

Public Works / Finance Committee



Regular Meeting ~Agenda~

Laurie M. Hopkins
City Clerk

www.ci.moscow.id.us

208.883.7015

Monday, March 22, 2021

3:00 PM

**Council Chambers
206 E. Third St.**

The Moscow Mayor, City Council and Staff welcome you to today's meeting. Due to the rise in COVID-19 cases in the area, the meeting is open to the public, but is subject to social distancing protocols and masks will be required of attendees. If you do not have a mask, a disposable mask will be provided. The number of attendees at any one time is limited to no more than 14 due to social distancing requirements in Stage 3 of the Idaho Rebounds Plan and the City of Moscow Public Health Emergency Order. We appreciate and encourage public participation. Citizens wishing to comment on business on the agenda are encouraged to communicate with the Mayor and City Council by phone or email (council@ci.moscow.id.us) in order to respect social distancing protocol. Please note that Council Committee meetings are televised, videotaped and/or recorded. Links to view the City Council meeting live can be found on the City website, YouTube, Facebook and Spectrum Cable 1301. Thank you for your interest in City government.

REGULAR AGENDA

1. Approval of March 8, 2021 Public Works/Finance Committee Minutes (ACTION ITEM) - Taylor Riedner

2. Monitoring Well Siting Agreement with the Idaho Division of Water Resources (ACTION ITEM) - Tyler Palmer

The Idaho Division of Water Resources (IDWR) has funding available to drill monitoring wells in the Palouse Basin. These wells help monitor and track water levels, recharge, and other pertinent information to our basin. There is an interest in better understanding the Northeast edge of the basin. To this end, IDWR approached the City about installing a monitoring well at Mountain View Park. Staff from Engineering, Water, and Parks met with IDWR staff on-site and agreed on a suitable location. A draft agreement is in the review process for the well, and we anticipate agreement on terms that will protect both parties, and allow for the siting of the well on the Mountain View Park property. If approved, it is anticipated that the well will be drilled before the end of the summer. Staff is currently working with IDWR on an agreement and it is anticipated it will be completed prior to the April 5, 2021 City Council meeting.

PROPOSED ACTIONS: Recommend approval of Monitoring Well Siting Agreement with the Idaho Division of Water Resources, or provide staff further direction.

3. Latah County, Idaho, Multi-Jurisdictional Hazard Mitigation Plan (ACTION ITEM) - Alisa Anderson

Latah County has been working with the University of Idaho (UI), Idaho Office of Emergency Management (IOEM), and Federal Emergency Management Agency (FEMA) Region 10 to update the 2011 Latah County All Hazard Mitigation Plan. Members of City staff from Police, Fire, and Grants participated in planning meetings during the development of the new plan which includes several other cities within the County to include Moscow. The updated plan is called the Multi-Jurisdictional Hazard Mitigation Plan (HMP). The HMP identifies both short and long-term policies and actions that help reduce risk and future losses from hazards. In early 2020, City staff received a request from Latah County to identify and prepare a list of hazard mitigation actions the City may pursue to reduce the risk and impact of hazards facing the community.

Inclusion of the mitigation actions in the HMP will allow the City to continue to apply for and receive various grant funds for emergency response planning and equipment and will assist the City in pursuing additional grant funding for the identified projects in the future.

PROPOSED ACTIONS: Recommend adoption, support and facilitation of the new Latah County, Idaho, Multi-Jurisdictional Hazard Mitigation Plan, or provide staff further direction.

REPORTS

Staff Report (if needed)

ADJOURN

NOTICE: Moscow City Council and committee meetings are televised, videotaped and/or recorded. Individuals attending the meeting who require special assistance to accommodate physical, hearing, or other impairments, please contact the City Clerk, at (208) 883-7015 or TDD 883-7019, as soon as possible so that arrangements may be made.

Public Works / Finance Committee



Regular Meeting ~Minutes~

Laurie M. Hopkins
City Clerk

www.ci.moscow.id.us

208.883.7015

Monday, March 8, 2021

3:00 PM

**Council Chambers
206 E. Third St.**

The meeting was called to order at 3:00 p.m.

PRESENT: Maureen Laflin, Art Bettge, Anne Zabala (Virtual),

OTHERS: Mayor Bill Lambert, Council Member Gina Taruscio, Council Member Sandra Kelly, Council Member Brandy Sullivan (Virtual)

STAFF: Gary Riedner, Bill Belknap, Tyler Palmer, Chief James Fry, Sarah Banks (Virtual), Scott Bontrager (Virtual), Mia Bautista (Virtual), Laurie Hopkins (Virtual), Taylor Riedner (Virtual)

REGULAR AGENDA

1. Approval of February 22, 2021 Public Works/Finance Committee Minutes (ACTION ITEM) - Taylor Riedner

The minutes were approved as presented.

2. Disbursement Report February 2021 (ACTION ITEM) - Sarah Banks

Staff will present the Accounts Payable Report for the month ending February 2021.

PROPOSED ACTIONS: Sign the Disbursements Report for the month of February 2021.

Banks introduced the report by highlighting the major expenses for the previous month including a BS&A payment for new software implementation, police facility construction payment, Whitcom services quarterly payment, and Well #10 Phase 2 payment. The Committee approved the report, gave verbal authorization for use of their digital signatures, and recommended it be placed on the Council consent agenda.

3. Fourth Quarter Financial Report July 1, 2020 to September 30, 2020 for FY2020 (ACTION ITEM) - Sarah Banks

Staff will present the financial report for the fourth quarter of Fiscal Year 2020 (July 1, 2020 to September 30, 2020).

PROPOSED ACTIONS: Approve the FY2020 Fourth Quarter Report, or provide staff further direction

Banks reviewed the Quarterly Financial Report from the packet and recalled the budget cutback for FY2020 due to COVID-19 and explained the fourth quarter revenue ended at 67% of budget and expenses ended at 62% of budget. Needing no further discussion, the Committee approved the report, gave verbal authorization for use of their digital signatures, recommended it be placed on the Council consent agenda.

4. Indian Hills Water Line Improvements Bid Results and Contract Award (ACTION ITEM) - Scott Bontrager

The Indian Hills Water Line Improvements project includes the replacement and upsizing of an existing 6-inch water line with a new 8-inch water line extending south from the Indian Hills Drive and Northwood Drive intersection south and east along Indian Hills Drive to the intersection with Atsirk Street. The replacement will also continue north on Atsirk Street and extend from the Nyarol Street and Pine Cone Road intersection north approximately 300-feet. New water laterals will be

installed to service new fire hydrants and the existing water meters servicing the residential properties. Additionally, a new water line will be installed from Indian Hills Drive down to the future booster station on the north side of Southview Avenue and The Grove Apartments. The City published an advertisement for bids on February 6, 2021 and the Engineer's estimate for construction was \$998,403. Bids were opened on Tuesday, March 2, 2021. Two responsive bids and one late bid were received, with bids ranging from \$899,560 to \$1,298,500.00. Of those, the lowest responsive bid was submitted by Germer Construction with a bid of \$899,560. A complete Bid Tabulation is attached.

PROPOSED ACTIONS: Recommend acceptance of the low bid from Germer Construction, award the contract for the bid amount of \$899,560.00, and authorize staff approval of construction change orders in an amount not to exceed 10% of the contract amount, or provide staff further direction.

Bontrager introduced the item as written above and explained that this project was approved in the FY2020 budget as part of the overall booster station project. Needing no further discussion, the Committee recommended approval and that it be placed on the Council consent agenda.

5. Residential Street Standard Update Proposal (ACTION ITEM) - Bill Belknap

During the most recent update to the City Standard Construction Drawings containing the adopted street standards for the construction and development of new public and private streets within the City, the use of the 28-foot residential street standard was limited to cul-de-sacs and short unextendable streets. The Planning and Zoning Commission is currently working on the development of new subdivision standards which include clustered and traditional development options to provide greater flexibility and allowing compact and innovative developments that would likely benefit from the 28-foot street standard. Narrower streets reduce current and future maintenance and replacement costs, provide traffic calming in residential areas, and facilitate the development of more cohesive neighborhoods. The Transportation Commission reviewed the proposal and concurred with the Planning and Zoning Commission's request and recommended approval to the City Council. Staff has prepared and updated draft of the Standard Construction Drawings that includes the proposed revisions for the Council's review and consideration.

PROPOSED ACTIONS: Recommend approval of the proposed amended Standard Construction Drawings and associated Resolution; or provide staff further direction.

Belknap introduced the item as written above and explained that the 28-foot roadway could save nearly \$500,000 per mile in expenditures over the life of the roadway and an estimated \$14,000 in snow removal savings. A narrower roadway would reduce neighborhood traffic speeds, stormwater runoff, construction impacts, and public right-of-way land use, and would improve the heat island affect and housing affordability concerns. The 28-foot standard would be promoted for all forms of roadways and residences will have to utilize garage spaces and driveways for parking rather than on the street. Traditionally there are no on-street ADA parking availability unless there is a unique request by an individual which will be reviewed on a case by case basis. All new subdivisions and street designs will be reviewed by Council before approval, and are able to make suggestions or requirements at that time. The 28-foot roadways are not a new design as many roads are already as such, however, it will now become the suggested standard. The Committee recommended approval and that it be placed on the Council regular agenda.

ADJOURN

The meeting adjourned at 3:28 p.m.

COMMITTEE STAFF REPORT

DATE: Monday, March 22, 2021



RESPONSIBLE STAFF

Tyler Palmer, Deputy Director - Operations

ADDITIONAL PRESENTER(S)

OTHER RESOURCES

AGENDA ITEM TITLE

Monitoring Well Siting Agreement with the Idaho Division of Water Resources (ACTION ITEM) - Tyler Palmer

DESCRIPTION

The Idaho Division of Water Resources (IDWR) has funding available to drill monitoring wells in the Palouse Basin. These wells help monitor and track water levels, recharge, and other pertinent information to our basin. There is an interest in better understanding the Northeast edge of the basin. To this end, IDWR approached the City about installing a monitoring well at Mountain View Park. Staff from Engineering, Water, and Parks met with IDWR staff on-site and agreed on a suitable location. A draft agreement is in the review process for the well, and we anticipate agreement on terms that will protect both parties, and allow for the siting of the well on the Mountain View Park property. If approved, it is anticipated that the well will be drilled before the end of the summer. Staff is currently working with IDWR on an agreement and it is anticipated it will be completed prior to the April 5, 2021 City Council meeting.

STAFF RECOMMENDATION

Recommend approval of Monitoring Well Siting Agreement with the Idaho Division of Water Resources, or provide staff further direction.

PROPOSED ACTIONS

PROPOSED ACTIONS: Recommend approval of Monitoring Well Siting Agreement with the Idaho Division of Water Resources, or provide staff further direction.

FISCAL IMPACT

PERSONNEL IMPACT

ATTACHMENTS

None

COMMITTEE STAFF REPORT

DATE: Monday, March 22, 2021



RESPONSIBLE STAFF

Alisa Anderson, Grants Manager

ADDITIONAL PRESENTER(S)

Bill Belknap, Deputy City Supervisor, Community Planning and Design

OTHER RESOURCES

Not applicable.

AGENDA ITEM TITLE

Latah County, Idaho, Multi-Jurisdictional Hazard Mitigation Plan (ACTION ITEM) - Alisa Anderson

DESCRIPTION

Latah County has been working with the University of Idaho (UI), Idaho Office of Emergency Management (IOEM), and Federal Emergency Management Agency (FEMA) Region 10 to update the 2011 Latah County All Hazard Mitigation Plan. Members of City staff from Police, Fire, and Grants participated in planning meetings during the development of the new plan which includes several other cities within the County to include Moscow. The new plan is called the Multi-Jurisdictional Hazard Mitigation Plan (HMP). The HMP identifies both short and long-term policies and actions that help reduce risk and future losses from hazards. The term hazard is defined as any event with the potential to cause loss of life or property. Such events include natural hazards (such as earthquakes, floods, landslides, severe weather, and wildfire) and anthropogenic hazards (such as civil unrest and hazardous materials). Hazards then become disasters when communities are negatively impacted or overwhelmed by such events. To reduce the risk to disasters, hazard mitigation is implemented across the county and its communities. Hazard mitigation consists of cost-effective actions that are often divided into three categories such as policies and actions that: keep the hazard away from people, property, and structures; keep people, property, and structures away from hazards; and that reduce the hazard impacts on people, property, and structures.

In early 2020, City staff received a request from Latah County to identify and prepare a list of hazard mitigation actions the City may pursue to reduce the risk and impact of hazards facing the community. This request was distributed to the relevant City Departments including Administration, Police, Fire, IS, Public Works Services, Planning, Engineering and Parks and Facilities to compile a list of potential hazard mitigation actions. Inclusion of the mitigation actions in the HMP will allow the City to continue to apply for and receive various grant funds for emergency response planning and equipment and will assist the City in pursuing additional grant funding for the identified projects in the future. This list of hazard mitigation actions was reviewed by the Public Works/Finance Committee on January 27, 2020 and approved by the City Council on February 3, 2020. The approved list of hazardous mitigation actions and/or projects are included in the attached final HMP in addition to other data regarding county and community profiles.

The FEMA Region 10 completed a pre-adoption review of the draft Hazard Mitigation Plan. The attached Mitigation Plan Review Tool documents the Region's review and compliance with all required elements of 44 CFR Part 201.6, as well as identifies the jurisdictions participating in the planning process. This letter serves as Region 10's commitment to approve the HMP upon receiving documentation of its adoption by participating jurisdictions. Formal adoption documentation must be submitted to FEMA Region 10 within one calendar year of the review in order to be formally adopted. Once FEMA approves the plan, the jurisdictions are eligible to apply for FEMA Hazard Mitigation

Assistance grants.

Staff has included with this report the 2020 Latah County, Idaho, Multi-Jurisdictional Hazard Mitigation Plan, FEMA's pre-adoption review documentation, and a Resolution declaring the City Council's support and adoption of the new Plan.

STAFF RECOMMENDATION

Recommend adoption, support and facilitation of the new Latah County, Idaho, Multi-Jurisdictional Hazard Mitigation Plan.

PROPOSED ACTIONS

PROPOSED ACTIONS: Recommend adoption, support and facilitation of the new Latah County, Idaho, Multi-Jurisdictional Hazard Mitigation Plan, or provide staff further direction.

FISCAL IMPACT

Not applicable.

PERSONNEL IMPACT

Not applicable.

ATTACHMENTS

1. Latah County, Idaho, Multi-Jurisdictional Hazardous Mitigation Plan
2. IOEM.FEMA Letter Plan Review Approval
3. LC Multi-Hazard Mitigation Plan Adoption Resolution 2021-__

Latah County, Idaho

Multi-Jurisdictional Hazard Mitigation Plan



Update 2020

**The Multi-Jurisdictional Hazard Mitigation Plan
of
Latah County, Idaho
and the Cities of**

Deary, Genesee, Moscow & Potlatch

**Prepared for
Latah County Disaster Services
Latah County Annex
200 S Almon Street, Suite #104
Moscow, Idaho 83843
(208) 883-2265**

August 2020

Executive Summary

The Latah County Hazard Multi-Jurisdictional Mitigation Plan (HMP) is an update to the 2011 Latah County, Idaho Multi-Hazard Mitigation Plan. Through a collaborative effort between the county, its jurisdictions, the University of Idaho (UI), and the Idaho Office of Emergency Management (IOEM), the plan was updated in a process that was done primarily in 2018-2019 and the plan finalized and approved 2020. Latah County Disaster Services Coordinator Mike Neelon led the Local Emergency Planning Committee. The Planning Committee was composed of members from the Latah County Office of Disaster Services and representatives from the communities, State and Federal agencies, and other organizations and stakeholders active within the county.

This update is built on the former plan, but is reorganized in structure to enhance the plan's usability. The update comprehensively revised all sections of the plan to reflect current hazards, political and socioeconomic conditions, and to incorporate best-available data. Major changes to the HMP include updated and rewritten county and community profiles, the inclusion of additional hazards, more detailed and comprehensive risk and vulnerability assessments for the hazards of focus, and the addition of new mitigation actions. The 2020 update also builds a strong foundation for annual review and monitoring of progress, allowing Latah County to maintain the HMP through the plan's five-year lifecycle.

Mitigation actions were reviewed and updated per feedback from the Planning Committee and responsible agencies and departments. Additional mitigation actions were included based on Committee and public input. These actions were scored and ranked to better prioritize efforts and resources towards the completion of listed mitigation actions.

Finally, under an agreement between IOEM and the Idaho Department of Lands (IDL), the Latah County Community Wildfire Protection Plan (amid an update process this year) acts as the Wildfire Annex to the Latah County Hazard Multi-Jurisdictional Mitigation Plan, located in Appendix G.

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- Appendix B. Plan Review Tool
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- Appendix E. Public Involvement & Meeting Documentation
- Appendix F. Risk Assessment Tables
- Appendix G. 2011 Latah County Community Wildfire Protection Plan

I. Introduction

1.1 Overview

The Latah County Multi-Jurisdictional Hazard Mitigation Plan (HMP) identifies both short and long-term policies and actions that help reduce risk and future losses from hazards. The term *hazard* is defined as any event with the potential to cause loss of life or property. Such events include natural hazards (such as earthquakes, floods, landslides, severe weather, and wildfire) and anthropogenic hazards (such as civil unrest and hazardous materials). Hazards then become disasters when communities are negatively impacted or overwhelmed by such events. To reduce the risk to disasters, hazard mitigation is implemented across the county and its communities. Hazard mitigation consists of cost-effective actions that are often divided into three categories:



- Policies and actions that keep the hazard away from people, property, and structures.
- Policies and actions that keep people, property, and structures away from hazards.
- Policies and actions that reduce the hazard impacts on people, property, and structures.

This plan identifies the vulnerabilities and risks from threats and hazards to the county and its communities, and details the mitigation strategy that will be implemented over a five-year period. By implementing this plan, resources can more efficiently and effectively be targeted towards the hazards that pose the greatest risk. Other benefits of this plan include the following:

- Selection of Risk Reduction Actions – Hazard mitigation is a systematic process of identifying and analyzing the county’s risks. By setting clear goals and identifying and implementing mitigation strategies, the county can reduce losses from future hazards.
- Builds Local, State, & Federal Partnerships – The plan builds partnerships through two-way communication and collaboration by involving various stakeholders at the local, State, and Federal levels.
- Facilitates Sustainability – Risk and sustainability are linked, and without identifying and mitigating risks, the livelihood and continuance of the county and its communities is threatened. Enhancing resilience to hazards through sound mitigation practices enhances sustainability.
- Establishes Funding & Resource Priorities – By coordinating and consolidating mitigation actions undertaken in the county into a unified strategy, the plan helps prioritize and articulate the county’s and its communities’ needs to the public, other organizations and private enterprise, and agencies with stake in the county.
- Increase Hazard Awareness & Education – The hazard mitigation planning process increases education and awareness of hazards and risks in the county and its communities. This awareness helps individuals understand their risk, self-mitigate, and enhance their resilience. This can translate to support of mitigation actions in the county.

1.2 Legal Authority

The legal basis of hazard mitigation plans is the federal Stafford Act, as amended by the Disaster Mitigation Act (DMA) of 2000. The DMA emphasizes pre-disaster planning, and Section 322 of the Act specifically addresses hazard mitigation planning. The DMA requires state and local governments to prepare and maintain hazard mitigation plans in order to receive federal hazard mitigation project grants. This financial assistance can be sought pre- and post-disaster and is vital in all phases of emergency management. The requirements for an HMP are codified in Title 44, part 201, section 6 of the Code of Federal Regulations (44 CFR §201.6) and include criteria for six elements. Detailed criteria for each of the requirements can be found in Appendix A, as well as the relevant sections of the plan (see 1.4 Plan Organization).

1.3 Hazard Mitigation Plan Update

Existing HMPs must be reviewed and updated as required by 44 CFR§201.6(c)(v). The revision must reflect changes in development, progress made in local mitigation efforts, and changes in hazard and mitigation priorities. The update then must be resubmitted for approval within five years in order to maintain eligibility for FEMA mitigation grant funding.

The former plan was originally completed and adopted in 2011 and expired in 2016. Through a collaborative effort between the county, its jurisdictions, the University of Idaho (UI), and the Idaho Office of Emergency Management (IOEM), the plan was updated in 2020. The update built on the former plan, but reorganized its structure to enhance the plan's usability. The update also comprehensively revised all sections of the plan to reflect current hazards, political and socioeconomic conditions, and incorporate best-available data. Each section summarizes the revisions made in the 2020 update.

1.4 Plan Organization

The plan is organized to be operational in nature:

1. Introduction – Provides an overview of mitigation, hazards, and the basis of HMPs.
2. County & Community Profiles – Provides an overview of the socioeconomic, demographic, and geographical character of the county and its communities.
3. Planning Process – Details the process undertaken for the 2020 plan update. This section identifies and details the planning committee, participating jurisdictions, and stakeholders.
4. Risk Assessment – Details identified hazards and risks facing the county. Hazard profiles include hazard descriptions; hazard extents, magnitudes, and past occurrences; population, structure, and structure value exposure; socioeconomic vulnerability assessments; loss estimates; and land use and future developments in relation to hazards.
5. Mitigation Capabilities – This section details and describes the capabilities and resources the participating jurisdictions and organizations can leverage to implement hazard mitigation. This includes funding avenues and detailed National Flood Insurance Program (NFIP) information.
6. Mitigation Strategy – Details the goals and actions to be implemented to reduce loss of life and property from hazards and risks identified in the risk assessment.

7. Plan Maintenance – Details the county’s commitment to maintaining the 2020 plan through the five-year lifecycle. The county will monitor, evaluate, and update the plan on an annual basis, and engage the public throughout the process. This section also includes recommendations for future plan updates.

II. County & Community Profiles

2.1 Overview

Hazard mitigation within the county needs to be localized in order to maximize the reduction of losses to both life and property; therefore, it is pertinent to understand the characteristics of the county and its communities.

2.1.1 Summary of Revisions

Major revisions made to this section in the 2020 update include:

- Reorganized the Community Profiles Section within the plan
- Updated statistics and data where necessary
- Incorporated new and additional maps and figures where appropriate

2.1.2 FEMA Requirements

There are no CFR elements specific to this section.

2.2 Geographic Setting & Historical Context

Latah County, Idaho is located in the southwestern part of the Idaho Panhandle and home of the University of Idaho. Major population centers in the area include Moscow, Bovill, Onaway, Deary, Genesee, Juliaetta, Kendrick, Potlatch, and Troy. 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. Elevation ranges from about 1,000 feet above sea level along the Potlatch River to about 5,000 feet. 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.

Latah County's total land area of the county is roughly 1,076.89 square miles (689,209.6 acres). The geography, topography, climate, and other natural attributes such as vegetation vary significantly across the County. The geographic diversity of Latah County is an important factor to consider in wildfire mitigation planning.

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.

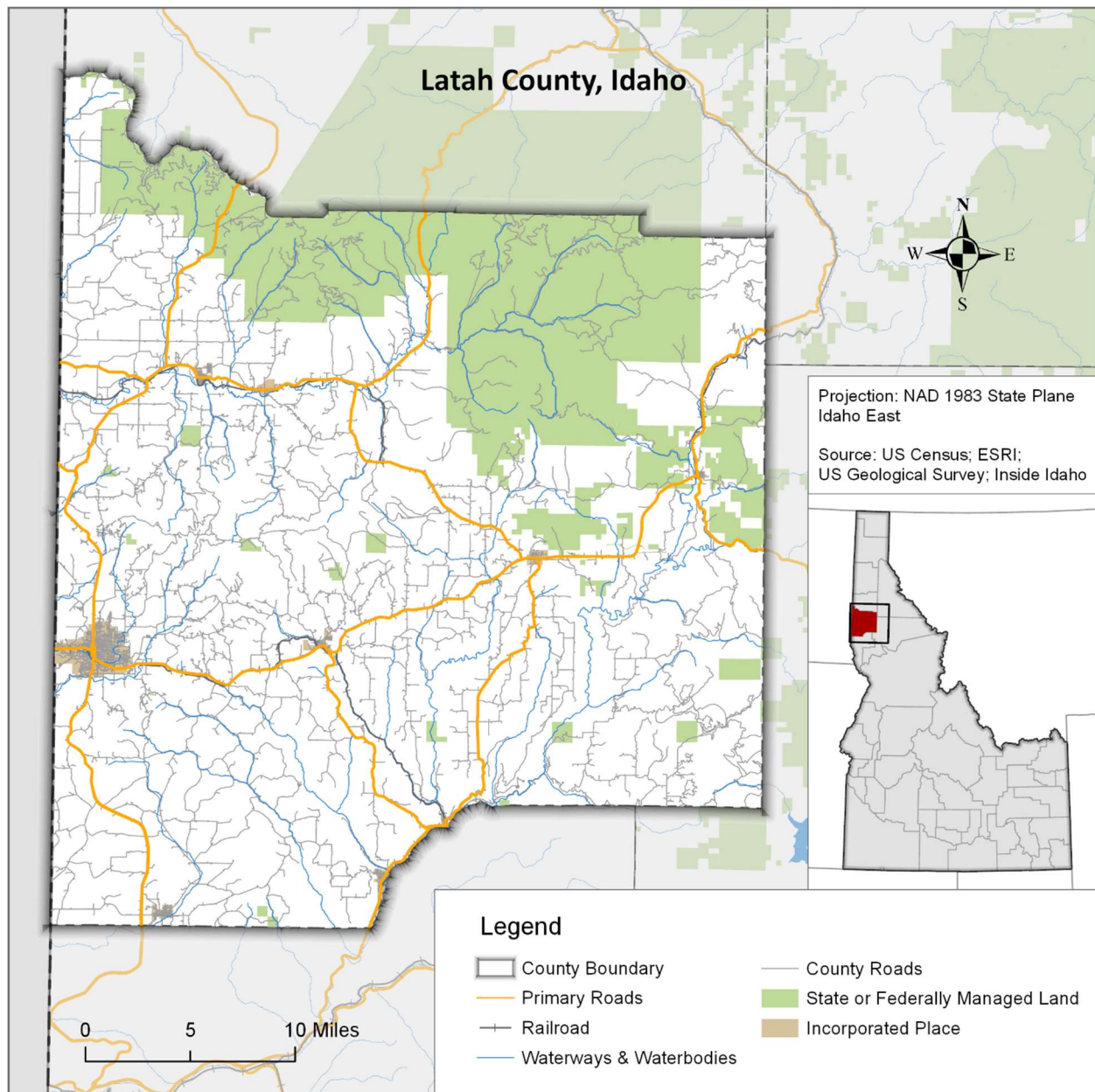


Figure 1 Map of Latah County

2.3 Climate & Weather

The climate in Latah County is moderate. The highest average daily temperature occurs in July and is approximately 88 degrees Fahrenheit (F). The lowest average daily temperature occurs in January and is approximately 28 degrees (F). The average annual rainfall is about 18 inches. Average annual snowfall is

about 48 inches. The average temperatures, precipitation, and snowfall for Moscow, Idaho are listed in Table 1.

Table 1 Moscow Idaho Climate Summary

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max Temp (F)	37	42	50	58	67	74	84	85	75	61	44	35	59.3
Average Min Temp (F)	25	27	31	35	41	45	49	49	43	36	30	24	36.3
Average Total Precip (in)	3.15	2.36	2.68	2.52	2.52	1.89	0.98	0.98	1.22	2.17	3.62	2.99	27.08
Average Total Snowfall (in)	15	7	5	1	0	0	0	0	0	0	6	15	49

2.4 Demographics

Latah County's population rose 8 percent from 36,251 in 2006 to 39,196 in 2016. Because of the 11,800 students at the University of Idaho, about 26 percent of the county's population is 20 to 29 years old (median age is 28.3). Moscow, the county seat, had a population of 25,322 in 2016. The populations of other cities were 958 in Genesee, 887 in Troy, 813 in Potlatch, 582 in Juliaette, 511 in Deary, 299 in Kendrick, 247 in Bovill, and 191 in Onaway. The City of Moscow contains approximately 70% of Latah County's total population. Other incorporated cities in Latah County contain approximately 11% of the County's population. The remaining population is scattered in small communities and in rural areas throughout the area. Table 2 summarizes some relevant demographic statistics for Latah County from the 2010 Census.

Table 2 Selected Demographic Statistics (2010 Census)

Subject	Number	Percent
Total Population	37,244	100.00
SEX & AGE		
Male	19,163	51.5
Female	18,081	48.5
Median Age (years)	27.4	-
RELATIONSHIP		
In households	34,158	91.7
Householder	14,708	39.5
Spouse	6,816	18.3
Child	7,862	21.1
Under 18 years	6,583	17.7
Non-relatives	3,908	10.5
HOUSEHOLDS BY TYPE		
Households	14,708	100.00
Family households (families)	8,241	56.0
With own children under 18 years	3,504	23.8

Subject	Number	Percent
Husband-wife family	6,816	46.3
Average household size	2.32	-
Average family size	2.89	-

2.5 Economic Profile

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 about 580 people—about 100 fewer than 10 years ago. Many county residents work at fast-growing Schweitzer Engineering Laboratories, which employs more than 2,300 in nearby Pullman, Washington. 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 now is the same level as 21 years ago. Leisure and hospitality has 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 US 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 2016 was \$37,996, 96 percent of the state's average and 77 percent of the national average. Latah county ranked 13th of the 44 counties in this metric.

2.6 Land Cover & Vegetation

Land cover in Latah County is a mix of agriculture, forestland, riparian ecosystems, and shrubland. Data from the National Land Cover Data set indicates that the prime land use types in the county are cultivated crops and evergreen forest, at 31 percent and 45 percent, respectively. Approximately three percent of the county is developed. The percent of these different land cover and vegetation types is provided in Table 3 and land cover for the county is mapped in Figure 2.

Table 3 Vegetative Cover Types

Cover Type	Acres	Percent of Area
Barren Land	14	0.002
Cultivated Crops	213,179	30.93
Deciduous Forest	888	01.3
Developed, High Intensity	228	0.33
Developed, Low Intensity	4,160	0.60
Developed, Medium Intensity	1,529	0.22
Developed, Open Space	14,284	2.07
Emergent Herbaceous Wetlands	2,003	0.29
Evergreen Forest	307,532	44.63
Grassland/Herbaceous	16,317	2.37
Mixed Forest	82	0.01
Open Water	162	0.02
Pasture/Hay	550	0.08
Shrub/Scrub	126,494	18.36
Woody Wetlands	1,725	0.25

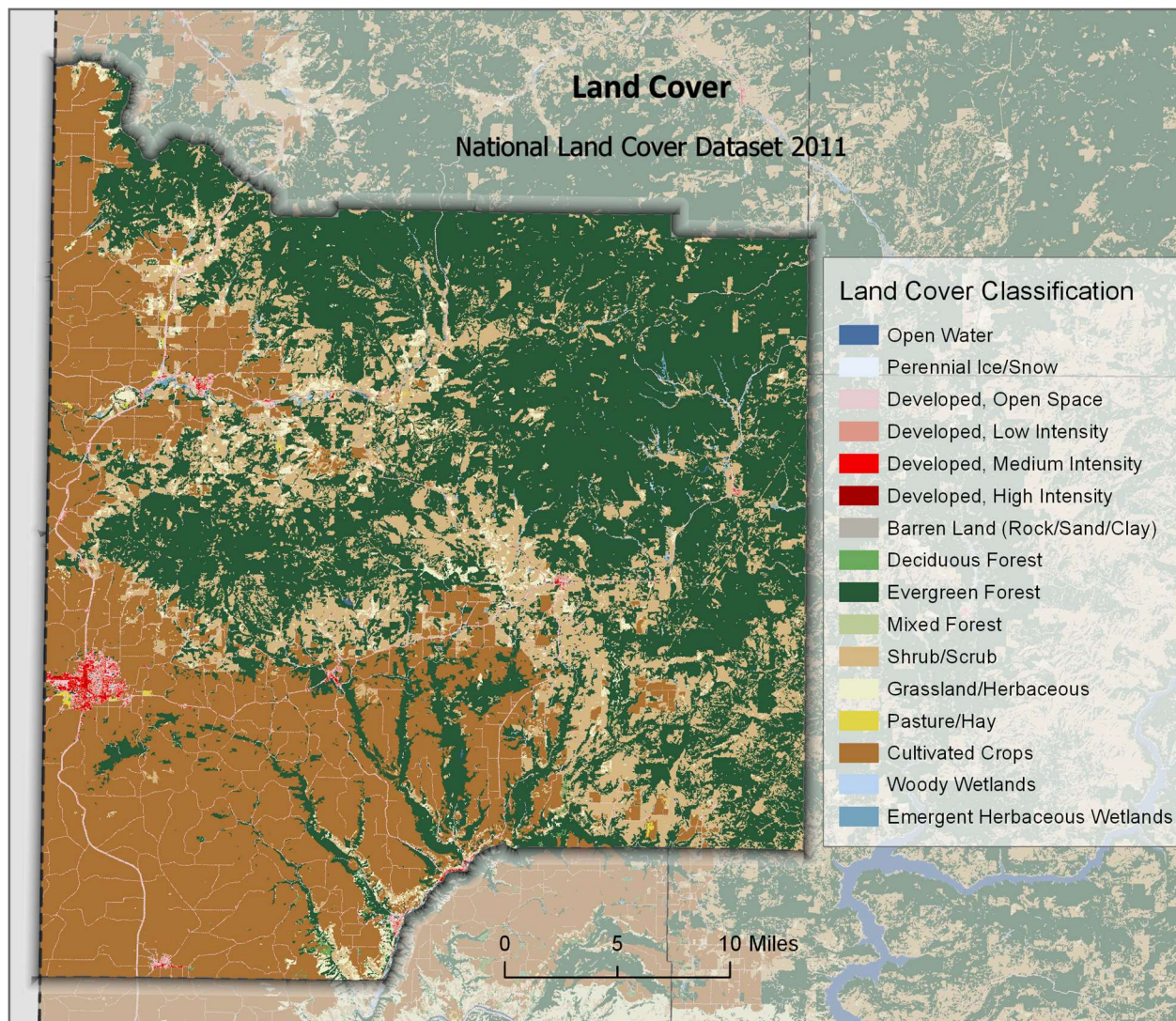


Figure 2 Latah County land cover types

2.6.1 Biota – Fish & Wildlife

Latah County is home to a diverse array of fish and wildlife species. Latah County streams provide habitat for salmon and steelhead, including populations that are listed as threatened under the federal Endangered Species Act. Forestlands and interface areas are important habitat for many species of birds and mammals.

2.7 Hydrology

Latah County depends heavily on groundwater for private wells, public drinking water, irrigation, industrial operations, and other beneficial uses. The Idaho Water Resource Board (IWRB) is charged with the development of the Idaho Comprehensive State Water Plan. Included in the State Water Plan are the statewide water policy plan and component basin and water body plans which cover specific geographic areas of the state. The Idaho Department of Water Resources has prepared General Lithologies of the Major Ground Water Flow Systems in Idaho. The majority of Latah County has not been designated by the IWRB as a ground water system. The state may assign or designate beneficial uses for particular Idaho water bodies to support. These beneficial uses are identified in sections 3.35 and 100.01 to 100.05 of the Idaho water quality standards.

2.8 Air Quality

The primary means by which the protection and enhancement of air quality is accomplished is through implementation of National Ambient Air Quality Standards (NAAQS). These standards address six pollutants known to harm human health including ozone, carbon monoxide, particulate matter, sulfur dioxide, lead, and nitrogen oxides.

The Clean Air Act, passed in 1963 and amended in 1977, is the primary legal authority governing air resource management. The Clean Air Act provides the principal framework for national, state, and local efforts to protect air quality. Under the Clean Air Act, the Organization for Air Quality Protection Standards (OAQPS) is responsible for setting the NAAQS standards for pollutants which are considered harmful to people and the environment. OAQPS is also responsible for ensuring these air quality standards are met, or attained (in cooperation with state, Tribal, and local governments) through national standards and strategies to control pollutant emissions from automobiles, factories, and other sources.

Smoke emissions from fires potentially affect an area and the airsheds that surround it. Climatic conditions affecting air quality in Idaho are governed by a combination of factors. Large-scale influences include latitude, altitude, prevailing hemispheric wind patterns, and mountain barriers. At a smaller scale, topography and vegetation cover also affect air movement patterns. Locally adverse conditions can result from occasional wildland fires in the summer and fall, and prescribed fire and agricultural burning in the spring and fall.

2.9 Land Ownership

A relatively large percentage of the county is privately owned. Private parcels are becoming more and more expensive as the population grows and more property is developed. This factor combined with the highly variable topography throughout the county is expected to produce significantly higher demands on privately held land in the future. Second to private landowners is land owned and managed by the forest industry, followed by federal agencies.

Table 4 Land Ownership Categories

Landowner	Acres	Percent of Area
Private	404,682	58.7%
Forest Industry	126,701	18.4%
US Government	108,285	15.7%
State	35,577	5.2%
University	9,856	1.4%
Highway	2,100	0.3%
City	1,990	0.3%
Railroad	665	0.1%
Latah County	493	0.1%
School District	296	0.0%

2.10 Land Use

In Latah County, there are five land use designations. These land use designations are shown below in Figure 3. The map (Latah County 2010 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 contains 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 contains 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.

LATAH COUNTY COMPREHENSIVE PLAN LAND USE MAP

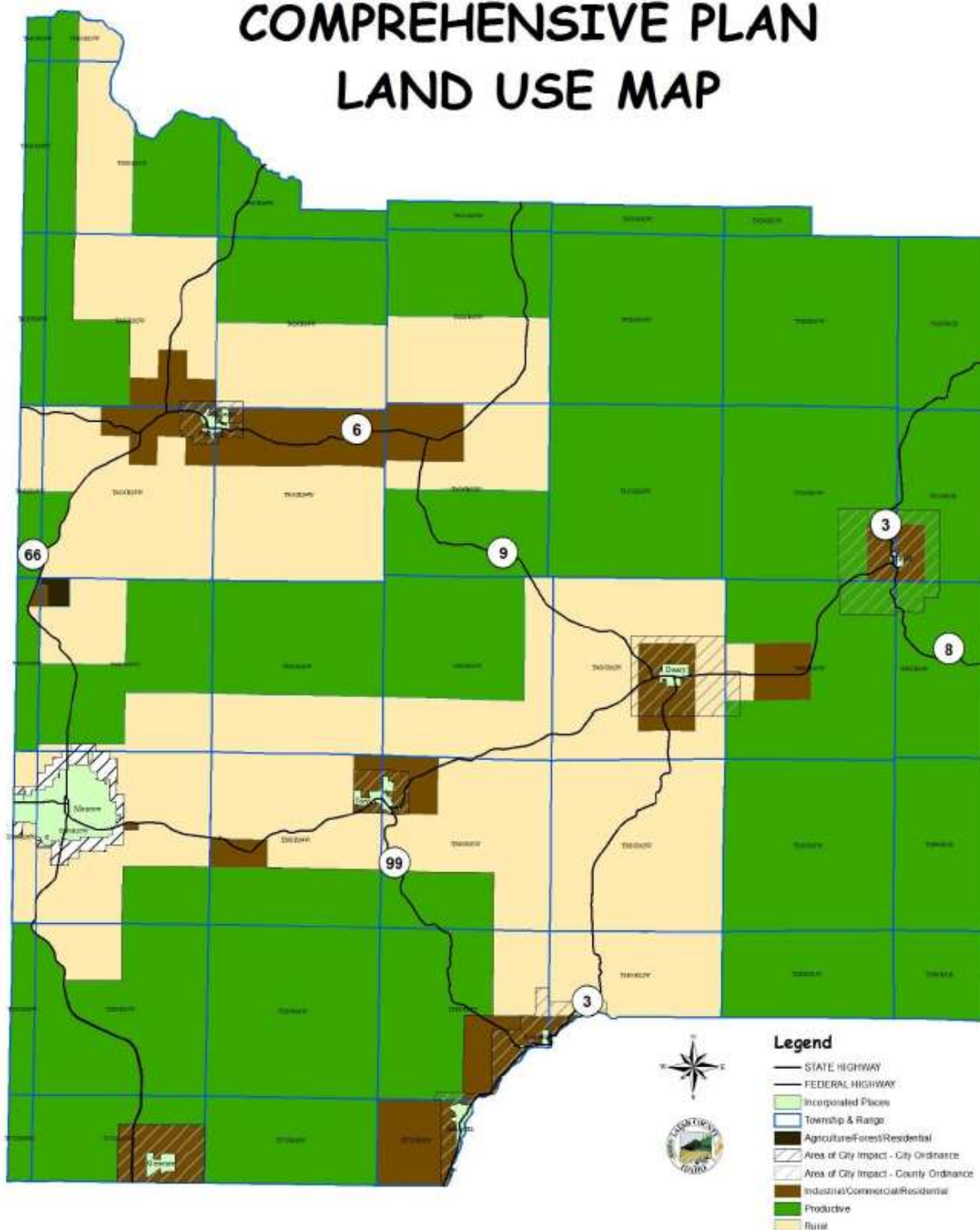


Figure 3 Latah County Comprehensive Plan Land Use Map

2.11 Latah County Development Trends and Projections

Across Latah County, a number of farms are being subdivided into smaller lots for residential development. These are relatively low in number, typically representing family parcel splits. The County has Land Use ordinances that minimize the ability of property owners to subdivide and require owners to place new lots in areas that minimize the hazards. Recent modifications allowing residential development have resulted in more lots but in locations that are better suited to prevent hazards.

The County does not anticipate new major developments within its unincorporated areas in the near future.

Latah County manages construction in floodplains adequately through its Land Use ordinances, and County-led construction (e.g. recreation centers) does not present vulnerabilities. The County is currently updating the area's Community Wildfire Protection Plan to address Wildland Urban Interface issues. While the population is increasing steadily, with significant fluctuations in University of Idaho enrollment, growth is currently not dramatic enough to present a vulnerability.

2.11.1 City of Deary Development Trends and Projections

The City of Deary did not identify significant property development since the 2011 Plan Update. Several City-led development projects have been cited for future implementation – including upgrading City infrastructure to full ADA compliance, a freshwater project to maintain Idaho department of Environmental Quality standards, and a Parks & Recreation project. The City is also in early planning stages for future street projects under a unified transportation plan.

Deary has experienced a general turnover of businesses and residents since 2011. New businesses tend to occupy the physical spaces vacated by those which have left. Overall the population has not measurably increased in the area. With the advantageous local housing market, many long-term residents are actively listing their real estate (homes and land properties) for sale.

2.11.2 City of Genesee Development Trends and Projections

Recent development since the 2011 plan update includes Maple Court, a 7-lot subdivision at the east of Maple Street. Emergency infrastructure development includes construction of the new Fire Station on Chestnut Street at Pine Street, which will improve fire and EMS response due to its strategic location and accessibility. City-led development included construction of sport fields in the Recreation District, whose location in the floodplain were designed to not disrupt the functionality of the existing floodplain or increase the base flood elevation.

Proposed city-led development includes a new sewer lagoon system, with a site to be determined.

Water availability and quality are future risks, whose vulnerability impacts may need to be mitigated. Overall City population trends show minimal increases within the City boundary.

2.11.3 City of Moscow Development Trends and Projections

Moscow has continued to see further development and population increases in the northeast quadrant of the City since the 2011 Plan update. It is anticipated that this trend will continue and the City will need to plan for the location and funding of public infrastructure in that area, including a fourth Fire Station.

A goal of the City's Comprehensive Plan has been to transition the industrial agricultural uses that were historically associated with the railroad corridors, to the periphery of the City. These industrial areas have traditionally been located near the core of the City. As the industrial uses have slowly transitioned to the edges of the City, urban redevelopment has started to occur in those areas. Currently, a 67,000 square foot, 4-story office building to serve a technology company is under construction, as well as a condominium development that contains three 4-story buildings, with a total of 36 dwelling units. Both of these projects are adjacent to downtown as well as Hogg Creek, which saw substantial flooding in spring of 2019. The hydrology of Hogg Creek is not well known, and a comprehensive hydrological study of Hogg Creek and Paradise Creek is needed to identify problem areas and mitigation strategies as development continues to occur in the area.

No other vulnerable conditions have been identified, as Moscow has historically experienced a rather linear, low growth rate and the housing market has been stable.

2.11.4 City of Potlatch Development Trends and Projections

The City of Potlatch has completed a number of City-led development projects for infrastructure maintenance and upgrades since the 2011 Plan update – including a sidewalk project with some stormwater control elements included, a new water and sewer system, and street paving.

Potlatch cited potential for new housing development in the near future, with an associated increase in population within the City. There is also the possibility for a subdivision development. The City is also planning Phase III of a long-term City-led sidewalks project, along with continued street paving.

Conditions impacting vulnerability include anticipated flooding along the Potlatch River, as well as a lack of security features (cameras) for the City's well water system and City-owned properties.

III. Planning Process

3.1 Overview

The planning process is vital to the development and completion of a comprehensive HMP that best fits a county and its communities. As with almost all planning efforts, the plan is only as good as the process itself. A major component of the planning process is involvement and participation from representatives and stakeholders from the county, local communities, State and Federal agencies, and other organizations. Through the process, perspectives on hazards and risks, community assets, and mitigation needs are discussed and incorporated into the plan.

3.1.1 Summary of Revisions

Major revisions include:

- Reorganized the planning process section within the plan
- Updated the planning committee to the 2020 participants
- Revised the former plan's Planning Process section to reflect the 2020 update
- Moved the former plan's Continued Public Involvement sub-section to Section VII. Plan Maintenance
- Revised and incorporated the former plan's Integration with Other Local Planning Documents sub-section into this Section

3.1.2 FEMA Requirements

This section adheres to and fulfills the following regulations:

- 44 CFR §201.6(b) – An open public involvement process is essential to the development of an effective plan. In order to develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include:
 - (i) – An opportunity for the public to comment on the plan during the drafting stage and prior to plan approval;
 - (ii) – An opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development, as well as businesses, academia and other private and nonprofit interests to be involved in the planning process; and
 - (iii) – Review and incorporation, if appropriate, of existing plans, studies, reports, and technical information.
- 44 CFR §201.6(c) – The plan shall include the following:
 - (i) – Documentation of the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

3.2 Plan Preparation & Development

The planning process consisted of the following phases:

- Plan Update Kick-Off – Plan development for the 2020 update began in February 2017. A kick-off meeting was held with the planning team to cover FEMA requirements and to propose a work plan.
- Plan Review & Evaluation – The former plan was reviewed and evaluated according to the FEMA Local Mitigation Review Tool (2011) and a more stringent and comprehensive evaluation matrix developed by Frazier et al. (2013). The review and evaluation results guided the risk assessment and mitigation strategy for the 2020 plan update by identifying the strengths and weaknesses of the former plan.
- Risk Assessment – Hazard occurrences and hazard impacts were collected for the county. Hazard profiles were updated to reflect current science around risk and vulnerability.
- Mitigation Strategy Review – The mitigation actions listed in the former plan were reviewed and their status determined by the responsible jurisdictions and organizations.
- Mitigation Strategy Update – New and additional mitigation actions were detailed and scored by the planning committee for inclusion into the 2020 plan update. Each jurisdiction was provided the opportunity to put forth mitigation actions for discussion and approval. Mitigation goals and objectives were likewise visited and updated as necessary.
- Public Involvement & Outreach – The public was engaged through numerous open public meetings and news releases to local media. The draft plan was also provided on-line and a press release distributed to encourage the public to comment on it.
- Plan Completion & Adoption – Following the compilation of all information, data, and analyses conducted throughout the planning process, drafts were distributed to the planning team and the public for review. Feedback and comments were incorporated in subsequent drafts. After the review and edit period, the plan was formally submitted to IEOM and FEMA for approval prior to formal adoption by the county, its communities, and other organizations.

3.3 Multi-Jurisdictional Participation & Coordination

The hazard mitigation planning process was built on the participation of each jurisdiction. All incorporated communities were invited to participate in the 2018-2020 update through email and personal outreach by the UI technical team and Latah County Disaster Services Coordinator Mike Neelon. Table 1 summarizes the participation of the jurisdictions with authority to adopt the plan following IOEM and FEMA review and approval.

Table 5 Jurisdictional participation

Jurisdiction	2011 Participation & Adoption	2020 Participation & Adoption
Latah County	Yes	Yes
City of Bovill	Yes	No
City of Deary	Yes	Yes
City of Genesee	Yes	Yes
City of Juliaetta	Yes	No
City of Kendrick	Yes	No
City of Moscow	Yes	Yes
City of Potlatch	Yes	Yes
City of Troy	Yes	No

3.4 The Planning Team & Stakeholder Participation

The planning team is the core group of individuals responsible for the development and update the plan. In the case of Latah County, the existing Local Emergency Planning Committee (LEPC) served the role of the planning committee. Comprised of local officials and subject matter experts, these individuals represent jurisdictions and organizations with the authority to implement the mitigation strategy over the plan's five-year life. These individuals and entities bring local knowledge and perspectives to the table that are vital in developing a comprehensive and cohesive HMP, although they might not have the authority to implement the mitigation strategy. The 2020 planning team function was headed by Latah County Disaster Services Coordinator Mike Neelon, and is detailed in Table 1.

Table 6 Latah County LEPC and HMP planning team members for the 2018-2020 update

Jurisdiction	Name	Title & Department	Former Participation
Latah County	James Agidius	Coordinator, Latah County GIS	
	Chris Blankenship	Associate Planner, Planning & Zoning	
	Laurel Caldwell	Director, Latah County ITS	
	Austin Cole	Operator, ARES HAM	
	Rich Huggins	Operator, ARES HAM	
	Bob Isenberg	Operator, ARES HAM	
	Alan Martinson	Director, Latah County Weed Control	
	Mike Neelon	Disaster Services Coordinator	
	Richie Skiles	Sheriff	
	Bill Ward	Team Leader, Auxiliary Communications	
City of Moscow	James Fry	Chief, City of Moscow Police Dept.	
	Charles Graham	Commissioner, Moscow Rural Fire District	
	Bill Belknap	Deputy City Supervisor, Community Planning and Design	
	Alisa J. Anderson	Grants Manager, ADA Coordinator	
	Monte McMillan	Commissioner, Moscow Rural Fire District	
	Bill Lambert	Mayor	
	Brian Nickerson	Fire Chief, Moscow Fire Dept.	
City of Genesee	Steve Odenburg	Mayor	

City of Potlach	David Brown	Mayor	
City of Deary	John Henderson	Mayor	
Avista Corp	Paul Kimmell	Regional Business Manager	
Helmer Water & Sewer District	Cherri Vitah	Secretary	
Gritman Medical Center	Charlie Craig	Director, Engineering	
Potlatch School District #285	Jeff Cirka	Superintendent	

Stakeholders were also invited to participate throughout the planning process. These included representatives of neighboring communities, local and regional agencies involved in hazard mitigation, agencies with the authority to regulate development, and businesses, academia, and other private and non-profit interests. The three smaller jurisdictions participating in the plan (Deary, Genesee and Potlach) were always invited to planning committee meetings, however, their staffing constraints and very part-time nature of mayor/council positions made it difficult for representatives of these participating jurisdictions to attend. The EM did considerable individual outreach with these jurisdictions, however, including attendance at some public city council meetings and numerous 1-1 work sessions. Those jurisdictions provided all necessary input to the plan, such as capacity assessment, review of prior mitigation actions and discussion of new mitigation actions.

Table 7 Other Stakeholders and other partners

Jurisdiction	Name	Title & Department	Former Participation
American Red Cross	Catherine Rawsthorne	Program Specialist, Disaster Program	
Idaho Department of Lands	Michael McManus	Assistant Fire Warden	
	Casey Strong	Deputy Fire Marshal	
Idaho North Central District	Dean Neufeld	Program Manager, PHP Program Manager	
Idaho Office of Emergency Management	Susan Cleverley	State Hazard Mitigation Officer	
	Lorrie Pahl	State Mitigation Planner	
	Rob Feely (through 2019) and Rick Bender (2020)	Area Field Officer, IOEM	
Idaho State Police	Lonnie Richardson/Rich Adamson	Captain	
Idaho Transportation Dept.	Mike Ahlers	Officer, Safety/Compliance	
State University of New York (SUNY) as subcontractor to UI (2017) and Georgetown University (2018-2020)	Tim Frazier	Director, Emergency and Disaster Management Program (Georgetown University)	
University of Idaho (contractor to IOEM)	Elizabeth Boyden	Mitigation Planner	
	Karen Humes	Professor (report editor)	
	Alexander Peterson	Mitigation Planner	

3.5 Planning Meetings

A number of meetings were convened throughout the planning process to facilitate discussion amongst the planning team and other stakeholders with regards to hazards and mitigation. The following sections summarize these meetings. See Appendix E for sign-in sheets, agendas, and presentations. Additionally, as mentioned above, the Latah County EM did small-group outreach to other participating jurisdictions whose representatives were unable to attend the planning committee meetings (e.g., City of Genesee, Deary and Potlach), in order to assist them in preparing the required input. These participating cities all quite small and staff is too limited in order to attend daytime meetings of the planning committee. However, the combination of mayors, clerks and city council members in each of these jurisdictions completed each of the phases of required input (capabilities assessment, review of prior strategies, identification and prioritization of new actions) and discussed the plan at their public city council meetings. Outreach was also done by the Latah County EM to some of the other very small outlying jurisdictions that participated in the last plan but decided they did not have the ability to participate this time (for example, Cities of Bovill, Kendrick, Juliaetta and Troy).

3.5.1 February 2017 Kickoff Meeting

The kickoff meeting for the plan update was held on February 21, 2017 at the Latah County Courthouse in Moscow. The meeting was facilitated by Alexander Peterson, mitigation planner with the University of Idaho and Georgetown University, and Mike Neelon, the county emergency manager. The meeting was attended by 20 members of the planning team.

The meeting focused on introducing hazard mitigation, hazard mitigation plans, and the planning process. The requirements of HMPs as codified in the Code of Federal Regulations (CFR) were presented, and cost share requirements of the Pre-Disaster Mitigation grant discussed. A brief review of the former plan included which jurisdictions and agencies participated and adopted the former plan and which hazards were profiled. A summary of the comprehensive evaluation conducted to identify the former plan's limitations was presented and discussed, followed by the participation and adoption requirements for communities and agencies in the update process.

3.5.2 April 2017 Planning Meeting

A planning meeting was held on April 18, 2017 and attended by 16 members of the planning team. The second planning meeting of the plan update focused on initializing the risk assessment, public outreach, and reviewing the former mitigation strategy. Copies of the Phase I Risk Assessment survey (see Appendix E) were distributed to members of the planning team. Public outreach was then discussed, with specifics paid to a public service announcement in local media, a short public opinion survey, and engaging the communities to conduct awareness and outreach throughout the update process. The meeting concluded following a discussion of the county's progress in implementing the former mitigation strategy.

3.5.3 July 2017 Planning Meeting

The July 2017 planning meeting was held from 9:00 AM to 12:00 PM on July 28th in Moscow, and was attended by 12 members of the planning team. Discussion and activities revolved around match to date, public outreach, reviewing and revising the goals of the former mitigation strategy, and aligning the mitigation strategy with the risk assessment. Notable topics included moving the landslide hazard profile into a mass wastings/geologic movement profile, identifying crop loss as an impact from multiple hazards but to deprioritize it as a standalone profile, and to remove the technological hazards as an identified hazard to be included as a profile due to redundancy. The team also decided to profile public health threats and environmental contamination/issues. Additional mitigation actions were discussed, but detailing the implementation plan and scoring was postponed to a later date.

3.5.3 November 2017 Planning Meeting & Conference Call

A coordinated planning meeting and webinar was held from 12:00 PM to 2:00 PM on Friday, December 1st. The discussion focused on a new timeline to complete the plan update, a review of the cost share documented to date, and jurisdictional participation to date. Attendees then worked through each element of 44 CFR §201 to discuss progress to date, the need for continued public outreach and participation by additional jurisdictions and stakeholders, and how the plan will be maintained, evaluated, and updated throughout its five-year lifecycle following approval and adoption.

3.5.4 Feb 2018 City of Genesee City Council meeting

County EM Mike Neelon attended the Genesee City Council meeting February 20, 2018 in order to describe the goals and procedures of the HMP update process. It was well attended by the mayor, 6 city council members and members of the public. In the weeks and months after this meeting, city representatives worked through all the input required for full participation in the plan.

3.5.5 March 2018 Planning Committee Meeting

A planning committee meeting was held in Moscow on March 15, 2018 and was facilitated by UI subcontractor Tim Frazier. It was well attended by planning committee members. The discussion focused on hazard risk profiles and the review of prior mitigation strategies, and discussions of problem statement development as the first stage in developing new mitigation actions.

3.5.6 March 2018 South Latah Highway District Meeting

EM Mike Neelon made a presentation about the HMP planning process at the open public meeting by the South Latah Highway District from 9-10am on March 8. The development of desired mitigation actions was discussed.

3.5.7 April 2018 Planning Committee meeting

Planning occurred at this meeting for several public outreach events to occur in subsequent months regarding the HMP process.

3.5.8 August 2018 Outreach to North and South Latah Highway districts and City of Genesee

EM Mike Neelon did individual outreach to members of both the South and North Latah Highway District commissioners and to several appropriate city officials in the City of Genesee.

3.5.9 August 2018 Planning Committee meeting

An LEPC meeting was held on August 9, 2018 and was well attended by committee members. EM Mike Neelson described his outreach efforts to each jurisdiction, including delivery of a thumb drive with forms required for participation in the HMP process.

There was a gap for some while in planning committee meetings as the UI team awaited the required input from jurisdictions. By Summer 2019 only approximately 30% of the required input was received. Efforts were made on the part of the EM and the UI team to receive the remaining input.

3.5.10 December 2019 Planning Committee meeting

The planning committee met and reviewed each of the prior mitigation strategies for Latah County in order to be sure the status was up to date, given the elapsed time since the start of the process. New mitigation strategies were also discussed.

In December 2019 and January 2020, the EM and the UI team also met individually with representatives of the jurisdictions to ensure that all input about mitigation strategies and capabilities assessments were complete and up to date in order to finalize the plan.

3.5.11 February 2020 City of Moscow City Council Meeting

The HMP was discussed at the Feb 3, 2020 City Council meeting of the City of Moscow, the largest city in Latah County. The meeting was open to the public. Mitigation strategies were reviewed and approved by the City Council.

3.6 Public Involvement

Public involvement was integral to the 2018-2020 plan update. Appendix E collects all press releases, and documentation of the public meetings.

3.6.1 Press Releases – Invitations for public involvement

Several press releases were distributed to local media in order to inform citizens of the update process, to solicit public review and comments on the draft plan, and to inform citizens of the date, time, and location of the public meeting held to present the risk assessment and mitigation strategy. Press releases were distributed at the following times:

- June 20, 2017 – Updated announcement with details on the Pre-Disaster Mitigation grant funding the update, jurisdictional participation, a summary of the planning process and proposed revisions.
- July 11 and 15, 2020 - a notice was placed in the local newspaper to encourage the public to view the draft plan on-line and provide review/comments. A copy of the notice is provided in Appendix E. No public comments were received on the draft plan made available during the July 2020 comment period.

3.6.2 Public meetings

All LEPC meetings and the City Council meetings at which the HMP as discussed were open to the public. Documentation of those meetings is provided in Appendix E.

3.7 Review & Incorporation of Existing Plans, Reports, Studies, & Technical Information

Several plans, policies, reports, and other documents were reviewed and incorporated into the former plan. The 2018-2020 update process revisited these documents to review and evaluate their applicability in 2020. Additional documents were also reviewed and incorporated in the 2020 plan update.

3.7.1 Latah County Comprehensive Plan

Latah County and incorporated cities within Latah County have agreed to support the connection between the Multi-Hazard Mitigation Plan and their individual Comprehensive Plans by identifying mitigation actions and assigning each mitigation action to a priority level within their jurisdiction.

Each jurisdiction is committed to using the Multi-Hazard Mitigation Plan when executing or updating their plans.

3.7.2 Latah County Emergency Operations Plan

The Latah County Emergency Operation Plan was adopted by all jurisdictions within Latah County and covers actions for each vulnerability assessment and mitigation action identified in the Multi-Hazard Mitigation Plan.

3.7.3 Latah County Community Wildfire Protection Plan

The Community Wildfire Protection Plan (CWPP) from 2011 included a more detailed description of exposure to wildfire risk than was in the scope of this HMP update. That plan also included specific recommendations for wildfire-related mitigation actions for each jurisdiction. These recommendations informed this planning process. Each community participating in this HMP has included a mitigation action in this plan to implement the recommendations in that plan. Some have also included additional or specific actions related to the exposure described in that plan.

IV. Risk Assessment - Latah County, Idaho

4.1 Overview

Risk assessments are key in aiding mitigation. A risk assessment identifies and characterizes hazards and the potential impacts to the county and its jurisdictions should a disaster occur. By undertaking a comprehensive risk assessment, local officials and decision makers can compare, evaluate, and prioritize mitigation actions to most effectively and efficiently reduce loss of life and property. The risk assessment also provides for more effective land use through zoning and planning, ultimately allowing for resilient growth across the jurisdictions. To begin to contextualize these considerations, see Latah County current land cover and use patterns in Figure 4 below, duplicated from Figure 2 in Section 2.

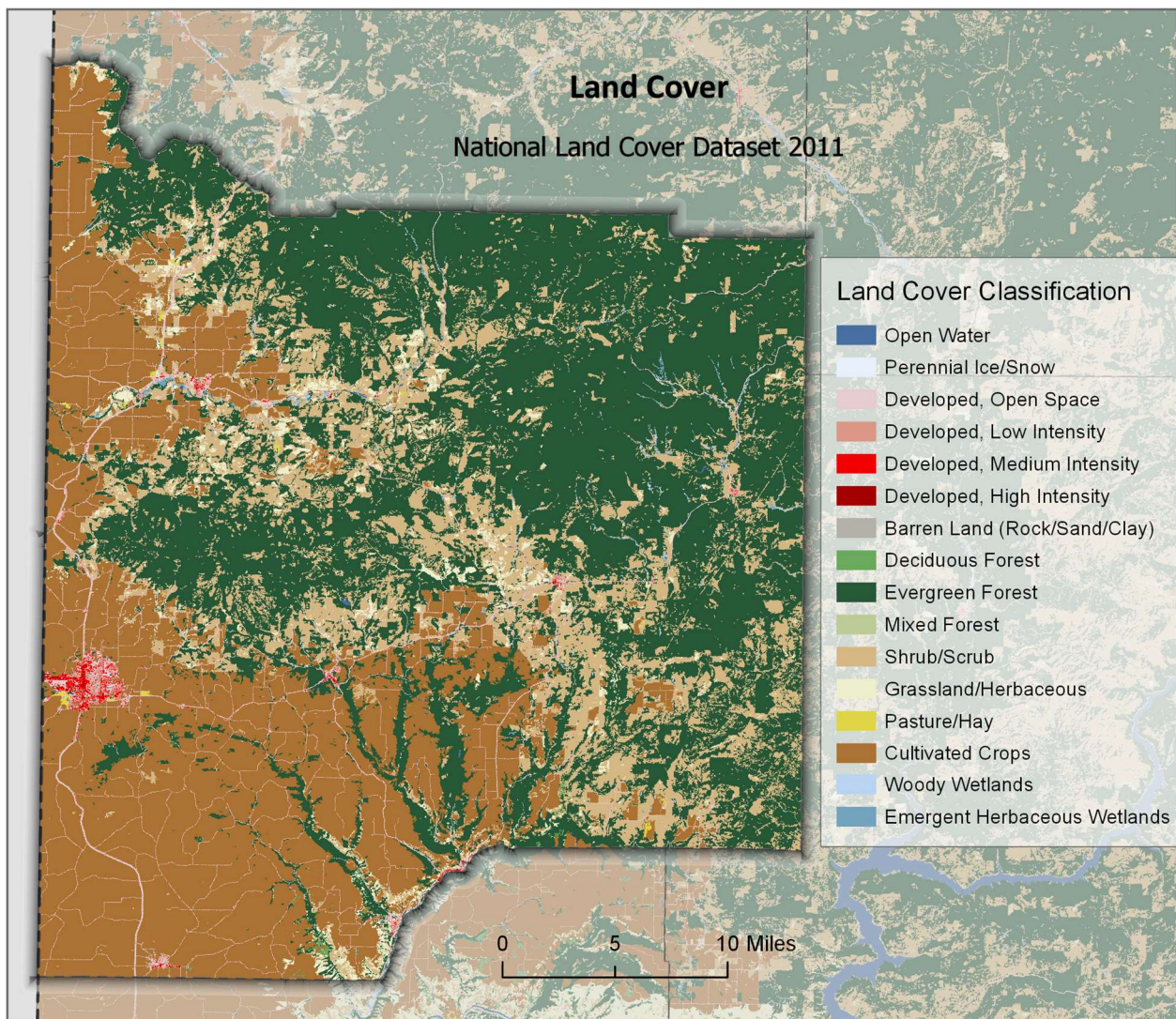


Figure 4 Latah County Land Cover

The United States and its communities are vulnerable to a wide array of natural and human-caused hazards that threaten life and property. Therefore, it is imperative that any hazard mitigation plan

identify and assess the hazards in their jurisdiction. Hazards that pose a risk to this county and its jurisdictions are many and varied, and this plan attempts to profile those that pose the most significant threat to the populations, infrastructure, and built environment. This risk assessment is intended to offer priorities based on an examination of the hazards facing Latah County. According to the Idaho State Hazard Mitigation Plan (HMP), the top three hazards for Latah County are Floods, Severe Weather, and Wildland Fire. The hazards for Latah County include, but are not limited to:

- Flood
- Severe Weather
- Wildland Fire
- Landslides
- Extended Power Failure/Outages
- Earthquake
- Volcano
- Communicable Disease Outbreak
- Technological Hazards/Cyber Security

Appendix F contains information on population, population density and an inventory of critical infrastructure in Latah County and each of its jurisdictions (Table F.1). Also contained in Appendix F are tables with probabilistic risk categories for the county and each of its jurisdictions for risk associated with flood, earthquake, volcanic activity, tornado/wind risk, and winter weather, along with the components of critical infrastructure in each risk category for each jurisdiction. This analysis was performed by Dr. Himanshu Grover's group within the Institute of Hazard Mitigation Planning and Research at the University of Washington. Risks associated with Wildland Fire were studied in more detail in 2011 Community Wildfire Protection Plan, which is included as an Annex to this plan and provided in Appendix G.

4.2 Flood

4.2.1 Hazard Vulnerability & Risk Summary

Flooding is an overflowing of water onto land that is normally dry. Floods can happen during heavy rains, when ocean waves come on shore, when snow melts too fast, or when dams or levees break. Flooding may happen with only a few inches of water, or it may cover a house to the rooftop. They can occur quickly or over a long period and may last days, weeks, or longer. Floods are the most common and widespread of all weather-related natural disasters. Flash floods are the most dangerous kind of floods, because they combine the destructive power of a flood with incredible speed and unpredictability. Flash floods occur when excessive water fills normally dry creeks or riverbeds along with currently flowing creeks and rivers, causing rapid rises of water in a short amount of time. Per the NOAA National Severe Storms Laboratory, floods can happen with little or no warning.

Tables F.2 and F.3 in Appendix F provide more detail on the risk due to flooding reflected in the table below. The vast majority of the county and each of its jurisdictions are rated at low risk for flooding, however, there are a number of known problem spots where small-magnitude trouble spots occur and certain roads/bridges are at risk (see Tables 8 and 9 below). The county and participating jurisdictions have each identified mitigation strategies for these areas and key infrastructure components.

Flood Hazard

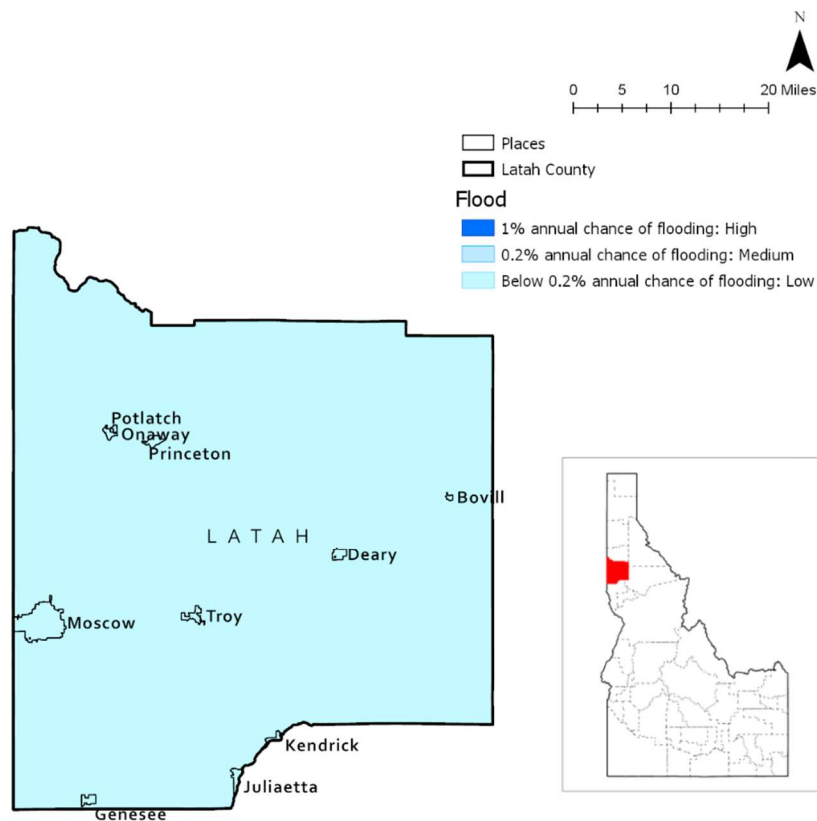


Figure 5 Latah County Flood Hazard Map

4.2.1.1 Past Occurrences

Latah County has a significant history with flooding across its lower elevations. Flooding is considered a natural hazard that occurs annually; however, there were previously fourteen Presidential Declarations for flooding in the state of Idaho from 1956 to 2008, as well as one in March 2017 (DR-4313) and one in March 2019 (DR-4443). Two of the costliest flooding incidents occurred on February 25, 1999, and May 6, 2005, with one million dollars in reported property damage. The FEMA-eligible costs and locations for projects associated with the 2017 and 2019 flooding are provided in the tables below. Awards for losses in the 2017 event totaled just over \$500,000. The City of Moscow's 6th St bridge near Mountain View Ave sustained severe damage in the 2019 event, to the extent that it needs to be replaced, but is not FEMA-eligible because it is a main collector route. Total project costs to replace is \$2.3M.

Table 8 FEMA-eligible projects costs and locations for damages associated with flooding in Latah County in 2017.

Jurisdiction	Project	Project Amount
DEARY	DYC001C - Washington St. & Unnamed Access Rd.	\$ 14,857.12
MOSCOW	MWC001A - PAAP Debris Removal, City-Wide	\$ 8,345.16
MOSCOW	MWC004C - Joseph St. Storm Grate and Drainage Ditch	\$ 6,197.02
MOSCOW	MWC003B - Sandbagging Donated Labor, City-Wide	\$ 2,091.87
MOSCOW	MWC002B - Sandbagging, City-Wide	\$ 3,207.36
GENESEE	GEC001C - Road Damage	\$ 9,735.24
GENESEE	GEC002B EPM	\$ 4,501.76
KENDRICK	KKC001D - Potlatch River Levee Embankment Erosion	\$ 82,023.00
POTLATCH	PHC001C - WWTP Access Road & Pedestrian Bridge	\$ 155,759.32
SOUTH LATAH HIGHWAY DISTRICT	SLHD01A Debris Removal	\$ 45,126.62
SOUTH LATAH HIGHWAY DISTRICT	SLHD02C Road Damage	\$ 98,617.20
NORTH LATAH COUNTY HIGHWAY DISTRICT	NLHD01C - Road Damage Linden Road	\$ 58,486.61
SOUTH LATAH HIGHWAY DISTRICT	SLHD03C Little Bear	\$ 33,624.45
		\$ 522,572.73

Table 9 FEMA-eligible project costs and locations for damages associated with flooding in Latah County in 2019.

Jurisdiction	Project	Project Amount
SOUTH LATAH HIGHWAY DISTRICT	107631 - District wide road and shoulder washouts-Self	\$ 53,905.06
LATAH (COUNTY)	105105 - Latah Trail - Self Cert	\$ 7,393.05
NORTH LATAH COUNTY HIGHWAY DISTRICT	106784 - District Wide Road Washouts-Self Cert	\$ 121,127.93
MOSCOW	110486 - Wastewater Treatment Plant Pump	\$ 12,533.40
MOSCOW	107638 - Joseph St and mountainview Culvert Headwall	\$ 6,966.30
LATAH (COUNTY)	105576 - DRRRA	\$ 369.65
MOSCOW	107645 - Emergency Protective Measures - Self Certifica	\$ 15,343.46
MOSCOW	126214 - Donated Resources	\$ 6,894.08
MOSCOW	107639 - Paradise Path in Kiwanis park	\$ 4,183.60
		\$ 228,716.53

4.2.1.2 Hazard Extent & Magnitude

There are three types of flooding: riverine floods, flash floods, and base floods. Riverine flooding is a gradual rise of volume of a stream that overflows and spills onto adjacent lands. Typically, these are natural occurrences that are associated with meteorological events, i.e., winter rain/snowmelt events. Riverine flooding is often slow in speed, affects large areas, and persist for an extended amount of time. Flash flooding is a fast rise of water in a limited area, over a short amount of time, typically in smaller rivers and drainage ways. Due to Idaho steep mountainous terrain, flash flooding is a frequent occurrence and usually from a sudden onset of a substantial amount of rain.

The final flood type is the base flood or more commonly known as the 100-year flood. This type of flooding is the most common type of flooding, described as having a one percent chance of being equaled or exceeded in any given year. Typically, this type of flooding occurs in control flood plains, an area that is designed to flood and is adjacent to a channel that usually carries water. However, there are vulnerabilities in the county to some roads and bridges that cross streams in places where there is not sufficient floodplain area to prevent damage to those roads and bridges.

4.2.1.3 Hazard Exposure or Probability

Latah County experiences a high amount of snow annually, which contributes to their probability of flooding through snow melt and winter rain-on-snow events. Snowmelt is common in Latah County, but when unusually high snow accumulation and/or high spring temperatures occurs, a significant amount of spring runoff will result, causing flooding that will last for several days to weeks. When a warm regional frontal rain system occurs, it rapidly melts snow at the lower altitudes, which produces a large amount of water in the channel system. Floodplains associated with some of the larger waterways in Latah County like the Palouse River (North, East, and South) and larger creeks like Cow Creek and Big Bear Creek are vulnerable to flooding. See context in Figure 6 below. Tables F.2 and F.3 in Appendix F also provide more detail on the risk due to flooding in the county and for each jurisdiction.

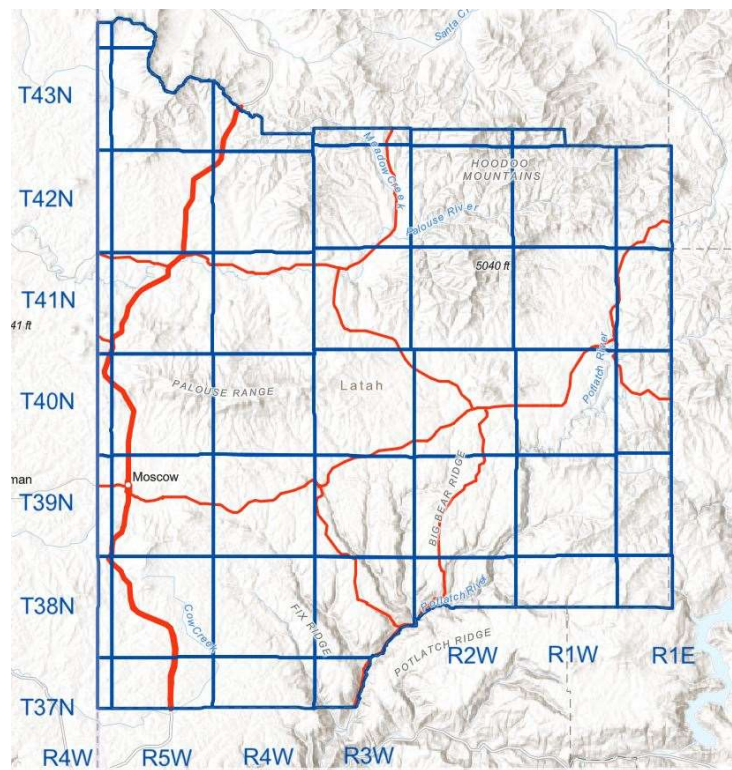


Figure 6 Rivers, streams context per Latah County GIS

4.2.1.4 Loss Exposure

As of 2020, there were no repetitive loss structures in Latah County. According to the 2018 State HMP, Latah County has an estimated \$1,687,274,914 in replacement cost value to owned critical facilities and \$1,497,479,249 exposure (facility and contents) within the 1% hazard flood zone. Amongst Latah County, the highest risk that the county faces is the loss or temporary blockage of accessible roads that could delay responses efforts in a significant flooding event. The City of Moscow, which is located in Latah County, has several "commercial, industrial and residential areas with public utilities in and around the flood plains." The residential areas of the City of Deary sometimes experience a small amount of flooding due to the newly constructed railroads which sometimes obstructs the drainage due to its size. In the city of Juliaetta, one of the most concerning structures is the wastewater treatment facility that is located within a floodplain zone, as well as the Northern railroad bed. The city of Onaway main transportation road, Highway 95, is the most susceptible to flooding; without this road, the community loses its access to the outside world. The most significant vulnerability to the county of Latah is their potential loss of accessible roads.

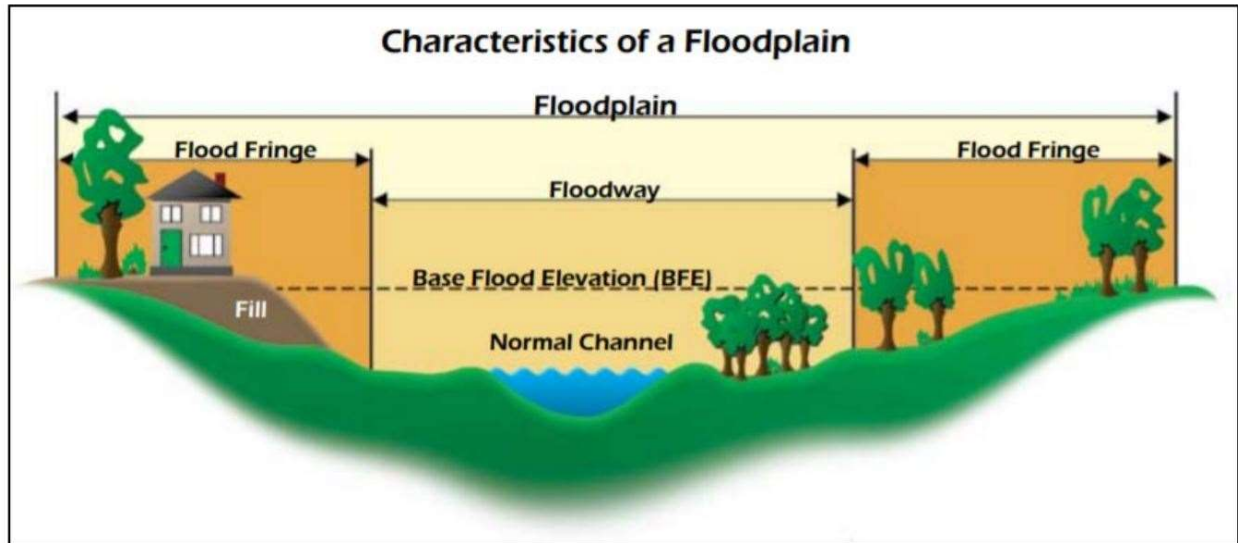
4.2.1.5 Socioeconomic Vulnerability

According to the 2000 Census, there are over 13,838 housing units with a population density of 32.4 persons per square mile. There are three communities in Latah County that lived below the median income period: Moscow, Potlatch, and Kendrick. In Latah County, 7.9% of families lived below the poverty level, with 4.9% of the population being unemployed. The City of Moscow, by far the largest jurisdiction within the county in terms of population, according to the July 2019 US Census "Quick Facts, has a poverty level of 27.2% and 55.8% of its population are in the low to moderate income category.

All three communities, along with the entire county, are participating in the National Flood Insurance Program (NFIP) to help mitigate their risk. Unfortunately, a lack of knowledge and awareness about the NFIP and vulnerability is attributed to low enrollment numbers. This can be addressed through public education programs set forth by the county to raise awareness.

4.2.1.6 Land Use & Future Development Impacts

Due to the annual occurrence of flooding, there are several natural and manmade mitigation efforts in us that use land use to their advantage. One of these is the county participation of the National Flood Insurance Program (NFIP), which helps ensure that their future construction zones and buildings are up to local building codes and regulations. According to the Latah County Mitigation Plan (2011) there are approximately 714 improvement projects that exist within the FEMA-identified floodplains (reference Figure 7), and these are located within unincorporated areas within the county.



Source: NFIP Guidebook 2009

Figure 7 Conceptual floodplain representation per FEMA

4.2.1.7 Climate Change Impacts

Climate change is expected to affect Idaho the same as it affects the world. According to the Environmental Protection Agency (EPA) (2016), the average temperature of Idaho has risen one to two degrees over the past century. This rise in temperature has increased the amount of snow that melts during the winter, decreasing the snowpack, and increase the risk of flooding. With the increase in temperature, the precipitation that falls will be consistent with rain rather than snow, which will run off the top of the snow and increase the chances of flooding even more.

4.3 Severe Weather

The section below contains an assessment of most aspects of severe weather, but does not include an assessment of drought. This is because the hydroclimatology of north central Idaho is such that typical years usually feature long, wet winters and warm dry summers. The agricultural producers in the County are adapted to this normal cycle by growing crops that flourish in the typically warm dry summers. The Idaho Department of Water Resources database on county-level drought declarations within the state (with records back to 2001) indicates that no counties in north central or northern Idaho, including Latah County, have requested that the state declare a drought in those counties in the 19 years of data available.

Drinking water and domestic/municipal irrigation in the County and all jurisdictions is sourced from groundwater, the depth of which responds slowly to interannual variability in precipitation. The jurisdiction with the largest needs for groundwater pumping for domestic supply (the City of Moscow) has had major water conservation efforts in place for over a decade in order to reduce long-term groundwater pumping to level that are sustainable within the typical interannual variability in precipitation and recharge. The City of Moscow also has ordinances in place to reduce outdoor water

use when the spring/summer rainfall falls below the relatively low average amounts. Thus, most of the few actionable strategies for mitigating the risk of impacts to drought are already in place in the jurisdiction whose water use far exceeds that of the rest of the county.

The quantitative analysis of risk to Latah County and its jurisdictions, shown in Table F.12 in Appendix F, shows all of the Latah County to be in the Low Risk category for droughts. Relative to more pressing needs to evaluate risk and develop mitigation actions for other severe weather hazards, the county and jurisdictions did not feel that full consideration of risks due to drought and development of new mitigation actions was warranted. However, there is a major indirect impact of drought for Latah County, which is the increased risk of wildfires, which is described in Sec 4.4 below and in more detail in Appendix G.

4.3.1 Hazard Vulnerability & Risk Summary

According to the 2018 Idaho State HMP, severe weather is one of the top three highest risk within Latah County. Severe storms include thunderstorms, lightning, hailstorms, and winter storms. A thunderstorm is a rain shower during which you hear thunder. Since thunder comes from lightning, all thunderstorms have lightning. A thunderstorm is classified as “severe” when it contains one or more of the following: hail one inch or greater, winds gusting in excess of 50 knots (57.5 mph), or a tornado.

- **Lightning** is defined as a sudden and violent discharge of electricity from within a thunderstorm due to a difference in electrical charges and represents a flow of electrical current from cloud-to-cloud or cloud-to-ground. Nationally, lightning causes extensive damage to buildings and structures, kills or injures people and livestock, starts forest fires and wildfires and disrupts electromagnetic transmissions. Lightning is extremely dangerous during dry lightning storms because people remain outside due to the lack of precipitation.

Lightning Hazard

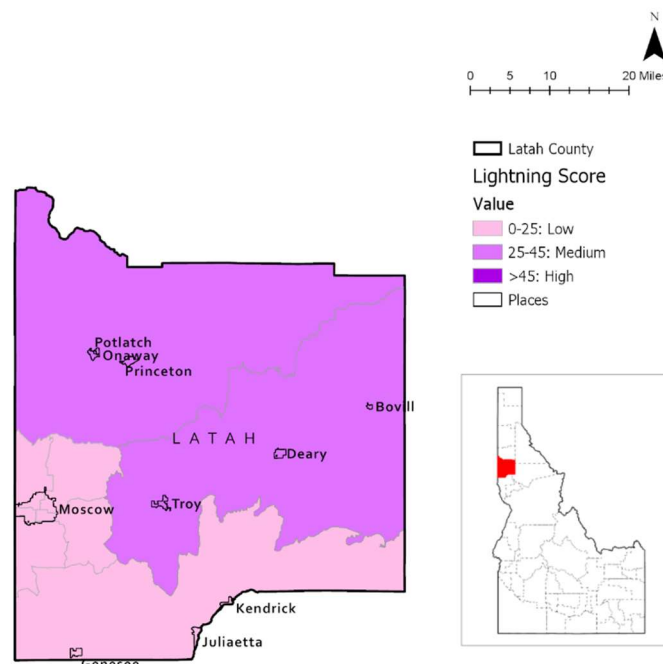


Figure 8 Latah County Lightning Hazard

- **Hailstorms** are violent and spectacular phenomena of atmospheric convection, always associated with heavy rain, gusty winds, thunderstorm, and lightning. Hail is a product of strong convection and occurs only in connection with a thunderstorm where the high velocity updrafts carry large raindrops into the upper atmosphere (where the temperature is well below the freezing point of water).
- **Winter storms** can vary in size and strength and include heavy snowstorms, blizzards, freezing rain, sleet, ice storms and blowing and drifting snow conditions. Extremely cold temperatures accompanied by strong winds can result in wind chills that cause bodily injury such as frostbite and death. A variety of weather phenomena and conditions can occur during winter storms. For clarification, the following are NWS-approved descriptions of winter storm elements:
 - **Heavy snowfall** – the accumulation of six or more inches of snow in a 12-hour period or eight or more inches in a 24-hour period.
 - **Blizzard** – the occurrence of sustained wind speeds in excess of 35 miles per hour accompanied by heavy snowfall or large amounts of blowing or drifting snow.
 - **Ice storm** – an occurrence where rain falls from warmer upper layers of the atmosphere to the colder ground, freezing upon contact with the ground and exposed objects near the ground.
 - **Freezing drizzle/freezing rain** – the effect of drizzle or rain freezing upon impact on objects that have a temperature of 32 degrees Fahrenheit or below.
 - **Sleet** – solid grains or pellets of ice formed by the freezing of raindrops or the refreezing of largely melted snowflakes. This ice does not cling to surfaces.
 - **Wind chill** – an apparent temperature that describes the combined effect of wind and low air temperatures on exposed skin.

4.3.1.1 Past Occurrences

Occurrences of reported severe weather in Latah County from February 2010 to February 2020 are provided Table 8 below. Incidence of winter weather conditions and heavy snowfall are relatively common in Latah County. In addition to the events described in Table 8, there were prolonged periods of heavy snowfall and below-freezing temperatures in the county in January 2008 and January 2009. Of the events described in the table, the most significant was the heavy rainfall combined with snowmelt in March 2017, a time that the county was included in a Presidential Disaster Declaration. The area experienced numerous road closures and some flooding near creeks. These “rain on snow” events caused by the so-called “Pineapple Express” (warm/moist) low pressure systems from the Pacific Ocean that occur in the late winter/early spring provide the most common mechanism for widespread vulnerability to flooding events. A milder event occurred in March 2012 due to a similar mechanism.

Table 10: Reported severe weather events in Latah County, Feb 2010 – Feb 2020.

Reported Severe Weather Events in Latah County Feb 2010 – Feb 2020 (Source: National Weather Service)
LATAH COUNTY --- 10.0 N MOSCOW [46.87, -117.00] 11/16/10 01:30 PST Thunderstorm Wind (EG 78 kt); 11/16/10 02:30 PST Source: Broadcast Media Thousands of people went without power near the Viola area on the Idaho Palouse as 11 transmission structures went down in a domino effect on Highway 95 between Moscow and Potlatch. The highway was shut down for a four mile stretch.

LATAH COUNTY --- 2.8 W KENNEDY FORD [46.92, -117.04], 2.9 SW MOSCOW [46.70, -117.04], 4.8 SSW AVON [46.76, -116.62], 1.8 N HARVARD [46.95, -116.72] 01/16/11 18:00 PST Flood (due to Heavy Rain / Snow Melt); 01/18/11 06:00 PST Source: Law Enforcement Described as a moderate flood event with multiple roads inundated with water where roads crossed streams and creeks in the area. Flooding reported on roadways with road closures in Potlatch along the Palouse River and in Paradise Creek, and on Highway 95 near Flannigan Creek; in Moscow along Paradise Creek; and on Highway 8 at milepost 21 between Troy and Deary. The Palouse River at Potlatch went above its flood stage of 15 feet at 1630PST on the 16th; crested at 16.5 feet at 530PST on the 17th; and then went back below flood stage at 615PST on the 18th. No damage was reported.
LATAH COUNTY --- 1.0 ENE MOSCOW [46.73, -116.98], 1.2 ENE MOSCOW [46.74, -116.98], 1.2 ENE MOSCOW [46.73, -116.98], 1.0 ENE MOSCOW [46.73, -116.98] 03/10/11 18:00 PST Flood (due to Heavy Rain / Snow Melt); 03/11/11 20:00 PST Source: Newspaper Minor flooding was observed along Bridge Street in Moscow as water overflowed its banks along Paradise Creek. The City of Moscow utilized sandbags and temporary gravel walls to contain the flood waters.
LATAH COUNTY --- 1.0 SSW PRINCETON [46.91, -116.83], 4.9 S PRINCETON [46.85, -116.83], 4.5 S PRINCETON [46.85, -116.81], 0.8 S PRINCETON [46.91, -116.82] 03/31/11 08:00 PST Flood (due to Heavy Rain / Snow Melt); 03/31/11 23:59 PST Source: Department of Highways North Latah County Road Department reported water over portions of Hatter Creek Road.
LATAH COUNTY --- 1.5 NNE HOWELL [46.75, -116.79], 1.5 NE HOWELL [46.74, -116.78], 1.6 S HOWELL [46.71, -116.80], 1.1 SW HOWELL [46.72, -116.82] 03/31/11 20:00 PST Flood (due to Heavy Rain / Snow Melt); 03/31/11 23:23 PST Source: Department of Highways North Latah County Road Department reported water over roadways along portions of Randle Flat Creek Road and Driscoll Ridge Road near Troy.
LATAH COUNTY --- 3.5 NE JULIAETTA [46.62, -116.65] 03/26/12 06:00 PST Heavy Rain; 03/26/12 20:00 PST Source: Emergency Manager Heavy rain and excess snow melt from the 25th through the 26th caused the Potlatch River to flow out of its banks causing some damage to an Eastern Berm in the city of Kendrick. The costs of equipment and material to repair the berm was 13 thousand dollars.
LATAH COUNTY --- 4.2 WSW CORNWALL [46.68, -116.94], 5.3 S MOSCOW [46.65, -116.98], 2.6 N GENESEE [46.59, -116.91], 5.1 NNE GENESEE [46.61, -116.86] 03/26/12 06:00 PST Flood (due to Heavy Rain / Snow Melt); 03/27/12 11:00 PST Source: Department of Highways The combination of heavy rain and snow melt caused several creeks and streams to flood causing minor damage to multiple roads between Genesee and Moscow. The most significant damage occurred along Blaine, Eid, Danielson, Swenson, and Troy-Genesee Roads. The South Latah Highway district estimated repair cost to these roads at 50 thousand dollars, primarily to procure, haul, and replace material to restore the roadways for safe travel.
LATAH COUNTY --- 1.7 NE MOSCOW [46.74, -116.97], 1.7 W MOSCOW [46.73, -117.04], 2.5 SW MOSCOW [46.70, -117.04], 1.5 ESE MOSCOW [46.72, -116.97] 03/26/12 06:20 PST Flood (due to Heavy Rain / Snow Melt); 03/27/12 12:30 PST Source: NWS Employee Moderate to major flooding occurred along Paradise Creek on the morning of March 26th flooding numerous streets, bridges, and homes within the city of Moscow, Idaho. The creek crested at ten feet, making it the fourth highest crest on record. Among the list of flooded streets, bridges, parks, and homes which were impacted from the flooding along Paradise Creek include: the intersection of Bridge and Hillcrest Streets, intersection at 5th and Roosevelt, D Street bridge, Main Street, Mountainview Park, the University of Idaho bike path, Blaine Street Bridge, South Lynn Street, and Sand Road. Estimated damage: \$80K
LATAH COUNTY --- 0.3 S ONAWAY [46.93, -116.87], 0.5 SE POTLATCH [46.91, -116.87], 0.8 SE POTLATCH [46.91, -116.87], 0.4 SSE ONAWAY [46.92, -116.87] 03/26/12 07:00 PST Flood (due to Heavy Rain / Snow Melt); 03/27/12 05:00 PST Source: Broadcast Media The Red Cross North Central Disaster Response Team helped a family evacuate their Harvard home early March 26th due to flooding along the Palouse River and Gold Creek. The family had been fighting minor flooding for days but finally decided to evacuate their home when standing water began to fill the house. The water was four inches deep in some spots. Estimated cost of repair \$10K.
LATAH COUNTY --- 2.8 W KENNEDY FORD [46.91, -117.04], 3.2 WSW KENNEDY FORD [46.90, -117.04], 1.4 SSW KENNEDY FORD [46.90, -116.99], 0.9 SE KENNEDY FORD [46.91, -116.97], 0.7 ENE KENNEDY FORD [46.92, -116.97] 04/01/12 00:00 PST Flood (due to Heavy Rain / Snow Melt); 04/01/12 06:00 PST Source: Emergency Manager There was extensive flooding of the low lying areas west of Potlatch. South River Road was flooded where it crosses the Palouse River at Wellesley Road.
LATAH COUNTY --- 3.6 ESE BOVARD [46.65, -116.66] and 3.1 NE JULIAETTA [46.61, -116.65] 07/20/12 12:40 PST Hail (1.00 in); 07/20/12 12:46 PST Source: Trained Spotter A large and widespread severe weather events occurred across the Spokane County Warning Area on July 20th. Severe hail and winds were observed with storms during the early afternoon across lower portions of the Idaho Panhandle. The threat transitioned to severe winds by the mid to late afternoon.
LATAH COUNTY --- 23.1 N KENNEDY FORD [47.25, -117.06], 6.9 SW GENESEE [46.49, -117.04], 16.8 ESE LINDEN [46.57, -116.16], 22.4 NNE SHERWIN [47.24, -116.22] 02/12/14 13:00 PST Flood (due to Heavy Rain / Snow Melt); 02/14/14 15:00 PST Source: Broadcast Media Several low lying areas experienced minor flooding. A few homes near Moscow, ID reported water seeping into their basements.
LATAH COUNTY --- 3.1 WNW KENNEDY FORD [46.94, -117.04], 7.7 NNW ONAWAY [47.04, -116.92] 07/23/14 14:30 PST Thunderstorm Wind (EG 56 kt); 07/23/14 15:00 PST Source: Trained Spotter A spruce and locus tree were destroyed around a farm house. Two roofs on farm buildings lost tin. Tree limbs four inches in diameter were broken off into four foot chunks and flew 100 feet. Fifty to sixty foot spruce trees with six inch diameter trunks had twenty feet of their tops taken off. Hail was also reported in Potlatch by a member of the public. Estimated damage 2K.
LATAH COUNTY --- 1.8 SW GENESEE [46.53, -116.95], 8.3 N ONAWAY [47.05, -116.87] 08/12/14 16:00 PST Thunderstorm Wind (EG 52 kt); 08/12/14 16:55 PST Source: Trained Spotter A large tree and several power lines were blown down in Moscow resulting in 5000 power outages.
LATAH COUNTY --- JULIAETTA [46.58, -116.70] 06/01/15 18:30 PST Heavy Rain; 06/01/15 19:10 PST Source: Trained Spotter A trained spotter reported 1.10 inches of rain that fell in 20 minutes in Juliaetta, Idaho. Law enforcement reported trees blown down on US 12 at Mile Marker 21 near Linden, ID.
LATAH COUNTY --- 7.6 NNW KENNEDY FORD [47.02, -117.03], 1.9 NE ONAWAY [46.95, -116.85], 2.8 NNW SHERWIN [46.97, -116.36], 6.2 ESE LINDEN [46.63, -116.36], 3.9 NE JULIAETTA [46.62, -116.65], 3.4 SSW JULIAETTA [46.54, -116.73], 5.6 W GENESEE [46.55, -117.04] 03/15/17 07:00 PST Flood (due to Heavy Rain / Snow Melt) 03/31/17 23:59 PST Source: Emergency Manager Periodic heavy rain and spring snow melt produced debris flows and widespread areal flooding across Latah County during the second half of March. Numerous roads were closed and the county was included in a Presidential Disaster Declaration as a result of the disruption and damage

caused by this episode. Paradise Creek near Moscow flooded multiple times leading to damage on roads and parks as well as basement flooding of homes along and near the creek. Estimated costs: \$800,000
LATAH COUNTY --- MOSCOW [46.73, -117.00] 04/07/17 06:00 PST Thunderstorm Wind (EG 52 kt); 04/07/17 07:00 PST Source: Emergency Manager The Latah County Emergency Manager reported broken tree branches and downed power lines in Latah County. The Moscow area was impacted with several large trees down, at least one tree falling on a house, and at least two cars damaged by falling trees. Damage estimate \$80K.
LATAH COUNTY --- 1.6 W MOSCOW [46.73, -117.03], 1.6 W MOSCOW [46.73, -117.03], 0.6 WNW MOSCOW [46.73, -117.01], 0.2 WSW MOSCOW [46.73, -117.00] 12/29/17 20:45 PST Flood (due to Heavy Rain / Snow Melt); 12/29/17 23:00 PST Source: River/Stream Gage The USGS river gage at Paradise Creek in Moscow recorded a sharp rise above the Flood Stage of 9.2 feet at 8:45 PM December 29th. The creek quickly crested at 9.7 feet by 9:00 PM and then receded back below Flood Stage by 11:00 PM. No damage was reported with this minor flood.
LATAH COUNTY --- 1.5 WSW KENNEDY FORD [46.91, -117.01], 2.3 SW KENNEDY FORD [46.89, -117.01], 1.8 ESE KENNEDY FORD [46.91, -116.94], 1.0 SSE POTLATCH [46.91, -116.87], 0.4 WNW ONAWAY [46.93, -116.88], 2.4 WNW POTLATCH [46.93, -116.93] 02/04/18 20:45 PST Flood (due to Heavy Rain / Snow Melt); 02/05/18 22:30 PST Source: River/Stream Gage The USGS Palouse River Gage at Potlatch recorded a rise above the Flood Stage of 15.0 feet at 8:45 PM February 4th. The river crested at 15.9 feet at 10:45 AM February 5th and then receded below Flood Stage at 10:30 PM February 5th. Est damage \$500.
Events in multiple locations on 04/09/19 and 04/10/19: LATAH COUNTY --- 1.6 WSW MOSCOW [46.72, -117.03], 1.7 WNW MOSCOW [46.74, -117.03], 0.3 NNE MOSCOW [46.73, -117.00], 0.7 SE MOSCOW [46.72, -116.99] 04/09/19 14:45 PST Flood (due to Heavy Rain); 04/10/19 02:00 PST Source: River/Stream Gage The USGS River Gage on Paradise Creek in Moscow recorded a sharp rise to above the Flood Stage of 9.2 feet at 2:45 PM PDT on April 9th. The creek continued to rise passing through the Moderate Flood Stage of 10.0 feet at 7:00 PM. The creek continued to rise and crested at 11.4 feet at 7:15 PM which is a record high crest beating the previous record crest of 11.3 feet set in 1996. The creek then quickly receded passing below the moderate Flood Stage at 8:00 PM and then below Flood Stage at 9:15 PM PDT. LATAH COUNTY --- 0.6 NNW MOSCOW [46.74, -117.00], 1.7 NNE MOSCOW [46.75, -116.99], 0.7 ENE MOSCOW [46.73, -116.99], 0.5 SW MOSCOW [46.72, -117.01], 0.8 WNW MOSCOW [46.73, -117.02] 04/09/19 15:30 PST Flash Flood (due to Heavy Rain); 04/09/19 21:30 PST Source: Emergency Manager Heavy rain during the afternoon and evening of April 9th caused Paradise Creek running through Moscow to rapidly rise and inundate lower elevation portions of the city along the creek. In addition heavy rain in the hills north of Moscow caused flash flooding in the northeastern areas of the city as runoff drained through valleys and ravines along North Polk Street and into the East D street neighborhood, then through downtown before draining into Paradise Creek. In some areas flood waters were reported to be 3 feet deep with numerous roads, intersections and underpasses impassable. Most of the reported damage involved basement and first floor flooding of buildings. Estimated damage \$200K. LATAH COUNTY --- 2.9 WSW KENNEDY FORD [46.90, -117.04], 2.6 W KENNEDY FORD [46.92, -117.03], 1.0 NW HARVARD [46.93, -116.73], 2.6 NNE HARVARD [46.95, -116.70], 1.4 NW YALE [46.92, -116.69] 04/09/19 19:30 PST Flood (due to Heavy Rain); 04/10/19 20:15 PST Source: River/Stream Gage The USGS River Gage on the Palouse River near Potlatch recorded a rise to the Flood Stage of 15.0 feet at 8:30 PM PDT on April 9th. The river continued to rise and pass through the Moderate Flood Stage of 16.0 feet at 10:45 pm on the 9th. The river crested just under the Major Flood Stage of 17.0 feet at 5:00 am on the 10th and then began receding. The river passed down through the Moderate Flood Stage at 3:00 PM on the 10th and then receded below the Flood Stage at 9:15 PM PDT on April 10th. Estimated damage \$50k.
LATAH COUNTY --- 2.8 ESE MOSCOW [46.71, -116.95], 2.9 ESE MOSCOW [46.71, -116.95], 2.9 ESE MOSCOW [46.71, -116.95], 2.9 ESE MOSCOW [46.71, -116.95] 05/30/19 17:30 PST Flash Flood (due to Heavy Rain); 05/30/19 19:00 PST Source: Trained Spotter A spotter submitted photos of a Flash Flood flowing down a driveway and washing out a culvert creating a breach in the driveway 3 to 4 feet deep with a similar width. Estimated damage \$500.

4.3.1.2 Hazard Extent & Magnitude

This category is broad in the way that it covers multiple different potential hazards that could affect Latah County. Severe storms affect the entire state to varying degrees, due to the complex landscape and the influence from the Pacific. Aspects of severe weather such as thunderstorms and winter storms can lead to secondary hazards as well as the compounding of other threats. For example, the “rain on snow” events that occur in the late winter/early spring timeframe is a leading cause of flooding. Similarly, thunderstorms also produce precipitation that can lead to flooding. In both cases, flooding could lead to landslides and thus, a tertiary hazard. The county is at a great risk of severe winter weather with a high probability of recurrence. Drought and windstorms are also known to affect the county and are added under the severe weather category.

4.3.1.3 Hazard Exposure:

Latah County has a history of snowstorms and thunderstorms affecting all towns within the county limits. Generally, the mountainous terrain and the north/south orientation of the Cascades tend to isolate severe storms into localized areas of the County. For winter storms in particular, the weather conditions can change rapidly which could lead to unplanned increased exposure.

The information presented in Tables F.8 and F.9 in Appendix F delineate the risk categories for tornado and wind risk in Latah County and each of its jurisdictions. As noted in the map below, the whole of the county and each of its jurisdictions are classified in the category of low risk for tornado and wind hazards (excluding winter weather). The information in Tables F.10 and F.11 in Appendix F indicates that all areas of Latah County are in the medium or high risk category for winter weather. The county and each participating jurisdiction have identified mitigation strategies to address these risks.

Tornado Hazard

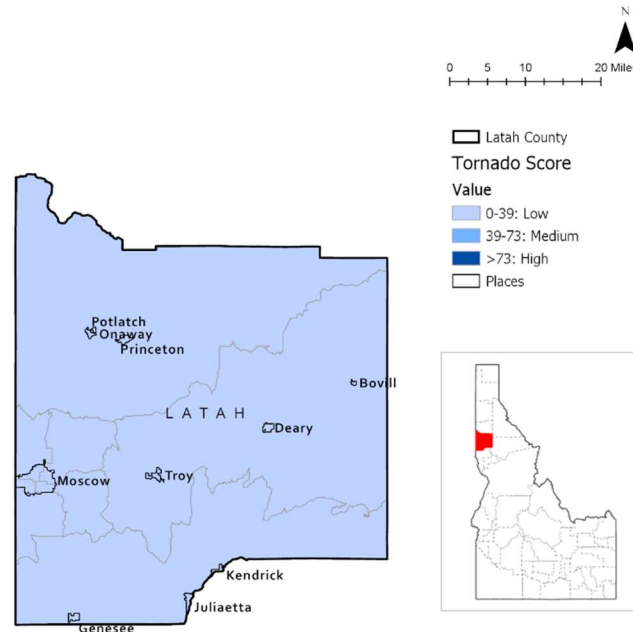


Figure 9 Latah County Tornado Hazard Map

4.3.1.4 Loss Exposure

There have been multiple disaster declarations that have been declared for Idaho and have included Latah County. Many of these declarations are for weather events that fall under this severe weather category. The most recent disaster declarations being DR-4443 and DR-4313, according to FEMA 2019 documentation. Potential economic losses vary depending on the degree of the severe weather.

As far as winter storms are concerned, there is the possibility of damaged infrastructure, but most of the loss is contributed to lost economic activity (i.e. closed businesses). Thunderstorms do not contribute to significant economic loss, however second hazards such as flooding have a high probability of occurring.

4.3.1.5 Socioeconomic Vulnerability

The elderly and the young are two populations that are the most vulnerable from winter storms. Those community members in poverty can also be more susceptible to the effects of the

hazards. According to the 2018 US Census, the county has 16.5% of the population listed at below the poverty level which is 4.7% above the national average. As noted above, this figure is at 27.2% for the largest city, the City of Moscow. Additionally, Latah County has 9.5% of its under 65 years old population listed as disabled. This population can be vulnerable opposite hazards like severe weather, flooding, or power outages – especially when their vulnerability is compounded with other socioeconomic factors – like poverty.

4.3.1.6 Land Use & Future Development Impacts:

There is really no land use policy or development policy that can be put into effect that would reduce exposure to severe weather. In most cases, damages are limited to lost economic activity since businesses are closed during the storm. However, in the areas that are susceptible to flooding, land use policies could be implemented to mitigate against flood damage.

4.3.1.7 Climate Change Impacts:

Future climate change impacts could lead to more severe weather in the area which could force multiply the primary hazards as well as potential secondary and tertiary ones. As mentioned in the flooding section of this document, increasing temperatures will lead to the melting of snow and ice in the mountain areas which will contribute to increased flooding disasters. According to the EPA, if there is less frequency of storms then drought conditions could occur which can lead to wildfires as well as failed agriculture.

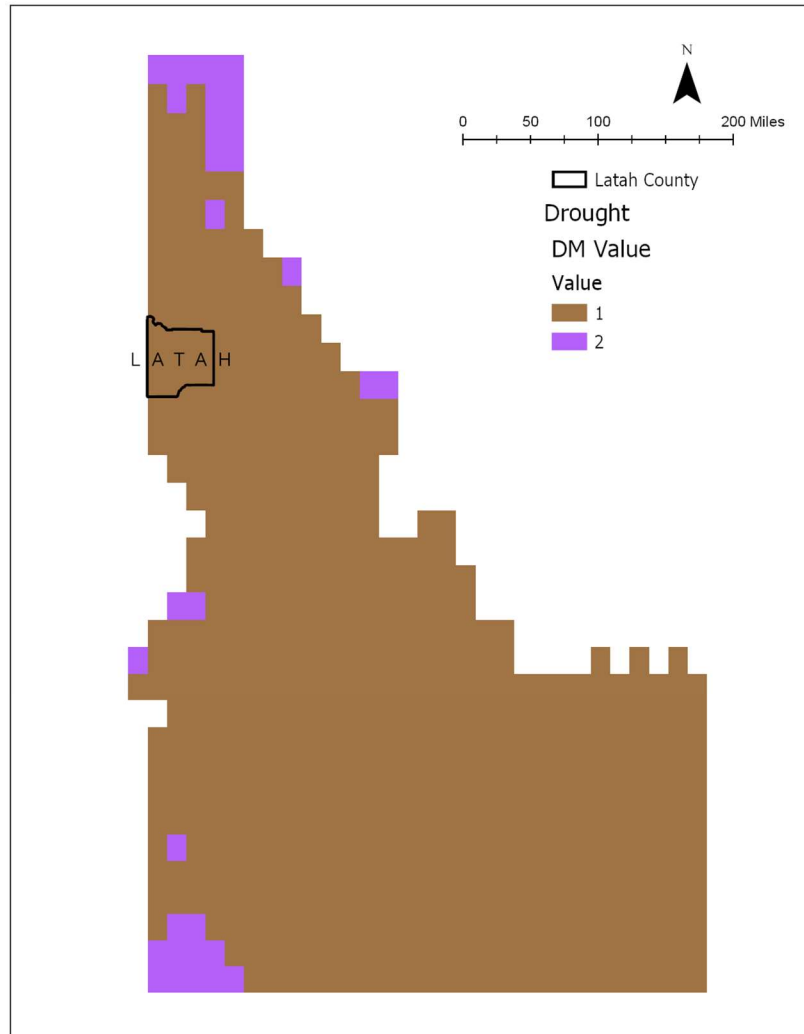


Figure 10 Latah County drought hazard within larger regional context

4.4 Wildland Fire Annex

Under agreement between IOEM and IDL, the Latah County Community Wildfire Protection Plan (CWPP) acts as the Wildfire Annex to the Latah County Multi-Jurisdictional Hazard Mitigation Plan.

Vulnerabilities and wildfire mitigation strategies for each jurisdiction within Latah County, including some not participating in this plan, were part of the 2011 CWPP, which is provided in Appendix G.

Several general points about fire hazards and the map of the Wildland Urban Interface from the 2011 CWPP are provided here.

4.4.1 Hazard Vulnerability & Risk Summary

Wildfires are unplanned fires that burn in natural areas, such as grasslands, shrublands,

forests, or other environments, including wildland areas where people live. They can start from both human and natural causes, such as lightning, and they affect every state in the U.S. Nearly 85 percent of U.S. wildfires are from human causes, including uncontrolled campfires, burning debris, sparks from malfunctioning equipment, discarded cigarettes, and arson, accounting for 44% of the total area burned across the U.S. (American Geosciences Institute.org, 2019).

4.4.1.1 Past Occurrences

Fire history data from fire scars and charcoal deposits suggest fire has played an important role in shaping the vegetation throughout Latah County. The late summer months then to bring lightning storms which have historically ignited wildfires at areas in and around Latah County. The time frame is approximately 5-20 years between significant wildfire spread. Researchers have noted that the area vegetation has adapted to the wildfire occurrences.

Table 11 Latah County Historic Fire Regimes per the 2011 Latah County Wildfire Protection Plan

Historic Fire Regime	Description	Acres	Percent of Area
Fire Regime Group I	<= 35 Year Fire Return Interval, Low and Mixed Severity	75,712	11%
Fire Regime Group II	<= 35 Year Fire Return Interval, Replacement Severity	95,517	14%
Fire Regime Group III	35 - 200 Year Fire Return Interval, Low and Mixed Severity	439,674	64%
Fire Regime Group IV	35 - 200 Year Fire Return Interval, Replacement Severity	66,554	10%
Fire Regime Group V	> 200 Year Fire Return Interval, Any Severity	3,162	0%
Water	Water	126	0%
Barren	Barren	836	0%
Sparsely Vegetated	Sparsely Vegetated	0	0%
Indeterminate Fire Regime Characteristics	Indeterminate Fire Regime Characteristics	7,065	1%

Occurrence of wildfires that were larger than 2 acres in final size for the time period since the assessment done for the 2011 Community Wildfire Protection Plan are provided in Tables 12 and 13 below. These data are from the Idaho Department of Lands.

Table 12 Latah County Wildland Fires >2 acres, 2018-2020

Fire Name	Fire Number	Quarter	Range	Section	Township	Year	District	Final Size	General Cause	Specific Cause
Walker	410-002	SENW	05W	21	41N	2020	Ponderosa FPD	13.65	Debris Burning	Residential Yard Waste/Orchard Clippings
Cedar Ridge	410-001	SESW	01W	8	38N	2020	Ponderosa FPD	12.27	Unknown	Unknown
Prospect	410-004	SWNE	03W	29	43N	2019	Ponderosa FPD	304.66	Debris Burning	Prescribed Burning-Broadcast
Chambers Creek	990-015	NWSW	01E	21	39N	2019	CPTA	5.5	Equipment Use	Equipment Use, No Further Breakdown
Lenville	410-001	SESW	04W	23	38N	2019	Ponderosa FPD	2.45	Debris Burning	Residential Yard Waste/Orchard Clippings
Mica	410-010	SENE	02W	5	40N	2018	Ponderosa FPD	58.23	Debris Burning	Crop Residue, Pasture and CRP burning
Gold Hill	410-006	SENE	04W	33	42N	2018	Ponderosa FPD	56.14	Debris Burning	Crop Residue, Pasture and CRP burning
Zeitler	410-012	NWSE	05W	32	39N	2018	Ponderosa FPD	28.54	Debris Burning	Residential Yard Waste/Orchard Clippings
Lone Star	410-007	SENW	04W	7	38N	2018	Ponderosa FPD	8.71	Debris Burning	Crop Residue, Pasture and CRP burning
River Rd.	410-001	SWNE	02W	29	37N	2018	Ponderosa FPD	2	Miscellaneous	Fireworks

Table 13 Latah County Wildland Fires >2 acres, 2010-2017

Fire Number	Firename	IDL District	Year	Land Owner	General Cause	Specific Cause	Quarter	Section	Township	Range	Final Size
41008	Dry Creek	Ponderosa FPD	2016	Private Property	Debris Burning	Illegal Burning	SESE	12	39N	03W	11.5
99005	Three Bear Corral	CPTPA	2016	Private Property	Arson	Arson	NWNW	1	38N	01W	5
41007	Mad Hatter	Ponderosa FPD	2016	Private Property	Debris Burning	Yard Grass, Weeds, Ditch	NWSW	26	41N	04W	4.3
99020	Norwegian	CPTPA	2016	Private Property	Lightning	Lightning	SESE	6	38N	01E	2
41005	Big Lost	Ponderosa FPD	2015	Private Property	Lightning	Lightning	NENE	27	42N	03W	850
99052	Larch	CPTPA	2015	Private Property	Debris Burning	Field Burning, Prescribed	NWSW	3	38N	01W	40
41006	White Pine	Ponderosa FPD	2015	Private Property	Debris Burning	Field Burning, Prescribed	SWSW	25	40N	03W	5
41007	American Ridge	Ponderosa FPD	2014	U.S. Forest Service	Lightning	Lightning	SESE	28	38N	03W	5
41005	MICA SLASH	Ponderosa FPD	2012	Forest Industry Co.	Lightning	Lightning	NWNW	30	41N	02W	124
41016	KENDRICK GRADE	Ponderosa FPD	2011	Private Property	Miscellaneous	Structure Fire	NWNE	17	38N	02W	25
41017	LAST FIRE	Ponderosa FPD	2011	Private Property	Debris Burning	Slash Burning, Prescribed	NWSE	6	41N	03W	6
41003	DRISCOLL RIDGE	Ponderosa FPD	2011	Private Property	Debris Burning	Field Burning, Prescribed	NWSW	30	39N	03W	4.5
41015	FLANNIGAN FIRE	Ponderosa FPD	2011	Private Property	Debris Burning	Field Burning, Prescribed	NWNE	11	41N	05W	3.95
41001	THISTLE	Ponderosa FPD	2010	Private Property	Miscellaneous	Powerline, Insulator, Tra	NWSE	26	38N	03W	6
41007	MOON HILL	Ponderosa FPD	2010	Forest Industry Co.	Lightning	Lightning	SWNE	16	41N	03W	3.77
32004	WILLOW PEAK	West St Joe FPD	2010	Forest Industry Co.	Lightning	Lightning	NWSW	2	42N	01W	2

4.4.1.2 Hazard Extent & Magnitude

The potential for hazard magnitude where it pertains to wildfires is extensive. Climate change has worked to add fuel and increase the risk of wildfires. The community has begun to work towards combating that issue by introducing a mitigation strategy they have named the Wildland Urban Interface. The program works to reduce the amount of natural fuel like vegetation near urban settlements thus reducing the potential for wildfires to endanger residential homes or critical infrastructure according to the 2011 Latah County Wildfire Protection Plan.

4.4.1.3. Hazard Exposure or Probability

Latah County is currently at a moderate threat level of wildland fire. This is due to the levels of rain and snowfall which helps to minimize the period of time the County is most susceptible to severe wildfires. It is important to note that for portions of the county, like Moscow, depending on conditions in specific developments in wildland-urban interface areas (see Figure 8), the threat may be moderate to high, especially during periods of drought. Over 51% of wildland fires in Latah County are started by lightning strikes.

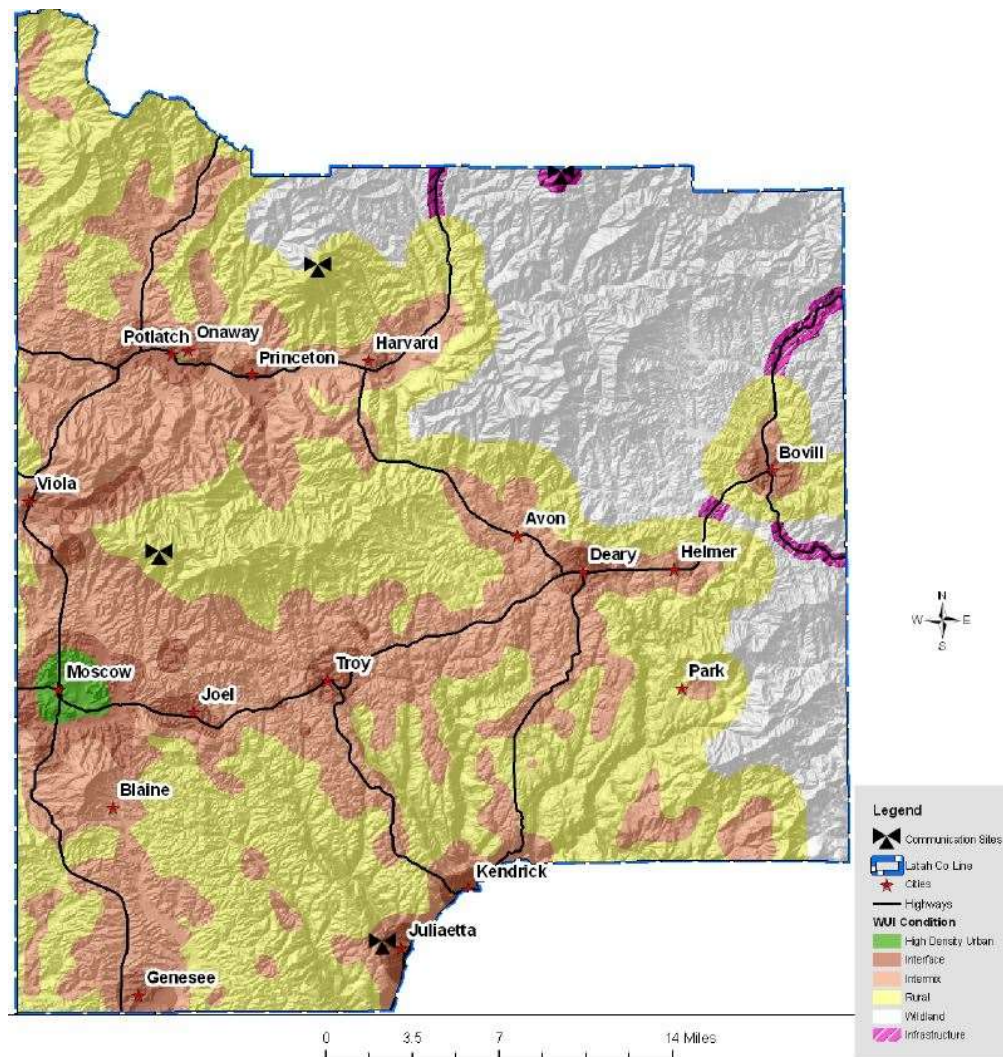


Figure 11 Wildland Urban interface from 2011 Latah County Wildfire Protection Plan

4.4.1.4 Loss Exposure

If a wildland fire were to occur in an area with favorable conditions, the results could be total losses to physical infrastructure as well as widespread destruction of agriculture. An estimate of potential losses is difficult to determine due to the unpredictability of wildfire behavior and the nature of ignition sources.

4.4.1.5 Socioeconomic Vulnerability:

In looking at the demographics of Latah County, over 60% of the population live in Moscow, 13% are located in other incorporated cities, and approximately 27% are scattered in small communities and rural areas throughout the county. Areas of vulnerability could be in rural areas where there are less resources to fight the fires (access to water) as well as other suppression resources. Also, any community members living in the wildland-urban interface are at a greater risk of contending with a wildland fire hazard.

4.4.1.6. Land Use & Future Development Impacts

One of the important locations of land use and future development policy is in areas that can be identified as being in the wildland-urban interface. The wildland-urban interface is an area where structures are built in areas with essentially continuous (and often high) vegetative fuel loads. Because of this vegetation, wildland fires that break out in these areas move fast, causing widespread destruction of everything in its path. Consideration should be given to building in the wildland-urban interface, including the placement of homes near water sources as well as sufficient access points for evacuation and passage of fire apparatus.

4.4.1.7 Climate Change Impacts

Researchers have found that climate change has impacted the risks associated with wildfire and agricultural decline for Latah county over the past several decades. They have found that the faster snow melt and dry seasons have extended the risks for wildfires by one month. Drier months coupled with higher temperatures causes an increase in both fuel and possibility for conduction. A lack of adequate precipitation is a growing problem in many areas as well. These three factors (i.e., lack of precipitation, longer dry months, and higher temperatures) put the area at a higher risk for wildfire burns within the next decade.

4.5 Landslides

4.5.1 Hazard Description

Landslides are sudden, short-lived geomorphic events that involve the rapid-to-slow descent of soil or rock in sloping terrains. The term landslide includes a wide range of ground movement, such as rock falls, failure of slopes, and debris flows. Although gravity acting on an oversteepened slope is the primary reason for a landslide, there are other contributing factors:

- erosion by rivers, glaciers, or ocean waves create oversteepened slopes
- rock and soil slopes are weakened through saturation by snowmelt or heavy rains
- earthquakes create stresses that make weak slopes fail
- earthquakes of magnitude 4.0 and greater have been known to trigger landslides
- volcanic eruptions produce loose ash deposits, heavy rain, and debris flows
- excess weight from accumulation of rain or snow, stockpiling of rock or ore, from waste
- piles, or from man-made structures may stress weak slopes to failure and other structures
- unsustainable deforestation or other loss of vegetative cover can contribute to landslides

4.5.2 Past Occurrences

Latah County has experienced several landslides of significance in the past three decades. In 1993, a landslide northeast of Juliaetta (on the southern boundary of the county) killed two people traveling along state Route 3 and caused damage to property and crops, while another landslide in 2006 caused \$7,500 in property damage. More recently, one small landslide was reported in 2011 and

two in 2012. No significant landslides have occurred recently in Latah County, although landslides have occurred in other counties in northern Idaho in recent years that have caused roads to be closed for some time (eg., Bonner County 120 miles to the north and Idaho County 60 miles to the south). These events are usually, but not always, associated with prolonged periods of high intensity rainfall. The Idaho Geological Survey is engaged in a project to identify and map more than 3,000 landslides in the state since the time they began to record them, but results for this project were not available at the time of this report.

4.5.3 Hazard Exposure and Future Probability

Determining the probability of landslides in the future is difficult because of the numerous factors that contribute to them. Landslides typically occur on slopes and in areas where they have taken place before. Idaho's geology, landscape, climate, soils, and other factors can be conducive to landslide activity and numerous small landslides occur each year in Idaho.

According to the 2018 State Risk Assessment:

“The geophysical processes that contribute to landslides during a particular year are statistically independent of past events. Unfortunately, the short period of recorded and observed landslides and associated conditions that contribute to the risk make it difficult to develop return periods for landslideprone areas in Idaho. Landslide occurrence is not directly attributed to a specific major meteorological event, such as the 1-percent-annual-chance or 100-year snowfall; though rainfall events are one known cause of events.”

Because of the wide variety and unpredictability of “triggers” to landslide events, there is no widely accepted model for assessing the probability of future landslide events in this region. However, the most static of the influencing factors is the slope magnitude and stability of the geologic material. In lieu of comprehensive regional model, we use here some breakpoints related to slope values in order to map areas of Latah County exposure to landslides based on slope values alone (see Figure 13 below). The risk categories are assigned based on observations in a report¹ by US Forest Service scientists who synthesized previous US Forest Service analyses of the occurrence of 860 landslides in the Clearwater-Nez Perce National Forest, which is a large national forest in Idaho that lies southeast of Latah county.

---- ¹ Summary of Landslide Prone Delineation for Forest Plan Revision, Clearwater National Forest, US Forest Service
downloaded here: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5400826.pdf

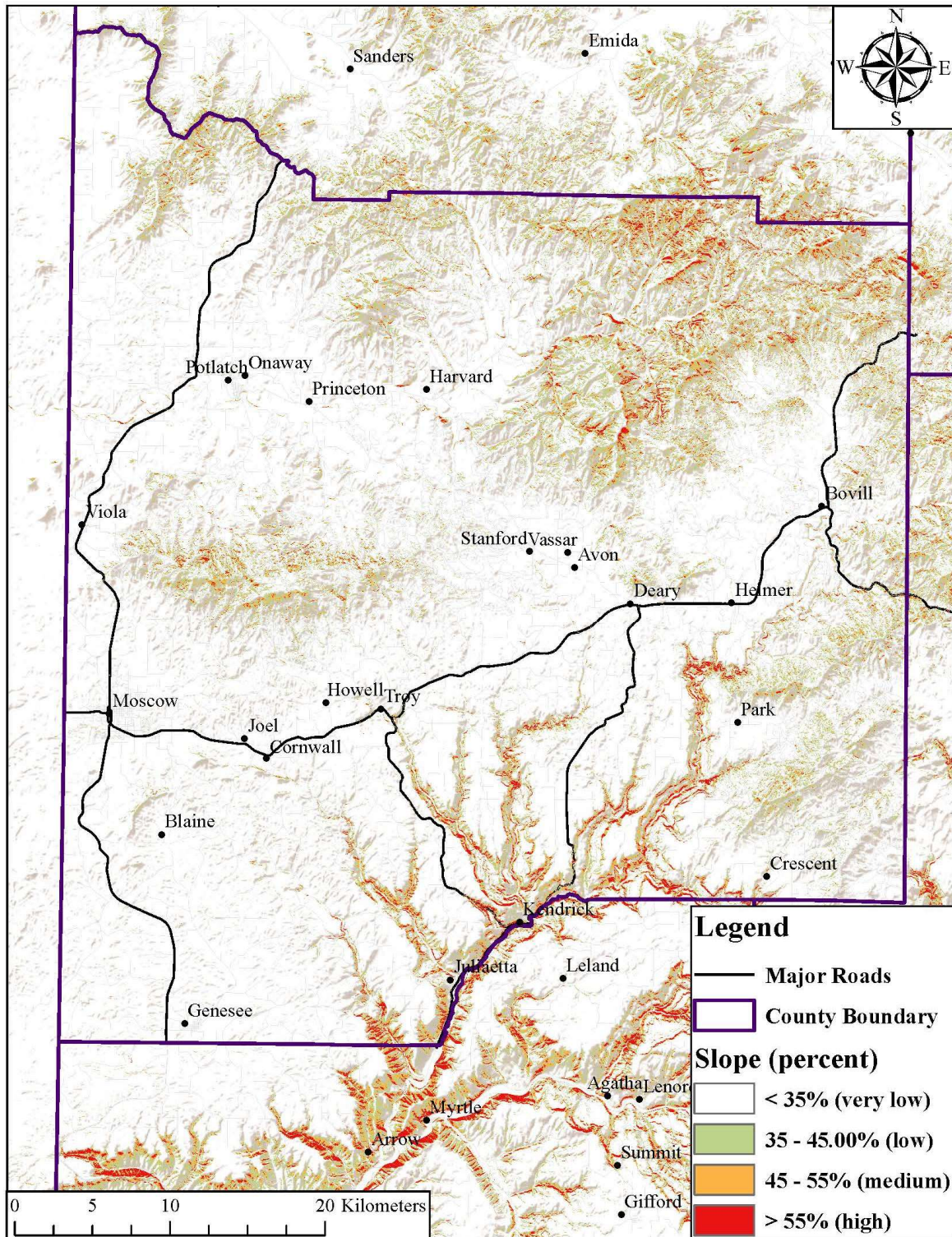


Figure 12 Latah County Landslide Hazard Map

Terrain in mountainous areas is such that roads are often placed along streams that sometimes have steep embankments just adjacent. These are the conditions that make for the greatest exposure if the geologic materials are not stable. The map provided in Figure 12 shows that the risk for landslides is not high for the county as a whole and none of the jurisdictions participating in this plan are at high risk. However, Route 3, which runs along the Middle Potlach Creek and forms the southern boundary of the county for the middle third of the county, provides important road access for two non-participating communities (Juliaetta and Kendrick) and is at some risk for closure due to landslides.

4.5.4 Vulnerability

There is no reliable estimate of total landslide costs and losses in Idaho, but these events are costly. Landslides continue to cause challenges to the maintenance of U.S. 95, the primary north-south transportation link from the northern Panhandle region, through central Idaho and into the southern part of the state. There have been no closures of that major artery in Latah County due to landslides in recent decades, but it has occurred in several counties north and south of Latah County. In Summer 2020, there was a major landslide on this artery several counties to the south that caused no loss of life or property, but did have significant impacts on transportation. It is often very difficult to redirect traffic on this heavily traveled road as alternate routes do not exist and detours in steep terrain are difficult or impossible to construct. Landslides here disrupt emergency functions and commerce, as well as personal lives. The same holds true for other smaller roads, such as Highways 3 and 99 in the southern portions of the county. Highway 3, similar to portions of US-95, is particularly vulnerable to disruption of transportation because the road runs along a narrow track between a high-slope area and a stream, making options for detour routes during times of disruptions very limited.

4.5.4.1 Land Use & Future Development Impacts

Due to the risk of landslides near slopes, development near these areas, particularly those that have experienced prior landslides, could be negatively impacted. Areas near Highways 3 and 99 have also experienced increased impact of landslides which have in turn caused issues for transportation and vital services. Two Landslide Impact Zones have been identified in Latah County; one at the base of the slope just west of Juliaetta and another along Highway 99 at Kendrick. Neither of these communities are participating in this plan. Development in or near these areas is risky and should be avoided if possible.

4.7.3.2 City of Deary

The City of Deary is exposed to similar landslide threat as the greater planning area.

4.7.3.3 City of Genesee

The City of Genesee is exposed to similar landslide threat as the greater planning area.

4.7.3.4 City of Moscow

The City of Moscow is exposed to similar landslide threat as the greater planning area.

4.7.3.5 City of Potlach

The City of Potlach is exposed to similar landslide threat as the greater planning area.

4.6 Extended Power Failure/Outages

4.6.1 Hazard Vulnerability & Risk Summary

This category defines itself as any interruption or loss of electrical service due to disruption of power transmission caused by accident, sabotage, natural hazards or equipment failure. A significant power failure is defined as any incident of a long duration which would require the involvement of the local and/or state emergency management organizations to coordinate the provision of food, water, heating, shelter, etc.

4.6.2 Past Occurrences

Due to the rural setting and frequent occurrence of winter weather events, localized power outages of less than several hours are not uncommon in Latah County. There have been no prolonged and widespread outages in Latah County in recent years, however. Most of Latah County is served by Avista Corp., a large public utility. A portion of southern Latah County is serviced by Clearwater Power, a rural electrical coop. Clearwater Power reported that over the last several years, the average number of outage hours per year for their Latah County accounts was 11.2 hrs.

4.6.3 Hazard Extent & Magnitude

Power outages can be a serious and costly occurrence. Extended power outages can result in a collapse of community infrastructure and services. Traffic lights go off, telephone landlines lose service, gas pumps stop operating, and businesses and schools close. Essential community functions such as hospitals, police and fire departments, airports, and critical care facilities should all be equipped with backup power generators to maintain their necessary functions. The length of time these essential services can stay operational is dependent upon how extensively they prepared for a disaster such as a power outage.

4.6.4 Hazard Exposure

The power infrastructure of Latah County will always be prone to some level of power outages brought on by unforeseeable events. Strong winds, freezing rain, and heavy snow are typical of significant weather events that commonly result in a loss of power and affect Latah County. Strong winds can topple power lines and poles and blow limbs off of trees onto power lines. Freezing rain and heavy snow can accumulate on power lines and overwhelm the tension strength that line is capable of supporting. When this occurs, power lines collapse and fall to the ground creating power outages and a potential electrical hazard on the ground.

4.6.5 Vulnerability

While there is no reliable estimate on the exact cost of loss of electricity, it can be estimated that sections of power lines lost in a wildland fire alone could cost power companies millions in addition to taking up to several weeks for repairs. Most of the losses can be contributed to electronic records being damaged/lost, disruption of essential services and commerce, as well as losses in individual homes as far as lost goods and utilities.

4.6.1.5 Socioeconomic Vulnerability

Power outages can increase the vulnerability of the general population, particularly in the winter months where outages may affect heating in homes and public facilities. Those community members below the poverty line might struggle even more so if they do not have the financial means to purchase a generator or alternate fuel. Similarly, for those that have medical conditions that require specific temperatures or machinery that runs on power will be highly vulnerable.

4.6.1.6 Land Use & Future Development Impacts

Although there is no way to prevent or predict future power outages, mitigation measures exist. Routine inspection of power lines by the power supply companies and any and all potential hazards (trees, debris, etc.) need to be reported and resolved in a timely manner. A recommendation from 2011 Latah County Hazard Mitigation Plan is to put public education about power outages as a priority. This recommendation comes because both responders and citizens forget to review plan and take the needed precautions. One of the best ways to avoid damage to the electrical infrastructure is to require strict building permits and force compliance with county building codes.

4.6.1.7 Climate Change Impacts

If severe weather events continue to rise in frequency with future climate change, there will be expected power outages. This is because many weather-related impacts can cause power outages. Storms that produce strong winds, freezing rain, and heavy snow commonly cause power outages for the county. Freezing rain/snow can overwhelm the power lines and cause failure. Other factors associated with weather related events are from strong winds compromising power lines with falling object or such as trees or street lights.

4.7 Earthquake

4.7.1 Hazard Description

An earthquake is the trembling of the ground resulting from the sudden shifting of rock beneath the earth's crust. Earthquakes are caused by a sudden slip on a fault, or the breaks and fractures where the earth's crust on either side has moved relative to the other. Such events cause waves of energy to radiate from the point of release, and cause the movement, shaking, and rolling felt during an earthquake event. The durations of earthquakes are normally limited to a few seconds but can last for minutes in length. The resultant waves can travel hundreds to thousands of miles, causing damage to locations far from the epicenter.

Movements associated with earthquakes are classified as a foreshock, main shock, or aftershock. Foreshocks occur before the main shock, which is defined as the actual onset of the earthquake, while aftershocks occur after the onset of the main shock. Main shocks can occur immediately following foreshocks or can occur days to months after. Likewise, aftershocks can occur immediately following the main shock or much later. Aftershocks can be large, damaging events that further impact an area.

Earthquakes can be particularly damaging in Idaho. Geological and seismological studies show that earthquakes are likely in several active zones in Idaho and adjacent states. The state itself is ranked fifth in the nation for earthquake hazard, with only California, Nevada, Utah, and Alaska ranked higher. Idaho has experienced several damaging earthquakes over the past 100 years, with two notable events occurring in 1959 (Hebgen Lake earthquake) and 1983 (Borah Peak earthquake). Both caused fatalities and millions of dollars in damage across the state.

Earthquakes can cause significant damage to structures, and can cause injury, loss of life, and impact the socioeconomic functioning of affected communities. The following influence damages associated with earthquakes:

- **Seismic Activity** – Varying between earthquake events, seismic activity ranges from localized, small points of energy release to widespread, large, and destructive releases. The length of earthquakes ranges from brief (a few seconds) to more than a minute. Earthquake epicenters can be shallow or deep, with depth influencing the type of seismic waves felt and their destructive potential.
- **Geology & Soil Types** – The underlying geology and soil type of an area influences the propagation of seismic waves and their impact. Stable geologic types (such as solid bedrock) are less prone to destructive shaking than geologic types that are more unstable, such as fill soils. The siting of structures and communities as a whole strongly influences the nature and extent of earthquake damages.
- **Development & Development Quality** – The type and quality of development is vital in considering earthquake damages to a county or community. Isolated, small earthquakes in densely populated areas or areas with unreinforced masonry can be more devastating than a high-magnitude earthquake in a remote location or in an area with earthquake-appropriate building codes.
- **Time of Day** – Time of day determines the distribution of the population, and therefore the distribution of injuries and fatalities. Residences house more people in the evening and night, whereas business centers, schools, and other day-use locations house more people in the morning and afternoon. Day of the week is also important to consider, as people's work, travel, and activities vary between weekdays and weekends.

Secondary impacts, such as landslides, can also result from shaking. The following describes some of the types of damage stemming from an earthquake:

- **Shaking** – Ranging from minor to severe, minor shaking can cause objects to fall and other minimal damage, while severe shaking causing large structures to collapse and extensive damages. Unreinforced masonry and wood frame structures are most prone to earthquake damage. Non-structural falling hazards include loose or poorly secured objects, and include objects such as bookcases, wall hangings, and building facades. These objects can cause additional structural damage, and injury or fatality. Shaking can also rupture dams, destroy power and telephone lines, gas, sewer, or water mains, and can cause fires or other hazards that impair response and recovery efforts.
- **Ground Displacement** – The most dramatic visual evidence of an earthquake, ground displacement often occurs along a fault line. Ground can be thrust upward, subside, or move laterally given a severe enough earthquake. Damages from ground displacement is normally

limited to utility lines and transportation infrastructure, though structures situated on fault lines can also be impacted.

- Landslides & Avalanches – Earthquakes often cause cascading hazards. Given conducive meteorological conditions (such as in-place snowpack or recent rain events), earthquakes can cause rock falls, landslides, or debris flows. According to the 2018 Idaho State HMP, there were no recorded avalanches in Latah County between 1999 and 2017.
- Liquefaction & Subsidence – Liquefaction occurs when the energy released from an earthquake weakens the strength and stiffness of a soil, while subsidence is caving in or sinking of an area. Fill and saturated soils are notably at risk of liquefaction, which can result in widespread structural damage. Liquefaction and subsidence can also impact surface and subsurface water flow, which can impair individual or community wells as well as cause flash flood-like water flow. These impacts can likewise impact septic systems, which create additional health risks.
- Seiches – Oscillating waves in an enclosed body of water caused by an earthquake are termed seiches. Although not commonly damaging given their rarity, seiches can resemble tsunami characteristics and destructive potential. Shoreline development along a lake in earthquake-prone areas are at risk of damage, as well as dams or flood mitigation structures such as levees. Seiches can also cause hydrothermal explosions.

Earthquakes are measured in both magnitude and intensity, where magnitude refers to the energy released at the source of the earthquake, and intensity refers to the strength of shaking produced by the earthquake at a discrete location. Where magnitude is derived from seismograph measurements, the effects on people, structure, and the environment determine intensity.

The most common measure of magnitude is the Richter scale. The Richter scale measures magnitude as a function of the amplitude of waves recorded by seismographs, with adjustments to account for variations in distances between recording stations and the epicenter. Magnitude is expressed in whole numbers and decimals, and is measured logarithmically; that is, each whole number step corresponds to the release of about 31 times more energy than the preceding whole number.

The most common measure of intensity is the Modified Mercalli Intensity (MMI) Scale. The scale, composed of increasing levels of intensity that range from imperceptible shaking to catastrophic destruction, is designated by Roman numerals. The scale does not have a mathematical basis; instead, it is an arbitrary ranking based on observed effects.

4.7.2 Past Occurrence, Location and Extent

The severity or magnitude of an earthquake is measured on the Richter Scale (generally ranging from 2 to 10) with significant damage expected from seismic activity registering a 5.0 or higher. The 2018 Idaho State HMP, in which all earthquakes recorded for Idaho between 1872-2017 that were above 4 on the Richter scale were identified, indicates that there were no events centered in or near Latah County. The only events of that magnitude felt in Latah County were regional events at considerable distance from Latah County that impacted the entire state, or in one case, the neighboring county to the south.

Table 14 Notable Earthquakes since 1872 that were felt in Latah County (per the 2018 Idaho State HMP)

Date	Magnitude	Epicenter	Description	Idaho Counties Affected
1872	7.4	Lake Chelan, WA	Largest quake in Washington State; felt strongly in North Idaho	All
1926	6.6	Southwest Montana	Felt throughout Idaho	All
1935	6.25	Helena, MT	Extensive damage; multiple large events felt throughout Idaho; 4 fatalities	All
1936	6.4	Walla Walla, WA	Damaging earthquake; widely felt in Idaho	All
1944	4.0	Lewiston, ID	Widely felt I northern Idaho	Nez Perce (county just to the south of Latah)

A search of the USGS data base on earthquakes of magnitude greater than 3.5 since 2010 indicates that there were no such events in Latah County in the last decade.

4.7.3. Future Probability and Vulnerability Assessment

Vulnerability to earthquakes across the planning area can be highly variable given the range of possible event characteristics and the range of socioeconomic and structural characteristics found across the jurisdictions. Those factors that increase structural vulnerability include unreinforced masonry; cornices, friezes, and other heavy decorative parts; chimneys; and structures sited on liquefaction-prone soils. Earthquakes often cause cracking or settling that then undermines the stability of the structure, which can entail costly repairs. Infrastructure such as roads, bridges, and water lines are also vulnerable to earthquake events. Additionally, changes to the water table or even the topography can impact local municipal and private wells which could result in the loss of land use.

Across all jurisdictions, there are publicly accessible unreinforced masonry structures in addition to numerous homes and other buildings with unreinforced chimneys. Damaged or collapsed chimneys could result in the secondary hazard of fire. Nonstructural damage caused by falling and swinging objects may be considerable after any magnitude earthquake. Damage to some older bridges in addition to land failure causing minor slides along roadways may isolate some residents.

The information provided in Tables F.4 and F.5 in Appendix F indicates that all portions of Latah County and each of its participating jurisdictions to be in the category of medium risk for earthquake-related hazards. However, owing to the lack of prior occurrences of anything other than very mild earthquake event throughout the county, no previous reports of significant damage due to earthquakes in the county or surrounding counties, few buildings over 2-3 stories in height, and generally low population density throughout the county, it was not a high priority for the county or any of the jurisdiction to identify mitigation strategies specific to earthquake hazards. However, many of the mitigation strategies described under the categories of “general” for the county and each jurisdiction will definitely help mitigate potential safety issues and emergency response for county residents should significant damage due to earthquakes occur.

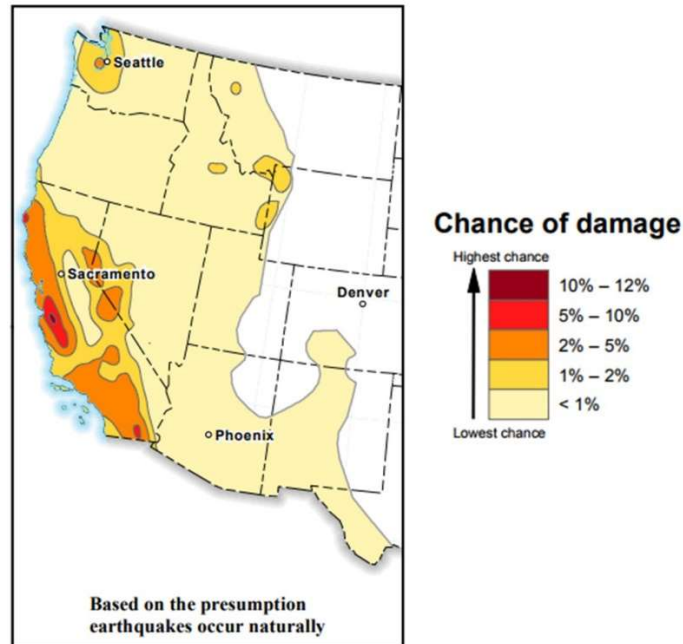


Figure 13 Idaho in context of USGS seismic forecast for western states

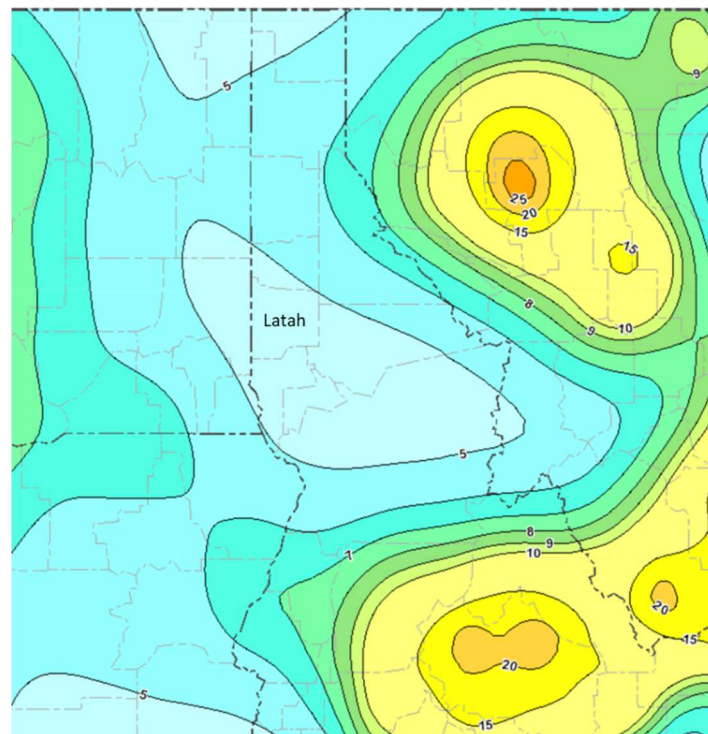


Figure 14 PGA, 10% probability of occurrence in 50 yrs, 760 m/s

Figure 15, from the USGS National Seismic Mapping Tool, shows that the peak accelerations with a 10% probability of occurrence in 50 yrs in Latah County to be 5 or less, relatively low compared with other

counties in the region. Because the risk from earthquakes in Latah County arises mainly from areas of seismic activity some distance away, the vulnerability to significant damage is not high.

4.7.3.1 City of Deary

City of Deary is exposed to similar earthquake threat as the greater planning area.

4.7.3.2 City of Genesee

City of Genesee is exposed to similar earthquake threat as the greater planning area.

4.7.3.3 City of Moscow

City of Moscow is exposed to similar earthquake threat as the greater planning area.

4.7.3.4 City of Potlatch

City of Potlatch is exposed to similar earthquake threat as the greater planning area.

4.8 Volcano

4.8.1 Hazard Description

Volcanoes are openings or vents on the Earth's surface where lava, small rocks, and steam erupt. There are multiple types of volcanoes and can appear to be either a circular depression or a protruding cone at the main vent. In addition to the main vent, there can be a series of other vents and cracks in the volcano that serve as storage areas for magma. When the magma rises to the vents and erupts from the vents, it is then called lava. Eruptions can be simple flows or they can be more violent in nature.

The information provided in Tables F.6 and F.7 in Appendix F indicates that all portions of Latah County and each of its participating jurisdictions to be in the category of low risk for volcano-related hazards.

Volcano Hazard

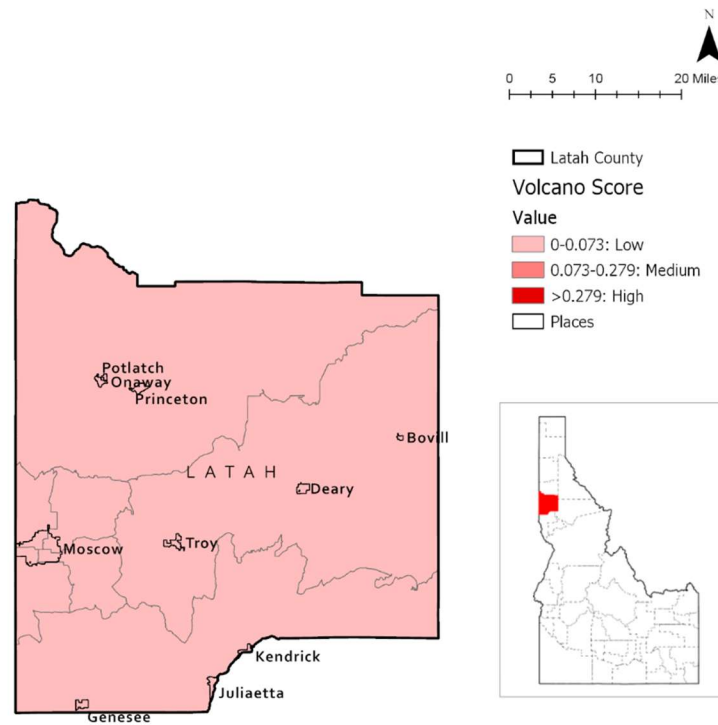


Figure 15 Latah County Volcano Hazard Map

4.9 Communicable Disease Outbreak

4.9.1 Hazard Vulnerability & Risk Summary

Latah County and its jurisdictions are vulnerable to communicable disease outbreaks; both annual outbreaks and epidemics. These outbreaks have the potential to cause a range of devastating impacts to the Latah County community and its economy.

4.9.1.2 Hazard Description

Bacteria, viruses, fungi and parasites are a few of the organisms that cause communicable diseases, sometimes referred to as infectious diseases.

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. Overall, transition can occur

between people, animal to human, animal to animal or from an object to a human. The following is a list and brief description of communicable diseases that threaten Latah County:

- Influenza – A serious disease caused by viruses that infect the respiratory tract. Pandemic flu is a virulent human flu that causes a global outbreak, or pandemic, of serious illness. Because there is little natural immunity, the disease can spread easily from person to person. AI (Avian flu) viruses occur naturally among wild birds. Low pathogenic AI is common in birds and causes few problems. Highly pathogenic AI (HPAI) is extremely infectious among humans. The rapid spread of HPAI, with outbreaks occurring at the same time, is of growing concern for human health as well as for animal health. Spanish influenza caused several waves of pandemic in 1918 through 1919, resulting in 20 to 50 million deaths worldwide. A pandemic of Asian flu (Influenza A [H2N2]) occurred in 1957-58 where it caused about 70,000 deaths.
- Lyme disease --Caused by the bacterium *borrelia burgdorferi* and is transmitted to humans by the bite of infected blacklegged ticks. Typical symptoms include fever, headache, fatigue, and a characteristic skin rash. If left untreated, infection can spread to joints, the heart, and the nervous system. Lyme disease is diagnosed based on symptoms, physical findings, and the possibility of exposure to infected ticks; laboratory testing is helpful in the later stages of disease. Most cases of Lyme disease can be treated successfully with a few weeks of antibiotics.
- West Nile Virus--Often mosquito-transmitted, West Nile virus can result in minor symptoms to death. 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 5 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.

4.10 Technological Hazards/Cyber Security

4.10.1 Hazard Description

According to FEMA, “Cyber security involves preventing, detecting, and responding to cyberattacks that can have a wide-ranging effect on the individual, organization, the community, and at the national level. Cyber-attacks are malicious attempts to access or damage a computer system.” For example, an incident involving ransomware can cause detrimental effects to government agencies because it will deny access to a system and encrypt all files.

4.10.1.1 Past Occurrences: N/A

Loss of access to all files for systems used by emergency management agencies (i.e., 9-1-1 system, County computer systems, etc.,) has not occurred in Latah County.

4.10.1.2 Socioeconomic Vulnerability:

Residents may not have access to bank information or important computer files. Additionally, if this occurred during an emergency the level of response to the event will be delayed which can have serious impact on life safety.

4.11 Land Use, Future Development and Climate Change

See Section 2.11 for detailed information on land use and future development impacts to individual hazards.

It was beyond the scope of this plan update to forecast impacts of climate change on hazards for Latah County, however, the most significant physical hazard faced by Latah County tends to be associated with intense and/or prolonged extreme precipitation events (both rainfall and snowfall). To the extent that these extreme precipitation events may become more frequent under a changing climate, the more vulnerable Latah County will be to the impacts of these events.

V. Mitigation Capabilities

5.1 Overview

Each community has a unique set of capabilities, including authorities, policies, programs, staff, funding, and other resources available to accomplish mitigation and reduce long-term vulnerability. This section provides an overview of these capabilities, including state and federal capabilities that local officials can utilize in hazard mitigation, the National Flood Insurance Program (NFIP), and an assessment of the capability types completed by adopting jurisdictions.

5.1.1 Summary of Revisions

The 2020 update incorporated this section into the plan. Points to note:

- Incorporated the former plan's Floodplain Management section
- Reviewed and summarized relevant Federal and State planning and regulatory capabilities related to hazard mitigation
- Reviewed and summarized county and community planning and regulatory capabilities related to hazard mitigation
- Incorporated National Flood Insurance Program (NFIP) statistics and discussion on jurisdictional participation and future compliance

5.1.2 FEMA Requirements

This section adheres to and fulfills the following regulations:

- 44 CFR §201.6(c)(3) – A mitigation strategy that provides the jurisdiction's blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs, and resources, and its ability to expand on and improve these existing tools.
 - (ii) – A section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure. All plans approved by FEMA after October 1, 2008, must also address the jurisdiction's participation in the NFIP, and continued compliance with NFIP requirements, as appropriate.
- 44 CFR §201.6(c)(4) – The plan shall include the following:
 - (ii) – A process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, where appropriate.

5.2 Federal & State Planning & Regulatory Capabilities

A number of federal and state regulations and policies form the legal framework in which to implement Latah County's hazard mitigation goals and projects. A list of these regulations and plans is presented below:

- Federal
 - The Federal Civil Defense Act of 1950
 - Public Law 96-342, The Improved Civil Defense Act of 1980
 - Public Law 91-606, Disaster Relief Act
 - Public Law 93-288, The Robert T. Stafford Disaster Relief Act of 1974.
 - Presidential Executive Order 11988, Floodplain Management
 - Presidential Executive Order 11990, Protection of Wetlands
- State of Idaho
 - Idaho State Code Title 46, Chapter 10, State Disaster Preparedness Act
 - Idaho State Code Title 39, Chapter 71, Hazardous Material Act
 - Idaho State Title 67, Chapter 65, Local Land Use Planning Act
 - Governor's Executive Order 2000-04, April 20, 2000

5.3 National Flood Insurance Program Compliance

In response to the mounting flood-related losses over the 20th century, Congress passed the National Flood Insurance Act (NFIA) of 1968, which instituted the National Flood Insurance Program (NFIP). The NFIP made flood insurance available to communities that agreed to adopt and enforce floodplain management ordinances, through hazard mitigation planning, site design and construction standards, and land use regulations. The NFIP was based on the premise that populations located in flood-prone areas should bear a substantial portion of the cost to reduce community vulnerability and bear responsibility for a majority of losses should the community experience a flood disaster. The table below details the county's and cities' participation and policies in the NFIP.

Table 15 NFIP statistics¹

Community Name	NFIP Status	CRS Status	Flood Claims	Claims Paid	Repetitive Loss Properties	Policies In-force	Insurance In-force Whole	Written Premium In-force
Latah County	Yes	-	-	-	No	25	\$4,846,900	\$22,502
Deary	Yes	-	-	-	No	1	\$175,000	\$1,428
Genesee	Yes	-	-	-	No	14	\$2,990,000	\$6,777
Moscow	Yes	-	-	-	No	97	\$21,713,100	\$85,748
Potlatch	No, no FIRMS							

Latah County and three out of the four participating jurisdictions do participate in the NFIP. The City of Potlatch does not, but coordinates with that Latah County Floodplain Manager on floodplain issues in their jurisdiction.

¹ Policy & Claim Statistics for Flood Insurance, Policy Statistics retrieved 02/01/2020 from <https://www.fema.gov/policy-claim-statistics-flood-insurance>

The population base for Latah County is fairly small; just a little over 36,000 people. There are 58 FIRMs in Latah County and 11 floodway panels. There are also FIRMs for all the cities in the County except Potlatch and Onaway. All of the FIRMs have been digitized and are available on the County's mapping system. Latah County recently had a Community Assessment Visit from FEMA and their flood hazard program was found to be very good. Latah County has a very thorough flood hazard ordinance in place. No new homes are allowed to be built in flood hazard areas, unless there is no area outside the flood hazard area to build. All new parcels created are required to have areas outside of the flood hazard areas in which to build all structures.

5.4 Latah County Mitigation Capabilities Assessment

The tables below were compiled from a questionnaire completed by county representatives. The tables detail the county's mitigation-related capabilities that reduce hazard impacts or that can be used to implement hazard mitigation activities.

Table 16 Latah County mitigation-related capabilities

Capability/Resource		Synopsis
Administrative & Technical		
Administration	Dedicated planning commission	Latah County has a dedicated planning commission. They implement the standards set forth in the building code ordinance and the land use ordinance. They also advise people on proper development methods in the flood hazard areas, and consider the adopted codes to ensure that the policies set forth ensure compliance with federal flood hazard area standards and to try to find ways in the code to implement mitigation through policy.
	Local Emergency Planning Committee	Latah County maintains an active LEPC. The LEPC meets six times a year to discuss events, policies, and other related material to disasters, special needs, and other community issues. The LEPC is made up of community members to include the general public, volunteer organizations, NGOs, and governmental agencies. Issues discussed during LEPC meetings are public per Idaho Open Meeting Laws. The hopes of the LEPC is that members will relayed information to the community for future education and to gather input from those unable to attend meetings.
	Mutual aid agreements (MAAs) and/or memorandums of understanding (MOUs)	Latah County has various mutual aid agreements in place. The Emergency Manager is part of an Idaho 10 northern county MOU, which allows the emergency manager to respond to and aid another county during a disaster. Latah County also support and provided personnel to the Idaho Incident Management and Support Team (IIMAST). IIMAST volunteers are able to respond when activated to incidents within the State of Idaho, as well as other counties needing assistance. Local law enforcement and fire agencies maintain various MOUS between cities and state services.
		These MOU and groups will address topics or projects need to be compatible with other local, state, neighboring states, or federal agencies.
Staff	Chief Building Official	Latah County has a full time Chief Building Official. They follow the standards set forth in the Building Code Ordinance and the Land Use Ordinance. They also consider the adopted codes to ensure that the policies set forth ensure compliance with federal flood hazard area standards and to try to find ways in the code to implement mitigation through policy.

Capability/Resource		Synopsis
	Floodplain Administrator	Latah County has a Floodplain administrator. They implement the standards set forth in the building code ordinance and the land use ordinance. They also advise people on proper development methods in the flood hazard areas. They review engineering submittals for development in flood hazard areas and ensure proper implementation of development permits.
	Emergency Manager	Latah County has a full time Emergency Manager (AKA: Disaster Service Coordinator). The Emergency Manager (EM) continues to develop disaster plans, and operation guideline for the county. Part of the EMs job is to network with local, state, and federal agencies to help support the National Incident Management System and the National Response Framework. The EM also supervises the LEPC meeting, and work to review and develop the HMP in all its stages.
	Community Planner	Latah County has a Community Planner. They are partially knowledgeable in hazard mitigation. They have experience and training in flood hazard areas, residential fire planning and mitigation, epidemiology/environmental health, and various computer programs that are used to assess hazards and plan for hazard mitigation.
	GIS Coordinator	Latah County has a GIS coordinator. The County GIS Department is able to provide graphs, maps, and data for floodplains, landslide, and other disaster related files or data. GIS is involved with addressing and Geo-locating residences, infrastructures, water and waste line, power grids, and other data that can be used to locate real property in relation to real or established hazards. They can create maps, link databases and create databases to assist emergency personnel on-line or on paper.
		The GIS person also has some Hazus understanding, and works with the GIS program to create hazard layers that can be used in mitigation.
Technical	Hazard data & information	The Emergency Manager for Latah County holds Type II chemical hazard information. The Emergency Manager also collect historic data such as events that become local, state, or federally disasters. Latah County's Planning & Building Department maintains information for hazardous material, construction issues, and other possible areas that could cause an event or have mitigations issues. They also maintain flood data and information, special areas data and information, steep slopes data and information, and snow load data and information.
Education & Outreach		
Education	Active local citizen groups or non-profit organizations	Currently we have CERT, Search and Rescue, Vehicle Posse, Horse Posses, VOAD, Amateur Radio Emergency Services, and Auxiliary Communications in Latah County. While these are mainly responders during a disaster or event, they are groups that can participate in training and preparing the community. We also have a "Function Needs" committee that meets with county emergency managers, responding organizations, and special needs organizations to discuss disaster preparedness and how it will integrate with the special/functional community. We are currently looking at how these individuals can be notified during an event or what types of assistance they will need.
	Ongoing public education or information programs	Latah County also has a LEPC group that meets several times a year to look over county issues and discuss training or preparedness for the communities within the county. One of the programs within Latah County is FireWise, to educate homeowners how to reduce fuels on their property. The EM also presents preparedness information during community events. Every other year the county hosts a preparedness fair for the community to

	Capability/Resource	Synopsis
Outreach		talk with vendors and groups. The EM speaks at organizations on preparedness and current events related to disasters upon request.
	Natural disaster or safety related school programs	Latah County participated in an active school shooter exercise in 2017. This was to enforce our mutual aid agreements between counties and neighboring state response groups. Because of this exercise, local school came together to discuss safety in the school systems as well as lock -down drills. Training programs have been brought into Latah County and surrounding communities to discuss and support school safety programs. Nez Perce County and Latah County Emergency Managers have achieved “train the trainer” status for FEMA 364 course: Multihazard Emergency Planning for Schools. Private organizations within the county have looked at the Pillowcase Project and school lockdown kits for classrooms.
	Public-private partnership initiatives addressing disaster-related issues	Latah County is very active with Public Health, and Red Cross. Latah County also has an active Local Emergency Preparedness Committee (LEPC), which is made up of local government agencies, the public, and NGOs that is active in reviewing plans and other disaster related subjects for the county. Red Cross help address sheltering needs in the county.
	Primary education & outreach to implement hazard mitigation	Latah County maintains its own website. The Mitigation Plans (as well as other plans) will be posted for the public to review. A printed copy is available for review at the office of the Latah County Disaster Services during normal working hours. The public is welcome to attend LEPC meeting, or any other meeting discussing disasters, events, or projects within Latah County. Notification of mitigation project can be addressed via local new release formats.
Financial		
Funding Resources	Funding for capital improvement projects	Latah County has funding for capital improvement projects that are related to the courthouse – but none for mitigation projects.
	Authority to levy taxes for specific purposes	Latah County does maintain authority to levy taxes for specific purposes – but does not do so for mitigation.
	Ability to incur debt through general obligation bonds and/or special tax bonds	Latah County currently does not have any bonds or special taxes. If the county were to invoke a special tax, it would have to go through an election process.
	Funding through other federal funding programs	Latah County does have other types of federal funding, but none that apply towards mitigation or disaster related issues.
	Funding through any state funding programs	Latah County does have other types of state funding, but none that apply towards mitigation or disaster relate issues.
	Other funding programs	Latah County does have other types of funding programs, but none that apply towards mitigation or disaster relate issues.
Planning & Regulatory		
Planning & Plans	Comprehensive Plan (2016)	Latah County Comprehensive Plan and Land Use Map Resolution #2010-32 December 2010; Revised as amended by Resolution #2012-02, #2015-14 & #2016-07. The Planning Department was responsible for its development and update. The plan incorporates a Hazardous Areas Element to protect life and property from natural hazards – including appropriate regulation of development in hazardous areas, such as floodplains, wildland urban interface and on unstable slopes, and that appropriate measures are used to minimize loss of property due to wildfire in rural developments – on Page 7. The Comprehensive Plan does not address hazard mitigation.
	Local Emergency Operations Plan (2008)	Latah County Emergency Operation Plan, April 2008. A new EOP is being developed that will combine EOP’s from the City of Moscow, University of Idaho, and Latah County. The Plan was originally developed by the Latah County All Hazards Mitigation Plan Committee in cooperation with Northwest Management and Latah County Disaster Services. Plan management and maintenance is still under Latah County Disaster

Capability/Resource		Synopsis
		Services and any subgroup that is developed to work on this project. Hazards are listed under Support Annexes: Flood; Evacuation; Volunteer Donation & Management; and Mass Fatality. The Plan will incorporated hazard mitigations through yearly review of the HMP by the Latah County LEPC group.
	Transportation Plans (2006 / 2004)	Latah County participates in North Latah County Highway District Transportation System Plan 2006, and South Latah Highway District Transportation System Plan January 2004 – which are developed and maintained by those special purpose districts. These plans only address hazards as a part of general road conditions/maintenance.
	Community Wildfire Protection Plan (2010)	Latah County Community Wildfire Protection Plan and Appendices (part of the All Hazard Mitigation Plan as Volume II), 2007 with a revision adopted in 2010. Originally developed and updated by the Latah County Community Wildfire Protection Plan Committee and the Latah County Disaster Services. Plan management and maintenance is still under Latah County Disaster Services and any subgroup that is developed to work on this project. The Plan strictly addresses fire-related hazards. Latah County is part of a newly developed subgroup, the Latah County Fuels Group, that was created to look to reduce fire fuel within Latah County and to educate Latah residents of fire danger. This plan is currently undergoing an update with planned completion later this year.
Building Codes, Permitting, & Inspections	Building codes	Latah County has adopted, with amendment, the version of the International Codes that have been adopted by the State of Idaho as prescribed by Idaho Code. The codes adopted are adopted by ordinance and include the International Building, Residential, Mechanical, Fuel Gas, Energy Conservation, Existing Building, and Property Maintenance Codes, including various appendices and the ANSAUBF, ICC/ANSI A117.1, IDAPA 07.03.01 and 07.07.01 Building Code Effectiveness Grading Schedule (BCEGS): 2 commercial, 4 personal/residential. Snow load, wind speed, flood hazard and seismic activities are accounted for in the code. The code is leveraged by requiring permits, conducting plan reviews, conducting inspections, requiring certificates of occupancy/completion, and conducting enforcement of violations.
		Latah County Land Use Ordinance #269, adopted August 2006, and as frequently amended (last amendment in effect on May 6, 2020).
		Ordinances address flood plain, steep slopes, wet areas, and fire wildlands. We have a floodplain overlay with rules laid out for such, provisions that discourage building permits in areas that are hazards or special places, and also provide some limited opportunity to transfer building permits from a place with hazards to a place that doesn't have them. We also have construction standards that in part address hazard mitigation tied to our Comprehensive Plan, and found primarily in Sections 4.01, 5, 8.01, 8.02, 8.03, and 9 of the Land Use Ordinance.
Land Use Planning & Ordinances	Zoning ordinance	There are no current plans to incorporate more hazard mitigation. The ordinance is leveraged by requiring permits and by staff ensuring that the ordinance is enforced.
	Subdivision ordinance	Latah County Land Use Ordinance #269, adopted August 2006, and as frequently amended (last amendment in effect on May 6, 2020).
		Section 8 specifically addresses division of property/ subdivisions. Ordinances address floodplain, steep slopes, wet areas, and wildland

Capability/Resource		Synopsis
Floodplain ordinance		fire wildlands. We have a floodplain overlay with rules laid out for such, provisions that discourage building permits in areas that are hazards or special places, and also provide some limited opportunity to transfer building permits from a place with hazards to a place that doesn't have them. We don't allow high density divisions of property/formal subdivisions in areas outside a fire district. We also have construction standards that in part address hazards such as fire, streams, and others. We are currently reviewing the ordinances to see if there are additional hazard mitigation strategies we can reasonably incorporate. If so and given public input, they will be adopted as part of the next code cycle (currently occurring) which will likely be adopted sometime next year. The ordinance is currently leveraged by requiring permits and by staff ensuring that the ordinance is enforced.
		Latah County Land Use Ordinance #269, adopted August 2006, and as frequently amended (last amendment in effect on May 6, 2020).
		Section 5 of the Latah County Land Use Ordinance specifically addresses flood hazard areas. Flood hazard areas are also in the definitions, Section 3 and Section 8.
		We recently went through a community assessment visit (CAV) with FEMA and have a few pending issues to resolve. The issues should be resolved sometime in the next 6 months. Currently, the ordinance is leveraged by requiring permits and by staff ensuring that the ordinance is enforced.

Table 17 Latah County mitigation-related capability gaps

Capability/Resource		Synopsis
Administrative & Technical		
Administrative	Dedicated maintenance programs to reduce risk	Latah County does not have a dedicated maintenance program to reduce risk. Special purpose highway districts in Latah County are tasked with culvert clearing/cleaning as well as minor spraying for noxious weeds along the roadside. Avista, a private power utility company, has used contractors to trim trees to reduce harm to the power grid system.
		Latah County does not employ a full time Civil Engineer. The position is contracted out as needed. The local highway districts also contract out. Currently there is no need to fill the Civil Engineer position, and one is not being looked at in the near future.
Staff	Civil Engineer	Engineering requirements set forth in the code are the responsibility of applicants. When engineering is required, the applicant must hire an engineer licensed in the State of Idaho to submit an application/plans for their project.
Technical	Warning systems and/or services	Latah County currently does not have a public warning system (Ex: Code Red). Issues with the

Capability/Resource		Synopsis
		implementation of such a system involve the cost of maintaining the subscription, and availability to all community members. There are some areas within Latah County where such a system is not viable due to the lack of infrastructure – such as poor cell phone coverage or reliance on dial up internet service – and rural classification. Latah County has approached this topic, but members of the community and LEPC members are not able to reach consensus on the type of services the county needs. In part, the community wants advance technology that is yet to be developed in the area or the programs. This type of warning system also needs an operators to input information for warning; currently this would fall upon the Latah County Sheriff's Office Dispatchers or Emergency Manager. The dispatchers have been presented with various commercial alert programs, and have not chosen one that accommodates dispatcher abilities to use during an actual emergency or disaster in relation to normal dispatch duties. The University of Idaho and the Moscow Police Department do have different subscription base alert services. Both organizations are located within a populated and developed part of Latah County that support a robust infrastructure
	Grant-writing expertise	Latah County does not maintain a grant-writing expert. It is unknown if the county will employ one or continue to use a per contract grant writer.
	Education & Outreach	
Education	StormReady certification	Latah County has maintained a Storm Ready certification in the past. One of the main issues currently is the certificate requirement to have multi-message avenues to warn the public. Currently warnings are via radio, television and people signing up for (non-county) alert notification services to receive text or email (Ex: Alert Sense or NOAA weather alerts). There has been talk about purchasing a subscription alert system (Ex: Code Red) to help notify the public. But there are still parts of Latah County that do not receive cell service, which makes this program unviable. This is something that will be readdressed within the next 5 years. Last Certification was over 5 years ago.
	FireWise Communities certification	Currently the county is working with the North Central Fire Cooperative to look at educating homeowners on how to reduce fuel on their property to create defensible space. Currently there is no certification or FIREWISE certificate community in Latah County. But FireWise-based and other fuel reduction/defensible space

Capability/Resource		Synopsis
		practices are common within the county. Education material is available to the public.
Financial		
Funding Resources	Fees for water, sewer, gas, or electric services	No
	Collect impact fees for new development	No
	Storm water utility fee	No
	Ability to incur debt through private activities	No
	Funding through a Community Development Block Grant	Latah County has participated in the past with helping other counties obtain Community Development Block Grants. With a change in legislation, Latah County does not participate now.
Planning & Regulatory		
Planning & Plans	Capital Improvements Plan	The county is unlikely to develop a Capital Improvements Plan within the next 5 years.
Planning & Plans	Economic Development Plan	The county may develop an independent economic development plan in the next 5 years.
Planning & Plans	Stormwater Management Plan	This was not identified as a need. The county is unlikely to development a Stormwater Management Plan in the next 5 years.
Building Codes, Permitting, & Inspections	ISO-rated fire department	The county does not maintain its own fire department.

Overall, Latah County will incorporate hazard mitigation using available planning mechanisms, primarily doing so by ensuring structures are built out of harm's way or in a manner that minimizes effects a hazard would have upon them, i.e. access to the properties. Most technical capabilities for risk management will be guided toward cybersecurity measures in the new future.

While there is discussion about doing a THIRA to match the state THIRA, or a COOP plan over the next 5 years, no additional planning mechanisms were noted for Latah County.

5.5 City of Deary Mitigation Capabilities Assessment

The tables below were compiled from a questionnaire completed by the city personnel. The tables detail the city's mitigation-related capabilities that reduce hazard impacts or that can be used to implement hazard mitigation activities.

Table 18 City of Deary capabilities assessment

Capability/Resource		Synopsis
Administrative & Technical		
Administration	Dedicated planning commission	No, other than the City Planning & Zoning Committee which mainly deals with setbacks and zoning questions as they arise. They recommend action to the City Council.
	Local Emergency Planning Committee	No; we mainly utilize the connections within the City council, fire, EMS, and Latah County Emergency Services
	Dedicated maintenance programs to reduce risk	Yes: we have annual tree trimming or removal, brush clearing around ditches and culverts, and areas are marked as possible

	Capability/Resource	Synopsis
		hazards for future maintenance such as removal of debris and culvert installation.
	Mutual aid agreements (MAAs) and/or memorandums of understanding (MOUs)	Yes: we are currently part of IDWARN. This organization is promoted through Idaho Rural Water Association to help small towns with equipment, personnel, or expertise during disasters.
Staff	Chief Building Official	No; we currently under contract with Latah County. This is not a likely addition in the near future.
	Floodplain Administrator	No; this is not a likely addition in the near future.
	Emergency Manager	No; we currently work in connection with Latah County. This is not a likely addition in the near future.
	Community Planner	No; this is not a likely addition in the near future.
	Civil Engineer	No; we utilize Engineers per each project as needed.
	GIS Coordinator	No; currently we do use GIS mapping for our infrastructure but are limited in budget for a permanent position, and try to train our personnel on our cloud based inexpensive software. This is not a likely addition in the near future.
Technical	Warning systems and/or services	Yes: the Deary Fire Department has a Whelen Multi-hazard warning siren via a communications grant and donations. The siren has some built in hazard announcements as well as a P.A. system for notification. These sirens are easily expandable in that they are wireless and run by battery, but need a 110v source to maintain battery charge.
	Hazard data & information	No; this data is slowly being added as GIS data is updated. It would be ideal if there was a collaboration of local and county governments to update this information.
	Grant-writing expertise	No; a grant administrator that is shared between the County and Cities would be greatly appreciated.
	Hazus expertise	No; currently it appears to be not needed/required.
Education & Outreach		
Education	Active local citizen groups or non-profit organizations	No; there are many community members active in organizations but none within the umbrella off hazard mitigation.
	Ongoing public education or information programs	No
	Natural disaster or safety related school programs	No
	Storm Ready certification	No
	FireWise Community certification	No
	Public-private partnerships	No
Financial		
Funding Resources	Funding for capital improvement projects	Yes: the funding is only used for Capital Improvements of the infrastructure including streets, water, and sewer projects.
	Authority to levy taxes for specific purposes	Yes, but it hasn't been used for hazard mitigation
	Fees for water, sewer, gas, or electric services	Yes, but the fees are used to repay bonds and for replacement and maintenance of infrastructure – not specific hazard mitigation.
	Impacts fees for new development	No
	Storm water utility fee	No
	Incur debt through general obligation bonds and/or special tax bonds	Yes: from Capital Improvement projects for water and sewer system updates.
	Incur debt through private activities	No
	Funding through a Community Development Block Grant	Yes, including a Water Improvement Project that is currently in progress – but not for hazard mitigation.

Capability/Resource		Synopsis
	Other federal funding programs	Yes, including a Water Improvement Project that is currently in progress – but not for hazard mitigation.
	Funding through any state funding programs	No, but we are likely to apply for such funding in the future.
	Other funding programs	No, but we are like to apply for such funding in the future.
Planning & Regulatory		
Planning & Plans	Comprehensive Plan (2016)	Deary updated and adopted its Comprehensive Plan in 2016. Deary Planning and Zoning is responsible for updates. Hazards are listed on pages 26-27. These will likely not be addressed again within the next 5 years.
	Capital Improvements Plan	No; a tentative plan is in development.
	Economic Development Plan	No
	Local Emergency Operations Plan	No; there is a possibility for this to be developed in the next 5 years.
	Transportation Plan	Yes: this is maintained by the City of Deary Streets Department. It does not address hazards, mainly covering improvements, street classifications and quality grading.
	Stormwater Management Plan	No
	Community Wildfire Protection Plan	Refer to County CWPP.
Building Codes, Permitting, & Inspections	Building codes	Yes: adopted in 2018 to the Latah County Building Department request via contract.
	ISO-rated fire dept.	Unknown
Land Use Planning & Ordinances	Zoning ordinance	Yes: updated in 2018. They do not address hazards.
	Subdivision ordinance	Yes: updated in 2018. They do not address hazards.
	Floodplain ordinance	Yes: updated in 2018.

Overall, Deary faces funding limitations from a large Area of City Impact (ACI) but inability to assess fees beyond the formal City boundary. City personnel indicated that staffing and funding shortfalls create a lack of capacity for desired mitigation measures – including community plans for public education and developing a stormwater management plan. They also noted regular updates with City Councilors would aid plan maintenance.

No additional planning mechanisms were noted by Deary.

5.6 City of Genesee Mitigation Capabilities Assessment

The tables below were compiled from a questionnaire completed by the city personnel. The tables detail the city's mitigation-related capabilities that reduce hazard impacts or that can be used to implement hazard mitigation activities.

Table 19 City of Genesee capabilities assessment

Capability/Resource		Synopsis
Administrative & Technical		
Administration	Dedicated planning commission	Yes. Planning and Zoning (P&Z) Commission. We are asking P&Z for review and comments on mitigation actions.
	Local Emergency Planning Committee	No, we do not have one.

	Capability/Resource	Synopsis
	Dedicated maintenance programs to reduce risk	Yes. Regular maintenance schedule. Maintenance Supervisor works around town daily and addresses any issues he sees.
	Mutual aid agreements (MAAs) and/or memorandums of understanding (MOUs)	Yes. MAA directly with our local volunteer fire and EMS departments; and we work with fire department and County on local MOU's and training.
Staff	Chief Building Official	No. We are in the process of creating a position for next year – duties currently contracted to Scott Becker of Hodge & Associates.
	Floodplain Administrator	No - contracted to Scott Becker of Hodge & Associates.
	Emergency Manager	No
	Community Planner	No – contracted to Jim Stravens of JP Stravens & Associates.
	Civil Engineer	No - contracted to Scott Becker of Hodge & Associates.
	GIS Coordinator	No – contracted through third party consultant.
Technical	Warning systems and/or services	Yes. Genesee Volunteer Fire Department multi-toned siren. An in-development emergency services station will likely have more.
	Hazard data & information	Yes. The City maintains data on past occurrences to help with the planning for future projects.
	Grant-writing expertise	No – contracted to Jim Stravens of JP Stravens & Associates.
	Hazus expertise	No
Education & Outreach		
Education	Active local citizen groups or non-profit organizations	Yes. We have CERT, and VOAD County and State programs.
	Ongoing public education or information programs	Yes – though they are provided by County resources (Sheriff's Office and Volunteer Fire Department), not by the City.
	Natural disaster or safety related school programs	No
	Storm Ready certification	No. We are working with the County to receive certification in the next 5 years.
	FireWise Community certification	No
	Public-private partnerships	No
Financial		
Funding Resources	Funding for capital improvement projects	Yes, but only as available from excess funds.
	Authority to levy taxes for specific purposes	No, per State code.
	Fees for water, sewer, gas, or electric services	Yes, but have not been used to implement hazard mitigation; this would need to go through a budget process.
	Impacts fees for new development	No – no need cited at this time.
	Storm water utility fee	No – no need cited at this time.
	Incur debt through general obligation bonds and/or special tax bonds	Yes; bonds financed upgrades to the fire station that will include a training facility – and the station also serves as an evacuation & rescue site.
	Incur debt through private activities	No – no need cited at this time.
	Funding through a Community Development Block Grant	No; there is a possibility for this in the next 5 years.
	Other federal funding programs	No; there is a possibility for this in the next 5 years.
	Funding through any state funding programs	No – but there is a need for this funding for training, and we will likely apply in the next 5 years.
Planning & Regulatory		
Planning & Plans	Comprehensive Plan (2012)	Yes. City of Genesee Comprehensive Plan 2012, developed by Planning and Zoning Commission. It addresses Flood Plain Management – Section VII, pp.27-28 & Section XI, pp.33. We intend

Capability/Resource		Synopsis
		to update the Comprehensive Plan within the next 5 years and further incorporate hazard mitigation.
	Capital Improvements Plan (2009)	Yes. City of Genesee Capital Improvement Plan (October 2009), developed by City administration. Curbed Corners will increase walking safety and improved accessibility; sidewalks and increased lighting (pp.21-22). Our LHTAC Grant will fund widened streets with sidewalks and lighting, for better visibility and accessibility for both vehicles and pedestrian traffic.
	Economic Development Plan	Yes. The City is incorporated into "Pathways to Accelerate North Central Idaho: Clearwater Economic Development District Comprehensive Economic Development Strategy 2020-2025," developed by the Clearwater Economic Development Association (CEDA). We also participate with Partnership for Economic Prosperity.
	Local Emergency Operations Plan	No – we refer to the County's LEOP.
	Transportation Plan	Yes. Genesee Transportation Plan, developed by Planning and Zoning. It does not address hazards.
	Stormwater Management Plan	No – but we plan to have contractor Hodge & Associates study this and report to City Council.
	Community Wildfire Protection Plan	No. City Council will discuss the County's plan (in development) with a County representative.
Building Codes, Permitting, & Inspections	Building codes	Yes. We are utilizing the 2012 International Building Code.
	ISO-rated fire dept.	No – the Genesee Volunteer Fire Department is not ISO-rated.
Land Use Planning & Ordinances	Zoning ordinance	Yes. Ordinance 230, 6/1976. This addresses lessening congestion in streets; to secure safety from fire, panic and other dangers; to provide adequate light and air; to prevent overcrowding of land; to avoid undue concentration of population; to facilitate water, sewerage, schools, parks and other public requirements; to promote the public health and safety.
	Subdivision ordinance	Yes. Ordinance 246, 1/1979. This ordinance is currently being reviewed by committee for a future report to City Council.
	Floodplain ordinance	Yes. Ordinance 292, 3/1987. There is discussions about dredging Cow Creek in late summer or early fall to prepare for projected flood events.

Overall, the city sensed few pressing shortfalls. It acknowledged a need for additional technical resources and capabilities, but noted it would likely be able to fulfill them through contracted services and typically applies for grants as they become available. It did note a lack of coordination with County officials to achieve some technical capacities and facilitate community education.

No additional planning mechanisms were noted by Genesee.

5.7 City of Moscow Mitigation Capabilities Assessment

The tables below were compiled from a questionnaire completed by the city personnel. The tables detail the city's mitigation-related capabilities that reduce hazard impacts or that can be used to implement hazard mitigation activities.

Table 20 City of Moscow capabilities assessment

Capability/Resource		Synopsis
Administrative & Technical		
Administration	Dedicated planning commission	Yes. The City of Moscow has a nine-member Planning and Zoning Commission that is appointed by the Mayor and confirmed by the Council. The Commission is responsible to conduct a comprehensive planning process designed to prepare, implement, review and update a comprehensive plan. The Commission also prepares all land use and development regulations for City Council's consideration and adoption. The Commission further reviews and provides recommendations regarding all zoning changes, subdivisions and planned unit developments.
		The Commission regularly reviews potential natural hazard areas and makes recommendations to the City Council regarding methods to mitigate the risks.
	Local Emergency Planning Committee	Participates in County LEPC.
	Dedicated maintenance programs to reduce risk	Yes. Moscow has a number of programs to reduce risk of flooding and other street maintenance programs to include tree trimming and clearing of drainage systems. These include annual comprehensive creek reviews, monthly crossing and known trouble areas reviews, post storm reviews, debris removal and trimming. We also conduct routine catch basin inspection and cleaning.
		The City of Moscow will be permitted for stormwater starting in October of 2021. The City is currently working on a stormwater utility proposal that will be presented to City Council prior to implementation. The new stormwater process will allow the City the ability to be proactive in all aspects of stormwater management and maintenance.
Staff	Mutual aid agreements (MAAs) and/or memorandums of understanding (MOUs)	Yes. The Moscow Volunteer Fire Department (MVFD) provides mutual aid protection to Latah County (128 square miles and 12,650+ residents). The Volunteers own/operate the fire department and the ambulance company. The City purchased the fire trucks, built the newest facility station, and funds 5.5 positions for management continuity. In conjunction with City support, the volunteers and resident firefighters perform the majority of the work of responding to fire/ambulance calls. The MVFD has mutual aid agreements with 19 fire departments to include the Lewiston, Washington State University, Pullman, Clarkston, Asotin and two Whitman County Fire Districts in Washington.
	Chief Building Official	Yes. The City employs a full-time building official who has been trained in hazard mitigation and who is actively engaged in structure hazard mitigation on a regular basis.
	Floodplain Administrator	The City's Community Development Department serves as the floodplain administrator and implements the City's Flood Hazard Area development standards to assist in hazard mitigation.
	Emergency Manager	No. The City does not employ an Emergency Manager. In the event of an emergency, our department heads from Fire, Police and Streets team to manage the event. There is a need, however, funding is not available to have a position of this type. However, the City employs a Grants Manager who is versed in developing FEMA grant applications to include flooding and other hazard mitigation programs. The Grants Manager currently engages post disaster event to track and information for FEMA assistance post-disaster.
	Community Planner	The City employs two planners who are responsible for all long-term and short-term land use planning and development activities including

	Capability/Resource	Synopsis
Technical		the maintenance and administration of the City's Comprehensive Plan and Flood Hazard Area Ordinances.
	Civil Engineer	The City employs three licensed professional engineers and three additional engineering technicians who are trained in hazard mitigation and who oversee all stormwater facilities and administer the City's stormwater and erosion control standards to help mitigate natural hazards.
	GIS Coordinator	The City employs a half-time GIS Coordinator within the Engineering Department who maintains all of the City's GIS data related to all public utilities and natural hazard information that can be utilized in future mitigation actions. City utilities are mapped and can be used to locate services in the event of a mitigation action.
	Additional Positions Leveraged for Hazards	Yes. The City of Moscow employs an Environmental Services Coordinator.
	Warning systems and/or services	Emergency services is exploring a reverse 911 option that they hope to implement in the next 5 years.
		No. The City does not maintain hazard data and information in a specific manner, however the Community Planning and Design Department does maintain a historical database of flood information, to include measurement data with corresponding photographs.
	Hazard data & information	Documentation is now being managed in a much more detailed manner as we have experienced two large flooding events since 2017, which have been classified as disasters by the Idaho Governor and the President of the United States. This has triggered the availability of assistance from FEMA and the Idaho Office of Emergency Management (IOEM).
	Grant-writing expertise	Yes. The City of Moscow hired a full-time Grants Manager in 2007 who is highly trained in writing and administering local, state and federal grants for multiple programs for all departments of the City. The Grants Manager has become well versed in working with FEMA and IOEM projects under the both the Hazardous Mitigation Grant Program and under Post Disaster Mitigation.
	Resources	No. The City of Moscow and Latah County rarely if ever experience earthquakes as we are not located in a coastal area that experiences Tsunami or hurricanes. The only element of the Hazus model that Moscow could potentially experience is flooding; therefore, the Hazus program and analysis model is beyond the scope of what would be needed for our location.
Education & Outreach		
Education		Yes. The City of Moscow is home to the University of Idaho – a land-grant university which educates and performs research in multiple areas of environmental impact and addresses mitigation efforts in the surrounding region which is mainly comprised of agricultural farmlands.
	Active local citizen groups or non-profit organizations	Palouse Clearwater Environment Institute (PCEI), a local non-profit, contribute to hazard mitigation. PCEI programs encourage sustainable living, provide experiential learning, and offer opportunities for serving in our community, while actively protecting and restoring our natural resources such as Riparian Planting on the South Fork of the Palouse River to stabilize stream banks and reestablish native riparian vegetation.
	Ongoing public education or information programs	Yes. Palouse Roots is a local non-profit partnering with the Palouse-Clearwater Environmental Institute (PCEI) to offer outdoor educational

Capability/Resource		Synopsis
		programs for children living in Moscow and the surrounding area. Their other programs include Science After Hours focusing on conservation efforts. PCEI also offers field trips, classroom lessons and summer expeditions to local schools with some opportunities funded generously by local cities and counties. They engage children during school and summer months in place-based, hands-on learning, encouraging exploration and curiosity to ultimately encourage life-long learning and stewardship of our natural world. Their other programs include the Watershed Festival and the Water Conservation Program. The City of Moscow also has an Environmental Services Department which focuses on water conservation related to groundwater sources, and water conservation efforts by distributing water saving devices and promoting wisescape programs. These educational and prevention programs teach youth at a young age to instill conservation and sustainable concepts which will have a positive impact on future mitigation measures.
	Natural disaster or safety related school programs	Unknown.
	Storm Ready certification	No. At this time the City of Moscow does not have a StormReady Certification but we plan to explore it in the future.
	FireWise Community certification	No. Moscow is a growing small urban area surrounded by farm fields which is at a very low risk of a wildland fire event. However, Moscow residents support fire resistive landscapes through the City sponsored wisescape programs.
	Public-private partnerships	Yes. We work in collaboration with the University of Idaho and Latah County – primarily for Police and Fire services. The City of Moscow, Latah County and the University of Idaho are currently working together on updating an Emergency Operations Plan.
Financial		
Funding Resources	Funding for capital improvement projects	Yes. The City funds water and sewer capital projects from utility service and new connection (general facilities charges) fees to maintain, replace and expand the utility systems. The City has limited other funding to assist with non-utility related capital improvements such as roadway maintenance and improvement projects or facility repair, expansion or replacement. The City has funded limited mitigation actions in the past such as drainage system improvements and similar activities. Due to limited resources, minimal funds will be available for future mitigation actions.
	Authority to levy taxes for specific purposes	No. Under Idaho Law the City can only levy property taxes for general governmental purposes but is limited in the amount of taxes that can be levied, and under such limitations it is unlikely the City could fund a significant hazard mitigation project using those tax resources. It is unlikely the Idaho State Legislature will grant such authority over the next five years.
	Fees for water, sewer, gas, or electric services	Yes. The City does collect fees for water and sewer services and a portion of those fees are utilized for necessary capital system improvements, some of which assist in hazard mitigation directly related to those utility systems such as backup power generation on

Capability/Resource	Synopsis
	the City's water production and distribution systems and wastewater collection and treatment facilities.
Impacts Fees for new development	No. The City collects General Facilities Charges for new water and sewer utility connections which are the equivalent of impact fees for those utilities. A portion of those General Facilities Charges are utilized for necessary capital system improvements, some of which assist in hazard mitigation directly related to those utility systems such as backup power generation on the City's water production and distribution systems and wastewater collection and treatment facilities. Impact fees have previously been presented to the Moscow City Council and the request was not implemented due to a lack of support from the business community.
Storm Water Utility Fee	No. The City is currently in the process of establishing a stormwater utility that is anticipated to be completed by the end of 2021 and will install a stormwater utility service fee. Those fees will be utilized to maintain and operate the City's stormwater utility system which may include system improvements to increase system capacity to mitigate hazards.
Incur debt through general obligation bonds and/or special tax bonds	Yes. On occasion the City may present a bond ballot to the voters for necessary city facilities. Most recently in May of 2019, the City passed a general obligation bond to fund the construction of a new police services facility. Prior general obligation bond elections have been utilized to fund the construction of fire stations and community recreation facilities.
Incur debt through private activities	No. The City does not incur debt through private activities as that is unconstitutional in the State of Idaho.
Funding through a Community Development Block Grant	Yes. Moscow is eligible to apply for Idaho Community Development Block Grant (ICDBG) funding categories to include public facilities, economic development, community and senior centers, post disaster assistance and public park improvement. The City of Moscow Fire Department received \$280,000+ grant dollars from ICDGB Public Facilities Program to purchase a new fire engine in 2018. The public facility funding can be used to upgrade and repair public infrastructure and utilities; however, mitigation measures would need to be included in an existing or upcoming project. Post disaster funds are not available for pre-mitigation actions; they are only available to assist after as disaster event.
Other federal funding programs	Yes. The City of Moscow has received post disaster assistance from FEMA after flood events and has been awarded Advanced Assistance HMP funding for flooding issues throughout Moscow. These funds be used to address flooding and operational facilities for disaster coordination and prevention measures. Other funding is available from various sources for improvement projects that may include pre-disaster mitigation activities to address surface water runoff, erosion control and flooding. The Moscow Fire Department has received numerous awards from FEMA under the Assistance to Firefighter Grants Program for communications and personal protection equipment.
Funding through any state assistance programs	Yes. The City of Moscow has received funding from the Idaho Transportation Department for replacement of non-compliant ADA curb ramps on the State Highway System traveling through Moscow. This funding is very minimal. The City has also received funding from

Capability/Resource		Synopsis
		IOEM as the State's share of federal awards from FEMA for flooding post disaster mitigation for declared disasters in 2017 and 2019.
Planning & Regulatory		
Planning & Plans	Comprehensive Plan (2019)	The City of Moscow's Comprehensive Plan was updated in March of 2019. The Community Development Department is responsible for the management and maintenance of the plan. As required by state law, the plan does address natural hazards which are primarily steeply sloped areas and flooding hazards. The Natural Hazards Section begins on page 1.18 of the document which will be utilized to guide land use and development standards to mitigate these natural hazards.
	Capital Improvements Plan	Currently, the City does not have a formally adopted Capital Improvement Plan. It is anticipated that a new Capital Improvement Plan will be development and presented to the City Council for adoption by February of 2021. The Community Development Department is responsible for the development of this plan.
	Economic Development Plan (2010)	The last Economic Development Plan was completed in 2010 and is now obsolete. The City is currently working through a strategic planning process which is used for future development purposes.
	Local Emergency Operations Plan (1999)	The prior Disaster Management Plan was updated in 1999 and is completely obsolete. A new plan is being drafted in collaboration with Latah County and the University of Idaho. The Fire Department is the lead entity, with input and support from Police and Public Works. The new plan will include: radiological and explosive incidents; petroleum, chemical storage facilities and pipelines; and use of explosive and hazardous materials in disaster operations. The process is still under review.
	Transportation Plan (2014)	Yes. The City adopted the Moscow Multi-Modal Transportation Plan in July of 2014. The Engineering Department is responsible for the maintenance and updating of the plan. The Transportation Plan does not address hazards. Community Planning and Design is responsible for the management and maintenance of the plan.
	Stormwater Management Plan	No. Moscow does not have an adopted Stormwater Management Plan. However, a plan is being drafted and will be adopted in conjunction with the Phase II Storm Water Permit compliance efforts. Hazard identification and mitigation will be a component to the comprehensive stormwater plan that will be developed over the next few years.
	Community Wildfire Protection Plan	No. Moscow, located in Latah County is a small suburban community with a population under 28,000. Latah County does have a plan and this item may be addressed by the City of Moscow in the upcoming Local Emergency Operations Plan.
	Other Special Plans	Yes. The City of Moscow works cooperatively with the Moscow Urban Renewal Agency which is currently developing a district in the downtown core of Moscow called Legacy Crossing. This district encompasses redevelopment of a prior agricultural/railroad system corridor. Many of the properties along the railroad corridor were part of a prior EPA Brownfield's Coalition Assessment Grant. Assessed properties under this award have all been mitigated and redeveloped.
Building Codes, Permitting, & Inspections	Building Codes	The Moscow Urban Renewal Agency redevelopment plan for Legacy Crossing and the Brownfield's Coalition Assessment Grant addressed hazardous mitigation of contaminated soils. There are no new plans currently being drafted in which hazardous mitigation is addressed.
		The City has adopted the following building codes and has a Building Code Effectiveness Rating Schedule (BCEGS) rating of Class 3 in both residential and commercial classes: 2015 International Building Code;

Capability/Resource		Synopsis
Land Use Planning & Ordinances		2015 International Existing Building Code; 2012 International Residential Code; 2015 International Energy Efficiency Code w/ 2009 amendments for Residential; 2015 Uniform Plumbing Code; 2017 National Electrical Code; 2012 International Fuel Gas Code; 2012 International Mechanical Code; 2012 International Property Maintenance Code; 2012 International Fire Code; 2009 ICC/ANSI A117.1; & S+ASCE/SEI 7-05
	ISO-rated Fire Department	Yes. The Moscow Volunteer Fire Department has obtained an ISO Rating of 3 which benefits our residents as it translates into greater safety and lower fire insurance premiums.
	Site Plan Mandates	Yes. Moscow City Code Title 4 – Land Use Regulation (Zoning Code); Title 5 – Public Ways and Property; Title 6 – Mobile Home and Recreational Vehicle Parks; and Title 7 – Construction Regulations.
	Zoning Ordinance	The City's Zoning Ordinances are contained in Title 4 of the Moscow City Code. Chapter 5 of Title 4 addresses flood hazard areas which establishes development standards to reduce the risk of property damage from flooding events.
	Subdivision ordinance	The City's subdivision regulations are contained within Chapter 1, Title 5 of Moscow City Code.
	Floodplain ordinance	Chapter 5 of Title 4 addresses flood hazard areas which establishes development standards to reduce the risk of property damage from flooding events.

Overall, the City is limited in its operational resources, and has identified a need for additional technical resources for hazard mitigation, local emergency management planning, and ensuring regulatory compliance – including staff for risk management and proactive preparation for disaster relief situations. Moscow's fiscal resources are limited by a high concentration of tax-exempt properties within the City limits, namely the University of Idaho and several non-profit organizations. As such, the City is largely dependent on grants and other external funding sources to address hazard mitigation, and has been unable to identify other funding resources than those outlined above.

Shortfalls identified include flood mitigation, currently a high-priority action. The City of Moscow was recently awarded a FEMA Advanced Assistance grant to do a Hydrologic and Hydraulic Study of Paradise Creek on the east side of Moscow. This award will assist Moscow in determining the best mitigation methods to prevent future flooding. The City will be implementing a stormwater utility program in 2021 which will assist in stormwater management, improve water quality, increase ground water recharge, flood control, and a healthier aquatic ecosystem through maintenance of base flow for streams. The City is also currently constructing a new Police Station on Hwy. 95 South which will include an "Emergency Command Center."

5.8 City of Potlatch Mitigation Capabilities Assessment

The tables below were compiled from a questionnaire completed by the city personnel. The tables detail the city's mitigation-related capabilities that reduce hazard impacts or that can be used to implement hazard mitigation activities.

Table 21 City of Potlatch capabilities assessment

Capability/Resource	Synopsis
Administrative & Technical	

	Capability/Resource	Synopsis
Administration	Dedicated planning commission	No
	Local Emergency Planning Committee	No
	Dedicated maintenance programs to reduce risk	No, the City does have an informal program that is used for maintenance programs that is completed on a yearly basis depending on season.
	Mutual aid agreements (MAAs) and/or memorandums of understanding (MOUs)	No
Staff	Chief Building Official	No. We contract with Latah County Planning & Building Department for Building Inspections.
	Floodplain Administrator	No
	Emergency Manager	No
	Community Planner	No
	Civil Engineer	No; we contract with a private engineer for this role.
	GIS Coordinator	No
Technical	Warning systems and/or services	Yes; fire department siren.
	Hazard data & information	No
	Grant-writing expertise	Yes; we apply for grant money for hazard mitigation.
	Hazus expertise	No
Education & Outreach		
Education	Active local citizen groups or non-profit organizations	No
	Ongoing public education or information programs	No
	Natural disaster or safety related school programs	No
	Storm Ready certification	No
	FireWise Community certification	No
	Public-private partnerships	No
Financial		
Funding Resources	Funding for capital improvement projects	No; the City of Potlatch plans to put one together in the near future.
	Authority to levy taxes for specific purposes	Yes, but not related to hazard mitigation
	Fees for water, sewer, gas, or electric services	Yes; we use the budget to control vegetation around wells at water and sewer plants.
	Impacts fees for new development	No
	Storm water utility fee	No
	Incur debt through general obligation bonds and/or special tax bonds	No
	Incur debt through private activities	No
	Funding through a Community Development Block Grant	No
	Other federal funding programs	Yes; we have used these funds for our Sidewalk Program and Lagoon Access project.
	Funding through any state funding programs	Yes; we have used these funds for our Sidewalk Program.

Capability/Resource		Synopsis
Planning & Regulatory		
Planning & Plans	Comprehensive Plan (2018)	City of Potlatch, Comprehensive Plan. It was adopted September 24, 2018. City Administration is responsible for plan management and maintenance. Hazards are addressed on Page 17. We will work will appropriate Latah County personnel to leverage the plan's hazard mitigation implementation.
	Capital Improvements Plan	No; the City plans to develop one in the near future.
	Economic Development Plan	No; the City plans to develop one in the near future.
	Local Emergency Operations Plan	No; we contact area law enforcement and fire services.
	Transportation Plan (2002)	City of Potlatch, Transportation System Plan, adopted July 2002. City Administration is responsible for plan management and maintenance.
	Stormwater Management Plan	No
	Community Wildfire Protection Plan	No; Latah County and area fire services are developing this plan.
Building Codes, Permitting, & Inspections	Building codes	Yes: 2015 International Building Code; 2013 International Residential Code; American National Standard Accessible and Usable Buildings and Facilities; ICC/ANSI A117.1, 2013 Edition; 2012 International Mechanical Code; 2012 International Fuel Gas Code; 2015 International Energy Conservation Code; 2015 International Existing Building Code; 2012 International Property Maintenance Code; & IDAPA 07.03.01 and 07.07.01 (State codes).
	ISO-rated fire dept.	Unsure; Potlatch Fire District operates as a separate entity.
	Site Plan Mandates	Yes; they must meet the City of Potlatch Zoning Ordinance.
Land Use Planning & Ordinances	Zoning ordinance	Unknown
	Subdivision ordinance	Yes, 1981
	Floodplain ordinance	No

Overall, the City identifies limited property tax revenue as a primary hurdle to hazard mitigation projects, as it primarily uses those funds for such projects. They also indicate a difficulty to adequately enforce ordinances related to hazards. The area Potlatch Fire District educates the public and students on certain hazards.

5.9 Other Planning Mechanisms

As noted in the Planning and Regulatory sections of the tables presented in Sections 5.4 - 5.8, various mechanisms exist for Latah County and the adopting jurisdictions to incorporate elements of the mitigation plan and/or mitigation actions items. The following table assesses one of the major planning mechanisms for the county as it relates to hazard mitigation:

Table 22 Latah County Comprehensive Plan Planning Mechanism

Latah County, Idaho Comprehensive Plan	
Date of Last Revision	2016
Author/Owner	Latah County, Idaho
Description	Through the preparation of a Comprehensive Plan, residents can give some direction to the development ("building") of their community.
Relationship to Hazard Mitigation Planning	The plan includes objectives in the Public Works, Housing, Land Use, Transportation, and Community Design sections related to natural hazard mitigation planning. The Hazardous Area section describes an extensive number of hazards that impact the County including flood, severe weather, landslides, and more. Additionally, in the Land Use section the County aims to continue the enforcement of the adopted building codes which are also directly correlated to hazard mitigation. The County lists several ways to implement these objectives including adopting and

	administering zoning and subdivision ordinances, coordinating agency partnerships, requiring reviews of significant development proposals, and coordinating county programs.
Thoughts for Future Hazard Mitigation Incorporation	The County could include tactics in how to accomplish the objectives along with what offices or partnerships are working collaboratively toward the goal or objective.
Incorporation into Hazard Mitigation Plan	Plan content used for the capability assessment, county profile, and risk assessment. 'Thoughts for Future Hazard Mitigation Incorporation' may be used for the creation of new mitigation actions in this HMP update or future updates.

Table 23 Latah County Land Use Ordinances planning mechanism

Latah County, Idaho Land Use Ordinances	
Date of Last Revision	Building Codes 2018, Land Use Ordinance (Zoning and Subdivisions) 2020
Author/Owner	Latah County, Idaho
Description	The Building Code and the Land Use Ordinance implement the County's Comprehensive Plan policy through specific development standards and criteria.
Relationship to Hazard Mitigation Planning	The County has adopted building codes that address fire, snow, flooding and wind; The Land Use Ordinance and Comprehensive plan address mitigation through policies regarding wildlife habitats, floodplains, fire hazards, etc. and these are included as possible conditions of approval for "conditional" use permits; new subdivision development are generally required to locate outside of hazardous areas, but when within any special development area, such as a floodplain they must meet a variety of standards.
Thoughts for Future Hazard Mitigation Incorporation	The County could include a hazard overlay in future ordinance and zoning map updates that put forth specific development standards and criteria for more specific hazardous areas (e.g. landslides, steep slope, wildfire, seismic). Maps could be used from the HMP update for reference.
Incorporation into Hazard Mitigation Plan	Ordinance content used for the capabilities assessment, county profile, and risk assessment. 'Thoughts for Future Hazard Mitigation Incorporation' may be used for the creation of new mitigation actions in this HMP update or future updates.

Table 24 Latah County Flood Damage Prevention Ordinance planning mechanism

Latah County, Flood Damage Prevention Ordinance (Flood Hazard section of the Land Use Ordinance)	
Date of Last Revision	2020
Author/Owner	Latah County, Idaho
Description	Building and construction standards for the flood prone areas in all unincorporated areas of Latah County, Idaho.
Relationship to Hazard Mitigation Planning	This ordinance puts forth provisions for flood hazard reduction including, but not limited to standards regarding construction materials and methods, subdivision proposals, the review of building permits, floodway development, and more.
Thoughts for Future Hazard Mitigation Incorporation	The County could continue to include a flood hazard overlay in any future ordinance and zoning map updates where these conditions apply. Maps could be used from the HMP update for reference.

Incorporation into Hazard Mitigation Plan	Ordinance content used for the capabilities assessment, county profile, and risk assessment. 'Thoughts for Future Hazard Mitigation Incorporation' may be used for the creation of new mitigation actions in this HMP update or future updates.
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Table 25 City of Moscow Comprehensive Plan Planning Mechanism

City of Moscow, Idaho Comprehensive Plan	
Date of Last Revision	2019
Author/Owner	City of Moscow, Idaho
Description	Through the preparation of a Comprehensive Plan, residents can give some direction to the development ("building") of their community.
Relationship to Hazard Mitigation Planning	The plan includes objectives in the Public Works, Housing, Land Use, Transportation, and Community Design sections related to natural hazard mitigation planning. The Hazardous Area section describes an extensive number of hazards that impact the County including flood, severe weather and more. Additionally, in the Land Use section the County aims to continue the enforcement of the IBC 2000 which is also directly correlated to hazard mitigation. The City lists several ways to implement these objectives including adopting and administering zoning and subdivision ordinances, coordinating agency partnerships, requiring reviews of significant development proposals, and coordinating with county programs.
Thoughts for Future Hazard Mitigation Incorporation	The City could include tactics in how to accomplish the objectives along with what offices or partnerships are working collaboratively toward the goal or objective.
Incorporation into Hazard Mitigation Plan	Plan content used for the capability assessment and goals in city comprehensive plan informed new mitigation actions in this HMP.

Other planning and regulatory mechanisms within the county and its jurisdictions that relate to hazards mitigation in Latah county and its jurisdictions are noted below. In each case, the mechanisms were considered in plans to maintain or prior mitigation strategies, and in some cases, the development of new strategies. The current and planned revisions to these mechanisms will also assist the county in implementing and maintaining the HMP.

- The Emergency Operations Plan (EOP) informed several of the mitigation strategies updated or added in this HMP, such as the need for updated communications networks. One of the mitigation actions in this HMP is related to this need.
- The Community Wildfire Protection Plan (CWPP) from 2011 included a more detailed description of exposure to wildfire risk than was in the scope of this HMP update. That plan also included specific recommendations for wildfire-related mitigation actions for each jurisdiction. These recommendations informed this planning process. Each community participating in this HMP has included a mitigation action in this plan to implement the recommendations in that plan. Some have also included additional or specific actions related to the exposure described in that plan.

VI. Mitigation Strategy

6.1 Overview

The mitigation strategy is a comprehensive effort to reduce or eliminate potential losses from the hazards identified by the planning team and detailed in the risk assessment (see *Section 4 Risk Assessment*). The goals, objectives, and actions that comprise the strategy were carried forward from the former plan (with revisions where necessary), with additional goals, objectives, and actions developed through collaborative effort across the county that included its communities, various State and Federal agencies, and through public engagement.

6.1.1 Summary of Revisions

Major revisions include:

- Reviewed and revised goals and objectives
- Reviewed and revised all mitigation actions to reflect progress to date
- Updated all mitigation actions with estimated cost, timelines, and potential funding avenues where possible/applicable
- Removed mitigation actions no longer relevant or necessary
- Included additional mitigation actions

6.1.2 FEMA Requirements

This section adheres to and fulfills the following regulations:

- 44 CFR §201.6(c)(3) – A mitigation strategy that provides the jurisdiction’s blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs, and resources, and its ability to expand on and improve these existing tools.
 - (i) – A description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.
 - (ii) – A section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with particular emphasis on new and existing buildings and infrastructure. All plans approved by FEMA after October 1, 2008, must also address the jurisdiction's participation in the NFIP, and continued compliance with NFIP requirements, as appropriate.
 - (iii) – An action plan, describing how the action identified in paragraph (c)(3)(ii) of this section will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to cost benefit review of the proposed projects and their associated costs.
 - (iv) – For multijurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.

6.2 Mitigation Strategy Goals

Goals and objectives frame the mitigation strategy and are put forward and adopted by the planning team at the outset of the planning process. The 2020 plan update revisited and revised the goals included in the former plan to enhance their cogency and applicability to Latah County and its incorporated cities. The following seven goals guided the planning process and update of the mitigation strategy:

1. To minimize the area of land damaged and losses experienced because of hazards where these risks threaten communities in the county.
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
3. Educate communities about the unique opportunities and challenges of pre- and post-disaster hazard mitigation, disaster response, and post-disaster recovery.
4. Establish mitigation priorities and develop mitigation strategies.
5. Strategically locate, plan, coordinate, and implement hazard reduction projects with emphasis on those projects to reduce exposure to multiple hazards
6. Continue and enhance cooperation, coordination, and capabilities of agencies and partners within the county
7. Ensure long-term viability of the county to support successful mitigation, response, and recovery through human resources

6.2.1 Process for developing mitigation actions

Based on the risk assessment and concerns of the planning committee, the mitigation actions from the prior plan were each evaluated and updated. New mitigation actions were developed using the template provided in Appendix C and prioritized using the Staplee method using worksheets provided in Appendix D.

6.3 Latah County Mitigation Actions & Implementation Plan

The following table shows the specific actions and projects to be implemented over the plan's five-year life.

Table 26 Latah County mitigation actions and implementation plan

Latah County Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
General						
1	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	1, 2, 3, 4 Priority: High	Latah County Disaster Services; all jurisdictions within the county	Timeline: 2 years	New action item	Preparedness & Response
				Cost: \$5,000		
				Funding and/or Resources: SHSP (Homeland Security) Grant, county funding, and/or special grants		
2	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	1 Priority: Moderate	Latah County Disaster Services; proprietary/service company	Timeline: 2 years	New action item	Preparedness & Response
				Cost: Up to \$25,000 annual subscription fee		
				Funding and/or Resources: SHSP (Homeland Security) Grant, county funding and/or special grants		
3	Develop WIFI and internet services at the Latah County Fairgrounds as part of an Emergency Operations Center upgrade	5 Priority: High	Latah County I.T.S. Department; Latah County Fair board and First Step Internet Service	Timeline: 5 years	New action item.	Preparedness & Response Structure & Infrastructure
				Cost: \$10,000		
				Funding and/or Resources: SHSP (Homeland Security) Grant, county funding, and/or special grants		

Latah County Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
4	Create and 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	5 Priority: Moderate	Latah County I.T.S. Department; City of Moscow	Timeline: 2 years Cost: \$20,000 Funding and/or Resources: SHSP (Homeland Security) Grant, and county funding	New action item.	Preparedness & Response Structure & Infrastructure
5	Develop a program that will help identify hazardous materials transported through the County	Priority: Moderate	Latah County Disaster Services; Idaho Office of Emergency Management	Timeline: 5 years; Ongoing Cost: Unknown Funding and/or Resources: HEMP Grant, EMSI database	New action item	Preparedness & Response
6	Develop a plan to deal with internally displaced people and displaced families resulting from disaster events in areas outside of Latah County	2, 6 Priority: Low	Latah County Disaster Services; Idaho Office of Emergency Management	Timeline: Ongoing Cost: N/A – Time-based per Red Cross Funding and/or Resources: N/A	Adapted to new changes per Red Cross Policies. Red Cross reviewed each shelter and does so on regular basis. Hotel rooms/capacity to house has increased since last plan.	Planning & Regulatory Preparedness & Response
7	Continue to enhance radio availability in each fire district and improve range within the region	2, 5 Priority: Moderate	Latah County Disaster Services; Latah County Sheriff’s Office	Timeline: Ongoing Cost: Unknown Funding and/or Resources: Latah County Sheriff’s Office annual budget	The County has added 2 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	Preparedness & Response Structure & Infrastructure

Latah County Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
8	Obtain funding for mobile repeater stations with backup power sources	1, 2, 4, 5 Priority: Low	Latah County Disaster Services; Latah County Sheriff's Office	Timeline: Ongoing (previously deferred) Cost: Unknown Funding and/or Resources: SHSP (Homeland Security) Grant, funded	Almost completed – currently awaiting Latah County Sheriff's Office authorization to set up and broadcast on their frequencies. Completed action will allow capability with HAM trailer. New radios will be available by the end of May 2020. Mobile repeater stations were completed as of September 2019.	Preparedness & Response Structure & Infrastructure
9	Develop a public education campaign specifically to provide awareness for residents in the Juliaetta and Kendrick area regarding the lack of a rural fire district and the ramifications	2, 3 Priority: High	Latah County Disaster Services; City of Juliaetta, City of Kendrick, Juliaetta Fire Department, Kendrick Fire Department	Timeline: 3 years (previously deferred) Cost: Unknown Funding and/or Resources: Idaho Department of Lands, other fire districts and state agencies	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.	Education Programs Preparedness & Response

Latah County Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
10	Continue to implement and develop public education programs (eg., Disaster Preparedness Programs, Fuel Reduction Programs, Pillow Case Project, etc).	1, 2, 3 Priority: High	North Central Idaho Fire Prevention Cooperative; Latah County Disaster Services, local fire districts	Timeline: Annual, Ongoing Yearly program Cost: Unknown \$5,000.00 for the region Funding and/or Resources: Unknown Fire Co-op receives funding from organizations like BLM to support fire awareness public education programs	Ongoing	Education Programs
11	Enforce existing land use and development policies including floodplain restrictions to reduce residents' exposure to hazards	1, 2, 6 Priority: High	Latah County Planning and Building	Timeline: Ongoing Cost: Unknown Funding and/or Resources: County general fund and fees	Ongoing	Planning & Regulatory
12	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.)	2, 3 Priority: Moderate	Latah County Disaster Services	Timeline: Annual, Ongoing Cost: \$1000, most of equipment has been purchased, mostly training costs for new recruits Funding and/or Resources: County budget and/or SHSP grant	Ongoing, Latah has a new CERT program manager. The team is being re-evaluated and possibly restructured. All volunteer groups are working towards join training and education.	Education Programs Preparedness & Response

Latah County Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
13	Continue to development and maintain a countywide evacuation plan with designate routes, including main routes as well as routes in rural areas	2, 6 Priority: High	Latah County Disaster Services: Idaho Transportation Department, Latah County Highway districts, Latah County GIS Dept	Timeline: Review and update by Oct 2021 Cost: Approx. \$500 Funding and/or Resources: County budget or SHSP grant	Ongoing	Planning & Regulatory Preparedness & Response
14	Work with the American Red Cross to update the emergency shelter list and conduct field visits	2, 6 Priority: Moderate	Latah County Disaster Services; American Red Cross	Timeline: Pending Red Cross's timeline Cost: Unknown Funding and/or Resources: Red Cross	Ongoing	Preparedness & Response
Flood						
15	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.	1, 2, 4, 5 Priority: Low	Latah County Disaster Services; U.S. Army Corps of Engineers	Timeline: 5 years Cost: \$50,000 Funding and/or Resources: SHSP (Homeland Security) Grant, county funding, and/or special grants	Updated from previous plan, with more specific plan for implementation and partnership, particularly ACOE.	Structure & Infrastructure
16	Improve the State Highway 9 crossing over Flat Creek.	1, 4, 5 Priority: High	Latah County Disaster Services; Idaho Transportation Department	Timeline: Unknown Cost: Unknown Funding and/or Resources: ITD	Ongoing. No progress from previous HMP, but this is still a high priority for the County. The actual work and funding is dependent on ITD, which has identified several bridge/culvert passes slated for upgrades.	Natural Systems Protection Structure & Infrastructure

Latah County Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
17	Develop a site-specific plan for addressing flood fighting activities along the Potlach Junction levee.	1, 2, 7 Priority: Moderate	City of Potlatch; Idaho Transportation Department, U.S. Army Corps of Engineers	Timeline: 3 years Cost: Unknown Funding and/or Resources: Available mitigation grants	The Army Corps of Engineers has indicated upgrades and maintenances will need to be performed on the levee or it will be disqualified. There are potential legal issues for nearby homes.	Planning & Regulatory Preparedness & Response Structure & Infrastructure
18	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	4 Priority: Moderate	Latah County Disaster Services; North Latah Highway District, South Latah Highway District, Latah County G.I.S. Department	Timeline: Ongoing Cost: Unknown: costs for GIS mapping, salary & time cost for highway districts and Idaho Transportation Department personnel Funding and/or Resources: ITD	There is now a good inventory of bridges and roadways, but no profiles of floodplain areas. Lidar was utilized in the general area, but did not assess all of the County. We will need to consult with special purpose highway districts, Idaho Transportation Department, and Latah County Planning, Building and GIS Department.	Preparedness & Response Structure & Infrastructure
19	Encourage residents to participate in the National Flood Insurance Program	2, 6 Priority: High	Latah County Disaster Services; Latah County Planning & Building	Timeline: Annual, Ongoing Cost: Unknown Funding and/or Resources: Unknown	Ongoing	Education Programs
Landslide						
20	Develop a landslide hazard identification and mitigation program and use as guidance in the development of the Latah County Comprehensive Plan	1, 2, 3, 6 Priority: Moderate	Latah County Commission; Latah County Planning & Building; Latah County G.I.S. Department	Timeline: 5 years Cost: Unknown Funding and/or Resources: Unknown	Ongoing, awaiting new analysis of landslide vulnerability by Idaho Geologic Survey	Planning & Regulatory Preparedness & Response
Wildland Fire						

Latah County Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
21	Fuels reductions to 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, 2, 4, 5 Priority: High	Latah County Parks and Recreation; North Central Fire Cooperative, Idaho Department of Lands, Idaho Fish & Game	Timeline: 5 years	New action item	Natural Systems Protection
				Cost: \$50,000 over 5 years		Preparedness & Response
				Funding and/or Resources: Annual county funding when available, grant funding when available		
22	Continue to work on action items and proposed projects in Latah County's Community Wildfire Protection Plan	1, 3, 4, 5 Priority: High	Latah County Disaster Services; all relevant partners	Timeline: Annual; Ongoing	Progress has been made. An update to the Community Wildfire Protection Plan is under review, and this action item will be revisited after review.	Education Programs
				Cost: Unknown		Natural Systems Protection
				Funding and/or Resources: Possibility of Youth Conservation Corps crew work in the Summer.		Planning & Regulatory
						Preparedness & Response
						Structure & Infrastructure

6.3.1 Changes in Mitigation Priorities

As noted in Section 2.11, development in Latah County as a whole has not been significant and the primarily rural nature of the unincorporated portions of the county has been maintained. **No major developments have occurred in the time since the last plan.** There have not been many changes in the nature or magnitude of hazards in the area, thus, there has not been much shift in the priorities. Several new county strategies relate to more use of technology and/or protection of such. All new actions were prioritized using the Staplee method, documentation for which is provided in Appendix D.

6.3.2 Completed & Removed Mitigation Actions & Projects

The following actions were completed prior to the 2020 update or were removed from the strategy during the 2020 update for Latah County:

Table 27 Latah County completed or removed mitigation actions

Mitigation Action	Status	Notes
Develop a countywide safety program by assigning a designee to monitor flood conditions and maintenance of existing levees.	Removed	Each relevant agency maintains awareness. Latah County Emergency Manager works with U.S. Army Corps of Engineers, and is updated by call-in from City of Potlatch, Idaho Transportation Department, and area fire departments. As such, no safety program needs to be developed.
Retrofit schools and other public buildings known to have inadequate snowload resistance	Removed	Responsibility lies with special purpose school districts to complete these action items. Ordinances vary between school districts across the county. And almost all structures have snowload variances. The county will reiterate the hazard to school districts.
Continue to provide funding for signage of rural addresses and road signs	Removed	Completed intro phase of this action for retrofitting and will conduct evaluation every 5 yrs when EOP is updated. The Planning Dept requires that new addresses be signed and also oversees the conversions to lanes; costs borne by individual property owners.
Assess and hardwire the Latah County Fairgrounds for use with a backup generator	Removed	Completed
Inspect buildings, particularly unreinforced masonry, for hazard stability	Removed	Low priority due to low vulnerability to earthquake and higher priorities for which to use limited funds

6.4 City of Deary Mitigation Actions & Implementation Plan

The following table shows the specific actions and projects to be implemented over the plan's five-year life.

Table 28 City of Deary mitigation actions and implementation plan

City of Deary Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
General						
1	Replace aging streets infrastructure (cracked and deteriorating) to provide access for emergency vehicles and citizens	2 Priority: Moderate	City of Deary; Idaho Department of Commerce	Timeline: 5 years Cost: \$2,000,000 Funding and/or Resources: Local bond, grants	New action item	Preparedness & Response Structure & Infrastructure
2	Replace blacktop in Nelson Park to prevent everyday hazardous use	2 Priority: Moderate	City of Deary; Lewis Clark Valley Healthcare Foundation	Timeline: Fall 2020 Cost: \$12,000 Funding and/or Resources: City of Deary Recreation Fund, Lewis Clark Valley Healthcare Foundation Fasttrack Grant	New action item	Structure & Infrastructure
3	Replace city park bathroom, which is past its useful life (in disrepair) and non-ADA compliant, to prevent everyday hazardous use	2 Priority: High	City of Deary; Idaho Department of Commerce	Timeline: Summer 2020 Cost: \$100,000 Funding and/or Resources: City park funds, Idaho Department of Commerce, Potlatch Deltic, White Pines Lion's Club	New action item	Structure & Infrastructure
4	Upgrade city water infrastructure by replacing the back up well and other water system elements	2 Priority: High	City of Deary; Mountain Waterworks	Timeline: Fall 2020 Cost: \$2,500,000 Funding and/or Resources: Local bond, Idaho Department of Commerce, U.S. Department of Agriculture	New action item	Structure & Infrastructure
5	Maintain city sidewalks to maintain quality of infrastructure and ADA compliance	2 Priority: Low	City of Deary; local businesses	Timeline: 10 years Cost: \$250,000 Funding and/or Resources: Budget allocation, City Streets Fund, grants, local business and private donations,	New action item	Structure & Infrastructure

City of Deary Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources		2020 Status	Mitigation Type
				Timeline: Ongoing			
6	Maintain funding to equip all vehicles and emergency apparatus with adequate radios	6 Priority: Moderate	Deary City Council; Deary Rural Fire District	Cost: \$1,500 per year Funding and/or Resources: Budget allocation, SHSP (Homeland Security) grants		All vehicles are equipped with radios.	Preparedness & Response
7	Maintain funding for a utility trailer to haul the Search and Rescue 4-wheeler and rescue boggan	6 Priority: Moderate	Deary City Council; Deary Rural Fire District	Cost: Unknown Funding and/or Resources: Budget allocation		Acquired by donations and fire district funds	Preparedness & Response
8	Develop a program that will help identify hazardous materials transported through the city	1 Priority: Moderate	Deary Maintenance Crew	Cost: Unknown Funding and/or Resources: Unknown		Ongoing	Preparedness & Response
Extended Power Failure / Outage							
9	Backup generator for water wells to have the ability to produce water in case of power outage	2, 5 Priority: Low	City of Deary; Idaho Rural Water	Cost: \$60,000 Funding and/or Resources: Budget allocation, grants		New action item	Preparedness & Response Structure & Infrastructure
10	Backup generator for the Community Center, which serves as an emergency shelter and food source during local incidents	2, 5 Priority: Low	City of Deary; Deary Recreation District	Cost: \$40,000 Funding and/or Resources: Budget allocations from city, recreation & fire/ambulance districts, grants, donated funds		New action item	Preparedness & Response Structure & Infrastructure
11	Maintain generator to ensure the functionality of the fire/emergency medical services station during power outages	2, 5 Priority: High	Deary City Council; Deary Rural Fire District	Cost: <\$100 annual maintenance Funding and/or Resources: Budget allocation		Acquired by a private donation.	Preparedness & Response Structure & Infrastructure
Flood							

City of Deary Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
12	Culvert replacement at entrance to city wells to prevent loss of access during flood events	1, 2, 5 Priority: High	City of Deary; FEMA, Idaho Office of Emergency Management	Timeline: Fall 2020 Cost: \$20,000 Funding and/or Resources: City of Deary Water Fund, FEMA	New action item	Preparedness & Response Structure & Infrastructure
13	Replace inadequate culverts on Line Street, First Avenue, Second Avenues, Fifth Avenue, Park Street, Reservoir Road, and 6th Avenue to improve flow and reduce flood damages	1, 2 Priority: Moderate	Deary Maintenance Crew	Timeline: Recurring & Ongoing Cost: Not provided Funding and/or Resources: Budget allocation, grants	Maintenance scheduled annually for the Spring to improve water flow with clean up. All transportation projects are awaiting completion of a pending water improvement project.	Structure & Infrastructure
14	Install a culvert at Railroad fill to direct water drainage and prevent flood damage and erosion	1, 2 Priority: Moderate	Deary Maintenance Crew	Timeline: Unknown Cost: Unknown Funding and/or Resources: Unknown	Unknown status.	Structure & Infrastructure
17	Encourage residents to participate in the National Flood Insurance Program	3 Priority: High	Deary Maintenance Crew	Timeline: Unknown Cost: Unknown Funding and/or Resources: Unknown	Ongoing.	Education Programs
Severe Weather						
18	Work with local organizations and the Red Cross to identify and equip adequate emergency shelters	6 Priority: Low	Deary Maintenance Crew	Timeline: Unknown Point of contact every year. Facility survey every 4 years Cost: Unknown None Funding and/or Resources: Unknown This is under Red Cross. No country funding is used.	Ongoing, in conjunction with county.	Planning & Regulatory Preparedness & Response
Wildland Fire						

City of Deary Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
19	Continue to work on action items and proposed projects in the Latah County Wildfire Protection Plan	1, 3, 4, 5 Priority: High	Deary Maintenance Crew	Timeline: Annual & Ongoing Cost: Unknown Funding and/or Resources: Unknown	The Community Wildfire Protection Plan and WUI issues may be revisited by a county subgroup over the next year.	Education Programs
						Natural Systems Protection
						Planning & Regulatory
						Preparedness & Response
						Structure & Infrastructure

6.4.1 Changes in Mitigation Priorities

As noted in Section 2.11.1, development in the City of Deary has not been significant since the last update and there have not been many changes in the nature or magnitude of hazards in the area, thus, there has not been much shift in the priorities. However, the City has identified new actions that will help them mitigate existing hazards and improve preparedness/response. All new actions were prioritized using the Staplee method, documentation for which is provided in Appendix D.

6.4.2 Completed & Remove Mitigation Actions & Projects

The following action was removed from the strategy during the 2020 update:

Table 29 City of Deary completed or removed mitigation actions

Mitigation Action	Status	Notes
Raise the grade on First Avenue at Pine Creek to remove it from the floodplain	Removed	Affected businesses have relocated due to floodplain
Obtain funding for an updated community warning siren for use during all types of emergency events	Completed	New siren last year installed with SHSP grant

6.5 City of Genesee Mitigation Actions & Implementation Plan

The following table shows the specific actions and projects to be implemented over the plan's five-year life.

Table 30 City of Genesee mitigation actions and implementation plan

City of Genesee Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
General						
1	Enforce existing land use and development policies in order to reduce residents' exposure to hazards	1, 3 Priority: High	City of Genesee	Timeline: Ongoing Cost: Not provided Funding and/or Resources: Unknown	Currently enforced	Planning & Regulatory
Extended Power Failure / Outage						
2	Replace manual pumping from sanitary sewer lift station to sewer lagoon with a backup power supply to prevent raw sewage overflow/spillage	2, 5 Priority: High	City of Genesee; FEMA	Timeline: 2024 Cost: Not provided Funding and/or Resources: City of Genesee sewer fund, FEMA	New action item	Preparedness & Response Structure & Infrastructure
Flood						
3	Raise the Chestnut Street bridge to prevent upstream flooding from Cow Creek	1, 2 Priority: High	City of Genesee; FEMA	Timeline: 5-10 years Cost: \$475,000 Funding and/or Resources: FEMA (HGMP or PDM)	New action item	Structure & Infrastructure
4	Clean and widen Cow Creek above the ordinary high water mark for increased flood capacity to prevent flooding within City limits	1, 2 Priority: High	City of Genesee	Timeline: Annual, Ongoing Cost: \$5,000 annually Funding and/or Resources: General stormwater budget	New action item	Structure & Infrastructure
5	Encourage residents to participate in the National Flood Insurance Program	3 Priority: High	City of Genesee; FEMA	Timeline: Ongoing Cost: Unknown Funding and/or Resources: Unknown	The City is working with FEMA to meet all NFIP requirements	Education Programs
6	Conduct a stability assessment of Cow Creek from Highway 95 to Genesee and implement projects that will address chronic flooding issues	2, 4 Priority: High	City of Genesee; Maintenance crew; consultant	Timeline: 2022 Cost: \$15,000 Funding and/or Resources: Budget allocation, FEMA	Lidar information has been collected. Hydraulic & hydrologic study need to be conducted.	Preparedness & Response Structure & Infrastructure
Wildland Fire						

City of Genesee Action Item	Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
7	Continue to work on action items and proposed projects in the Latah County Wildfire Mitigation Plan.	1, 3, 4, 5 City of Genesee; various partners	Timeline: Annual, Ongoing Cost: Unknown Funding and/or Resources: Unknown	A new Fire Station has been constructed. BLM Wildland Fire protocols are practiced.	Education Programs
					Natural Systems Protection
					Planning & Regulatory
					Preparedness & Response
					Structure & Infrastructure

6.5.1 Changes in Mitigation Priorities

As noted in Section 2.11.2, development in the City of Genesee has not been significant since the last update and there have not been many changes in the nature or magnitude of hazards in the area, thus, there has not been much shift in the priorities. However, the City has identified new actions that will help them mitigate existing hazards and improve preparedness/response. All new actions were prioritized using the Staplee method, documentation for which is provided in Appendix D.

6.5.2 Completed & Removed Mitigation Actions & Projects

The City of Genesee did not complete or remove any mitigation actions from the strategy prior to or during the 2020 update.

6.6 City of Moscow Mitigation Actions & Implementation Plan

The following table shows the specific actions and projects to be implemented over the plan's five-year life.

Table 31 City of Moscow mitigation actions and implementation plan

City of Moscow Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
General						
1	Continue capital replacement program and actively identify aging wastewater collection infrastructure	1, 2, 4 Priority: High	City of Moscow; IDEQ	Timeline: Long-term Cost: \$250,000 per project Funding and/or Resources: City of Moscow	New action item	Structure & Infrastructure
3	Identify potential sources of HAZMAT storage areas in the event of release	4, 5 Priority: Moderate	City of Moscow; Lewiston Regional HAZMAT Team	Timeline: Ongoing Cost: Unknown Funding and/or Resources: Potential grant funding	New action item	Natural Systems Protection Preparedness & Response
4	Continue capital replacement program and actively identify aging water distribution infrastructure (water mains)	2, 4 Priority: High	City of Moscow	Timeline: Ongoing Cost: Unknown Funding and/or Resources: Unknown	New action item	Structure & Infrastructure
5	Perform maintenance on all well pumps and controls based on hours of operation and/or as per manufacture specifications	2, 4 Priority: High	City of Moscow	Timeline: Ongoing Cost: Unknown Funding and/or Resources: Unknown	New action item	Structure & Infrastructure
6	Perform maintenance based on hours of operation and/or as per manufacture specifications	2 Priority: Moderate	City of Moscow	Timeline: Ongoing Cost: Unknown Funding and/or Resources: Unknown	New action item	Structure & Infrastructure
7	Perform maintenance and inspections on all water storage facilities every two years	2 Priority: High	City of Moscow	Timeline: Ongoing Cost: Unknown Funding and/or Resources: Unknown	New action item	Structure & Infrastructure

City of Moscow Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
8	Operate and maintain all distribution valves and replace damaged valve stacks	2, 4 Priority: High	City of Moscow	Timeline: Ongoing Cost: Unknown Funding and/or Resources: Unknown	New action item	Structure & Infrastructure
9	Provide barriers at Sixth & Main and Third & Main to reduce vehicle threats at downtown community events	5, 7 Priority: Moderate	City of Moscow; downtown businesses	Timeline: 1 year Cost: \$100,000 Funding and/or Resources: Grants, special projects	New action item	Structure & Infrastructure
10	Equip police department training room with command post equipment in case of an emergency (furniture, radio, computer capabilities, monitors, etc.)	5, 7 Priority: Moderate	City of Moscow; University of Idaho	Cost: Unknown Funding and/or Resources: Grants, special projects	New action item	Preparedness & Response
11	Update aging emergency radio communication system to improve City radio coverage and interagency communications	6 Priority: High	City of Moscow; area emergency response agencies	Timeline: 3 years Cost: Unknown Funding and/or Resources: Grants, special projects	New action item	Preparedness & Response Structure & Infrastructure
12	Update radio repeater infrastructure	6 Priority: High	City of Moscow; Moscow Police & Volunteer Fire Departments	Timeline: 5 years Cost: Unknown Funding and/or Resources: City of Moscow, grants	New action item	Preparedness & Response Structure & Infrastructure
13	Replace mobile and portable radios that are beyond their useful life	6 Priority: High	City of Moscow; Moscow Volunteer Fire Departments	Timeline: 3 years Cost: Unknown Funding and/or Resources: City of Moscow, grants	New action item	Preparedness & Response Structure & Infrastructure
14	Ensure preservation of public records by moving City record storage facility to a location not prone to flood damage	2 Priority: High	City of Moscow	Timeline: 5 years Cost: Unknown Funding and/or Resources: City of Moscow, grants	New action item	Preparedness & Response

City of Moscow Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
				Timeline: 6 years		
15	Scan all critical public records with redundant digital storage	2 Priority: High	City of Moscow	Cost: Unknown Funding and/or Resources: City of Moscow, grants	New action item	Preparedness & Response
16	Funding to establish an Emergency Operations Center for the City	4, 5 Priority: Moderate	City of Moscow	Timeline: Ongoing Cost: Unknown Funding and/or Resources: Potential grant funding	No update from 2011 – deferred due to lack of funding.	Preparedness & Response Structure & Infrastructure
17	Enforce existing land use and development policies, including floodplain restrictions, to reduce residents' exposure to hazards	1, 3 Priority: High	City of Moscow; Moscow City Council	Cost: Unknown Funding and/or Resources: Unknown	Ongoing	Planning & Regulatory
Extended Power Failure / Outage						
18	Emergency generator at Fire Station 2 to power critical infrastructure during disaster events	2, 5 Priority: High	City of Moscow	Timeline: Unknown Cost: \$100,000 Funding and/or Resources: Potential grant funding	New action item	Preparedness & Response Structure & Infrastructure
19	Replacement of three aging water booster stations including installation of backup power generation to meet fire flow requirements and continuity of fire protection during power outage	2, 5 Priority: High	City of Moscow	Timeline: 2 years Cost: Unknown Funding and/or Resources: Unknown	New action item	Preparedness & Response Structure & Infrastructure
20	Install a backup power generator for City Shop facility which acts as a command post during flooding, wind storms and snow removal situations, and houses the City's fuel system	2, 5 Priority: Moderate	City of Moscow	Timeline: Long-term Cost: Unknown Funding and/or Resources: City of Moscow	New action item	Preparedness & Response Structure & Infrastructure

City of Moscow Action Item	Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
21	Install a natural gas backup power generator at the Hamilton Indoor Recreation Center (HIRC), designated as an emergency shelter for the City. It is critical that the facility be operational during any emergency but the HIRC currently has no backup power source in case of electrical outage. 2, 5 Priority: High	City of Moscow	Timeline: 4 years Cost: Unknown Funding and/or Resources: City of Moscow, grants	New action item	Preparedness & Response Structure & Infrastructure
Flood					
22	Identify high risk infrastructure to calculate and identify areas in need of restoration to reduce sewer inflow and infiltration (I & I) during flooding events 2, 4, 5 Priority: High	City of Moscow; IDEQ	Timeline: 5-7 years Cost: \$1,000,000 Funding and/or Resources: City of Moscow	New action item	Preparedness & Response Structure & Infrastructure
23	Install backup power at key area lift stations to maintain continuity of operations during flooding events 2, 5 Priority: High	City of Moscow; IDEQ	Timeline: 2 years Cost: \$5,000 Funding and/or Resources: City of Moscow	New action item	Preparedness & Response Structure & Infrastructure
24	Floodproof the Water Reclamation and Reuse Facility from damage during high-flow flooding events 2, 5 Priority: Moderate	City of Moscow; IDEQ	Timeline: 5-7 years Cost: \$250,000 Funding and/or Resources: City of Moscow	New action item	Preparedness & Response Structure & Infrastructure
25	Create capital replacement program and actively identify aging/failed stormwater infrastructure 4 Priority: High	City of Moscow	Timeline: Long-term Cost: Unknown Funding and/or Resources: City of Moscow	New action item	Preparedness & Response Structure & Infrastructure
26	Conduct a comprehensive study of Moscow's creek systems including Paradise Creek and Hogg Creek to identify problem areas and develop plans and projects to mitigate flooding 4 Priority: High	City of Moscow	Timeline: Long-term Cost: Unknown Funding and/or Resources: City of Moscow, grants	New action item	Natural Systems Protection Planning & Regulatory Structure & Infrastructure

City of Moscow Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources		2020 Status	Mitigation Type
27	Assess, plan for and fund the replacement of bridge and culvert structures that are substandard, deteriorating, or are an obstruction in flooding events	4, 5 Priority: Low	City of Moscow	Timeline: Long-term Cost: Unknown Funding and/or Resources: City of Moscow		New action item	Planning & Regulatory Structure & Infrastructure
28	Acquire easements and develop access points and pathways to allow for maintenance and emergency repairs of drainage facilities	4, 5 Priority: Moderate	City of Moscow	Timeline: Long-term Cost: Unknown Funding and/or Resources: City of Moscow		New action item	Planning & Regulatory Preparedness & Response Structure & Infrastructure
29	Perform comprehensive assessment of the condition of City-owned stormwater infrastructure	2, 4 Priority: Moderate	City of Moscow	Timeline: Long-term Cost: Unknown Funding and/or Resources: City of Moscow		New action item	Structure & Infrastructure
30	Continue to support the pavement management program and actively maintain roadway system to prevent premature damage	2, 4 Priority: High	City of Moscow	Timeline: Long-term Cost: Unknown Funding and/or Resources: City of Moscow, grants		New action item	Structure & Infrastructure
31	Encourage residents to participate in the National Flood Insurance Program	3 Priority: Moderate	Moscow Community Development Department	Timeline: Ongoing Cost: Unknown Funding and/or Resources: Unknown		Ongoing	Education Programs
32	Continue to support programs that address bank stabilization and channel restoration, especially within the identified floodplain	1, 2, 3, 6 Priority: High	Moscow Public Works Department; University of Idaho, various interested groups	Timeline: Ongoing Cost: Unknown Funding and/or Resources: Unknown		Ongoing	Natural Systems Protection
Severe Weather							

City of Moscow Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
33	Develop a response plan for wind events	2, 4	City of Moscow; local utility companies	Timeline: Long-term	New action item	Planning & Regulatory
		Priority: Moderate		Cost: Unknown		
		Funding and/or Resources: Unknown				
Technological Hazards / Cybersecurity						
34	Annually update water System (SCADA) control software and control features	2	City of Moscow	Timeline: Ongoing	New action item	Structure & Infrastructure
		Priority: Moderate		Cost: Unknown		
		Funding and/or Resources: Unknown				
35	Add City-wide wireless network for redundancy	2, 5	City of Moscow	Timeline: 5-7 years	New action item	Preparedness & Response
		Priority: Moderate		Cost: Unknown		Structure & Infrastructure
		Funding and/or Resources: City of Moscow, grants				
36	Build fiber to utility sites to prevent SCADA outage from cellular network outage	2, 5	City of Moscow	Timeline: 5-7 years	New action item	Preparedness & Response
		Priority: Moderate		Cost: Unknown		Structure & Infrastructure
		Funding and/or Resources: City of Moscow, grants				
37	Assess and install security systems at all critical governmental facilities	2	City of Moscow	Timeline: 6 years	New action item	Structure & Infrastructure
		Priority: Moderate		Cost: Unknown		
		Funding and/or Resources: City of Moscow, grants				
Wildland Fire						
38	Facilitate continued funding for Personal Protective Equipment (PPE) for staff	5, 7	City of Moscow	Timeline: Ongoing	New action item	Preparedness & Response
		Priority: High		Cost: \$3,500 each		
		Funding and/or Resources: Potential grant funding				

City of Moscow Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
39	Facilitate continued funding for volunteer fire department training and equipment and community fire prevention awareness	3, 5, 7	City of Moscow	Timeline: Ongoing	New action item	Education Programs
		Priority: High		Cost: Unknown Funding and/or Resources: Potential grant funding		Preparedness & Response
40	Update aging emergency radio communication system for the City and Rural Fire Districts	5, 7	City of Moscow	Timeline: Unknown - ASAP	New action item	Preparedness & Response
		Priority: Moderate		Cost: Unknown Funding and/or Resources: Potential grant funding		Structure & Infrastructure
41	Provide upgraded training facility for the Moscow Fire Department and the surrounding agencies	5, 6, 7	City of Moscow; regional emergency services agencies	Timeline: Unknown	New action item	Preparedness & Response
		Priority: Low		Cost: Unknown Funding and/or Resources: Potential grant funding		Preparedness & Response
42	Obtain funding for expansion and renovation of Fire Station 2 to increase resident fire fighter staffing to improve response times and capacity	5, 7	City of Moscow	Timeline: Unknown	New action item	Preparedness & Response
		Priority: Low		Cost: Unknown Funding and/or Resources: Potential grant funding		Structure & Infrastructure
43	Obtain funding and location for future Fire Station 4	5	City of Moscow	Timeline: Unknown	New action item	Planning & Regulatory
		Priority: Low		Cost: Unknown Funding and/or Resources: Potential grant funding		Preparedness & Response Structure & Infrastructure
44	Replace fire hydrants older than 40 years to improve operation for emergencies	4, 5	City of Moscow	Timeline: Ongoing	New action item	Preparedness & Response
		Priority: High		Cost: Unknown Funding and/or Resources: Unknown		Structure & Infrastructure

City of Moscow Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
45	Continue to work on action items and proposed projects in the Latah County Wildfire Protection Plan	1, 3, 4, 5 Priority: High	City of Moscow; various partners	Timeline: Unknown Ongoing or every 5 years when plans are reviewed.	Ongoing	Education Programs
				Cost: Unknown		Natural Systems Protection
				Funding and/or Resources: Unknown Some funding by grants or EM County budget for meeting and printed material.		Planning & Regulatory
						Preparedness & Response
						Structure & Infrastructure

6.6.1 Changes in Mitigation Priorities

As noted in Section 2.11.2, development in the City of Moscow has not seen significant population growth since the last plan, however, there has been further residential development in the northeastern portion of the city and a redistribution of some industrial activities from railroad lines in the city center outward to the fringes and redevelopment in the core. The nature and magnitude of hazards has not changed significantly, so there has not been much shift in the overall priorities. However, the City has identified quite a few new actions that will help them mitigate long-standing hazards, evaluate infrastructure condition and needs, and improve emergency services to the expanding parts of the city. All new actions were prioritized using the Staplee method, documentation for which is provided in Appendix D.

6.6.2 Completed & Removed Mitigation Actions & Projects

The following actions were completed prior to the 2020 update or were removed from the strategy during the 2020 update:

Table 22b City of Moscow completed or removed mitigation actions

Mitigation Action	Status	Notes
Install Jersey barriers to protect Avista transfer station and the Williams pipeline near the intersection of the Old Pullman Highway and Stadium Way	Completed - 2014	

6.7 City of Potlatch Mitigation Actions & Implementation Plan

The following table shows the specific actions and projects to be implemented over the plan's five-year life.

Table 32 City of Potlatch mitigation actions and implementation plan

City of Potlatch Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
General						
1	Upgrade bypass pipe booster station from Maple Street to the East city limit	2 Priority: High	Potlatch City Council	Timeline: 5 years Cost: \$50,000 Funding and/or Resources: Unknown	New action item	Structure & Infrastructure
2	Upgrade Ridge well pipes	2 Priority: Moderate	Potlatch City Council	Timeline: 5 years Cost: \$50,000 Funding and/or Resources: Unknown	New action item	Structure & Infrastructure
3	Upgrade sewer pipe from Maple Street	2 Priority: Low	Potlatch City Council	Timeline: 5 years Cost: \$10,000 Funding and/or Resources: Unknown	New action item	Structure & Infrastructure
4	Enforce existing land use and development policies in order to reduce residents' exposure to hazards	1, 3 Priority: <u>Low</u>	Potlatch City Council	Timeline: 5 years Cost: Unknown Funding and/or Resources: Unknown	Ongoing	Planning & Regulatory
5	Develop a program to work with partners to help identify hazardous material transported through the city	4, 6 Priority: High	Potlatch City Council; Idaho Transportation Department	Timeline: 2 years Cost: Unknown Funding and/or Resources: Unknown	Ongoing	Preparedness & Response
6	Work with the fire department to educate homeowners about smoke alarms and fire extinguishers in the home	3, 6 Priority: High	Potlatch City Council; Potlatch Rural Fire District	Timeline: Ongoing Cost: Unknown Limited per grant, or by inventory of product. Funding and/or Resources: Unknown Through various resources like Red Cross, and other organizations.	Ongoing	Education Programs Preparedness & Response

City of Potlatch Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
Extended Power Failure / Outage						
7	Obtain a portable generator for the Ridge well	2 Priority: High	Potlatch City Council	Timeline: 5 years Cost: \$10,000 Funding and/or Resources: Unknown	New action item	Structure & Infrastructure
8	Obtain funding for additional generators to power the sewer and water infrastructure during a power outage	2, 5 Priority: High	Potlatch Water and Sewer Department	Timeline: Unknown Cost: Unknown Funding and/or Resources: Grants	The direction of the project will take one of two forms: a mobile generator; or permanent generators at the wells and sewage treatment plant for power failure.	Preparedness & Response Structure & Infrastructure
Flooding						
9	Obtain funding to construct stormwater mitigation infrastructure throughout the City	1, 2 Priority: Low	Potlatch Water and Sewer Department	Timeline: 3-5 years Cost: \$500,000 Funding and/or Resources: Great Basin Grant	The city has completed a curb improvement project that helps addresses this issue. More sidewalk improvement projects are planned.	Structure & Infrastructure
10	Encourage residents to participate in the National Flood Insurance Program	3 Priority: Low	Potlatch City Council	Timeline: Ongoing Cost: Unknown Funding and/or Resources: Unknown	Ongoing	Education Programs
11	Improve response capability by providing storage of sand and sandbags within the City	1, 2, 4, 5 Priority: Low	Potlatch City Council; Potlatch Rural Fire District	Timeline: 2 years Cost: Unknown Funding and/or Resources: Unknown	Ongoing	Preparedness & Response
12	Work with local planners, engineers, and developers to ensure lands being considered for annexation in the floodplain is developed responsibly	1, 4, 6 Priority: High	Potlatch City Council	Timeline: 2 years Cost: Unknown Funding and/or Resources: Unknown	Ongoing	Education Programs Planning & Regulatory
Severe Weather						

City of Potlatch Action Item		Goals & Priority	Lead Agency, Partners	Estimated Timeline, Cost, & Resources	2020 Status	Mitigation Type
13	Improve the emergency shelter capacity of the Potlatch Senior Center	2, 5, 6	Potlatch City Council	Timeline: 5 years	New action item	Preparedness & Response
		Priority: Moderate		Cost: \$20,000		Structure & Infrastructure
		Funding and/or Resources: Unknown				
Technological Hazard / Cybersecurity						
14	Obtain a dedicated backup server for the City	2	Potlatch City Council	Timeline: 1 year	New action item	Structure & Infrastructure
		Priority: High		Cost: \$5,000		
		Funding and/or Resources: Unknown				
Wildland Fire						
15	Continue to work on action items and proposed projects in the Latah County Wildfire Protection Plan	1, 3, 4, 5 Priority: High	Potlatch City Council; various partners	Timeline: Annual, Ongoing	Latah County created a work group as of October 2019. The City will work with the County on the CWPP and WUI issues over the next 2 years.	Education Programs
				Cost: Unknown		Natural Systems Protection
				Funding and/or Resources: Unknown		Planning & Regulatory
						Preparedness & Response
						Structure & Infrastructure

6.7.1 Changes in Mitigation Priorities

As noted in Section 2.11.3, development in the City of Potlatch has not been significant since the last update and there have not been many changes in the nature or magnitude of hazards in the area, thus, there has not been much shift in the priorities. However, the City has identified new actions that will help them mitigate existing hazards and improve preparedness/response. All new actions were prioritized using the Staplee method, documentation for which is provided in Appendix D.

6.7.2 Completed & Removed Mitigation Actions & Projects

The following actions were completed prior to the 2020 update or were removed from the strategy during the 2020 update:

Table 33 City of Potlatch completed or removed mitigation actions

Mitigation Action	Status	Notes
Continue to upgrade and improve the City's wastewater treatment facility	Completed	
Obtain funding to install or replace sidewalks along main city streets	Completed	
Develop options and obtain funding for the improvement or replacement of the Rock Creek Bridge	Removed	The scope of this action item fell under the North Latah Highway District's jurisdiction.
Improve sheltering capacity at the schools and churches	Completed	

VII. Plan Maintenance

7.1 Overview

The HMP is a living document that guides action over time, and it is vital the plan is actively engaged and maintained throughout its five-year lifecycle. As conditions change, new information becomes available, or actions are successfully implemented or challenged, plan adjustments may be necessary to maintain relevance and operationality. This section describes the procedures to monitor, evaluate, and update the HMP in addition to continued public involvement in hazard mitigation.

7.1.1 Summary of Revisions

Major revisions made to this section in the 2020 update include:

- Plan Maintenance was reorganized into a discrete section
- The procedures to monitor, evaluate, and update the plan were reviewed and revised
- The procedures for continued public participation were reviewed and revised

7.1.2 FEMA Requirements

This section adheres to and fulfills the following regulations:

- 44 CFR §201.6(c)(4) – The plan shall include the following:
 - (i) – A section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.
 - (iii) – A discussion on how the community will continue public participation in the plan maintenance process.

7.2 Plan Monitoring, Evaluation, & Update

Plan maintenance is the process the planning committee establishes to track the progress of the plan's implementation and to inform future plan updates within a five-year cycle. These procedures help ensure the mitigation strategy is implemented according to the plan; provide a foundation for ongoing hazard mitigation across all participating jurisdictions; standardize long-term monitoring of hazard and risk-related activities; help integrate mitigation into department roles; and maintain momentum through continued engagement and accountability.

Plan maintenance will primarily be coordinated and led by Latah County Disaster Services (or an official designee), and will be accomplished through annual meetings in addition to a five-year evaluation. Latah County Disaster Services (or an official designee) will schedule, publicize, and lead the annual meetings

and the five-year evaluation, with additional coordination undertaken by the official designee of the adopting jurisdictions:

- Latah County Emergency Manager
- County GIS, Building & Planning, Commissioners
- City of Moscow (Mayor or designate)
- City of Deary (Mayor or designate)
- City of Genesee (Mayor or designate)
- City of Potlach (Mayor or designate)

The plan maintenance group will also continue to try to engage representatives from smaller cities not able to participate in the plan this time, including Onaway, Troy, Bovill, Kendrick and Juliaetta.

All meeting minutes, press releases, and other documentation of revisions should be kept on record by Latah County Disaster Services.

7.2.1 Monitoring Implementation

Plan monitoring refers to charting and tracking the implementation of the plan over time. During the annual meetings, the entities responsible for the mitigation strategy will report on the progress of implementation of actions (see Section II), noting both successes and challenges encountered or foreseen. Monitoring will be captured by the Latah County Disaster Services Coordinator and compiled into a report to be used in plan updates.

7.2.2 Evaluating Effectiveness

Evaluating means assessing the effectiveness of the plan at achieving its stated purpose and goals. During the annual meetings and the five-year evaluation, the planning committee in addition to all participating stakeholders will evaluate progress of the following items:

- The number of actions listed in the mitigation strategy completed (see Section II)
- Integration of hazard mitigation into other planning mechanisms
- Opportunities for new and additional mitigation actions

The annual evaluation will be captured by the Latah County Disaster Services Coordinator and compiled into a report to be used in plan updates.

7.2.3 Updating the Plan

The plan must be reviewed and revised least once every five years to reflect changes in development, progress in local mitigation efforts, and changes in priorities. The Latah County Disaster Services Coordinator will be responsible for the five-year update. Prior to the five-year anniversary of plan adoption, the Disaster Services Coordinator will seek local, state, and/or federal funding to update the plan (if necessary), will initiate the plan update by convening the planning committee, and coordinate across the adopting jurisdictions and stakeholders to ensure participation and engagement. During the

update process, the planning committee in addition to all participating stakeholders will revisit and update the following information:

- Local, state, and/or federal policy related to emergency management, with focus paid to hazard mitigation
- Completed mitigation actions, identify new actions, and conduct a comprehensive evaluation of mitigation priorities and programs
- Identify avenues for successful mitigation implementation, challenges and limitations encountered, and methods to overcome challenges
- Review and update mitigation-related capabilities and resources specific to each adopting jurisdiction and participating stakeholder with roles in emergency management
- Incorporate additional or updated demographic and socioeconomic data of the county and its jurisdictions
- Review and incorporate any new planning documents, ordinances, codes, and regulations that have been developed by the county and its jurisdictions
- Update the hazard profiles—specifically the risk and vulnerability assessments of each hazard and jurisdiction—noting any major changes to the hazard type, location, and extent, or mitigation projects that have altered vulnerability to the hazard
- Local and regional hazard occurrences, specifically those with associated direct and/or indirect losses and repetitive/recurring losses to people, structures, and infrastructure
- Update and/or incorporate additional risk analysis models and data, such as an updated parcel data, new construction projects, development trends, population vulnerabilities, changing risk potential, etc.

7.3 Continued Public Participation

The Latah County Commissioners and Latah County Disaster Services Coordinator are jointly responsible for continued public involvement in hazard mitigation. Additionally, an official designee from each jurisdiction is responsible for coordinating continued public engagement over the five-year lifecycle of the plan:

- Latah County Emergency Manager
- Latah County Board of County Commissioner
- Latah County Planning and Building Director
- City of Moscow Mayor
- City of Deary Mayor
- City of Genesee Mayor
- City of Potlatch Mayor
- City of Troy Mayor
- City of Juliaetta Mayor
- City of Kendrick Mayor
- City of Bovill Mayor
- North Latah Highway District- Commissioner
- South Latah Highway District- Commissioner

The designees will hold a public meeting as part of each annual monitoring/evaluation or when deemed necessary by the planning committee. The meetings will provide the public a forum for which they can express concerns, opinions, or ideas about the plan. The County Commissioner's Offices will be responsible for using county resources to publicize the annual meetings and maintain public involvement through the county's webpage and local newspapers. The public will have the opportunity to provide feedback about the plan at meetings of the County Board of Commissioners. In addition, copies of the plan will be kept at the County Courthouse. The plan includes contact information for Latah County Disaster Services, which is responsible for keeping track of public comments and incorporating public feedback into the plan when necessary.

**BOARD OF COUNTY COMMISSIONERS
LATAH COUNTY, IDAHO
RESOLUTION 2020-13**

**A RESOLUTION SUPPORTING THE MULTI-JURISDICTIONAL ALL HAZARD
MITIGATION PLAN**

WHEREAS, Latah County recognizes that the development of an All Hazard Mitigation Plan between jurisdictions in Latah County is valuable and necessary for public safety; and

WHEREAS, it is the desire of the Latah County Board of Commissioners to support the Coordinator of Disaster Services efforts to work collaboratively with cities within Latah County to establish a hazard mitigation plan.

NOW, THEREFORE, BE IT HEREBY RESOLVED THAT:

Section 1: Latah County Board of County Commissioners do hereby approve the Adoption of the Latah County Multi-Jurisdictional Hazard Mitigation Plan and direct its implementation through the Latah County All Hazard Mitigation Planning Committee.

Section 2: Latah County Board of County Commissioners hereby directs the Coordinator of Disaster Services to continue to lead the implementation of this Plan as the Latah County All Hazard Mitigation Committee Chair.

Section 3: This Plan has been developed in the interest of providing all hazard mitigation protection to populations living in Latah County and the incorporated Cities within its boundary. Through adoption of this Plan, all county and city agencies are requested to develop directives, Standard Operating Procedures, checklists of other supplemental guidance to insure its maximum effectiveness.

This Resolution is duly approved and adopted by the Board of Latah County
Commissioners on the 14th day of October, 2020.

BOARD OF COUNTY COMMISSIONERS
Latah County, Idaho



Thomas C. Lamar, Chair



Kathie LaFortune, Commissioner

ATTEST:



Deputy Clerk

11-14-20



David McGraw, Commissioner



FEMA

October 7, 2020

Ms. Susan Cleverley
State Hazard Mitigation Officer
Idaho Office of Emergency Management
4040 Guard Street, Building 600
Boise, Idaho 83705-5004

Dear Ms. Cleverley:

The Federal Emergency Management Agency (FEMA) Region 10 completed a pre-adoption review of the draft *Latah County Hazard Mitigation Plan*. The attached Mitigation Plan Review Tool documents the Region's review and compliance with all required elements of 44 CFR Part 201.6, as well as identifies the jurisdictions participating in the planning process. This letter serves as Region 10's commitment to approve the plan upon receiving documentation of its adoption by participating jurisdictions.

Formal adoption documentation must be submitted to FEMA Region 10 by at least one jurisdiction within one calendar year of the date of this letter, or the entire plan must be updated and resubmitted for review. Once FEMA approves the plan, the jurisdictions are eligible to apply for FEMA Hazard Mitigation Assistance grants.

Please contact John Schelling, Regional Mitigation Planning Program Manager, at (425) 487-2104 or john.schelling@fema.dhs.gov with any questions.

Sincerely,

A handwritten signature in black ink that reads "Ted Perkins".

Ted Perkins, P.E.
Acting Chief, Risk Analysis Branch
Mitigation Division

Enclosure

KM:vl

FEMA REGION 10 LOCAL MITIGATION PLAN REVIEW TOOL

The *Local Mitigation Plan Review Tool* demonstrates how the Local Mitigation Plan meets the regulation in [44 CFR §201.6](#) and offers States and FEMA Mitigation Planners an opportunity to provide feedback to participating jurisdictions.

1. The [Multi-Jurisdiction Summary Sheet](#) is used to document how each jurisdiction met the requirements in the Plan.
2. The [Regulation Checklist](#) provides a summary of FEMA's evaluation of whether the Plan has addressed all requirements.
3. The [Plan Assessment](#) identifies the plan's strengths as well as documents areas for future improvement.

The FEMA Mitigation Planner must reference the [Local Mitigation Plan Review Guide](#) when completing this *Local Mitigation Plan Review Tool*.

Jurisdiction: Latah County	Title of Plan: Multi-jurisdictional Hazard Mitigation Plan for Latah County	Date of Plan: August 12, 2020
Local Point of Contact: Mike Neelon	Address: Latah County Disaster Services Latah County Annex 200 S Almon Street, Suite #104 Moscow, Idaho 83843	
Title: Emergency Manager		
Agency: Latah County, Idaho		
Phone Number: 208-883-2265		
		E-Mail: mneelon@latah.id.us

State Reviewer: Lorrie Pahl	Title: Mitigation Planner	Date: July 1, 2020, August 12, 2020
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FEMA Reviewer: Kyle McCormick	Title: Mitigation Planner	Date: 9/22/2020 10/1/2020
Date Received in FEMA Region 10	9/21/2020	
Plan Not Approved		
Plan Approvable Pending Adoption	10/7/2020	
Plan Approved		

SECTION 1: MULTI-JURISDICTION SUMMARY SHEET (used only for multi-jurisdictional plans)

INSTRUCTIONS: The Multi-Jurisdiction Summary Spreadsheet is completed by listing each participating jurisdiction and which required Elements for each jurisdiction were 'Met' or 'Not Met,' and when the adoption resolutions were received. This Summary Sheet does not imply that a mini-plan be developed for each jurisdiction; it is used to ensure that each jurisdiction participating in the Plan has been documented and has met the requirements for those Elements (A through E).

MULTI-JURISDICTION SUMMARY SHEET (Add additional pages if necessary)										
#	Jurisdiction Name	Jurisdiction Type (city/borough/district, etc.)	POC	Required Revisions / Comments	Requirements Met (Y/N)					
					A. Planning Process	B. Hazard Identification & Risk Assessment	C. Mitigation Strategy	D. Plan Review, Evaluation & Implementation	E. Plan Adoption	F. State Requirements
1	Latah	County	Mike Neelon		x	x	x	x		
2	Deary	City	John Henderson		x	x	x	x		
3	Genesee	City	Steve Odenborg		x	x	x	x		
4	Moscow	City	Bill Lambert		x	x	x	x		
5	Potlach	City	David Brown		x	x	x	x		
6										
7										
8										
9										
10										

SECTION 2: REGULATION CHECKLIST

INSTRUCTIONS: The Regulation Checklist is completed by FEMA. The purpose of the Checklist is to identify the location of relevant or applicable content in the Plan by Element/sub-element and to determine if each requirement has been 'Met' or 'Not Met.' The 'Required Revisions' summary at the bottom of each Element is completed by FEMA to provide a clear explanation of the revisions that are required for plan approval. Required revisions are explained for each plan sub-element that is 'Not Met.' Sub-elements are referenced in each summary by using the appropriate numbers (A1, B3, etc.), where applicable.

1. REGULATION CHECKLIST		Location in Plan (section and/or page number)	Met	Not Met
Regulation (44 CFR 201.6 Local Mitigation Plans)				
ELEMENT A. PLANNING PROCESS				
A1. Does the Plan document the planning process, including how it was prepared and who was involved in the process for each jurisdiction? (Requirement §201.6(c)(1))	Secs 3.3, 3.4, 3.5 and 3.6 and Appendix E	X		
A2. Does the Plan document an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development as well as other interests to be involved in the planning process? (Requirement §201.6(b)(2))	Secs 3.4, 3.5, 3.6 and Appendix E	X		
A3. Does the Plan document how the public was involved in the planning process during the drafting stage? (Requirement §201.6(b)(1))	Sec 3.6 and Appendix E	X		
A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement §201.6(b)(3))	Secs 3.7, 4.4 and 5.9	X		
A5. Is there discussion of how the community(ies) will continue public participation in the plan maintenance process? (Requirement §201.6(c)(4)(iii))	Sec 7.3 – Page 110-111	X		
A6. Is there a description of the method and schedule for keeping the plan current (monitoring, evaluating and updating the mitigation plan within a 5-year cycle)? (Requirement §201.6(c)(4)(i))	Sec 7.2 – Page 108-110	X		
ELEMENT A: REQUIRED REVISIONS				
ELEMENT B. HAZARD IDENTIFICATION AND RISK ASSESSMENT				
B1. Does the Plan include a description of the type, location, and extent of all natural hazards that can affect each jurisdiction(s)? (Requirement §201.6(c)(2)(i))	Sec 4.2 through 4.10; Appendix F	X		
B2. Does the Plan include information on previous occurrences of hazard events and on the probability of future hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))	Secs 4.2 through 4.10	X		
B3. Is there a description of each identified hazard's impact on the community as well as an overall summary of the community's vulnerability for each jurisdiction? (Requirement §201.6(c)(2)(ii))	Secs 4.2 through 4.10; Appendix F	X		

1. REGULATION CHECKLIST		Location in Plan (section and/or page number)	Met	Not Met
Regulation (44 CFR 201.6 Local Mitigation Plans)				
B4. Does the Plan address NFIP insured structures within the jurisdiction that have been repetitively damaged by floods? (Requirement §201.6(c)(2)(ii))	N/A, no repetitive losses on NFIP insured structures, NFIP 5.3 pgs 55-56, Table 14	X		
ELEMENT B: REQUIRED REVISIONS				
ELEMENT C. MITIGATION STRATEGY				
C1. Does the plan document each jurisdiction's existing authorities, policies, programs and resources and its ability to expand on and improve these existing policies and programs? (Requirement §201.6(c)(3))	Sec 5.2; Secs 5.4-5.8 Pgs. 54-55, 56-76	X		
C2. Does the Plan address each jurisdiction's participation in the NFIP and continued compliance with NFIP requirements, as appropriate? (Requirement §201.6(c)(3)(ii))	Sec 5.3 – pgs. 55-56	X		
C3. Does the Plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards? (Requirement §201.6(c)(3)(i))	Sec 6.2 - Pg. 77	X		
C4. 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? (Requirement §201.6(c)(3)(ii))	Sec 6.3-6.7 describe strategies for county and each jurisdiction. Sections address 6.3.1, 6.4.1, 6.5.1, 6.6.1 and 6.7.1 address impacts of development since last plan.	X		
C5. Does the Plan contain an action plan that describes how the actions identified will be prioritized (including cost benefit review), implemented, and administered by each jurisdiction? (Requirement §201.6(c)(3)(iv)); (Requirement §201.6(c)(3)(iii))	Secs 6.3-6.7; Appendix D	X		
C6. Does the Plan describe a process by which local governments will integrate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate? (Requirement §201.6(c)(4)(ii))	Secs 5.4-5.9	X		
ELEMENT C: REQUIRED REVISIONS				
ELEMENT D. PLAN REVIEW, EVALUATION, AND IMPLEMENTATION (applicable to plan updates only)				
D1. Was the plan revised to reflect changes in development? (Requirement §201.6(d)(3))	Sec 2.11; Secs 6.3.1, 6.4.1, 6.5.1, 6.6.1, 6.7.1	X		

1. REGULATION CHECKLIST		Location in Plan (section and/or page number)	Met	Not Met
Regulation (44 CFR 201.6 Local Mitigation Plans)				
D2. Was the plan revised to reflect progress in local mitigation efforts? (Requirement §201.6(d)(3))	Secs 6.3 through 6.7, with explanation of prior strategies completed, modified or removed	X		
D3. Was the plan revised to reflect changes in priorities? (Requirement §201.6(d)(3))	Secs 6.3 through 6.7	X		
ELEMENT D: REQUIRED REVISIONS				
ELEMENT E. PLAN ADOPTION				
E1. Does the Plan include documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval? (Requirement §201.6(c)(5))				
E2. For multi-jurisdictional plans, has each jurisdiction requesting approval of the plan documented formal plan adoption? (Requirement §201.6(c)(5))				
ELEMENT E: REQUIRED REVISIONS				
ELEMENT F. CWPP FIRE - ADDITIONAL STATE REQUIREMENTS (OPTIONAL FOR STATE REVIEWERS ONLY; NOT TO BE COMPLETED BY FEMA)				
F1. Define Area of concern. Develop a County Risk Assessment and establish resource availability. a) Clear description of WUI area and include map of boundaries/areas. b) Identify elements and process to evaluate wildfire risk and includes map(s) (i.e. fire history, slopes, aspects, weather, vegetation, WUI, etc.) c) Local, state and federal partner preparedness should include such things as equipment, personal, weather resources, etc (i.e. county response plan).				
F2. Establish specific fuels reduction projects and recommendations to reduce structural ignitability and impact on landscapes. a) Includes fuels projects on private, state and federal lands b) Establishes interagency education/outreach efforts c) Identified policy initiatives d) Lists equipment/resource needs e) Establishes CWPP maintenance				

1. REGULATION CHECKLIST		Location in Plan (section and/or page number)	Met	Not Met
Regulation (44 CFR 201.6 Local Mitigation Plans)				
F3. Finalize County Wildfire Protection Plan – Core planning team agree on action plan. HFRA requires that three entities must mutually agree to the final contents and sign a CWPP: • The applicable local government; • The local fire department(s); and <i>The state entity responsible for forest management.</i>				
F4. Pre-Attack Plan (OPTIONAL) • Chain of Command protocol • Interagency communication standards • Evacuation procedures (with shelter information)				
<u>ELEMENT F: REQUIRED REVISIONS</u>				

SECTION 3: PLAN ASSESSMENT

A. Plan Strengths and Opportunities for Improvement

This section provides a discussion of the strengths of the plan document and identifies areas where these could be improved beyond minimum requirements.

Element A: Planning Process

Plan Strengths

- The coordination of the planning process and inclusion of each jurisdiction and multiple stakeholders through public city council meetings and 1 on 1 meetings as well as multiple LEPC meetings is evident in the plan.
- The planning meetings, as described in the planning process sections, summarizes the meetings and is further documented with meeting sign in sheets and agendas in the appendix. This provides detailed context for how this plan was created and how decisions were made.
- Opening all planning meetings to the public as well as the multiple press releases and providing a final version comment period on-line shows the effort to include the public throughout the planning process.

Opportunities for Improvement

- Consider adding additional details on comments received from the public through the planning process. This will aid in providing documentation on how the public helped shape the plan.

Element B: Hazard Identification and Risk Assessment

Strengths:

- Flood tables that show areas impacted by previous flooding events as points of vulnerability is a great way to identify future mitigation action.
- The risk assessment provides detailed historical analysis on previous events that occurred in the planning area and documents how it impacted the communities. This helps provide context the risk assessments and allows for making a tie into the mitigation strategy.
- Additionally, providing data and context for socioeconomic vulnerability, climate change impacts and future development impacts aid tremendously in the identification of potential risks to the communities.

Opportunities:

- While there is great information included in the risk assessment tables in appendix F along with summaries in section 4, consider developing problem statements around the data that is provided. Problem statements identify key issues that describe in detail each jurisdiction's highest vulnerabilities that can be addressed in the mitigation strategy.

Element C: Mitigation Strategy

Strengths:

- The review of each jurisdictions planning mechanisms that could be integrated with the hazard mitigation strategies is very thorough and provides a really great opportunity for the community to begin incorporating this plan with others.

Opportunities:

- Consider adding additional mitigation strategies that are tied back to the risk assessment tables. Having more developed projects identified will help in the implementation.

Element D: Plan Update, Evaluation, and Implementation (*Plan Updates Only*)

Plan Strengths

- Each City and the County has a well-developed synopsis on growth trends and projections that may be impacted by natural hazards. It was also a great idea to put this information into the prioritization of new projects in the mitigation strategies for each community.

B. Resources for Implementing Your Approved Plan

The **Region 10 Integrating Natural Hazard Mitigation into Comprehensive Planning** is a resource specific to Region 10 states and provides examples of how communities are integrating natural hazard mitigation strategies into comprehensive planning. You can find it in the FEMA Library at <http://www.fema.gov/media-library/assets/documents/89725>.

The **Integrating Hazard Mitigation Into Local Planning: Case Studies and Tools for Community Officials** resource provides practical guidance on how to incorporate risk reduction strategies into existing local plans, policies, codes, and programs that guide community development or redevelopment patterns. It includes recommended steps and tools to assist with local integration efforts, along with ideas for overcoming possible impediments, and presents a series of case studies to demonstrate successful integration in practice. You can find it in the FEMA Library at <http://www.fema.gov/library/viewRecord.do?id=7130>.

The **Mitigation Ideas: A Resource for Reducing Risk from Natural Hazards** resource presents ideas for how to mitigate the impacts of different natural hazards, from drought and sea level rise, to severe winter weather and wildfire. The document also includes ideas for actions that communities can take to reduce risk to multiple hazards, such as incorporating a hazard risk assessment into the local development review process. You can find it in the FEMA Library at <http://www.fema.gov/library/viewRecord.do?id=6938>.

The **Local Mitigation Planning Handbook** provides guidance to local governments on developing or updating hazard mitigation plans to meet and go above the requirements. You can find it in the FEMA Library at <http://www.fema.gov/library/viewRecord.do?id=7209>.

The **Integration Hazard Mitigation and Climate Adaptation Planning: Case Studies and Lessons Learned** resource is a 2014 ICLEI publication for San Diego with a clear methodology that could assist in next steps for integration impacts of climate change throughout mitigation actions. <http://iclei.usa.org/wp-content/uploads/2015/08/Integrating-Hazard-Mitigation-and-Climate-Adaptation-Planning.pdf>

The **Local Mitigation Plan Review Guide and Tool** resource is available through FEMA's Library and should be referred to for the next plan update. <http://www.fema.gov/library/viewRecord.do?id=4859>

The **Tribal Multi-Hazard Mitigation Planning Guidance**: This resource is specific to tribal governments developing or updating tribal mitigation plans. It covers all aspects of tribal planning requirements and the steps to developing tribal mitigation plans. You can find the document in the FEMA Library at <http://www.fema.gov/media-library/assets/documents/18355>

Volcanic Eruption Mitigation Measures: For information on Mitigation Actions for Volcanic Eruptions that would satisfy the C4 requirement, please visit: <http://earthzine.org/2011/03/21/volcanic-crisis-management-and-mitigation-strategies-a-multi-risk-framework-case-study/> and <http://www.gvess.org/publ.html>.

The FEMA Region 10 **Risk Mapping, Analysis, and Planning program (Risk MAP)** releases a monthly newsletter that includes information about upcoming events and training opportunities, as well as hazard and risk related news from around the Region. Past newsletters can be viewed at <http://www.starr-team.com/starr/RegionalWorkspaces/RegionX/Pages/default.aspx>. If you would like to receive future newsletters, email rxnewsletter@starr-team.com and ask to be included.

The mitigation strategy may include eligible projects to be funded through FEMA's hazard mitigation grant programs (Pre-Disaster Mitigation, Hazard Mitigation Grant Program, and Flood Mitigation Assistance). Contact your State Hazard Mitigation Planner, Lorrie Pahl at lpahl@imd.idaho.gov, for more information.

RESOLUTION 2021-__

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MOSCOW, A MUNICIPAL CORPORATION OF THE STATE OF IDAHO, DECLARING SUPPORT AND ADOPTION OF THE LATAH COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN.

WHEREAS, the City Council of Moscow supports the Latah County, Idaho, Multi-Jurisdictional Hazard Mitigation Plan, and

WHEREAS, the City of Moscow has participated in the development of the Latah County Multi-Jurisdictional Hazard Mitigation, and

WHEREAS, the Latah County Multi-Jurisdictional Hazardous Mitigation Plan will be utilized as a guide for planning for hazard mitigation projects and will allow the City to continue to receive various grant funds for emergency response planning and equipment as well as other purposes as deemed appropriate by the City Council of Moscow;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Moscow does hereby adopt and support and will facilitate the implementation of the Latah County Multi-Jurisdictional Hazard Mitigation Plan.

PASSED AND APPROVED by the Mayor and the Council of the City of Moscow, Idaho, this ____ day of _____, 2021.

Bill Lambert, Mayor

ATTEST:

Laurie Hopkins, City Clerk