond-shaped NFPA 704 signs ranking the health, fire, and instability hazards on a numerical scale from zero (least) to four (greatest) along with any special hazards are usually required to be posted on chemical storage buildings, tanks, and other facilities. Similar NFPA 704 labels may also be required on individual containers stored and/or used inside facilities.

15.4 HISTORICAL FREQUENCY & PROBABILITY OF FUTURE OCCURRENCE

There have been several releases of hazardous materials in Latah County. Many releases are due to packages that contain hazardous substances leaking or becoming damaged in transit, which are usually controlled and cleaned up quickly.

The following table details notable hazardous material incidents that have occurred in Latah County since 2020.

Table 15-1. Hazardous Materials Incidents

Date	Nearest Location	Mode of Release	Hazardous Material	Quantity Released	Description
11/13/2020	Moscow, ID	Equipment failure	Non-PCB transformer oil	N/A	Non-PCB transformer oil discharged from a pad-mounted transformer due to equipment failure
10/13/2022	Princeton, ID	Highway	Motor oil	N/A	Unknown amount of motor oil released from box truck
04/06/2023	Genesee, ID	Storage tank	Diesel fuel	N/A	Farmer overfilled above ground storage tank, causing diesel to spill onto the ground and into Cow Creek
08/28/2023	Moscow, ID	Operator error	Boric acid	N/A	Improper use of boric acid on floors of apartment building as a pesticide for cockroaches

Source: PHMSA, 2017–2023; National Response Center, 2017–2023; Salt Lake Tribune, 2023; Storm Events Database, 2023

There are 13 Superfund sites in Idaho, but none are in Latah County. However, there is one Superfund site in St. Maries in Benewah County just north of Latah County called St. Maries Creosote, which is no longer active and is in the cleanup phase. According to the Idaho State Hazard Mitigation Plan, Latah County has 21 Tier II sites. The Toxics Release Inventory (TRI) database lists only one TRI industrial facility in Latah County—Bennett Lumber Products, Inc. in Princeton, ID. This facility is a mill that processes lumber and creates a variety of lumber products. The facility has had one TRI release, which consisted of 35 pounds of lead released on land (19 lbs) and in air (16 lbs) in 2022 (EPA, 2025). While not listed on the TRI, the former Potlatch Mill site has potential contaminations on the property, which is located in Potlatch.

Environmental assessments have been conducted, and any environmental concerns at the mill site are known and documented.

15.5 IMPACTS & LOSS ESTIMATES

Latah County and the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts may be impacted by hazardous material incidents, as presented in the table below.

Table 15-2. Impacts of Hazardous Material Incident by Jurisdiction

Jurisdiction	May Be Impacted by Hazardous Material Incident	Experienced Hazardous Material Incident Since 2020	Potential Impacts of Hazardous Material Incident
Latah County	Yes	Yes	Injury, disability, death, destruction of vegetation/crops, property damage, livestock poisoning, toxic air, polluted groundwater/drinking water, food contamination, road closures, facility closures, loss of utilities, business/industrial productivity losses, repair/removal expenses, loss of chemical products, economic losses
City of Bovill	Yes	No	Injury, disability, death, destruction of vegetation/crops, property damage, livestock poisoning, toxic air, polluted groundwater/drinking water, food contamination, road closures, facility closures, loss of utilities, business/industrial productivity losses, repair/removal expenses, loss of chemical products, economic losses
City of Deary	Yes	No	Injury, disability, death, destruction of vegetation/crops, property damage, livestock poisoning, toxic air, polluted groundwater/drinking water, food contamination, road closures, facility closures, loss of utilities, business/industrial productivity losses, repair/removal expenses, loss of chemical products, economic losses
City of Genesee	Yes	Yes	Injury, disability, death, destruction of vegetation/crops, property damage, livestock poisoning, toxic air, polluted groundwater/drinking water, food contamination, road closures, facility closures, loss of utilities, business/industrial productivity losses, repair/removal expenses, loss of chemical products, economic losses
City of Juliaetta	Yes	No	Injury, disability, death, destruction of vegetation/crops, property damage,

Jurisdiction	May Be Impacted by Hazardous Material Incident	Experienced Hazardous Material Incident Since 2020	Potential Impacts of Hazardous Material Incident
			livestock poisoning, toxic air, polluted groundwater/drinking water, food contamination, road closures, facility closures, loss of utilities, business/industrial productivity losses, repair/removal expenses, loss of chemical products, economic losses
City of Kendrick	Yes	No	Injury, disability, death, destruction of vegetation/crops, property damage, livestock poisoning, toxic air, polluted groundwater/drinking water, food contamination, road closures, facility closures, loss of utilities, business/industrial productivity losses, repair/removal expenses, loss of chemical products, economic losses
City of Moscow	Yes	Yes	Injury, disability, death, destruction of vegetation/crops, property damage, livestock poisoning, toxic air, polluted groundwater/drinking water, food contamination, road closures, facility closures, loss of utilities, business/industrial productivity losses, repair/removal expenses, loss of chemical products, economic losses
City of Potlatch	Yes	No	Injury, disability, death, destruction of vegetation/crops, property damage, livestock poisoning, toxic air, polluted groundwater/drinking water, food contamination, road closures, facility closures, loss of utilities, business/industrial productivity losses, repair/removal expenses, loss of chemical products, economic losses
City of Troy	Yes	No	Injury, disability, death, destruction of vegetation/crops, property damage, livestock poisoning, toxic air, polluted groundwater/drinking water, food contamination, road closures, facility closures, loss of utilities, business/industrial productivity losses, repair/removal expenses, loss of chemical products, economic losses

Because hazardous materials are so widely used, stored, and transported, a hazardous material event could take place almost anywhere. Further, many hazardous materials are used, stored, and transported in very large quantities, so the impacts of an event may be widespread and

powerful. Regulations and safety practices make such large-scale events unlikely, but smaller scale incidents may have severe impacts, including:

- Human deaths, injuries, and permanent disabilities
- Livestock/animal deaths
- Destruction of vegetation and crops
- Property damage and destruction
- Pollution of groundwater, drinking water supplies, and the environment
- Contamination of foodstuffs, property, land, and structures
- Temporary or long-term closure of transportation routes and/or facilities
- Loss of business and industrial productivity
- Utility outages
- Clean-up and restoration costs
- Losses and inconvenience due to evacuation
- Loss of valuable chemical product

Losses due to the release of hazardous materials are linked specifically to two areas: (1) response, including evacuation, and (2) cleanup. Repairs to damaged equipment may also result in heavy monetary losses. Releases of hydrocarbon fuels are a constant threat. Cleanup of these releases is the responsibility of the spiller.

CHAPTER 16 MAJOR TRANSPORTATION INCIDENT

16.1 HAZARD DESCRIPTION

A transportation hazard may be defined as a condition created by moving anything by common carrier. Transportation hazards can be divided into two categories: hazards created by the material that is being transported and hazards created by the transportation medium. Transportation systems available in Latah County include air and roadways.

- *Vehicular Accidents:* In the context of commercial motor vehicles, the Code of Federal Regulations defines accidents as a fatality, bodily injury to a person who receives medical treatment away from the scene of an accident, or one or more motor vehicles incurring disabling damage as a result of the accident. Vehicular accidents can include passenger and commercial vehicles, motorcycles, trucks, buses, bicycle and pedestrian accidents, and other motorized forms of road transportation.
- *Aviation Accidents:* The Code of Federal Regulations (CFR) defines an aircraft accident as "an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage."

16.2 LOCATION

This hazard affects every community in Latah County, specifically along any roadways, railroads, and flight paths. U.S. 95 is a large U.S. highway that passes through the center of the city of Moscow and passes nearby Genesee and Potlatch. Highways 8, 99, and 3 are also major highways susceptible to transportation incidents. These highways see thousands of travelers per day. Latah County's major highways and roads can be seen in the map below.

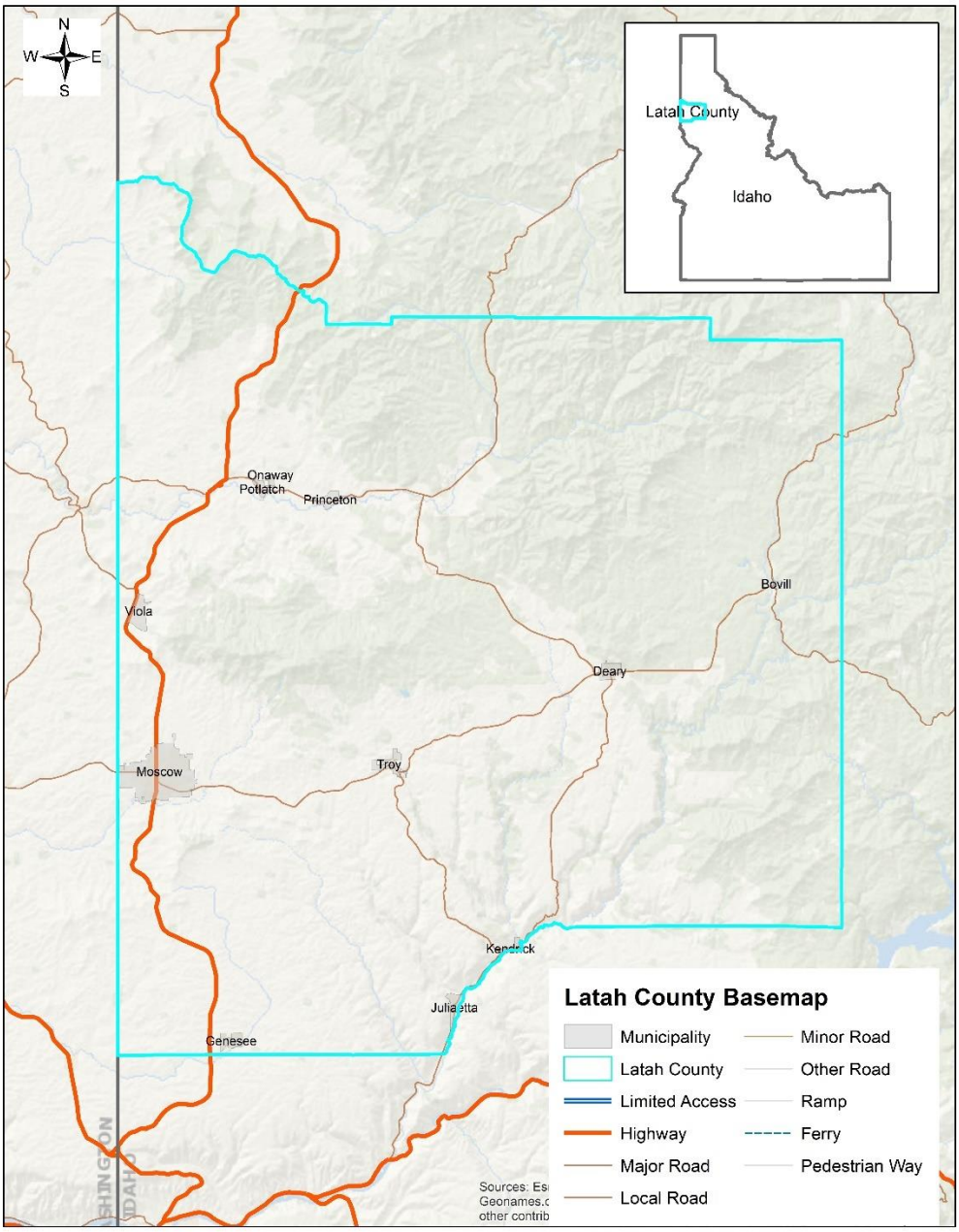


Figure 16-1. Latah County Major Highways

There are two highway districts in Latah County that oversee and maintain many of the roads in the county. The North Latah County Highway District covers 590 miles of road in Latah County, and the South Latah Highway District covers 248.9 miles of road.

16.3 EXTENT

Major transportation incidents can result in injuries and fatalities and property damage. A major accident involving a bus or plane could result in a mass casualty event.

16.4 HISTORICAL FREQUENCY & PROBABILITY OF FUTURE OCCURRENCE

In Latah County, vehicular incidents occur often in the county. However, large-scale mass casualty events are rare. The Office of Highway Safety at the Idaho Transportation Department reports 11 fatalities since 2019 (not including the year 2024), which are included in the table below (ITD, 2024).

Table 16-1. Latah County Vehicle Accidents

Year	Total Accidents	Total Injuries	Total Fatalities
2019	489	140	2
2020	399	122	1
2021	493	112	6
2022	423	130	0
2023	412	106	2
Source: Idaho Transportation Department, 2024			

According to the National Transportation Safety Board available data and local news sites, there have been five recorded aviation crashes and one fatality in Latah County since 2000 (NTSB, 2025). On September 8, 2012, a plane performing at an air show for a Republican Party fundraiser in Viola crashed, killing the pilot who was the only occupant of the airplane. The accident occurred just six miles north of Moscow, ID. The cause of the crash was likely due to the engine stalling or the plane losing its lift midair (KHQ, 2012).

Table 16-2. Aviation Accidents in Latah County

Date	Location	Accident Type	Cause	Injuries	Fatalities
03/22/2008	Genesee, ID	Airplane	Aircraft structural failure, rudder failure	1	None
08/18/2010	Genesee, ID	Airplane	Flying too low, collision with terrain	None	None
09/08/2012	Viola, ID	Airplane	Engine stalled, circling/dropping streamers	None	1
03/11/2016	Juliaetta, ID	Airplane	Loss of engine power	None	None
09/23/2021	Bovill, ID	Helicopter	Unknown	None	None

16.5 IMPACTS & LOSS ESTIMATES

Latah County and the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts may be impacted by major transportation incidents, as presented in the table below.

Table 16-3. Impacts of Major Transportation Incident by Jurisdiction

Jurisdiction	May Be Impacted by Major Transportation Incident	Potential Impacts of Major Transportation Incident
Latah County	Yes	Stranded vehicles/people, mass sheltering, damage/disruption to roads and infrastructure, delayed rescue vehicles, injury, disability, death, supply disruption, property damage, disruption to tourism industry, loss of income, recovery and clean-up costs
City of Bovill	Yes	Stranded vehicles/people, mass sheltering, damage/disruption to roads and infrastructure, delayed rescue vehicles, injury, disability, death, supply disruption, property damage, disruption to tourism industry, loss of income, recovery and clean-up costs
City of Deary	Yes	Stranded vehicles/people, mass sheltering, damage/disruption to roads and infrastructure, delayed rescue vehicles, injury, disability, death, supply disruption, property damage, disruption to tourism industry, loss of income, recovery and clean-up costs
City of Genesee	Yes	Stranded vehicles/people, mass sheltering, damage/disruption to roads and infrastructure, delayed rescue vehicles, injury, disability, death, supply disruption, property damage, disruption to tourism industry, loss of income, recovery and clean-up costs
City of Juliaetta	Yes	Stranded vehicles/people, mass sheltering, damage/disruption to roads and infrastructure, delayed rescue vehicles, injury, disability, death, supply disruption, property damage, disruption to tourism industry, loss of income, recovery and clean-up costs
City of Kendrick	Yes	Stranded vehicles/people, mass sheltering, damage/disruption to roads and infrastructure, delayed rescue vehicles, injury, disability, death, supply disruption, property damage, disruption to tourism industry, loss of income, recovery and clean-up costs
City of Moscow	Yes	Stranded vehicles/people, mass sheltering, damage/disruption to roads and infrastructure, delayed rescue vehicles, injury, disability, death, supply disruption, property damage, disruption to tourism industry, loss of income, recovery and clean-up costs
City of Potlatch	Yes	Stranded vehicles/people, mass sheltering, damage/disruption to roads and infrastructure, delayed rescue vehicles, injury, disability, death, supply disruption, property damage, disruption to tourism industry, loss of income, recovery and clean-up costs
City of Troy	Yes	Stranded vehicles/people, mass sheltering, damage/disruption to roads and infrastructure, delayed rescue vehicles, injury, disability, death, supply disruption, property damage, disruption to tourism industry, loss of income, recovery and clean-up costs

Commuters or other travelers: Stranded commuters or travelers can become a significant problem in the event of a transportation system breakdown. Mass care and sheltering may become necessary in the event of a transportation system disruption of significant magnitude and/or duration.

Emergency responders and public safety personnel: Damage or disruption to the transportation infrastructure, especially the roadway system, can create threats to rescuer

safety when transiting to and from events. The inability or delay of rescue vehicles to reach the scene of an event could potentially postpone critical treatment to the injured and therefore could increase potential life loss.

Evacuees: Damage or disruption to the transportation infrastructure, especially the roadway system, could create potential challenges with evacuating individuals out of impacted areas, especially in the aftermath of an event with a fast onset that allowed for little to no evacuation time prior to its occurrence. It may also delay re-entry into disaster areas, which has implications for mass care and sheltering.

Businesses and other commercial ventures: Depending on the magnitude of the transportation system disturbance, economic disruption might occur ranging from limited to severe. Impassible roads and transportation corridors will impact delivery and services of goods. Lost worker time also needs to be considered from transportation disruption. Businesses in the immediate vicinity of an event that rely on the shipment of goods either in or out of their location could be potentially impacted the most. However, businesses not in the immediate impact area, but that either transit goods or people through the impacted area or have a significant customer base in the immediate impact area might also be negatively affected.

Hospitals and public health facilities: The hospital relies on the transportation network for delivery of critical supplies, such as medicine, supplies, and equipment for patient care. These facilities and their patients could be facing a shortage of necessary supplies in the event of a transportation disruption of significant duration or magnitude.

Institutions with large numbers of people: In addition to hospitals, other institutions that serve large numbers of people, such as nursing homes, may face the potential of supply shortage of food and other necessary commodities to care for the people who reside in the facility in the event of a transportation disruption of significant duration or magnitude.

Losses to date have mostly been incurred by property (i.e., vehicle) owners. No major transportation incidents have occurred in the county.

CHAPTER 17 PROLONGED POWER OUTAGE

17.1 HAZARD DESCRIPTION

An electric power outage (also power failure or power loss) is the loss of the electricity supply to a geographic area. The area of an outage (scale) can range from a single facility or neighborhood to a multi-state region. The length of the outage (scope) is determined by a combination of factors to include the scale of the outage, weather, and redundant equipment and capacity.

A power outage can be described as a blackout if power is lost completely or as a brownout if the voltage level is below the normal minimum level specified for the system. The reasons for a power outage can, for instance, be a defect in a power station, damage to a power line or other part of the distribution system, a short circuit, or the overloading of electricity mains. “Load shedding” is a common term for a controlled way of rotating available generation capacity between various districts or customers, thus avoiding total wide area blackouts.

Prolonged power outages are particularly serious for hospitals and other critical facilities and operations. Our society is extremely reliant upon life-critical medical devices, communications, and electronic information, all of which require reliable (uninterrupted) electric power.

The entire energy system is complex and consists of three major parts: generation, transmission, and distribution. The control and communication between these parts are extremely important as the failure of one part could disrupt the entire system. The energy system is reliant upon the following factors: continual maintenance, equipment replacement and redundancy, and additional high-load capacity. These factors have to be carefully balanced against operating cost and profit. These initiatives are expensive, but the costs cannot be readily pushed down to the consumer due to public pressure and opinion.

17.2 LOCATION

This hazard affects every community in Latah County.

17.3 EXTENT

Power outages in Latah County are typically isolated and limited to a short amount of time (less than six hours), although a prolonged power outage of more than six hours is still possible.

17.4 HISTORICAL FREQUENCY & PROBABILITY OF FUTURE OCCURRENCE

Latah County has several short power outages (i.e., lasting less than six hours) per year but does not have a history of extended power outages. The possibility always exists that a manmade or natural disaster could affect the power system for an extended period of time. Most recently,

975 Avista customers around Latah County were without power on February 23, 2025 after heavy rain caused downed trees that hit power lines (KREM, 2025).

17.5 IMPACTS & LOSS ESTIMATES

Latah County and the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts may be impacted by prolonged power outages, as presented in the table below.

Table 17-1. Impacts of Prolonged Power Outage by Jurisdiction

Jurisdiction	May Be Impacted by Prolonged Power Outage	Potential Impacts of Prolonged Power Outage
Latah County	Yes	Loss of heat/power, Injury, death, damage to goods, temporary closure of businesses, economic loss, disruption in medical equipment, delay in medical treatment, maintenance and repair costs, increased electricity bills, loss of income, downed power lines, risk of electrocution
City of Bovill	Yes	Loss of heat/power, Injury, death, damage to goods, temporary closure of businesses, economic loss, disruption in medical equipment, delay in medical treatment, maintenance and repair costs, increased electricity bills, loss of income, downed power lines, risk of electrocution
City of Deary	Yes	Loss of heat/power, Injury, death, damage to goods, temporary closure of businesses, economic loss, disruption in medical equipment, delay in medical treatment, maintenance and repair costs, increased electricity bills, loss of income, downed power lines, risk of electrocution
City of Genesee	Yes	Loss of heat/power, Injury, death, damage to goods, temporary closure of businesses, economic loss, disruption in medical equipment, delay in medical treatment, maintenance and repair costs, increased electricity bills, loss of income, downed power lines, risk of electrocution
City of Juliaetta	Yes	Loss of heat/power, Injury, death, damage to goods, temporary closure of businesses, economic loss, disruption in medical equipment, delay in medical treatment, maintenance and repair costs, increased electricity bills, loss of income, downed power lines, risk of electrocution
City of Kendrick	Yes	Loss of heat/power, Injury, death, damage to goods, temporary closure of businesses, economic loss, disruption in medical equipment, delay in medical treatment, maintenance and repair costs, increased electricity bills, loss of income, downed power lines, risk of electrocution
City of Moscow	Yes	Loss of heat/power, Injury, death, damage to goods, temporary closure of businesses, economic loss, disruption in medical equipment, delay in medical treatment, maintenance and repair costs, increased electricity bills, loss of income, downed power lines, risk of electrocution
City of Potlatch	Yes	Loss of heat/power, Injury, death, damage to goods, temporary closure of businesses, economic loss, disruption in medical

Jurisdiction	May Be Impacted by Prolonged Power Outage	Potential Impacts of Prolonged Power Outage
		equipment, delay in medical treatment, maintenance and repair costs, increased electricity bills, loss of income, downed power lines, risk of electrocution
City of Troy	Yes	Loss of heat/power, Injury, death, damage to goods, temporary closure of businesses, economic loss, disruption in medical equipment, delay in medical treatment, maintenance and repair costs, increased electricity bills, loss of income, downed power lines, risk of electrocution

Unplanned and prolonged suspension of services has the potential to result in injury, death, damage to or spoilage of household goods, temporary closure of businesses, and thousands of dollars in losses. Individuals or businesses that rely on life-saving, electric-powered medical equipment are especially vulnerable when electric services are disrupted.

For rural communities like those in Latah County, an outage could have severe consequences if residents are unable to seek alternative shelter or care due to lack of resources, inventory, or functioning facilities. In the winter when extreme cold days are frequent, residents would have a difficult time heating their homes during a prolonged power outage.

A malfunction in electric utilities could prove disastrous if the event occurred during a time of extreme heat or cold, which would result in greater monetary losses. The electricity transmission and distribution systems that connect power plants with consumers have construction, operation, and maintenance costs (EIA, 2023). Faulty equipment or human-caused damage to equipment could be extremely expensive to repair or replace. These repairs may also result in an increase in the average price of electricity per household for residents in Latah County. The current residential average electric bill in Latah County is $139.53 per month (Find Energy, 2025). Avista Utilities provides electricity to the majority of the county.

Downed power lines are especially and directly dangerous during thunderstorms, winter storms, and flooding. The dangers of electrically charged lines in pools of water are a real danger to pedestrians and motorists.

Dollar losses due to power outages are not typically recorded or assessed.

CHAPTER 18 CYBERSECURITY INCIDENT

18.1 HAZARD DESCRIPTION

Advancements in technology have increased the productivity of our nation and made daily operations and markets reliant on cyber systems. As a result, the United States has become, and will increasingly continue to be, vulnerable to non-traditional attacks including cyberattacks on information and operations. Cyberspace is the nervous system for all critical infrastructures and is composed of hundreds of thousands of interconnected computers, servers, routers, switches, and fiber optic cables that allow our critical infrastructures to work. Studies performed by the Government Accounting Office and the Computer Security Institute found that the number of cyber security threats to both public and private sectors are on the rise.

Cyber-attacks are “deliberate exploitation of computer systems, technology-dependent enterprises, and networks.” Cyber-attacks use malicious code to alter computer operations or data. The vulnerability of computer systems to attacks is a growing concern as people and institutions become more dependent upon networked technologies. The Federal Bureau of Investigation (FBI) reports that, “cyber intrusions are becoming more commonplace, more dangerous, and more sophisticated,” with implications for private- and public-sector networks.

Malware, or malicious software, can cause numerous problems once on a computer or network, from taking control of users’ machines to discreetly sending out confidential information. Ransomware is a specific type of malware that blocks access to digital files and demands a payment to release them. Hospitals, schools, state and local governments, law enforcement agencies, businesses, and even individuals can be targeted by ransomware. Even if a victim is perfectly prepared with full offline data backups, recovery from a sophisticated ransomware attack typically costs far more than the demanded ransom. However, according to a 2016 study by Kaspersky Lab, roughly one in five ransomware victims who pay their attackers are still not able to retrieve their data.

Cyber spying or espionage is the act of illicitly obtaining intellectual property, government secrets, or other confidential digital information and often is associated with attacks carried out by professional agents working on behalf of a foreign government or corporation. According to cybersecurity firm Symantec, in 2016 “…the world of cyber espionage experienced a notable shift towards more overt activity, designed to destabilize and disrupt targeted organizations and countries.” A major data breach is when hackers gain access to large amounts of personal, sensitive, or confidential information and have become increasingly common. A 2018 report from the security firm Symantec found that more than seven billion identities have been exposed in data breaches over the last eight years. In addition to networked systems, data breaches can occur due to the mishandling of external drives.

Cyber-crime can refer to any of the above incidents when motivated primarily by financial gain or other criminal intent. The most severe type of attack is cyber terrorism, which aims to disrupt or damage systems in order to cause fear, injury, and loss to advance a political agenda.

Cyberattacks can be divided into two main categories: attacks against data and attacks against physical infrastructure. Because our society is so dependent on technology, a large-scale cyberattack could overwhelm government and/or private-sector resources quickly, as well as threaten lives, property, the economy, and national security.

Phishing is a technique employed in many of the above attacks and involves sending fraudulent emails purporting to be from known contacts or reputable companies to induce individuals to reveal personal information, such as passwords and credit card numbers, or to click on links that put the user at risk.

18.2 LOCATION

Cyber disruptions are not central to one geographic area; they can occur anywhere across Idaho where technological systems exist or are utilized. A breach can originate at one computer and affect any other computer in the world. Targets include individual computers, networks, organizations, business sectors, or governments.

18.3 EXTENT

The extent of a cybersecurity breach is dependent on various factors. These factors include the system that is attacked, protective measures put in place, training of the people involved, warning time, and the firewalls that exist to protect different levels of the system.

18.4 HISTORICAL FREQUENCY & PROBABILITY OF FUTURE OCCURRENCE

Cybersecurity incidents have increased nationwide in recent years, particularly targeting the energy sector. Cyberattacks have also increased in the banking and finance sectors. Hackers have attacked company computers, distracting employees and interfering with Internet Security Providers (ISP) to divert resources, take proprietary information, and steal PII. Small devices can wreak havoc and disrupt systems. Some USBs have been manufactured with viruses or may become infected and spread viruses to multiple computers. Firewalls, access via signatures, and anti-virus are becoming antiquated security methods.

While specific data on the number of occurrences is not known, the probability of future cybersecurity incidents is high. In the last few years, Idaho has adopted two policies designed to help Idaho counties improve their cybersecurity. One policy provides and requires each county to implement the same incident response plan in the event of a cyberattack. The second policy provides access to an insurance pool for responding to the impacts of a cyberattack that counties can choose to join. Latah County is participating in both (State Scoop, 2019). Additionally, a new bill—House Bill 35—was proposed in February 2025 to modernize Idaho's

telecommunications infrastructure and strengthen cybersecurity across state agencies (Citizen Portal, 2025).

Cyberattackers have only taken limited interest in Latah County and have not directly attacked county networks or online infrastructure. However, a large city in a neighboring county has been attacked three times by ransomware in recent years. Latah County also has internet and communication facilities located in buildings at a lower elevation that may be flooded due to abnormal weather events, which would cause a loss of connectivity and weaken cybersecurity for the county.

One significant cybersecurity incident in Idaho began on May 29, 2023 in Idaho Falls at the Mountain View Hospital, Idaho Falls Community Hospital, and their partner clinics. The hospitals' computer systems came under a ransomware attack, and all systems had to be taken offline for weeks while they tried to recover. The attack forced the closure of one clinic, limited patients at a cancer treatment center, and caused ambulances to be diverted to different area hospitals. Phone communications, billing services, electronic record-keeping, and other computer systems were completely inoperable for several weeks, and the hospitals and clinics were still recovering from the effects of the attack months later. The FBI investigated the attack, although the origin was unknown (East Idaho News, 2023; Mountain View Hospital, 2023).

Other jurisdictions have been impacted by ransomware attacks in recent years. The city of Atlanta was hit by a major ransomware attack in 2018, recovery from which wound up costing a reported $2.6 million, significantly more than the $52,000 ransom demand. A similar attack against the city of Baltimore in 2019 affected the city government's email, voicemail, property tax portal, water bill and parking ticket payment systems, and delayed more than 1,000 pending home sales. In March 2019, Orange County, North Carolina was attacked with a ransomware virus, causing slowdowns and service problems at key public offices such as the Register of Deeds, the sheriff's office, and county libraries. The attack impacted a variety of county services, including disrupting the county's capability to process real estate closings, issue marriage licenses, process fees or permits, process housing vouchers, and verify tax bills.

18.5 IMPACTS & LOSS ESTIMATES

Latah County and the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts may be impacted by cybersecurity incidents, as presented in the table below.

Table 18-1. Impacts of Cybersecurity Incident by Jurisdiction

Jurisdiction	May Be Impacted by Cybersecurity Incident	Potential Impacts of Cybersecurity Incident
Latah County	Yes	Infrastructure damage, loss of services and communication, recovery/maintenance costs, economic loss, loss of data/information, data breach, breach of personal information, financial loss, disruption to medical services, reputational damage, legal repercussions, operational disruptions, breach of intellectual property, endangerment of supply chains, increase in cyber insurance premiums
City of Bovill	Yes	Infrastructure damage, loss of services and communication, recovery/maintenance costs, economic loss, loss of data/information, data breach, breach of personal information, financial loss, disruption to medical services, reputational damage, legal repercussions, operational disruptions, breach of intellectual property, endangerment of supply chains, increase in cyber insurance premiums
City of Deary	Yes	Infrastructure damage, loss of services and communication, recovery/maintenance costs, economic loss, loss of data/information, data breach, breach of personal information, financial loss, disruption to medical services, reputational damage, legal repercussions, operational disruptions, breach of intellectual property, endangerment of supply chains, increase in cyber insurance premiums
City of Genesee	Yes	Infrastructure damage, loss of services and communication, recovery/maintenance costs, economic loss, loss of data/information, data breach, breach of personal information, financial loss, disruption to medical services, reputational damage, legal repercussions, operational disruptions, breach of intellectual property, endangerment of supply chains, increase in cyber insurance premiums
City of Juliaetta	Yes	Infrastructure damage, loss of services and communication, recovery/maintenance costs, economic loss, loss of data/information, data breach, breach of personal information, financial loss, disruption to medical services, reputational damage, legal repercussions, operational disruptions, breach of intellectual property, endangerment of supply chains, increase in cyber insurance premiums
City of Kendrick	Yes	Infrastructure damage, loss of services and communication, recovery/maintenance costs, economic loss, loss of data/information, data breach, breach of personal information, financial loss, disruption to medical services, reputational damage, legal repercussions, operational disruptions, breach of intellectual property, endangerment of supply chains, increase in cyber insurance premiums
City of Moscow	Yes	Infrastructure damage, loss of services and communication, recovery/maintenance costs, economic loss, loss of data/information, data breach, breach of personal information, financial loss, disruption to medical services, reputational damage, legal repercussions, operational disruptions, breach of

Jurisdiction	May Be Impacted by Cybersecurity Incident	Potential Impacts of Cybersecurity Incident
		intellectual property, endangerment of supply chains, increase in cyber insurance premiums
City of Potlatch	Yes	Infrastructure damage, loss of services and communication, recovery/maintenance costs, economic loss, loss of data/information, data breach, breach of personal information, financial loss, disruption to medical services, reputational damage, legal repercussions, operational disruptions, breach of intellectual property, endangerment of supply chains, increase in cyber insurance premiums
City of Troy	Yes	Infrastructure damage, loss of services and communication, recovery/maintenance costs, economic loss, loss of data/information, data breach, breach of personal information, financial loss, disruption to medical services, reputational damage, legal repercussions, operational disruptions, breach of intellectual property, endangerment of supply chains, increase in cyber insurance premiums

Cyberattacks can have a wide range of impacts, ranging from minimal to significant, depending on if the county or its jurisdictions are the main target for the attack or if they are one of many targets. Some of these attacks may be malicious and can result in catastrophic damage to the nervous system of a community's cyber infrastructure. Back-up systems, redundancy, heightened awareness, integrity restoration, and recovery will provide means to adequately manage the consequence of an attack.

Direct Damage

Cyberattacks can inflict damage on physical systems by manipulating the technology supporting the built environment.

Economic Damage

Cyberattacks can inflict huge amounts of economic damage in many different ways. Cyberattacks targeting financial institutions (banks, stock markets, etc.) can directly impact the overall economy while other attacks may target individual businesses.

Large scale cyberattacks can greatly affect the economy. Symantec reports that in the last three years, businesses have lost $3 billion due to phishing email scams alone. In an electronic-based commerce society, any disruption to daily activities can have disastrous impacts to the economy. It is difficult to measure the true extent of the impact.

CHAPTER 19 CAPABILITY ASSESSMENT

19.1 PREVENTATIVE MEASURES

Preventative activities keep problems related to natural hazards from escalating and ensure new developments have reduced vulnerability to hazards. The following examples of preventative measures are usually carried out by building, planning, zoning, and/or code enforcement officials:

- Floodplain Mapping and Data
- Open Space Preservation
- Floodplain Regulations
- Erosion Setbacks
- Planning and Zoning
- Stormwater Management
- Drainage System Maintenance
- Building Codes

The information within this chapter largely focuses on building codes, planning and zoning, stormwater runoff, floodplain management, water quality protection, and soil erosion control.

19.2 JURISDICTIONAL CAPABILITY ASSESSMENT

19.2.1 Latah County

Table 19-1. Latah County Capability Assessment

Agency Name (Mission/Function)	Programs, Plans, Policies, Regulations, Funding, or Practices	Effect of Loss Reduction			Comments
		Support	Facilitate	Hinder	
Latah County Department of Disaster Services	2025 Hazard Mitigation Plan; Community Wildfire Protection Plan; Community Emergency Response Team (CERT) Program; Family Communication Plan; 2016 Emergency Operations Plan; Auxiliary Communications; Latah ARES	X			CWPP: Includes mitigation information for preventing wildfires. Discusses county vulnerabilities. CERT: Educates community about disaster preparedness and how to respond to local hazards
Latah County Planning & Building Department	2010 Comprehensive Plan and Land Use Map; Land Use Code; North Latah County Highway District Transportation	X			Comprehensive Plan: Short Hazardous Areas section with brief mention of relevant hazards. References

Agency Name (Mission/Function)	Programs, Plans, Policies, Regulations, Funding, or Practices	Effect of Loss Reduction			Comments
		Support	Facilitate	Hinder	
	Plan; South Latah Highway District Transportation Plan; Palouse Basin Ground Water Management Plan; Fair Housing Resolutions and Analysis; Building Permits/Code; Subdivision Ordinance; Landownership/Parcel Maps; Zoning Maps; GIS				Latah County Hazard Mitigation Plan. Includes resource info about wildfires, land use, public safety, fire protection, transportation and infrastructure, sensitive areas, recreation, railways/highways, water, and natural resources.

Opportunities for Plan Integration

The plan will be reviewed on an annual basis by the Disaster Services Coordinator and by the local hazard mitigation planning team, which is comprised of representatives from the Latah County Local Emergency Planning Committee (LEPC). The Latah County local hazard mitigation planning team will determine the effectiveness of programs and reflect changes that may affect mitigation priorities and identify opportunities for plan integration based on plans that are being developed or updated. The Planning Commission for Latah County will be a mechanism to ensure mitigation strategies and priorities are included in land use decisions and plans. The commission meets every first and third Tuesday of each month.

The Latah County Emergency Operations Plan will be undergoing an update in 2025. There are opportunities to integrate and align this Hazard Mitigation Plan with the EOP.

Table 19-2. Latah County Fiscal Capability

Fiscal Capability	
Financial Resources	**Accessible or Eligible to Use?**
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas, or Electric Service	Yes
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State/Federal Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

Expansion, Implementation, and Improvement: There is an opportunity to establish specific funding to support the cost match for the implementation of FEMA Hazard Mitigation Assistance grants. The county will also anticipate that the time and cost of maintaining the hazard mitigation plan will be significantly higher than in previous updates due to increased

planning requirements by FEMA. Funds to support the cost match for updating this plan will need to be strategically determined.

Table 19-3. Latah County Fiscal Capability

Legal and Regulatory Capability	
	Local Authority Exists to Develop and Implement/ Enforce?
Building Code Development and Enforcement	Yes
Zoning Ordinance(s)	Yes
Subdivision Ordinance(s)	Yes
Stormwater Management Program	Yes
Floodplain Ordinance(s)	Yes
Post Disaster Recovery Program	Yes
Growth Management	Yes
Site Plan Review Requirements	Yes
General or Comprehensive Plan	Yes
Capital Improvement Plan	Yes
Comprehensive Emergency Management Plan / Local Emergency Operations Plan	Yes

Expansion, Implementation, and Improvement: Latah County will review building and fire codes based on development trends in identified hazards and mitigation measures that can make them more effective at preventing losses. They will be updated to comply with the latest state codes, as required and applicable.

Ordinances must be modified and updated to reflect changes in development. Ordinances may be used to address land use regulations that support mitigation actions such as preservation of open space. It should be implemented to require adequate infrastructure to support residential area populations.

Table 19-4. Latah County Administrative and Technical Capability

Administrative and Technical Capability			
Staff/Personnel Resources	**Available?**	**Full Time/Part Time/Other**	**Department/Agency/Position**
Planners or engineers with knowledge of land development and land management practices	Yes	Full Time	Planning & Building Department
Engineers or professionals trained in building or infrastructure construction practices	Yes	Full Time	Planning & Building Department
Planners or engineers with an understanding of natural hazards	Yes	Full Time	Planning & Building Department

Administrative and Technical Capability			
Staff/Personnel Resources	**Available?**	**Full Time/Part Time/Other**	**Department/Agency/Position**
Personnel skilled or trained in GIS applications	Yes	Full Time	Latah County GIS
Emergency coordinator	Yes	Full Time	Latah County Department of Disaster Services
Grant writers	Yes	N/A	Each department is responsible for writing their own grants

Expansion, Implementation, and Improvement: Provide opportunities for continued education to planning staff to maintain state-of-the-art knowledge of new code and regulatory requirements. Grant writing staff need additional support and training on FEMA Hazard Mitigation Assistance grants and conducting BCAs.

Continue to acquire and conduct training for GIS technicians on the latest versions of ArcGIS, improve overall GIS data and attributes, and address hazard vulnerability data gaps.

Table 19-5. Latah County National Flood Insurance Compliance

National Flood Insurance Compliance	
What department is responsible for floodplain management in your jurisdiction?	Latah County Planning & Building Department
Who is your jurisdiction's floodplain administrator? (department/position)	Michelle Fuson, Planning & Building
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? (If no, please state why)	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	No
Does your jurisdiction participate in the Community Rating System (CRS)? If so, is your jurisdiction seeking to improve its CRS Classification? If not, is your jurisdiction interested in joining the CRS program?	No, but interested in joining

Expansion, Implementation, and Improvement: Continue to manage the county's NFIP participation. Support the development of mitigation activities consistent with the best practices for floodplain management and work toward joining the CRS program.

19.2.2 City of Bovill

Table 19-6. City of Bovill Capability Assessment

Agency Name (Mission/Function)	Programs, Plans, Policies, Regulations, Funding, or Practices	Effect of Loss Reduction			Comments
		Support	Facilitate	Hinder	
City of Bovill	2024 Drinking Water Facility Plan; Bovill Area of Impact; City Code; Land Use Ordinances	X			Drinking Water Facility Plan: Appendix D includes FIRM for Bovill

Opportunities for Plan Integration

The plan will be reviewed on an annual basis by the Disaster Services Coordinator and by the local hazard mitigation planning team, which is comprised of representatives from the Latah County Local Emergency Planning Committee (LEPC). The Latah County local hazard mitigation planning team will determine the effectiveness of programs and reflect changes that may affect mitigation priorities and identify opportunities for plan integration based on plans that are being developed or updated. The Bovill City Council will be a mechanism to ensure mitigation strategies and priorities are included in land use decisions and plans. The council meets the first Monday of each month.

Table 19-7. City of Bovill Fiscal Capability

Fiscal Capability	
Financial Resources	**Accessible or Eligible to Use?**
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas, or Electric Service	Yes
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State/Federal Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

Expansion, Implementation, and Improvement: There is an opportunity to establish specific funding to support the cost match for the implementation of FEMA Hazard Mitigation Assistance grants.

Table 19-8. City of Bovill Legal and Regulatory Capability

Legal and Regulatory Capability	
	Local Authority Exists to Develop and Implement/ Enforce?
Building Code Development and Enforcement	Yes
Zoning Ordinance(s)	Yes

Legal and Regulatory Capability	
	Local Authority Exists to Develop and Implement/ Enforce?
Subdivision Ordinance(s)	Yes
Stormwater Management Program	Yes
Floodplain Ordinance(s)	Yes
Post Disaster Recovery Program	Yes
Growth Management	Yes
Site Plan Review Requirements	Yes
General or Comprehensive Plan	No (refer to Latah County's Plan)
Capital Improvement Plan	Yes
Comprehensive Emergency Management Plan / Local Emergency Operations Plan	Yes, rely on County plans

Expansion, Implementation, and Improvement: Bovill will review building and fire codes based on development trends in identified hazards and mitigation measures that can make them more effective at preventing losses. They will be updated to comply with the latest state codes, as required and applicable.

Ordinances must be modified and updated to reflect changes in development. Ordinances may be used to address land use regulations that support mitigation actions, such as preservation of open space. It should be implemented to require adequate infrastructure to support residential area populations.

Table 19-9. City of Bovill Administrative and Technical Capability

Administrative and Technical Capability			
Staff/Personnel Resources	**Available?**	**Full Time/Part Time/Other**	**Department/Agency/Position**
Planners or engineers with knowledge of land development and land management practices	Yes	Full Time	Planning & Zoning
Engineers or professionals trained in building or infrastructure construction practices	Yes	Full Time	Planning & Zoning
Planners or engineers with an understanding of natural hazards	Yes	Full Time	Planning & Zoning
Personnel skilled or trained in GIS applications	Yes	Full Time	Planning & Zoning
Emergency coordinator	Yes	Full Time	Latah County Department of Disaster Services
Grant writers	Yes	N/A	Each department is responsible for writing their own grants

Expansion, Implementation, and Improvement: Provide opportunities for continued education to planning staff to maintain state-of-the-art knowledge of new code and regulatory requirements. Grant writing staff need additional support and training on FEMA Hazard Mitigation Assistance grants and conducting BCAs.

Continue to acquire and conduct training for GIS technicians on the latest versions of ArcGIS, improve overall GIS data and attributes, and address hazard vulnerability data gaps.

Table 19-10. City of Bovill National Flood Insurance Compliance

National Flood Insurance Compliance	
What department is responsible for floodplain management in your jurisdiction?	Planning & Zoning
Who is your jurisdiction's floodplain administrator? (department/position)	?
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? (If no, please state why)	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	No
Does your jurisdiction participate in the Community Rating System (CRS)? If so, is your jurisdiction seeking to improve its CRS Classification? If not, is your jurisdiction interested in joining the CRS program?	No

Expansion, Implementation, and Improvement: Continue to manage the city's NFIP participation. Support the development of mitigation activities consistent with the best practices for floodplain management.

19.2.3 City of Deary

Table 19-11. City of Deary Capability Assessment

Agency Name (Mission/Function)	Programs, Plans, Policies, Regulations, Funding, or Practices	Effect of Loss Reduction			Comments
		Support	Facilitate	Hinder	
City of Deary	2016 Comprehensive Plan; Zoning Map; Parcel Viewer; Land Use Map; Flood Zone Map	X			General Plan: Hazardous Areas section on page 26, specifically about floods, fires, and hazardous materials
City of Deary Planning & Zoning	Building Permits; City Code; Subdivision Regulations	X			City Code: Floodplain Overlay Zone included in code

Opportunities for Plan Integration

The plan will be reviewed on an annual basis by the Disaster Services Coordinator and by the local hazard mitigation planning team, which is comprised of representatives from the Latah County Local Emergency Planning Committee (LEPC). The Latah County local hazard mitigation planning team will determine the effectiveness of programs and reflect changes that may affect mitigation priorities and identify opportunities for plan integration based on plans that are being developed or updated. The Planning and Zoning Commission for Deary will be a mechanism to ensure mitigation strategies and priorities are included in land use decisions and plans. The commission meets the first Tuesday of each month.

Table 19-12. City of Deary Fiscal Capability

Fiscal Capability	
Financial Resources	**Accessible or Eligible to Use?**
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas, or Electric Service	Yes
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State/Federal Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

Expansion, Implementation, and Improvement: There is an opportunity to establish specific funding to support the cost match for the implementation of FEMA Hazard Mitigation Assistance grants.

Table 19-13. City of Deary Legal and Regulatory Capability

Legal and Regulatory Capability	
	Local Authority Exists to Develop and Implement/ Enforce?
Building Code Development and Enforcement	Yes
Zoning Ordinance(s)	Yes
Subdivision Ordinance(s)	Yes
Stormwater Management Program	No
Floodplain Ordinance(s)	Yes
Post Disaster Recovery Program	Yes, rely on County
Growth Management	Yes (see Comprehensive Plan)
Site Plan Review Requirements	Yes
General or Comprehensive Plan	Yes
Capital Improvement Plan	Yes
Comprehensive Emergency Management Plan / Local Emergency Operations Plan	Yes, rely on County plans

Expansion, Implementation, and Improvement: Deary will review building and fire codes based on development trends in identified hazards and mitigation measures that can make them

more effective at preventing losses. They will be updated to comply with the latest State Codes, as required and applicable.

Ordinances must be modified and updated to reflect changes in development. Ordinances may be used to address land use regulations that support mitigation actions, such as preservation of open space. It should be implemented to require adequate infrastructure to support residential area populations.

Table 19-14. City of Deary Administrative and Technical Capability

Administrative and Technical Capability			
Staff/Personnel Resources	**Available?**	**Full Time/Part Time/Other**	**Department/Agency/Position**
Planners or engineers with knowledge of land development and land management practices	Yes	Full Time	Planning & Zoning
Engineers or professionals trained in building or infrastructure construction practices	Yes	Full Time	Planning & Zoning
Planners or engineers with an understanding of natural hazards	Yes	Full Time	Planning & Zoning
Personnel skilled or trained in GIS applications	Yes	Full Time	Planning & Zoning
Emergency coordinator	Yes	Full Time	Latah County Department of Disaster Services
Grant writers	Yes	N/A	Each department is responsible for writing their own grants

Expansion, Implementation, and Improvement: Provide opportunities for continued education to planning staff to maintain state-of-the-art knowledge of new code and regulatory requirements. Grant writing staff need additional support and training on FEMA Hazard Mitigation Assistance grants and conducting BCAs.

Continue to acquire and conduct training for GIS technicians on the latest versions of ArcGIS, improve overall GIS data and attributes, and address hazard vulnerability data gaps.

Table 19-15. City of Deary National Flood Insurance Compliance

National Flood Insurance Compliance	
What department is responsible for floodplain management in your jurisdiction?	Planning & Zoning
Who is your jurisdiction's floodplain administrator? (department/position)	?
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? (If no, please state why)	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	No

National Flood Insurance Compliance	
Does your jurisdiction participate in the Community Rating System (CRS)? If so, is your jurisdiction seeking to improve its CRS Classification? If not, is your jurisdiction interested in joining the CRS program?	No

Expansion, Implementation, and Improvement: Continue to manage the city's NFIP participation. Support the development of mitigation activities consistent with the best practices for floodplain management.

19.2.4 City of Genesee

Table 19-16. City of Genesee Capability Assessment

Agency Name (Mission/Function)	Programs, Plans, Policies, Regulations, Funding, or Practices	Effect of Loss Reduction			Comments
		Support	Facilitate	Hinder	
City of Genesee	City of Genesee Water Consumer Confidence Reports	X			Water Reports: Briefly addresses hazardous chemicals and stormwater in regard to the water supply
City of Genesee Planning & Zoning	Building Permits; City Code; Subdivision Regulations	X			City Code: Discusses floodplain development

Opportunities for Plan Integration

The plan will be reviewed on an annual basis by the Disaster Services Coordinator and by the local hazard mitigation planning team, which is comprised of representatives from the Latah County Local Emergency Planning Committee (LEPC). The Latah County local hazard mitigation planning team will determine the effectiveness of programs and reflect changes that may affect mitigation priorities and identify opportunities for plan integration based on plans that are being developed or updated. The Genesee City Council will be a mechanism to ensure mitigation strategies and priorities are included in land use decisions and plans. The council meets the first and third Tuesday of each month.

Table 19-17. City of Genesee Fiscal Capability

Fiscal Capability	
Financial Resources	**Accessible or Eligible to Use?**
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas, or Electric Service	Yes
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State/Federal Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

Expansion, Implementation, and Improvement: There is an opportunity to establish specific funding to support the cost match for the implementation of FEMA Hazard Mitigation Assistance grants.

Table 19-18. City of Genesee Legal and Regulatory Capability

Legal and Regulatory Capability	
	Local Authority Exists to Develop and Implement/ Enforce?
Building Code Development and Enforcement	Yes
Zoning Ordinance(s)	Yes
Subdivision Ordinance(s)	Yes
Stormwater Management Program	No
Floodplain Ordinance(s)	Yes
Post Disaster Recovery Program	Yes, rely on County
Growth Management	Yes
Site Plan Review Requirements	Yes
General or Comprehensive Plan	No (refer to Latah County's plan)
Capital Improvement Plan	Yes
Comprehensive Emergency Management Plan / Local Emergency Operations Plan	Yes, rely on County plans

Expansion, Implementation, and Improvement: Genesee will review building and fire codes based on development trends in identified hazards and mitigation measures that can make them more effective at preventing losses. They will be updated to comply with the latest State Codes, as required and applicable.

Ordinances must be modified and updated to reflect changes in development. Ordinances may be used to address land use regulations that support mitigation actions, such as preservation of open space. It should be implemented to require adequate infrastructure to support residential area populations.

Table 19-19. City of Genesee Administrative and Technical Capability

Administrative and Technical Capability			
Staff/Personnel Resources	**Available?**	**Full Time/Part Time/Other**	**Department/Agency/Position**
Planners or engineers with knowledge of land development and land management practices	Yes	Full Time	Planning & Zoning
Engineers or professionals trained in building or infrastructure construction practices	Yes	Full Time	Planning & Zoning
Planners or engineers with an understanding of natural hazards	Yes	Full Time	Planning & Zoning

Administrative and Technical Capability			
Staff/Personnel Resources	**Available?**	**Full Time/Part Time/Other**	**Department/Agency/Position**
Personnel skilled or trained in GIS applications	Yes	Full Time	Planning & Zoning
Emergency coordinator	Yes	Full Time	Latah County Department of Disaster Services
Grant writers	Yes	N/A	Each department is responsible for writing their own grants

Expansion, Implementation, and Improvement: Provide opportunities for continued education to planning staff to maintain state-of-the-art knowledge of new code and regulatory requirements. Grant writing staff need additional support and training on FEMA Hazard Mitigation Assistance grants and conducting BCAs.

Continue to acquire and conduct training for GIS technicians on the latest versions of ArcGIS, improve overall GIS data and attributes, and address hazard vulnerability data gaps.

Table 19-20. City of Genesee National Flood Insurance Compliance

National Flood Insurance Compliance	
What department is responsible for floodplain management in your jurisdiction?	?
Who is your jurisdiction's floodplain administrator? (department/position)	?
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? (If no, please state why)	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	No
Does your jurisdiction participate in the Community Rating System (CRS)? If so, is your jurisdiction seeking to improve its CRS Classification? If not, is your jurisdiction interested in joining the CRS program?	No

Expansion, Implementation, and Improvement: Continue to manage the city's NFIP participation. Support the development of mitigation activities consistent with the best practices for floodplain management.

19.2.5 City of Juliaetta

Table 19-21. City of Juliaetta Capability Assessment

Agency Name (Mission/Function)	Programs, Plans, Policies, Regulations, Funding, or Practices	Effect of Loss Reduction			Comments
		Support	Facilitate	Hinder	
City of Juliaetta	2018 Juliaetta/Kendrick Joint Transportation	X			Transportation Plan: Discusses land use and

Agency Name (Mission/Function)	Programs, Plans, Policies, Regulations, Funding, or Practices	Effect of Loss Reduction			Comments
		Support	Facilitate	Hinder	
	Plan Update; Annual Water Quality Report; Building Permits; Building/Subdivision Ordinances; City Code				zoning and includes Capital Improvement Plan
Juliaetta Planning & Zoning Commission	Kendrick-Juliaetta Comprehensive Plan	X			Comprehensive Plan: No hazards section, but includes resource info about land use, floodplain development, population growth, stormwater management, etc.

Opportunities for Plan Integration

The plan will be reviewed on an annual basis by the Disaster Services Coordinator and by the local hazard mitigation planning team, which is comprised of representatives from the Latah County Local Emergency Planning Committee (LEPC). The Latah County local hazard mitigation planning team will determine the effectiveness of programs and reflect changes that may affect mitigation priorities and identify opportunities for plan integration based on plans that are being developed or updated. The Juliaetta City Council will be a mechanism to ensure mitigation strategies and priorities are included in land use decisions and plans. The council meets the second Tuesday of each month.

Table 19-22. City of Juliaetta Fiscal Capability

Fiscal Capability	
Financial Resources	**Accessible or Eligible to Use?**
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas, or Electric Service	Yes
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State/Federal Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

Expansion, Implementation, and Improvement: There is an opportunity to establish specific funding to support the cost match for the implementation of FEMA Hazard Mitigation Assistance grants.

Table 19-23. City of Juliaetta Legal and Regulatory Capability

Legal and Regulatory Capability	
	Local Authority Exists to Develop and Implement/ Enforce?
Building Code Development and Enforcement	Yes
Zoning Ordinance(s)	Yes
Subdivision Ordinance(s)	Yes
Stormwater Management Program	No
Floodplain Ordinance(s)	Yes
Post Disaster Recovery Program	Yes, rely on County
Growth Management	Yes
Site Plan Review Requirements	Yes
General or Comprehensive Plan	Yes
Capital Improvement Plan	Yes
Comprehensive Emergency Management Plan / Local Emergency Operations Plan	Yes, rely on County plans

Expansion, Implementation, and Improvement: Juliaetta will review building and fire codes based on development trends in identified hazards and mitigation measures that can make them more effective at preventing losses. They will be updated to comply with the latest State Codes, as required and applicable.

Ordinances must be modified and updated to reflect changes in development. Ordinances may be used to address land use regulations that support mitigation actions, such as preservation of open space. It should be implemented to require adequate infrastructure to support residential area populations.

Table 19-24. City of Juliaetta Administrative and Technical Capability

Administrative and Technical Capability			
Staff/Personnel Resources	**Available?**	**Full Time/Part Time/Other**	**Department/Agency/Position**
Planners or engineers with knowledge of land development and land management practices	Yes	Full Time	Juliaetta Planning & Zoning
Engineers or professionals trained in building or infrastructure construction practices	Yes	Full Time	Juliaetta Planning & Zoning
Planners or engineers with an understanding of natural hazards	Yes	Full Time	Juliaetta Planning & Zoning
Personnel skilled or trained in GIS applications	Yes	Full Time	Juliaetta Planning & Zoning
Emergency coordinator	Yes	Full Time	Latah County Department of Disaster Services

Administrative and Technical Capability			
Staff/Personnel Resources	**Available?**	**Full Time/Part Time/Other**	**Department/Agency/Position**
Grant writers	Yes	N/A	Each department is responsible for writing their own grants

Expansion, Implementation, and Improvement: Provide opportunities for continued education to planning staff to maintain state-of-the-art knowledge of new code and regulatory requirements. Grant writing staff need additional support and training on FEMA Hazard Mitigation Assistance grants and conducting BCAs.

Continue to acquire and conduct training for GIS technicians on the latest versions of ArcGIS, improve overall GIS data and attributes, and address hazard vulnerability data gaps.

Table 19-25. City of Juliaetta National Flood Insurance Compliance

National Flood Insurance Compliance	
What department is responsible for floodplain management in your jurisdiction?	Juliaetta Planning & Zoning
Who is your jurisdiction's floodplain administrator? (department/position)	?
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? (If no, please state why)	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	No
Does your jurisdiction participate in the Community Rating System (CRS)? If so, is your jurisdiction seeking to improve its CRS Classification? If not, is your jurisdiction interested in joining the CRS program?	No

Expansion, Implementation, and Improvement: Continue to manage the city's NFIP participation. Support the development of mitigation activities consistent with the best practices for floodplain management.

19.2.6 City of Kendrick

Table 19-26. City of Kendrick Capability Assessment

Agency Name (Mission/Function)	Programs, Plans, Policies, Regulations, Funding, or Practices	Effect of Loss Reduction			Comments
		Support	Facilitate	Hinder	
City of Kendrick	2018 Juliaetta/Kendrick Joint Transportation Plan Update; Consumer Confidence Report; Building Permits;	X			Transportation Plan: Discusses land use and zoning and includes Capital Improvement Plan

Agency Name (Mission/Function)	Programs, Plans, Policies, Regulations, Funding, or Practices	Effect of Loss Reduction			Comments
		Support	Facilitate	Hinder	
	Building/Subdivision Ordinances; City Code				
Kendrick Planning & Zoning Commission	Kendrick-Juliaetta Comprehensive Plan	X			Comprehensive Plan: No hazards section, but includes resource info about land use, floodplain development, population growth, stormwater management, etc.

Opportunities for Plan Integration

The plan will be reviewed on an annual basis by the Disaster Services Coordinator and by the local hazard mitigation planning team, which is comprised of representatives from the Latah County Local Emergency Planning Committee (LEPC). The Latah County local hazard mitigation planning team will determine the effectiveness of programs and reflect changes that may affect mitigation priorities and identify opportunities for plan integration based on plans that are being developed or updated. The Kendrick City Council will be a mechanism to ensure mitigation strategies and priorities are included in land use decisions and plans. The council meets the third Tuesday of each month.

Table 19-27. City of Kendrick Fiscal Capability

Fiscal Capability	
Financial Resources	**Accessible or Eligible to Use?**
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas, or Electric Service	Yes
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State/Federal Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

Expansion, Implementation, and Improvement: There is an opportunity to establish specific funding to support the cost match for the implementation of FEMA Hazard Mitigation Assistance grants.

Table 19-28. City of Kendrick Legal and Regulatory Capability

Legal and Regulatory Capability	
	Local Authority Exists to Develop and Implement/ Enforce?
Building Code Development and Enforcement	Yes
Zoning Ordinance(s)	Yes
Subdivision Ordinance(s)	Yes
Stormwater Management Program	Yes
Floodplain Ordinance(s)	Yes
Post Disaster Recovery Program	Yes, rely on County
Growth Management	Yes
Site Plan Review Requirements	Yes
General or Comprehensive Plan	Yes
Capital Improvement Plan	Yes
Comprehensive Emergency Management Plan / Local Emergency Operations Plan	Yes, rely on County plans

Expansion, Implementation, and Improvement: Kendrick will review building and fire codes based on development trends in identified hazards and mitigation measures that can make them more effective at preventing losses. They will be updated to comply with the latest State Codes, as required and applicable.

Ordinances must be modified and updated to reflect changes in development. Ordinances may be used to address land use regulations that support mitigation actions, such as preservation of open space. It should be implemented to require adequate infrastructure to support residential area populations.

Table 19-29. City of Kendrick Administrative and Technical Capability

Administrative and Technical Capability			
Staff/Personnel Resources	**Available?**	**Full Time/Part Time/Other**	**Department/Agency/Position**
Planners or engineers with knowledge of land development and land management practices	Yes	Full Time	Kendrick Planning & Zoning
Engineers or professionals trained in building or infrastructure construction practices	Yes	Full Time	Kendrick Planning & Zoning
Planners or engineers with an understanding of natural hazards	Yes	Full Time	Kendrick Planning & Zoning
Personnel skilled or trained in GIS applications	Yes	Full Time	Kendrick Planning & Zoning
Emergency coordinator	Yes	Full Time	Latah County Department of Disaster Services

Administrative and Technical Capability			
Staff/Personnel Resources	**Available?**	**Full Time/Part Time/Other**	**Department/Agency/Position**
Grant writers	Yes	N/A	Each department is responsible for writing their own grants

Expansion, Implementation, and Improvement: Provide opportunities for continued education to planning staff to maintain state-of-the-art knowledge of new code and regulatory requirements. Grant writing staff need additional support and training on FEMA Hazard Mitigation Assistance grants and conducting BCAs.

Continue to acquire and conduct training for GIS technicians on the latest versions of ArcGIS, improve overall GIS data and attributes, and address hazard vulnerability data gaps.

Table 19-30. City of Kendrick National Flood Insurance Compliance

National Flood Insurance Compliance	
What department is responsible for floodplain management in your jurisdiction?	Kendrick Planning & Zoning
Who is your jurisdiction's floodplain administrator? (department/position)	?
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? (If no, please state why)	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	No
Does your jurisdiction participate in the Community Rating System (CRS)? If so, is your jurisdiction seeking to improve its CRS Classification? If not, is your jurisdiction interested in joining the CRS program?	No

Expansion, Implementation, and Improvement: Continue to manage the city's NFIP participation. Support the development of mitigation activities consistent with the best practices for floodplain management.

19.2.7 City of Moscow

Table 19-31. City of Moscow Capability Assessment

Agency Name (Mission/Function)	Programs, Plans, Policies, Regulations, Funding, or Practices	Effect of Loss Reduction			Comments
		Support	**Facilitate**	**Hinder**	
City of Moscow	City of Moscow Strategic Plan; 2024-2033 Capital Improvement Plan;	X			Strategic Plan: Page 119 outlines Moscow's storm drainage system.

Agency Name (Mission/Function)	Programs, Plans, Policies, Regulations, Funding, or Practices	Effect of Loss Reduction			Comments
		Support	Facilitate	Hinder	
	2012 Comprehensive Water System Plan; 2009 Economic Development Strategy Plan; 2014 Multi-Modal Transportation Plan; City Code; City Maps/Plans				
City of Moscow Planning & Zoning Commission	2019 Comprehensive Plan; Paradise Creek Flood Hazard Mitigation Study; FIRM; Land Use; Zoning/Subdivision Ordinances	X			Comprehensive Plan: Includes Hazardous Areas section and discusses land use, public services, economic development, and zoning.
City of Moscow Public Works & Services	2022 Stormwater Management Program (SWMP); 2022 Annual Stormwater Report	X			SWMP: Details stormwater management in the city to help prevent and control flooding and includes storm sewer system map and stormwater drainage basins map.

Opportunities for Plan Integration

The plan will be reviewed on an annual basis by the Disaster Services Coordinator and by the local hazard mitigation planning team, which is comprised of representatives from the Latah County Local Emergency Planning Committee (LEPC). The Latah County local hazard mitigation planning team will determine the effectiveness of programs and reflect changes that may affect mitigation priorities and identify opportunities for plan integration based on plans that are being developed or updated. The Planning & Zoning Commission for Moscow will be a mechanism to ensure mitigation strategies and priorities are included in land use decisions and plans. The commission meets the fourth Wednesday of each month.

Table 19-32. City of Moscow Fiscal Capability

Fiscal Capability	
Financial Resources	**Accessible or Eligible to Use?**
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas, or Electric Service	Yes
Withhold Public Expenditures in Hazard-Prone Areas	Yes

Fiscal Capability	
State/Federal Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

Expansion, Implementation, and Improvement: There is an opportunity to establish specific funding to support the cost match for the implementation of FEMA Hazard Mitigation Assistance grants.

Table 19-33. City of Moscow Legal and Regulatory Capability

Legal and Regulatory Capability	
	Local Authority Exists to Develop and Implement/ Enforce?
Building Code Development and Enforcement	Yes
Zoning Ordinance(s)	Yes
Subdivision Ordinance(s)	Yes
Stormwater Management Program	Yes
Floodplain Ordinance(s)	Yes
Post Disaster Recovery Program	Yes
Growth Management	Yes
Site Plan Review Requirements	Yes
General or Comprehensive Plan	Yes
Capital Improvement Plan	Yes
Comprehensive Emergency Management Plan / Local Emergency Operations Plan	Yes, rely on County plans

Expansion, Implementation, and Improvement: Moscow will review building and fire codes based on development trends in identified hazards and mitigation measures that can make them more effective at preventing losses. They will be updated to comply with the latest State Codes, as required and applicable.

Ordinances must be modified and updated to reflect changes in development. Ordinances may be used to address land use regulations that support mitigation actions, such as preservation of open space. It should be implemented to require adequate infrastructure to support residential area populations.

Table 19-34. City of Moscow Administrative and Technical Capability

Administrative and Technical Capability			
Staff/Personnel Resources	**Available?**	**Full Time/Part Time/Other**	**Department/Agency/Position**
Planners or engineers with knowledge of land development and land management practices	Yes	Full Time	Engineering Division, City Engineer Planning Division, Planners and Building Official

Administrative and Technical Capability			
Staff/Personnel Resources	**Available?**	**Full Time/Part Time/Other**	**Department/Agency/Position**
Engineers or professionals trained in building or infrastructure construction practices	Yes	Full Time	Engineering Division, City Engineer Planning Division, Planners and Building Official
Planners or engineers with an understanding of natural hazards	Yes	Full Time	Engineering Division, City Engineer Planning Division, Planners and Building Official
Personnel skilled or trained in GIS applications	Yes	Full Time	Engineering Division, GIS Coordinator
Emergency manager	Yes	Full Time	Latah County Department of Disaster Services
Grant writers	Yes	Full Time	Alisa Anderson, Grants Manager

Expansion, Implementation, and Improvement: Provide opportunities for continued education to planning staff to maintain state-of-the-art knowledge of new code and regulatory requirements. Grant writing staff need additional support and training on FEMA Hazard Mitigation Assistance grants and conducting BCAs.

Continue to acquire and conduct training for GIS technicians on the latest versions of ArcGIS, improve overall GIS data and attributes, and address hazard vulnerability data gaps.

Table 19-35. City of Moscow National Flood Insurance Compliance

National Flood Insurance Compliance	
What department is responsible for floodplain management in your jurisdiction?	Community Development, Planning Division
Who is your jurisdiction's floodplain administrator? (department/position)	Aimee Hennrich, Planner I
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? (If no, please state why)	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	No
Does your jurisdiction participate in the Community Rating System (CRS)? If so, is your jurisdiction seeking to improve its CRS Classification? If not, is your jurisdiction interested in joining the CRS program?	We participate and work toward a better CRS Classification.

Expansion, Implementation, and Improvement: Continue to manage the city's NFIP participation. Support the development of mitigation activities consistent with the best practices for floodplain management and work toward a better CRS classification. Moscow has a Class 8 classification, which provides all flood insurance holders within the city with a 10% discount on their flood insurance premiums.

19.2.8 City of Potlatch

Table 19-36. City of Potlatch Capability Assessment

Agency Name (Mission/Function)	Programs, Plans, Policies, Regulations, Funding, or Practices	Effect of Loss Reduction			Comments
		Support	Facilitate	Hinder	
City of Potlatch	2018 Comprehensive Plan; 2022 Transportation Plan; City Code	X			General Plan: Hazards and Hazardous Areas section with summaries of flooding, landslide, severe weather, wildland fire, and hazardous materials in Latah County.
City of Potlatch Planning & Zoning	Zoning Maps/Ordinances; Building Permits	X			

Opportunities for Plan Integration

The plan will be reviewed on an annual basis by the Disaster Services Coordinator and by the local hazard mitigation planning team, which is comprised of representatives from the Latah County Local Emergency Planning Committee (LEPC). The Latah County local hazard mitigation planning team will determine the effectiveness of programs and reflect changes that may affect mitigation priorities and identify opportunities for plan integration based on plans that are being developed or updated. The Planning & Zoning Commission for Potlatch will be a mechanism to ensure mitigation strategies and priorities are included in land use decisions and plans. The commission meets the second Tuesday of each month.

Table 19-37. City of Potlatch Fiscal Capability

Fiscal Capability	
Financial Resources	**Accessible or Eligible to Use?**
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas, or Electric Service	Yes
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State/Federal Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

Expansion, Implementation, and Improvement: There is an opportunity to establish specific funding to support the cost match for the implementation of FEMA Hazard Mitigation Assistance grants.

Table 19-38. City of Potlatch Legal and Regulatory Capability

Legal and Regulatory Capability	
	Local Authority Exists to Develop and Implement/ Enforce?
Building Code Development and Enforcement	Yes
Zoning Ordinance(s)	Yes
Subdivision Ordinance(s)	Yes
Stormwater Management Program	No
Floodplain Ordinance(s)	No
Post Disaster Recovery Program	Yes, rely on County
Growth Management	No
Site Plan Review Requirements	Yes
General or Comprehensive Plan	Yes
Capital Improvement Plan	Yes
Comprehensive Emergency Management Plan / Local Emergency Operations Plan	Yes, rely on County plans

Expansion, Implementation, and Improvement: Potlatch will review building and fire codes based on development trends in identified hazards and mitigation measures that can make them more effective at preventing losses. They will be updated to comply with the latest State Codes, as required and applicable.

Ordinances must be modified and updated to reflect changes in development. Ordinances may be used to address land use regulations that support mitigation actions, such as preservation of open space. It should be implemented to require adequate infrastructure to support residential area populations.

Table 19-39. City of Potlatch Administrative and Technical Capability

Administrative and Technical Capability			
Staff/Personnel Resources	**Available?**	**Full Time/Part Time/Other**	**Department/Agency/Position**
Planners or engineers with knowledge of land development and land management practices	Yes	Full Time	City Engineer/rely on County
Engineers or professionals trained in building or infrastructure construction practices	Yes	Full Time	City Engineer/rely on County
Planners or engineers with an understanding of natural hazards	Yes	Full Time	City Engineer/rely on County
Personnel skilled or trained in GIS applications	Yes	Full Time	City Engineer/rely on County
Emergency manager	Yes	Full Time	Latah County Department of Disaster Services

Administrative and Technical Capability			
Staff/Personnel Resources	**Available?**	**Full Time/Part Time/Other**	**Department/Agency/Position**
Grant writers	Yes	Full Time	City Clerk

Expansion, Implementation, and Improvement: Provide opportunities for continued education to planning staff to maintain state-of-the-art knowledge of new code and regulatory requirements. Grant writing staff need additional support and training on FEMA Hazard Mitigation Assistance grants and conducting BCAs.

Continue to acquire and conduct training for GIS technicians on the latest versions of ArcGIS, improve overall GIS data and attributes, and address hazard vulnerability data gaps.

19.2.9 City of Troy

Table 19-40. City of Troy Capability Assessment

Agency Name (Mission/Function)	Programs, Plans, Policies, Regulations, Funding, or Practices	Effect of Loss Reduction			Comments
		Support	Facilitate	Hinder	
City of Troy	2021 City of Troy Comprehensive Plan; 2023 Wastewater System Facility Plan; Forest Management Plan; City Code; Zoning Ordinances; Building Permits	X			Comprehensive Plan: Hazardous Areas section on page 22. Also discusses land use, economic development, environmental pollution, public services, etc.

Opportunities for Plan Integration

The plan will be reviewed on an annual basis by the Disaster Services Coordinator and by the local hazard mitigation planning team, which is comprised of representatives from the Latah County Local Emergency Planning Committee (LEPC). The Latah County local hazard mitigation planning team will determine the effectiveness of programs and reflect changes that may affect mitigation priorities and identify opportunities for plan integration based on plans that are being developed or updated. The Troy City Council will be a mechanism to ensure mitigation strategies and priorities are included in land use decisions and plans. The council meets every second and fourth Wednesday of each month.

Table 19-41. City of Troy Fiscal Capability

Fiscal Capability	
Financial Resources	**Accessible or Eligible to Use?**
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes

Fiscal Capability	
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas, or Electric Service	Yes
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State/Federal Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

Expansion, Implementation, and Improvement: There is an opportunity to establish specific funding to support the cost match for the implementation of FEMA Hazard Mitigation Assistance grants.

Table 19-42. City of Troy Legal and Regulatory Capability

Legal and Regulatory Capability	
	Local Authority Exists to Develop and Implement/ Enforce?
Building Code Development and Enforcement	Yes
Zoning Ordinance(s)	Yes
Subdivision Ordinance(s)	Yes
Stormwater Management Program	Yes
Floodplain Ordinance(s)	Yes
Post Disaster Recovery Program	Yes
Growth Management	Yes
Site Plan Review Requirements	Yes
General or Comprehensive Plan	Yes
Capital Improvement Plan	Yes
Comprehensive Emergency Management Plan / Local Emergency Operations Plan	Yes, rely on County plans

Expansion, Implementation, and Improvement: Troy will review building and fire codes based on development trends in identified hazards and mitigation measures that can make them more effective at preventing losses. They will be updated to comply with the latest State Codes, as required and applicable.

Ordinances must be modified and updated to reflect changes in development. Ordinances may be used to address land use regulations that support mitigation actions, such as preservation of open space. It should be implemented to require adequate infrastructure to support residential area populations.

Table 19-43. City of Troy Administrative and Technical Capability

Administrative and Technical Capability			
Staff/Personnel Resources	**Available?**	**Full Time/Part Time/Other**	**Department/Agency/Position**
Planners or engineers with knowledge of land development and land management practices	Yes	Part Time	City of Troy
Engineers or professionals trained in building or infrastructure construction practices	Yes	Full Time	Planning & Building Department
Planners or engineers with an understanding of natural hazards	Yes	Part Time	City of Troy
Personnel skilled or trained in GIS applications	Yes	Full Time	Planning & Building Department
Emergency manager	Yes	Full Time	Latah County Department of Disaster Services
Grant writers	Yes	N/A	Each department is responsible for writing their own grants

Expansion, Implementation, and Improvement: Provide opportunities for continued education to planning staff to maintain state-of-the-art knowledge of new code and regulatory requirements. Grant writing staff need additional support and training on FEMA Hazard Mitigation Assistance grants and conducting BCAs.

Continue to acquire and conduct training for GIS technicians on the latest versions of ArcGIS, improve overall GIS data and attributes, and address hazard vulnerability data gaps.

Table 19-44. City of Troy National Flood Insurance Compliance

National Flood Insurance Compliance	
What department is responsible for floodplain management in your jurisdiction?	?
Who is your jurisdiction's floodplain administrator? (department/position)	?
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? (If no, please state why)	Yes
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	No
Does your jurisdiction participate in the Community Rating System (CRS)? If so, is your jurisdiction seeking to improve its CRS Classification? If not, is your jurisdiction interested in joining the CRS program?	No

Expansion, Implementation, and Improvement: Continue to manage the city's NFIP participation. Support the development of mitigation activities consistent with the best practices for floodplain management.

19.2.10 Special Participating Districts

Latah County has eight special participating districts, which include the North Latah County Highway District, South Latah Highway District, Bovill Fire Protection District, Deary Rural Fire District, Genesee Rural Fire Protection District, Moscow Rural Fire District, Potlatch Rural Fire District, and Troy Rural Fire District. Any relevant programs, plans, codes, regulations, or practices for each district are described in the table below.

Table 19-45. Special Participating Districts Capability Assessment

Participating Special District	Programs, Plans, Policies, Regulations, Funding, or Practices	Effect of Loss Reduction			Comments
		Support	Facilitate	Hinder	
North Latah County Highway District	2006 North Latah County Highway District Transportation Plan; Capital Improvement Plan; 2016 North Latah County Highway District Map Book	X			Transportation Plan: References the Latah County, Moscow, Troy, Potlatch, and Deary Comprehensive Plans and Land Use maps. Addresses roadway maintenance to roads, pipes, culverts, and bridges. Capital Improvement Plan: Included in the Transportation Plan
South Latah Highway District	2004 South Latah Highway District Transportation System Plan; Capital Improvement Plan; 2015 South Latah Highway District Map Book	X			Transportation Plan: References the Latah County, Genesee, and Juliaetta-Kendrick Comprehensive Plans and Land Use maps. Addresses roadway maintenance to roads, culverts, and bridges. Capital Improvement Plan: Included in the Transportation Plan
Bovill Fire Protection District	Latah County Mutual Aide Agreement; Idaho Firewise	X			
Deary Rural Fire District	Latah County Mutual Aide Agreement; Idaho Firewise	X			
Genesee Rural Fire Protection District	Latah County Mutual Aide Agreement; Idaho Firewise	X			
Moscow Rural Fire District	Latah County Mutual Aide Agreement; Idaho Firewise	X			Monthly meetings held at the Moscow Rural Fire District station

Participating Special District	Programs, Plans, Policies, Regulations, Funding, or Practices	Effect of Loss Reduction			Comments
		Support	Facilitate	Hinder	
Potlatch Rural Fire District	Latah County Mutual Aide Agreement; Idaho Firewise	X			Mutual Aide Agreements with Palouse, WA, Moscow Fire District, Farmington, WA, Deary Rural Fire District, IDL, and Bennett Lumber Fire Department
Troy Rural Fire District	Latah County Mutual Aide Agreement; Idaho Firewise	X			

19.3 BUILDING CODES

Updating and adopting new building codes, as well as addressing the effectiveness of these codes, can be one of the best ways to conduct mitigation. When properly designed and constructed, many buildings can withstand the impacts of high winds, earthquakes, floods, snow loads, or a tornado. The communities in Latah County are working with various versions of the International Codes published by the International Code Council, Inc. (ICC). These codes, in addition to a few state codes, include:

- 2018 International Building Code, including Appendices C, E, F, G, H, I, and J
- 2018 International Residential Code, parts I through IV, including Appendices A, B, C, D, H, J, M, Q, R, and S
- 2018 International Plumbing Code
- 2018 International Mechanical Code
- 2018 International Fuel Gas Code
- 2018 International Energy Conservation Code
- 2018 International Existing Building Code, including Appendices A-1, A-2, and B and Resource A
- 2018 International Property Maintenance Code
- Installation and Safety Requirements for Mobile Homes Built Before June 15, 1976

Additionally, all Idaho communities are required by the state to enforce the 2017 National Electrical Code, 2017 Idaho Plumbing Code, and the 2012 Idaho Commercial HVAC Inspection and Maintenance Code regardless of building codes. Ground snow loads are found by entering specific locations into the 2015 Ground and Roof Snow Loads for Idaho Map from the University of Idaho.

The table below lists the building code adoptions in use within Latah County.

Table 19-46. Building Codes Used in Latah County

Jurisdiction	Building Code Residential	Building Code Commercial
Latah County	2018 IRC	2018 IBC

Jurisdiction	Building Code Residential	Building Code Commercial
City of Bovill	2018 IRC	2015 IBC
City of Deary	2018 IRC	2018 IBC
City of Genesee	2018 IRC	2018 IBC
City of Juliaetta	2003 IRC	2003 IBC
City of Kendrick	2018 IRC	2009 IBC
City of Moscow	2018 IRC	2018 IBC
City of Potlatch	2018 IRC	2018 IBC
City of Troy	2018 IRC	2018 IBC

19.3.1 Code Administration

Enforcement of code standards is very important to hazard mitigation. Adequate inspections are needed during the course of construction to ensure that the builder understands and implements the requirements. The Building Code Effectiveness Grading Schedule (BCEGS) is a national program used by the insurance industry to determine how well new construction is protected from wind, earthquake, and other non-flood hazards. It is similar to the CRS program and the fire insurance rating scheme: building permit programs are reviewed and scored. A class 1 community is the highest rating, and a class 10 community is the most basic rating. The city of Moscow is the only jurisdiction in Latah County that currently participates in the CRS program. Moscow has a Class 8 classification, which provides all flood insurance holders within the city with a 10% discount on their flood insurance premiums.

Training of code officials is also very important for code enforcement. Training of code officials and inspectors is a large part of the BCEGS rating for a community. Courses are offered through the building code associations to help local officials understand standards that apply to seismic, wind, and flood hazards.

19.4 PUBLIC SAFETY AGENCIES

19.4.1 Fire Protection

There are six fire districts participating in the HMP in Latah County, including:

- Bovill Fire Protection District
- Deary Rural Fire District
- Genesee Rural Fire Protection District
- Moscow Rural Fire District
- Potlatch Rural Fire District
- Troy Rural Fire District

The majority of these fire departments are operated almost entirely by volunteers. Several areas of Latah County have no fire protection services. The Clearwater/Potlatch Timber Protection Association, Idaho Department of Lands, U.S. Forest Service, Potlatch Lumber

Corporation, and Bennett Lumber Corporation all provide fire services when needed to protect their properties and sometimes assist in other fire suppression efforts.

19.4.2 Healthcare Facilities

Latah County has one hospital and several health clinics. Gritman Medical Center is an independent, not-for-profit hospital located in Moscow and provides 24/7 emergency services, surgical care, comprehensive diagnostic imaging, critical care, family birth services, pediatric care, nutrition counseling, therapy programs, and more (Gritman, 2025). The hospital has been in service since 1897. Gritman also operates an urgent care clinic, six primary care clinics, and specialty care clinics.

There are three retirement/assisted living/nursing home facilities in Moscow, in addition to several others throughout the county. The North Central District Health Department offers family planning clinics, well child exams, pregnancy testing, HIV/AIDs testing, and immunizations and administers the WIC program. Other doctors, dentists, and optometrists are also located in communities throughout the county (Latah County Comprehensive Plan, 2021).

19.4.3 Emergency Services

Latah County Department of Disaster Services is located in Moscow, Idaho and is under the direction of Steve Risken, who is the county's Disaster Services Coordinator.

Emergency services for the county are primarily provided by EMS volunteers. EMS agencies in Latah County include Moscow Volunteer Fire Department (MVFD), Potlatch Ambulance, Genesee Ambulance, Troy Ambulance, Juliaetta-Kendrick Ambulance, and Deary Ambulance, and all operate as not-for-profit and are not tax-supported. All of these agencies are dispatched by the Latah County Sheriff's Office except for the MVFD, which is dispatched by the Whitcom Dispatch Center in Pullman, Washington. The Moscow Volunteer Fire Department provides the only paramedic-level service in the county. The Latah County Sheriff's Office provides emergency and search and rescue services 24 hours a day, 365 days a year.

Several air ambulance and helicopter transport/rescue companies service the Latah County area, including, but not limited to, Life Flight Network, Air Ambulance 1, Classic Air Medical, and Angel MedFlight.

19.4.4 Law Enforcement & Public Safety

The Latah County Sheriff's Office is located at 522 S Adams St Ste 100, Moscow, ID 83843. The Sheriff is Richard Skiles. The Sheriff's Office provides law enforcement throughout the county where other primary law enforcement agencies do not exist, which primarily consists of all the rural areas of the county and also the cities of Bovill, Deary, Genesee, Juliaetta, Kendrick, Potlatch, and Troy. The Sheriff's Office has approximately six communications towers to aid in emergency response. The Sheriff's Office has a Patrol Division, Investigations Division, and

Training Division. There are BLM-administered lands, U.S. Forest Service lands, SITLA lands, and one nationally protected area (part of St. Joe National Forest) in the county that each have their own attendant law enforcement authorities in addition to the county sheriff.

Moscow Police Department is located at 155 Southview Ave in Moscow. The Chief of Police is Anthony Dahlinger, and the department has 35 commissioned peace officers and civilian members spread between the Operations Division, Support Services Division, and the Campus Division.

Latah County has two highway districts: North Latah County Highway District and South Latah Highway District. The North Latah County Highway District covers the central and north region of the county (see map below) and maintains 590 miles of road. Their office is located at 1132 White Ave in Moscow. The South Latah Highway District covers the south region of the county and maintains 248.9 miles of road. Their office is located at 154 W Chestnut St in Genesee.

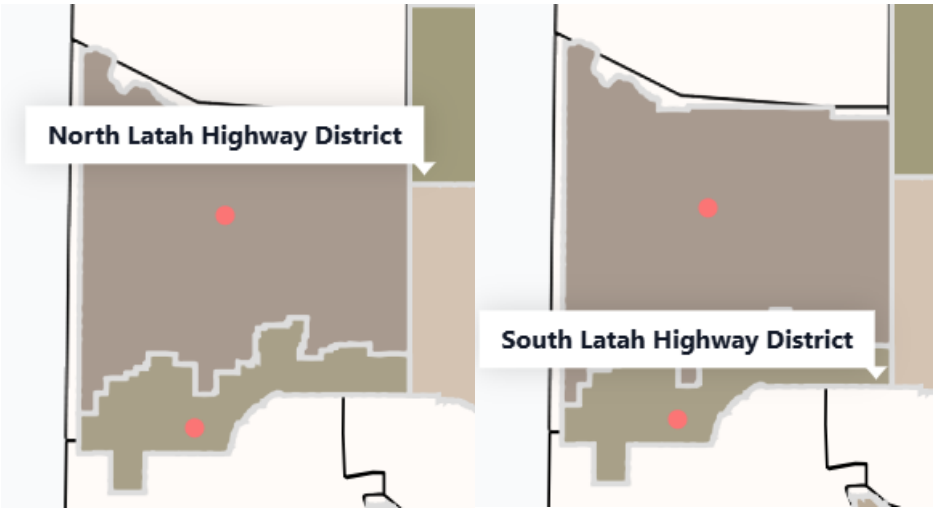


Figure 19-1. Latah County Highway Districts Maps

19.5 LAND USE PLANNING & CHANGES IN DEVELOPMENT AND FUTURE DEVELOPMENT

This section of the Latah County Multi-Jurisdictional All Hazard Mitigation Plan examines the relationship between the county's Comprehensive Plan, Land Use or Zoning Ordinances, and the AHMP. Incorporating hazard mitigation practices into land use planning is extremely important as future developments are planned and constructed. Through proper planning within the individual jurisdictions, risk to property owners can be reduced and future disaster related economic losses avoided. Land Use and Mitigation Planning Integration are seen as critical components of the mitigation program in Latah County.

Latah County's Comprehensive Plan was last revised and adopted in September 2021. The plan should be reviewed and updated to address condition changes within the county and the economy.

Latah County's Land Use Map is included in the Comprehensive Plan and provides a comprehensive and strategic basis for implementing zoning changes and land use code updates that the county may want to pursue in the immediate term. The map has been prepared to reflect the principles of protecting productive agricultural and forested areas and to identify suitable areas for future residential, commercial, or industrial development. The plan map is partially based on existing land use patterns but is also designed as a projection for suitable potential growth patterns of the county. The map is to be used as a guide for locational decisions regarding requests for land use changes.

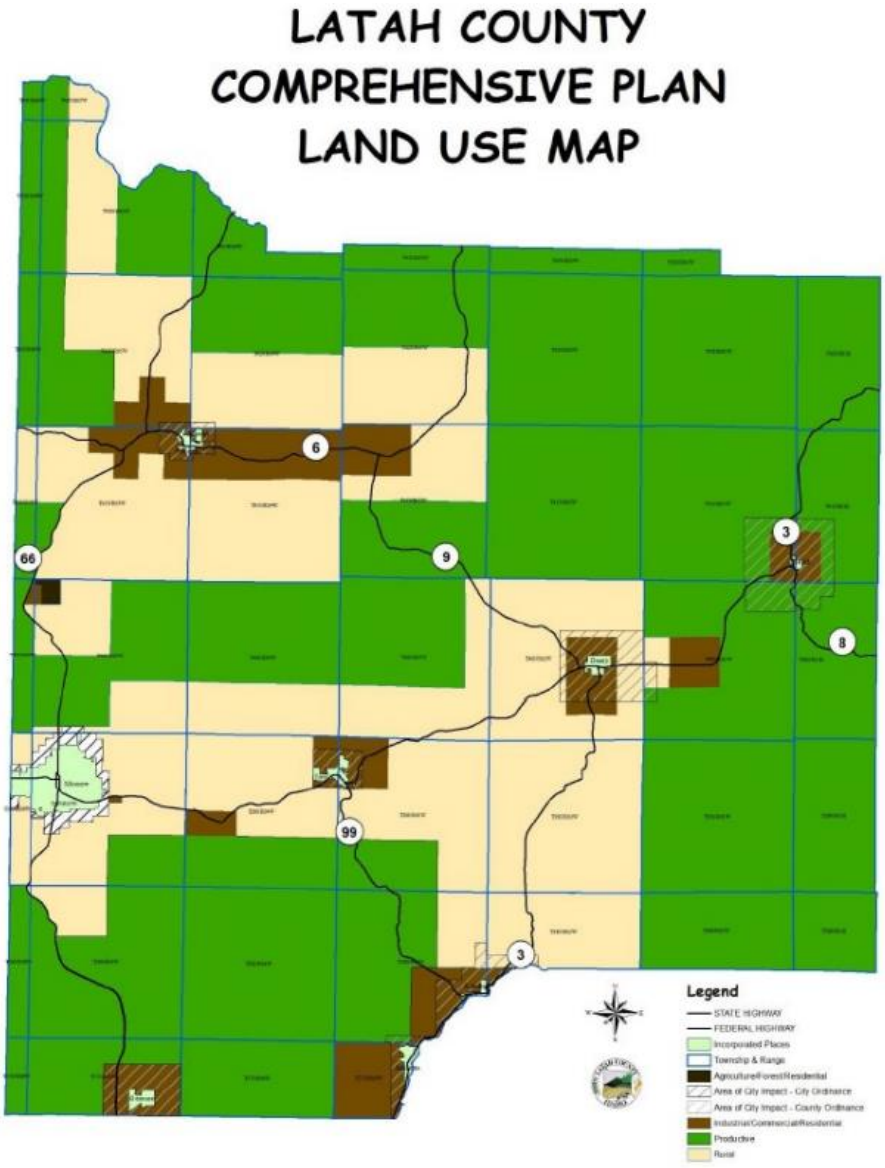


Figure 19-2. Latah County Land Use Map

The hazard risk assessment (see *Chapter 4 Hazard Risk Summary*) took into consideration changes in development and future development trends based on planning and zoning maps and documents. The following tables highlight those sections of the assessment:

Table 19-47. Changes in Development

Hazard Event	Changes in Development and Hazard Vulnerability (High, Medium, Low)	**Vulnerability Factor** (Adjust Impact Factor to Change Scores)	Multiplied by Weighting Factor (1)
Extreme Heat	Low	1	1
Thunderstorm/Lightning	Low	1	1
Hail	Low	1	1
Tornado	Low	1	1
Straight-line Wind	Low	1	1
Extreme Cold	Low	1	1
Winter Storm	Low	1	1
Wildfire	Low	1	1
Flood	Low	1	1
Dam/Levee Failure	Low	1	1
Drought	Low	1	1
Earthquake	Low	1	1
Landslide	Low	1	1
Volcanic Activity	Low	1	1
Communicable Disease Outbreak	No Vulnerability	0	0
Hazardous Material Incident	Low	1	1
Major Transportation Incident	Low	1	1
Prolonged Power Outage	Low	1	1
Cybersecurity Incident	Low	1	1

Changes in Development Factor—Changes in development since the previous plan was approved (if this is an update) or in the past five years (if this is a new plan) have increased or decreased the community's vulnerability/exposure to this hazard. **[Weighted Factor: 1]**

High—Changes in development have significantly increased the vulnerability/exposure of the community to this hazard (Vulnerability Factor = 3)

Medium—Changes in development have increased the vulnerability/exposure of the community to this hazard, but not significantly (Vulnerability Factor = 2)

Low—Changes in development have minimally increased the vulnerability/exposure of the community to this hazard (Vulnerability Factor = 1)

No Vulnerability—Changes in development have had no effect and/or have decreased the vulnerability/exposure of the community to this hazard (Vulnerability Factor = 0)

Table 19-48. Impact of Future Development

Hazard Event	Impact of Future Development (High, Medium, Low)	**Impact Factor** (Adjust Impact Factor to Change Scores)	Multiplied by Weighting Factor (1)

Extreme Heat	Low	1	1
Thunderstorm/Lightning	Medium	2	2
Hail	Low	1	1
Tornado	Low	1	1
Straight-line Wind	Medium	2	2
Extreme Cold	Low	1	1
Winter Storm	Medium	2	2
Wildfire	High	3	3
Flood	High	3	3
Dam/Levee Failure	Medium	2	2
Drought	Low	1	1
Earthquake	Low	1	1
Landslide	Low	1	1
Volcanic Activity	Low	1	1
Communicable Disease Outbreak	No Impact	0	0
Hazardous Material Incident	Low	1	1
Major Transportation Incident	Low	1	1
Prolonged Power Outage	Medium	2	2
Cybersecurity Incident	Medium	2	2
Future Development Factor—The potential that future development will have on increasing or decreasing the impact/consequence of this hazard. **[Weighted Factor: 1]**			
High—Future development trends will significantly increase the impact/consequence of this hazard (Impact Factor = 3)			
Medium—Future development trends will increase the impact/consequence of this hazard, but not significantly (Impact Factor = 2)			
Low—Future development trends will minimally increase impact/consequence of this hazard (Impact Factor = 1)			
No Impact—Future development trends will not increase the impact/consequence of this hazard, and/or may even decrease the impact/consequence of this hazard (Impact Factor = 0)			

19.5.1 City of Bovill

The city of Bovill does not currently have a Comprehensive Plan and instead relies on Latah County's Comprehensive Plan. The creation of a city-specific Comprehensive Plan is recommended to better align with the goals of the Hazard Mitigation Plan.

19.5.2 City of Deary

The city of Deary updated their Comprehensive Plan in 2016. The plan is "a unified effort to improve the community through preparation of community development projects, the

improvement of public facilities, and the adoption of ordinances" (Deary Comprehensive Plan, 2016). It describes the city's plans and goals for land use, economic development, natural resources, hazardous areas, housing, transportation, public facilities, recreation, special sites, community design, and agriculture. It also complements the community profile in the Mitigation Plan by detailing the location, history, schools, and demographics of the area.

Deary's Land Use Map, taken from the Comprehensive Plan, can be seen below.

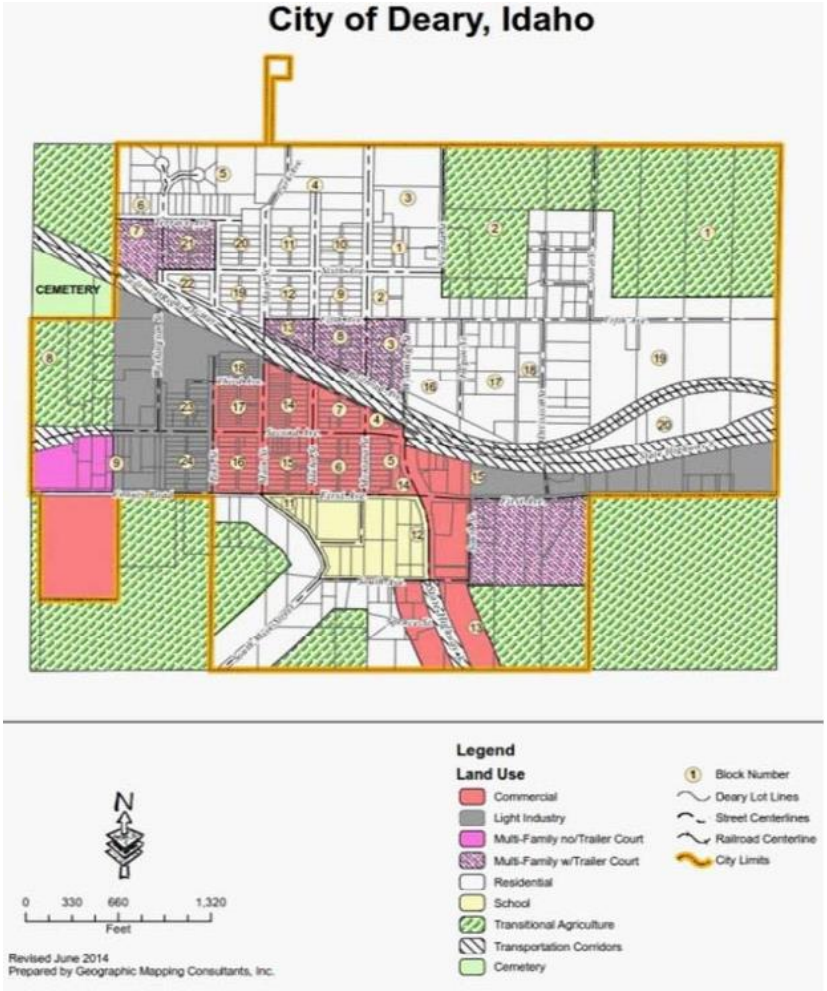


Figure 19-3. City of Deary Land Use Map

19.5.3 City of Genesee

The city of Genesee does not currently have a Comprehensive Plan and instead relies on Latah County's Comprehensive Plan. The creation of a city-specific Comprehensive Plan is recommended to better align with the goals of the Hazard Mitigation Plan.

19.5.4 City of Juliaetta

The city of Juliaetta updated their Comprehensive Plan in 2009. The joint Kendrick-Juliaetta Comprehensive Plan "seeks to initiate positive change" and "meet the needs of the future while retaining the desirable elements of the present community" (Kendrick-Juliaetta Comprehensive Plan, 2009). It describes the city's plans and goals for land use, agriculture, commercial development, floodplain development, housing, industrialization, population growth, public facilities, recreation, transportation, and stormwater management. It also complements the community profile in the Mitigation Plan by detailing the location, history, schools, and demographics of the area.

19.5.5 City of Kendrick

The city of Kendrick updated their Comprehensive Plan in 2009. The joint Kendrick-Juliaetta Comprehensive Plan "seeks to initiate positive change" and "meet the needs of the future while retaining the desirable elements of the present community" (Kendrick-Juliaetta Comprehensive Plan, 2009). It describes the city's plans and goals for land use, agriculture, commercial development, floodplain development, housing, industrialization, population growth, public facilities, recreation, transportation, and stormwater management. It also complements the community profile in the Mitigation Plan by detailing the location, history, schools, and demographics of the area.

19.5.6 City of Moscow

The city of Moscow updated their Comprehensive Plan in 2019. The plan establishes how Moscow will "provide for sustainable, incremental growth while preserving and enhancing the distinctive characteristics of Moscow and its rich and vibrant economic, cultural, social, and physical environments" (Moscow Comprehensive Plan, 2019). It describes the city's plans and goals for hazardous areas, land use, community design, transportation, parks and recreation, public services, economic development, and stormwater management. It also complements the community profile in the Mitigation Plan by detailing the location, climate, history, natural resources, and demographics of the area.

Moscow's Future Land Use Map, taken from the Comprehensive Plan, can be seen below.

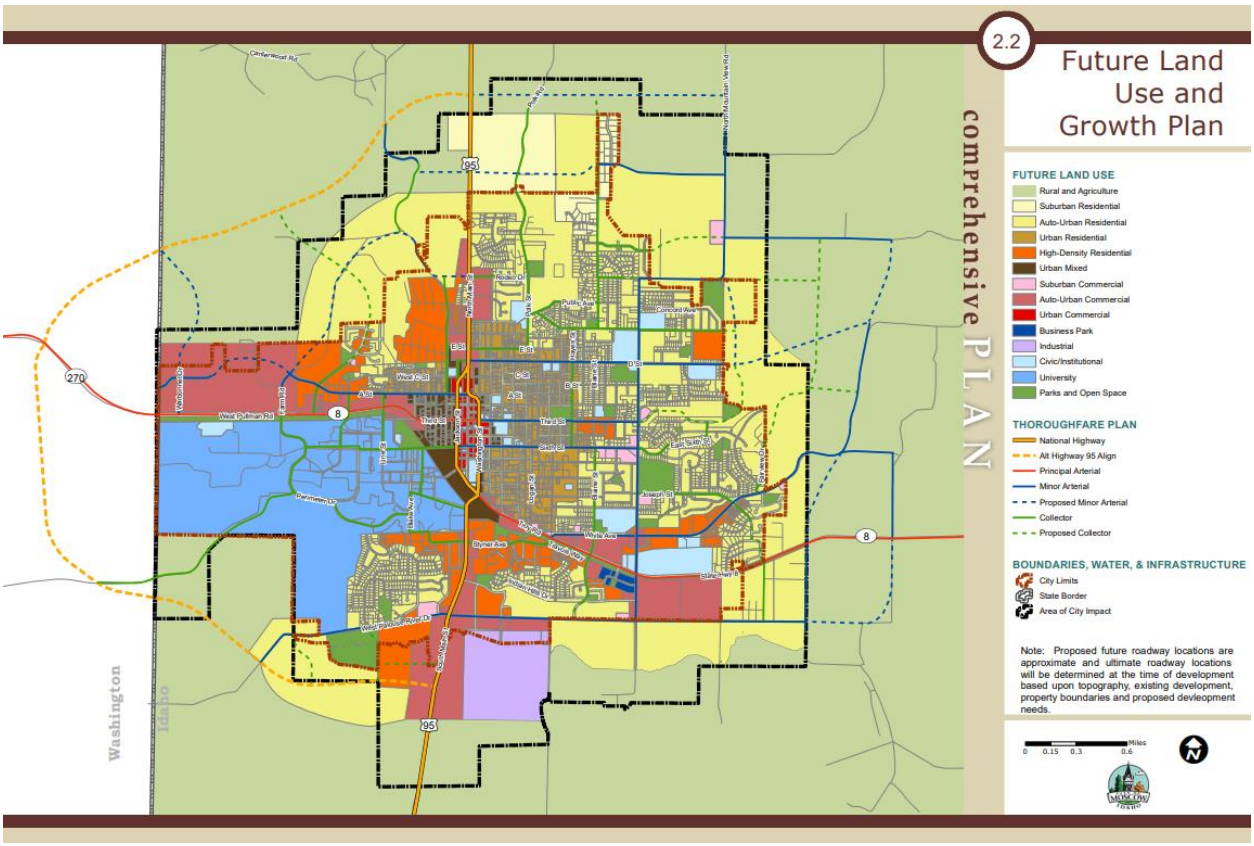


Figure 19-4. City of Moscow Future Land Use Plan

19.5.7 City of Potlatch

The city of Potlatch updated their Comprehensive Plan in 2018. The plan establishes how Potlatch intends to "maintain and improve the quality of life enjoyed by those who live in Potlatch" (Potlatch Comprehensive Plan, 2018). It describes the city's plans and goals for economic development, community design, public services, historical resources, special sites, housing, parks and recreation, transportation, natural resources, agriculture, hazardous areas, and land use. It also complements the community profile in the Mitigation Plan by detailing the location, watershed, history, natural resources, schools, and demographics of the area.

Potlatch's Zoning Map, taken from the Comprehensive Plan, can be seen below.

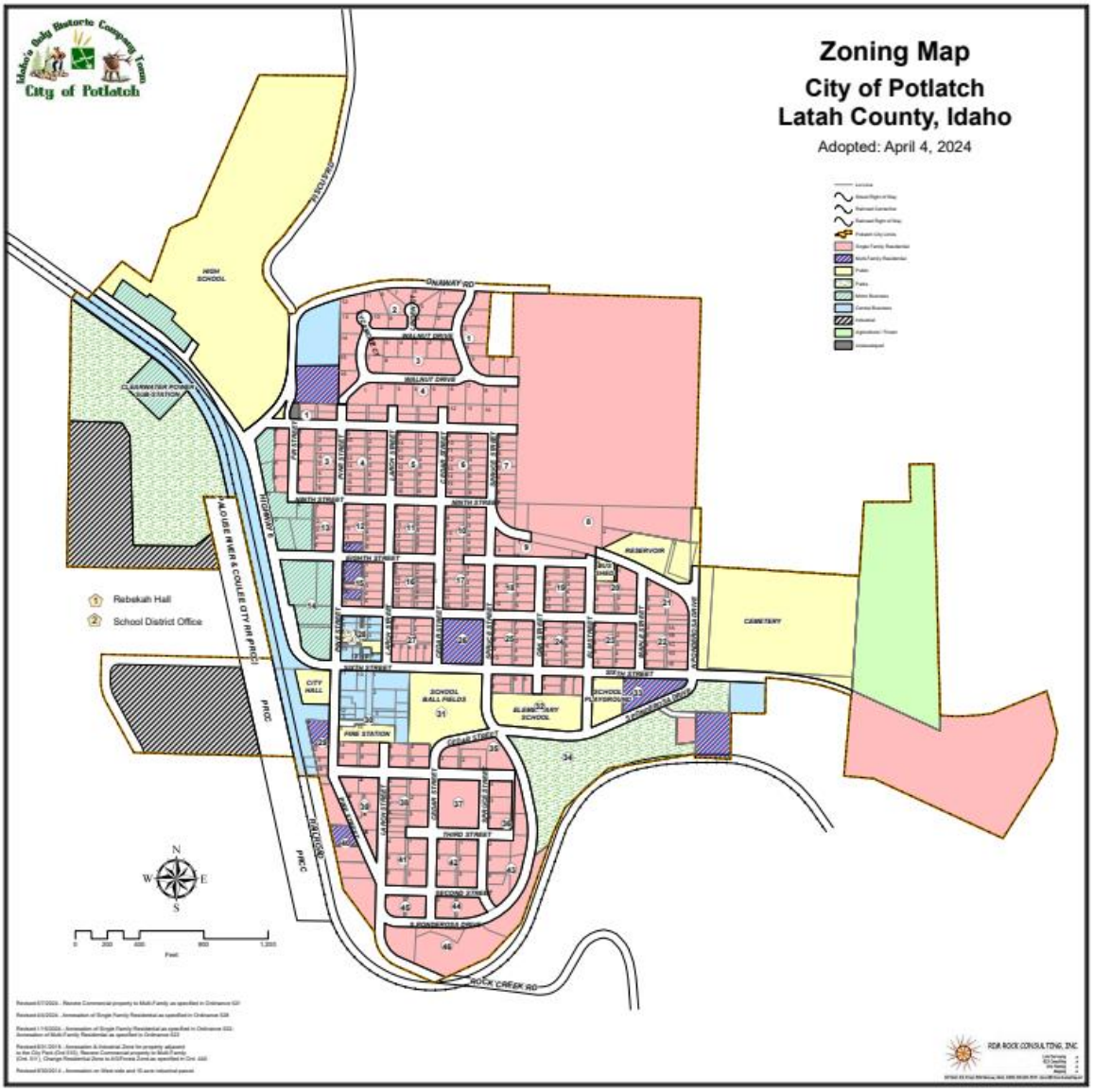


Figure 19-5. City of Potlatch Zoning Map

19.5.8 City of Troy

The city of Troy updated their Comprehensive Plan in 2021. The plan establishes how Troy will "implement, administer, and enforce with integrity, and in the best interests of the community, the policies and goals described within the plan" (Troy Comprehensive Plan, 2021). It describes the city's plans and goals for land use, community design, economic development, population growth, housing, special sites, hazardous areas, natural resources, environmental pollution, public services, transportation, and parks and recreation. It also complements the community profile in the Mitigation Plan by detailing the location, history, schools, and demographics of the area.

Troy's Land Use Map, taken from the Comprehensive Plan, can be seen below.

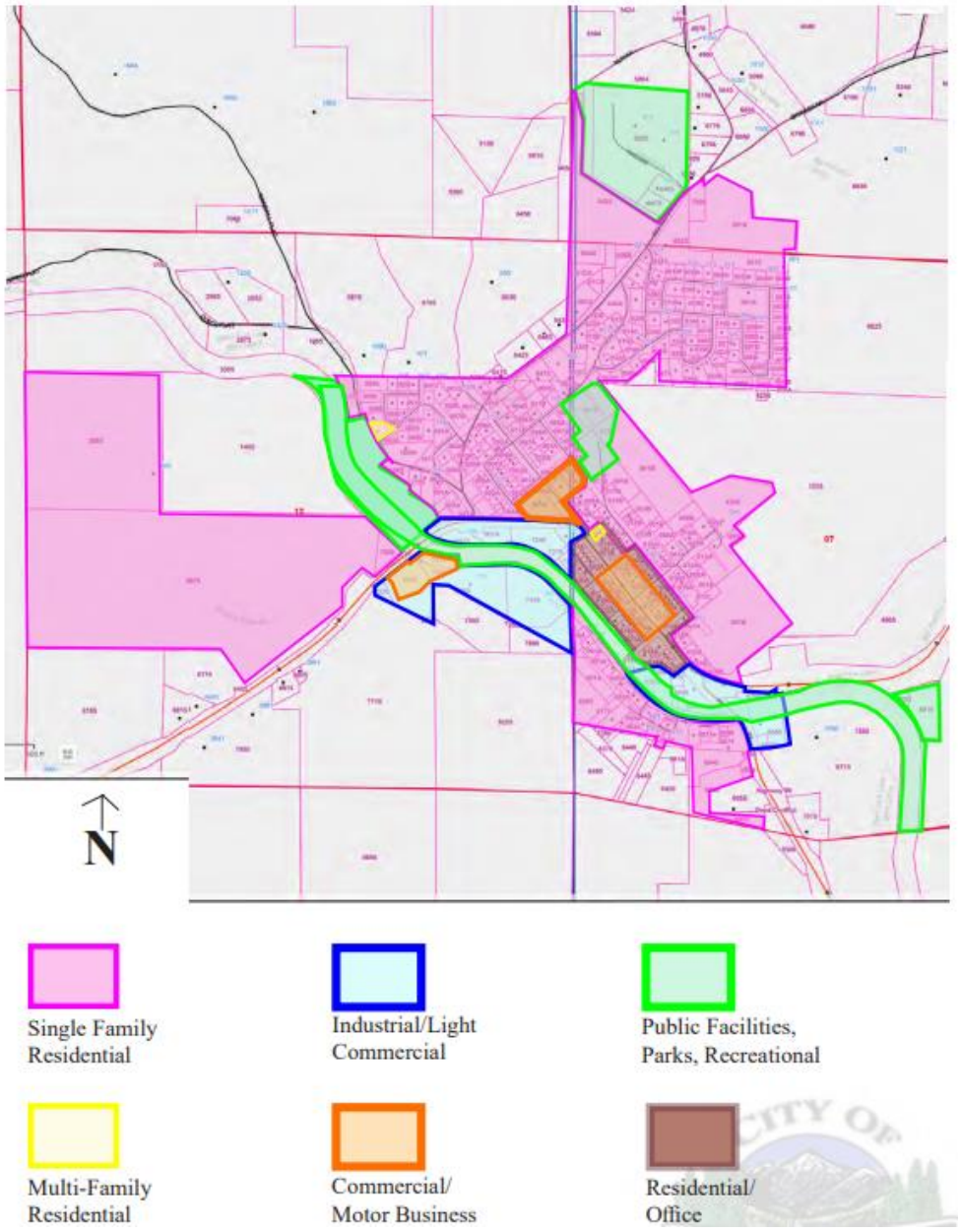


Figure 19-6. City of Troy Land Use Map

19.6 NFIP CONTINUITY STRATEGY

Latah County participates in the National Flood Insurance Program (NFIP) as do the cities of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, and Troy. Potlatch does not participate. Latah County's participation in the regular phase of the National Flood Insurance Program began August 15, 1980. See Appendix F for each jurisdiction's digital FIRM.

Latah County has no communities within the 100-year floodplain hazard area that are not participating in the NFIP. Latah County has no communities under suspension or revocation of participation in the NFIP.

Table 19-49. NFIP Participation and Repetitive Loss

Jurisdiction	FIRM Date	Participating in CRS (Class)	Number of NFIP Policies	Insurance in Force	Total Premiums	Are FIRMS Digital or Paper?	Repetitive Loss Properties	Severe Repetitive Loss Properties
Latah County	08/15/1980	No	11	$2,455,000	$8,155	Digital	0	0
Bovill	12/18/1979	No	N/A	N/A	N/A	Digital	0	0
Deary	06/05/1985	No	1	$175,000	$394	Digital	0	0
Genesee	12/18/1979	No	8	$1,662,000	$5,638	Digital	0	0
Juliaetta	03/04/1980	No	N/A	N/A	N/A	Digital	0	0
Kendrick	02/01/1980	No	N/A	N/A	N/A	Digital	0	0
Moscow	05/15/1980	Yes (8)	64	$16,576,000	$46,441	Digital	6	0
Potlatch	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Troy	12/18/1979	No	6	$1,016,000	$7,101	Digital	0	0

Specific NFIP and floodplain related activities include:

- Using the newly acquired topography data and a new hydraulic analysis, the city of Moscow made changes to the base map and floodway of Paradise Creek in November 2019.
- The City of Moscow has made a number of property/structure removals from the FIRM in recent years. The most recent was in May 2024. Deary, Genesee, and parts of unincorporated Latah County have made recent removals, as well.
- Latah County continues to offer one-on-one advice to property owners on how to protect property and has staff available to make site visits to property owners regarding flooding and drainage issues on private property.
- Floodplain training was provided for Latah County staff in March 2025 in Orofino.
- Additional flood mapping for the county is in progress, which includes a Base Level Engineering (BLE) analysis and Risk MAP Discovery.
- STARR II has continued to work on hydrologic and hydraulic analyses of the scoped flooding sources. Hydrology estimates the peak flood flows for each stream reach in the study, and hydraulic analysis uses the processed terrain and the peak flood flows from the hydrologic analysis to simulate and map water surface elevations. STARR II is also working with Latah County communities to receive information about GIS mapping for stormwater systems and/or culverts.

19.6.1 Substantial Improvement and Substantial Damage

Substantial improvement is important to understand within the context of floodplain management. According to FEMA, "when buildings undergo repair or improvement, it's an opportunity to reduce future flood damage. Communities participating in the NFIP adopt and enforce a floodplain management ordinance that applies to development in a Special Flood Hazard Area" (FEMA, 2024). Substantial improvement and substantial damage are defined below:

- **Substantial Improvement:** Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure before the start of construction of the improvement. Communities may establish a smaller percentage to adhere to, as well.
- **Substantial Damage:** Damage of any kind sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50% of the market value of the structure.

Each jurisdiction's floodplain management ordinance includes minimum NFIP requirements for new structures and existing structures undergoing substantial improvements or repairing substantial damage. NFIP-participating communities must determine whether proposed work qualifies as a substantial improvement or repair of substantial damage, and structures must be brought into compliance with local floodplain ordinances if so.

The following jurisdictions in Latah County have a substantial improvement/substantial damage provision written into their code. The substantial improvement percentage is identified, as well.

Table 19-50. Substantial Improvement/Substantial Damage in Latah County

Jurisdiction	Substantial Improvement/ Substantial Damage?	Percentage
Latah County	Yes	50%
Bovill	No	N/A
Deary	Yes	50%
Genesee	Yes	50%
Juliaetta	Yes	50%
Kendrick	Yes	50%
Moscow	Yes	50%
Potlatch	No	N/A
Troy	No	N/A
Source: Local city websites		

PART IV: MITIGATION STRATEGY

CHAPTER 20 MITIGATION GOALS & CHANGES IN PRIORITY

20.1 MITIGATION GOALS

These goals describe the broad direction that Latah County will take to select mitigation projects, which are designed specifically to address risks posed by natural and manmade hazards. The goals are steppingstones between the mission statement and the specific objectives developed for the individual mitigation projects. The mitigation projects refer to these goals by their number given below.

1. Prioritize the health and safety of Latah County residents from the impacts of natural and manmade hazards.
2. Protect critical infrastructure and community lifelines within Latah County by identifying and reducing vulnerabilities to the impacts of natural and manmade hazards.
3. Strengthen relationships between the public sector, private sector entities, leaders from underserved communities, and residents to enhance community resilience through a whole-community approach, with specific emphasis on achieving equitable outcomes for all communities, including underserved communities and socially vulnerable populations.
4. Increase the preparedness and awareness of natural and manmade hazards among Latah County residents and visitors through targeted and coordinated public outreach campaigns and education.
5. Promote better coordination between public service sectors, and encourage multi-jurisdictional participation in sustainable and cost-effective mitigation projects.
6. Safeguard economic, historic, and cultural aspects of Latah County from the effects of natural and manmade hazards.
7. Encourage systematic updates and adoptions of regulations to ensure new developments address changing environmental concerns and natural resource protection.
8. Protect properties and structures within Latah County from the impacts of natural hazards through the implementation of flood control projects, green infrastructure, mitigation activities, and advanced warning systems.

20.2 CHANGES IN PRIORITY

Mitigation priorities have not significantly changed for either Latah County or the cities of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts since the update of the last plan. For the 2025 plan update, mitigation goals for Latah County and all participating jurisdictions were significantly updated to better align with current federal priorities, ongoing sustainability efforts in all jurisdictions, and a more concerted focus on achieving equitable outcomes for all communities, including underserved communities and

socially vulnerable populations. The plan also underwent a complete rewrite to better align with new local mitigation plan requirements.

Also, for past mitigation projects identified in previous iterations of the plan, a **2025 Status Update and Changes in Priority** section was included for each past action. A description of the update and changes in priority were included, if appropriate and applicable.

CHAPTER 21 MITIGATION STRATEGIES

21.1 MITIGATION ACTION PLAN

The action plan helps to prioritize mitigation initiatives according to a benefit/cost analysis of the proposed projects and their associated costs (44 CFR, Section 201.6(c)(3)(iii)). The action plan also provides the framework for how the proposed projects and initiatives will be implemented and administered over the next five years.

21.1.1 Mitigation Strategy/Action Timeline Parameters

While the preference is to provide definitive project completion dates, this is not possible for every mitigation strategy/action. Therefore, the parameters for the timeline (Projected Completion Date) are as follows:

- **Short-term**—To be completed in 1 to 5 years
- **Long-term**—To be completed in greater than 5 years
- **Ongoing**—Currently being implemented under existing programs but without a definite completion date

21.1.2 Mitigation Strategy/Action Benefit Parameters

Benefit ratings are defined as follows:

- **High**—Project will provide an immediate reduction of risk exposure for life and property.
- **Medium**—Project will have a long-term impact on the reduction of risk exposure for life and property, or project will provide an immediate reduction in the risk exposure for property.
- **Low**—Long-term benefits of the project are difficult to quantify in the short term.

21.1.3 Mitigation Strategy/Action Estimated Cost Parameters

While the preference is to provide definitive costs (dollar figures) for each mitigation strategy/action, this is not possible for every mitigation strategy/action. Therefore, the estimated costs for the mitigation initiatives identified in this plan are identified as high, medium, or low, using the following ranges:

- **High**—Existing funding will not cover the cost of the project; implementation would require new revenue through an alternative source (e.g., bonds, grants, and fee increases).
- **Medium**—The project could be implemented with existing funding but would require a re-apportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.

- **Low**—The project could be funded under the existing budget. The project is part of or can be part of an ongoing existing program.

21.1.4 Mitigation Strategy/Action Prioritization Process

The action plan must be prioritized according to a benefit/cost analysis of the proposed projects and their associated costs (44 CFR, Section 201.6(c)(3)(iii)). The benefits of proposed projects were weighed against estimated costs as part of the project prioritization process. The benefit/cost analysis was not of the detailed variety required by FEMA for project grant eligibility under the Hazard Mitigation Grant Program (HMGP) and Building Resilient Infrastructure and Communities (BRIC) grant program. A less formal approach was used because some projects may not be implemented for up to 10 years, and associated costs and benefits could change dramatically in that time. Therefore, a review of the apparent benefits versus the apparent cost of each project was conducted. Parameters were established for assigning subjective ratings (high, medium, and low) to the costs and benefits of these projects.

The priorities are defined as follows:

- **High**—A project that addressed numerous goals or hazards, has benefits that exceed cost, has funding secured or is an ongoing project, and/or meets eligibility requirements for the HMGP or BRIC grant program. High priority projects can be completed in the short term (1 to 5 years).
- **Medium**—A project that addressed multiple goals and hazards, that has benefits that exceed costs, and for which funding has not been secured but that is grant eligible under HMGP, BRIC, or other grant programs. The project can be completed in the short term once funding is secured. Medium priority projects will become high priority projects once funding is secured.
- **Low**—A project that will address few or no goals, mitigate the risk of one or few hazards, has benefits that do not exceed the costs or are difficult to quantify, for which funding has not been secured, that is not eligible for HMGP or BRIC grant funding, and for which the timeline for completion is long term (1 to 10 years). Low priority projects may be eligible for other sources of grant funding from other programs.

For many of the strategies identified in this action plan, the partners may seek financial assistance under the HMGP or HMA programs, both of which require detailed benefit/cost analyses. These analyses will be performed on projects at the time of application using the FEMA benefit-cost model. For projects not seeking financial assistance from grant programs that require detailed analysis, the partners reserve the right to define “benefits” according to parameters that meet the goals and objectives of this plan.

21.2 MITIGATION PROJECTS

Listed below are the goals and objectives developed by the mitigation plan and the priority projects that were developed to address the risks posed. Included in the list are a rough estimate of cost and an anticipated period for further investigation, project development, and implementation.

Participating jurisdictions agreed upon a number of mitigation actions that apply to the county and all or some participating jurisdictions. These shared actions, some of which address all hazards, help to meet the following FEMA requirement: “Does the plan identify and analyze a comprehensive range of specific mitigation actions and projects for each jurisdiction being considered to reduce the effects of hazards, with emphasis on new and existing buildings and infrastructure? Does the plan include one or more action(s) per jurisdiction for each hazard identified within the risk assessment?” In addition to the mitigation measures that apply to the county and all participating jurisdictions, most communities identified additional mitigation actions unique to their jurisdiction.

21.2.1 New Mitigation Projects

Latah County New Projects

Mitigation Project: Conduct wildfire fuels reduction throughout Latah County.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	Latah County	Idaho Department of Lands	Latah County, USFS, UIdaho Experimental Forest, Latah Soil and Water Conservation	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 2, 8	All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide	High	HMGP, IOEM grants, Western States Fire Managers grant, local budget

Mitigation Project: Conduct wildfire fuels reduction throughout Latah County.			
	Volcanic Activity		
Action/Implementation Plan and Project Description:			
N/A			

City of Bovill New Projects

Mitigation Project: Improve drinking water infrastructure within the city of Bovill.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Bovill	City of Bovill Water Municipality	Merrick & Company, Idaho DEQ	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**

Mitigation Project: Improve drinking water infrastructure within the city of Bovill.			
1, 2	Flood Severe Winter Weather Wildfire	High	HMGP, IOEM grants, DEQ, local budget
Action/Implementation Plan and Project Description:			
N/A			

Mitigation Project: Obtain back-up generator for Bovill wastewater facility.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Bovill	City of Bovill Wastewater Municipality	Idaho DEQ	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 5		Flood Severe Winter Weather Wildfire		High		HMGP, IOEM grants, DEQ, local budget

Mitigation Project: Obtain back-up generator for Bovill wastewater facility.
Action/Implementation Plan and Project Description:
N/A

City of Deary New Projects

Mitigation Project: Increase retention and control measures to mitigate damages from a water reservoir failure in the city of Deary.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Deary	City of Deary Mayor	FEMA, surrounding dam/levee/reservoir owners	Medium	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 2, 5, 6, 8	Flood Dam Failure Landslide	Medium	HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:			

Mitigation Project: Increase retention and control measures to mitigate damages from a water reservoir failure in the city of Deary.
N/A

Mitigation Project: Study and prepare for the impacts of a landslide in the Spud Hill area.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Deary	City of Deary Mayor	Latah County GIS	Low	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 5, 8		Landslide		Medium		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
N/A						

City of Genesee New Projects

Mitigation Project: Build pump station for improved firefighting capacity for areas in town that have low hydrant pressure due to proximity to reservoir.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Genesee	City of Genesee	Genesee Planning & Zoning	High	Ongoing	$1,000,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 5, 8		Severe Summer Weather Wildfire Hazardous Materials Incident		High		HMGP, IOEM grants, local budget, local bond levy
Action/Implementation Plan and Project Description:						
N/A						

Mitigation Project: Install backup generator at two main water wells.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Genesee	City of Genesee	Latah County Disaster Services	High	Ongoing	$200,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 2, 8	All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity	High	HMGP, IOEM grants, USDA, local budget

Action/Implementation Plan and Project Description:
N/A

Mitigation Project: Install larger water lines and close loops in water infrastructure to bring fire flows up to standard in all areas.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Genesee	City of Genesee	Genesee Rural Fire Protection District	High	Ongoing	$500,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
2, 5, 8		Wildfire		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
N/A						

City of Juliaetta New Projects

Mitigation Project: Purchase new generator for the City of Juliaetta water plant.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Juliaetta	City of Juliaetta	City of Juliaetta Public Works	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 8		Prolonged Power Outage		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
N/A						

City of Kendrick New Projects

Mitigation Project: Purchase portable radio communication and repeater equipment for the Kendrick Fire Department to have better radio communication to serve the rural community.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Kendrick	Kendrick Volunteer Fire Department	City of Kendrick	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 3, 5		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						

Mitigation Project: Purchase portable radio communication and repeater equipment for the Kendrick Fire Department to have better radio communication to serve the rural community.
N/A

Mitigation Project: Conduct wildland mitigation of Brady Gulch on Highway 99.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Kendrick	City of Kendrick	City of Kendrick Maintenance Crew	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 8		Wildfire		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
N/A						

Mitigation Project: Install dry hydrants on the Kendrick levee system to protect the town from the canyon walls threat of fire.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Kendrick	City of Kendrick	Kendrick Volunteer Fire Department	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 5, 6, 8		Wildfire		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
N/A						

Mitigation Project: Purchase generator for evacuation center and electrical upgrades to Kendrick High School and the VFW Center.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance**	**Projected Completion Date**	**Estimated Cost & Analysis** (Low, Medium, High)

Mitigation Project: Purchase generator for evacuation center and electrical upgrades to Kendrick High School and the VFW Center.						
				(Low, Medium, High)	(Short-term, Long-term, or Ongoing)	
2025	City of Kendrick	City of Kendrick	Kendrick Joint School District #283	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 2, 8	All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity	High	HMGP, IOEM grants, local budget

Action/Implementation Plan and Project Description:
N/A

City of Moscow New Projects

Mitigation Project: Capital Improvement Project—Replace inadequate/undersized filter plant infrastructure at water wells.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Moscow	City of Moscow	Idaho Department of Environmental Quality, IDOC	High	Ongoing	$650,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
2, 5		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						

Mitigation Project: Capital Improvement Project—Replace inadequate/undersized filter plant infrastructure at water wells.
Note: Well No. 2 and 3

Mitigation Project: Capital Improvement Project—Increase signage and warning devices and improve drivers training program to improve transportation safety.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Moscow	City of Moscow	Idaho Department of Environmental Quality, IDOC	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 2, 4	All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake	High	HMGP, IOEM grants, local budget

Mitigation Project: Capital Improvement Project—Increase signage and warning devices and improve drivers training program to improve transportation safety.			
	Landslide Volcanic Activity		
Action/Implementation Plan and Project Description:			
N/A			

Mitigation Project: Purchase and install emergency generator at Fire Station No. 2 to ensure continuous operation of critical life-safety systems and equipment during power outage.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Moscow	City of Moscow	FEMA	High	Ongoing	$100,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 8		Prolonged Power Outage		High		HMGP, IOEM grants, local budget

Mitigation Project: Purchase and install emergency generator at Fire Station No. 2 to ensure continuous operation of critical life-safety systems and equipment during power outage.
Action/Implementation Plan and Project Description:
N/A

Mitigation Project: Purchase and install emergency generators for water wells to ensure continuous operation of critical life-safety systems and equipment during power outage.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Moscow	City of Moscow	FEMA, IDEQ	High	Ongoing	$100,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 8		Prolonged Power Outage		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
Note: Wells No. 8 and 9						

Mitigation Project: Remove accumulated sediment and other materials (desilt) from Paradise and Hogg Creeks channels to prevent flooding.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Moscow	City of Moscow	IOEM, FEMA	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 2, 8	Flood	High	HMGP, IOEM grants, local budget

Action/Implementation Plan and Project Description:
N/A

Mitigation Project: Conduct channel stabilization, improvement, and restoration of the floodplain area for Paradise and Hogg Creeks to allow for greater drainage and water flood capacity.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Moscow	City of Moscow	University of Idaho, PCEI, IOEM, FEMA	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 8		Flood		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
N/A						

Mitigation Project: Capital Improvement Project—Conduct stormwater mitigation and increase capacity to address historic flooding issues of streets, businesses, homes, and city facilities.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance**	**Projected Completion Date**	**Estimated Cost & Analysis** (Low, Medium, High)

Mitigation Project: Capital Improvement Project—Conduct stormwater mitigation and increase capacity to address historic flooding issues of streets, businesses, homes, and city facilities.						
				(Low, Medium, High)	(Short-term, Long-term, or Ongoing)	
2025	City of Moscow	City of Moscow	IDEQ, IOEM, FEMA	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 2, 6, 8	Flood	High	HMGP, IOEM grants, local budget

Action/Implementation Plan and Project Description:
Note: Citywide

Mitigation Project: Capital Improvement Project—Replace undersized inadequate stormwater infrastructure and install new where necessary.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)

Mitigation Project: Capital Improvement Project—Replace undersized inadequate stormwater infrastructure and install new where necessary.						
2025	City of Moscow	City of Moscow	IDEQ,	High	Ongoing	$150,000-1,100,000/project; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 8		Flood		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
Note: Tamarack St., Henley St., NE Water Tower drain line, various storm mains citywide						

Mitigation Project: Identify storage areas to prevent potential release of hazardous materials.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)

Mitigation Project: Identify storage areas to prevent potential release of hazardous materials.						
2025	City of Moscow	City of Moscow	Lewiston Regional HazMat Team	Medium	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 5		Hazardous Material Incident		Medium		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
Note: Citywide						

Mitigation Project: Purchase portable street barriers to prevent vehicle threats during outdoor public events.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Moscow	City of Moscow	Moscow downtown businesses, DOJ, FWHA	Medium	Ongoing	$200,000; The total cost of this action item is highly dependent on the community. The primary

Mitigation Project: Purchase portable street barriers to prevent vehicle threats during outdoor public events.						
						cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 5		Major Transportation Incident Hazardous Material Incident		Medium		HMGP, IOEM grants, FWHA grant, local budget
Action/Implementation Plan and Project Description:						
Note: Downtown Main St. & Third St., Main St. & Sixth St., and other areas as needed						

Mitigation Project: Purchase equipment for an emergency command post, specifically communication equipment such as phone lines, computers, internet, recharging station, radios, video board, etc.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Moscow	City of Moscow	University of Idaho	Medium	Ongoing	$200,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that

Mitigation Project: Purchase equipment for an emergency command post, specifically communication equipment such as phone lines, computers, internet, recharging station, radios, video board, etc.						
						have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 3, 5, 6		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		Medium		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
Note: Downtown Main St. & Third St., Main St. & Sixth St., and other areas as needed						

Mitigation Project: Transition to Automated Meter Reading (AMI) infrastructure with user portal.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)

Mitigation Project: Transition to Automated Meter Reading (AMI) infrastructure with user portal.						
2025	City of Moscow	City of Moscow	Bureau of Reclamation (BOR)	High	Ongoing	$1,600,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 8		Cybersecurity		High		HMGP, IOEM grants, WaterSMART grant, local budget
Action/Implementation Plan and Project Description:						
Note: Already applied for WaterSMART grant for meter purchase						

Mitigation Project: Purchase new PPE for Moscow Volunteer Fire Department (especially new members) and replace damaged and obsolete equipment.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Moscow	City of Moscow	Moscow Volunteer Fire Department, Assistance to	High	Ongoing	$3,500/project; The total cost of this action item is highly dependent on the community.

Mitigation Project: Purchase new PPE for Moscow Volunteer Fire Department (especially new members) and replace damaged and obsolete equipment.						
			Firefighters Grants (AFG)			The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 5	Wildfire	High	HMGP, IOEM grants, AFG, local budget

Action/Implementation Plan and Project Description:

Note: Fire Department consists of paid staff and volunteers

Mitigation Project: Fund Moscow Volunteer Fire Department training, equipment, and community fire prevention awareness.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Moscow	City of Moscow	Moscow Volunteer Fire Department, Assistance to Firefighters Grants	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that

Mitigation Project: Fund Moscow Volunteer Fire Department training, equipment, and community fire prevention awareness.						
						have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 4, 5		Wildfire		High		HMGP, IOEM grants, AFG, local budget
Action/Implementation Plan and Project Description:						
Note: Fire Department consists of paid staff and volunteers						

Mitigation Project: Purchase property and construct new Fire Station No. 4.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Moscow	City of Moscow	Moscow Volunteer Fire Department	Low	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation

Mitigation Project: Purchase property and construct new Fire Station No. 4.						
						capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 5		Wildfire		Low		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
Note: Purchase property in South Moscow						

Mitigation Project: Replace inadequate/undersized obsolete fire hydrants (40+ years old) to maintain emergency operations.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Moscow	City of Moscow	Moscow Volunteer Fire Department	High	Ongoing	$2,500/project; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Mitigation Project: Replace inadequate/undersized obsolete fire hydrants (40+ years old) to maintain emergency operations.			
Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 2, 5	Wildfire	High	HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:			
Note: Citywide			

Mitigation Project: Create a Wildfire Urban Interface (WUI) surrounding Moscow city limits/Area of City Impact.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Moscow	City of Moscow	Idaho Department of Lands, IOEM, FEMA	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**

Mitigation Project: Create a Wildfire Urban Interface (WUI) surrounding Moscow city limits/Area of City Impact.			
1, 5, 6, 8	Wildfire	High	HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:			
N/A			

City of Potlatch New Projects

Mitigation Project: Replace reservoir roof in the city of Potlatch.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Potlatch	Potlatch City Council	City of Potlatch Maintenance Crew	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**

Mitigation Project: Replace reservoir roof in the city of Potlatch.			
1, 2, 8	All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity	High	HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:			
N/A			

Mitigation Project: Expand culvert and ditch lines along Onaway Road to mitigate flooding from groundwater and snowmelt into residential houses in the Bennett's Addition area of Potlatch.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	City of Potlatch	Potlatch City Council	Idaho Transportation Department, North Latah County Highway District	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of

Mitigation Project: Expand culvert and ditch lines along Onaway Road to mitigate flooding from groundwater and snowmelt into residential houses in the Bennett's Addition area of Potlatch.						
						redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 8		Severe Winter Weather Flood		High		HMGP, IOEM grants, FMA, local budget
Action/Implementation Plan and Project Description:						
N/A						

North Latah County Highway District New Projects

Mitigation Project: Upgrade secondary routes for detour options.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	North Latah County Highway District	North Latah County Highway District	N/A	Medium	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of

Mitigation Project: Upgrade secondary routes for detour options.						
						redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 5		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		Medium		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
N/A						

South Latah Highway District New Projects

Mitigation Project: Conduct mitigation on Cedar Ridge and Texas Ridge landslide area.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	South Latah Highway District	South Latah Highway District	N/A	High	Ongoing	$1,100,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be

Mitigation Project: Conduct mitigation on Cedar Ridge and Texas Ridge landslide area.						
						required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 6, 8		Landslide		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
N/A						

Deary Rural Fire District New Projects

Mitigation Project: Obtain generator for the Fire District's second station to still be able to open garage doors and access fire trucks in the event of a power outage.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	Deary Rural Fire District	Deary Rural Fire District	City of Deary	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the

Mitigation Project: Obtain generator for the Fire District's second station to still be able to open garage doors and access fire trucks in the event of a power outage.						
						critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 8		Prolonged Power Outage		Medium		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
N/A						

Mitigation Project: Install fire hydrants at the city well and water tank where there is currently no water protection.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	Deary Rural Fire District	Deary Rural Fire District	City of Deary	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of

Mitigation Project: Install fire hydrants at the city well and water tank where there is currently no water protection.						
						redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 8		Wildfire		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
N/A						

Genesee Rural Fire Protection District New Projects

Mitigation Project: Increase firefighting ability for rural structures and wildland fires by having more truck carrying water capacity.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	Genesee Rural Fire Protection District	Genesee Rural Fire Protection District	City of Genesee	Medium	Ongoing	$200,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of

Mitigation Project: Increase firefighting ability for rural structures and wildland fires by having more truck carrying water capacity.						
						redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 8		Wildfire		Medium		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
N/A						

Moscow Rural Fire District New Projects

Mitigation Project: Build new joint facility or community center/senior center that could provide room for IDL and secondary dispatch/command post.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	Moscow Rural Fire District	Moscow Rural Fire District	Idaho Department of Lands, Latah County	Medium	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of

Mitigation Project: Build new joint facility or community center/senior center that could provide room for IDL and secondary dispatch/command post.						
						redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 3, 5		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
N/A						

Mitigation Project: Conduct wildfire mitigation in the Moscow, Troy, and Potlatch areas, including but not limited to preplanning, access, hazard removal, and fuels reduction in WUI.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	Moscow Rural Fire District, Troy Rural Fire District, Potlatch Rural Fire District	Moscow Rural Fire District	Troy Rural Fire District, Potlatch Rural Fire District, Bennett Lumber, USFS, IDL, Latah County	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the

Mitigation Project: Conduct wildfire mitigation in the Moscow, Troy, and Potlatch areas, including but not limited to preplanning, access, hazard removal, and fuels reduction in WUI.						
						critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 5, 8		Wildfire		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
N/A						

Potlatch Rural Fire District New Projects

Mitigation Project: Obtain backup generator for fire station in Potlatch, which currently has no backup power to support fire department or public buildings during a power outage.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	Potlatch Rural Fire District	Potlatch Rural Fire District	City of Potlatch	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier

Mitigation Project: Obtain backup generator for fire station in Potlatch, which currently has no backup power to support fire department or public buildings during a power outage.						
						time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 8		Prolonged Power Outage		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
N/A						

Mitigation Project: Conduct wildland fire mitigation on the Moscow Mountain Range through fuels reduction and ingress/egress accessibility.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	Potlatch Rural Fire District, Moscow Rural Fire District, Troy Rural Fire District	Potlatch Rural Fire District	Moscow Rural Fire District, Troy Rural Fire District, Idaho Department of Lands, Latah County	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Mitigation Project: Conduct wildland fire mitigation on the Moscow Mountain Range through fuels reduction and ingress/egress accessibility.			
Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 8	Wildfire	High	HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:			
N/A			

Troy Rural Fire District New Projects

Mitigation Project: Install emergency off-grid energy generation and alternative heating sources to provide a climate-controlled emergency shelter during extreme cold/heat conditions.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2025	Troy Rural Fire District	Troy Rural Fire District	City of Troy	Medium	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**

Mitigation Project: Install emergency off-grid energy generation and alternative heating sources to provide a climate-controlled emergency shelter during extreme cold/heat conditions.			
1, 2, 8	Severe Summer Weather Severe Winter Weather	Medium	HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:			
N/A			

21.2.2 Ongoing Mitigation Projects

Latah County Ongoing Projects

Mitigation Project: Develop a countywide all hazards program to assist residents preventing loss of life and property and provide stability aid during incidents or long-term events.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	Latah County	Latah County Disaster Services	City of Bovill, City of Deary, City of Genesee, City of Juliaetta, City of Kendrick, City of Moscow, City of Potlatch, City of Troy, North Latah County Highway District, South Latah Highway District, Bovill Fire Protection District, Deary Rural Fire	High	Ongoing	$5,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Mitigation Project: Develop a countywide all hazards program to assist residents preventing loss of life and property and provide stability aid during incidents or long-term events.						
			District, Genesee Rural Fire Protection District, Moscow Rural Fire District, Potlatch Rural Fire District, and Troy Rural Fire District			
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 3, 4, 5, 6		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		High		HMGP, IOEM grants, SHSP grant, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing & in progress						

Mitigation Project: Develop a program that will help identify hazardous materials transported through the county.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)

Mitigation Project: Develop a program that will help identify hazardous materials transported through the county.						
2020	Latah County	Latah County Disaster Services	Idaho Office of Emergency Management	Medium	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 4		Hazardous Material Incident		Medium		HMGP, IOEM grants, HEMP grant, local budget, Lightcast database
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing						

Mitigation Project: Develop a plan to deal with internally displaced people and families resulting from disaster events in areas outside of Latah County.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	Latah County	Latah County Disaster Services	Idaho Office of Emergency Management	Low	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost

Mitigation Project: Develop a plan to deal with internally displaced people and families resulting from disaster events in areas outside of Latah County.						
						associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)	**Hazard(s) Mitigated**			**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 3, 5	All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity			Low		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing; Adapted to new changes per Red Cross policies. Red Cross reviewed each shelter and does so on a regular basis. Hotel rooms/capacity to house has increased since last plan.						

Mitigation Project: Continue to enhance radio availability in each fire district and improve range within the region.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low,	**Projected Completion Date**	**Estimated Cost & Analysis** (Low, Medium, High)

Mitigation Project: Continue to enhance radio availability in each fire district and improve range within the region.						
				Medium, High)	(Short-term, Long-term, or Ongoing)	
2020	Latah County	Latah County Disaster Services	Latah County Sheriff's Office	Medium	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 5	All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity	Medium	HMGP, IOEM grants, local budget

Action/Implementation Plan and Project Description:

2025 Status Update: Ongoing; Latah County has added two new towers and an upgraded simplex system to multicast. Rural districts have the option for Volunteer Fire Assistance. Latah County Sheriff's Office is now the lead agency on multicast and will be responsible for putting in secondary capacity.

Mitigation Project: Obtain funding for mobile repeater stations with backup power sources.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	Latah County	Latah County Disaster Services	Latah County Sheriff's Office	Low	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		Low		HMGP, IOEM grants, SHSP grant, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing; Mobile repeater stations completed in September 2019.						

Mitigation Project: Develop a public education campaign specifically to provide awareness for residents in Juliaetta and Kendrick area regarding the lack of a rural fire district and the ramifications.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	Latah County	Latah County Disaster Services	City of Juliaetta, City of Kendrick, Juliaetta Fire Department, Kendrick Fire Department	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 4, 5		Wildfire		High		HMGP, IOEM grants, local budget, IDL
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing; This area of the county does not have a rural fire district and its voters consistently reject ballot measures to create one. FireWise and defensible space education will increase from local fire departments, the regional fire cooperative for North Central Idaho, and state agencies to help communicate the response issue. This project has #1 priority.						

Mitigation Project: Continue to implement and develop public education programs (e.g., Disaster Preparedness Programs, Fuel Reduction Programs, Pillow Case Project, etc.).						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	Latah County	Latah County Disaster Services	Latah County Disaster Services, local fire districts	High	Ongoing	$5,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 4, 5		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		High		HMGP, IOEM grants, BLM, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing						

Mitigation Project: Enforce existing land use and development policies including floodplain restrictions to reduce residents' exposure to hazards.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	Latah County	Latah County Planning & Building	Latah County Disaster Services	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 7, 8	All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity	High	HMGP, IOEM grants, local budget

Action/Implementation Plan and Project Description:

2025 Status Update: Ongoing

Mitigation Project: Continue to develop community emergency response team program throughout Latah County by training additional volunteers (Community Emergency Response Team [CERT], Auxiliary Communications Team [AUXCOMM], Search & Rescue [SAR], etc.).						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	Latah County	Latah County Disaster Services	City of Bovill, City of Deary, City of Genesee, City of Juliaetta, City of Kendrick, City of Moscow, City of Potlatch, City of Troy, North Latah County Highway District, South Latah Highway District, Bovill Fire Protection District, Deary Rural Fire District, Genesee Rural Fire Protection District, Moscow Rural Fire District, Potlatch Rural Fire District, and Troy Rural Fire District	Medium	Ongoing	$1,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 3, 5	All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure	Medium	HMGP, IOEM grants, SHSP grant, local budget

Mitigation Project: Continue to develop community emergency response team program throughout Latah County by training additional volunteers (Community Emergency Response Team [CERT], Auxiliary Communications Team [AUXCOMM], Search & Rescue [SAR], etc.).			
	Drought Earthquake Landslide Volcanic Activity		
Action/Implementation Plan and Project Description:			
2025 Status Update: Ongoing			

Mitigation Project: Continue to develop and maintain a countywide evacuation plan with designated routes, including main routes as well as routes in rural areas.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	Latah County	Latah County Disaster Services	Idaho Transportation Department, North Latah County Highway District, South Latah Highway District, Latah County GIS, Idaho Department of Lands	High	Ongoing	$500; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**

Mitigation Project: Continue to develop and maintain a countywide evacuation plan with designated routes, including main routes as well as routes in rural areas.			
1, 3, 5	All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity	High	HMGP, IOEM grants, SHSP grant, local budget
Action/Implementation Plan and Project Description:			
2025 Status Update: Ongoing			

Mitigation Project: Work with the American Red Cross to update the emergency shelter list and conduct field visits.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	Latah County	Latah County Disaster Services	American Red Cross	Medium	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of

Mitigation Project: Work with the American Red Cross to update the emergency shelter list and conduct field visits.						
						redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 5		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		Medium		HMGP, IOEM grants, American Red Cross, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing						

Mitigation Project: Improve Highway 9 crossing over Flat Creek.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	Latah County	Latah County Disaster Services	Idaho Transportation Department	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that

Mitigation Project: Improve Highway 9 crossing over Flat Creek.						
						have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 8		Flood		High		HMGP, IOEM grants, ITD, FMA, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing						

Mitigation Project: Maintain an inventory of all culverts, bridges, and roads to help determine maintenance priorities and road profiles that need to be elevated out of the floodplain.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	Latah County	Latah County Disaster Services	North Latah County Highway District, South Latah Highway District, Latah County GIS	Medium	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier

Mitigation Project: Maintain an inventory of all culverts, bridges, and roads to help determine maintenance priorities and road profiles that need to be elevated out of the floodplain.						
						time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 8		Flood		Medium		HMGP, IOEM grants, ITD, FMA, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing						

Mitigation Project: Encourage residents to participate in the National Flood Insurance Program.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	Latah County	Latah County Planning & Building	Latah County Disaster Services	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of

Mitigation Project: Encourage residents to participate in the National Flood Insurance Program.						
						redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 4, 8		Flood		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing						

Mitigation Project: Develop a landslide hazard identification and mitigation program to use as guidance in the development of the Latah County Comprehensive Plan.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	Latah County	Latah County Planning & Building	Latah County Disaster Services, Latah County GIS	Medium	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Mitigation Project: Develop a landslide hazard identification and mitigation program to use as guidance in the development of the Latah County Comprehensive Plan.			
Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 2, 5, 7	Landslide	Medium	HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:			
2025 Status Update: Ongoing			

Mitigation Project: Conduct fuels reduction in local recreational areas and wildlife habitat, such as Spring Valley Reservoir and trailer park or Moose Creek Reservoir and campground, to protect those resources from wildland fire.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	Latah County	Latah County Parks & Recreation	Idaho Department of Lands, Idaho Fish & Game	High	Ongoing	$100,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**

Mitigation Project: Conduct fuels reduction in local recreational areas and wildlife habitat, such as Spring Valley Reservoir and trailer park or Moose Creek Reservoir and campground, to protect those resources from wildland fire.			
1, 6, 8	Wildfire	High	HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:			
2025 Status Update: Ongoing; fuels reduction projects completed at Robinson County Park, Palouse land trust, and Spring Valley Reservoir. $75,000 in funding was used to complete these projects.			

Mitigation Project: Continue to work on action items and proposed projects in Latah County's Community Wildfire Protection Plan.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	Latah County	Latah County Disaster Services	N/A	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**

Mitigation Project: Continue to work on action items and proposed projects in Latah County's Community Wildfire Protection Plan.			
1, 8	Wildfire	High	HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:			
2025 Status Update: Ongoing; CWPP was recently updated as well as the projects			

City of Deary Ongoing Projects

Mitigation Project: Replace aging street infrastructure (cracked and deteriorating) to provide access for emergency vehicles and citizens.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Deary	City of Deary Mayor	Idaho Department of Commerce	Medium	Ongoing	$2,000,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**

Mitigation Project: Replace aging street infrastructure (cracked and deteriorating) to provide access for emergency vehicles and citizens.			
1, 2	All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity	Medium	HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:			
2025 Status Update: Ongoing			

Mitigation Project: Replace blacktop in Nelson Park to prevent everyday hazardous use.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Deary	City of Deary Mayor	Lewis Clark Valley Healthcare Foundation	Medium	Ongoing	$12,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of

Mitigation Project: Replace blacktop in Nelson Park to prevent everyday hazardous use.						
						redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
2		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		Medium		HMGP, IOEM grants, local budget, City of Deary Recreation Fund, Lewis Clark Valley Healthcare Foundation Fasttrack Grant
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing						

Mitigation Project: Maintain city sidewalks to maintain quality of infrastructure and ADA compliance.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Deary	City of Deary Mayor	Local businesses	Low	Ongoing	$250,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that

Mitigation Project: Maintain city sidewalks to maintain quality of infrastructure and ADA compliance.						
						have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		Low		HMGP, IOEM grants, local budget, City Streets Fund, local businesses/donations
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing						

Mitigation Project: Maintain funding to equip all vehicles and emergency apparatus with adequate radios.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)

Mitigation Project: Maintain funding to equip all vehicles and emergency apparatus with adequate radios.						
2020	City of Deary	Deary City Council	Deary Rural Fire District, Fire Chief	Medium	Ongoing	$1,500/year; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 2, 5	All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity	Medium	HMGP, IOEM grants, SHSP grants, local budget

Action/Implementation Plan and Project Description:

2025 Status Update: Ongoing

Mitigation Project: Develop a program that will help identify hazardous materials transported through the city.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Deary	City of Deary Mayor	City of Deary Maintenance Crew	Medium	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 4, 5		Hazardous Materials Incident		Medium		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing; funding for study is still needed						

Mitigation Project: Obtain backup generator for the Community Center, which serves as an emergency shelter and food source during local incidents.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance**	**Projected Completion Date**	**Estimated Cost & Analysis** (Low, Medium, High)

Mitigation Project: Obtain backup generator for the Community Center, which serves as an emergency shelter and food source during local incidents.						
				(Low, Medium, High)	(Short-term, Long-term, or Ongoing)	
2020	City of Deary	City of Deary Mayor	Deary Recreation District	High	Ongoing	$40,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 2, 8	Prolonged Power Outage	High	HMGP, IOEM grants, local budget, recreation & fire district budgets, donated funds

Action/Implementation Plan and Project Description:
2025 Status Update: Ongoing; priority updated from low to high

Mitigation Project: Maintain generator to ensure the functionality of the fire/emergency medical services station during power outages.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)

Mitigation Project: Maintain generator to ensure the functionality of the fire/emergency medical services station during power outages.						
2020	City of Deary	Deary City Council	Deary Rural Fire District, Fire Chief	High	Ongoing	$100/year; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 8		Prolonged Power Outage		High		HMGP, IOEM grants, local budget, private donation
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing						

Mitigation Project: Replace inadequate culverts on Line Street, First Avenue, Second Avenue, Fifth Avenue, Park Street, Reservoir Road, and Sixth Avenue to improve flow and reduce flood damages.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Deary	City of Deary Mayor/Street Commissioners	City of Deary Maintenance Crew	Medium	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost

Mitigation Project: Replace inadequate culverts on Line Street, First Avenue, Second Avenue, Fifth Avenue, Park Street, Reservoir Road, and Sixth Avenue to improve flow and reduce flood damages.						
						associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 2, 8	Flood	Medium	HMGP, IOEM grants, FMA, local budget

Action/Implementation Plan and Project Description:

2025 Status Update: Ongoing; maintenance scheduled annually for the spring to improve water cleanup.

Mitigation Project: Install a culvert at Railroad fill to direct water drainage and prevent flood damage and erosion.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Deary	City of Deary Mayor/Street Commissioners	City of Deary Maintenance Crew	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that

Mitigation Project: Install a culvert at Railroad fill to direct water drainage and prevent flood damage and erosion.						
						have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 8		Flood		High		HMGP, IOEM grants, FMA, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing; priority updated from medium to high						

Mitigation Project: Encourage residents to participate in the National Flood Insurance Program.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Deary	City of Deary Mayor/City Council	City of Deary Maintenance Crew	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier

Mitigation Project: Encourage residents to participate in the National Flood Insurance Program.						
						time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 4, 5, 8		Flood		High		HMGP, IOEM grants, FMA, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing						

Mitigation Project: Work with local organizations and the Red Cross to identify and equip adequate emergency shelters.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Deary	City of Deary Mayor	American Red Cross, City of Deary Maintenance Crew	Low	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of

Mitigation Project: Work with local organizations and the Red Cross to identify and equip adequate emergency shelters.						
						redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 3, 5		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		Low		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing						

Mitigation Project: Continue to work on action items and proposed projects in the Latah County Wildfire Protection Plan.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Deary	City of Deary Mayor	Latah County Disaster Services	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that

Mitigation Project: Continue to work on action items and proposed projects in the Latah County Wildfire Protection Plan.						
						have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 8		Wildfire		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing						

City of Genesee Ongoing Projects

Mitigation Project: Enforce existing land use and development policies to reduce residents' exposure to hazards.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Genesee	City of Genesee	Genesee Planning & Zoning	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the

Mitigation Project: Enforce existing land use and development policies to reduce residents' exposure to hazards.						
						critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 7		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing						

Mitigation Project: Replace manual pumping from sanitary sewer lift station to sewer lagoon with a backup power supply to prevent raw sewage overflow/spillage.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Genesee	City of Genesee	FEMA	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost

Mitigation Project: Replace manual pumping from sanitary sewer lift station to sewer lagoon with a backup power supply to prevent raw sewage overflow/spillage.						
						associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 2, 8	Prolonged Power Outage	High	HMGP, IOEM grants, local budget, Genesee sewer fund

Action/Implementation Plan and Project Description:

2025 Status Update: New sewer system will be completed summer 2025

Mitigation Project: Raise the Chestnut Street bridge to prevent upstream flooding from Cow Creek.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Genesee	City of Genesee	FEMA	High	Ongoing	$475,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that

Mitigation Project: Raise the Chestnut Street bridge to prevent upstream flooding from Cow Creek.						
						have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 8		Flood		High		HMGP, IOEM grants, FMA, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing; funding has become an issue for this project						

Mitigation Project: Clean and widen Cow Creek above the ordinary high water mark for increased flood capacity to prevent flooding within city limits.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Genesee	City of Genesee	N/A	High	Ongoing	$5,000/year; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community

Mitigation Project: Clean and widen Cow Creek above the ordinary high water mark for increased flood capacity to prevent flooding within city limits.						
						will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 8		Flood		High		HMGP, IOEM grants, FMA, local budget, stormwater budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing						

Mitigation Project: Encourage residents to participate in the National Flood Insurance Program.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Genesee	City of Genesee	Latah County Disaster Services	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of

Mitigation Project: Encourage residents to participate in the National Flood Insurance Program.						
						redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 3, 4, 5, 8		Flood		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing						

Mitigation Project: Conduct a stability assessment of Cow Creek from Highway 95 to Genesee and implement projects that will address chronic flooding issues.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Genesee	City of Genesee	City of Genesee Maintenance Crew	High	Ongoing	$15,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Mitigation Project: Conduct a stability assessment of Cow Creek from Highway 95 to Genesee and implement projects that will address chronic flooding issues.			
Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 2, 8	Flood	High	HMGP, IOEM grants, FMA, local budget
Action/Implementation Plan and Project Description:			
2025 Status Update: Project will be completed in summer 2025.			

Mitigation Project: Continue to work on action items and proposed projects in the Latah County Wildfire Protection Plan.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Genesee	City of Genesee	Latah County Disaster Services	Low	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**

Mitigation Project: Continue to work on action items and proposed projects in the Latah County Wildfire Protection Plan.			
1, 5, 8	Wildfire	Low	HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:			
2025 Status Update: Ongoing			

City of Moscow Ongoing Projects

Mitigation Project: Capital Improvement Project—Replace inadequate/undersized wastewater (sewer) collection infrastructure.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Moscow	City of Moscow	Idaho Department of Environmental Quality, IDOC	High	Ongoing	$1,200,000-1,500,000/project; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**

Mitigation Project: Capital Improvement Project—Replace inadequate/undersized wastewater (sewer) collection infrastructure.			
2	All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity	High	HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:			
2025 Status Update: Updated in 2025; Sewer Mains: Hwy 8 – Harrison St, University Heights, Blaine St, Hwy 95 & S Main St, Morton St & W Van Buren St, N Main St – N Polk St			

Mitigation Project: Capital Improvement Project—Replace inadequate/undersized wastewater (sewer) lift station infrastructure.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Moscow	City of Moscow	Idaho Department of Environmental Quality, IDOC	High	Ongoing	$900,000-1,300,000/project; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation

Mitigation Project: Capital Improvement Project—Replace inadequate/undersized wastewater (sewer) lift station infrastructure.						
						capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
2		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Updated in 2025; Sewer Lift Stations: Palouse Mall and Southeast Moscow (Palouse River Dr & Hwy 95)						

Mitigation Project: Capital Improvement Project—Replace inadequate/undersized wastewater (sewer) infrastructure at Water Reuse & Reclamation facility.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Moscow	City of Moscow	Idaho Department of Environmental Quality, IDOC	High	Ongoing	$1,300,000-5,600,000/project; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be

Mitigation Project: Capital Improvement Project—Replace inadequate/undersized wastewater (sewer) infrastructure at Water Reuse & Reclamation facility.						
						required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
2		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Updated in 2025; Screw Pumps, Ultraviolet Treatment, Effluent Filtration, Filter Cover Phase IV, Biological Treatment, Reaeration Systems						

Mitigation Project: Capital Improvement Project—Replace inadequate/undersized water transmission line infrastructure.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)

Mitigation Project: Capital Improvement Project—Replace inadequate/undersized water transmission line infrastructure.						
2020	City of Moscow	City of Moscow	Idaho Department of Environmental Quality, IDOC	High	Ongoing	$300,000-1,200,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
2	All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity	High	HMGP, IOEM grants, local budget

Action/Implementation Plan and Project Description:

2025 Status Update: Updated in 2025; Downtown Transmission Phase 3 and 4: “A” Street Phase 3 and 4

Mitigation Project: Capital Improvement Project—Replace inadequate/undersized water well infrastructure on Well No. 8.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Moscow	City of Moscow	Idaho Department of Environmental Quality, IDOC	High	Ongoing	$1,300,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
2		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Updated in 2025						

Mitigation Project: Capital Improvement Project—Replace inadequate/undersized water well infrastructure on Well No. 9.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Moscow	City of Moscow	Idaho Department of Environmental Quality, IDOC	High	Ongoing	$1,800,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
2		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Updated in 2025						

Mitigation Project: Capital Improvement Project—Replace inadequate/undersized water distribution infrastructure.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Moscow	City of Moscow	Idaho Department of Environmental Quality, IDOC	High	Ongoing	$1,000,000-1,300,000/project; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
2	All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity	High	HMGP, IOEM grants, local budget

Action/Implementation Plan and Project Description:

2025 Status Update: Updated in 2025; East “E” Street, South Moscow (Palouse River Dr & Hwy 95)

Mitigation Project: Capital Improvement Project—Replace inadequate/undersized water main line infrastructure.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Moscow	City of Moscow	Idaho Department of Environmental Quality, IDOC	High	Ongoing	$300,000-1,000,000/project; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
2		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		High		HMGP, IOEM grants, local budget

Mitigation Project: Capital Improvement Project—Replace inadequate/undersized water main line infrastructure.
Action/Implementation Plan and Project Description:
2025 Status Update: Updated in 2025; Camas St (2025), Mtn View Rd/Hwy 8 (2026), S Hayes St (2029)

Mitigation Project: Capital Improvement Project—Replace inadequate/damaged city streets to prevent further deterioration as part of the Pavement Management Program.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Moscow	City of Moscow	Idaho Department of Environmental Quality, IDOC	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 2	All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure	High	HMGP, IOEM grants, local budget

Mitigation Project: Capital Improvement Project—Replace inadequate/damaged city streets to prevent further deterioration as part of the Pavement Management Program.			
	Drought Earthquake Landslide Volcanic Activity		
Action/Implementation Plan and Project Description:			
2025 Status Update: Updated in 2025; citywide			

Mitigation Project: Create/construct damage-proof secure area for city historic and public records, and scan all public records for creating redundant digital storage.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Moscow	City of Moscow	N/A	Medium	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**

Mitigation Project: Create/construct damage-proof secure area for city historic and public records, and scan all public records for creating redundant digital storage.			
2, 6	All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity	Medium	HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:			
2025 Status Update: Updated in 2025; City Hall, Police & Fire Departments, Haddock & Paul Mann buildings, Public Works facilities			

Mitigation Project: Purchase and install emergency generators for Orchard Lift Station to ensure continuous operation of critical life-safety systems and equipment during power outage.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Moscow	City of Moscow	FEMA, IDEQ	High	Ongoing	$100,000/project; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant

Mitigation Project: Purchase and install emergency generators for Orchard Lift Station to ensure continuous operation of critical life-safety systems and equipment during power outage.						
						power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 8		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Updated in 2025						

Mitigation Project: Purchase and install emergency power generator for new City Shop Facility (Command Post site) to protect against flooding, storms, and the power fuel system.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Moscow	City of Moscow	N/A	Medium	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that

Mitigation Project: Purchase and install emergency power generator for new City Shop Facility (Command Post site) to protect against flooding, storms, and the power fuel system.						
						have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 8		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		Medium		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Updated in 2025; to be completed 2025/2026 on 650 N Van Buren St						

Mitigation Project: Purchase and install emergency dual power generator with enhanced filtration system for HVAC for the emergency shelter at Hamilton-Lowe Indoor Recreation Center.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)

Mitigation Project: Purchase and install emergency dual power generator with enhanced filtration system for HVAC for the emergency shelter at Hamilton-Lowe Indoor Recreation Center.						
2020	City of Moscow	City of Moscow	FEMA	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 2, 8	All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity	High	HMGP, IOEM grants, local budget

Action/Implementation Plan and Project Description:

2025 Status Update: Updated in 2025; located at 830 N Mountain View Rd

Mitigation Project: Enforce existing development policies and land use ordinances, including floodplain restrictions, to reduce citizens' exposure to hazards.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance**	**Projected Completion Date**	**Estimated Cost & Analysis** (Low, Medium, High)

Mitigation Project: Enforce existing development policies and land use ordinances, including floodplain restrictions, to reduce citizens' exposure to hazards.						
				(Low, Medium, High)	(Short-term, Long-term, or Ongoing)	
2020	City of Moscow	City of Moscow	N/A	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 5, 7, 8	Flood	High	HMGP, IOEM grants, local budget

Action/Implementation Plan and Project Description:
2025 Status Update: Updated in 2025

Mitigation Project: Encourage residents of Moscow to participate in the NFIP.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)

Mitigation Project: Encourage residents of Moscow to participate in the NFIP.						
2020	City of Moscow	City of Moscow	Latah County Disaster Services, FEMA	Medium	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 4, 5, 8		Flood		Medium		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Updated in 2025						

Mitigation Project: Floodproof Water Reclamation & Reuse Facility to prevent damage during high-flow flood events.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Moscow	City of Moscow	IDEQ	Medium	Ongoing	$250,000; The total cost of this action item is highly dependent on the community. The primary

Mitigation Project: Floodproof Water Reclamation & Reuse Facility to prevent damage during high-flow flood events.						
						cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 8		Flood		Medium		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Updated in 2025; located at 2221 W Pullman Rd						

Mitigation Project: Identify high risk infrastructure in need of replacement, and develop a plan to reduce sewer inflow and infiltration (I & I) during flooding events.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Moscow	City of Moscow	IDEQ	High	Ongoing	$1,000,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that

Mitigation Project: Identify high risk infrastructure in need of replacement, and develop a plan to reduce sewer inflow and infiltration (I & I) during flooding events.						
						have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
2, 8		Flood		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Updated in 2025; citywide						

Mitigation Project: Identify locations and acquire easements to develop access points to provide maintenance, drainage, and emergency repair of facilities at Paradise and Hogg Creeks.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Moscow	City of Moscow	IOEM/FEMA	Medium	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier

Mitigation Project: Identify locations and acquire easements to develop access points to provide maintenance, drainage, and emergency repair of facilities at Paradise and Hogg Creeks.						
						time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
2, 8		Flood		Medium		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Updated in 2025; citywide and adjacent to Paradise and Hogg Creeks						

Mitigation Project: Prepare and distribute Emergency Operations Plan (EOP) for severe weather events.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Moscow	City of Moscow	Local utility companies	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of

Mitigation Project: Prepare and distribute Emergency Operations Plan (EOP) for severe weather events.						
						redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 4, 5		Severe Summer Weather Severe Winter Weather		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Updated in 2025; to be completed by in-house city staff						

Mitigation Project: Update Supervisory Control and Data Acquisition (SCADA) system to monitor and control public utility systems. Update software annually to maintain system controls.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Moscow	City of Moscow	N/A	Medium	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Mitigation Project: Update Supervisory Control and Data Acquisition (SCADA) system to monitor and control public utility systems. Update software annually to maintain system controls.			
Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
2, 5	Cybersecurity Incident	Medium	HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:			
2025 Status Update: Updated in 2025; citywide			

Mitigation Project: Build fiber to utility sites to prevent SCADA shutdown from cellular network outage.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Moscow	City of Moscow	N/A	Medium	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**

Mitigation Project: Build fiber to utility sites to prevent SCADA shutdown from cellular network outage.			
2, 5	Cybersecurity Incident	Medium	HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:			
2025 Status Update: Updated in 2025; complete on well sites, booster, and lift stations			

Mitigation Project: Purchase and install security systems at all critical governmental facilities.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Moscow	City of Moscow	DOJ	Medium	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 5, 6		Cybersecurity Incident		Medium		HMGP, IOEM grants, local budget

Mitigation Project: Purchase and install security systems at all critical governmental facilities.
Action/Implementation Plan and Project Description:
2025 Status Update: Updated in 2025; city-owned facilities

Mitigation Project: Remodel outdated training facility for the Moscow Voluntary Fire Department for Fire Station No. 2 and surrounding mutual aid agencies.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Moscow	City of Moscow	Moscow Volunteer Fire Department, Regional Emergency Service Agencies, Assistance to Firefighters Grants	Low	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 5		Wildfire		Low		HMGP, IOEM grants, AFG, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Updated in 2025						

Mitigation Project: Expand and renovate firefighter/paramedic living/sleeping quarters at Fire Station No. 2 to improve response times and capacity.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Moscow	City of Moscow	Moscow Volunteer Fire Department, Volunteer Ambulance	Medium	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 5		Wildfire		Medium		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Updated in 2025						

Mitigation Project: Implement Latah County Community Wildfire Protection Plan action items.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Moscow	City of Moscow	Moscow Volunteer Fire Department, Latah County Disaster Services, various Latah County partners	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 4, 5		Wildfire		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Updated in 2025						

City of Potlatch Ongoing Projects

Mitigation Project: Upgrade bypass pipe booster station from Maple Street to the East city limit.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Potlatch	Potlatch City Council	City of Potlatch Public Works	High	Ongoing	$50,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
2		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						

Mitigation Project: Upgrade bypass pipe booster station from Maple Street to the East city limit.
2025 Status Update: Ongoing

Mitigation Project: Upgrade Ridge well pipes.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Potlatch	Potlatch City Council	City of Potlatch Public Works	Medium	Ongoing	$50,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
2	All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake	Medium	HMGP, IOEM grants, local budget

Mitigation Project: Upgrade Ridge well pipes.			
	Landslide Volcanic Activity		
Action/Implementation Plan and Project Description:			
2025 Status Update: Ongoing			

Mitigation Project: Upgrade sewer pipe from Maple Street.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Potlatch	Potlatch City Council	City of Potlach Public Works	Low	Ongoing	$10,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
2		All Hazards Severe Summer Weather Severe Winter Weather		Low		HMGP, IOEM grants, local budget

Mitigation Project: Upgrade sewer pipe from Maple Street.			
	Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		
Action/Implementation Plan and Project Description:			
2025 Status Update: Ongoing			

Mitigation Project: Enforce existing land use and development policies to reduce residents' exposure to hazards.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Potlatch	Potlatch City Council	City of Potlatch Planning & Zoning	Low	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis**		**Potential Funding Source(s)**

Mitigation Project: Enforce existing land use and development policies to reduce residents' exposure to hazards.			
		(Low, Medium, High)	
1, 7	All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity	Low	HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:			
2025 Status Update: Ongoing			

Mitigation Project: Develop a program to work with partners to help identify hazardous material transported through the city.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Potlatch	Potlatch City Council	Idaho Transportation Department	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation

Mitigation Project: Develop a program to work with partners to help identify hazardous material transported through the city.						
						capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 5		Hazardous Materials Incident		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing						

Mitigation Project: Work with Potlatch Rural Fire Department to educate homeowners about smoke alarms and fire extinguishers in the home.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Potlatch	Potlatch City Council	Potlatch Rural Fire District	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Mitigation Project: Work with Potlatch Rural Fire Department to educate homeowners about smoke alarms and fire extinguishers in the home.			
Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 4	Wildfire	High	HMGP, IOEM grants, local budget, American Red Cross
Action/Implementation Plan and Project Description:			
2025 Status Update: Ongoing			

Mitigation Project: Obtain a portable generator for the Ridge well.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Potlatch	Potlatch City Council	City of Potlatch Public Works	High	Ongoing	$10,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**

Mitigation Project: Obtain a portable generator for the Ridge well.			
1, 2, 8	Prolonged Power Outage	High	HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:			
2025 Status Update: Ongoing			

Mitigation Project: Obtain funding for additional generators to power the sewer and water infrastructure during a power outage.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Potlatch	Potlatch City Council	City of Potlatch Public Works	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 8		Prolonged Power Outage		High		HMGP, IOEM grants, local budget

Mitigation Project: Obtain funding for additional generators to power the sewer and water infrastructure during a power outage.
Action/Implementation Plan and Project Description:
2025 Status Update: Ongoing; lift station and reservoir currently have one generator

Mitigation Project: Obtain funding to construct stormwater mitigation infrastructure throughout the city of Potlatch.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Potlatch	Potlatch City Council	N/A	Low	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 8		Flood		Low		HMGP, IOEM grants, FMA, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing						

Mitigation Project: Encourage residents to participate in the National Flood Insurance Program.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Potlatch	Potlatch City Council	Latah County Disaster Services	Low	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 4, 5, 8		Flood		Low		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing						

Mitigation Project: Improve response capability by providing storage of sand and sandbags within the city of Potlatch.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)
2020	City of Potlatch	Potlatch City Council	Potlatch Rural Fire District	Low	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 2, 8	Flood	Low	HMGP, IOEM grants, local budget

Action/Implementation Plan and Project Description:
2025 Status Update: Ongoing

Mitigation Project: Work with local planners, engineers, and developers to ensure lands being considered for annexation in the floodplain is developed responsibly.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance**	**Projected Completion Date**	**Estimated Cost & Analysis** (Low, Medium, High)

Mitigation Project: Work with local planners, engineers, and developers to ensure lands being considered for annexation in the floodplain is developed responsibly.						
				(Low, Medium, High)	(Short-term, Long-term, or Ongoing)	
2020	City of Potlatch	Potlatch City Council	City of Potlach Planning & Zoning	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.

Applicable Goal(s)	**Hazard(s) Mitigated**	**Benefit Analysis** (Low, Medium, High)	**Potential Funding Source(s)**
1, 7	Flood	High	HMGP, IOEM grants, FMA, local budget

Action/Implementation Plan and Project Description:

2025 Status Update: Ongoing; no lands in floodplain are currently being considered for annexation

Mitigation Project: Improve the emergency shelter capacity of the Potlatch Senior Center, Community Center, and Depot building.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)

Mitigation Project: Improve the emergency shelter capacity of the Potlatch Senior Center, Community Center, and Depot building.						
2020	City of Potlatch	Potlatch City Council	N/A	Medium	Ongoing	$20,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 3, 5		All Hazards Severe Summer Weather Severe Winter Weather Wildfire Flood Dam Failure Drought Earthquake Landslide Volcanic Activity		Medium		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing; generator is needed; Community Center and Depot building added to project						

Mitigation Project: Obtain a dedicated backup server for the city of Potlatch.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance**	**Projected Completion Date**	**Estimated Cost & Analysis** (Low, Medium, High)

Mitigation Project: Obtain a dedicated backup server for the city of Potlatch.						
				(Low, Medium, High)	(Short-term, Long-term, or Ongoing)	
2020	City of Potlatch	Potlatch City Council	N/A	High	Ongoing	$5,000; The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 2, 8		Cybersecurity Incident		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing						

Mitigation Project: Continue to work on action items and proposed projects in the Latah County Wildfire Protection Plan.						
Year Initiated	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Supporting Agencies/ Organizations**	**Priority and Level of Importance** (Low, Medium, High)	**Projected Completion Date** (Short-term, Long-term, or Ongoing)	**Estimated Cost & Analysis** (Low, Medium, High)

Mitigation Project: Continue to work on action items and proposed projects in the Latah County Wildfire Protection Plan.						
2020	City of Potlatch	Potlatch City Council	Latah County Disaster Services	High	Ongoing	The total cost of this action item is highly dependent on the community. The primary cost associated with this action item is the staff time that will be required. Communities that have a greater awareness of the critical facilities within their community will have an easier time verifying backup generation capabilities. Implementation of redundant power and the cost to do so will vary.
Applicable Goal(s)		**Hazard(s) Mitigated**		**Benefit Analysis** (Low, Medium, High)		**Potential Funding Source(s)**
1, 8		Wildfire		High		HMGP, IOEM grants, local budget
Action/Implementation Plan and Project Description:						
2025 Status Update: Ongoing; city is increasingly concerned about wildfire and is considering developing its own CWPP						

21.2.3 Completed/Removed Mitigation Projects

Table 21-1. Completed Mitigation Projects

COMPLETED/REMOVED MITIGATION PROJECTS						
Mitigation Project	**Year Initiated**	**Applicable Jurisdiction**	**Lead Agency/ Organization**	**Priority** (Low, Medium, High)	**Status**	**Hazard(s) Mitigated**
Latah County (County-Led)						

COMPLETED/REMOVED MITIGATION PROJECTS						
Purchase a public warning system that includes all methods of communication (text notifications, email, etc.) to aid advance public warning of events or incidents occurring within the county.	2020	Latah County	Latah County Disaster Services, Everbridge	Medium	Completed	All Hazards
Develop WIFI and Internet services at the Latah County Fairgrounds as part of an Emergency Operations Center upgrade.	2020	Latah County	Latah County ITS, Latah County Fair board, First Step Internet Service	High	Completed	All Hazards
Create an Emergency Backup Dispatch POD for the Latah County Sheriff's Office at the Fairgrounds with installation of a fiber line to provide communications redundancy for local law enforcement, fire, and EMS that are dispatched by the Latah County Sheriff's Office.	2020	Latah County	Latah County ITS, City of Moscow	Medium	Removed	All Hazards
Bring Potlatch Junction levee to U.S. Army Corps of Engineers' standards to protect U.S. Highway 95, local businesses, homes, and a mobile home park. Also note and plan for special temporary vulnerability that could occur during nearby bridge construction in 2020-21.	2020	Latah County	Latah County Disaster Services, U.S. Army Corps of Engineers	Low	Removed	Flood
Develop a site-specific plan for addressing flood fighting	2020	Latah County	City of Potlatch, ITD, U.S. Army Corps of Engineers	Medium	Removed	Flood

COMPLETED/REMOVED MITIGATION PROJECTS						
activities along the Potlatch Junction levee.						
City of Deary						
Replace city park bathroom, which is past its useful life (in disrepair) and non-ADA compliant, to prevent everyday hazardous use.	2020	City of Deary	City of Deary, Idaho Department of Commerce	High	Completed	All Hazards
Upgrade city water infrastructure by replacing the backup well and other water system elements.	2020	City of Deary	City of Deary Mayor/Water Commissioners, Mountain Waterworks	High	Completed	Flood Drought
Maintain funding for a utility trailer to haul the Search and Rescue 4-wheeler and rescue boggan.	2020	City of Deary	Deary City Council, Deary Rural Fire District, Fire Chief	Moderate	Completed	All Hazards
Obtain backup generator for water wells to have the ability to produce water in case of power outage.	2020	City of Deary	City of Deary Mayor/Water Commissioners, Idaho Rural Water	Low	Completed	Prolonged Power Outage
Replace culvert at entrance to city wells to prevent loss of access during flood events.	2020	City of Deary	City of Deary Water Commissioners, FEMA, IOEM	High	Completed	Flood
City of Moscow						
Update aging emergency radio communication system to improve city radio coverage and interagency communications.	2020	City of Moscow	City of Moscow, area emergency response agencies	High	Completed	All Hazards
Update radio repeater infrastructure.	2020	City of Moscow	City of Moscow, Moscow Police & Volunteer Fire Departments	High	Completed	All Hazards

COMPLETED/REMOVED MITIGATION PROJECTS						
Replace mobile and portable radios that are beyond their useful life.	2020	City of Moscow	City of Moscow, Volunteer Fire Departments	High	Completed	All Hazards
Replace three aging water booster stations including installation of backup power generator to meet fire flow requirements and continuity of fire protection during power outage.	2020	City of Moscow	City of Moscow	High	Completed	Prolonged Power Outage
Assess and develop a plan to fund the upsizing or replacement of culverts and bridge infrastructure that are substandard, deteriorating, or are an obstruction during floods.	2020	City of Moscow	City of Moscow, IOEM, FEMA	High	Completed	Flood

PART V: PLAN MAINTENANCE

CHAPTER 22 PLAN MAINTENANCE

The Latah County Multi-Jurisdictional All Hazard Mitigation Plan (AHMP) maintenance process includes a schedule for annual monitoring and evaluation of the programmatic outcomes established in the plan and for producing a formal plan revision every five years.

22.1 FORMAL REVIEW PROCESS

The plan may be reviewed on an annual basis by the Disaster Services Coordinator and reviewed and revised every five years by the local hazard mitigation planning team, which is comprised of representatives from the Latah County Local Emergency Planning Committee (LEPC). The Latah County local hazard mitigation planning team will determine the effectiveness of programs and reflect changes that may affect mitigation priorities. The Disaster Services Coordinator will be responsible for contacting the local hazard mitigation planning team members and organizing the review. The local hazard mitigation planning team members will be responsible for monitoring and evaluating the progress of the mitigation strategies in the plan. The team will review the goals and action items to determine their relevance to changing situations in the county, as well as changes in federal policy, and to ensure they are addressing current and expected conditions. The local hazard mitigation planning team will also review the risk assessment portion of the plan to determine if this information should be updated or modified, given any new available data. The organizations responsible for the various action items will report on the status of the projects, the success of various implementation processes, difficulties encountered, success of coordination efforts, and which strategies should be revised or removed.

The Disaster Services Coordinator will be responsible for ensuring the updating of the plan. The Disaster Services Coordinator will also notify all holders of the plan and affected stakeholders when changes have been made. Every five years the updated plan will be submitted to the Idaho Office of Emergency Management and to the Federal Emergency Management Agency for review and approval.

22.2 CONTINUED PUBLIC INVOLVEMENT

Latah County Department of Disaster Services is dedicated to involving the public directly in the review and updates of the plan. The Disaster Services Coordinator is responsible for the review and update of the plan. The public will also have the opportunity to provide input into plan revisions and updates, as well as adjacent counties. Copies of the plan will be kept by appropriate county departments and outside agencies.

Public meetings will be held when deemed necessary by the Disaster Services Coordinator. The meetings will provide a forum where the public can express concerns, opinions, or new alternatives that can then be included in the plan. The Latah County Commission will be responsible for using county resources to publicize the public meetings and maintain public

involvement, including in the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts (North Latah County Highway District, South Latah Highway District, Bovill Fire Protection District, Deary Rural Fire District, Genesee Rural Fire Protection District, Moscow Rural Fire District, Potlatch Rural Fire District, and Troy Rural Fire District).

To further facilitate continued public involvement in the planning process, Latah County will ensure that:

- Latah County Department of Disaster Services will keep a copy of the plan on hand at their office for review and comment by the public.
- A public meeting will be held annually to provide the public with a forum for discussing concerns, opinions, and ideas with the local hazard mitigation planning team.

22.3 MONITORING, EVALUATING, & UPDATING THE PLAN

To ensure the Latah County Multi-Jurisdictional All Hazard Mitigation Plan continues to provide an appropriate path for risk reduction throughout the county, it is necessary to regularly evaluate and update it. Latah County Department of Disaster Services will be responsible for monitoring the status of the plan and gathering appropriate parties to report the status of mitigation actions. The local hazard mitigation planning team, with members from each participating jurisdiction, will convene on an annual basis to determine the progress of the identified mitigation actions. The team will also be an active participant in the next plan update.

As the County AHMP matures, new stakeholders will be identified and encouraged to join the existing local hazard mitigation planning team. Additionally, the planning team reserves the right to include stakeholder communities such as Onaway, Princeton, Harvard, and Helmer—treated as unincorporated for planning purposes—in future plan updates as participating jurisdictions if they become eligible and express interest. The committee will work to facilitate their incorporation through coordinated efforts.

The Latah County Department of Disaster Services is responsible for contacting the local hazard mitigation planning team members and organizing the annual meeting. The local hazard mitigation planning team's responsibilities include:

- Annually review each goal and objective to determine its relevance and appropriateness.
- Monitor and evaluate the mitigation strategies in this plan to ensure the document reflects current hazard analyses, development trends, code changes, and risk analyses and perceptions.
- Ensure the appropriate implementation of annual status reports and regular maintenance of the plan. The local hazard mitigation planning team will hear progress

reports from the parties responsible for the various implementation actions to monitor progress.

- Create future action plans and mitigation strategies. These should be carefully assessed and prioritized using the benefit-cost analysis (BCA) methodology that FEMA has developed.
- Ensure the public is invited to comment and be involved in mitigation plan updates.
- Ensure the county complies with all applicable federal statutes and regulations during the periods for which it receives grant funding, in compliance with 44 CFR.
- Reassess the plan in light of any major hazard event. The local hazard mitigation planning team will convene within 45 days of any major event to review all applicable data and to consider the risk assessment, plan goals, objectives, and action items given the impact of the hazard event.
- Review the hazard mitigation plan in connection to other plans, projects, developments, and other significant initiatives.
- Coordinate with appropriate municipalities and authorities to incorporate regional initiatives that transcend the boundaries of the county.
- Update the plan every five years, and submit for FEMA approval.
- Amend the plan whenever necessary to reflect changes in state or federal laws and statutes required in 44 CFR.

22.4 THE FIVE-YEAR ACTION PLAN

This section outlines the implementation agenda that the local hazard mitigation planning team should follow five years following adoption of this plan and then every five years thereafter. The local hazard mitigation planning team, led by the Latah County Department of Disaster Services and including the jurisdictions of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, Troy, and all participating special districts (North Latah County Highway District, South Latah Highway District, Bovill Fire Protection District, Deary Rural Fire District, Genesee Rural Fire Protection District, Moscow Rural Fire District, Potlatch Rural Fire District, and Troy Rural Fire District), is responsible for ensuring the All Hazard Mitigation Plan is updated every five years.

The local hazard mitigation planning team will consider the following an action plan for the first five-year planning cycle. It should be noted that the schedule below can be modified, as necessary, and does not include any meetings and/or activities that would be necessary following a disaster event (which would include reconvening the team within 45 days of a disaster or emergency to determine what mitigation projects should be prioritized during the community recovery). If an emergency meeting of the local hazard mitigation planning team occurs, this proposed schedule may be altered to fit any new needs.

Year 0

- 2025: Update All Hazard Mitigation Plan, including a series of meetings and public meetings. Submit 2025 Multi-Jurisdictional All Hazard Mitigation Plan for FEMA approval.
- Fall 2025: Work on mitigation actions. Latah County Department of Disaster Services to stay in contact with lead departments to keep tabs on project status.

Year 1

- January 2026 – December 2026: Work on mitigation actions. Latah County Department of Disaster Services to stay in contact with lead departments to keep tabs on project status. Encourage plan integration efforts.
- Fall 2026: Reconvene the local hazard mitigation planning team for the annual meeting. Discuss opportunities for mitigation plan integration with other planning documents. Discuss recent hazards. Update status of projects. Host public meeting.

Year 2

- January 2027 – December 2027: Work on mitigation actions. Latah County Department of Disaster Services to stay in contact with lead departments to keep tabs on project status. Encourage plan integration efforts.
- Fall 2027: Reconvene the local hazard mitigation planning team for the annual meeting. Discuss opportunities for mitigation plan integration with other planning documents. Discuss recent hazards. Update status of projects. Host public meeting.

Year 3

- January 2028 – December 2028: Work on mitigation actions. Latah County Department of Disaster Services to stay in contact with lead departments to keep tabs on project status. Encourage plan integration efforts.
- Fall 2028: Reconvene the local hazard mitigation planning team for the annual meeting. Discuss opportunities for mitigation plan integration with other planning documents. Discuss recent hazards. Update status of projects. Host public meeting.
- Fall 2028: Apply for Building Resilient Infrastructure and Communities or Hazard Mitigation Grant Program funds to update the next iteration of the mitigation plan.

Year 4

- January 2029 – December 2029: Work on mitigation actions. Latah County Department of Disaster Services to stay in contact with lead departments to keep tabs on project status. Encourage plan integration efforts. Update 2025 Latah County Multi-Jurisdictional All Hazard Mitigation Plan, including a series of meetings and public meetings.

- Fall 2029: Reconvene the local hazard mitigation planning team for the annual meeting. Discuss opportunities for mitigation plan integration with other planning documents. Discuss recent hazards. Update the status of projects.

Year 5

- Spring/Summer 2030: Submit 2030 Latah County Multi-Jurisdictional All Hazard Mitigation Plan for FEMA approval. Repeat.

22.5 ANNUAL LOCAL EMERGENCY PLANNING COMMITTEE MEETINGS

During each annual local hazard mitigation planning team meeting, the team will be responsible for a brief evaluation of the 2025 All Hazard Mitigation Plan and review the progress of mitigation actions.

22.5.1 Plan Evaluation

To evaluate the plan, the local hazard mitigation planning team should answer the following questions:

- Are the goals still relevant?
- Is the risk assessment still appropriate, or has the nature of the hazards and/or vulnerabilities changed over time?
- Are current resources appropriate for implementing this plan?
- Have lead agencies participated as originally proposed?
- Has the public been adequately involved in the process? Are their comments being heard?
- Have departments been integrating mitigation into their planning documents?

If the answer to each of the above questions is “yes,” the plan evaluation is complete. If any questions are answered with a “no,” the identified gap must be addressed.

22.5.2 Review of Mitigation Actions

Once the plan evaluation is complete, the local hazard mitigation planning team must review the status of the mitigation actions. To do so, the team should answer the following questions:

- Have the mitigation actions been implemented as planned?
- Have outcomes been adequate?
- What problems have occurred in the implementation process?

22.5.3 Meeting Documentation

Each annual meeting must be documented, including the plan evaluation and review of mitigation actions. Mitigation actions have been formatted to facilitate the annual review process.

22.6 IMPLEMENTATION THROUGH EXISTING PROGRAMS

Hazard mitigation practices must be incorporated within existing plans, projects, and programs. Therefore, the involvement of all departments in Latah County; the cities of Bovill, Deary, Genesee, Juliaetta, Kendrick, Moscow, Potlatch, and Troy; the special participating districts of North Latah County Highway District, South Latah Highway District, Bovill Fire Protection District, Deary Rural Fire District, Genesee Rural Fire Protection District, Moscow Rural Fire District, Potlatch Rural Fire District, and Troy Rural Fire District; private non-profits; private industry; and other appropriate jurisdictions is necessary in order to find mitigation opportunities within existing or planned projects and programs. To execute this, Latah County Department of Disaster Services will assist and coordinate resources for the mitigation actions and provide strategic outreach to implement mitigation actions that meet the goals and objectives identified in this plan.

Refer to the *Capability Assessment* chapter for a breakdown of each participating agency within the county and their respective programs, plans, policies, regulations, funding, and practices that will be reviewed regularly along with this hazard mitigation plan. When each document listed in the aforementioned tables is updated, the mitigation plan will also be updated. The reverse is also true. The *Capability Assessment* tables also display how the mitigation plan has already been integrated into each jurisdiction’s plans, projects, and programs.

APPENDIX

APPENDIX A: LEPC, PLANNING TEAM, & PARTICIPATING MEMBERS CONTACT LIST

Representative	Agency	Position	Email
Steve Risken	Latah County Disaster Services	Coordinator; LEPC Secretary	srisken@latahcountyid.gov
Tom Lamar	Latah County Board of Commissioners	Chair, District II	tom@tomlamar.org
Tony Johnson	Latah County Board of Commissioners	Commissioner, District I	Johnson4lcc@gmail.com
Jason Stooks	Latah County Board of Commissioners	Commissioner, District III	info@jasonforlatah.com
John Bohman	Latah County Board of Commissioners	Commissioner	Jbohman19@gmail.com
Dave Glasebrook	LEPC	Chair	DaveGlasebrook@netscape.net
Chris Blankenship	Latah County Planning & Building	Associate Planner	cblankenship@latahcountyid.gov
Laurel Caldwell	Latah County ITS	Chief Information Officer	LCaldwell@LatahCountyID.gov
Austin Cole	Latah County ITS	Deputy IT Director/CISO; LEPC Vice-Chair	acole@latahcountyid.gov
Richie Skiles	Latah County Sheriff's Office	Sheriff	rskiles@latahcountyid.gov
Tim Besst	Latah County Sheriff's Office	Chief Deputy	TBesst@latahcountyid.gov>
Alan Martinson	Latah County Noxious Weed Control	Noxious Weed Superintendent	amartinson@latahcountyid.gov
Will Stokes	City of Bovill	Mayor	Bovillmayor@gmail.com
Jason Johnson	City of Deary	Mayor	Jason.Johnson@avistacorp.com
Tim Jones	Deary Rural Fire District	Deputy Fire Chief	chieftjjones@yahoo.com
John Hermann	City of Genesee	Mayor	gfd@genesee-id.com
Debi Zenner	City of Genesee	Deputy Clerk/Treasurer	debi@cityofgenesee.com
Nick Anderson	City of Juliaetta	Mayor	cityofjuliaetta@tds.net
Mike McGee	Juliaetta Volunteer Fire Department	Fire Chief	juliaettafire@gmail.com
Rose Norris	City of Kendrick	Mayor	ivrnorro@tds.net
Val Norris	Kendrick Volunteer Fire Department	Fire Chief	kendrickfirevol@gmail.com
Laurie M. Hopkins	City of Moscow	City Clerk	clerk@ci.moscow.id.us
Alisa Anderson	City of Moscow	Grants Manager	aanderson@ci.moscow.id.us
Brian Nickerson	Moscow Volunteer Fire & EMS	Fire Chief	bnickerson@ci.moscow.id.us
Debby Carscallen	Moscow Volunteer Fire & EMS	Paramedic/Firefighter	debcarscallen@ci.moscow.id.us
Dan Ellinwood	Moscow Volunteer Fire & EMS	Division Chief/Fire Marshal	dellinwood@ci.moscow.id.us
Scott Williams	Moscow Volunteer Fire & EMS	Instructor	swilliams@ci.moscow.id.us
James Fry	Moscow Police Department	Retired Chief of Police	JFry@ci.moscow.id.us

Representative	Agency	Position	Email
Roger Lanier	Moscow Police Department	Retired Police Captain	rlanier@ci.moscow.id.us
Potlatch Ambulance	N/A	N/A	ambulance@potlatch.com
David Brown	City of Potlatch	Mayor	dbrown@potlatch.com
Harmony Nowack	City of Potlatch	Clerk-Treasurer	cityhall@cityofpotlatch.org
Brad Rode	City of Potlatch	N/A	fireman_brad80@yahoo.com
Bill Abbott	City of Troy	Mayor	troycityhall@troyidaho.net
Ron Stearns	Troy Volunteer Fire Department	Fire Chief	TroyFireDept@outlook.com
Dan Carscallen	North Latah County Highway District	Clerk	northlatah@gmail.com
Kevin Renfrow	South Latah Highway District	Commissioner	slhd@idaho.net
Ryan Bender	Idaho Emergency Management	North Central Area Field Officer	rbender@imd.idaho.gov
Yolandi Faulkner	Idaho Emergency Management	HazMat Cost Recovery and Regulatory Compliance	yfaulkner@imd.idaho.gov
Alan Carlson	USDA, Palouse Ranger District	Fire Management Officer	alan.carlson@usda.gov
Andrew Brown	NOAA	Meteorologist	andrew.brown@noaa.gov
Autumn Gibson	American Red Cross	Disaster Program Specialist	autumn.gibson3@redcross.org
Bill Krick	McGregor Company	Business Unit Manager	bill.krick@mcgregor.com
Bill Tensfeld	Whitman County WA Emergency Management	Emergency Management Director	Bill.Tensfeld@co.whitman.wa.us
Robin Cocking	Whitman County WA Emergency Management	Deputy Director	RobinC@co.whitman.wa.us
Case Family	N/A	N/A	casefamily90@hotmail.com
Casey Strong	Lewiston Code Compliance	Inspector	casey.strong@dot.idaho.gov
Cathy Mabbutt	Mabbutt Law Office	Attorney	mabbuttlaw@gmail.com
Dean Neufeld	Idaho Public Health District 2	Idaho North Central District	DNeufeld@phd2.idaho.gov
Ed Button	Idaho Firewise	Board Member	ebutton838@gmail.com
Eric Anderson	University of Idaho	Associate Director for Employer Relations	esanderson@uidaho.edu
Chris Schreiber	University of Idaho	College Advisory Board Member	schreibr@uidaho.edu
Victoria Seever	University of Idaho	Retired Employee	vaseever@uidaho.edu
James Pickard	Disability Action Center NW	Independent Living Advocate, Benefits Planner, Ramps Program	james@dacnw.org
James Wotring	Idaho Transportation Department	N/A	James.Wotring@itd.idaho.gov
Jeff Odland	Paradigm Consulting	Founder	jeff.odland@ziply.com

Representative	Agency	Position	Email
Mike McManus	Idaho Department of Lands	Lands Resource Supervisor	mmcmanus@idl.idaho.gov
Jason Svancara	Idaho Department of Lands	Northern Operations Chief	jsvancara@idl.idaho.gov
William Ward	Amateur Radio Relay League	N/A	kc7qcs@arrl.net
Thomas Storer	Washington State Amateur Emergency Communication	Region 9, Whitman County	KI6DER@prodigy.net
Mark Feddersen	Idaho School Safety & Security	Analyst--North Idaho	Mark.Feddersen@dbs.idaho.gov
Nick Mechikoff	North Idaho Healthcare Coalition	Emergency Management Coordinator	Nicholas.Mechikoff@kh.org
Steven Turcott	North Idaho Healthcare Coalition	Safety Coordinator	Steven.Turcott@kh.org
Mike Heston	Pullman Fire Department	Retired Fire Chief	Mike.Heston@pullman-wa.gov
Monte Walker	Northwestern Mutual	Financial Representative	montewalker7@yahoo.com
Natalie Chiles	Ziply Fiber	Strategic Account Executive	natalie.chiles@ziply.com
Paul Kimmell	Avista Corp	Palouse Area Regional Business Manager	Paul.Kimmell@avistacorp.com
Robert Isenberg	Idaho American Legion	Retired Moscow Post Commander	robert.isenberg@hotmail.com
Scott Becker	Hodge & Associates	President	scottbecker@moscow.com
Brenda Robb	Williams Northwest Pipeline	N/A	brenda.j.robb@williams.com
Rachel Denzin	Williams Northwest Pipeline	N/A	Rachel.Denzin@williams.com
Tom Grant	Williams Northwest Pipeline	N/A	tom.c.grant@williams.com
Alice Barbut	N/A	N/A	apbarbut@gmail.com
Vin Benin	N/A	N/A	vinbenin@aol.com
Integrated Solutions Consulting	Micheal Kemp	Consultant	michealkemp@i-s-consulting.com

APPENDIX B: MEETING MINUTES & AGENDAS

Latah County Kickoff Meeting—November 12, 14, & 21, 2024

Agenda:

Latah County Planning Workshop—January 15 & 16, 2025

Agenda:

Latah County, Idaho
Hazard Mitigation Plan Update 2025
Latah County, Idaho

- Wednesday, January 15, 2025 | Latah County Disaster Services/Emergency Management, Latah County Courthouse, 522 S. Adams St, Moscow, 83843. Room 7B (in the basement) | **1:00 PM to 3:30 PM**
- Thursday, January 16, 2025 | Latah County Disaster Services/Emergency Management, Latah County Courthouse, 522 S. Adams St, Moscow, 83843. Room 7B (in the basement) | **9:00 AM to 11:30 AM**

Workshop Agenda

Introductions

Overview of mitigation: Why mitigate?

How the mitigation plan can benefit my community

Overview of key mitigation plan elements & plan process

New FEMA guidance that will affect the 2025 update

Risk Summary/Risk Assessment Discussion

Jurisdiction/Agency Hazard Summary

Mitigation Goals Discussion

New and Ongoing Mitigation Actions/Projects

Project schedule and key dates

APPENDIX C: MEETING INVITES & SIGN-IN SHEETS

Latah County Kickoff Meeting—November 12, 14, & 21, 2024

Invite:

Good Afternoon,

Latah County is in the process of updating the 2024 Latah County Multi-Jurisdictional Hazard Mitigation Plan (**HMP**). To ensure eligibility for the Federal Emergency Management Agency (FEMA) Hazard Mitigation Assistance (HMA) grant programs, every jurisdiction and eligible special district in Latah County, per the Disaster Mitigation Act of 2000, is required to:

- Actively participate in the development of the 2024 Latah County HMP. Your participation will be documented per FEMA's regulations.
- Adopt the County Plan at the conclusion of the planning process.

As part of the planning process, we will conduct a Stakeholder and Jurisdiction Introductory Webinar. Further details for each are provided below.

Stakeholder and Jurisdiction Introductory Webinars (VIRTUAL MEETING)

We would like to invite you to participate in an introductory webinar to discuss the 2024 update of the Latah County Multi-Jurisdictional Hazard Mitigation Plan. **This webinar initiates your participation in the update of the 2024 Latah County HMP.** This webinar will provide valuable information regarding the FEMA Hazard Mitigation Program directive, what will be required from each jurisdiction, and more importantly, demonstrate how participating in this Plan will enable your jurisdiction's eligibility for FEMA's Hazard Mitigation Assistance grant programs. FEMA requires proof of participation and attending one (1) of these webinars will count toward that requirement.

The primary audience for the webinars is the participating jurisdictions and special districts and key stakeholders. **Please share the webinar registration link below with other members of your local planning team**.

- Tuesday, November 12 | 2:00 p.m. to 3:00 p.m.
- Thursday, November 14 | 2:00 p.m. to 3:00 p.m.
- Thursday, November 21 | 10:00 a.m. to 11:00 a.m.

Please register for the Introductory Webinar here ***(You only need to attend one webinar session):***

- **Registration Link: https://attendee.gotowebinar.com/rt/1170815399843300951**

After registering, you will receive a confirmation e-mail containing information about joining the webinar.

Planning Team

It is beneficial to identify a planning team from your jurisdiction that can help to identify and implement mitigation actions/projects within your community. Provided below is a recommended list of agencies/departments you may consider. Please invite these planning team members from your jurisdiction to the **webinar**, as applicable:

- Elected Officials, City Administration/Management, Floodplain Administrator, Public Works, Building Code Enforcement, Fire, Law Enforcement, Planning/Community Development, Transportation (Roads & Bridges), Geographic Information Systems, Legal, Parks & Recreation

Attendee Reports:

11/12/2024

Attendee Report:	**Latah County Hazard Mitigation Plan | Stakeholder and Jurisdiction Introductory Webinar**					
Report Generated: 11/25/2024 10:54 AM CST						
Webinar ID	**Actual Start Date/Time**	**Duration**	**# Registered**	**# Attended**	**Clicked Registration Link**	**Opened Invitation**
249-899-371	11/12/2024 01:50 PM PST	1 hour 11 minutes	12	9	27	0

Staff Details

Attended	**Interest Rating**	**Last Name**	**First Name**	**Email Address**	**Role**	**Join Time - Leave Time (Time in Session)**
Yes	Not applicable for staff	Training	ISC	training@i-s-consulting.com	Organizer	11/12/2024 01:50 PM PST - 11/12/2024 03:00 PM PST (1 hour 11 minutes)

Attendee Details

Attended	**Interest Rating**	**Last Name**	**First Name**	**Email Address**	**Registration Date/Time**	**Join Time - Leave Time (Time in Session)**
Yes	90	Anderson	Eric	esanderson@uidaho.edu	11/06/2024 11:23 AM PST	11/12/2024 02:06 PM PST - 11/12/2024 02:06 PM PST (1 minute)
Yes	100	Bailey	Cody	slhdgenesee@idaho.net	11/12/2024 10:17 AM PST	11/12/2024 01:50 PM PST - 11/12/2024 02:59 PM PST (1 hour 9 minutes)
Yes	97	Brinkly	Dustin	dustin@cityofgenesee.com	11/06/2024 12:32 PM PST	11/12/2024 01:56 PM PST - 11/12/2024 02:59 PM PST (1 hour 3 minutes)
Yes	98	Cole	Austin	acole@latahcountyid.gov	11/12/2024 12:41 PM PST	11/12/2024 02:03 PM PST - 11/12/2024 03:00 PM PST (57 minutes)
Yes	94	Heimgartner	Clifford	juliaettafire@gmail.com	11/06/2024 11:30 AM PST	11/12/2024 02:02 PM PST - 11/12/2024 03:00 PM PST (58 minutes)
Yes	64	Johnson	Jason	jason.johnson@avistacorp.com	11/06/2024 09:25 AM PST	11/12/2024 01:59 PM PST - 11/12/2024 02:59 PM PST (1 hour 1 minute)
Yes	93	Norris	Rose	mayor@cityofkendrick.com	11/08/2024 07:21 AM PST	11/12/2024 01:50 PM PST - 11/12/2024 03:00 PM PST (1 hour 10 minutes)
Yes	92	Risken	Steve	srisken@latahcountyid.gov	11/12/2024 12:46 PM PST	minutes)
Yes	46	Turcott	Steve	steven.turcott@kh.org	11/06/2024 10:34 AM PST	11/12/2024 01:59 PM PST - 11/12/2024 02:59 PM PST (1 hour 1 minute)
No	0	Abe	Daiko	consulting.com	11/01/2024 01:21 PM PDT	n/a
No	0	Becker	Scott	scottbecker@moscow.com	11/07/2024 11:46 AM PST	n/a
No	0	Risken	Steve	srisken623@aol.com	11/12/2024 12:43 PM PST	n/a

11/14/2024

Attendee Report:	**Latah County Hazard Mitigation Plan | Stakeholder and Jurisdiction Introductory Webinar**					
Report Generated:						
11/25/2024 10:54 AM CST						
Webinar ID	**Actual Start Date/Time**	**Duration**	**# Registered**	**# Attended**	**Clicked Registration Link**	**Opened Invitation**
207-284-299	11/14/2024 01:49 PM PST	1 hour 1 minute	7	6	34	0

Staff Details

Attended	**Interest Rating**	**Last Name**	**First Name**	**Email Address**	**Role**	**Join Time - Leave Time (Time in Session)**
Yes	Not applicable for staff	Training	ISC	training@i-s-consulting.com	Organizer	11/14/2024 01:49 PM PST - 11/14/2024 02:50 PM PST (1 hour 1 minute)

Attendee Details

Attended	**Interest Rating**	**Last Name**	**First Name**	**Email Address**	**Registration Date/Time**	**Join Time - Leave Time (Time in Session)**
Yes	91	Cole	Austin	acole@latahcountyid.gov	11/12/2024 12:42 PM PST	11/14/2024 02:46 PM PST - 11/14/2024 02:49 PM PST (4 minutes)
Yes	55	Glasebrook	Dave	DaveGlasebrook@netscape.net	11/13/2024 01:06 PM PST	11/14/2024 02:01 PM PST - 11/14/2024 02:50 PM PST (49 minutes)
Yes	59	Nickerson	Brian	bnickerson@ci.moscow.id.us	11/06/2024 09:25 AM PST	11/14/2024 02:00 PM PST - 11/14/2024 02:49 PM PST (50 minutes)
Yes	99	Renfrow	Kevin	LKRenfrow@Hotmail.com	11/14/2024 01:51 PM PST	11/14/2024 01:52 PM PST - 11/14/2024 02:50 PM PST (58 minutes)
Yes	92	Risken	Steve	srisken@latahcountyid.gov	11/12/2024 12:47 PM PST	11/14/2024 01:49 PM PST - 11/14/2024 02:50 PM PST (1 hour 1 minute)
Yes	99	Rode	Brad	fireman_brad80@yahoo.com	11/12/2024 06:04 PM PST	11/14/2024 01:54 PM PST - 11/14/2024 02:50 PM PST (56 minutes)
No	0	Abe	Daiko	daiko.abe@i-s-consulting.com	11/01/2024 01:22 PM PDT	n/a

11/21/2024

11/25/2024 10:54 AM CST

Webinar ID	Actual Start Date/Time	Duration	# Registered	# Attended	Clicked Registration Link	Opened Invitation
775-464-619	11/21/2024 09:52 AM PST	54 minutes	17	15	48	0

Staff Details

Attended	Interest Rating	Last Name	First Name	Email Address	Role	Join Time - Leave Time (Time in Session)
Yes	Not applicable for staff	Training	ISC	training@i-s-consulting.com	Organizer	11/21/2024 09:52 AM PST - 11/21/2024 10:45 AM PST (54 minutes)

Attendee Details

Attended	Interest Rating	Last Name	First Name	Email Address	Registration Date/Time	Join Time - Leave Time (Time in Session)
Yes	46	Anderson	Alisa	aanderson@ci.moscow.id.us	11/15/2024 10:59 AM PST	11/21/2024 09:58 AM PST - 11/21/2024 10:44 AM PST (47 minutes)
Yes	46	Beagley	Brett	brett.beagley@avistacorp.com	11/18/2024 07:44 AM PST	11/21/2024 09:58 AM PST - 11/21/2024 10:44 AM PST (47 minutes)
Yes	95	Becker	Scott	scottbecker@moscow.com	11/07/2024 11:48 AM PST	11/21/2024 09:55 AM PST - 11/21/2024 10:44 AM PST (49 minutes)
Yes	96	Cole	Austin	acole@latahcountyid.gov	11/12/2024 12:42 PM PST	11/21/2024 10:11 AM PST - 11/21/2024 10:45 AM PST (34 minutes)
Yes	97	Heimgartner	Clifford	juliaettafire@gmail.com	11/21/2024 10:01 AM PST	11/21/2024 10:01 AM PST - 11/21/2024 10:44 AM PST (44 minutes)
Yes	100	Kaus	Andrew	clerk.mrfd@gmail.com	11/14/2024 05:02 PM PST	11/21/2024 09:52 AM PST - 11/21/2024 10:44 AM PST (53 minutes)
Yes	83	Lawrence	Vickie	vinbenin@aol.com	11/07/2024 09:53 AM PST	11/21/2024 09:53 AM PST - 11/21/2024 10:44 AM PST (52 minutes)
Yes	100	McManus	Michael	mmcmanus@idl.idaho.gov	11/13/2024 04:01 PM PST	11/21/2024 09:52 AM PST - 11/21/2024 10:44 AM PST (53 minutes)
Yes	95	Nowack	Harmony	cityhall@cityofpotlatch.org	11/14/2024 09:19 AM PST	11/21/2024 09:57 AM PST - 11/21/2024 10:44 AM PST (48 minutes)
Yes	40	Pierce	Robert	rdpierce@clearwaterpower.com	11/14/2024 02:23 PM PST	11/21/2024 09:59 AM PST - 11/21/2024 10:44 AM PST (46 minutes)
Yes	55	Risken	Steve	srisken623@aol.com	11/21/2024 10:03 AM PST	11/21/2024 10:03 AM PST - 11/21/2024 10:45 AM PST (42 minutes)
Yes	84	Risken	Steve	srisken@latahcountyid.gov	11/12/2024 12:48 PM PST	11/21/2024 09:52 AM PST - 11/21/2024 10:44 AM PST (53 minutes),11/21/2024 09:56 AM PST - 11/21/202
Yes	39	Seely	Colby	colby.seely@williams.com	11/07/2024 06:18 AM PST	11/21/2024 09:56 AM PST - 11/21/2024 10:43 AM PST (47 minutes)
Yes	92	Skinner	Samantha	sskinner@clearwaterpower.com	11/21/2024 07:53 AM PST	11/21/2024 09:58 AM PST - 11/21/2024 10:44 AM PST (47 minutes)
Yes	98	Wotring	James	james.wotring@itd.idaho.gov	11/20/2024 10:35 AM PST	11/21/2024 10:03 AM PST - 11/21/2024 10:44 AM PST (42 minutes)
No	0	Abe	Daiko	daiko.abe@i-s-consulting.com	11/01/2024 01:22 PM PDT	n/a
No	0	Kimmell	Paul	paul.kimmell@avistacorp.com	11/14/2024 04:47 PM PST	n/a

Latah County Planning Workshop—January 15 & 16, 2025

Invite:

2025 LATAH COUNTY HAZARD MITIGATION PLAN:
LOCAL JURISDICTIONAL WORKSHOPS

Please register below. Space will be limited, so your registration will help us ensure we have adequate accommodations.

Registration Link: https://integratedsolutions.wufoo.com/forms/zu35k951h71p9n/

What: Register today for our mitigation workshop. This in-person workshop will give your local planning team an opportunity to work with Latah County Disaster Services/Emergency Management to identify local hazards and areas of concern, review previously identified mitigation actions, develop future mitigation projects, prioritize mitigation projects moving forward and update your jurisdiction's section of the 2025 Latah County Hazard Mitigation Plan.

Why: Participating in updates to the mitigation plan is a FEMA Requirement to be eligible for certain federal disaster funding before and after disasters. By attending, you will be completing that requirement for your jurisdiction or special district.

Who Should Attend: This workshop should be attended by EVERY participating jurisdiction within Latah County. Special districts that intend to be officially part of the plan should also attend.

WHEN & WHERE THE WORKSHOPS WILL TAKE PLACE (You Only Need to Attend One Workshop):

- Wednesday, **January 15, 2025** | Latah County Courthouse, 522 S Adams St, Moscow, 83843. Room 7B (in the basement) | **1:00 PM to 3:30 PM**
- Thursday, **January 16, 2025** | Latah County Courthouse, 522 S Adams St, Moscow, 83843. Room 7B (in the basement) | **9:00 AM to 11:30 AM**

Sign-in Sheets:

- *SIGN-IN SHEET:* Hazard Mitigation Plan Update 2025 -

Workshop

Latah County, Idaho

Latah County Hazard Mitigation Plan Update 2025

Wednesday, January 15, 2025 | Latah County Disaster Services/Emergency Management, Latah County Courthouse, 522 S. Adams St, Moscow, 83843. Room 7B (in the basement) | 1:00 PM to 3:30 PM

Hazard Mitigation Planning Meeting – Workshops				
Name	**Organization / Jurisdiction**	**Title**	**Phone**	**E-mail**
Brian Nickerson	Moscow Fire Dept	Fire Chief	208-883-7809	bnickerson@ci.moscow.id.us
Tim Jones	Deary Fire Dept	Fire chief	208-596-5780	ChiefTJJones@yahoo.com
Bill Krick	Genesee Rural Fire City of Genesee	Firefighter/City Council	509-330-1098	bill.krick62@gmail.com
Michael McManus	Idaho Dept of Lands	Fire Warden	208 877 1121	mmcmanus@idl.idaho.gov
Andy Kaus	Moscow Rural	Clerk/Firefighter	509 330 0164	clark.mrfd@gmail.com
Andres Medina	Potlatch Fire	Asst. Fire Chief	208-596-9727	medina.fire@live.com
Brad Rode	Potlatch Rural Fire District	Fire Chief	208-669-1929	fireman_brad80@yahoo.com
John Bohman	Troy Rural Fire District	Commissioner Representative	509 338-2940	jbohman19@gmail.com
Austin Cole	Latah County CERT	~~Deputy~~ CERT Member	2083462202	acole@latahcounty.id.gov

- *SIGN-IN SHEET:* Hazard Mitigation Plan Update 2025 -

Workshop

Latah County, Idaho

Latah County Hazard Mitigation Plan Update 2025

Thursday, January 16, 2025 | Latah County Disaster Services/Emergency Management, Latah County Courthouse, 522 S. Adams St, Moscow, 83843. Room 7B | 9:00 AM to 11:30 AM

Hazard Mitigation Planning Meeting – Workshops				
Name	**Organization / Jurisdiction**	**Title**	**Phone**	**E-mail**
Cody Bailey	South Latah Hwy Dist	Road Foreman	208-301-3049	slhdgenesee@idaho.net
Scott Becker	SLHD & NLCHD	Engineer	(208) 882-3571	scottbecker@moscow.com
Vickie Lawrence	CERT	Program Manager	(571)439-1251	VINBGN IN@AOL.COM
Alisa Anderson	City of Moscow	Grant Manager ADA Coordinator	208-883-7600	aanderson@ci.moscow.id.us
Jason Stooks	Latah County	County Commission	714-381-2637	jstooks@latahcountyID.gov
Austin Cole	Community Nexus, Inc	President	208-346-2202	acole@communitynex.us
Christine Jewell	City of Bovill	Clerk/Treasurer	208-826-3603	cityofbovill@gmail.com

- *SIGN-IN SHEET:* Hazard Mitigation Plan Update 2025 -

Workshop

Latah County, Idaho

Latah County Hazard Mitigation Plan Update 2025

Thursday, January 16, 2025 | Latah County Disaster Services/Emergency Management, Latah County Courthouse, 522 S. Adams St, Moscow, 83843. Room 7B | 9:00 AM to 11:30 AM

Hazard Mitigation Planning Meeting – Workshops				
Name	**Organization / Jurisdiction**	**Title**	**Phone**	**E-mail**
Kevin Renfrow	South Latah Hwy District	Commissioner	(208)791-9453	L.K.Renfrow@hotmail.com
Jason S Johnson	City of Deary/Avista	Mayor / MGR. Palouse Elec Ops	509-209-4762	cityofdearymayor@gmail.com jason.johnson@avistacorp.com
Alan Carlson	USFS Palouse RD Potlatch	Fire Mgmt Officer	208-875-1702	alan.carlson@usda.gov
Rose Norris	City of Kendrick Kendrick Vol. Fire Dept	Mayor / Asst. Chief	208 816 6116	mayor@cityofkendrick.com kendrickfirevol@gmail.com
Harmony Nowack	City of Potlatch	clerk-treasurer	208-875-0708	cityhall@cityofpotlatch.org
Tony Johnson	Latah Co.	Commissioner	509 595-8276	johnsonexc@frontier.com
Melva Eichner	City of Juliaetta	Clerk	208-276-7791	Clerk@cityofjuliaetta.com
Clifford Heimgartner	Juliaetta Fire	Fire Chief	208-827-6642	juliaettafire@Gmail.com

Public and Stakeholder Meeting—January 15, 2025

Invite Flyer:

PUBLIC MEETING NOTICE

Latah County

Hazard Mitigation Plan

Latah County Disaster Services is hosting a public information and planning session to gather input from County residents regarding potential natural hazards and disasters that could impact the County. This session is part of the 2025 Latah County Multi-Jurisdictional Hazard Mitigation Plan update process.

Date: Wednesday, January 15, 2025

Time: 5:30 p.m. - 6:30 p.m.

Meeting Location: Latah County Courthouse, 522 S Adams St, Moscow, 83843. Room 7B (in the basement)

You can also assist by participating in our mitigation and preparedness survey! Help us inform the development of this plan and the ways we can mitigate risk and make our communities safer and more resilient to natural hazards. Take the survey:

http://latah.2025mitigation.alchemer.com/s3

Latah County Disaster Services | Emergency Management
Moscow, Idaho 83843
P: 208-883-2265
E: srisken@latahcountyid.gov

Invite Press Release:

FOR IMMEDIATE RELEASE

Steve Risken, Coordinator
Latah County Disaster Services
Emergency Management
208-883-2265
srisken@latahcountyid.gov

LATAH COUNTY RESIDENTS INVITED TO PARTICIPATE IN PUBLIC MEETING TO INFORM RESIDENTS ABOUT POTENTIAL DISASTERS THAT COULD IMPACT THE COUNTY

LATAH COUNTY, IDAHO – Latah County Disaster Services is hosting a public information and planning session to gather input from County residents regarding potential natural hazards and disasters that could impact the County. This session is part of the 2025 Latah County Multi-Jurisdictional Hazard Mitigation Plan update process.

The public meeting will be held on the following date and location:

Date: Wednesday, January 15, 2025
Time: 5:30 p.m. - 6:30 p.m.
Meeting Location: Latah County Courthouse, 522 S Adams St, Moscow, 83843. Room 7B (in the basement)

Latah County is committed to improving its emergency preparedness and mitigation capabilities, and this can only be done by involving the community in its efforts.

The County's Multi-Jurisdictional Hazard Mitigation Plan has been designed to reduce the impact of natural hazards with the goal of protecting the health, safety, and welfare of all residents and to mitigate damages to property and infrastructure by identifying cost-effective strategies intended to eliminate or reduce the negative impact of those hazards. The public meeting will help the County identify and prioritize the services, disaster-related projects, and capabilities the community may need during an emergency.

The United States Federal government requires local and state governments to have a FEMA-approved Hazard Mitigation Plan, as established by the Disaster Mitigation Act of 2000, to qualify for hazard mitigation assistance grant dollars. These programs are critical sources of Federal funding, especially for a community that wants to initiate mitigation projects using mitigation grant dollars proactively.

Public Meeting Social Media Post:

Latah County ID
January 9 ·

Latah County Disaster Services is hosting a public information and planning session to gather input from County residents regarding potential natural hazards and disasters that could impact the County. This session is part of the 2025 Latah County Multi-Jurisdictional Hazard Mitigation Plan update process.

LATAH COUNTY RESIDENTS INVITED TO PARTICIPATE IN
PUBLIC MEETING TO INFORM RESIDENTS ABOUT POTENTIAL DISASTERS THAT COULD IMPACT THE COUNTY

The public meeting will be held on the following date and location:

Date: Wednesday, January 15, 2025
Time: 5:30 p.m. - 6:30 p.m.
Meeting Location: Latah County Courthouse, 522 S Adams St, Moscow, 83843. Room 7B (in the basement, enter through the 5th Street entrance door)

Latah County is committed to improving its emergency preparedness and mitigation capabilities, and this can only be done by involving the community in its efforts. The County's Multi-Jurisdictional Hazard Mitigation Plan has been designed to reduce the impact of natural hazards with the goal of protecting the health, safety, and welfare of all residents and to mitigate damages to property and infrastructure by identifying cost-effective strategies intended to eliminate or reduce the negative impact of those hazards. The public meeting will help the County identify and prioritize the services, disaster-related projects, and capabilities the community may need during an emergency.

https://latahcountyid.gov/disaster_services/

You can also assist by participating in our mitigation and preparedness survey!

http://latah.2025mitigation.alchemer.com/s3

Sign-in Sheets:

- *SIGN-IN SHEET:* Hazard Mitigation Plan Update 2025 -

Public Meeting

Latah County, Idaho

Latah County Hazard Mitigation Plan Update 2025

Wednesday, January 15, 2025 | Latah County Disaster Services/Emergency Management | 5:30 PM to 6:30 PM
Latah County Courthouse, 522 S Adams St, Moscow, 83843. Room 7B (in the basement)

Hazard Mitigation Planning Meeting				
Name	**Organization / Jurisdiction**	**Title**	**Phone**	**E-mail**
Darko Abe	ISC		208 390 2021	darko.abe@i-s-consulting.com
Chris Hokanson	Troy Fire Servic	owner	509-330-2245	Chrishokanson@hotmail.com
Dan Hokanson				
Austin Cole	Community Nexus, Inc	President	208-346-2202	acole@~~latahcountyidaho.gov~~ communitynexus.us
Ramsey Marquis	Member of Public		925-708-9179	ramseymarquis@gmail.com
Michael McManus	IDL	Fire warden	208 877 1121	mmcmanus@idl.idaho.gov
Jake Chesbrough	member of Public		513-567-3376	familychesbrough@gmail.com
Adrienne Vincent	citizen		208.874-1611	KitKat874@moscow.com
Marilyn Beckett	public		208 882-1818	marilynbeckett@gmail.com
Dan Hardesty	self		208-883-3903	wildcell@turbonet.com
Carol Moravec	public		509 280 1066	birdoasis@gmail.com
Mike Moravec	Public		509-339-9164	Topstew2008@live.com

- *SIGN-IN SHEET:* Hazard Mitigation Plan Update 2025 -

Hazard Mitigation Planning Meeting				
Name	**Organization / Jurisdiction**	**Title**	**Phone**	**E-mail**
Laurel Caldwell	Latah County	CIO	2088832254	lcaldwell@latahcountyid.gov
Jan Hohenlohe	Landowner-Tdo Trl		541-231-6934	jhohenlohe@gmail.com
Heather Heward	University of Idaho	Instructor	208 596-5330	hheward@uidaho.edu
Alice Barbut	Nearing Rd Neighborhood	-	208-596-0824	apbarbut@uidaho.edu
Terry Whybark	Land owner Latah		208-310-0156	twhybark@gmail.com
Chris Hankenship	Latah County	Associate Planner		
Niles Peterson	Hills/Rivers Housing Trust	Exec. Director	509 336 1664	director@MoscowHousingTrust.org

APPENDIX D: NEW MITIGATION ACTION WORKSHEET

2025 Latah County New Mitigation Action Form

Instructions: Please complete one (1) Mitigation Action Form for each proposed mitigation action or project with as much detail as possible.

Name: _____ **Jurisdiction/Organization:** _____

E-mail: _____ **Phone:** _____

New Mitigation Action (Please Describe)

_____

_____

Year Initiated (i.e. 2025)	
Applicable Jurisdiction/Special District	
Lead Agency/Organization	
Supporting Agencies/Organizations (if applicable)	
Potential Funding Source **Examples**: Local Budgeted Funds, Local or State Special Taxes, Private/Non-Profit Funds, State Special Funds, Hazard Mitigation Grant Program (HMGP), Building Resilient Infrastructure and Communities (BRIC), Flood Mitigation Assistance (FMA) Program, Community Development Block Grant (CDBG), FEMA Public Assistance (PA)	
Estimated Cost (If estimated cost is unknown, indicate Low, Medium, or High)	
Benefits (Indicate Low, Medium, or High)	
Projected Duration (If estimated duration is unknown, indicate Short Term, Long Term, or Ongoing)	
PRIORITY (High, Medium, Low)	

Please indicate if the mitigation goals below are applicable to the new mitigation action/project). Check All That Apply.

X	Place an "X" by the applicable goals, if applicable
	Goal 1: To minimize the area of land damaged and losses experienced because of hazards where these risks threaten communities in the county.
	Goal 2: 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
	Goal 3: Educate communities about the unique opportunities and challenges of pre- and post-disaster hazard mitigation, disaster response, and post-disaster recovery.
	Goal 4: Establish mitigation priorities and develop mitigation strategies.
	Goal 5: Strategically locate, plan, coordinate, and implement hazard reduction projects with emphasis on those projects to reduce exposure to multiple hazards
	Goal 6: Continue and enhance cooperation, coordination, and capabilities of agencies and partners within the county
	Goal 7: Ensure long-term viability of the county to support successful mitigation, response, and recovery through human resources

2025 Latah County New Mitigation Action Form

This mitigation action:

The mitigation strategies/actions will be prioritized and evaluated using the STAPLEE+E method, which uses eight (8) criteria for evaluating a mitigation action – Social, Technical, Administrative, Political, Legal, Economic, Environmental, and Equity. Additional considerations are within each of these criteria. Each criterion is evaluated on a scale from one (1) to five (5), with one (1) defined as strongly disagree and five (5) as strongly agree. The summation will result in the STAPLEE+E Prioritization Score.

Instructions: Circle the best option

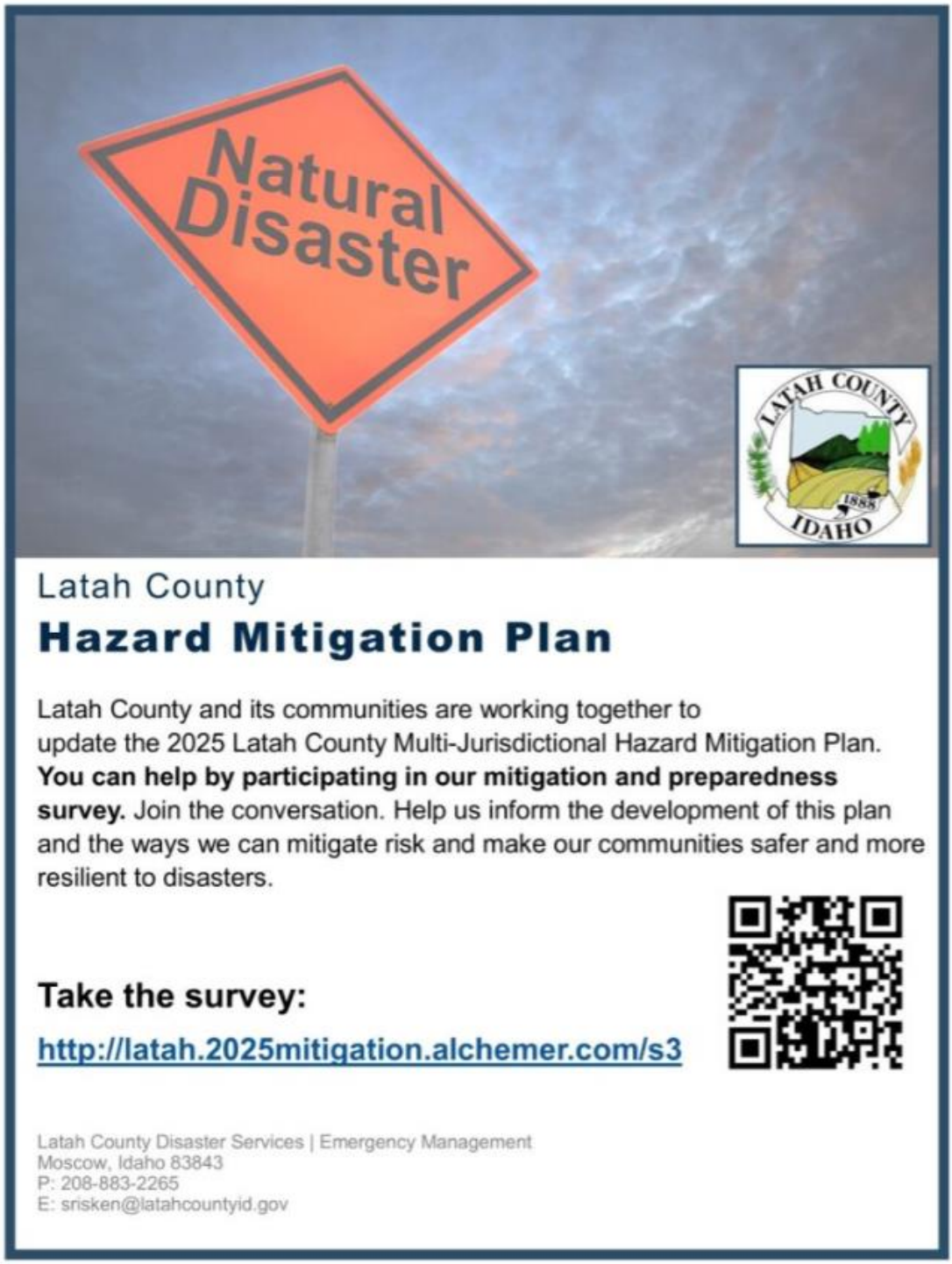
	Strongly Disagree (1)	Disagree (2)	Neither Agree or Disagree (3)	Agree (4)	Strongly Agree (5)
Social: Do you agree or disagree that the mitigation action is more likely to: be acceptable to the community, does not adversely affect a particular segment of the population, does not cause relocation of lower-income people, and is compatible with the community's social and cultural values?	1	2	3	4	5
Technical: Do you agree or disagree that the mitigation action is technically effective in providing a long-term reduction of losses and has minimal secondary adverse impacts?	1	2	3	4	5
Administrative: Do you agree or disagree that your jurisdiction/organization has the necessary staffing and funding to carry-out this mitigation action?	1	2	3	4	5
Political: Do you agree or disagree that the mitigation action has the support of the public and stakeholders who have been offered an opportunity to participate in the planning process?	1	2	3	4	5
Legal: Do you agree or disagree that the jurisdiction or implementing agency has the legal authority to implement and enforce the mitigation action?	1	2	3	4	5
Economic: Budget constraints can significantly deter the implementation of mitigation actions. Do you agree or disagree that the mitigation action is cost-effective, as determined by a cost-benefit review, and is possible to fund?	1	2	3	4	5
Environmental: Do you agree or disagree that the mitigation action is sustainable and does not have an adverse effect on the environment, complies with federal, state, and local environmental regulations, and is consistent with the community's environmental goals?	1	2	3	4	5
Equity: Do you agree or disagree that the mitigation actions are consistent and systematically fair? (i.e., Does not create an opportunity for unequal distribution of resources; affect a particular segment of the population, such as persons with disabilities, persons with Limited English Proficiency, or rural communities, etc.).	1	2	3	4	5

Place an "X" by the hazard(s) this action/project will mitigate:

Mitigated Hazards			
X	Place an "X" by the applicable hazard		
	All Hazards		Volcanic Activity/Ash
	Avalanche		Wildfire/Wildfire Smoke
	Dam and Levee Failure		Cybersecurity Incidents
	Drought		Infrastructure/Utility Failure: Communications, Pipeline Incident, Water/Wastewater Incident
	Earthquake		Hazardous Material (HAZMAT) Incident
	Flood (Riverine, Urban/Flash)		Major Transportation Incident
	Landslide		Extended Power Outage
	Severe Summer Weather (Extreme Heat, Thunderstorm/Lightning. Hail, Tornado, High Winds)		Public Health Emergency/Communicable Disease Outbreak
	Severe Winter Weather (Heavy Snow, Blizzards, Extreme Cold)		Other

APPENDIX E: SURVEY, SOCIAL MEDIA, & WEBSITE ADVERTISEMENT FOR PUBLIC PARTICIPATION

Public Survey Flyer:



Public Survey Press Release:

FOR IMMEDIATE RELEASE

Steve Risken, Coordinator
Latah County Disaster Services
Emergency Management
208-883-2265
srisken@latahcountyid.gov

LATAH COUNTY RESIDENTS INVITED TO PARTICIPATE IN COMMUNITY PREPAREDNESS STUDY

LATAH COUNTY, IDAHO – Latah County residents and businesses can help the County update its emergency preparedness plans by participating in a voluntary online questionnaire. Feedback from the confidential 10-minute survey will enable Latah County Disaster Services to better serve residents and businesses before, during, and after an emergency or disaster.

Those who live or work in Latah County are encouraged to share their experiences, knowledge, and concerns about local hazards by participating in the questionnaire. To complete the questionnaire, please go to: http://latah.2025mitigation.alchemer.com/s3

The questionnaire will remain open until March 31, 2025.

Information provided in Latah County's community preparedness questionnaire will help the County and local communities create strategies and implement actions to reduce future risk of death, injuries, and property damage from natural hazards.

The United States Federal government requires local and state governments to have a FEMA-approved Hazard Mitigation Plan, as established by the Disaster Mitigation Act of 2000, to qualify for hazard mitigation assistance grant dollars. These programs are critical sources of Federal funding, especially for a community that wants to initiate mitigation projects using mitigation grant dollars proactively.

Social Media Advertisements for Public Survey:

Community Outreach Tool-Kit

Social Media Taglines for Promoting the

Community Preparedness Survey

Instructions to Participating Jurisdictions: Please post the following message on your social media platforms, such as Facebook and NextDoor.

Facebook and NextDoor:

- Are you prepared for the next disaster? Let the County know! Latah County residents and businesses can help the county update its emergency preparedness plans by participating in a voluntary online questionnaire. Feedback from the confidential 10-minute survey will enable the Latah County Disaster Services to better serve residents and businesses before, during, and after an emergency or disaster.

  To fill out the questionnaire, go to: http://latah.2025mitigation.alchemer.com/s3

  The survey will remain open until March 31, 2025.

- Latah County Disaster Services wants to know how it can better prepare you for disasters. All responses are confidential and will greatly help improve preparedness in the county. Join the conversation at http://latah.2025mitigation.alchemer.com/s3

- Latah County Disaster Services wants you to take our disaster preparedness survey! Don't miss out on your opportunity to join the conversation. http://latah.2025mitigation.alchemer.com/s3

- What have you done to prepare for the next disaster? How can Latah County help? Let us know by taking this survey! http://latah.2025mitigation.alchemer.com/s3

X (formerly known as Twitter):

- Are you prepared for the next disaster? Let the County know! Latah County needs your input. Complete this preparedness survey. Go to http://latah.2025mitigation.alchemer.com/s3

- Are you disaster resilient? Let us know how you've prepared for emergencies. http://latah.2025mitigation.alchemer.com/s3

- How prepared is Latah County for disasters? Join the conversation at http://latah.2025mitigation.alchemer.com/s3

- What will you do if a disaster hits Latah County? Let us know at http://latah.2025mitigation.alchemer.com/s3

- What have you done to prepare for the next disaster? How can Latah County help? Let us know by taking this survey! http://latah.2025mitigation.alchemer.com/s3

Latah County ID
January 9 ·

Latah County Disaster Services is hosting a public information and planning session to gather input from County residents regarding potential natural hazards and disasters that could impact the County. This session is part of the 2025 Latah County Multi-Jurisdictional Hazard Mitigation Plan update process.

LATAH COUNTY RESIDENTS INVITED TO PARTICIPATE IN
PUBLIC MEETING TO INFORM RESIDENTS ABOUT POTENTIAL DISASTERS THAT COULD IMPACT THE COUNTY

The public meeting will be held on the following date and location:

Date: Wednesday, January 15, 2025
Time: 5:30 p.m. - 6:30 p.m.
Meeting Location: Latah County Courthouse, 522 S Adams St, Moscow, 83843. Room 7B (in the basement, enter through the 5th Street entrance door)

Latah County is committed to improving its emergency preparedness and mitigation capabilities, and this can only be done by involving the community in its efforts. The County's Multi-Jurisdictional Hazard Mitigation Plan has been designed to reduce the impact of natural hazards with the goal of protecting the health, safety, and welfare of all residents and to mitigate damages to property and infrastructure by identifying cost-effective strategies intended to eliminate or reduce the negative impact of those hazards. The public meeting will help the County identify and prioritize the services, disaster-related projects, and capabilities the community may need during an emergency.

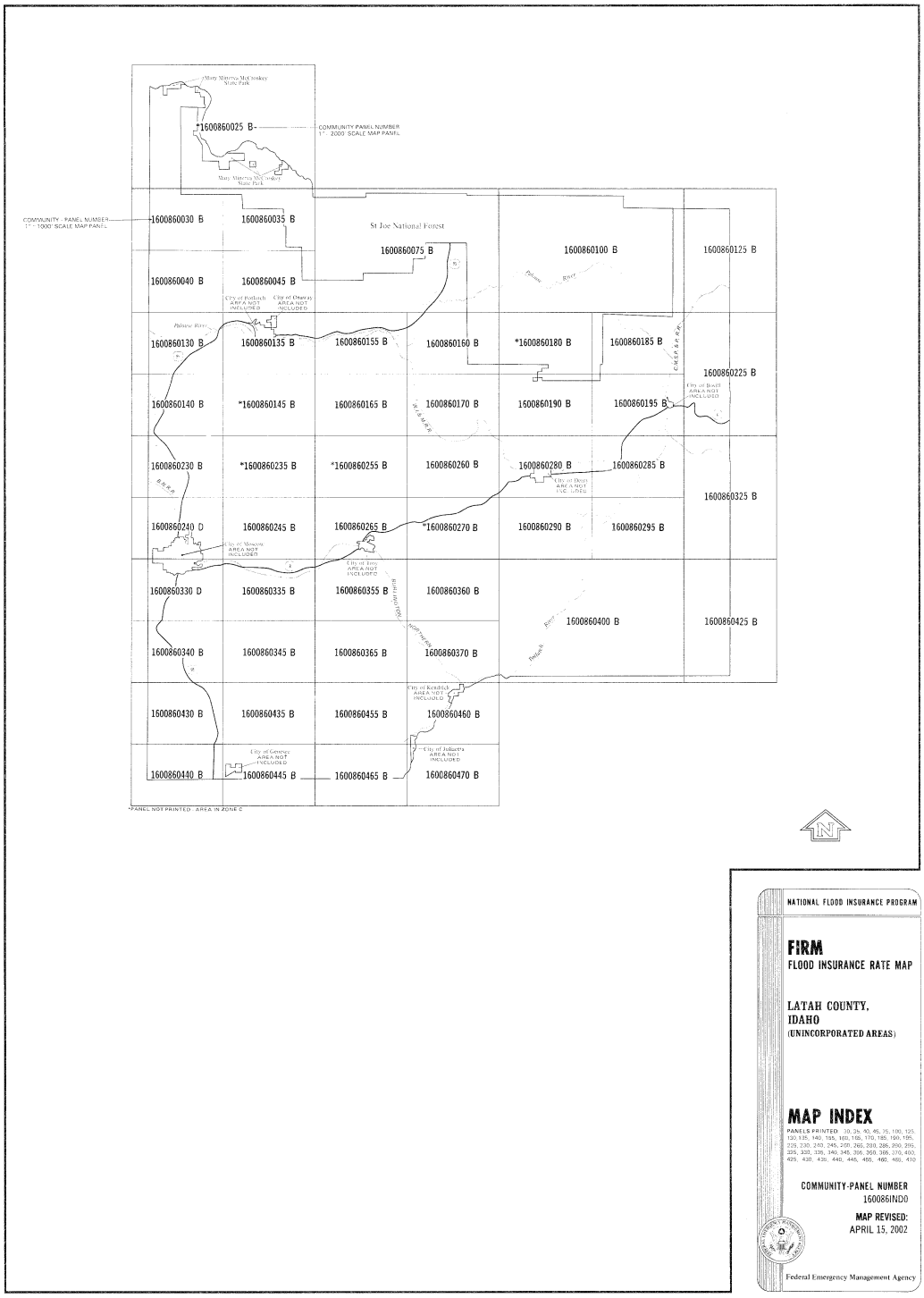
https://latahcountyid.gov/disaster_services/

You can also assist by participating in our mitigation and preparedness survey!

http://latah.2025mitigation.alchemer.com/s3

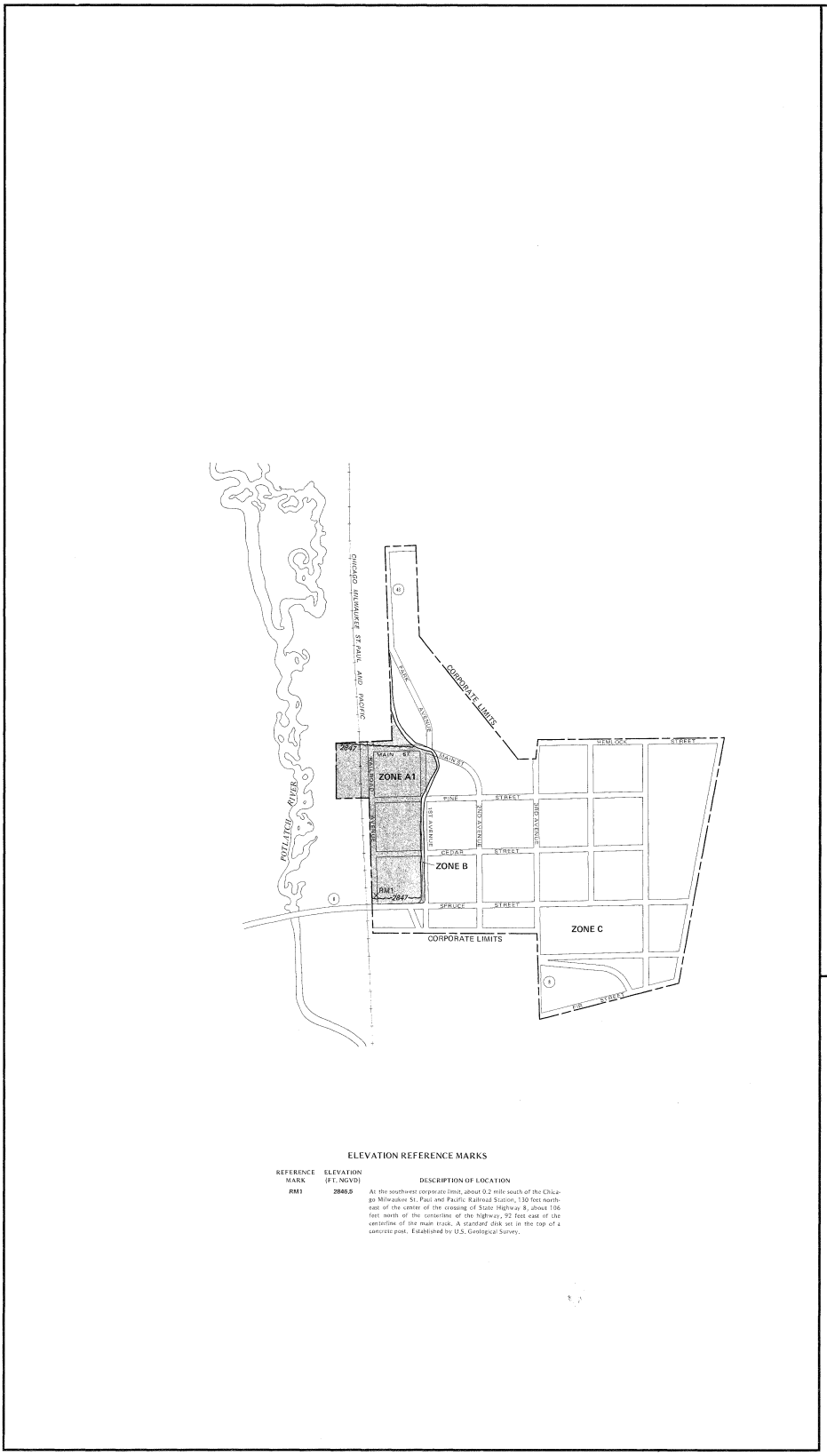
APPENDIX F: FEMA DIGITAL FIRMS

Unincorporated Latah County FIRM Panels



See https://msc.fema.gov/portal/advanceSearch#searchresultsanchor for individual panel FIRMs.

City of Bovill FIRM



KEY TO MAP

500-Year Flood Boundary
100-Year Flood Boundary
Zone Designations* With Date of Identification e.g., 12/2/74
100-Year Flood Boundary
500-Year Flood Boundary
ZONE B
ZONE A1 DATE
ZONE A5 DATE
ZONE B
Base Flood Elevation Line With Elevation In Feet** 513
Base Flood Elevation in Feet Where Uniform Within Zone** (EL 987)
Elevation Reference Mark RM7 ×
River Mile • M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

INITIAL IDENTIFICATION: JULY 2, 1976

FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE: DECEMBER 18, 1979

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620, or (800) 424-8872.

APPROXIMATE SCALE
400 0 400 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
BOVILL, IDAHO
LATAH COUNTY

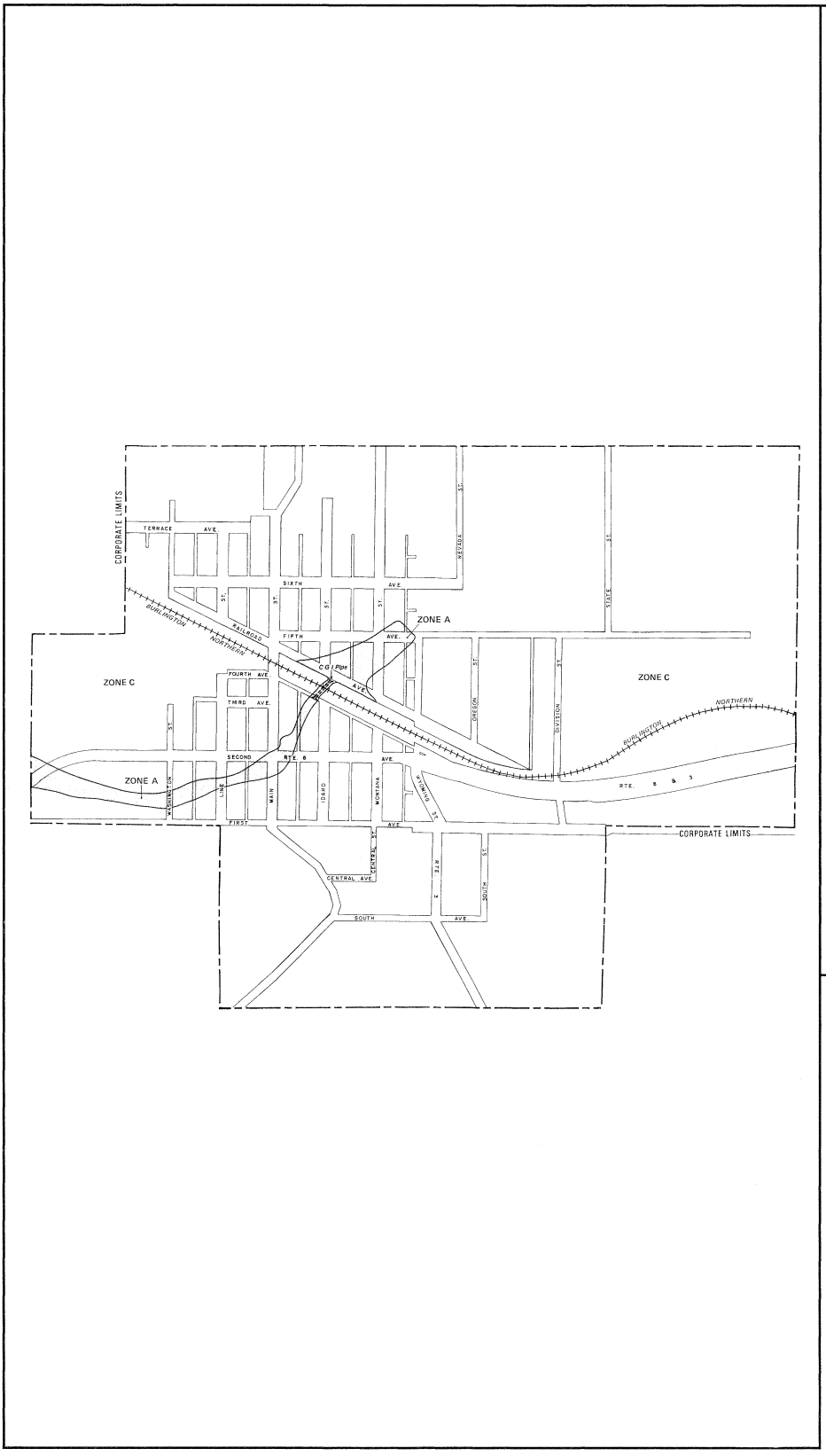
ONLY PANEL PRINTED

COMMUNITY-PANEL NUMBER
160202 0001 A

EFFECTIVE DATE:
DECEMBER 18, 1979

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION

City of Deary FIRM



KEY TO MAP

500-Year Flood Boundary	ZONE B
100-Year Flood Boundary	ZONE A1
Zone Designations	ZONE A5
100-Year Flood Boundary	ZONE B
500-Year Flood Boundary	
Base Flood Elevation Line With Elevation In Feet**	513
Base Flood Elevation in Feet Where Uniform Within Zone**	(EL 987)
Elevation Reference Mark	RM7×
Zone D Boundary	
River Mile	•M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

INITIAL IDENTIFICATION:
JANUARY 17, 1975

FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE:
JUNE 5, 1985

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620.

APPROXIMATE SCALE IN FEET
400 0 400

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
DEARY,
IDAHO
LATAH COUNTY

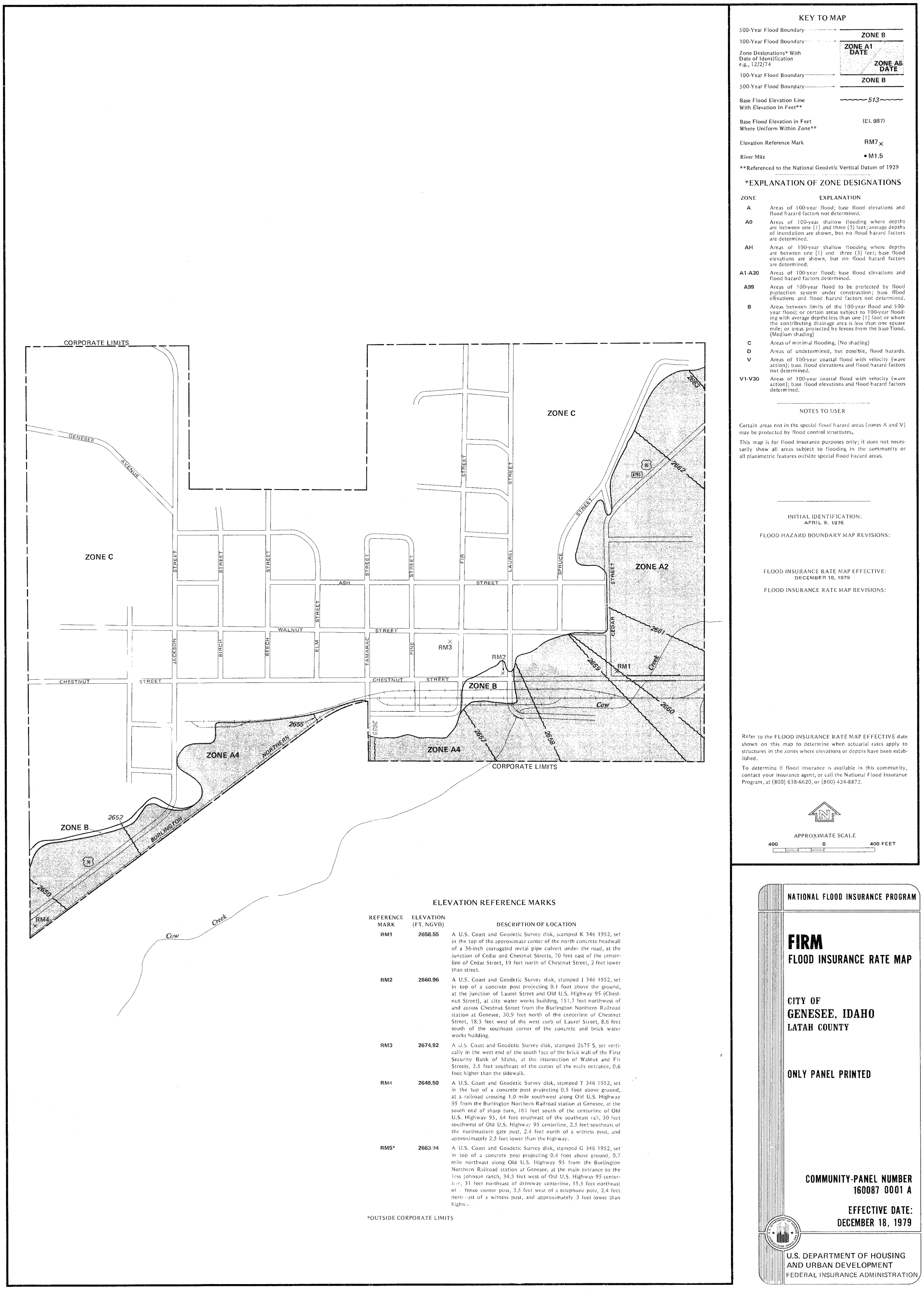
ONLY PANEL PRINTED

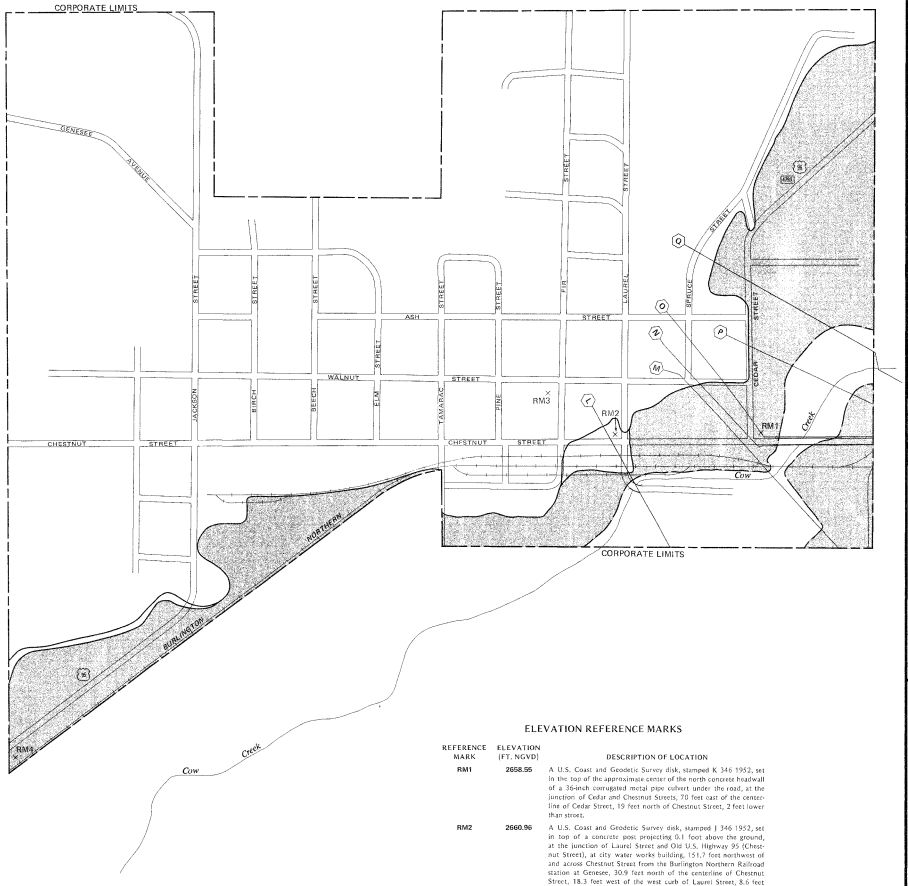
COMMUNITY-PANEL NUMBER
160133 0001 A

EFFECTIVE DATE:
JUNE 5, 1985

Federal Emergency Management Agency

City of Genesee FIRMs



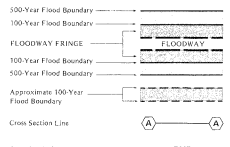


ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION (FT. NGVD)	DESCRIPTION OF LOCATION
RM1	2658.95	A U.S. Coast and Geodetic Survey disk, stamped K 346 1952, set in the top of the approximate center of the north concrete headwall of a 36-inch corrugated metal pipe culvert under the road, at the junction of Cedar and Chestnut Streets, 70 feet east of the centerline of Cedar Street, 19 feet north of Chestnut Street, 2 feet lower than street.
RM2	2660.96	A U.S. Coast and Geodetic Survey disk, stamped J 346 1952, set in top of a concrete post projecting 0.1 foot above the ground, at the junction of Laurel Street and Old U.S. Highway 95 (Chestnut Street), at city water works building, 151.7 feet northwest of and across Chestnut Street from the Burlington Northern Railroad station at Genesee, 30.9 feet north of the centerline of Chestnut Street, 18.3 feet west of the west curb of Laurel Street, 8.6 feet south of the southeast corner of the concrete and brick water works building.
RM3	2674.92	A U.S. Coast and Geodetic Survey disk, stamped 2675 S, set vertically in the west end of the south face of the brick wall of the First Security Bank of Idaho, at the intersection of Walnut and Fir Streets, 3.5 feet southeast of the center of the main entrance, 0.6 foot higher than the sidewalk.
RM4	2649.50	A U.S. Coast and Geodetic Survey disk, stamped T 346 1952, set in the top of a concrete post projecting 0.5 foot above ground, at a railroad crossing 1.0 mile southwest along Old U.S. Highway 95 from the Burlington Northern Railroad station at Genesee, at the south end of sharp turn, 101 feet south of the centerline of Old U.S. Highway 95, 64 feet southeast of the southeast rail, 30 feet southwest of Old U.S. Highway 95 centerline, 2.5 feet southeast of the northeastern gate post, 2.4 feet north of a witness post, and approximately 2.5 feet lower than the highway.
RM6*	2663.94	A U.S. Coast and Geodetic Survey disk, stamped G 346 1952, set in top of a concrete post projecting 0.4 foot above ground, 0.7 mile northeast along Old U.S. Highway 95 from the Burlington Northern Railroad station at Genesee, at the main entrance to the Jess Johnson ranch, 34.5 feet west of Old U.S. Highway 95 centerline, 31 feet northeast of driveway centerline, 15.5 feet northeast of a fence corner post, 3.5 feet west of a telephone pole, 2.4 feet northeast of a witness post, and approximately 3 feet lower than highway.

*OUTSIDE CORPORATE LIMITS

KEY TO MAP



NOTES TO USER

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the Federal Insurance Administration.

This map was prepared to support minimum flood plain management regulations; it may not show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

NATIONAL FLOOD INSURANCE PROGRAM

FLOODWAY
FLOOD BOUNDARY AND FLOODWAY MAP

CITY OF
GENESEE, IDAHO
LATAH COUNTY

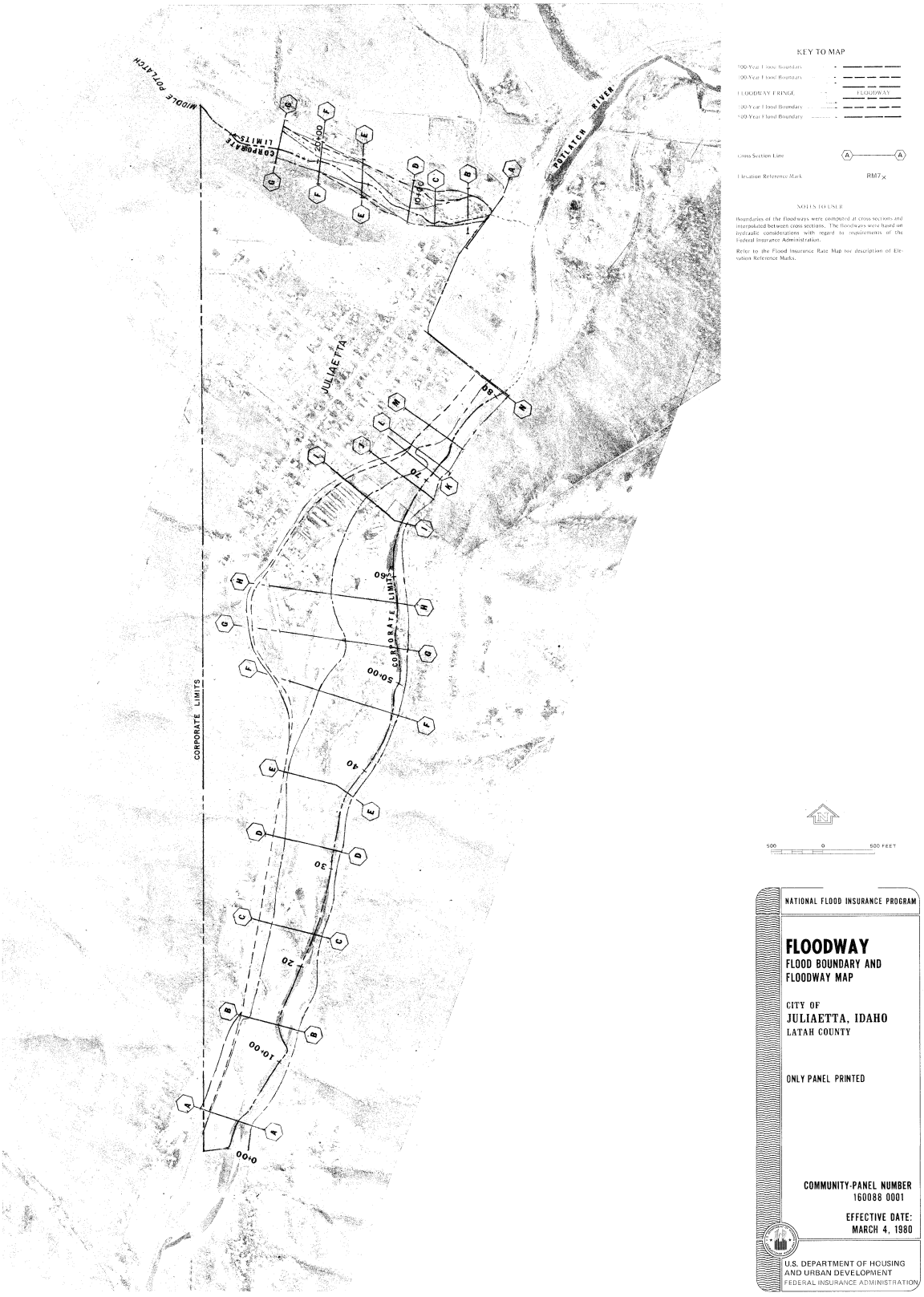
ONLY PANEL PRINTED

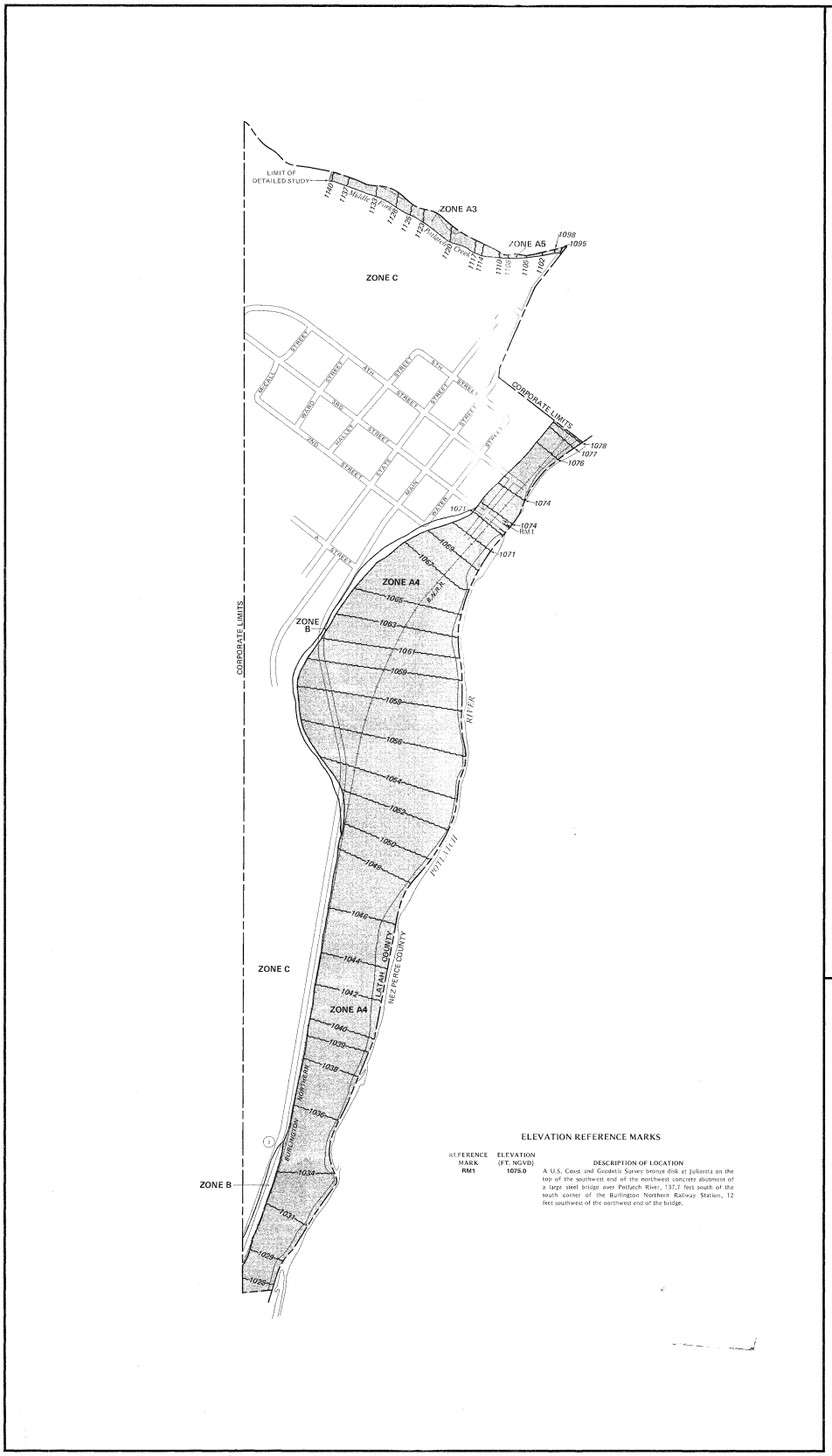
COMMUNITY-PANEL NUMBER
160087 0001

EFFECTIVE DATE:
DECEMBER 18, 1979

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION

City of Juliaetta FIRMs





KEY TO MAP

500-Year Flood Boundary	
100-Year Flood Boundary	ZONE B
Zone Designations* With Date of Identification e.g., 12/2/74	ZONE A1 DATE / ZONE A5 DATE
100-Year Flood Boundary	ZONE B
500-Year Flood Boundary	
Base Flood Elevation Line With Elevation In Feet**	513
Base Flood Elevation In Feet Where Uniform Within Zone**	(EL 987)
Elevation Reference Mark	RM7 ×
River Mile	• M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
AO	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

INITIAL IDENTIFICATION:
OCTOBER 18, 1974

FLOOD HAZARD BOUNDARY MAP REVISIONS:
DECEMBER 19, 1979

FLOOD INSURANCE RATE MAP EFFECTIVE:
MARCH 4, 1980

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620, or (800) 424-8872.

APPROXIMATE SCALE
500 0 500 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
JULIAETTA, IDAHO
LATAH COUNTY

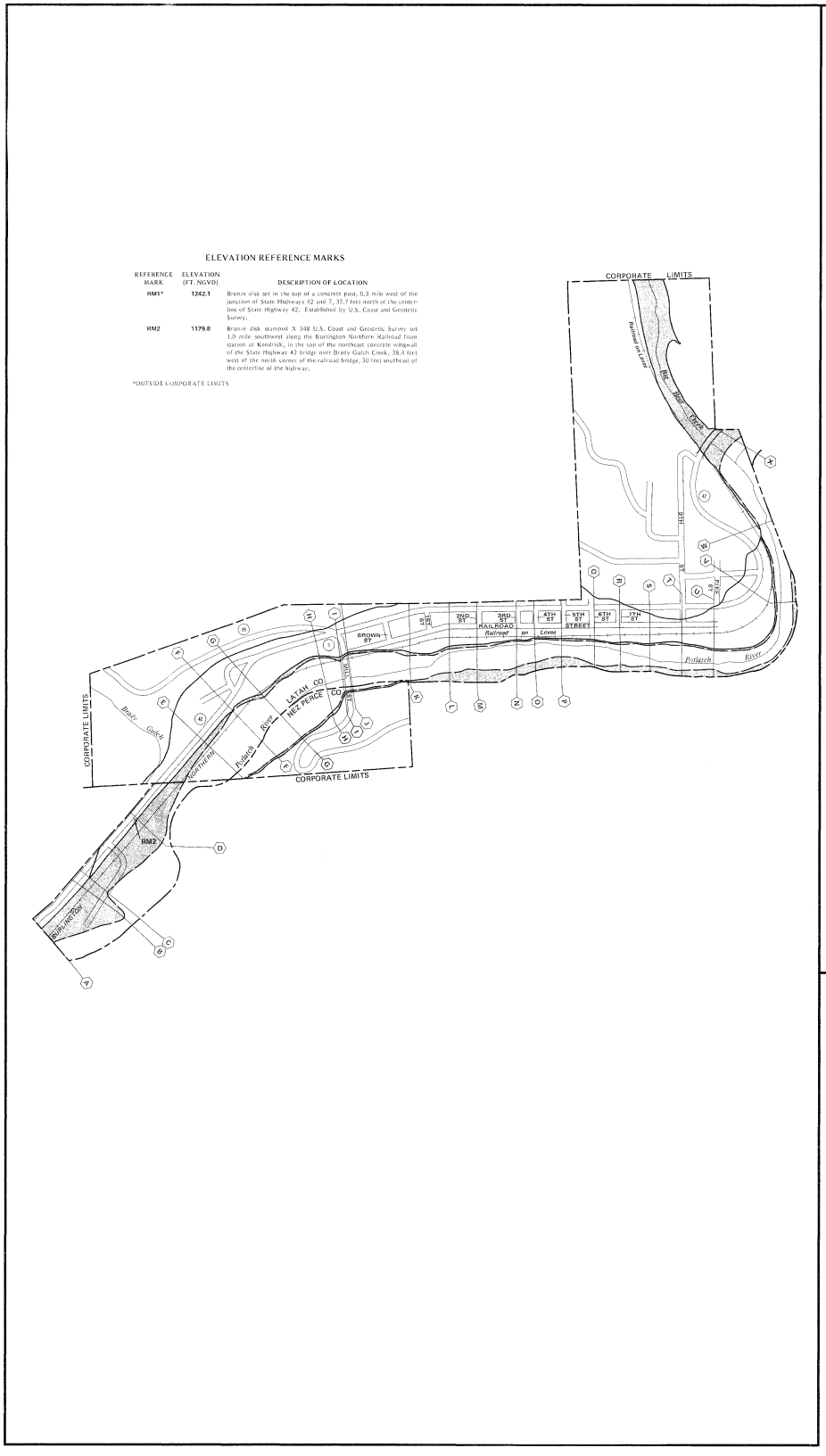
ONLY PANEL PRINTED

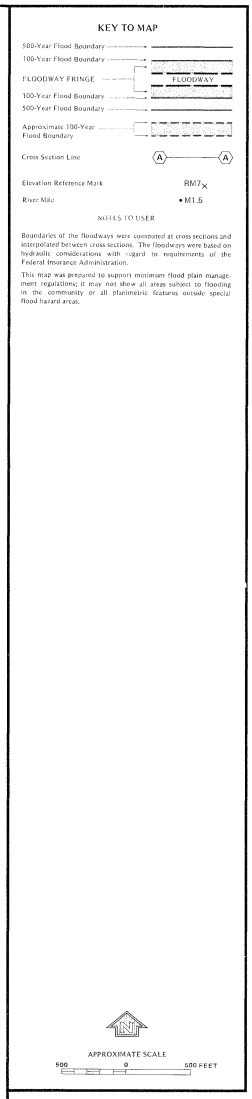
COMMUNITY-PANEL NUMBER
160088 0001 B

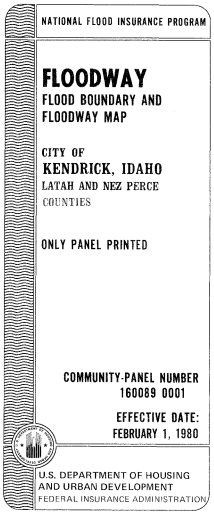
EFFECTIVE DATE:
MARCH 4, 1980

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION

City of Kendrick FIRMs



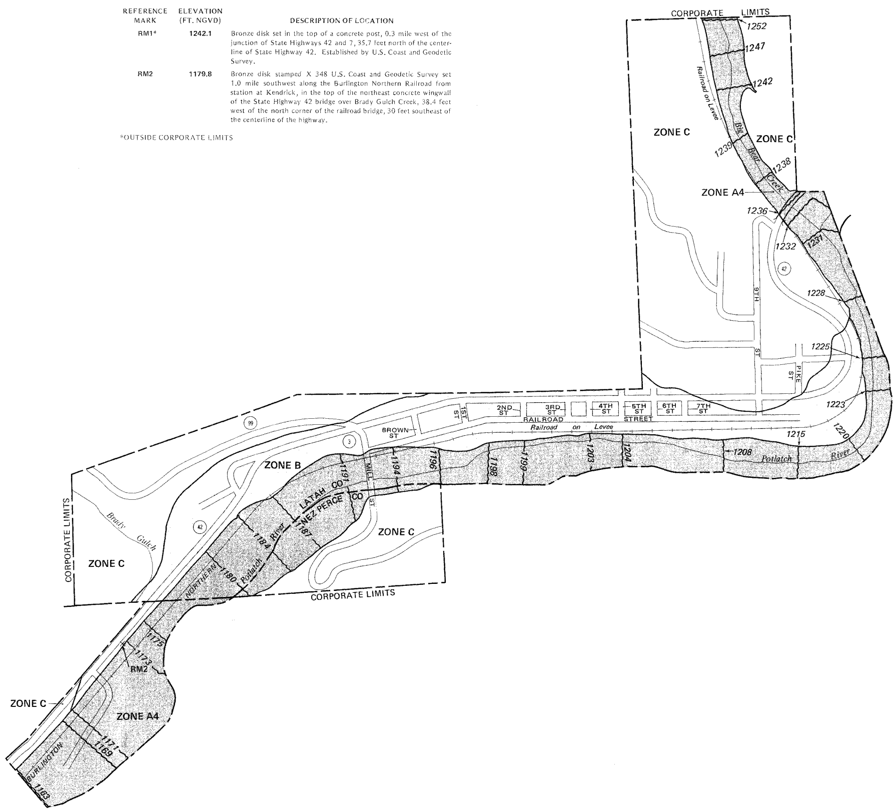




ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION (FT. NGVD)	DESCRIPTION OF LOCATION
RM1*	1242.1	Bronze disk set in the top of a concrete post, 0.3 mile west of the junction of State Highways 42 and 7, 35.7 feet north of the centerline of State Highway 42. Established by U.S. Coast and Geodetic Survey.
RM2	1179.8	Bronze disk stamped X 348 U.S. Coast and Geodetic Survey set 1.0 mile southwest along the Burlington Northern Railroad from station at Kendrick, in the top of the northeast concrete wingwall of the State Highway 42 bridge over Brady Gulch Creek, 38.4 feet west of the north corner of the railroad bridge, 30 feet southeast of the centerline of the highway.

*OUTSIDE CORPORATE LIMITS



KEY TO MAP

500-Year Flood Boundary	ZONE B
100-Year Flood Boundary	
Zone Designations* With Date of Identification e.g., 12/2/74	ZONE A1 DATE / ZONE A5 DATE
100-Year Flood Boundary	ZONE B
500-Year Flood Boundary	
Base Flood Elevation Line With Elevation In Feet**	513
Base Flood Elevation in Feet Where Uniform Within Zone**	(EL 987)
Elevation Reference Mark	RM7×
River Mile	• M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

INITIAL IDENTIFICATION:
OCTOBER 18, 1974

FLOOD HAZARD BOUNDARY MAP REVISIONS:

FLOOD INSURANCE RATE MAP EFFECTIVE:
FEBRUARY 1, 1980

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620, or (800) 424-8872.

N

APPROXIMATE SCALE
500 0 500 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
KENDRICK, IDAHO
LATAH AND NEZ PERCE
COUNTIES

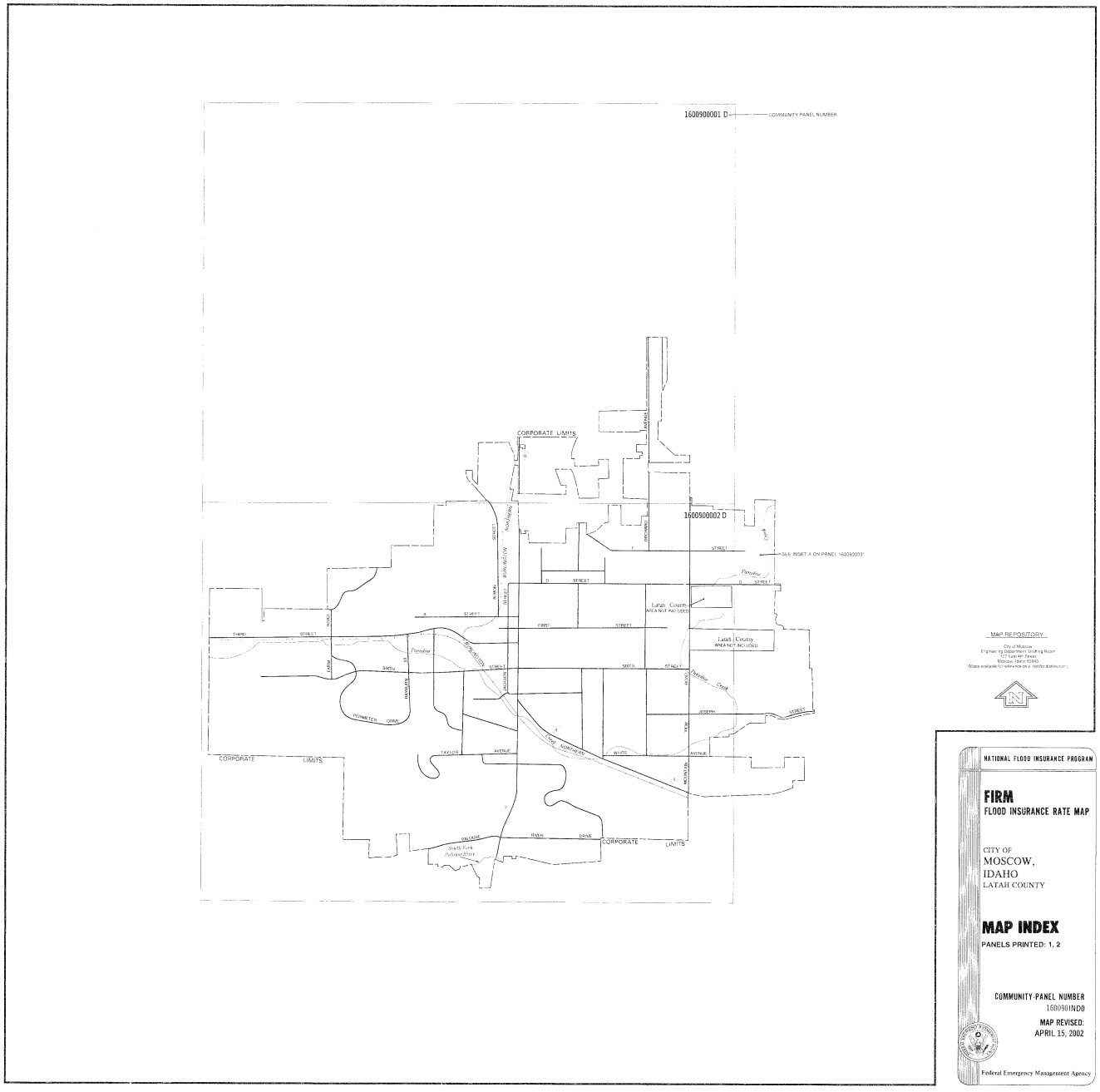
ONLY PANEL PRINTED

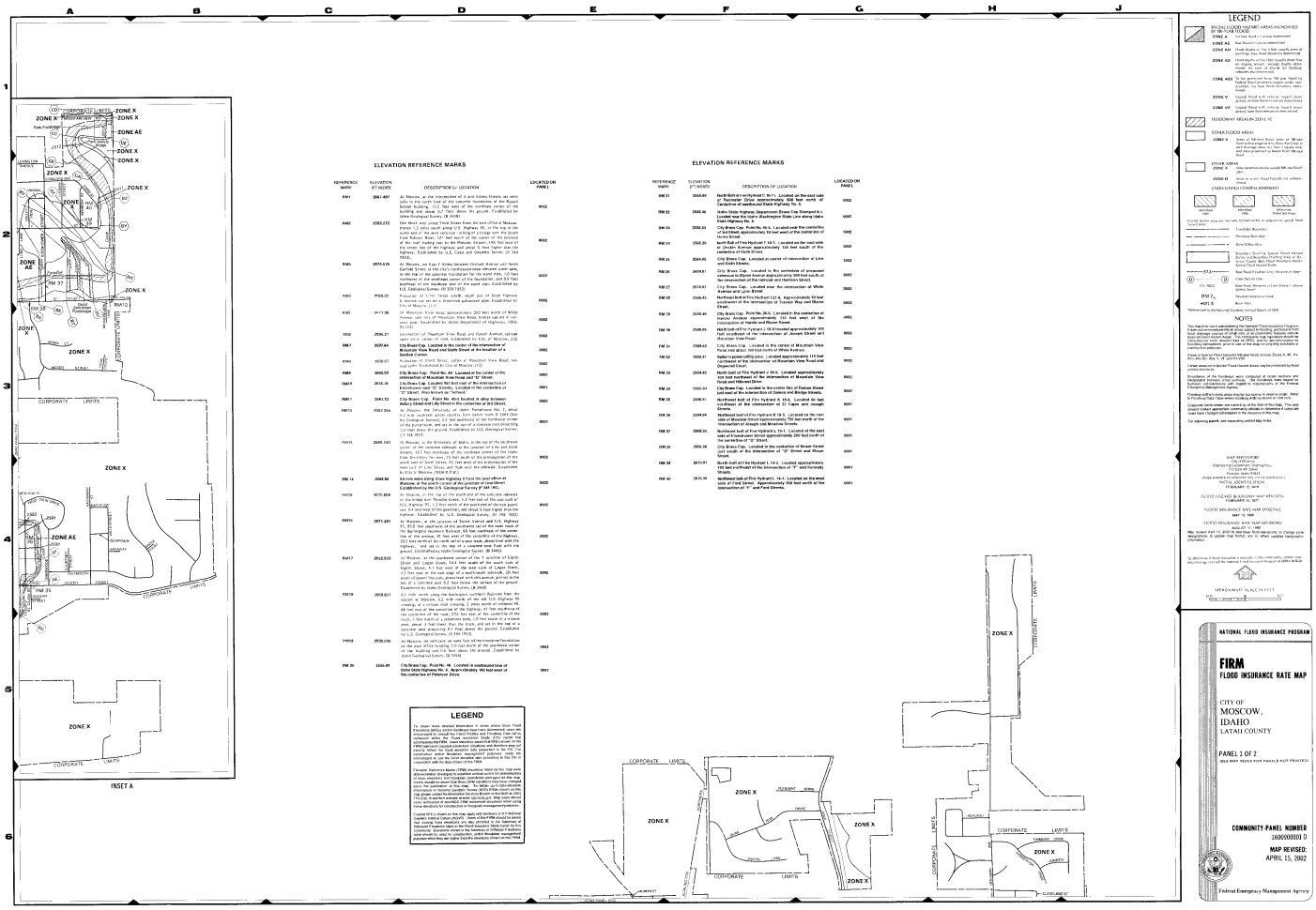
COMMUNITY-PANEL NUMBER
160089 0001 B

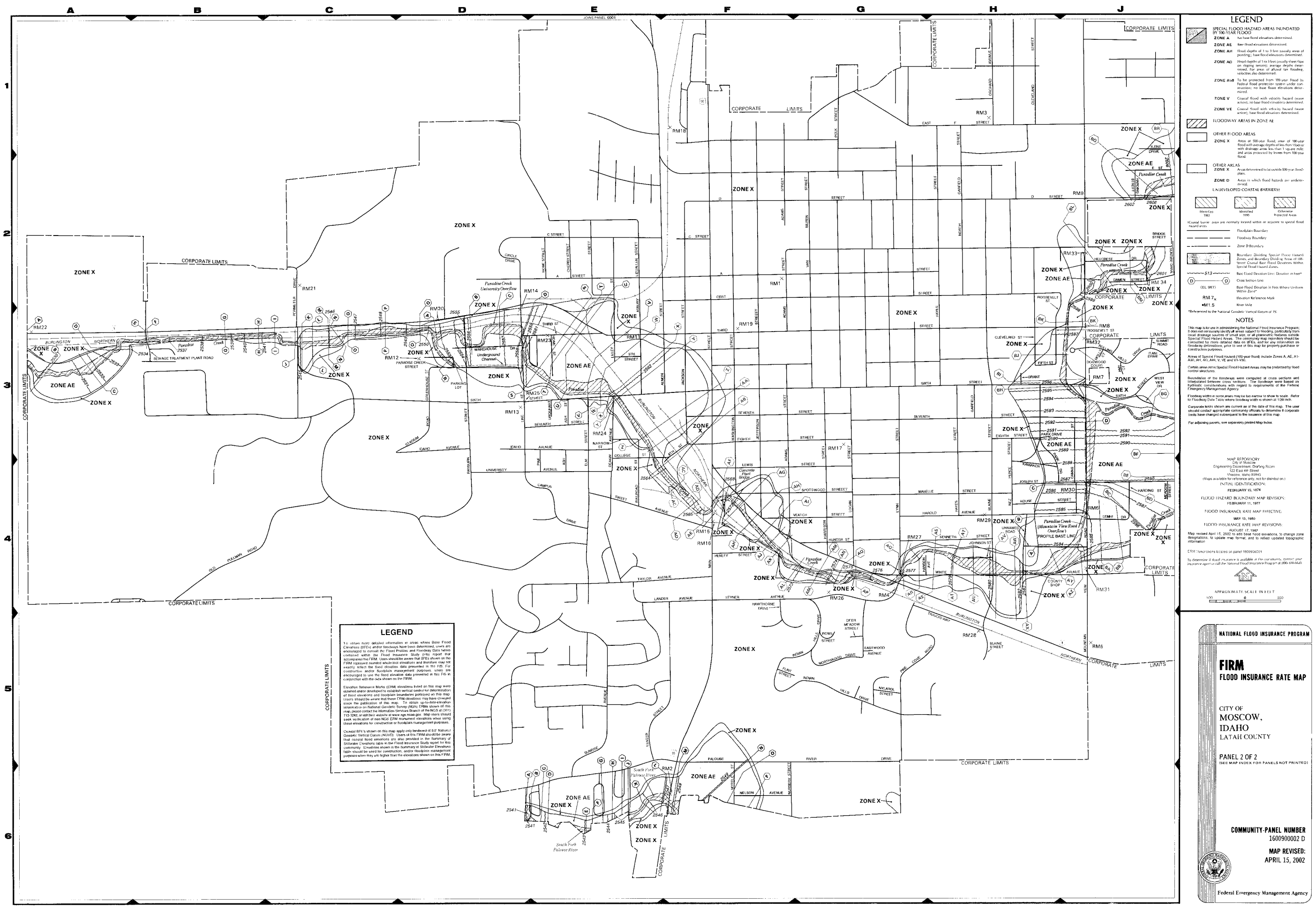
EFFECTIVE DATE:
FEBRUARY 1, 1980

U.S. DEPARTMENT OF HOUSING
AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION

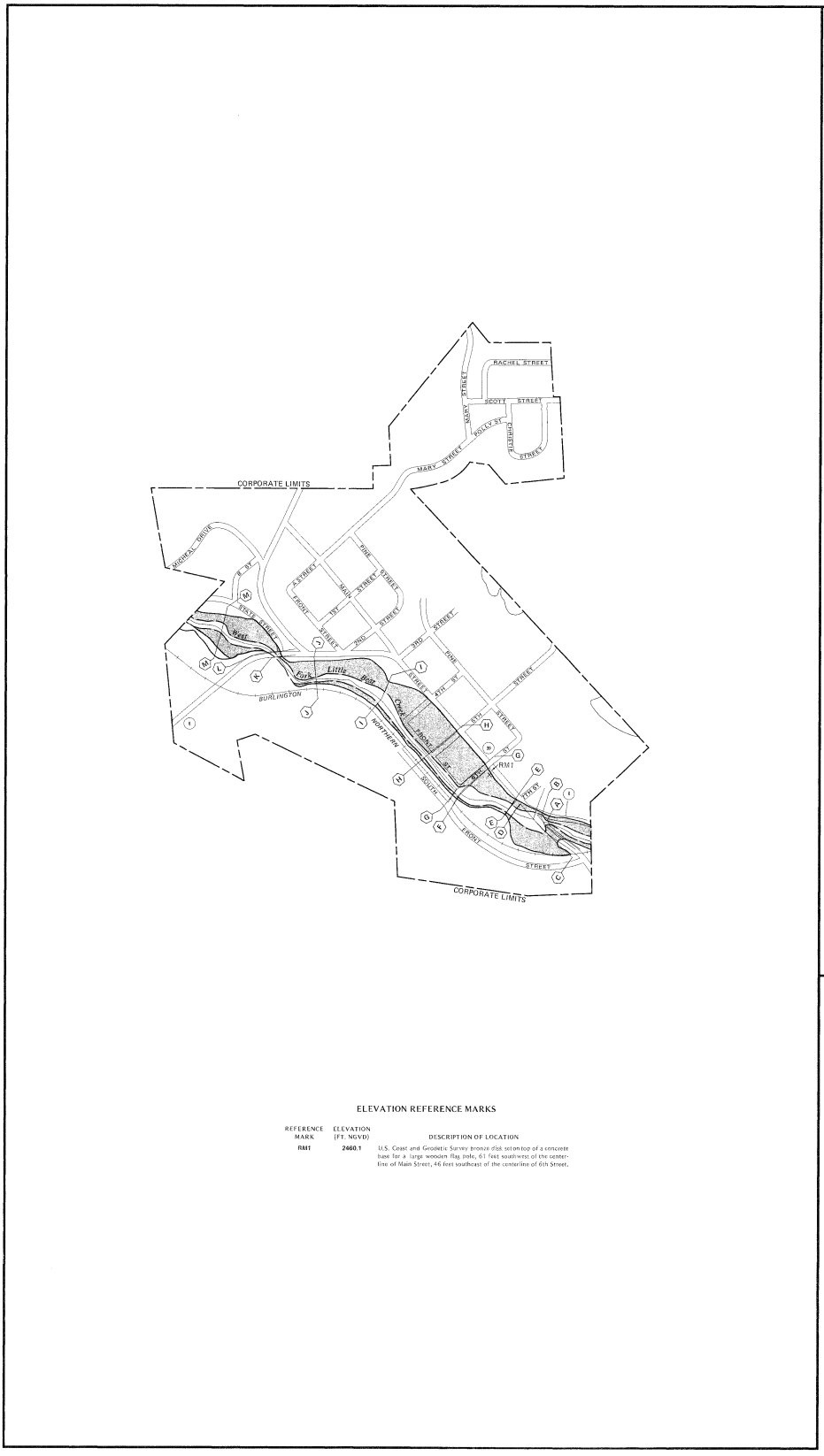
City of Moscow FIRMs




ELEVATION REFERENCE MARKS
ELEVATION REFERENCE MARKS
LEGEND
NOTES
FIRM
FLOOD INSURANCE RATE MAP
CITY OF
MOSCOW,
IDAHO
LATAH COUNTY
PANEL 1 OF 2
COMMUNITY-PANEL NUMBER
160900001 D
MAP REVISED:
APRIL 15, 2002
Federal Emergency Management Agency
INSET A


LEGEND
NOTES
APPROXIMATE SCALE IN FEET
NATIONAL FLOOD INSURANCE PROGRAM
FIRM
FLOOD INSURANCE RATE MAP
CITY OF
MOSCOW,
IDAHO
LATAH COUNTY
PANEL 2 OF 2
(SEE MAP INDEX FOR PANELS NOT PRINTED)
COMMUNITY-PANEL NUMBER
1600900002 D
MAP REVISED:
APRIL 15, 2002
Federal Emergency Management Agency

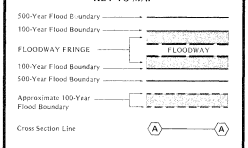
City of Troy FIRMs



ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION (FT. NGVD)	DESCRIPTION OF LOCATION
RM1	2460.1	U.S. Coast and Geodetic Survey bronze disk set on top of a concrete base for a large wooden flag pole, 61 feet southwest of the centerline of Main Street, 46 feet southeast of the centerline of 6th Street.

KEY TO MAP



NOTES TO USER

Boundaries of the floodways were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the Federal Insurance Administration.

This map was prepared to support minimum flood plain management regulations; it may not show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

NATIONAL FLOOD INSURANCE PROGRAM

FLOODWAY
FLOOD BOUNDARY AND FLOODWAY MAP

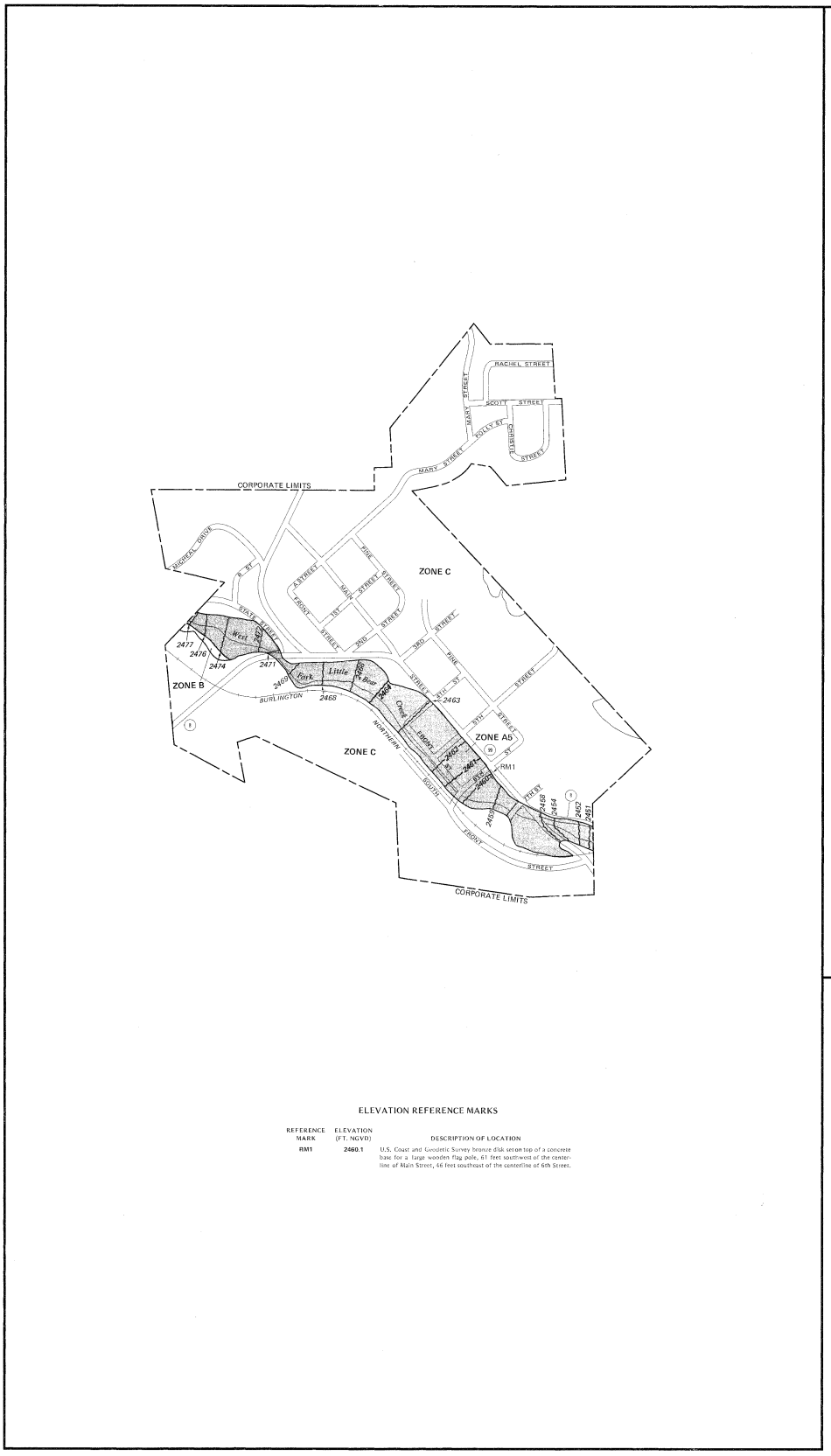
CITY OF
TROY, IDAHO
LATAH COUNTY

ONLY PANEL PRINTED

COMMUNITY-PANEL NUMBER
160091 0001

EFFECTIVE DATE:
DECEMBER 18, 1979

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION



ELEVATION REFERENCE MARKS

REFERENCE MARK	ELEVATION (FT. NGVD)	DESCRIPTION OF LOCATION
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KEY TO MAP

500-Year Flood Boundary	ZONE B
100-Year Flood Boundary	ZONE A1 DATE
Zone Designations* With Date of Identification e.g., 12/2/74	ZONE A5 DATE
100-Year Flood Boundary	ZONE B
500-Year Flood Boundary	
Base Flood Elevation Line With Elevation In Feet**	513
Base Flood Elevation In Feet Where Uniform Within Zone**	(EL 987)
Elevation Reference Mark	RM7 ×
River Mile	• M1.5

**Referenced to the National Geodetic Vertical Datum of 1929

*EXPLANATION OF ZONE DESIGNATIONS

ZONE	EXPLANATION
A	Areas of 100-year flood; base flood elevations and flood hazard factors not determined.
A0	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; average depths of inundation are shown, but no flood hazard factors are determined.
AH	Areas of 100-year shallow flooding where depths are between one (1) and three (3) feet; base flood elevations are shown, but no flood hazard factors are determined.
A1-A30	Areas of 100-year flood; base flood elevations and flood hazard factors determined.
A99	Areas of 100-year flood to be protected by flood protection system under construction; base flood elevations and flood hazard factors not determined.
B	Areas between limits of the 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. (Medium shading)
C	Areas of minimal flooding. (No shading)
D	Areas of undetermined, but possible, flood hazards.
V	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors not determined.
V1-V30	Areas of 100-year coastal flood with velocity (wave action); base flood elevations and flood hazard factors determined.

NOTES TO USER

Certain areas not in the special flood hazard areas (zones A and V) may be protected by flood control structures.

This map is for flood insurance purposes only; it does not necessarily show all areas subject to flooding in the community or all planimetric features outside special flood hazard areas.

INITIAL IDENTIFICATION:
MAY 10, 1974

FLOOD HAZARD BOUNDARY MAP REVISIONS:
DECEMBER 26, 1975

FLOOD INSURANCE RATE MAP EFFECTIVE:
DECEMBER 18, 1979

FLOOD INSURANCE RATE MAP REVISIONS:

Refer to the FLOOD INSURANCE RATE MAP EFFECTIVE date shown on this map to determine when actuarial rates apply to structures in the zones where elevations or depths have been established.

To determine if flood insurance is available in this community, contact your insurance agent, or call the National Flood Insurance Program, at (800) 638-6620, or (800) 424-8872.

APPROXIMATE SCALE
500 0 500 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
TROY, IDAHO
LATAH COUNTY

ONLY PANEL PRINTED

COMMUNITY-PANEL NUMBER
160091 0001 B

EFFECTIVE DATE:
DECEMBER 18, 1979

U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
FEDERAL INSURANCE ADMINISTRATION

APPENDIX G: PLAN ADOPTION & ENDORSEMENT FORMS

[Plan adoption and resolutions will be included upon State and FEMA approval of the plan]

APPENDIX H: REFERENCES

American Community Survey, 2023. Latah County, Idaho. *United States Census Bureau*, 2022 American Community Survey 5-Year Estimates. https://data.census.gov/table?q=Latah%20County,%20Idaho

Avalanche, 2025. North American Public Avalanche Danger Scale. *Avalanche*. https://avalanche.org/avalanche-encyclopedia/human/resources/north-american-public-avalanche-danger-scale/

Bennett, 2025. About. *Bennett Lumber Products*. https://blpi.com/index.php/about-us/

Big Country News, 2023. Cause of High Reservoir Rupture in Lewiston Nearly Two Months Ago Still Unknown. *Big Country News*. https://www.bigcountrynewsconnection.com/idaho/cause-of-high-reservoir-rupture-in-lewiston-nearly-two-months-ago-still-unknown/article_cbea7f34-c1c6-11ed-89f1-3b3f2bc7b937.html

Big Country News, 2023. Health Officials Urge Caution After Rabid Bat is Discovered in Latah County. *Big Country News*. https://www.bigcountrynewsconnection.com/idaho/health-officials-urge-caution-after-rabid-bat-is-discovered-in-latah-county/article_7980e300-4416-11ee-a545-9360fcc19834.html

Big Country News, 2024. Number of Structures Destroyed in Gwen Fire Grows to 156, Including 38 Homes. *Big Country News*. https://www.bigcountrynewsconnection.com/idaho/number-of-structures-destroyed-in-gwen-fire-grows-to-156-including-38-homes/article_9138fb5c-4b47-11ef-85e2-07666582557b.html

Big Country News, 2024. Wildfire Burning Northeast of Moscow 100% Contained. *Big Country News, 2024.* https://api.latah.id.us/web/DownloadFile?filename=DisasterServices%5CPlans%5C2020%20Latah%20County%20Mitigation%20Plan%209-30-2020.pdf

Big Country News, 2024. Wildfire Near Kendrick Reportedly 90% Contained. *Big Country News*. https://www.bigcountrynewsconnection.com/idaho/wildfire-near-kendrick-reportedly-90-contained/article_cb6c1bd4-4367-11ef-ae29-af2886a8f0ec.html

CDC, 2017. Severe Acute Respiratory Syndrome (SARS). *Centers for Disease Control and Prevention (CDC).* https://archive.cdc.gov/#/details?url=https://www.cdc.gov/sars/index.html

CDC, 2024. 2024 Provisional Pertussis Surveillance Report. *Centers for Disease Control and Prevention (CDC)*. https://www.cdc.gov/pertussis/media/pdfs/2025/01/pertuss-surv-report-2024_PROVISIONAL-508.pdf

CDC, 2024. Rabies in the United States: Protecting Public Health. *Centers for Disease Control and Prevention (CDC).* https://www.cdc.gov/rabies/php/protecting-public-health/index.html

CDC, 2025. Norovirus. *Centers for Disease Control and Prevention (CDC).* https://www.cdc.gov/norovirus/about/index.html

CDC, 2025. Rabies. *Centers for Disease Control and Prevention (CDC).* https://www.cdc.gov/rabies/index.html

CDC, 2025. Ticks. *Centers for Disease Control and Prevention (CDC).* https://www.cdc.gov/ticks/about/where-ticks-live.html?CDC_AAref_Val=https://www.cdc.gov/ticks/geographic_distribution.html

CDC, 2025. Whooping Cough (Pertussis). *Centers for Disease Control and Prevention (CDC).* https://www.cdc.gov/pertussis/index.html

Citizen Portal, 2025. Idaho Enacts New Telecommunications and Cybersecurity Policies for State Agencies. *Citizen Portal.* https://citizenportal.ai/articles/2402375/Idaho/Idaho-enacts-new-telecommunications-and-cybersecurity-policies-for-state-agencies

City of Moscow, 2025. Latah County Emergency Medical Services Study. *City of Moscow, Idaho.* https://www.ci.moscow.id.us/DocumentCenter/View/32886/2024-EMS-Study--RFP-Latah-County-1-9-25-FINAL?bidId=

City of Moscow, 2025. Paradise Creek Flood Hazard Mitigation TAC. *City of Moscow, Idaho.* https://www.ci.moscow.id.us/1044/Paradise-Creek-Flood-Hazard-Mitigation-T

City of Moscow, 2025. Press Release: Record Reponse Year for Moscow Fire Department. *City of Moscow, Idaho.* https://www.ci.moscow.id.us/CivicSend/ViewMessage/Message/249646

Climate of Idaho, 2025. Climate of Idaho. *National Oceanic and Atmospheric Administration*, National Climatic Data Center. https://www.nrc.gov/docs/ML1018/ML101800249.pdf

CWPP, 2023. 2023 Latah County, Idaho Community Wildfire Protection Plan. *Latah County, Idaho.* https://api.latah.id.us/web/DownloadFile?filename=DisasterServices%5CPlans%5CLatah%20County%20CWPP.pdf

Data USA, 2024. Latah County, Idaho. *Data USA*. https://datausa.io/profile/geo/latah-county-id#housing

DEQ, 2024. Idaho Wildfire Emissions Estimates, 2023 Wildfire Season. *Idaho Department of Environmental Quality.*

https://www2.deq.idaho.gov/admin/LEIA/api/document/download/18546#:~:text=The%202023%20season%20saw%20a,2020%20average%20of%20601%2C826%20acres.

DOI, 2025. Fire Department Directory. *Idaho Department of Insurance (DOI).* https://doi.idaho.gov/state-fire-marshal/fire-department-directory/

DOI, 2025. State Fire Marshal Annual Reports. *Idaho Department of Insurance (DOI).* https://doi.idaho.gov/state-fire-marshal/annual-reports/

Drought, 2025. Current Idaho Drought Maps. *National Oceanic and Atmospheric Administration*, National Integrated Drought Information System. https://www.drought.gov/states/idaho

East Idaho News, 2023. Here's the Latest On the Cyberattack Affecting Mountain View and Idaho Falls Community Hospitals. *East Idaho News*, Logan Ramsey. https://www.eastidahonews.com/2023/06/heres-the-latest-on-the-cyberattacks-affecting-mountain-view-and-idaho-falls-community-hospitals/

eCFR, 2025. Appendix A to Part 355--The List of Extremely Hazardous Substances and Their Threshold Planning Quantities. *Code of Federal Regulations*. https://www.ecfr.gov/current/title-40/chapter-I/subchapter-J/part-355/appendix-Appendix%20A%20to%20Part%20355

EIA, 2025. Electricity Explained: Factors Affecting Electricity Prices. *U.S. Energy Information Administration*, Independent Statistics and Analysis. https://www.eia.gov/energyexplained/electricity/prices-and-factors-affecting-prices.php

EPA, 2025. Toxics Release Inventory. U*.S. Environmental Protection Agency (EPA).* https://edap.epa.gov/public/extensions/newTRISearch/newTRISearch.html?#

EWG, 2023. Crop Insurance Indemnities in Latah County, Idaho. *Environmental Working Group (EWG).* https://farm.ewg.org/cropinsurance.php?fips=16057&summpage=IN_REGPAGE

FEMA, 2025. FEMA Flood Map Service Center. *Federal Emergency Management Agency (FEMA).* https://msc.fema.gov/portal/advanceSearch#searchresultsanchor

FEMA, 2025. Community Status Book Report. *Federal Emergency Management Agency (FEMA).* https://www.fema.gov/cis/ID.html

FEMA, 2025. CRS Eligible Communities. *Federal Emergency Management Agency (FEMA).* https://www.fema.gov/sites/default/files/documents/fema_crs_eligible-communities_apr-2025.pdf

FEMA, 2025. Flood Insurance Data and Analytics. *Federal Emergency Management Agency (FEMA)*, National Flood Insurance Program. https://nfipservices.floodsmart.gov/reports-flood-insurance-data

FEMA, 2024. Understanding Substantial Improvement and Substantial Damage. *Federal Emergency Management Agency (FEMA).* https://www.fema.gov/fact-sheet/understanding-substantial-improvement-and-substantial-damage

Find Energy, 2025. Latah County, ID Electricity Rates & Statistics. *Find Energy.* https://findenergy.com/id/latah-county-electricity/

Genesee School District, 2025. *Genesee Joint School District #282.* https://www.sd282.org/

Gritman, 2025. About Us. *Gritman Medical Center*. https://www.gritman.org/about/

Headwaters Economics, 2025. Latah County, ID. *Headwaters Economics*, Economic Profile System. https://headwaterseconomics.org/apps/economic-profile-system/16057

HHS Empower Program, 2025. Medicare At-Risk Populations by Geography. *U.S. Department of Health & Human Services (HHS),* Empower Program. https://empowerprogram.hhs.gov/empowermap

HUD Exchange, 2025. Floodplain Management. *HUD Exchange*. https://www.hudexchange.info/programs/environmental-review/floodplain-management/

IAHD, 2025. Highway District Members. *Idaho Association of Highway Districts*. https://iahd.com/highway-district-members/

Idaho ARES, 2025. Current Fire. *Idaho Amateur Radio Emergency Service (ARES).* https://www.idahoares.info/current_fire.php

Idaho Capital Sun, 2023. Almost Three-Fourths of Fires Idaho State Officials Tracked in 2023 Were Human Caused. *Idaho Capital Sun,* Clark Corbin. https://idahocapitalsun.com/2023/10/17/almost-three-fourths-of-fires-idaho-state-officials-tracked-in-2023-were-human-caused/

Idaho Demographics, 2025. Idaho Counties by Population (2024). *Idaho Demographics by Cubit.* https://www.idaho-demographics.com/counties_by_population

Idaho Department of Education, 2025. School Choice. *Idaho Department of Education*. https://www.sde.idaho.gov/school-choice/index.html

Idaho Department of Labor, 2025. Unemployment Insurance Reports. *Idaho Department of Labor, Research & Analysis and Public Affairs*. https://lmi.idaho.gov/data-tools/unemployment-insurance-reports/

Idaho DHW, 2025. Arbovirus Surveillance Summary--Idaho, 2003-2023. *Idaho Department of Health & Welfare (DHW).* https://publicdocuments.dhw.idaho.gov/WebLink/DocView.aspx?id=29657&dbid=0&repo=PUBLIC-DOCUMENTS&cr=1

Idaho Fire Info, 2025. *Idaho Fire Information*. https://www.idahofireinfo.com/

Idaho Fire Marshal, 2023. 2023 Annual Report. *Idaho Department of Insurance*, Idaho State Fire Marshal. https://doi.idaho.gov/wp-content/uploads/SFM/AnnualReport/2023-Annual-Report.pdf

Idaho Genealogy Trails, 2025. Latah County History. *Idaho Genealogy Trails*. https://genealogytrails.com/ida/latah/history/history_latah.html

Idaho Geological Survey, 2002. Latah County, Idaho. *Idaho Geological Survey*, Idaho State University. https://digitalatlas.cose.isu.edu/counties/latah/geomap.htm

Idaho Geological Survey, 2003. Miocene and Younger Faults in Idaho. *Idaho Geological Survey*. https://www.idahogeology.org/pub/Maps/m-08-m.pdf

Idaho Hazard Mitigation Plan, 2023. 2023 State of Idaho Hazard Mitigation Plan. *State of Idaho*. https://ioem.idaho.gov/wp-content/uploads/2023/11/2023-SHMP-State-Mitigation-Final-11_15_23.pdf

Idaho Schools, 2025. State of Idaho. *Idaho State Department of Education*. https://idahoschools.org/state/ID

Idaho SDE, 2025. School Choice. *Idaho State Department of Education*. https://www.sde.idaho.gov/school-choice/index.html

Idaho State Historical Society, 1969. The Creation of the Territory of Idaho. *Idaho State Historical Society*. https://history.idaho.gov/wp-content/uploads/0264_The-Creation-of-the-Territory-of-Idaho.pdf

III, 2023. Facts + Statistics: Hail. *Insurance Information Institute (III).* https://www.iii.org/fact-statistic/facts-statistics-hail#:~:text=IN%20THIS%20FACTS%20%2B%20STATISTICS&text=Hail%2Drelated%20insured%20losses%20between,the%20NOAA%27s%20Severe%20Storms%20database.

IPAC, 2025. *Idaho Panhandle Avalanche Center*. https://www.idahopanhandleavalanche.org/

ITD, 2023. 2023 Idaho Traffic Crashes. *Idaho Transportation Department*, Office of Highway Safety. https://apps.itd.idaho.gov/Apps/OHS/Crash/23/Analysis.pdf

Kendrick School District, 2025. *Kendrick Joint School District #283.* https://www.sd283.org/

KHQ, 2012. UPDATE: Idaho Plane Dropping Tissue At Event Before Crash. *Nonstop Local KHQ*. https://www.khq.com/news/update-idaho-plane-dropping-tissue-at-event-before-crash/article_9c14d02e-d1e3-58d6-af6f-e8231b2b9728.html

KHQ, 2019. Flooding in Moscow, ID. *Non-Stop Local KHQ.* https://www.khq.com/flooding-in-moscow-id/collection_8b52ceae-5b2c-11e9-b7c3-0b115f9e696b.html

KREM2, 2020. Mount St. Helens Eruption: A Timeline in the Northwest. *KREM2,* Megan Carroll, Destiny Johnson. https://www.krem.com/article/news/local/mt-st-helens/mount-st-helens-eruption-timeline-northwest/293-28b036fd-d7c5-4285-8d7c-4c7be2dce468

KREM2, 2023. City of Lewiston Continues Investigating Reservoir Failure that Caused Property Damage. *KREM2*, Shannon Moudy, Brianda Perez. https://www.krem.com/article/news/local/lewiston-reservoir-failure-investigation/293-5bb6e694-55c0-4b3b-a8cd-3153e5feb464

KREM2, 2025. Power Outages Near Palouse, Potlatch Amid Heavy Rain, Flooding. *KREM2*, Emmalee Appel. https://www.krem.com/article/news/local/power-outages-palouse-heavy-rain-flooding/293-6946d887-243d-4300-ba25-d35a5a58c199

Lane, 2018. The Dangers of Cold Weather. *Public Health Post*, Kathryn Lane. https://www.publichealthpost.org/research/counting-cold-related-deaths-new-york-city/

Latah County, 2004. South Latah Highway District Transportation System Plan. *Latah County, ID.* https://api.latah.id.us/web/DownloadFile?filename=PlanningBuilding%5CPlans%5CSouth%20Latah%20Highway%20District%20Transportation%20Plan.pdf

Latah County, 2006. North Latah County Highway District Transportation System Plan. *Latah County, ID.* https://api.latah.id.us/web/DownloadFile?filename=PlanningBuilding%5CPlans%5CNorth%20Latah%20Highway%20District%20Transportation%20Plan.pdf

Latah County, 2020. 2020 Latah County Multi-Jurisdictional Hazard Mitigation Plan. *Latah County, Idaho.* https://api.latah.id.us/web/DownloadFile?filename=DisasterServices%5CPlans%5C2020%20Latah%20County%20Mitigation%20Plan%209-30-2020.pdf

Latah County, 2021. Latah County Comprehensive Plan & Land Use Map. *Latah County, Idaho.* https://api.latah.id.us/web/DownloadFile?filename=PlanningBuilding%5CPlans%5CComprehensive%20Plan.pdf

Latah County, 2024. Latah County Highway Districts. *Latah County, Idaho*. https://api.latah.id.us/web/DownloadNewsNotice?fileName=LC%20Highway%20Districts.pdf&type=Notice

Latah County Comprehensive Plan, 2010. Latah County Comprehensive Plan and Land Use Map. *Latah County, Idaho.* https://api.latah.id.us/web/DownloadFile?filename=PlanningBuilding\Plans\Comprehensive%20Plan.pdf

Latah County Topo Map, 2025. *Latah County Topographic Map.* https://en-gb.topographic-map.com/map-8h3g9m/Latah-County/?center=46.90777%2C-117.01864&zoom=14&popup=46.63297%2C-116.64955

Latah SWCD, 2025. Agricultural Lands. *Latah Soil and Water Conservation District*. https://www.latahswcd.org/agricultural-lands

Lewiston Tribune, 2008. Failure is Not an Option. *Lewiston Tribune*, Eric Barker. http://a566616.sites.myregisteredsite.com/failnota.htm#:~:text=Nearly%2030%20years%20ago%2C%20corps,Lewiston%20after%20about%20two%20hours.

Lewiston Tribune, 2024. City of Lewiston Faces Lawsuit Over Reservoir Failure. *Yahoo Finance*, Lewiston Tribune, Elaine Williams. https://finance.yahoo.com/news/city-lewiston-faces-lawsuit-over-132100317.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAAL3Uw8LBkjAgLGcxuPcUuAES31tZuFe9MIRHU-uLT96gJHY4hDkZSYhJtYuF5Njt8b_jvn_JskjASYHxm_lIhjTEuUPUaQkbB9xCvRfUPhH181csdfWzMZ492ouPxVaDzjNJLVv-HWdq4TgzZZ28kBe_iNVh8EJxBbP6jkoMWHCT

Moscow School District, 2025. *Moscow School District #281*. https://www.msd281.org/home

Mountain View Hospital, 2023. Mountain View Managing IT Issue. *Mountain View Hospital*. https://www.mountainviewhospital.org/blog/posts/2023/may/mountain-view-managing-it-issue/

National Bridge Inventory, 2024. Bridges & Structures. U*.S. Department of Transportation*, Federal Highway Administration. https://www.fhwa.dot.gov/bridge/nbi/ascii2024.cfm

National Geographic, 2025. Koppen Climate Classification System. *National Geographic*. https://education.nationalgeographic.org/resource/koppen-climate-classification-system/

National Register of Historic Places, 2025. Data Downloads. *National Park Service*, National Register of Historic Places. https://www.nps.gov/subjects/nationalregister/data-downloads.htm

National Response Center, 2025. *National Response Center*. https://nrc.uscg.mil/Default.aspx

National Risk Index, 2025a. Community Resilience. *Federal Emergency Management Agency*, National Risk Index. https://hazards.fema.gov/nri/community-resilience

National Risk Index, 2025b. Determining Risk. *Federal Emergency Management Agency*, National Risk Index. https://hazards.fema.gov/nri/determining-risk

National Risk Index, 2025c. Expected Annual Loss. *Federal Emergency Management Agency*, National Risk Index. https://hazards.fema.gov/nri/expected-annual-loss

National Risk Index, 2025d. Risk Comparison Report. *Federal Emergency Management Agency*, National Risk Index. https://hazards.fema.gov/nri/report/viewer?dataLOD=Census%20tracts&dataIDs=T16057005500,T16057005102,T16057005101,T16057005200,T16057005600,T16057005301,T16057005302,T16057005400,T16057005700

National Risk Index, 2025e. Social Vulnerability. *Federal Emergency Management Agency*, National Risk Index. https://hazards.fema.gov/nri/social-vulnerability

NCEI, 2025. Drought Indices and Data. *National Oceanic and Atmospheric Administration*, National Centers for Environmental Information (NCEI). https://www.ncei.noaa.gov/access/monitoring/nadm/indices

NCEI, 2025. Regional Snowfall Index (RSI). *National Oceanic and Atmospheric Administration* (NOAA), National Centers for Environmental Information (NCEI). https://www.ncei.noaa.gov/access/monitoring/rsi/#:~:text=RSI%20is%20based%20on%20the,the%20index%20to%20societal%20impacts.

NDMC, 2025. Drought Basics. *University of Nebraska-Lincoln*, National Drought Mitigation Center. https://drought.unl.edu/Education/DroughtBasics.aspx

Neighborhoods at Risk, 2025. Latah County, ID Climate Projections. *Headwaters Economics*, Neighborhoods at Risk. https://nar.headwaterseconomics.org/16057/explore/climate

Newsweek, 2025. 'Very Rare' Lightning Strikes Idaho a Dozen Times During Winter Storm. *Newsweek*, Anna Skinner. https://www.newsweek.com/rare-lightning-strikes-idaho-atmospheric-river-winter-storm-2035388

NFPA, 2025. Lightning Fires and Lightning Strikes. *National Fire Protection Association (NFPA).* https://www.nfpa.org/en

NIFC, 2025. Maps. *National Interagency Fire Center (NIFC).* https://www.nifc.gov/fire-information/maps

NIFC, 2025. NICC Annual Reports. *National Interagency Fire Center (NIFC).* https://www.nifc.gov/fire-information/statistics

NOAA, 2025. Beaufort Wind Scale. *National Oceanic and Atmospheric Administration (NOAA),* Storm Prediction Center. https://www.spc.noaa.gov/faq/tornado/beaufort.html

NOAA, 2025. The Enhanced Fujita Scale (EF Scale). *National Oceanic and Atmospheric Administration (NOAA),* Storm Prediction Center. https://www.spc.noaa.gov/efscale/

NOWData, 2025. NOAA Online Weather Data--Moscow, ID. *National Oceanic and Atmospheric Administration*, National Weather Service (NWS). https://www.weather.gov/wrh/climate?wfo=otx

NPS, 2025. Volcanic Explosivity Index (VEI). *National Park Service.* https://www.nps.gov/subjects/volcanoes/volcanic-explosivity-index.htm#:~:text=The%20Volcanic%20Explosivity%20Index%20(VEI,for%20the%20size%20of%20earthquakes.

NTSB, 2025. Case Analysis and Reporting Online. *National Transportation Safety Board (NTSB).* https://carol.ntsb.gov/

NWS, 2025. Drought Monitoring. *National Weather Service (NWS),* Climate Prediction Center. https://www.cpc.ncep.noaa.gov/products/monitoring_and_data/drought.shtml

NWS, 2025. Hail Threat Defined. *National Oceanic and Atmospheric Administration*, National Weather Service (NWS). https://www.weather.gov/mlb/hail_threat#:~:text=Note%3A%20To%20be%20considered%20severe,golf%20balls)%20causing%20minor%20damage.

NWS, 2025. Heat Forecast Tools. *National Oceanic and Atmospheric Administration*, National Weather Service (NWS). https://www.weather.gov/safety/heat-index

NWS, 2025. How Dangerous is Lightning? *National Oceanic and Atmospheric Administration*, National Weather Service (NWS). https://www.weather.gov/safety/lightning-odds

NWS, 2025. Lightning Activity Level (LAL). *National Oceanic and Atmospheric Administration*, National Weather Service (NWS). https://www.weather.gov/media/rnk/fire/LAL.pdf

NWS, 2025. Lightning Fatalities 2024 by State. *National Oceanic and Atmospheric Administration*, National Weather Service (NWS). https://www.weather.gov/safety/lightning-fatalities

NWS, 2025. Lightning Safety Tips and Resources. *National Oceanic and Atmospheric Administration,* National Weather Service (NWS). https://www.weather.gov/safety/lightning

NWS, 2025. Lightning Victims. *National Oceanic and Atmospheric Administration*, National Weather Service (NWS). https://www.weather.gov/safety/lightning-victims

NWS, 2025. NWS HeatRisk. *National Oceanic and Atmospheric Administration (NOAA),* National Weather Service (NWS). https://www.wpc.ncep.noaa.gov/heatrisk/

NWS, 2025. PDSI Explanation. *National Oceanic and Atmospheric Administration*, National Weather Service (NWS), Climate Prediction Center. https://www.cpc.ncep.noaa.gov/products/analysis_monitoring/cdus/palmer_drought/wpdanote.shtml

NWS, 2025. Tornado Definition. *National Oceanic and Atmospheric Administration*, National Weather Service (NWS). https://www.weather.gov/phi/TornadoDefinition

NWS, 2025. Wind Chill Chart. *National Oceanic and Atmospheric Administration*, National Centers for Environmental Information. https://www.weather.gov/safety/cold-wind-chill-chart

PHMSA, 2025. PHMSA Portal Access Page. *Pipeline and Hazardous Materials Safety Administration (PHMSA).* https://portal.phmsa.dot.gov/phmsapub/faces/PHMSAHome;PHMSAPUB_SESSIONID=1axpPn_i-h966SfuaOue_4OJt5fSy7X3iiMCYdwkbhX-bogU0_Sh!-1439947437?req=-3216874334889349807&attempt=0

Potlatch School District, 2025. *Potlatch School District #285*. https://www.psd285.org/

RAPT, 2025. Resilience Analysis and Planning Tool (RAPT). *Federal Emergency Management Agency.* https://fema.maps.arcgis.com/apps/webappviewer/index.html?id=90c0c996a5e242a79345cdbc5f758fc6

RGJ, 2025. Latah County, ID Drought Monitor. *Reno Gazette Journal (RGJ).* https://data.rgj.com/drought/idaho/latah-county/16057/#search

Schweitzer, 2024. Schweitzer Engineering Laboratories Accelerates Hiring. *Schweitzer Engineering Laboratories Newsroom.* https://selinc.com/company/news/schweitzer-engineering-laboratories-accelerates-hiring/

SMS Tsunami Warning, 2025. Mercalli Scale. *SMS Tsunami Warning*. https://www.sms-tsunami-warning.com/pages/mercalli-scale

Spokesman-Review, 1996. Counties Hope for Flood of Money Work to Repair Last Winter's Flood Damage Begins as $2.5 Million On Way From State. *The Spokesman-Review*. https://www.spokesman.com/stories/1996/oct/18/counties-hope-for-flood-of-money-work-to-repair/

Spokesman-Review, 2012. Pilot Dead After Plane Crash Near Moscow. *The Spokesman-Review*. https://www.spokesman.com/stories/2012/sep/09/pilot-dead-after-plane-crash-near-moscow/

Spokesman-Review, 2023. Largest Natural Gas Outage in Avista's History Cuts Off Heat to Much of the Palouse; Some Customers Could Be Without Power 3-5 Days. *The Spokesman-Review*, James Hanlon. https://www.spokesman.com/stories/2023/nov/09/major-gas-line-break-cuts-off-heat-to-much-of-the-/

SSA, 2023. SSI Recipients by State and County, 2023. *Social Security Administration*. https://www.ssa.gov/policy/docs/statcomps/ssi_sc/2023/id.pdf

State of Idaho, 2025. School Districts. *State of Idaho.* https://idaho.gov/education/school-districts/#a

StateScoop, 2019. Small Counties Serious About Cybersecurity Should Meet Their State CIOs. *StateScoop*, Benjamin Freed. https://statescoop.com/small-counties-serious-about-cybersecurity-should-meet-their-state-cios/

State Summaries, 2022. State Climate Summaries 2022, Idaho. *National Oceanic and Atmospheric Administration*, National Centers for Environmental Information, State Summaries. https://statesummaries.ncics.org/chapter/id/

Storm Events Database, 2025. Storm Events Database. *National Oceanic and Atmospheric Administration,* National Centers for Environmental Information. https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=16%2CIDAHO

Think Hazard, 2025. Volcano. *Think Hazard*. https://www.thinkhazard.org/en/report/3226-united-states-of-america-idaho/VA#:~:text=Climate%20change%20impact%3A%20Future%20ice,to%20eruptions%20(IPCC%202013).

TORRO, 2025. The TORRO Hailstorm Intensity Scale. *The Tornado and Storm Research Organisation.* https://www.torro.org.uk/research/hail/hscale

Transparent Idaho, 2025. Latah County. *Transparent Idaho*. https://transparent.idaho.gov/Counties/546

Troy School District, 2025. *Troy School District #287.* https://www.troysd287.org/

UCAR, 2024. *University Corporation for Atmospheric Research (UCAR).* https://www.ucar.edu/

UIdaho, 2016. Ticks in Northern Idaho. *University of Idaho Extension*, Kootenai County. https://www.uidaho.edu/-/media/uidaho-responsive/files/extension/county/kootenai/gardening/insect-pest/2016-tick-id-handout.pdf?la=en&rev=4c142d3f80114869898c4a616a7c3f35

UIdaho, 2025. 1918 Flu Pandemic Collection. *University of Idaho*. https://www.lib.uidaho.edu/digital/1918flu/about.html

UIdaho, 2025. Idaho Climate-Economy Impacts Assessment--Key Findings. *University of Idaho*. https://www.uidaho.edu/president/direct-reports/mcclure-center/iceia/key-findings

UNH, 2021. COVID-19 Economic Crisis: By State. *University of New Hampshire*, Carsey School of Public Policy. https://carsey.unh.edu/publication/COVID-19-Economic-Impact-By-State

U of I, 2025. University of Idaho Fast Facts. *University of Idaho.* https://www.uidaho.edu/about/fast-facts

USA Facts, 2025. U.S. COVID-19 Cases and Deaths by State. *USA Facts.* https://usafacts.org/visualizations/coronavirus-covid-19-spread-map/

U.S. Census QuickFacts, 2024. QuickFacts: Latah County, Idaho. *United States Census Bureau*, 2023 Population Estimates. https://www.census.gov/quickfacts/fact/table/latahcountyidaho,US/PST045223

U.S. Compliance, 2025. DOT Hazardous Materials--Understanding the Core Requirements. *U.S. Compliance.* https://www.uscompliance.com/blog/dot-hazardous-materials-understanding-the-core-requirements/#:~:text=A%20hazardous%20material%20is%20defined,so%20designated.%E2%80%9D%20This%20includes%20hazardous

USDA, 2017. 2017 Census of Agriculture Latah County Profile. *United States Department of Agriculture (USDA).* https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/Idaho/cp16057.pdf

USDA, 2022. 2022 Idaho Census of Agriculture. *United States Department of Agriculture (USDA).* https://www.nass.usda.gov/Publications/AgCensus/2022/Full_Report/Volume_1,_Chapter_2_County_Level/Idaho/idv1.pdf

USFA, 2025. Idaho Fire Loss and Fire Department Profile. *Federal Emergency Management Agency*, U.S. Fire Administration (USFA). https://www.usfa.fema.gov/statistics/states/idaho.html

Vaisala, 2020. Total Lightning Counts by State from 2015 to 2019. *Vaisala*, Lightning Datasheet. https://www.weather.gov/media/safety/lightning/15-19lightning_density_state.pdf

USGS, 2022. The Volcanic Explosivity Index: A tool for comparing the sizes of explosive volcanic eruptions. *U.S. Geological Survey*, Yellowstone Volcano Observatory. https://www.usgs.gov/observatories/yvo/news/volcanic-explosivity-index-a-tool-comparing-sizes-explosive-volcanic

USGS, 2025. Earthquake Catalog. *U.S. Geological Survey (USGS*), Earthquake Hazards Program. https://earthquake.usgs.gov/earthquakes/search/

USGS, 2025. Volcano Hazards Program. *U.S. Geological Survey*. https://www.usgs.gov/natural-hazards/volcano-hazards/

USGS, 2025. Why Study Cascade Volcanoes? *U.S. Geological Survey*, Cascades Volcano Observatory. https://www.usgs.gov/observatories/cascades-volcano-observatory/why-study-cascade-volcanoes#:~:text=Very%20High%20Threat%3A%20Crater%20Lake,Helens%2C%20Newberry%2C%20Three%20Sisters.

Weather on the Web, 2025. Historical Hail Data. *Weather on the Web.* https://personal.ems.psu.edu/~nese/ch9web.htm

Western Regional Climate Center, 2025. Moscow, Idaho. *Western Regional Climate Center*. https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?id6152

Whitepine School District, 2025. *Whitepine School District #288*. https://www.sd288.org/

WHO, 2025. Severe Acute Respiratory Syndrome (SARS). *World Health Organization (WHO).* https://www.who.int/health-topics/severe-acute-respiratory-syndrome#tab=tab_1

WHO, 2025. WHO COVID-19 Dashboard. *World Health Organization (WHO).* https://data.who.int/dashboards/covid19/cases?n=c