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Idaho Multi-Hazard Risk Portfolio

A product of the Cooperating Technical Partners Grant EMS-2014-CA-0011. Thank you FEMA RX for funding the creation of this portfolio.

The Idaho Multi-Hazard Risk Portfolio would not be possible without the assistance from numerous people from the following agencies and partnerships.

**Flood Technical Advisory Group**
- Environmental Protection Agency
- Federal Emergency Management Agency
- Idaho Bureau of Homeland Security
- Idaho Transportation Department
- Idaho Department of Environmental Quality
- Idaho Department of Water Resources
- National Oceanic and Atmospheric Administration
- United States Army Corps of Engineers
- United States Bureau of Reclamation
- United States Department of Agriculture
- United States Geological Survey

**Fire Technical Advisory Group**
- Bureau of Land Management
- Federal Emergency Management Agency
- Idaho Bureau of Homeland Security
- Idaho Department of Agriculture
- Idaho Department of Insurance
- United States Forest Service

**Seismic Technical Advisory Group**
- Boise Independent School District
- Boise State University
- Federal Emergency Management Agency
- Idaho Bureau of Homeland Security
- Idaho Department of Parks and Recreation
- Idaho Division of Building Safety
- Idaho National Laboratory
- Idaho Geological Survey
- SuperValu, Inc.
- United States Geological Survey

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1. Left: South Fork Boise River Debris Flow in Elk Fire Complex Burn, USDA Forest Service (2013)
2. Middle: Borah Peak Fault Scarp, USGS Earthquake Hazards Program (1983)
INTRODUCTION

Natural disasters are serious threats that endanger lives and property in Idaho. The Idaho Multi-Hazard Risk Portfolio (IMHRP) is a tool designed to evaluate the risk of flood, wildfire, and seismic activity to life and private property so that both governments and individuals within the state can be better plan for, respond to, and mitigate the effects of natural hazards. IMHRP presents the geospatial natural hazard risk inventory as a desk reference to convey a common vision of flood, wildfire, and seismic hazards throughout the state. Flooding, wildfires, and seismic events happen throughout Idaho every year. This 2014 update to the previous two iterations of the portfolio incorporates a number of datasets to provide a detailed overview of the risk of the three hazards broken down into 84 watersheds within Idaho.

Flood

Flooding is perhaps the single most common, costly, and predictable natural hazard in Idaho. Riverine flooding continues to be hazardous to the population living near streams and other water bodies, especially when spring rains compound runoff from mountain snow pack into water systems near areas of concentrated population. Flooding can damage property and infrastructure, especially rural roads and bridges, as well as displace the population living in imperiled areas.

Seismic

Idaho sits between the Pacific Coast’s fault lines and the volcanic hotspot of Yellowstone to the east, as well as within the Basin and Range tectonic province. This translates into a seismic risk throughout all of Idaho. Within the state, there are a small number of quaternary fault lines that are considered to be hazardous. Seismic events in Idaho are common, though significant damage to people and property resulting from these events is rare. The most significant seismic disaster in Idaho is the 1983 Borah Peak earthquake which registered a 6.9 on the moment magnitude scale. The quake occurred outside of Challis, Idaho, on a fault along the Lost River Range, caused millions of dollars worth of damage to private property and public infrastructure, and took the lives of two children. While the vast majority of seismic events go unnoticed, the potential for significant events exist in the geologic features in Idaho and surrounding states.

Wildfire

Wildfires within Idaho are very common during the summer months. Every year, hundreds of thousands of acres on private and public lands burn in wildfire events. The majority of these events occur naturally as the result of lightning strikes, but also occur because of human activity. Oftentimes these fires occur in the Wildland-Urban Interface (WUI), the area where homes, communities and transportation corridors mesh with undeveloped areas. Property within these regions is at a serious risk to damage resulting from wildfires. A number of factors contribute to the overall wildfire risk; the condition of the forest or rangeland, the resources available to suppression efforts, the potential for fire-related mass movements, the population and the amount of private property within the WUI.
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</tr>
<tr>
<td>Shelley</td>
<td>American Falls</td>
</tr>
<tr>
<td>Shoshone</td>
<td>Little Wood</td>
</tr>
<tr>
<td>Smelterville</td>
<td>South Fork Coeur d’Alene</td>
</tr>
<tr>
<td>Soda Springs</td>
<td>Bear Lake</td>
</tr>
<tr>
<td>Spencer</td>
<td>Beaver-Camas</td>
</tr>
<tr>
<td>Spirit Lake</td>
<td>Pend Oreille Lake</td>
</tr>
<tr>
<td>St. Anthony</td>
<td>Lower Hensys</td>
</tr>
<tr>
<td>St. Charles</td>
<td>Bear Lake</td>
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<tr>
<td>St. Maries</td>
<td>St. Joe</td>
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<tr>
<td>Stanley</td>
<td>Upper Salmon</td>
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<tr>
<td>Star</td>
<td>Lower Boise</td>
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<tr>
<td>State Line</td>
<td>Upper Spokane</td>
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<tr>
<td>Stites</td>
<td>South Fork Clearwater</td>
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<tr>
<td>Sugar City</td>
<td>Teton</td>
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<tr>
<td>Sun Valley</td>
<td>Big Wood</td>
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<tr>
<td>Swan Valley</td>
<td>Palisades</td>
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<tr>
<td>Sensed</td>
<td>Hangman</td>
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<td>Teton</td>
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<td>Tetonia</td>
<td>Teton</td>
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<tr>
<td>Troy</td>
<td>Clearwater</td>
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<tr>
<td>Twin Falls</td>
<td>Upper Snake-Rock</td>
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<td>Ucon</td>
<td>Idaho Falls</td>
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<td>Victor</td>
<td>Teton</td>
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<td>South Fork Coeur d’Alene</td>
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<td>Weippe</td>
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<td>Upper Snake-Rock</td>
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<td>Whitebird</td>
<td>Lower Salmon</td>
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<tr>
<td>Wilder</td>
<td>Lower Boise</td>
</tr>
<tr>
<td>Winchester</td>
<td>Clearwater</td>
</tr>
<tr>
<td>Worley</td>
<td>Hangman</td>
</tr>
</tbody>
</table>
Hazard Characterization and the Ranking Process

To determine the overall risk for each hazard, the team at Idaho Bureau of Homeland Security (IBHS), developed a series of inputs that well represented the hazards and consequences of each natural hazard and watershed. The methodology and content of the report was vetted through a series of internal and external review processes which included members of Technical Advisory Groups for each natural hazard. Each input is represented on the maps, narratives, and tables of each watershed in the report. The results of the equation were broken down into three risk categories: High, Medium, and Low. The risk rank for each hazard was then placed into a logic table to determine the watershed’s overall risk rank. The equation, methodologies, and logic of the ranking in full can be found on the following pages.

Flood

The flood section of the Idaho Multi-Hazard Risk Portfolio is built upon the previous two iterations of the report: the Idaho Flood Risk Portfolio (2011) and the Idaho Flood and Seismic Risk Portfolio (IFSRP, 2013). The analysis included life and property, population and the percentage of the watershed that is privately owned. This third version of the portfolio hones the analysis to include both the population within the watershed, the population at risk of flooding based, as well as essential facilities at risk of flooding as the consequence portion of the risk calculation. The hazards taken into consideration are the presence of levees and hazardous dams, determined by the hazard classification methodology used by Idaho Department of Water Resources (note: the classification of dam hazard does not imply dam risk, it is merely a categorization according to the potential downstream damage in the event of a breach or other catastrophe).

Each factor in the risk equation is ordered from smallest to largest and assigned a ranking value from one upward. For example, when the population input is sorted, the Lower Boise is given a 78 because it has the highest population in the state, whereas the watersheds with no permanent inhabitants, the least populated, are given a 1. Next, the inputs are weighted according to their contribution to overall flood risk and added together with the other consequence factors and hazard factors, respectively. The consequence subtotal is multiplied by the hazard subtotal and the watersheds are arranged by their overall risk score. The 25 with the highest score are considered to be high risk, the next 25 are considered to be of medium risk, and the remainder are considered to be of low risk. It was determined that 25 was a natural grouping in the number of watersheds in Idaho (84 in this portfolio). The table used to determine the risk, including all inputs, weights, and ranks can be found on the following page.

\[
Risk \ Score = C(P_w + F_w + E_w) \times H(D_w + L_w)
\]

\(P_w\) = Weighted Population score
\(F_w\) = Weighted Population at Risk of Flooding score
\(E_w\) = Weighted Essential Facilities in the Floodplain score
\(D_w\) = Weighted Dams of Concern score
\(L_w\) = Weighted Levee score
<table>
<thead>
<tr>
<th>Watershed</th>
<th>Risk Area</th>
<th>2010 Population</th>
<th>Pop. Rank</th>
<th>Pop. % of Risk of Flood</th>
<th>Flood Pop. Rank</th>
<th>Pop. % of Pop. at Risk</th>
<th>Physical Facilities in Vulnerable Areas</th>
<th>Flooded % of Facilities in Vulnerable Areas</th>
<th>Dam Hazard Rank</th>
<th>Inundation Type</th>
<th>Inundation Rank</th>
<th>Population Dam Weighted</th>
<th>Flooded Facilities Dam Weighted</th>
<th>Consequence Damage</th>
<th>Dam Hazard Dam Weighted</th>
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</table>
Wildfire

This third update to the Risk Portfolio includes the first analysis of wildfire risk to people and property in Idaho. Like the flood section, the wildfire risk analysis compiles a series of inputs that depict wildfire hazard to communities and consequences of wildfire events: life and property.

The Relative Risk to Communities and Ecosystems from Uncharacteristic Wildland Fire in Idaho (2009) data from Idaho Department of Lands, shown to the right, was used to develop the hazard component of the equation. The dataset breaks Idaho down into five different categories. To use the data in the overall risk equation, the layer was clipped to the boundaries of each watershed; the area of each category determined in relation to the overall area of the watershed was found so that the percentage of each watershed the category occupies could be entered into the equation table and weighted. The consequence portion of the risk calculation includes the overall population of the watershed and the number of structures within the Wildland-Urban Interface (IBHS SHMP, 2013) of the watershed (note: the WUI is not present in every watershed). If there was a lack of WUI, a 0 was entered into the equation table for the sake of consistency.

Each consequence faction in the risk equation is ordered from smallest to largest and assigned a ranking value from one upward. For example, when the population input is sorted, the Lower Boise is given a 78 because it has the highest population in the state, whereas the watersheds with no permanent inhabitants, the least populated, are given a 1. Next, the inputs are weighted according to their relative contribution to wildfire risk; the percentage of the watershed that is high risk is weighted more heavily than the percentage of the watershed that is low risk. The weighted values of each risk component are then added together to determine the consequence subtotal and the hazard subtotal, respectively. The product of the multiplication of these two values gives the overall risk score.

The 25 with the highest score are considered to be high risk, the next 25 are considered to be of medium risk, and the remainder are considered to be of low risk. The table used to determine the risk, including all inputs, weights, and ranks can be found on the following page. It was determined that 25 was a natural number for the high and medium risk groups for the 84 watersheds in Idaho.

\[
Risk \ Score = C(P_w + W_w) \times H(R_w)
\]

\(P_w\) = Weighted Population score
\(W_w\) = Weighted Structures in WUI score
\(R_w\) = Weighted Overall Wildfire Risk Score
## Wildfire Risk Ranking Table

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<tr>
<th>Watershed</th>
<th>MDC</th>
<th>% HUC Low Risk</th>
<th>% HUC Mod Risk</th>
<th>% HUC High Risk</th>
<th>% Burned</th>
<th>% Mitigated</th>
<th>% Unmitigated</th>
<th>% Public Risk</th>
<th>% Public Mitigated</th>
<th>% Public Unmitigated</th>
<th>Total Risk</th>
<th>Rating</th>
<th>Weight</th>
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<tr>
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<td>47.00</td>
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</tr>
</tbody>
</table>

Idaho Multi-Hazard Risk Portfolio
Seismic

This third update to the Risk Portfolio builds upon the last Idaho Flood and Seismic Risk Portfolio’s analysis of seismic risk in Idaho to include a comprehensive analysis of each individual watershed.

Regional Geologic History

Geologic periods are measured on timescales of millions of years, far beyond those measured in human life. The two most recent periods, the Neogene (23.03-2.58 million years ago) and Quaternary (~2.6 million years to present) are times in which most of the current regional tectonic regimes were established. Prior to and during the early Neogene period, the entire west coast underwent subduction, the process of denser oceanic crust converging with and sliding under more buoyant North American continental crust. This caused regional compression and thickening of the continental crust, allowing mountain ranges to form. Remnants of this subduction still occur across the rim of the Pacific Northwest but a majority of this ancient oceanic tectonic plate was subducted during the Neogene, transforming what was a convergence zone into a strike-slip zone with plates sliding past each along the San Andreas Fault in California. This switch from a convergence zone with compressional stresses in the early Neogene to a zone with those continental stresses no longer applied allowed for extension and thinning of the crust which continues today. This has resulted in a series of north-south trending extensional faults known as the Basin and Range Province, which includes portions of southern and eastern Idaho.

Yellowstone Tectonic Parabola

Approximately 15 million years ago a hot plume formed under the crust of the Idaho-Oregon-Nevada border. This plume, termed the Yellowstone Hotspot based off its present location below Yellowstone National Park, remained stationary while continental crust slid slowly to the southwest. While the crust moved over the hotspot, crustal rocks melted and formed massive eruptive volcanic centers which become younger to the northeast. The figure to the right shows the age progression of seismic activity leading away from the ancient Yellowstone eruptive centers in a parabolic shape around the eastern Snake River Plain. The Central Idaho Seismic Zone and the Intermountain Seismic Belt both appear to have relationships with this hotspot track. It should be noted that the other seismic zones within Idaho don’t appear to have a relationship with this model. For more details on the geologic history and hazards, please refer to Putting Down Roots in Earthquake Country: Your Handbook for Earthquakes in Idaho (URL: http://www.bhs.idaho.gov/Pages/Preparedness/Hazards/NaturalHazards/Earthquake.aspx)
Risk Ranking

This third update to the Risk Portfolio builds upon the last Idaho Flood and Seismic Risk Portfolio’s analysis of seismic risk in Idaho to include a comprehensive analysis of each individual watershed.

The Ground Acceleration Map (2014) data (included in the Figure on page 13) and the Quaternary Fault (2014) data (shown to the right) from United States Geological Survey, was used to develop the hazard component of the equation. Peak Ground Acceleration is a predicted measurement of ground motion that may be equal to or exceeded 2% annually over a 50 year period. The dataset breaks the likelihood of acceleration down into five different categories. To use the data in the overall risk equation, the layer was clipped to the boundaries of each watershed, the area of each risk category determined in relation to the overall area of the watershed was found so that the percentage of each watershed the category occupies could be entered into the equation table and weighted. The consequence portion of the risk calculation includes the overall population of the watershed and the number of essential facilities within 25 miles of a quaternary fault (note: faults used in the analysis are from the USGS Quaternary Fault database and only includes faults less than 130,000 years of age).

Each consequence fraction in the risk equation is ordered from smallest to largest and assigned a ranking value from one upward. For example, when the population input is sorted, the Lower Boise is given a 78 because it has the highest population in the state, whereas the watersheds with no permanent inhabitants, the least populated, are given a 1. Next, the inputs are weighted according to their relative contribution to seismic risk; the percentage of the watershed that is high risk is weighted more heavily than the percentage of the watershed that is low risk. The weighted values of each risk component are then added together to determine the consequence subtotal and the hazard subtotal, respectively. The product of the multiplication of these two values gives the overall risk score.

The 25 with the highest score are considered to be high risk, the next 25 are considered to be of medium risk, and the remainder are considered to be of low risk. The table used to determine the risk, including all inputs, weights, and ranks can be found on the following page.

\[
P_w = \text{Weighted Population score} \\
E_w = \text{Weighted Essential Facilities within 25 Miles of a Fault score} \\
GA_w = \text{Weighted Ground Acceleration Subtotal} \\
F_w = \text{Weighted Percentage of Watershed within 25 Miles of a Fault}
\]

\[
Risk Score = C(R_w + E_w) \times H(GA_w + F_w)
\]
Idaho Multi-Hazard Risk Portfolio
Seismic Risk Ranking Table
Watershed
Blackfoot
Teton
Middle Bear
Portneuf
Idaho Falls
Bear Lake
Lower Henrys
Payette
North Fork Payette
Big Wood
American Falls
Lower Boise
Upper Henrys
Lower Bear-Malad
Weiser
Upper Salmon
Willow
Big Lost
Middle Snake-Payette
Lemhi
Beaver-Camas
Brownlee Reservoir
Middle Salmon-Panther
Lake Walcott
Little Salmon
Upper Spokane
Palisades
South Fork Coeur d'Alene
Upper Snake-Rock
Pend Oreille Lake
Coeur d'Alene Lake
Little Wood
Boise-Mores
Clearwater
Middle Fork Payette
Palouse
C.J. Strike Reservoir
Middle Snake-Succor
Goose
Medicine Lodge
South Fork Payette
Lower Snake-Asotin
St. Joe
Raft
Lower Kootenai
South Fork Clearwater
Curlew Valley
Little Lost
Salt
Camas
Pahsimeroi
Lower Clark Fork
Priest
Central Bear
Lower Salmon
Hangman
Middle Fork Clearwater
South Fork Boise
Pend Oreille
Upper Coeur d'Alene
Moyie
Salmon Falls
Little Spokane
Bruneau
Lower North Fork Clearwater
South Fork Salmon
North and Middle Forks Boise
Upper Owyhee
Birch
Lochsa
Middle Salmon-Chamberlain
Jordan
Upper Middle Fork Salmon
Rock
Hells Canyon
Lower Selway
Middle Owyhee
Lower Middle Fork Salmon
Little Bear-Logan
East Little Owyhee
Upper Selway
Upper North Fork Clearwater
Middle Kootenai
South Fork Owyhee
WEIGHTS

14 | P a g e

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27668
14847
86445
33155
9713
30196
30522
9791
23221
77212
573637
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3867
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5185
5895
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2399
99092
761
11035
107887
37818
34838
10005
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333
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1034
255
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3623
135
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1726
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Pop.
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1
1
1
1
1
1
1

Est.
Facilities
Weight
16.8
21.6
15.6
13.2
19.2
20.4
15.6
22.8
19.2
18
20.4
24
8.4
10.8
14.4
12
7.2
13.2
9.6
4.8
8.4
1.2
1.2
1.2
4.8
1.2
4.8
1.2
1.2
1.2
1.2
1.2
2.4
1.2
2.4
1.2
1.2
9.6
2.4
2.4
6
1.2
1.2
1.2
1.2
1.2
3.6
2.4
1.2
1.2
2.4
1.2
1.2
3.6
1.2
2.4
1.2
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1.2
1.2
2.4
1.2
2.4
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1.2
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1.2
1.2
1.2
1.2
1.2
1.2
1.2
1.2

Ground
Accel Low
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.15
0.00
0.15
0.04
0.69
0.00
0.00
0.00
0.00
0.00
0.00
0.75
0.00
0.00
0.05
0.00
0.68
0.00
0.69
0.00
0.02
0.92
0.75
0.75
0.43
0.00
1.00
0.00
1.00
0.87
1.00
0.21
0.00
0.00
1.00
0.66
0.00
1.00
1.00
0.00
0.00
0.00
0.00
0.00
0.20
1.00
0.00
0.80
1.00
1.00
0.00
1.00
0.00
1.00
0.94
1.00
1.00
1.00
0.00
0.00
1.00
0.00
0.84
0.12
1.00
0.00
1.00
0.64
1.00
1.00
0.00
0.00
0.71
0.73
0.89
0.92
1.00
0.25

GA Low
Weight
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.04
0.00
0.04
0.01
0.17
0.00
0.00
0.00
0.00
0.00
0.00
0.19
0.00
0.00
0.01
0.00
0.17
0.00
0.17
0.00
0.01
0.23
0.19
0.19
0.11
0.00
0.25
0.00
0.25
0.22
0.25
0.05
0.00
0.00
0.25
0.17
0.00
0.25
0.25
0.00
0.00
0.00
0.00
0.00
0.05
0.25
0.00
0.20
0.25
0.25
0.00
0.25
0.00
0.25
0.24
0.25
0.25
0.25
0.00
0.00
0.25
0.00
0.21
0.03
0.25
0.00
0.25
0.16
0.25
0.25
0.00
0.00
0.18
0.18
0.22
0.23
0.25

GA LowModerate
0.00
0.00
0.00
0.03
0.06
0.00
0.00
0.55
0.06
0.23
0.53
0.31
0.00
0.00
0.46
0.00
0.00
0.31
0.25
0.00
0.08
0.63
0.13
0.24
0.79
0.31
0.00
0.98
0.08
0.25
0.25
0.37
0.17
0.00
0.00
0.00
0.13
0.00
0.79
0.22
0.00
0.00
0.34
0.48
0.00
0.00
0.00
0.00
0.00
0.51
0.00
0.80
0.00
0.00
0.20
0.00
0.00
0.20
0.00
1.00
0.00
0.06
0.00
0.00
0.00
0.13
0.00
0.00
0.02
0.16
0.67
0.00
0.00
0.00
0.36
0.00
0.00
0.00
0.00
0.29
0.27
0.11
0.08
0.00
0.35

GA LowMod
Weight
0.00
0.00
0.00
0.01
0.02
0.00
0.00
0.19
0.02
0.08
0.19
0.11
0.00
0.00
0.16
0.00
0.00
0.11
0.09
0.00
0.03
0.22
0.05
0.08
0.28
0.11
0.00
0.34
0.03
0.09
0.09
0.13
0.06
0.00
0.00
0.00
0.05
0.00
0.28
0.08
0.00
0.00
0.12
0.17
0.00
0.00
0.00
0.00
0.00
0.18
0.00
0.28
0.00
0.00
0.07
0.00
0.00
0.07
0.00
0.35
0.00
0.02
0.00
0.00
0.00
0.05
0.00
0.00
0.01
0.06
0.23
0.00
0.00
0.00
0.13
0.00
0.00
0.00
0.00
0.10
0.09
0.04
0.03
0.00

GA
Mod
0.38
0.48
0.00
0.58
0.93
0.00
0.73
0.30
0.94
0.33
0.43
0.00
0.02
0.23
0.54
0.00
0.20
0.29
0.00
0.16
0.48
0.32
0.56
0.08
0.21
0.00
0.03
0.00
0.00
0.00
0.00
0.20
0.83
0.00
0.97
0.00
0.00
0.00
0.00
0.54
0.29
0.00
0.00
0.52
0.00
0.00
0.53
0.32
0.00
0.49
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.75
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.75
0.70
0.00
0.34
0.00
0.21
0.00
0.00
0.00
0.00
0.00
0.00
0.53
0.00
0.00
0.00
0.00
0.00
0.00
0.40

GA Mod
Weight
0.15
0.19
0.00
0.23
0.37
0.00
0.29
0.12
0.38
0.13
0.17
0.00
0.01
0.09
0.22
0.00
0.08
0.12
0.00
0.06
0.19
0.13
0.22
0.03
0.08
0.00
0.01
0.00
0.00
0.00
0.00
0.08
0.33
0.00
0.39
0.00
0.00
0.00
0.00
0.22
0.12
0.00
0.00
0.21
0.00
0.00
0.21
0.13
0.00
0.20
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.30
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.30
0.28
0.00
0.14
0.00
0.08
0.00
0.00
0.00
0.00
0.00
0.00
0.21
0.00
0.00
0.00
0.00
0.00
0.00

GA
ModHigh
0.61
0.52
1.00
0.39
0.01
1.00
0.27
0.00
0.00
0.28
0.00
0.00
0.57
0.77
0.00
1.00
0.80
0.40
0.00
0.84
0.38
0.00
0.31
0.00
0.00
0.00
0.75
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.03
0.00
0.00
0.00
0.00
0.23
0.71
0.00
0.00
0.00
0.00
0.00
0.47
0.68
0.40
0.00
1.00
0.00
0.00
1.00
0.00
0.00
0.00
0.05
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.12
0.30
0.00
0.64
0.00
0.00
0.00
1.00
0.00
0.00
0.00
0.00
0.47
1.00
0.00
0.00
0.00
0.00
0.00
0.50

GA ModHigh
Weight
0.31
0.26
0.50
0.20
0.01
0.50
0.14
0.00
0.00
0.14
0.00
0.00
0.29
0.39
0.00
0.50
0.40
0.20
0.00
0.42
0.19
0.00
0.16
0.00
0.00
0.00
0.38
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.02
0.00
0.00
0.00
0.00
0.12
0.36
0.00
0.00
0.00
0.00
0.00
0.24
0.34
0.20
0.00
0.50
0.00
0.00
0.50
0.00
0.00
0.00
0.03
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.06
0.15
0.00
0.32
0.00
0.00
0.00
0.50
0.00
0.00
0.00
0.00
0.24
0.50
0.00
0.00
0.00
0.00
0.00

GA
High
0.01
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.41
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.05
0.00
0.00
0.00
0.00
0.00
0.23
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.60
0.00
0.00
0.00
0.00
0.00
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0.00
0.00
0.00
0.00
0.00
0.00
0.00
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0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.70

GA High
Weight
0.007
0
0
0
0
0
0
0
0
0
0
0
0.287
0
0
0
0
0
0
0
0.035
0
0
0
0
0
0.161
0
0
0
0
0
0
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0.42
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0
0
0
0
0
0
0

% HUC within
25 miles of Q
Fault
0.68
1.00
1.00
0.69
0.94
1.00
0.86
1.00
1.00
0.51
0.19
0.47
0.91
1.00
1.00
0.97
0.73
0.98
0.97
0.93
0.75
0.95
0.27
0.13
0.88
0.00
1.00
0.00
0.00
0.00
0.00
0.09
0.16
0.00
0.79
0.00
0.00
0.01
0.00
0.94
0.76
0.00
0.00
0.06
0.00
0.00
1.00
1.00
1.00
0.11
1.00
0.00
0.00
1.00
0.08
0.00
0.00
0.35
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.47
0.52
0.00
1.00
0.00
0.00
0.00
0.50
0.00
0.16
0.00
0.00
0.12
1.00
0.00
0.00
0.00
0.00
0.00
0.20

% HUC
Weight
0.14
0.20
0.20
0.14
0.19
0.20
0.17
0.20
0.20
0.10
0.04
0.09
0.18
0.20
0.20
0.19
0.15
0.20
0.19
0.19
0.15
0.19
0.05
0.03
0.18
0.00
0.20
0.00
0.00
0.00
0.00
0.02
0.03
0.00
0.16
0.00
0.00
0.00
0.00
0.19
0.15
0.00
0.00
0.01
0.00
0.00
0.20
0.20
0.20
0.02
0.20
0.00
0.00
0.20
0.02
0.00
0.00
0.07
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.09
0.10
0.00
0.20
0.00
0.00
0.00
0.10
0.00
0.03
0.00
0.00
0.02
0.20
0.00
0.00
0.00
0.00
0.00

Pop.
Weighted
146
128
120
150
136
106
130
132
108
124
148
156
80
88
100
82
96
90
116
74
78
92
94
142
76
152
50
114
154
140
138
110
84
144
62
134
126
122
98
52
42
118
102
72
112
104
36
34
28
58
30
66
86
26
70
68
64
32
60
40
56
54
48
46
44
20
16
38
8
24
18
22
6
14
10
12
10
4
2
2
2
2
2
2

Est.
Facilities
Weight
16.8
21.6
15.6
13.2
19.2
20.4
15.6
22.8
19.2
18
20.4
24
8.4
10.8
14.4
12
7.2
13.2
9.6
4.8
8.4
1.2
1.2
1.2
4.8
1.2
4.8
1.2
1.2
1.2
1.2
1.2
2.4
1.2
2.4
1.2
1.2
9.6
2.4
2.4
6
1.2
1.2
1.2
1.2
1.2
3.6
2.4
1.2
1.2
2.4
1.2
1.2
3.6
1.2
2.4
1.2
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1.2
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1.2
1.2
1.2
1.2
1.2
2.4
1.2
2.4
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1.2
1.2
1.2
1.2
1.2
1.2
1.2
1.2
1.2
1.2
1.2
1.2

Consequence
Subtotal
162.8
149.6
135.6
163.2
155.2
126.4
145.6
154.8
127.2
142
168.4
180
88.4
98.8
114.4
94
103.2
103.2
125.6
78.8
86.4
93.2
95.2
143.2
80.8
153.2
54.8
115.2
155.2
141.2
139.2
111.2
86.4
145.2
64.4
135.2
127.2
131.6
100.4
54.4
48
119.2
103.2
73.2
113.2
105.2
39.6
36.4
29.2
59.2
32.4
67.2
87.2
29.6
71.2
70.4
65.2
33.2
61.2
41.2
57.2
55.2
49.2
47.2
45.2
21.2
18.4
39.2
10.4
25.2
19.2
23.2
7.2
15.2
11.2
13.2
11.2
5.2
3.2
3.2
3.2
3.2
3.2
3.2

% HUC
Weight
0.14
0.20
0.20
0.14
0.19
0.20
0.17
0.20
0.20
0.10
0.04
0.09
0.18
0.20
0.20
0.19
0.15
0.20
0.19
0.19
0.15
0.19
0.05
0.03
0.18
0.00
0.20
0.00
0.00
0.00
0.00
0.02
0.03
0.00
0.16
0.00
0.00
0.00
0.00
0.19
0.15
0.00
0.00
0.01
0.00
0.00
0.20
0.20
0.20
0.02
0.20
0.00
0.00
0.20
0.02
0.00
0.00
0.07
0.00
0.00
0.00
0.00
0.00
0.00
0.00
0.09
0.10
0.00
0.20
0.00
0.00
0.00
0.10
0.00
0.03
0.00
0.00
0.02
0.20
0.00
0.00
0.00
0.00
0.00

Ground
Acceleration
Subtotal
0.46
0.45
0.50
0.44
0.40
0.50
0.43
0.35
0.40
0.39
0.37
0.28
0.58
0.48
0.38
0.50
0.48
0.42
0.28
0.48
0.45
0.36
0.42
0.29
0.36
0.28
0.55
0.35
0.26
0.28
0.28
0.32
0.39
0.25
0.40
0.25
0.26
0.25
0.33
0.41
0.47
0.25
0.28
0.38
0.25
0.25
0.45
0.47
0.62
0.37
0.50
0.33
0.25
0.50
0.27
0.25
0.25
0.40
0.25
0.35
0.25
0.26
0.25
0.25
0.25
0.41
0.43
0.25
0.46
0.27
0.35
0.25
0.50
0.25
0.29
0.25
0.25
0.45
0.50
0.28
0.28
0.26
0.26
0.25

Hazard
Subtotal
0.60
0.65
0.70
0.57
0.59
0.70
0.60
0.55
0.60
0.49
0.41
0.37
0.76
0.68
0.58
0.69
0.63
0.62
0.47
0.67
0.60
0.55
0.48
0.31
0.54
0.28
0.75
0.35
0.26
0.28
0.28
0.33
0.42
0.25
0.56
0.25
0.26
0.25
0.33
0.60
0.62
0.25
0.28
0.39
0.25
0.25
0.65
0.67
0.82
0.40
0.70
0.33
0.25
0.70
0.29
0.25
0.25
0.46
0.25
0.35
0.25
0.26
0.25
0.25
0.25
0.50
0.53
0.25
0.66
0.27
0.35
0.25
0.60
0.25
0.32
0.25
0.25
0.47
0.70
0.28
0.28
0.26
0.26
0.25

Total
Risk
97.58266
97.47731
94.91999
93.83496
90.95138
88.48
87.08135
85.13999
75.9384
69.79237
68.29642
67.37868
67.27937
66.8876
65.93053
65.31362
64.51954
64.06714
59.02673
52.75383
51.48504
51.30717
45.55093
44.58025
43.39483
43.0492
40.9904
40.0896
40.0416
38.83
38.28
37.1922
36.66568
36.3
36.14185
33.8
33.4536
33.29318
33.0316
32.46718
29.93465
29.8
29.3088
28.46672
28.3
26.3
25.58693
24.3152
23.944
23.50991
22.68
22.176
21.8
20.72
20.29447
17.6
16.3
15.40881
15.3
14.42
14.3
14.1312
12.3
11.8
11.3
10.56845
9.808791
9.8
6.8952
6.7032
6.691978
5.8
4.318432
3.8
3.569315
3.3
2.8
2.450747
2.24
0.8928
0.8864
0.8352
0.8256
0.8


Cumulative Risk Score

To determine the overall risk category of each watershed, the final overall ranking, Low, Medium, or High, for each watershed was run through a logical analysis. If the watershed has at least one ‘High’ risk hazard, it cannot be low. Conversely, if the watershed has no high categorization for any of the three hazards, it cannot be high. The logic can be found below,

Overall Risk Determination Logic

If not H, then (M or L)
If (not H and not M), then L
If 2 H, then H
If 2 M, then M
If 2 L, then L
If [(1 H and 1 M) and 1 L] then Professional Judgment
American Falls

Risk Rank: M

Introduction

Areas of concentrated population within the American Falls watershed include Aberdeen, American Falls, Arbon Valley, Blackfoot, Firth, Idaho Falls, Pocatello and Shelley. There are 77,212 total people who live within the watershed, of which 2,935 are at risk of flooding. The watershed is roughly half privately owned.

What is the risk?

The watershed is susceptible to flash flooding due to its minimal slope and significant rural agricultural and urban development along the Snake River. Flood hazards can also include seasonal high stream flows that exceed bankfull discharge as can be seen on the graph below. According to AHMPs for counties within the watershed, 58 flood events have been reported. Most of those reported events are flash floods. There are 5 high or significant hazard dams in the American Falls watershed, including the Genes State and Shingle Flats dams. There are 13 communities participating in the National Flood Insurance Program (NFIP), with 90 policies contributing to $62,994 of premiums paid in exchange for $22,605 of coverage.

LIDAR data availability

LIDAR availability within the American Falls watershed is as follows:
- NLI FIRE (2007)
- USDA (2011)
- A greater portion of the Snake River within the American Falls watershed is planned to be obtained (2014)

Conclusion

Due to variable flows of the Snake River, the high number of NFIP policies, high population and presence of a number of hazardous dams, the American Falls watershed is considered a high risk watershed.

Counties and Tribes

Bannock, Bingham, Blaine, Bonneville, Butte, Caribou, Power, Shoshone-Bannock Tribes

Cities

Aberdeen, American Falls, Arbon Valley, Blackfoot, Firth, Idaho Falls, Pocatello, Shelley

Idaho Multi-Hazard Risk Portfolio
American Falls

Risk Rank: M

Introduction

The American Falls watershed is home to 77,212 people. Acres of concentrated population within the American Falls watershed boundaries are Aberdeen, American Falls, Arbon Valley, Basalt, Blackfoot, Birt, Idaho Falls, Pocatello and Shelley.

What is the risk?

Fires within the American Falls watershed have the potential to severely disrupt life, property and economic activity. There are no structures located within the WUI of the American Falls watershed. Since 2000, 568,849 acres have burned during 253 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the American Falls watershed has 3.42% low risk, 50.3% low moderate risk, 4.4% moderate risk, 5.2% moderate high risk and 0.5% high risk of wildfire to the communities within the watershed.

2 out of the 7 counties in the American Falls watershed identified wildfire as their number one hazard.

3 out of the 7 counties in the American Falls watershed identified wildfire as their number two hazard.

2 out of the 7 counties in the American Falls watershed identified wildfire as their number three hazard.

Conclusion

Based on a large amount of historical fires, a lack of structures within the WUI and relatively high overall population, the American Falls watershed is at a moderate risk of wildfire.

Counties and Tribes

Bannock, Bingham, Blaine, Bonneville, Butte, C Machines, Power, Shoshone-Bannock Tribes

Cities

Aberdeen, American Falls, Arbon Valley, Basalt, Blackfoot, Birt, Idaho Falls, Pocatello, Shelley

Total wildfire mitigation actions: 117

A majority of the proposed mitigation actions are not location specific and can be found in the the county HMRs.
American Falls

Risk Rank: H

Introduction
Areas of concentrated population within the American Falls watershed boundaries are Aberdeen, American Falls, Arbon Valley, Basalt, Blackfoot, Firth, Idaho Falls, Pocatello and Shelley.

What is the risk?
An earthquake within the watershed has a high potential to cause damage to the life and property of those within these areas. There are also 608 miles of canals that are receptive to seismic disturbances.

There are 30 essential facilities within 25 miles of a quaternary fault.

• 0 out of the 7 counties within the American Falls watershed identified seismic as their number one hazard.
• 0 out of the 7 counties within the American Falls watershed identified seismic as their number two hazard.
• 1 out of the 7 counties within the American Falls watershed identified seismic as their number three hazard.

Counties and Tribes
Bannock, Bingham, Blaine, Bonneville, Butte, Oneida, Power, Shoshone-Bannock Tribes

Cities
Aberdeen, American Falls, Arbon Valley, Basalt, Blackfoot, Firth, Idaho Falls, Pocatello, Shelley

Total seismic mitigation actions: 77

A majority of the proposed mitigation actions are not location specific and can be found in the the county AHMPs.
**Bear Lake**

**Risk Rank:** H

**Introduction:**
Areas of concentrated population within the Bear Lake watershed boundaries are Georgetown, Bloomington, Montpelier, Paris, Soda Springs and St. Charles. There are 9,733 total people who live within the watershed, of which 22% are at risk of flooding. The majority of the Bear Lake watershed is within Idaho and nearly half of which is privately owned.

**What is the risk?**

The Bear River meanders unregulated across this watershed as it flows into Alexander Reservoir. According to the the county AHRAF, there have been 44 historic flash floods. There are 3 high or significant hazard dams in the Bear Lake watershed. There are 3 communities participating in the NFIP with 3 policies contributing to $2,328 of premiums paid in exchange for $200,300 of coverage.

+ 0 out of the 3 counties in the Bear Lake watershed identified flood as their number one hazard.
+ 0 out of the 3 counties in the Bear Lake watershed identified flood as their number three hazard.

**LIDAR data availability**

LIDAR availability within the Bear Lake watershed is as follows:
- Idaho HAT (2010)

**Conclusion**

The Bear Lake watershed is at a high flood risk because of the number of dams of concern and the amount of people and property at flood risk.

**Counties and Tribes**

Bear Lake, Caribou, Franklin

**Cities**

Georgetown, Bloomington, Montpelier, Paris, Soda Springs, St. Charles

---

**Subbasin Metrics**

<table>
<thead>
<tr>
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<th></th>
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<tbody>
<tr>
<td>Bear Lake</td>
<td>1,273</td>
<td>9,733</td>
<td>1,512</td>
<td>212</td>
<td>5,715</td>
<td>9,665</td>
<td>3</td>
<td>453</td>
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**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>44%</td>
</tr>
<tr>
<td>Federal</td>
<td>33%</td>
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<td>Reservation/BIA</td>
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<tr>
<td>State</td>
<td>2%</td>
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<tr>
<td>Out of Idaho</td>
<td>21%</td>
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**NFIP Statistics (2014)**

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th>P Claims</th>
<th>Paid Claims</th>
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<tr>
<td>3</td>
<td>$205,300</td>
<td>$2,328</td>
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</table>

**Total flood mitigation actions:** 20

A majority of the proposed mitigation actions are not location specific and can be found in the county AHRAF.
Wildfire

Bear Lake

Risk Rank: M

Introduction

The Bear Lake watershed is home to 9,713 people. Areas of concentrated population within the Bear Lake watershed boundaries are Georgetown, Bloomington, Montpelier, Paris, Soda Springs and St. Charles.

What is the risk?

Fires within the Bear Lake watershed have the potential to severely disrupt life, property and economic activity. Since 2000, 3,600 acres have burned during 38 individual wildfire events. Based on data from the Idaho Forest Action Plan (2018), the Bear Lake watershed has 0.1% low risk, 34.4% low-moderate risk, 63.8% moderate risk, 1.7% moderate-high risk and 0.1% high risk of wildfire to the communities within the watershed.

• 1 out of the 3 counties in the Bear Lake watershed identified wildfire as their number one hazard.
• 2 out of the 3 counties in the Bear Lake watershed identified wildfire as their number two hazard.
• 0 out of the 3 counties in the Bear Lake watershed identified wildfire as their number three hazard.

Conclusion

Given the historically low amount of area burned from wildfire, agricultural nature of the watershed, low population and lack of wildfire, the communities are at an overall moderate risk to wildfire in the Bear Lake watershed.

Counties and Tribes

Bear Lake, Caribou, Franklin

Cities

Georgetown, Bloomington, Montpelier, Paris, Soda Springs, St. Charles

Subbasin Metrics

<table>
<thead>
<tr>
<th></th>
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</thead>
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<tr>
<td>1,273</td>
<td>9,713</td>
<td>1,512</td>
<td>212</td>
<td>5,715</td>
<td>9,665</td>
<td>0</td>
<td>38</td>
<td>3,908</td>
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Subbasin Ownership

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<tr>
<td>Private</td>
<td>44%</td>
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<tr>
<td>Federal</td>
<td>33%</td>
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<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>2%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>21%</td>
</tr>
</tbody>
</table>

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0.1%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>34.4%</td>
</tr>
<tr>
<td>Moderate</td>
<td>63.8%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>1.7%</td>
</tr>
<tr>
<td>High</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 37

A majority of the proposed mitigation actions are not location-specific and can be found in the applicable county AHPA's.
Idaho Multi-Hazard Risk Portfolio

Seismic

### Bear Lake

**Risk Rank:** H

**Introduction**

Areas of concentrated population within the Bear Lake watershed boundaries are Georgetown, Bloomington, Montpelier, Paris, Soda Springs, and St. Charles.

What is the risk?

An earthquake within the watershed has a high potential to cause damage to the life and property of those within these areas. There are also 211 miles of canals that are receptive to seismic disturbances.

There are 30 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 3 counties within the Bear Lake watershed identified seismic as their number one hazard.
- 0 out of the 3 counties within the Bear Lake watershed identified seismic as their number two hazard.
- 1 out of the 3 counties within the Bear Lake watershed identified seismic as their number three hazard.

**Counties and Tribes**

Bear Lake, Caribou, Franklin

**Cities**

Georgetown, Bloomington, Montpelier, Paris, Soda Springs, St. Charles

<table>
<thead>
<tr>
<th>Subbasin Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
</tr>
<tr>
<td>Population (2010)</td>
</tr>
<tr>
<td>Miles of Stream</td>
</tr>
<tr>
<td>Miles of Canal</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
</tr>
<tr>
<td>% Watershed within 25 miles of fault</td>
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</table>

<table>
<thead>
<tr>
<th>Subbasin Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner Type</td>
</tr>
<tr>
<td>Private</td>
</tr>
<tr>
<td>Federal</td>
</tr>
<tr>
<td>Reservation/IBA</td>
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<tr>
<td>State</td>
</tr>
<tr>
<td>Out of Idaho</td>
</tr>
</tbody>
</table>

**Ground Acceleration**

<table>
<thead>
<tr>
<th>Accl. Amount</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>100%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
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</table>

**Total seismic mitigation actions:** 29

A majority of the proposed mitigation actions are not location specific and can be found in the county reports.
Idaho Multi-Hazard Risk Portfolio

Flood

Beaver-Camas

Risk Rank: M

Introduction
Areas of concentrated population within the Beaver-Camas watershed boundaries are Dubois, Hamer, Mud Lake and Spencer. There are 2,463 total people who live within the watershed, of which 468 are at risk of flooding. Nearly half of the watershed is privately owned.

What is the risk?
The bankfull discharge of Beaver Creek (268 cfs) is often exceeded as can be seen on the USGS graph below. According to the county ARMPs, there have been two significant flood events. There are 9 high or significant hazard dams in the Beaver-Camas watershed. There are 6 communities participating in the NFIP with 13 policies contributing to $30,341 of premiums paid in exchange for $2,785,200 of coverage. At the NIFP 13 policies contributing to $30,341 of premiums paid in exchange for $2,785,200 of coverage.

-1 out of the 4 counties in the Beaver-Camas watershed identified flood as their number one hazard.
-1 out of the 4 counties in the Beaver-Camas watershed identified flood as their number two hazard.
-1 out of the 4 counties in the Beaver-Camas watershed identified flood as their number three hazard.

LIDAR data availability
LIDAR availability within the Beaver-Camas watershed is as follows:
-Beaver Station (2002)
-Beaver Station before burning (2005)
-Beaver Station after burning (2005)
-Camano National Wildlife Refuge (2013)

Conclusion
The area’s population is at a moderate risk to flood because of the proximity to water systems within the Beaver-Camas watershed.

Counties and Tribes
Clark, Fremont, Jefferson, Madison
Cities
Dubois, Hamer, Mud Lake, Spencer

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
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<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,002</td>
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<tr>
<td>Population (2010)</td>
<td>2,463</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,633</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>232</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,777</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>9,872</td>
</tr>
<tr>
<td>SFHMA</td>
<td>468</td>
</tr>
</tbody>
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Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
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<tr>
<td>Private</td>
<td>62%</td>
</tr>
<tr>
<td>Federal</td>
<td>47%</td>
</tr>
<tr>
<td>Reservation/RI</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>13%</td>
</tr>
<tr>
<td>Out of Id</td>
<td>0%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

| NFIP Policies | 13   |
| Total Coverage | $2,785,200 |
| Total Premiums | $30,341 |
| Flood Claims | 34 |
| Paid Claims | 50 |

Total flood mitigation actions: 36
A majority of the proposed mitigation actions are site-specific and can be found in the Parish Action Plan.

USGS 13113950 BEAVER CREEK AT DUBOIS ID

County All Hazards Mitigation Plans Flood Mitigation Actions

- Flood risk mitigation areas
- Flood risk mitigation areas
- Flood risk mitigation areas
Idaho Multi-Hazard Risk Portfolio

Beaver-Camas Watershed

Risk Rank: L

Introduction

The Beaver-Camas watershed is home to 2,403 people. Areas of concentrated population within the Beaver-Camas watershed boundaries include Dubois, Hamer, Mud Lake and Spencer.

What is the risk?

Fires within the Beaver-Camas watershed have the potential to severely disrupt life, property and economic activity. There are 33 structures located within the WUI of the Beaver-Camas watershed. Since 2000, 41,337 acres have burned during 46 individual wildfire events. Based on data from the Idaho Forest Action Plan (2018), the Beaver-Camas watershed has 30.3% low risk, 15.1% low-moderate risk, 32.4% moderate risk, 25.7% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

2 out of the 4 counties in the Beaver-Camas watershed identified wildfire as their number one hazard.

8 out of the 4 counties in the Beaver-Camas watershed identified wildfire as their number two hazard.

8 out of the 4 counties in the Beaver-Camas watershed identified wildfire as their number three hazard.

Conclusion

Based on the large losses from recent wildfires, a small population within the WUI and overall low to moderate identified risk of wildfire to communities the potential for future damage to life and property is low.

Counties and Tribes

Clark, Fremont, Jefferson, Madison

Cities

Dubois, Hamer, Mud Lake, Spencer

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,002</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>2,403</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,633</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>232</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,777</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>9,872</td>
</tr>
<tr>
<td>Structures in WUI</td>
<td>0</td>
</tr>
<tr>
<td>Historic Fire Events</td>
<td>46</td>
</tr>
<tr>
<td>Acres Burned (1995)</td>
<td>41,557</td>
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</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
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</thead>
<tbody>
<tr>
<td>Private</td>
<td>42%</td>
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<tr>
<td>Federal</td>
<td>47%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>11%</td>
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<tr>
<td>Out of Idaho</td>
<td>0%</td>
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</table>

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>30.3%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>15.1%</td>
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<tr>
<td>Moderate</td>
<td>52.4%</td>
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<tr>
<td>Moderate-High</td>
<td>2.7%</td>
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<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 40

A majority of the proposed mitigation actions are not location specific and can be found in the the county HMNF.
Beaver-Camas

**Risk Rank:** H

**Introduction**
Areas of concentrated population within the Beaver-Camas watershed boundaries are Dubois, Hamer, Mud Lake and Spencer.

**What is the risk?**
An earthquake within the watershed has a high potential to cause damage to the life and property of those within these areas.

There are 6 essential facilities within 25 miles of a quaternary fault.
- 0 out of the 4 counties within the Beaver-Camas watershed identified seismic as their number one hazard.
- 0 out of the 4 counties within the Beaver-Camas watershed identified seismic as their number two hazard.
- 0 out of the 4 counties within the Beaver-Camas watershed identified seismic as their number three hazard.

**Counties and Tribes**
Clark, Fremont, Jefferson, Madison

**Cities**
Dubois, Hamer, Mud Lake, Spencer

**Subbasin Metrics**

<table>
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<tr>
<th>Subbasin Ownership</th>
<th>Owner Type</th>
<th>% Subbasin Area</th>
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<td></td>
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<td>11%</td>
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<td></td>
<td>Out of Idaho</td>
<td>0%</td>
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</table>

**Ground Acceleration**

<table>
<thead>
<tr>
<th>Acceleration Level</th>
<th>% Watershed Area</th>
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</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
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<tr>
<td>Low-Moderate</td>
<td>8%</td>
</tr>
<tr>
<td>Moderate</td>
<td>40%</td>
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<tr>
<td>Moderate-Moderate</td>
<td>30%</td>
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<tr>
<td>High</td>
<td>5%</td>
</tr>
</tbody>
</table>

**Total seismic mitigation actions:** 26

A majority of the proposed mitigation actions are not location specific and can be found in the the county / district.
Flood

Risk Rank: M

Introduction
Areas of concentrated population within the Big Lost watershed boundaries are Arco, Atomic City, Butte City, Lost River, Mackay, and Moore. There are 3,998 total people who live within the watershed, of which 632 are at risk of flooding. 13% of the watershed is privately owned.

What is the risk?
Flood hazards include high stream flow discharge from the Big Lost River, which is variable as can be seen below. According to the county AHMP, there have been 25 significant historic flood events within the watershed. There is 1 high or significant hazard class in the Big Lost watershed. There are 6 communities participating in the NFIP with 81 policies contributing to $13,850 of premiums paid in exchange for $5,196,706 of coverage:
- 1 out of the 4 counties in the Big Lost watershed identified flood as their number one hazard.
- 1 out of the 4 counties in the Big Lost watershed identified flood as their number two hazard.
- 0 out of the 4 counties in the Big Lost watershed identified flood as their number three hazard.

LIDAR data availability
LIDAR availability within the Big Lost watershed is as follows:
- NWI/ Birch Creek S (2002)
- NWI/ Birch Creek Watershed (2003)
- Boise Scarp (2005)
- IDL (2006)
- IDL (2007)
- IDL (2010)

Conclusion
Significant hazards are present downstream of the Mackay Dam, though the watershed is largely federally managed, it is placed into the moderate flood risk category.

Counties and Tribes
Bingham, Blaine, Butte, Custer

Cities
Arco, Atomic City, Butte City, Lost River, Mackay, Moore
The Big Lost watershed is home to 3,998 people and there is no Wildland Urban Interface. Areas of concentrated population within the Big Lost watershed boundaries are Arco, Atomic City, Butte City, Lost River, Mackay and Moore.

What is the risk?
Fires within the Big Lost watershed have the potential to severely disrupt life, property and economic activity. Since 2000, 183,671 acres have burned during 82 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Big Lost watershed has 41.1% low risk, 29.2% low moderate risk, 26.7% moderate risk, 2.9% moderate high risk and 0% high risk of wildfire to the communities within the watershed.

* 2 out of the 4 counties in the Big Lost watershed identified wildfire as their number one hazard.
* 1 out of the 4 counties in the Big Lost watershed identified wildfire as their number two hazard.
* 1 out of the 4 counties in the Big Lost watershed identified wildfire as their number three hazard.

Conclusion
Based on the large areas burned by historic fires, the lack of WUI and the relatively small population; the Big Lost is at an overall moderate risk to wildfire.

Counties and Tribes
Bingham, Blaine, Butte, Custer

Cities
Arco, Atomic City, Butte City, Lost River, Mackay, Moore

Total wildfire mitigation actions: 68
A majority of the proposed mitigation actions are not location specific and can be found in the the county WUIAM.

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>41.1%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>29.2%</td>
</tr>
<tr>
<td>Moderate</td>
<td>26.7%</td>
</tr>
<tr>
<td>Moderate/High</td>
<td>2.9%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>
Risk Rank: H

Introduction
Areas of concentrated population within the Big Lost watershed boundaries are Arco, Atomic City, Butte City, Lost River, Mackay and Moore.

What is the risk?
An earthquake within the watershed has a high potential to cause damage to the life and property of those within these areas. There are also 353 miles of canals that are receptive to seismic disturbances.

There are 13 essential facilities within 25 miles of a quaternary fault.

0 out of the 4 counties within the Big Lost watershed identified seismic as their number one hazard.
0 out of the 4 counties within the Big Lost watershed identified seismic as their number two hazard.
0 out of the 4 counties within the Big Lost watershed identified seismic as their number three hazard.

Counties and Tribes
Bingham, Blaine, Butte, Custer

Cities
Arco, Atomic City, Butte City, Lost River, Mackay, Moore

Total seismic mitigation actions: 54

A majority of the proposed mitigation actions are not location specific and can be found in the the county vicinities.
**Idaho Multi-Hazard Risk Portfolio**

**Flood**

### Big Wood

**Risk Rank:** H

**Introduction**
Areas of concentrated population within the Big Wood watershed boundaries are Bellevue, Gooding, Hailey, Ketchum and Sun Valley. There are 23,221 total people who live within the watershed, of which 1,316 are at risk of flooding. 75% of the watershed is forested managed.

**What is the risk?**
The NRCS recognizes that the flood load for the Big Wood River at Hailey is 3,906 cfs. As can be seen below, the natural discharge flow has been exceeded regularly at a return interval of 4.1 years, resulting in 28 significant flood events according to the county AHPs. There are 7 high or significant hazard dams in the Big Wood watershed. There are 9 communities participating in the NFIP with 577 policies contributing to $406,038 of premiums paid in exchange for $170,859,600 of coverage.

- 0 out of 5 counties in the Big Wood watershed identified flood as their number one hazard.
- 2 out of the 5 counties in the Big Wood watershed identified flood as their number two hazard.
- 2 out of the 5 counties in the Big Wood watershed identified flood as their number three hazard.

**LIDAR data availability**
LIDAR availability within the Big Wood watershed is as follows:
- Big Wood River Valley (2015)
- Planned: Expansion to Original Big Wood Collection Area (2014)
- Planned: Additional coverage of the City of Hailey (2014)
- Planned: Additional coverage of the City of Gooding (2014)
- Planned: Additional area to cover NRM, detail study (2014)

**Conclusion**
The high population, variable streamflow, and presence of hazardous dams contribute to the Big Wood watershed’s high flood risk categorization.

**Counties and Tribes**

<table>
<thead>
<tr>
<th>County</th>
<th>Cities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boise</td>
<td>-</td>
</tr>
<tr>
<td>Canyon</td>
<td>-</td>
</tr>
<tr>
<td>Elmore</td>
<td>-</td>
</tr>
<tr>
<td>Jerome</td>
<td>-</td>
</tr>
<tr>
<td>Custer</td>
<td>-</td>
</tr>
<tr>
<td>Camas</td>
<td>-</td>
</tr>
<tr>
<td>Teton</td>
<td>-</td>
</tr>
<tr>
<td>Kootenai</td>
<td>-</td>
</tr>
<tr>
<td>Lincoln</td>
<td>-</td>
</tr>
</tbody>
</table>

**USGS**

**USGS 13139500 Big Wood River at Hailey, ID**

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,499</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>2,614</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>341</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>2,700</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>11,918</td>
</tr>
<tr>
<td>Days of Concern</td>
<td>80</td>
</tr>
<tr>
<td>Pop at Flood Risk</td>
<td>1,314</td>
</tr>
</tbody>
</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>22%</td>
</tr>
<tr>
<td>Federal</td>
<td>75%</td>
</tr>
<tr>
<td>Reservation/RRA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>2%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

**NFIP Statistics (2014)**

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th># Claims</th>
<th>Paid Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>527</td>
<td>$170,859,600</td>
<td>$406,038</td>
<td>25</td>
<td>$65,338</td>
</tr>
</tbody>
</table>

**Total flood mitigation actions:** 95

A majority of the proposed mitigation actions are not location specific and can be found in the county AHPs.
**Idaho Multi-Hazard Risk Portfolio**

**Wildfire**

### Big Wood

**Risk Rank:** H

**Introduction**

The Big Wood watershed is home to 23,221 people and there is no Wildland Urban Interface. Areas of concentrated population within the Big Wood watershed boundaries are Bellevue, Gooding, Hailey, Ketchum and Sun Valley.

**What is the risk?**

Fires within the Big Wood watershed have the potential to severely disrupt life, property and economic activity. Since 2000, 189,391 acres have burned during 195 individual wildfire events.

Based on data from the Idaho Forest Action Plan (2010), the Big Wood watershed has 14.4% low risk, 13.4% low/moderate risk, 35.0% moderate risk, 23.3% moderate high risk and 13.0% high risk of wildfire to the communities within the watershed.

- Out of the 5 counties in the Big Wood watershed identified wildfire as their number one hazard.
- Out of the 5 counties in the Big Wood watershed identified wildfire as their number two hazard.
- Out of the 5 counties in the Big Wood watershed identified wildfire as their number three hazard.

**Conclusion**

Based on the size of recent fires, high population concentration in high risk areas and overall identified moderate to high risk of wildfire to communities; wildfire risk of the Big Wood watershed is high.

**Counties and Tribes**

Blaine, Camas, Custer, Gooding, Lincoln

**Cities**

Bellevue, Gooding, Hailey, Ketchum, Sun Valley

**Subbasin Metrics**

- **Area (sq. miles):** 1,499
- **Population (2010):** 23,221
- **Miles of Stream:** 2,614
- **Miles of Canal:** 341
- **Min. Elevation:** 2,700
- **Max. Elevation:** 11,913
- **Structures in WUI:** No WUI
- **Historic Fire Events:** 195
- **Acres Burned (1995-):** 186,931

**Subbasin Ownership**

- **Owner Type:** 23%
- **Private:** 23%
- **Federal:** 75%
- **Reservation/ BIA:** 0%
- **State:** 2%
- **Out of State:** 0%

**Watershed Fire Risk**

- **Risk Level:** Low
- **Area:** 14.4%
- **Low/Moderate:** 13.4%
- **Moderate:** 35.9%
- **Moderate-High:** 23.3%
- **High:** 13%

**Total wildfire mitigation actions:** 82

A majority of the proposed mitigation actions are not location-specific and can be found in the [county HMAA](#).
Risk Rank: H

Introduction

Areas of concentrated population within the Big Wood watershed boundaries are Bellevue, Gooding, Hailey, Ketchum and Sun Valley.

What is the risk?

An earthquake within the watershed has a high potential to cause damage to the life and property of those within these areas. There are also 341 miles of canals and 23 levees that are receptive to seismic disturbances.

There are 22 essential facilities within 25 miles of a quaternary fault.

-0 out of the 5 counties within the Big Wood watershed identified seismic as their number one hazard.
-0 out of the 5 counties within the Big Wood watershed identified seismic as their number two hazard.
-0 out of the 5 counties within the Big Wood watershed identified seismic as their number three hazard.

Counties and Tribes

Blaine, Camas, Custer, Gooding, Lincoln

Cities

Bellevue, Gooding, Hailey, Ketchum, Sun Valley

Total seismic mitigation actions: 46

A majority of the proposed mitigation actions are not location specific and can be found in the the county plans.
Idaho Multi-Hazard Risk Portfolio

Flood

Birch

Risk Rank: 1

Introduction
There are 18 total people who live within the watershed, of which 0 are at risk of flooding. The watershed is almost entirely federally managed.

What is the risk?
There are 0 high or significant hazard dams in the Birch watershed. There are 0 communities participating in the NFIP with 0 policies contributing to $0 of premiums paid in exchange for $0 of coverage.

0 out of the 4 counties in the Birch watershed identified flood as their number one hazard.

0 out of the 4 counties in the Birch watershed identified flood as their number two hazard.

0 out of the 4 counties in the Birch watershed identified flood as their number three hazard.

LIDAR data availability
LIDAR availability within the Birch watershed is as follows:

- NLI, Birch Creek West (2002)
- NLI, Birch Creek Central (2002)

Conclusion
The very small population of the Birch watershed and lack of flood hazard factors place the Birch watershed into the low risk category.

Counties and Tribes
Butte, Clark, Jefferson, Lemhi

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>707</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>18</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,153</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>14</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,770</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>12,152</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>3%</td>
</tr>
<tr>
<td>Federal</td>
<td>96%</td>
</tr>
<tr>
<td>Reservation/RIF</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>1%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFIP Policies</td>
<td>0</td>
</tr>
<tr>
<td>Total Coverage</td>
<td>50</td>
</tr>
<tr>
<td>Total Premiums</td>
<td>50</td>
</tr>
<tr>
<td>Perils</td>
<td>0</td>
</tr>
<tr>
<td>Paid Claims</td>
<td>50</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 26
A majority of the proposed mitigation actions are not location specific and can be found in the county SFHERP.
**Idaho Multi-Hazard Risk Portfolio**

**Wildfire**

---

**Birch**

**Risk Rank:** L

**Introduction**
The Birch watershed is home to 18 people. There are no areas of concentrated population within the watershed.

**What is the risk?**
Fires within the Birch watershed have the potential to severely disrupt life, property and economic activity. There are seven structures located within the WUI of the Birch watershed. Since 2000, 4,200 acres have burned during 17 individual wildfire events. Based on data from the Idaho Forest Action Plan (2018), the Birch watershed has 79.9% low risk, 16.9% low-moderate risk, 0% moderate risk, 3.2% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

- 8 out of the 4 counties in the Birch watershed identified wildfire as their number one hazard.
- 6 out of the 4 counties in the Birch watershed identified wildfire as their number two hazard.
- 1 out of the 4 counties in the Birch watershed identified wildfire as their number three hazard.

**Conclusion**
While there have been fires within the Birch watershed within recent history, the likelihood of future fires to cause damage to life and property is low because of the extremely low population and overall low identified wildfire risk.

**Counties and Tribes**
Butte, Clark, Jefferson, Lemhi

**Cities**

---

**Watershed Fire Risk**

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>79.9%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>15.9%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>3.2%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Total wildfire mitigation actions:** 40

A majority of the proposed mitigation actions are location specific and can be found in the the county MRRM.
Birch

Risk Rank: L

Introduction
There are no areas of concentrated population within the Birch watershed boundaries.

What is the risk?
An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas. There are also 14 miles of canals that are receptive to seismic disturbances.

There is 1 essential facility within 25 miles of a quaternary fault.

• 0 out of the 4 counties within the Birch watershed identified seismic as their number one hazard.
• 0 out of the 4 counties within the Birch watershed identified seismic as their number two hazard.
• 0 out of the 4 counties within the Birch watershed identified seismic as their number three hazard

Counties and Tribes
Butte, Clark, Jefferson, Lemhi

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>707</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2018)</td>
<td>18</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,153</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>18</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,770</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>12,152</td>
</tr>
<tr>
<td># Waterfalls within 25 miles of fault</td>
<td>1</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>3%</td>
</tr>
<tr>
<td>Federal</td>
<td>96%</td>
</tr>
<tr>
<td>Reservation/BLM</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>1%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Category</th>
<th>% of Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>2%</td>
</tr>
<tr>
<td>Moderate</td>
<td>34%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>64%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 34

A majority of the proposed mitigation actions are site-specific and can be found in the various county disaster plans.
**Idaho Multi-Hazard Risk Portfolio**

---

**Blackfoot**

**Risk Rank:** H

**Introduction**
Areas of concentrated population within the Blackfoot watershed boundaries are Ammon, Blackfoot, Idaho Falls, and Idaho. There are 8,374 total people who live within the watershed, of which 5,916 are at risk of flooding. Nearly half of the watershed is privately owned.

**What is the risk?**
Flood hazards can include seasonal high stream flows that exceed bankfull discharge. Historically, this has resulted in 6 significant flood events according to the county AHVPs. At the USGS gauge on the Blackfoot River near Goshen the 30 yr. 5% value is 3.3 ft. There are 2 high or significant hazard dams in the Blackfoot watershed. There are 8 communities participating in the NFIP with 181 policies contributing to $127,624 of premiums paid in exchange for $34,791,300 of coverage.

- 2 out of the 4 counties in the Blackfoot watershed identified flood as their number one hazard.
- 0 out of the 4 counties in the Blackfoot watershed identified flood as their number two hazard.
- 0 out of the 4 counties in the Blackfoot watershed identified flood as their number three hazard.

**LiDAR data availability**
LiDAR availability within the Blackfoot watershed is as follows:
- China Hat (2010)
- Planned: Portion of the Snake River (2014)

**Conclusion**
Because of the high population, large portion of private ownership, high volume of NFIP policies and presence of hazardous dams, the Blackfoot watershed is considered to be a high risk watershed.

**Counties and Tribes**

- Bear Lake, Bingham, Bonneville, Caribou, Shoshone-Bannock Tribes

- Cities
  - Ammon, Blackfoot, Idaho Falls, Idaho

---

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Subbasin Metrics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,089</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>58,074</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>2,632</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>280</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,606</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>8,970</td>
</tr>
<tr>
<td>Dams of Concern</td>
<td>0</td>
</tr>
<tr>
<td>Pop. at Flood Risk</td>
<td>5,916</td>
</tr>
</tbody>
</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>69%</td>
</tr>
<tr>
<td>Federal</td>
<td>20%</td>
</tr>
<tr>
<td>Reservation/RRA</td>
<td>17%</td>
</tr>
<tr>
<td>State</td>
<td>17%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

**NFIP Statistics (2014)**

- NFIP Policies: 181
- Total Coverage: $34,791,300
- Total Premiums: $127,624
- Total Claims: $4,796

**Total flood mitigation actions:** 43

A majority of the proposed mitigation actions are not location specific and can be found in the following counties: Bingham, Bonneville.
Blackfoot Watershed

**Idaho Multi-Hazard Risk Portfolio**

**Wildfire**

**Risk Rank:** H

**Introduction**

The Blackfoot watershed is home to 58,674 people, a small number of which live in the Wildland Urban Interface. Areas of concentrated population within the Blackfoot watershed boundaries are Ammon, Blackfoot, Idaho Falls and Iona.

**What is the risk?**

Fires within the Blackfoot watershed have the potential to severely disrupt life, property and economic activity. There are 8 structures located within the WUI of the Blackfoot watershed. Since 2000, 35,903 acres have burned during 99 individual wildfire events. Based on data from the Malheur Forest Action Plan (2010), the Blackfoot watershed has 26.1% low risk, 35.3% low moderate risk, 24% moderate risk, 16% moderate-high risk and 11.9% high risk of wildfire to the communities within the watershed.

- 1 out of 4 counties in the Blackfoot watershed identified wildfire as their number one hazard.
- 2 out of 4 counties in the Blackfoot watershed identified wildfire as their number two hazard.
- 1 out of 4 counties in the Blackfoot watershed identified wildfire as their number three hazard.

**Conclusion**

Based on the watershed’s relatively high population and historic fire activities, the Blackfoot watershed is at an overall high risk of wildfire to communities.

**Counties and Tribes**

Bear Lake, Bingham, Bonneville, Caribou, Shoshone-Bannock Tribes

**Cities**

Ammon, Blackfoot, Idaho Falls, Iona

**Subbasin Ownership**

- **Owner Type:** Private, Federal, Reservation/BIA, State, Out of State
- **% Subbasin Area:** Private 48%, Federal 20%, Reservation/BIA 17%, State 17%, Out of State 0%

**Watershed Fire Risk**

- **Risk Level:** Low, Low/Moderate, Moderate, Moderate-High, High
- **% Watershed Area:** Low 26.1%, Low/Moderate 35.3%, Moderate 24%, Moderate-High 13.5%, High 1.1%

**Total wildfire mitigation actions:** 50

A majority of the proposed mitigation actions are location specific and can be found in the HMA.

---

**Map of Blackfoot Watershed with risk levels and boundaries.**

---
Idaho Multi-Hazard Risk Portfolio

Seismic

Blackfoot

Risk Rank: H

Introduction

Areas of concentrated population within the Blackfoot watershed boundaries are Ammon, Blackfoot, Idaho Falls, and Iona.

What is the risk?

An earthquake within the watershed has a high potential to cause damage to the life and property of those within these areas. There are also 280 miles of canals and 13 levees that are receptive to seismic disturbances.

There are 21 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 4 counties within the Blackfoot watershed identified seismic as their number one hazard.
- 0 out of the 4 counties within the Blackfoot watershed identified seismic as their number two hazard.
- 1 out of the 4 counties within the Blackfoot watershed identified seismic as their number three hazard.

Counties and Tribes

Bear Lake, Bingham, Bonneville, Caribou, Shoshone-Bannock Tribes

Cities

Ammon, Blackfoot, Idaho Falls, Iona

Total seismic mitigation actions: 38

A majority of the proposed mitigation actions are not location specific and can be found in the county hands.
Flood

**Boise-Mores**

**Risk Rank:** M

**Introduction:**
Areas of concentrated population within the Boise-Mores watershed boundaries are Idaho City and Placerville. There are 3,416 total people who live within the watershed, of which 223 are at risk of flooding. Much of the population lies outside of the two cities. The majority of the watershed is federally managed.

**What is the risk?**
Flood hazards include seasonal high stream flows exceeding bankfull discharge. Historically, this has resulted in 8 significant flood events according to county AMLPs. Arrowrock Dam, a high or significant hazard dam in the Boise-Mores watershed, could cause significant amounts of damage downstream. There are 5 communities participating in the NFIP with 17 policies contributing to $13,437 of premiums paid in exchange for $2,902,300 of coverage.

- 6 out of the 5 counties in the Boise-Mores watershed identified flood as their number one hazard.
- 5 out of the 5 counties in the Boise-Mores watershed identified flood as their number two hazard.
- 3 out of the 5 counties in the Boise-Mores watershed identified flood as their number three hazard.

**LiDAR data availability**
LiDAR availability within the Boise-Mores watershed is as follows:
- Damrock (2007)
- Dry Creek, Boise Front (2007)

**Conclusion**
Because of the hazardous dams within the watershed and relatively low population, the Boise-Mores is considered a moderate flood risk.

**Counties and Tribes**
- Ada, Boise, Elmore
- City: Idaho City, Placerville

---

**Subbasin Metrics**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Boise-Mores</td>
<td>617</td>
<td>3,416</td>
<td>1,403</td>
<td>19</td>
<td>2,035</td>
<td>9,068</td>
<td>223</td>
<td>21%</td>
<td>27</td>
<td>$2,902,300</td>
<td>$13,437</td>
<td>1</td>
<td>50</td>
</tr>
</tbody>
</table>

**Total flood mitigation actions:** 92
A majority of the proposed mitigation actions are not location specific and can be found in the state AMLPs.
Wildfire

Boise-Mores

Risk Rank: H

Introduction
The Boise-Mores watershed is home to 3,416 people, a large portion of which live in the Wildland Urban Interface. Areas of concentrated population within the Boise-Mores watershed boundaries are Idaho City and Placerville.

What is the risk?
Fires within the Boise-Mores watershed have the potential to severely disrupt life, property, and economic activity. There are 2,898 structures, many of which are homes, located within the WUI of the Boise-Mores watershed. Since 2000, 20,408 acres have burned during 188 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Boise-Mores watershed has 10.9% low risk, 9.9% low-moderate risk, 23.2% moderate risk, 20.2% moderate-high risk and 34.3% high-risk of wildfire to the communities within the watershed.

2 out of the 3 counties in the Boise-Mores watershed identified wildfire as their number one hazard.
1 out of the 3 counties in the Boise-Mores watershed identified wildfire as their number two hazard.
1 out of the 3 counties in the Boise-Mores watershed identified wildfire as their number three hazard.

Conclusion
All of the counties within the Boise-Mores watershed have identified wildfire as a serious risk to life and property. The majority of people live within the watershed’s WUI and the risk identified in the Idaho Forest Action Plan is moderate to high. Though the overall population is relatively low, the bulk of it lies in the WUI of the area. The Boise-Mores is at a high risk to wildfire.

Counties and Tribes
Ada, Boise, Elmore
Cities
Idaho City, Placerville

Total wildfire mitigation actions: 47

A majority of the proposed mitigation actions are not location-specific and can be found in the state planning documents.
Idaho Multi-Hazard Risk Portfolio

Seismic

Boise-Mores

Risk Rank: M

Introduction

Areas of concentrated population within the Boise-Mores watershed boundaries are Idaho City and Placerville.

What is the risk?

An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas. There are also 19 miles of canals that are receptive to seismic disturbances.

There is 1 essential facility within 25 miles of a quaternary fault.

• 0 out of the 3 counties within the Boise-Mores watershed identified seismic as their number one hazard.
• 0 out of the 3 counties within the Boise-Mores watershed identified seismic as their number two hazard.
• 1 out of the 3 counties within the Boise-Mores watershed identified seismic as their number three hazard.

Counties and Tribes

Ada, Boise, Elmore

Cities

Idaho City, Placerville

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>617</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>3,416</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,403</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>19</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>3,033</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>9,083</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>1</td>
</tr>
<tr>
<td>% Watered within 20 miles of fault</td>
<td>16%</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>23%</td>
</tr>
<tr>
<td>Federal</td>
<td>66%</td>
</tr>
<tr>
<td>Reservation/BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>13%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Acceleration</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>13%</td>
</tr>
<tr>
<td>Moderate</td>
<td>83%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 28

A majority of the proposed mitigation actions are not location specific and can be found in the the county inventories.
Brownlee Reservoir

Risk Rank: M

Introduction
The only area of concentrated population within the Brownlee watershed boundaries is Weiser. There are 3,185 total people who live within the watershed, of which 388 are at risk of flooding. The majority of the watershed lies outside of Idaho.

What is the risk?
Flood hazards include seasonal high stream flows that exceed bankfull discharge, as can be seen on the USGS graph below. There is 1 high or significant hazard dam in the Brownlee Reservoir watershed. There are 5 counties participating in the NFIP with 8 policies contributing to $4,475 of premiums paid in exchange for $1,362,600 of coverage.

- 0 out of the 5 counties in the Brownlee Reservoir watershed identified flood as their number one hazard.
- 0 out of the 5 counties in the Brownlee Reservoir watershed identified flood as their number two hazard.
- 1 out of the 5 counties in the Brownlee Reservoir watershed identified flood as their number three hazard.

LIDAR data availability
LIDAR availability within the Brownlee Reservoir watershed is as follows:

Conclusion
The Brownlee Reservoir watershed is considered to be at a moderate risk of flood because of the relatively small population and lack of hazardous contributions to flood risks.

Counties and Tribes
Adams, Washington
Cities
Weiser

Flood

Idaho Multi-Hazard Risk Portfolio
Brownlee Reservoir

Risk Rank: H

Introduction
The Brownlee Reservoir watershed is home to 5,185 people, the majority of which live in the Wildland Urban Interface. The main area of concentrated population within the Brownlee Reservoir watershed boundaries is Weiser.

What is the risk?
Fires within the Brownlee Reservoir watershed have the potential to severely disrupt life, property, and economic activity. There are 1,980 structures located within the WUI of the Brownlee Reservoir watershed. Since 2000, 127,278 acres have burned during 91 individual wildfire events. Based on data from the Idaho Forest Action Plan 2010, the Brownlee Reservoir watershed has 17.7% low risk, 3.8% low-moderate risk, 12.9% moderate risk, 22.0% moderate-high risk, and 34.1% high risk of wildfire to the communities within the watershed.

1 out of the 2 counties in the Brownlee Reservoir watershed identified wildfire as their number one hazard.
1 out of the 2 counties in the Brownlee Reservoir watershed identified wildfire as their number two hazard.
3 out of the 2 counties in the Brownlee Reservoir watershed identified wildfire as their number three hazard.

Conclusion
Based on the moderately large historic fires and high population within the WUI, the overall risk of wildfire to communities is high.

Counties and Tribes
Adams, Washington
Coles
Weiser

Subbasin Metrics
Area (sq. miles) 1,296
Population (2010) 5,185
Miles of Stream 1,468
Miles of Canal 2
Min. Elevation (ft) 1,008
Max. Elevation (ft) 9,557
Structures in WUI 1,960
Historic Fire Events 91
Acres Burned (1992 - 2018) 97,278

Subbasin Ownership
Owner Type % Subbasin Area
Private 16%
Federal 29%
Reservation/ BIA 0%
State 5%
Out of State 49%

Watershed Fire Risk
Risk Level %Watershed Area
Low 17.2%
Low-Moderate 3.8%
Moderate 29.9%
Moderate-High 22%
High 34.1%

Total wildfire mitigation actions: 11

A majority of the proposed mitigation actions are site-specific and can be found in the individual WUI areas.
Brownlee Reservoir

Risk Rank: H

Introduction
The only area of concentrated population within the Brownlee Reservoir watershed boundaries is Weiser.

What is the risk?
An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas. There are also 23 miles of canals that are receptive to seismic disturbances.

There are no essential facilities within 25 miles of a quaternary fault.

- 0 out of the 2 counties within the Brownlee Reservoir watershed identified seismic as their number one hazard.
- 0 out of the 2 counties within the Brownlee Reservoir watershed identified seismic as their number two hazard.
- 0 out of the 2 counties within the Brownlee Reservoir watershed identified seismic as their number three hazard.

Counties and Tribes
Adams, Washington

Cities
Weiser

Total seismic mitigation actions: 9

A majority of the proposed mitigation actions are not location specific and can be found in the the county areas.

Subbasin Metrics

<table>
<thead>
<tr>
<th>Subbasin Area</th>
<th>1,265</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2010)</td>
<td>3,185</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,468</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>23</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>1,604</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>9,537</td>
</tr>
<tr>
<td>Eut. Facilities Near Fault</td>
<td>0</td>
</tr>
<tr>
<td>In Watershed with 12 Miles of Fault</td>
<td>95%</td>
</tr>
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</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>16%</td>
</tr>
<tr>
<td>Federal</td>
<td>29%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>5%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>45%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Accel. Amount</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>5%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>65%</td>
</tr>
<tr>
<td>Moderate</td>
<td>32%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>
Bruneau Watershed

Risk Rank: M

Introduction
There are 670 total people who live within the Bruneau watershed, of which 160 are at risk of flooding. The majority of the watershed is federally managed.

What is the risk?
The historical drainage of the Bruneau River near Hot Springs is 2,200 cfs. Peak annual flow shown in the USGS graph below regularly exceed this limit with one of these being recorded as a significant damaging flood event according to the Owyhee County AHPMP. There are 4 high or significant hazard dams in the Bruneau watershed. There are 8 communities participating in the NFIP with 0 policies contributing to $0 of premiums paid in exchange for $0 of coverage.

* 6 out of the 3 counties in the Bruneau watershed identified flood as their number one hazard.
* 0 out of the 3 counties in the Bruneau watershed identified flood as their number two hazard.
* 0 out of the 3 counties in the Bruneau watershed identified flood as their number three hazard.

LIDAR data availability
No LIDAR data is available or planned.

Conclusion
Though the population at the Bruneau watershed is low, the four hazardous dams have the potential to threaten life and property downstream, contributing to the moderate flood risk rank of the Bruneau.

Counties and Tribes
Owyhee, Twin Falls, Shoshone-Paiute Tribes

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>3.304</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>670</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>4,819</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>301</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>2,452</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>10,764</td>
</tr>
<tr>
<td>Dam Cost (M)</td>
<td>164</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>6%</td>
</tr>
<tr>
<td>Federal</td>
<td>64%</td>
</tr>
<tr>
<td>Reservation/RJA</td>
<td>1%</td>
</tr>
<tr>
<td>State</td>
<td>4%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>20%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th>Paid Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 3

A majority of the proposed mitigation actions are not location specific and can be found in the counties AHPMP.
Idaho Multi-Hazard Risk Portfolio

Wildfire

Bruneau

Risk Rank: L

Introduction

The Bruneau watershed is home to 670 people, most of which live in or near the Wildland Urban Interface. There are no areas of concentrated population within the watershed.

What is the risk?

Fires within the Bruneau watershed have the potential to severely disrupt life, property, and economic activity. There are no homes located within the WUI of the Bruneau watershed. Since 2000, 882,870 acres have burned during 189 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Bruneau watershed has 80.2% low risk, 9.9% lower-moderate risk, 5.4% moderate risk, 4.5% moderate-high risk and 0.3% high risk of wildfire to the communities within the watershed.

Conclusion

Although historic fires have been numerous and large in magnitude, the US data and low population of the Bruneau watershed indicate an overall low risk of wildfire.

Counties and Tribes

Owyhee, Twin Falls, Shoshone-Paiute Tribes

Cities

Bruneau Watershed

Communities at Risk of Wildfire

Low
Low-Moderate
Moderate
Moderate-High
High
Wildland-Urban Interface
Watershed

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>3,304</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>670</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>4,819</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>101</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>2,451</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>10,764</td>
</tr>
<tr>
<td>Structures in WUI</td>
<td>594</td>
</tr>
<tr>
<td>Historic Fire Events</td>
<td>186</td>
</tr>
<tr>
<td>Acres Burned (1995)</td>
<td>882,870</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>6%</td>
</tr>
<tr>
<td>Federal</td>
<td>68%</td>
</tr>
<tr>
<td>Reservation/ BLM</td>
<td>1%</td>
</tr>
<tr>
<td>State</td>
<td>4%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>20%</td>
</tr>
</tbody>
</table>

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>80.2%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>9.9%</td>
</tr>
<tr>
<td>Moderate</td>
<td>5.4%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>4.5%</td>
</tr>
<tr>
<td>High</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 15

A majority of the proposed mitigation actions are not location specific and can be found in the the county MPA.
Idaho Multi-Hazard Risk Portfolio

Seismic

Bruneau

Risk Rank: L

Introduction
There are no areas of concentrated population within the Bruneau watershed boundaries.

What is the risk?
An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas. There are also 101 miles of canals that are receptive to seismic disturbances.

There are no essential facilities within 25 miles of a quaternary fault.

• 0 out of the 2 counties within the Bruneau watershed identified seismic as their number one hazard.
• 0 out of the 2 counties within the Bruneau watershed identified seismic as their number two hazard.
• 0 out of the 2 counties within the Bruneau watershed identified seismic as their number three hazard.

Counties and Tribes
Owyhee, Twin Falls, Shoshone-Paiute Tribes

Cities

Total seismic mitigation actions: 10

A majority of the proposed mitigation actions are not location specific and can be found in the the county cities.
Idaho Multi-Hazard Risk Portfolio

C.J. Strike Reservoir

Risk Rank: H

Introduction
Areas of concentrated population within the C.J. Strike Reservoir watershed boundaries are Glenns Ferry, Mountain Home and Mountain Home AFB. There are 26,527 total people who live within the watershed, of which 1,134 are at risk of flooding. Nearly three quarters of the C.J. Strike Reservoir watershed is federally managed.

What is the risk?
According to the county AHMPs, 3 significant historic floods have occurred in the watershed. There are 10 high or significant hazard dams in the C.J. Strike Reservoir watershed. FEMA classifies dams according to their downstream damage potential and the Mountain Home and Salmon Falls Dam are attributed with the highest potential damage classification. There are 5 communities participating in the NFIP with 121 policies contributing to $92,991 of premium paid in exchange for $19,827,209 of coverage.

- 6 out of the 4 counties in the C.J. Strike Reservoir watershed identified flood as their number one hazard.
- 5 out of the 4 counties in the C.J. Strike Reservoir watershed identified flood as their number two hazard.
- 1 out of the 4 counties in the C.J. Strike Reservoir watershed identified flood as their number three hazard.

LIDAR data availability
No LIDAR data is available or planned.

Conclusion
The high population downstream of hazardous dams is the main threat of flood damage potential, contributing to the high flood risk classification of the C.J. Strike Reservoir watershed.

Counties and Tribes
Ada, Elmore, Owyhee, Twin Falls
Cities
Glenns Ferry, Mountain Home, Mountain Home AFB

Total flood mitigation actions: 142
A majority of the proposed mitigation actions are not location specific and can be found in the the county actions.
Idaho Multi-Hazard Risk Portfolio

Wildfire

C.J. Strike Reservoir

Risk Rank: H

Introduction

The C.J. Strike Reservoir watershed is home to 26,327 people, a moderate portion of which live near the Wildland-Urban Interface. Areas of concentrated population within the C.J. Strike Reservoir watershed boundaries are Glenns Ferry, Mountain Home and Mountain Home AFB.

What is the risk?

Fires within the C.J. Strike Reservoir watershed have the potential to severely disrupt life, property and economic activity. There are 2,674 structures located within the WUI of the C.J. Strike Reservoir watershed. Since 2000, 1,449,985 acres have burned during 334 individual wildfire events. More than 60% of the land area has been burned cumulatively within the watershed. This also accounts for more than 10% of the total area burned in Idaho during this time period. Based on data from the Idaho Forest Action Plan (2016), the C.J. Strike Reservoir watershed has 23.2% low risk, 17.4% low moderate risk, 12.5% moderate risk, 24.4% moderate high risk and 20.7% high risk of wildfire to the communities within the watershed.

4 out of the 4 counties in the C.J. Strike Reservoir watershed identified wildfire as their number one hazard.

1 out of the 4 counties in the C.J. Strike Reservoir watershed identified wildfire as their number two hazard.

1 out of the 4 counties in the C.J. Strike Reservoir watershed identified wildfire as their number three hazard.

Conclusion

The recent wildfire events in the C.J. Strike Reservoir watershed have been both numerous and large, and the amount of property within the WUI is relatively high, giving the watershed an overall high risk of damaging wildfire.

Counties and Tribes

Ada, Elmore, Owyhee, Twin Falls

Cities

Glenns Ferry, Mountain Home, Mountain Home AFB

Total wildfire mitigation actions: 64

A majority of the proposed mitigation actions are not location-specific and can be found in the the county WAHP.
C.J. Strike Reservoir

Risk Rank: M

Introduction
Areas of concentrated population within the C.J. Strike Reservoir watershed boundaries are Glenns Ferry, Mountain Home and Mountain Home AFB.

What is the risk?
An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas. There are also 146 miles of canals that are receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 4 counties within the C.J. Strike Reservoir watershed identified seismic as their number one hazard.
- 0 out of the 4 counties within the C.J. Strike Reservoir watershed identified seismic as their number two hazard.
- 1 out of the 4 counties within the C.J. Strike Reservoir watershed identified seismic as their number three hazard.

Counties and Tribes
Ada, Elmore, Owyhee, Twin Falls

Cities
Glenns Ferry, Mountain Home, Mountain Home AFB

Subbasin Metrics

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2,140</td>
<td>26,527</td>
<td>3,428</td>
<td>140</td>
<td>2,385</td>
<td>7,415</td>
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<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>23%</td>
</tr>
<tr>
<td>Federal</td>
<td>69%</td>
</tr>
<tr>
<td>State</td>
<td>8%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Acceleration</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>87%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>15%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 23

A majority of the proposed mitigation actions are not location specific and can be found in the 10 county areas.
Risk Rank: M

Introduction
The main area of concentrated population within the Camas watershed boundaries is Fairfield. There are 1,094 total people who live within the watershed, of which 178 are at risk of flooding. The majority of the watershed is privately owned.

What is the risk?
The city of Fairfield resides on an alluvial fan at the foot of a drainage basin that feeds into Salt Creek, which flows through the city. Multiple unreported flash floods have occurred historically, along with 6 reports of stream flooding events according to the Camas County AHP. High flows from rain or snow events could produce flooding. There are 2 and significant hazard dams in the Camas watershed. There are 4 communities participating in the NFIP with 8 policies contributing to $1,187 of premiums paid in exchange for $735,000 of coverage.

- 0 out of the 4 counties in the Camas watershed identified flood as their number one hazard.
- 1 out of the 4 counties in the Camas watershed identified flood as their number two hazard.
- 2 out of the 4 counties in the Camas watershed identified flood as their number three hazard.

LiDAR data availability
No LiDAR data is available or planned.

Conclusion
The presence of hazardous dams and proximity of the population to the floodplain of the water systems within the Camas watershed all contribute to its moderate risk classification.

Counties and Tribes
- Blaine, Camas, Elmore, Gooding
- Cities
  - Fairfield

USGS 11341500 SACRAMENTO R A CASTELLA CA

Total flood mitigation actions: $1
A majority of the proposed mitigation actions are not location specific and can be found in the county AHP.
Camas

**Risk Rank:** M

**Introduction**

The Camas watershed is home to 1,034 people and there is no Wildland Urban Interface. The only area of concentrated population within the Camas watershed boundaries is Fairfield.

**What is the risk?**

Fires within the Camas watershed have the potential to severely disrupt life, property and economic activity. Since 2000, 91,658 acres have burned during 95 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Camas watershed has 3.4% low risk, 8.3% low-moderate risk, 8.9% moderate risk, 48% moderate-high risk and 31.4% high risk of wildfire to the communities within the watershed.

- 4 out of the 4 counties in the Camas watershed identified wildfire as their number one hazard.
- 0 out of the 4 counties in the Camas watershed identified wildfire as their number three hazard.

**Conclusion**

Though there is no WUI present, there is a record of historically large wildfires and all counties within the Camas watershed have identified wildfire to be a significant risk. Based on this there is a moderate potential risk to life and property due to wildfire.

**Counties and Tribes**

Blaine, Camas, Elmore, Gooding

**Cities**

Fairfield

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>683</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>1,034</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,824</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>33</td>
</tr>
<tr>
<td>Min. Elevation (FT)</td>
<td>4,795</td>
</tr>
<tr>
<td>Max. Elevation (FT)</td>
<td>10,079</td>
</tr>
<tr>
<td>Structures in WUI</td>
<td>No WUI</td>
</tr>
<tr>
<td>Historic Fire Events</td>
<td>39</td>
</tr>
<tr>
<td>Acres Burned (1995)</td>
<td>91,658</td>
</tr>
</tbody>
</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>62%</td>
</tr>
<tr>
<td>Federal</td>
<td>32%</td>
</tr>
<tr>
<td>Reservation/BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>8%</td>
</tr>
<tr>
<td>Out of State</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Watershed Fire Risk**

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>3.4%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>8.3%</td>
</tr>
<tr>
<td>Moderate</td>
<td>8.9%</td>
</tr>
<tr>
<td>Moderate/High</td>
<td>48%</td>
</tr>
<tr>
<td>High</td>
<td>31.4%</td>
</tr>
</tbody>
</table>

**Total wildfire mitigation actions:** 76

A majority of the proposed mitigation actions are not location specific and can be found in the the county MWM.
**Camas**

**Risk Rank:** M

**Introduction**

The only area of concentrated population within the Camas watershed boundaries is Fairfield.

**What is the risk?**

An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas. There are also 33 miles of canals that are receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 4 counties within the Camas watershed identified seismic as their number one hazard.
- 0 out of the 4 counties within the Camas watershed identified seismic as their number two hazard.
- 0 out of the 4 counties within the Camas watershed identified seismic as their number three hazard.

**Counties and Tribes**

Blaine, Camas, Elmore, Gooding

**Cities**

Fairfield

---

**Subbasin Metrics**

- Area (sq. miles): 683
- Population (2010): 1,054
- Miles of Stream: 1,824
- Miles of Canal: 53
- Min. Elevation (ft): 4,793
- Max. Elevation (ft): 10,070

**Subbasin Ownership**

- Private: 62%
- Federal: 32%
- Reservation/BLM: 0%
- State: 6%
- Out of Idaho: 0%

**Ground Acceleration**

- Low: 0%
- Low-Moderate: 0%
- Moderate: 0%
- Moderate-High: 0%
- High: 0%

---

**Total seismic mitigation actions:** 29

A majority of the proposed mitigation actions are not location specific and can be found in the the county areas.
Central Bear

Risk Rank: L

Introduction
The Bear River and the Thomas Fork are two meandering streams that run freely through the Central Bear watershed. There are 135 total people who live within the watershed, of which 6 are at risk of flooding. The majority of the Central Bear watershed is outside of Idaho.

What is the risk?
Irregular stream flows are represented in the USGS table below. Stream gauges near Border, WY show flows that range between 300 and nearly 4,000 cfs in the past. There are 2 communities participating in the NFIP with 6 policies contributing to $8 in premiums paid in exchange for $50 of coverage.

- 6 out of the 2 counties in the Central Bear watershed identified flood as their number one hazard.
- 6 out of the 2 counties in the Central Bear watershed identified flood as their number two hazard.
- 6 out of the 2 counties in the Central Bear watershed identified flood as their number three hazard.

LIDAR data availability
No LIDAR data is available.

Conclusion
The low population and lack of hazardous factors contributing to damage to life and property in the Central Bear watershed equates to a low risk of flood.

Counties and Tribes
Bear Lake, Caribou

Cities

Central Bear Watershed

USGS 10039560 BEAR RIVER AT BORDER, WY

<table>
<thead>
<tr>
<th>Action Status</th>
<th>Descriptive Name</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ongoing</td>
<td>Ongoing</td>
<td>Details</td>
</tr>
<tr>
<td>Proposed Plan</td>
<td>Proposed Plan</td>
<td>Details</td>
</tr>
<tr>
<td>Completed</td>
<td>Completed</td>
<td>Details</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 8
A majority of the proposed mitigation actions are not location specific and can be found in the following years.

NFIP Statistics (2014)
- NFIP Policies: 0
- Total Coverage: 0
- Total Premiums: 0
- Claims: 0
- Paid Claims: 0

Total flood mitigation actions: 8
A majority of the proposed mitigation actions are not location specific and can be found in the following years.
Wildfire

**Central Bear**

**Risk Rank:** L

**Introduction**

The Central Bear watershed is home to 135 people and there is no Wildland-Urban Interface. There are no concentrated areas of population in the Central Bear watershed.

**What is the risk?**

Fires within the Central Bear watershed have the potential to severely disrupt life, property, and economic activity. Since 2000, 3,257 acres have burned during 13 individual wildfire events. Based on data from the Idaho Forest Action Plan (2016), the Idaho Falls watershed has 10.8% low risk, 22.1% moderate risk, 22.2% high risk, and 44.7% moderate-high risk; 13.9% of wildfires are high risk.

**Statistics**

- Area (sq. miles): 824
- Population (2010): 135
- Miles of Stream: 448
- Miles of Canal: 5
- Min. Elevation (ft): 5,997
- Max. Elevation (ft): 10,222
- Structures in WUI: No WUI
- Historic Fire Events: 8

**Subbasin Ownership**

- Private: 15%
- Federal: 11%
- Reservation/IA: 0%
- State: 1%
- Out of State: 72%

**Watershed Fire Risk**

- Low: 10.8%
- Low-Moderate: 22.1%
- Moderate: 44.7%
- Moderate-High: 13.9%
- High: 13.9%

Total wildfire mitigation actions: 20

A majority of the proposed mitigation actions are not location specific and can be found in the [IDNR data](#).
Central Bear

Risk Rank: L

Introduction
There are no areas of concentrated population within the Central Bear watershed boundary.

What is the risk?
An earthquake within the watershed has a high potential to cause damage to the life and property of those within these areas.

There are 2 essential facilities within 25 miles of a quaternary fault.

• 0 out of the 4 counties within the Central Bear watershed identified seismic as their number one hazard.
• 0 out of the 4 counties within the Central Bear watershed identified seismic as their number two hazard.
• 3 out of the 4 counties within the Central Bear watershed identified seismic as their number three hazard.

Counties and Tribes
Bear Lake, Caribou

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>824</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>135</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>448</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>5,853</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>5,991</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>2</td>
</tr>
<tr>
<td>In Watershed with 25 Miles of Fault</td>
<td>100%</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>15%</td>
</tr>
<tr>
<td>Federal</td>
<td>11%</td>
</tr>
<tr>
<td>Reservation/ USA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>3%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>75%</td>
</tr>
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</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Acceleration Level</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>100%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 10

A majority of the proposed mitigation actions are not location specific and can be found in the the county areas.
Idaho Multi-Hazard Risk Portfolio

Clearwater

Risk Rank: 1

Introduction
Areas of concentrated population within the watershed boundaries are Boise, Craigmont, Calexico, Deary, Ferdinand, Jewett, Kamiah, Kimberly, Kooskia, Lapwai, Lewiston, Nampa, Orofino, Pocatello, Rigby, Toms, Twisp, and Winchester. There are 45,908 total people who live within the watershed, of which 1,760 are at risk of flooding. The watershed is 75% privately owned.

What is the risk?
Flood risks include regular flooding of properties along the tributaries of the Clearwater River. According to the county AHPPs, 17 significant historic flood events have occurred. There are 8 high or significant hazard dams in the Clearwater watershed, including the Dworschak Reservoir upstream of this watershed. There are 3 communities participating in the NFIP with 126 policies contributing to $518,908 of premiums paid in exchanges for $24,926,500 of coverage.

- 5 out of the 5 counties in the Clearwater watershed identified flood as their number one hazard.
- 4 out of the 5 counties in the Clearwater watershed identified flood as their number two hazard.
- 6 out of the 5 counties in the Clearwater watershed identified flood as their number three hazard.

LIDAR data availability
LIDAR availability within the Clearwater watershed is as follows:
- Netto Lake Reservation (2002)
- Moscow, Moscow, & U of Idaho Forest Service (2003)
- Emerald Creek (2006)
- North Creek (2006)
- Diary Creek (2008)
- Jim Ford Creek (2008)
- Nlaka'pamux Reservation (2010)

Conclusion
The Dworschak Reservoir has brought flood control and safety to life and property, though the population within the watershed is at high risk given the flood hazards of the Clearwater watershed.

Counties and Tribes
Clearwater, Idaho, Latah, Lewis, Nez Perce, Nez Perce Tribe

Flood

Subbasin Metrics

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
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<tbody>
<tr>
<td>Population (2010)</td>
<td>45,908</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>5,594</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>18</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>719</td>
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<tr>
<td>Max. Elevation (ft)</td>
<td>6,047</td>
</tr>
<tr>
<td>PHL at Flood Risk</td>
<td>1,710</td>
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Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>75%</td>
</tr>
<tr>
<td>Federal</td>
<td>10%</td>
</tr>
<tr>
<td>Reserve/NRA</td>
<td>7%</td>
</tr>
<tr>
<td>State</td>
<td>8%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>126</th>
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</thead>
<tbody>
<tr>
<td>Total Coverage</td>
<td>$24,926,500</td>
</tr>
<tr>
<td>Total Premiums</td>
<td>$518,908</td>
</tr>
<tr>
<td>Claim Ratio</td>
<td>9</td>
</tr>
<tr>
<td>Paid Claims</td>
<td>$92,070</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 191

A majority of the proposed mitigation actions are not location specific and can be found in the county AHPPs.
Risk Rank: H

Introduction

The Clearwater watershed is home to 45,898 people, a moderate amount of which live in or near the Wildland-Urban Interface. Areas of concentrated population within the Clearwater watershed boundaries are Beav, Craigmont, Culdesac, Deary, Ferdinando, Juliaetta, Kamiah, Kendrick, Kooski, Lapwai, Lewiston, Nezperce, Orofino, Peck, Pierce, Reubens, Troy, Wapato, and Winchester.

What is the risk?

Fires within the Clearwater watershed have the potential to severely disrupt life, property, and economic activity. There are 2,100 structures located within the WUI of the Clearwater watershed. Since 2000, 14,142 acres have burned during 364 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Clearwater watershed has 6.6% low risk, 19.5% low-moderate risk, 32.3% moderate risk, 33.5% moderate-high risk and 6.3% high risk of wildfire to the communities within the watershed.

• Out of the 5 counties in the Clearwater watershed identified wildfire as their number one hazard.
• Out of the 5 counties in the Clearwater watershed identified wildfire as their number two hazard.
• Out of the 5 counties in the Clearwater watershed identified wildfire as their number three hazard

Conclusion

Though recent wildfire activity within the watershed is small, the counties within the watershed have all identified wildfire as a primary concern and a sizable portion of the population resides in the WUI. There is an overall high risk to communities from wildfire events.

Counties and Tribes

Clearwater, Malhe, Latah, Lewis, Nez Perce, Nez Perce Tribe

Cities

Beav, Craigmont, Culdesac, Deary, Ferdinando, Juliaetta, Kamiah, Kendrick, Kooski, Lapwai, Lewiston, Nezperce, Orofino, Peck, Pierce, Reubens, Troy, Wapato, and Winchester

Total wildfire mitigation actions: 121

A majority of the proposed mitigation actions are site-specific and can be found in the the county MHMAP.
Risk Rank: M

Introduction
Areas of concentrated population within the Clearwater watershed boundaries are Bovill, Craigmont, Caldfesac, Deary, Ferdinand, Juliaetta, Kamiah, Kendrick, Kooskia, Lapwai, Lewiston, Nespeca, Orofino, Peck, Pierce, Reubens, Troy, Weippe and Winchester.

What is the risk?
An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas. There are also 18 miles of canals and 44 levees that are receptive to seismic disturbances.

There are no essential facilities within 25 miles of a quaternary fault.

• 0 out of the 5 counties within the Clearwater watershed identified seismic as their number one hazard.
• 0 out of the 5 counties within the Clearwater watershed identified seismic as their number two hazard.
• 0 out of the 5 counties within the Clearwater watershed identified seismic as their number three hazard.

Counties and Tribes
Clearwater, Idaho, Latah, Lewis, Nez Perce, Nez Perce Tribe

Cities
Bovill, Craigmont, Caldfesac, Deary, Ferdinand, Juliaetta, Kamiah, Kendrick, Kooskia, Lapwai, Lewiston, Nespeca, Orofino, Peck, Pierce, Reubens, Troy, Weippe, Winchester

Total seismic mitigation actions: 19

A majority of the proposed mitigation actions are not location specific and can be found in the the county Areas.
Coeur d'Alene Lake

Risk Rank: H

Introduction
Areas of concentrated population within the Coeur d'Alene watershed boundaries are Coeur d'Alene, Dalton Gardens, Fernan, Harrison, Hayden, and Lake Village. There are 34,838 total people who live within the watershed, of which 1,219 are at risk of flooding. The watershed is largely privately owned.

What is the risk?
According to the Kootenai County AHMP, there have been 8 significant flood events along the shores of the Lake and tributaries within the watershed. There are 0 high or significant hazard dams in the Coeur d'Alene Lake watershed. There are 6 communities participating in the NFIP with 172 policies contributing to $135,686 of premiums paid in exchange for $32,667,900 of coverage.

- 6 out of the 3 counties in the Coeur d'Alene Lake watershed identified flood as their number one hazard.
- 1 out of the 3 counties in the Coeur d'Alene Lake watershed identified flood as their number two hazard.
- 2 out of the 3 counties in the Coeur d'Alene Lake watershed identified flood as their number three hazard.

LIDAR data availability
LIDAR availability within the Coeur d'Alene Lake watershed is as follows:
- Coeur d'Alene River (2002)
- Coeur d'Alene Reservation (2001)

Conclusion
Because of the high population within the watershed and its proximity to the Coeur d'Alene River, the watershed is considered to be at high risk to losses resulting from flood damage.

Counties and Tribes
Benewah, Coeur d'Alene Tribe, Kootenai, Shoshone
Cities
Coeur d'Alene, Dalton Gardens, Fernan, Harrison, Hayden, Lake Village

USGS 12413500 COEUR D'ALENE RIVER NR CATALDO ID

County All Hazard Mitigation Plans Flood Mitigation Actions

Total flood mitigation actions: 191
A majority of the proposed mitigation actions are not location specific and can be found in the the county AHMP.
**Coeur d’Alene Lake**

**Risk Rank:** H

**Introduction**

The Coeur d’Alene Lake watershed is home to 34,838 people, a moderate portion of which live in or near the Wildland Urban Interface. Areas of concentrated population within the Coeur d’Alene Lake watershed boundaries are Coeur d’Alene, Dalton Gardens, Fernan, Harrison, Hayden and Lake Village.

**What is the risk?**

Fires within the Coeur d’Alene Lake watershed have the potential to severely disrupt life, property and economic activity. There are 11,614 structures located within the WUI of the Coeur d’Alene Lake watershed. Since 2000, 1,958 acres have burned during 63 wildfire events. Based on data from the Idaho Forest Action Plan (2018), the Coeur d’Alene Lake watershed has 0% low risk, 0% moderate risk, 56% moderate-high risk, 41.3% high risk and 0% high risk of wildfire to the communities within the watershed.

- 2 out of the 3 counties in the Coeur d’Alene Lake watershed identified wildfire as their number one hazard.
- 1 out of the 3 counties in the Coeur d’Alene Lake watershed identified wildfire as their number two hazard.
- 0 out of the 3 counties in the Coeur d’Alene Lake watershed identified wildfire as their number three hazard.

**Conclusion**

Though the population residing within the WUI of the Coeur d’Alene Lake watershed is low and there haven’t been any major wildfire events since 2000, the potential for future damage to life and property by way of wildfire is identified as high.

**Counties and Tribes**

Benewah, Coeur d’Alene Tribe, Kootenai, Shoshone

**Cities**

Coeur d’Alene, Dalton Gardens, Fernan, Harrison, Hayden, Lake Village

**Total wildfire mitigation actions:** 91

A majority of the proposed mitigation actions are not location specific and can be found in the the county WHMN.
Coeur d’Alene Lake

Risk Rank: M

Introduction

Areas of concentrated population within the Coeur d’Alene Lake watershed boundaries are Coeur d’Alene, Dalton Gardens, Fernan, Harrison, Hayden and Lake Village.

What is the risk?

An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas. There are also 19 miles of canals and 6 levees that are receptive to seismic disturbances.

There are 34 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 3 counties within the Coeur d’Alene Lake watershed identified seismic as their number one hazard.
- 0 out of the 3 counties within the Coeur d’Alene Lake watershed identified seismic as their number two hazard.
- 0 out of the 3 counties within the Coeur d’Alene Lake watershed identified seismic as their number three hazard.

Counties and Tribes

Benewah, Coeur d’Alene Tribe, Kootenai, Shoshone

Cities

Coeur d’Alene, Dalton Gardens, Fernan, Harrison, Hayden, Lake Village

Total seismic mitigation actions: 29

A majority of the proposed mitigation actions are not location specific and can be found in the the county areas.
**Curlew Valley**

**Risk Rank:** 1

**Introduction:**
There are 362 total people who live within the Curlew Valley watershed, of which 6 are at risk of flooding. The watershed is largely outside of Idaho and the bulk of the land within the state is federally managed.

**What is the risk?**
According to the Oneida County AHMP, the watershed has experienced 3 flash flood events in recent history. Rock and Deep Creeks are the main water systems within the Curlew Valley watershed. Deep Creek flows into Stone Reservoir, which is impounded by 1 of the 2 high or significant hazard dams in the Curlew Valley watershed. There are 3 communities participating in the NFIP with 6 policies contributing to $0 of premiums paid in exchange for $0 of coverage.

- 0 out of the 3 counties in the Curlew Valley watershed identified flood as their number one hazard.
- 1 out of the 3 counties in the Curlew Valley watershed identified flood as their number two hazard.
- 0 out of the 3 counties in the Curlew Valley watershed identified flood as their number three hazard.

**LIDAR data availability**
No LIDAR data is available.

**Conclusion:**
Because of the low population and private property, the Curlew Valley watershed is considered a low risk watershed.

**Counties and Tribes**
Cassia, Oneida, Power

**Cities**

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**Curlew Valley Watershed**

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**Subbasin Metrics**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2,266</td>
<td>362</td>
<td>1,549</td>
<td>20</td>
<td>4,146</td>
<td>9,465</td>
<td>0</td>
<td>6</td>
</tr>
</tbody>
</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>1%</td>
</tr>
<tr>
<td>Federal</td>
<td>20%</td>
</tr>
<tr>
<td>Reservation/RRI</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>1%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>68%</td>
</tr>
</tbody>
</table>

**NFIP Statistics (2014)**

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th>F Claims</th>
<th>Paid Claims</th>
</tr>
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<tbody>
<tr>
<td>0</td>
<td>50</td>
<td>50</td>
<td>0</td>
<td>50</td>
</tr>
</tbody>
</table>

**Total flood mitigation actions:** 38

---

A majority of the proposed mitigation actions are not location specific and can be found in the the counties AHMP.

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**USGS**

**USGS 10172970 ROCK CREEK NR HOLBROOK ID**

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**County All Hazard Mitigation Plans Flood Mitigation Actions**

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Idaho Multi-Hazard Risk Portfolio

Wildfire

Curlew Valley

Risk Rank: L

Introduction
The Curlew Valley watershed is home to 362 people, none of which live in or near the Wildland Urban Interface. There are no major areas of population concentration within the watershed.

What is the risk?
Flores within the Curlew Valley watershed have the potential to severely disrupt life, property, and economic activity. There are no homes located within the WUI of the Curlew Valley watershed. Since 2000, 178,447 acres have burned during 60 individual wildfire events. Based on data from the MAFI Wildfire Action Plan (2010), the Curlew Valley watershed has 16.4% low risk, 29.4% low-moderate risk, 29.5% moderate risk, 22.7% moderate-high risk and 0.1% high risk of wildfire to the communities within the watershed.

- 2 out of the 3 counties in the Curlew Valley watershed identified wildfire as their number one hazard.
- 1 out of the 3 counties in the Curlew Valley watershed identified wildfire as their number two hazard.
- 0 out of the 3 counties in the Curlew Valley watershed identified wildfire as their number three hazard.

Conclusion
The low population and lack of effective WUI indicate an overall low risk of wildfire in the Curlew Valley watershed, despite the relatively frequent occurrence of wildfire.

Counties and Tribes
Cassia, Oneida, Power

Cities

Curlew Valley Watershed

Communities at Risk of Wildfire

- Low
- Low-Moderate
- Moderate
- Moderate-High
- High
- Wildland-Urban Interface
- Watershed

Subbasin Metrics

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>Population (2010)</th>
<th>Miles of Stream</th>
<th>Miles of Canal</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,268</td>
<td>362</td>
<td>1,548</td>
<td>20</td>
</tr>
</tbody>
</table>

Max. Elevation (ft): 9,485

Structures in WUI: 1

Historic Wildfire Events: 1

Acres Burned (1995-2010): 175,608

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>11%</td>
</tr>
<tr>
<td>Federal</td>
<td>20%</td>
</tr>
<tr>
<td>Reserve</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>1%</td>
</tr>
<tr>
<td>Out of State</td>
<td>68%</td>
</tr>
</tbody>
</table>

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>15.4%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>23.4%</td>
</tr>
<tr>
<td>Moderate</td>
<td>29.5%</td>
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<tr>
<td>Moderate-High</td>
<td>25.7%</td>
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<tr>
<td>High</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 37

A majority of the proposed mitigation actions are not location-specific and can be found in the county AROWS.
Risk Rank: M

Introduction

There are areas of concentrated population within the Curlew Valley watershed boundaries.

What is the risk?

An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas. There are also 20 miles of canals and that are receptive to seismic disturbances.

There are 2 essential facilities within 25 miles of a quaternary fault.

- 0 out of 3 counties within the Curlew Valley watershed identified seismic as their number one hazard.
- 0 out of 3 counties within the Curlew Valley watershed identified seismic as their number two hazard.
- 0 out of 3 counties within the Curlew Valley watershed identified seismic as their number three hazard.

Counties and Tribes

Cassia, Oneida, Power

Cities

Curlew Valley Watershed

USGS Ground Acceleration Map

Total seismic mitigation actions: 27

A majority of the proposed mitigation actions are not location specific and can be found in the the county assessors.
Idaho Multi-Hazard Risk Portfolio

Flood

East Little Owyhee

Risk Rank: 1

Introduction
There are 0 total people who live within the watershed.

What is the risk?
There are 0 high or significant hazard dams in the East Little Owyhee watershed. There are 0 communities participating in the NFIP with 0 policies contributing to $0 of premiums paid in exchange for $0 of coverage.

0 out of the 3 county in the East Little Owyhee watershed identified flood as their number one hazard.

0 out of the 3 county in the East Little Owyhee watershed identified flood as their number two hazard.

0 out of the 3 county in the East Little Owyhee watershed identified flood as their number three hazard.

UDAR data availability
No UDAR is available.

Conclusion
There are no people within the watershed at risk of flood damage. The East Little Owyhee is a low-risk watershed.

Counties and Tribes
Owyhee

Cities

East Little Owyhee Watershed

Not Available

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
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<tbody>
<tr>
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<td>922</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>0</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>204</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,347</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>8,369</td>
</tr>
<tr>
<td>Days of Concern</td>
<td>0</td>
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<tr>
<td>Pop. at Flood Risk</td>
<td>0</td>
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Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>0%</td>
</tr>
<tr>
<td>Federal</td>
<td>9%</td>
</tr>
<tr>
<td>Reservation/RIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>90%</td>
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</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFIP Policies</td>
<td>0</td>
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<tr>
<td>Total Coverage</td>
<td>50</td>
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<td>Total Premiums</td>
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<td>Total Claims</td>
<td>0</td>
</tr>
<tr>
<td>Paid Claims</td>
<td>50</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 15

A majority of the proposed mitigation actions are not location specific and can be found in the county ARMs.
Wildfire

East Little Owyhee

Risk Rank: L

Introduction
The East Little Owyhee watershed is home to no people.

What is the risk?
Since 2000, there have been no wildfire events. Based on data from the Idaho Forest Action Plan (2018), the East Little Owyhee watershed has 100% low risk, 0% low moderate risk, 0% moderate risk, 0% moderate high risk, and 0% high risk of wildfire in the communities within the watershed.

1 out of the 1 county in the East Little Owyhee watershed identified wildfire as their number one hazard.

0 out of the 1 county in the East Little Owyhee watershed identified wildfire as their number two hazard.

0 out of the 1 county in the East Little Owyhee watershed identified wildfire as their number three hazard.

Conclusion
There are no people within the East Little Owyhee watershed at risk of any wildfire events. The risk of wildfire is low.

Counties and Tribes

Owyhee

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>922</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2010)</td>
<td>0</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>204</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,347</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>8,366</td>
</tr>
<tr>
<td>Structures in WMU</td>
<td>No WMU</td>
</tr>
<tr>
<td>Historic Fire Events</td>
<td>0</td>
</tr>
<tr>
<td>Acres Burned (1993-15)</td>
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Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
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<tr>
<td>Private</td>
<td>0%</td>
</tr>
<tr>
<td>Federal</td>
<td>9%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>90%</td>
</tr>
</tbody>
</table>

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>100%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
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<tr>
<td>Moderate High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 10

A majority of the proposed mitigation actions are not location specific and can be found in the the county MHPRC.
Risk Rank: L

Introduction
There are no areas of concentrated population within the East Little Owyhee watershed boundaries. An earthquake within the watershed has a very small potential to cause damage to the life and property of those within these areas. There are 0 miles of canals that are receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 1 counties within the East Little Owyhee watershed identified seismic as their number one hazard.
- 0 out of the 1 counties within the East Little Owyhee watershed identified seismic as their number two hazard.
- 0 out of the 1 counties within the East Little Owyhee watershed identified seismic as their number three hazard.

Counties and Tribes
- Owyhee

Cities

Total seismic mitigation actions: 2

A majority of the proposed mitigation actions are not location specific and can be found in the the county plans.
## Goose

**Risk Rank:** M

**Introduction**
The areas of concentrated population within the Goose watershed boundaries are Burley and Oakley. There are 6,513 total people who live within the watershed, of which 1,006 are at risk of flooding. 24% of the watershed is privately owned, 35% federally managed, and 40% lies outside of Idaho.

**What is the risk?**
The city of Oakley is the population center for high intensity agricultural production which covers the northern end of the watershed. According to the Cassia County AHMP, there have been 12 flash flood events in recent history in the watershed. There is 1 high or significant hazard dam in the Goose watershed, the Oakley Dam, which provides storage for agriculture irrigation. There are 4 communities participating in the NFIP with 5 policies contributing to $1,681 of premiums paid in exchange for $1,239,000 of coverage.

- 4 out of the 3 counties in the Goose watershed identified flood as their number one hazard.
- 1 out of the 2 counties in the Goose watershed identified flood as their number two hazard.
- 0 out of the 3 counties in the Goose watershed identified flood as their number three hazard.

**LIDAR data availability**
LIDAR availability within the Goose watershed is as follows:
- City of Idaho National Monument (2011)

**Conclusion**
Because of the moderate population, amount of private property and presence of hazardous dams, the Goose watershed is considered to be at a moderate risk of flood damage.

### Counties and Tribes
- Cassia, Twin Falls
- Cities: Burley, Oakley

### NFIP Statistics (2014)
- NFIP Policies: 5
- Total Coverage: $1,239,000
- Total Premiums: $2,681
- Claims: 0
- Paid Claims: 0

### Total flood mitigation actions: 24
A majority of the proposed mitigation actions are not location specific and can be found in the AHMP.
Goose Watershed

Risk Rank: M

Introduction
The Goose watershed is home to 6,613 people and there is no Wildland Urban Interface. Areas of concentrated population within the Goose watershed boundaries are Burley and Oakley.

What is the risk?
Flores within the Goose watershed have the potential to severely disrupt life, property and economic activity. Since 2000, 36,693 acres have burned during 119 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Goose watershed has 36.9% low risk, 33.6% low-moderate risk, 6.7% moderate risk, 22.8% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

*2 out of the 2 counties in the Goose watershed identified wildfire as their number one hazard.
*0 out of the 2 counties in the Goose watershed identified wildfire as their number three hazard.

Conclusion
Both of the counties within the watershed have identified wildfire as a hazard of concern and there have frequently been wildfire events in the past. Though there is no WUI, the relatively low population is at an overall moderate risk to wildfire.

Counties and Tribes
Cassia, Twin Falls
Cities
Burley, Oakley

Goose

Wildfire

Subbasin Metrics

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
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<tr>
<td>Miles of Stream</td>
<td>1,104</td>
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<td>Miles of Canal</td>
<td>322</td>
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<td>Min. Elevation (ft)</td>
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<tr>
<td>Max. Elevation (ft)</td>
<td>9,995</td>
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<tr>
<td>Structures in WUI</td>
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<tr>
<td>Historic Fire Events</td>
<td>119</td>
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<tr>
<td>Acres Burned (1995)</td>
<td>56,091</td>
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Subbasin Ownership

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<thead>
<tr>
<th>Owner Type</th>
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<tbody>
<tr>
<td>Private</td>
<td>24%</td>
</tr>
<tr>
<td>Federal</td>
<td>35%</td>
</tr>
<tr>
<td>State</td>
<td>2%</td>
</tr>
<tr>
<td>Out of State</td>
<td>40%</td>
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</table>

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>36.9%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>33.6%</td>
</tr>
<tr>
<td>Moderate</td>
<td>6.7%</td>
</tr>
<tr>
<td>Moderate/High</td>
<td>22.8%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 15

A majority of the proposed mitigation actions are location specific and can be found in the county WUI.
Goose

Risk Rank: M

Introduction
Areas of concentrated population within the Goose watershed boundaries are Burley and Oakley.

What is the risk?
An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas. There are 322 miles of canals that are receptive to seismic disturbances.

There is 1 essential facility within 25 miles of a quaternary fault.

• 0 out of the 2 counties within the Goose watershed identified seismic as their number one hazard.
• 0 out of the 2 counties within the Goose watershed identified seismic as their number two hazard.
• 0 out of the 2 counties within the Goose watershed identified seismic as their number three hazard.

Counties and Tribes
Cassia, Twin Falls

Cities
Burley, Oakley

Total seismic mitigation actions: 20

A majority of the proposed mitigation actions are not location specific and can be found in the the county plans.
Hangman

Risk Rank: 1

Introduction
Areas of concentrated population within the Hangman watershed boundaries are Tensed and Worley. There are 1,726 total people who live within the watershed, of which 73 are at risk of flooding. Over half of the watershed is outside of Idaho.

What is the risk?
The main water system is Hangman Creek which runs through the south end of the city of Tensed. Little risk is associated since much of the land along these water systems being undeveloped. There are 0 high or significant hazard dams in the Hangman watershed. There are 5 communities participating in the NFIP with 6 policies contributing to 50 of premiums paid in exchange for $9 of coverage.
- 0 out of the 5 counties in the Hangman watershed identified flood as their number one hazard.
- 2 out of the 5 counties in the Hangman watershed identified flood as their number two hazard.
- 1 out of the 5 counties in the Hangman watershed identified flood as their number three hazard.

LiDAR data availability
LiDAR availability within the Hangman watershed is as follows:
- Coeur d'Alene Reservation (2005)

Conclusion
Low population and lack of dangerous waters equate to a low flood risk ranking for the Hangman watershed.

Counties and Tribes
- Benewah, Coeur d'Alene Tribe, Kootenai, Latah

Cities
- Tensed, Worley

Hangman Watershed

USGS 12422950 HANGMAN CREEK NR TENSED ID

**USGS**

<table>
<thead>
<tr>
<th>Action Status</th>
<th>Description</th>
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<td>Complete</td>
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**County All Hazard Mitigation Plans Flood Mitigation Actions**

**Provisional Data Subject to Revision**

**Subbasin Metrics**

<table>
<thead>
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<th>Metric</th>
<th>Value</th>
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<tr>
<td>Area (sq. miles)</td>
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<tr>
<td>Population</td>
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<tr>
<td>Miles of Stream</td>
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<tr>
<td>Miles of Canal</td>
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<tr>
<td>Min. Elevation</td>
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<td>Max. Elevation</td>
<td>6,015</td>
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<td>Bams of Concern</td>
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**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>22%</td>
</tr>
<tr>
<td>Federal</td>
<td>1%</td>
</tr>
<tr>
<td>Reservation/RiA</td>
<td>11%</td>
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<tr>
<td>State</td>
<td>1%</td>
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<tr>
<td>Out of Idaho</td>
<td>65%</td>
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**NFIP Statistics (2014)**

<table>
<thead>
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<th>NFIP Policies</th>
<th>NR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Coverage</td>
<td>50</td>
</tr>
<tr>
<td>Total Premiums</td>
<td>50</td>
</tr>
<tr>
<td>G Claims</td>
<td>50</td>
</tr>
<tr>
<td>Paid Claims</td>
<td>50</td>
</tr>
</tbody>
</table>
Hangman Watershed

Introduction

The Hangman watershed is home to 1,726 people, a small portion of which live in or near the Wildland Urban Interface. Areas of concentrated population within the Hangman watershed boundaries are Tensed and Worley.

What is the risk?

Fires within the Hangman watershed have the potential to severely disrupt life, property and economic activity. There are 40 structures located within the WUI of the Hangman watershed. Since 2000, 6,518 acres have burned in 24 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Hangman watershed has 0.1% low risk, 62.8% low-moderate risk, 22.9% moderate risk, 14.3% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

Out of the 3 counties in the Hangman watershed, 3 counties identified wildfire as their number one hazard.

Out of the 3 counties in the Hangman watershed, 2 counties identified wildfire as their number two hazard.

Out of the 3 counties in the Hangman watershed, 2 counties identified wildfire as their number three hazard.

Conclusion

Despite the small amount of homes in the WUI and lack of recent significant wildfire events, all three counties within the watershed have identified wildfire as a primary concern. The watershed is at an overall moderate risk to wildfire.

Counties and Tribes

Benewah, Coeur d'Alene Tribe, Kootenai, Latah

Cities

Tensed, Worley

Total wildfire mitigation actions: 100
**Hangman**

**Risk Rank:** L

**Introduction**

Areas of concentrated population within the Hangman watershed boundaries are Tensed and Worley.

An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas. There are 0 miles of canals that are receptive to seismic disturbances.

There is 1 essential facility within 25 miles of a quaternary fault.

- 0 out of the 3 counties within the Hangman watershed identified seismic as their number one hazard.
- 0 out of the 3 counties within the Hangman watershed identified seismic as their number two hazard.
- 0 out of the 3 counties within the Hangman watershed identified seismic as their number three hazard.

**Counties and Tribes**

Benewah, Coeur d'Alene Tribe, Kootenai, Latah

**Cities**

Tensed, Worley

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>603</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2010)</td>
<td>1,726</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>65.3</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>1,715</td>
</tr>
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<td>Max. Elevation (ft)</td>
<td>4,915</td>
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<tr>
<td>Est. Facilities Near Fault</td>
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<tr>
<td>In Watershed w/25 Miles of Fault</td>
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</tbody>
</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>23%</td>
</tr>
<tr>
<td>Federal</td>
<td>1%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>11%</td>
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<tr>
<td>State</td>
<td>1%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>60%</td>
</tr>
</tbody>
</table>

**Ground Acceleration**

<table>
<thead>
<tr>
<th>Accel. Amount</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>100%</td>
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<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Total seismic mitigation actions:** 13

A majority of the proposed mitigation actions are not location specific and can be found in the the county plans.
Introduction
There are 21 total people who live within the Hells Canyon watershed, of which none are at risk of flooding. 28% of the watershed is privately owned.

What is the risk?
The Snake River is a powerful water source with high flood hazards due to seasonal high stream flows that exceed its bankfull discharge with one major flood event reported in the Idaho County AHRP. There is 1 high or significant hazard dam in the Hells Canyon watershed. There are 0 communities participating in the NFIP with 0 policies contributing to $0 of premiums paid in exchange for $0 of coverage.

Risk Rank: L

LIDAR data availability
LIDAR availability within the Hells Canyon watershed is as follows:

Conclusion
Despite the high volume of the Snake River, the Hells Canyon watershed is a low flood risk watershed because of its low population.

Counties and Tribes
Adams, Idaho

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Subbasin Ownership</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>23%</td>
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<tr>
<td>Reservation/Rock</td>
<td>35%</td>
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<td>State</td>
<td>0%</td>
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<tr>
<td>Out of Idaho</td>
<td>36%</td>
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NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Policies</th>
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<tbody>
<tr>
<td>Total Coverage</td>
</tr>
<tr>
<td>Total Premiums</td>
</tr>
<tr>
<td>Total Claims</td>
</tr>
<tr>
<td>Paid Claims</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 29
A majority of the proposed mitigation actions are not location specific and can be found in the the county AHRP.
Hells Canyon

Risk Rank: L

Introduction
The Hells Canyon watershed is home to 21 people and there is no Wildland Urban Interface. There are no areas of concentrated population.

What is the risk?
Fires within the Hells Canyon watershed have the potential to severely disrupt life, property and economic activity. Since 2000, 90,395 acres have burned during 32 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Hells Canyon watershed has 6.4% low risk, 11.2% low-moderate risk, 77.8% moderate risk, 4.6% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

- 1 out of the 2 counties in the Hells Canyon watershed identified wildfire as their number one hazard.
- 1 out of the 2 counties in the Hells Canyon watershed identified wildfire as their number two hazard.
- 1 out of the 2 counties in the Hells Canyon watershed identified wildfire as their number three hazard.

Conclusion
Recent wildfire events within the Hells Canyon watershed have been large, however the extremely low population is at an overall low risk to future damage resulting from wildfire events.

Counties and Tribes
Adams, Idaho

Cities

Hells Canyon Watershed

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>5.4%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>11.7%</td>
</tr>
<tr>
<td>Moderate</td>
<td>77.8%</td>
</tr>
<tr>
<td>Moderate/High</td>
<td>4.6%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 17

A majority of the proposed mitigation actions are not location-specific and can be found in the the county MHP.
Idaho Multi-Hazard Risk Portfolio

Seismic

Risk Rank: L

Introduction

There are no areas of concentrated population within the Hells Canyon watershed boundaries.

What is the risk?

An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas. There are also 3 miles of canals that are receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

• 0 out of the 2 counties within the Hells Canyon watershed identified seismic as their number one hazard.
• 0 out of the 2 counties within the Hells Canyon watershed identified seismic as their number two hazard.
• 0 out of the 2 counties within the Hells Canyon watershed identified seismic as their number three hazard.

Counties and Tribes

Adams, Idaho

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>5.88</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2016)</td>
<td>21</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>2,617</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>3</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>902</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>9,337</td>
</tr>
<tr>
<td>St. Facilities Near Fault</td>
<td>0</td>
</tr>
<tr>
<td>% Watershed with 100 Year Elevation</td>
<td>110 %</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>23%</td>
</tr>
<tr>
<td>Federal</td>
<td>39%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>2%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>36%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Acceleration</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>64%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>36%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 11

A majority of the proposed mitigation actions are not location specific and can be found in the the county areas.
Idaho Multi-Hazard Risk Portfolio

Idaho Falls

Risk Rank: H

Introduction
Areas of concentrated population within the watershed boundaries are Hauser, Idaho Falls, Lewiston, Menan, Rigby, Ririe, Roberts and Ucon. There are 35,155 total people who live within the watershed, of which 3,136 are at risk of flooding. The watershed is largely privately owned.

What is the risk?
Flooding events within the Idaho Falls watershed could affect life and property, including agricultural operations along the Snake River. According to the county AHMPs, 19 significant flood events have occurred in recent history. There are a number of levees protecting communities from stream flow of the Snake River. There are 0 high or significant hazard dams in the Idaho Falls watershed. There are 8 communities participating in the NFIP with 78 policies contributing to $56,857 of premiums paid in exchange for $19,777,400 of coverage.

2 out of the 3 counties in the Idaho Falls watershed identified flood as their number one hazard.

0 out of the 3 counties in the Idaho Falls watershed identified flood as their number two hazard.

1 out of the 3 counties in the Idaho Falls watershed identified flood as their number three hazard.

LiDAR data availability
LiDAR availability within the Idaho Falls watershed is as follows:
- Jefferson County (2012)
- Madison County (2009)
- Snake River (2010)

Conclusion
Because of the high population within the watershed, the large amount of private property and the number of levees protecting life and property, the Idaho Falls watershed is considered a high risk watershed.

Counties and Tribes
Bonnieville, Jefferson, Madison
Cities
Hauser, Idaho Falls, Lewistown, Menan, Rigby, Ririe, Roberts, Ucon

NFIP Statistics (2014)
NFIP Policies 86
Total Coverage $19,777,400
Total Premiums $56,657
Claims 4
Paid Claims $11,966

Total flood mitigation actions: 31
A majority of the proposed mitigation actions are not location specific and can be found in the the county AHMPs.
Idaho Falls Watershed

Idaho Falls

Risk Rank: M

Introduction

The Idaho Falls watershed is home to 33,155 people and there is no Wildland Urban Interface within the watershed. Areas of concentrated population within the Idaho Falls watershed boundaries are Hamer, Idaho Falls, Lewisville, Menan, Rigby, Ririe, Roberts and Loran.

What is the risk?

Fires within the Idaho Falls watershed have the potential to severely disrupt life, property and economic activity. There are 1 homes located within the WUI of the Idaho Falls watershed. Since 2000, 15,600 acres have burned during 24 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Idaho Falls watershed has 44.9% low risk, 38.5% low moderate risk, 13.6% moderate risk, 1.6% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

1 out of the 3 counties in the Idaho Falls watershed identified wildfire as their number one hazard.

1 out of the 3 counties in the Idaho Falls watershed identified wildfire as their number two hazard.

1 out of the 3 counties in the Idaho Falls watershed identified wildfire as their number three hazard.

Conclusion

The moderate population and lack of WUI place the Idaho Falls watershed at an overall moderate risk of damaging future wildfire events.

Counties and Tribes

Bonneville, Jefferson, Madison

Cities

Hamer, Idaho Falls, Lewisville, Menan, Rigby, Ririe, Roberts, Loran

Idaho Falls

Total wildfire mitigation actions:
24

A majority of the proposed mitigation actions are location-specific and can be found in the the county RHMA.
**Idaho Falls**

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,248</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>39,155</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>362</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>338</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,698</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>7,077</td>
</tr>
<tr>
<td>Oil Facilities Near Fault</td>
<td>24</td>
</tr>
<tr>
<td>% Watershed with 25 Miles of Fault</td>
<td>96%</td>
</tr>
</tbody>
</table>

**Subbasin Ownership**

- **Owner Type**: Private (72%)
- **Federal**: 24%
- **Reservation/ BIA**: 0%
- **State**: 5%
- **Out of Idaho**: 0%

**Ground Acceleration**

- **Low**: 0%
- **Low-Moderate**: 5%
- **Moderate**: 93%
- **Moderate-High**: 1%
- **High**: 0%

**Risk Rank**: H

**Introduction**

Areas of concentrated population within the Idaho Falls watershed boundaries are Harmer, Idaho Falls, Lewiston, Menan, Rigby, Rexburg, Roberts and Ucon.

**What is the risk?**

An earthquake within the watershed has a high potential to cause damage to the life and property of those within these areas. There are 338 miles of canals and 13 levees that are receptive to seismic disturbances.

There are 24 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 3 counties within the Idaho Falls watershed identified seismic as their number one hazard.
- 0 out of the 3 counties within the Idaho Falls watershed identified seismic as their number two hazard.
- 0 out of the 3 counties within the Idaho Falls watershed identified seismic as their number three hazard.

**Counties and Tribes**

Bonneville, Jefferson, Madison

**Cities**

Harmer, Idaho Falls, Lewiston, Menan, Rigby, Rexburg, Roberts, Ucon

**Total seismic mitigation actions**: 26

A majority of the proposed mitigation actions are not location specific and can be found in the the county areas.
Jordan

Risk Rank: 1

Introduction

There are 78 total people who live within the Jordan watershed, of which 0 are at risk of flooding. The majority of the watershed lies outside of the state, leaving only 14% privately owned.

What is the risk?

There are 5 high or significant hazard dams in the Jordan watershed. According to the Owyhee County AHMP, two flooding events have occurred within the watershed in recent history. There are 0 communities participating in the NFIP with 0 policies contributing to $0 of premiums paid in exchange for $0 of coverage.

- 0 out of the 1 county in the Jordan watershed identified flood as their number one hazard.
- 0 out of the 1 county in the Jordan watershed identified flood as their number two hazard.
- 0 out of the 1 county in the Jordan watershed identified flood as their number three hazard.

LiDAR data availability

LiDAR availability within the Jordan watershed is as follows:
- Reynolds Creek (2007, 2009)

Conclusion

Despite the numerous hazardous dams in the Jordan, the population at risk of flood events is very small, placing the watershed in the low flood risk category.

Counties and Tribes

Owyhee

Cities

Flood

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,221</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>78</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,386</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>9</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>3,363</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>8,350</td>
</tr>
<tr>
<td>Dams of Concern</td>
<td>4</td>
</tr>
<tr>
<td>Pop. at Flood Risk</td>
<td>0</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>16%</td>
</tr>
<tr>
<td>Federal</td>
<td>24%</td>
</tr>
<tr>
<td>Reservation/R/IA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>8%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>52%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th>Total Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 18

A majority of the proposed mitigation actions are not location specific and can be found in the area's AHMP.

USGS

<table>
<thead>
<tr>
<th>USGS 13178630 JORDAN CREEK AB LONE TREE CR NR JORDAN VALLEY OR</th>
</tr>
</thead>
</table>

County All Hazards Mitigation Plans Flood Mitigation Actions

<table>
<thead>
<tr>
<th>Action Status</th>
<th>Stakeholder</th>
<th>Engagement Type</th>
<th>Bar</th>
<th>Area of Concern</th>
<th>Completion Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Jordan watershed is home to 78 people, there is no Wildland Urban Interface and there are no areas of concentrated population.

What is the risk?
Fires within the Jordan watershed have the potential to severely disrupt life, property and economic activity. Since 2000, 18,888 acres have burned during 24 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Jordan watershed has 17.6% low risk, 63.5% low-moderate risk, 18.3% moderate risk, 12.3% moderate-high risk and 8.6% high risk of wildfire to the communities within the watershed.

Conclusion
Given the very low population and lack of WUI in the Jordan watershed, the watershed is at a low risk of wildfire events to people and property.

Counties and Tribes

Cities
Jordan

Risk Rank: L

Introduction
There are no areas of concentrated population within the Jordan watershed boundaries.

What is the risk?
An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas. There are 9 miles of canals that are receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 1 counties within the Jordan watershed identified seismic as their number one hazard.
- 0 out of the 1 counties within the Jordan watershed identified seismic as their number two hazard.
- 0 out of the 1 counties within the Jordan watershed identified seismic as their number three hazard

Counties and Tribes
Owyhine

Cities

Subbasin Metrics
- Area (sq. miles): 1,221
- Population (2010): 78
- Miles of Stream: 1,186
- Miles of Canal: 9
- Min. Elevation (ft): 3,363
- Max. Elevation (ft): 8,330
- Est. Facilities Near Fault: 0
- % of Watershed within 25 Miles of Fault: 0%

Subbasin Ownership
- Private: 14%
- Federal: 24%
- Reservation/USA: 0%
- State: 8%
- Out of Idaho: 54%

Ground Acceleration
- Low: 100%
- Low-Moderate: 0%
- Moderate: 0%
- High: 0%

Total seismic mitigation actions: 2

A majority of the proposed mitigation actions are not location specific and can be found in the the county annexes.
Lake Walcott Watershed

Risk Rank: H

Introduction
Areas of concentrated population within the Lake Walcott watershed boundaries are Acepoua, Albion, American Falls, Burley, Declo, Heyburn, Minidoka, Paul, Rockland and Rupert. There are 37,901 total people who live within the watershed, of which 3,873 are at risk of flooding. Roughly one third of the watershed is privately owned.

What is the risk?
High stream flow from the Snake River has the potential to threaten life and property in the Lake Walcott watershed. According to the county AHWMs, there have been 23 flash flood events reported within the watershed in recent history. There are 7 high or significant hazard dams in the Lake Walcott watershed. There are 16 communities participating in the NFIP with 45 policies contributing to $54,083 of premiums paid in exchange for $12,255,700 of coverage.

* 6 out of the 9 counties in the Lake Walcott watershed identified flood as their number one hazard.
* 1 out of the 9 counties in the Lake Walcott watershed identified flood as their number two hazard.
* 1 out of the 9 counties in the Lake Walcott watershed identified flood as their number three hazard.

LIDAR data availability
No LIDAR data is available or planned.

Conclusion
The high population, relatively high population at risk of flooding, presence of hazardous dams and high NFIP involvement equate the Lake Walcott watershed as being a high risk watershed.

Counties and Tribes
Albany, Butte, Custer, Jerome, Lincoln, Minidoka, Oneida, Power, Shoshone-Bannock Tribes, Twin Falls
Cities
Acepoua, Albion, American Falls, Burley, Declo, Heyburn, Minidoka, Paul, Rockland, Rupert

Total flood mitigation actions: 123

A majority of the proposed mitigation actions are not location specific and can be found in the flood hazard areas.
Lake Walcott

Risk Rank: H

Introduction

The Lake Walcott watershed is home to 37,901 people, a moderate amount of which live in the Wildland Urban Interface. Areas of concentrated population within the Lake Walcott watershed boundaries are Aclequa, Albion, American Falls, Burley, Declo, Heyburn, Minidoka, Paul, Rockland, and Rupert.

What is the risk?

Fires within the Lake Walcott watershed have the potential to severely disrupt life, property, and economic activity. There are 6,783 structures located within the WUI of the Lake Walcott watershed. Since 2000, 1,131,522 acres have burned during 385 individual wildfire events. This cumulative burn area amounts to half of the total watershed area. Based on data from the Idaho Forest Action Plan (2018), the Lake Walcott watershed has 32,1% low risk, 24.9% low-moderate risk, 13.1% moderate risk, 8.5% moderate-high risk and 1.4% high risk of wildfire to the communities within the watershed.

7 out of the 9 counties in the Lake Walcott watershed identified wildfire as their number one hazard.

1 out of the 9 counties in the Lake Walcott watershed identified wildfire as their number two hazard.

1 out of the 9 counties in the Lake Walcott watershed identified wildfire as their number three hazard.

Conclusion

The relatively high population and high amount of property within the WUI of the Lake Walcott watershed, coupled with the high frequency and magnitude of historic fire events, place the people and property of the watershed at a high risk to future wildfire events.

Counties and Tribes

Blaine, Butte, Cassia, Jerome, Lincoln, Minidoka, Otero, Power, Shoshone-Bannock Tribes, Twin Falls.

Cities

Aclequa, Albion, American Falls, Burley, Declo, Heyburn, Minidoka, Paul, Rockland, Rupert.

Total wildfire mitigation actions: 127

A majority of the proposed mitigation actions are site-specific and cannot be found in the vicinity of the watershed.
Lake Walcott

Risk Rank: H

Introduction
Areas of concentrated population within the Lake Walcott watershed boundaries are Acequia, Albion, American Falls, Burley, Declo, Heyburn, Minidoka, Paul, Rockland and Rupert.

What is the risk?
An earthquake within the watershed has the high potential to cause damage to the life and property of those within these areas. There are 1319 miles of canals that are receptive to seismic disturbances.

There are no essential facilities within 25 miles of a quaternary fault.

- 0 out of the 9 counties within the Lake Walcott watershed identified seismic as their number one hazard.
- 0 out of the 9 counties within the Lake Walcott watershed identified seismic as their number two hazard.
- 0 out of the 9 counties within the Lake Walcott watershed identified seismic as their number three hazard.

Counties and Tribes
Blaine, Butte, Cassia, Jerome, Lincoln, Minidoka, Oneida, Power, Shoshone-Bannock Tribes, Twin Falls

Cities
Acequia, Albion, American Falls, Burley, Declo, Heyburn, Minidoka, Paul, Rockland, Rupert

Total seismic mitigation actions: 84

A majority of the proposed mitigation actions are not location specific and can be found in the county annexes.
Risk Rank: M

Introduction

Areas of concentrated population within the Lemhi watershed boundaries are Leadore and Salmon. There are 1,881 total people who live within the watershed, of which 159 are at risk of flooding. The majority of the watershed is federally managed.

What is the risk?

Flood hazards can be due to rain on snow events, localized intensive rainfall, and high streamflows exceeding bankfull discharge. According to the Lemhi County AHSMP, there has been 2 reports of flash floods within the watershed in recent history. There is 1 high or significant hazard zone in the Lemhi. There are 4 communities participating in the NFIP with 17 policies contributing to $36,168 in premiums paid in exchange for $39,948,000 of coverage.

-6 out of the 2 counties in the Lemhi watershed identified flood as their number one hazard.
-1 out of the 2 counties in the Lemhi watershed identified flood as their number two hazard.
-0 out of the 2 counties in the Lemhi watershed identified flood as their number three hazard.

LIDAR data availability within the Lemhi watershed is as follows:

Conclusion

The population near the unregulated Lemhi River and presence of a hazardous dam place the Lemhi watershed in the moderate flood risk rank.

Counties and Tribes

Gunter, Lemhi

Cities

Leadore, Salmon

Flood

Subbasin Metrics

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>1,261</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2010)</td>
<td>1,881</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>2,574</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>356</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>3,911</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>11,316</td>
</tr>
<tr>
<td>Bases of Concern</td>
<td></td>
</tr>
<tr>
<td>Pop. at Risk</td>
<td>159</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>15%</td>
</tr>
<tr>
<td>Federal</td>
<td>78%</td>
</tr>
<tr>
<td>Reservation/BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>3%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

| NFIP Policies | 27 |
| Total Coverage | $39,948,000 |
| Total Premiums | $36,168 |
| # Claims | 0 |
| Paid Claims | 0 |

Total flood mitigation actions: 26

A majority of the proposed mitigation actions are not location specific and can be found in the the county AHSMP.
Idaho Multi-Hazard Risk Portfolio

Wildfire

Lemhi

Risk Rank: M

Introduction

The Lemhi watershed is home to 1,881 people, nearly half of which live in the Wildland Urban Interface. Areas of concentrated population within the Lemhi watershed boundaries are Leadore and Salmon.

What is the risk?

Fires within the Lemhi watershed have the potential to severely disrupt life, property and economic activity. There are 743 structures located within the WUI of the Lemhi watershed. Since 2000, 23,793 acres have burned during 65 individual wildfire events. Based on data from the Malheur Forest Action Plan (2010), the Lemhi watershed has 13.4% low risk, 19.2% low moderate risk, 56.1% moderate risk, 16.1% moderate-high risk and 1.2% high risk of wildfire to the communities within the watershed.

2 out of the 2 counties in the Lemhi watershed identified wildfire as their number one hazard.

0 out of the 2 counties in the Lemhi watershed identified wildfire as their number two hazard.

0 out of the 2 counties in the Lemhi watershed identified wildfire as their number three hazard.

Conclusion

Two counties within the Lemhi watershed have identified wildfire as the primary hazard of concern. The high portion of the population with property within the WUI contributes to the overall moderate risk of wildfire events in the Lemhi watershed.

Counties and Tribes

Custer, Lemhi

Cities

Leadore, Salmon

Subbasin Metrics

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>1,261</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2010)</td>
<td>1,881</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>2,574</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>358</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>3,913</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>11,316</td>
</tr>
<tr>
<td>Structures in WUI</td>
<td>743</td>
</tr>
<tr>
<td>Historic Fire Events</td>
<td>65</td>
</tr>
<tr>
<td>Acres Burned (1995-)</td>
<td>23,793</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>19%</td>
</tr>
<tr>
<td>Federal</td>
<td>78%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>3%</td>
</tr>
<tr>
<td>Out of State</td>
<td>0%</td>
</tr>
</tbody>
</table>

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>13.4%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>19.2%</td>
</tr>
<tr>
<td>Moderate</td>
<td>56.1%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>10.1%</td>
</tr>
<tr>
<td>High</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 25

A majority of the proposed mitigation actions are not location specific and can be found in the the county WUI.
Idaho Multi-Hazard Risk Portfolio  

**Seismic**

**Lemhi**

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,261</td>
</tr>
<tr>
<td>Population (2020)</td>
<td>1,881</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>2,578</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>358</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>3,911</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>11,315</td>
</tr>
<tr>
<td>Out. Facilities Near Fault</td>
<td>3</td>
</tr>
<tr>
<td>Within 10 Miles of Fault</td>
<td>93%</td>
</tr>
</tbody>
</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% of Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>15%</td>
</tr>
<tr>
<td>Federal</td>
<td>78%</td>
</tr>
<tr>
<td>Reservation</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>3%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Ground Acceleration**

<table>
<thead>
<tr>
<th>Acceleration Level</th>
<th>% of Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>10%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>86%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Total seismic mitigation actions:** 29

A majority of the proposed mitigation actions are not location specific and can be found in the threat county plans.
Little Bear-Logan

Risk Rank: L

Introduction
The Little Bear-Logan watershed lies mainly in Utah and is uninhabited and undeveloped within its Idaho boundaries.

What is the risk?
Beaver Creek is the main water system within the watershed, though it poses very little threat to life or property because of the lack of private property or inhabitants. There is no NFIP participation within the Little Bear-Logan.

0 out of the 2 counties in the Little Bear-Logan watershed identified flood as their number one hazard.
0 out of the 2 counties in the Little Bear-Logan watershed identified flood as their number two hazard.
0 out of the 2 counties in the Little Bear-Logan watershed identified flood as their number three hazard.

UDAR data availability
No UDAR is available.

Conclusion
There are no people or property at risk of flooding within the Little Bear-Logan, therefore it is considered a low risk watershed.

Counties and Tribes
Bear Lake, Franklin

Cities

Not Available
**Little Bear-Logan**

**Risk Rank:** L

**Introduction**

The Little Bear-Logan watershed is home to no permanent residents.

**What is the risk?**

Since 2000, there have been no reported wildfires in the watershed. Based on data from the Idaho Forest Action Plan (2018), the Little Bear-Logan watershed has 0% low risk, 0% low-moderate risk, 100% moderate risk, 0% moderate-high risk, and 0% high risk of wildfire to the communities within the watershed.

- 1 out of the 2 counties in the Little Bear-Logan watershed identified wildfire as their number one hazard.
- 1 out of the 2 counties in the Little Bear-Logan watershed identified wildfire as their number two hazard.
- 0 out of the 2 counties in the Little Bear-Logan watershed identified wildfire as their number three hazard.

**Conclusion**

There are no people or properties at risk of future wildfire events. The watershed is at a low risk of future wildfire events.

**Counties and Tribes**

Bear Lake, Franklin

**Cities**

- Bear Lake
- Franklin

---

**Subbasin Metrics**

- Area (sq. miles): 888
- Population (2010): 0
- Miles of Stream: 45
- Miles of Canal: 0
- Min. Elevation (ft): 4,392
- Max. Elevation (ft): 9,934
- Structures in Wildfire Hazard Area: 0
- Historic Fire Events: 0
- Acres Burned (1995-): 0

**Subbasin Ownership**

- Owner Type: Private (100%)
- Federal: 0%
- Reservation: 0%
- State: 0%
- Out of Idaho: 0%

**Watershed Fire Risk**

- Risk Level: Low (100%)
- Low-Moderate: 0%
- Moderate: 0%
- Moderate-High: 0%
- High: 0%

---

**Total wildfire mitigation actions:** 22

A majority of the proposed mitigation actions are non-structural and can be found in the Idaho Multi-Hazard Risk Portfolio.
Little Bear-Logan

Risk Rank: L

Introduction

There are no areas of concentrated population within the Little Bear-Logan watershed boundaries.

What is the risk?

An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas.

There are no essential facilities within 25 miles of a fault or historic quake area.

- 0 out of the 2 counties within the Little Bear-Logan watershed identified seismic as their number one hazard.
- 0 out of the 2 counties within the Little Bear-Logan watershed identified seismic as their number two hazard.
- 0 out of the 2 counties within the Little Bear-Logan watershed identified seismic as their number three hazard.

Counties and Tribes

Bear Lake, Franklin

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Little Bear-Logan</td>
<td>888</td>
<td>0</td>
<td>65</td>
<td>0</td>
<td>4,393</td>
<td>9,334</td>
<td>100%</td>
</tr>
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</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>0%</td>
</tr>
<tr>
<td>Federal</td>
<td>4%</td>
</tr>
<tr>
<td>Reservation/BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>96%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Acceleration</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>1%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>100%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 13

A majority of the proposed mitigation actions are not location specific and can be found in the Idaho county areas.
Idaho Multi-Hazard Risk Portfolio

**Flood**

**Little Lost**

**Risk Rank:** L

**Introduction:**

There are 333 total people who live within the watershed, of which 0 are at risk of flooding. The watershed is 89% federally managed.

**What is the risk?**

The population along the Little Lost River could be at a small risk considering the river's variable and low stream flow. There are 0 high or significant hazard dams in the Little Lost watershed. There are 6 communities participating in the NFIP with 6 policies contributing to $0 of premiums paid in exchange for $0 of coverage.

- 0 out of the 6 counties in the Little Lost watershed identified flood as their number one hazard.
- 1 out of the 6 counties in the Little Lost watershed identified flood as their number two hazard.
- 0 out of the 6 counties in the Little Lost watershed identified flood as their number three hazard.

**LiDAR data availability**

No LiDAR data is available.

**Conclusion**

The small population and lack of significant factors contributing to flood risk place the Little Lost watershed in the low risk category.

**Counties and Tribes**

Burt, Clark, Custer, Lami

**Cities**

MacKay Reservoir, Butte, Clark, Custer, Lami

---

**Subbasin Metrics**

- **Area (sq. miles):** 966
- **Population (2010):** 333
- **Miles of Stream:** 1,859
- **Miles of Canal:** 14
- **Min. Elevation (ft):** 4,780
- **Max. Elevation (ft):** 12,355
- **Barns of Concern:** 0
- **Pop. at Flood Risk:** 54

**Subbasin Ownership**

- **Owner Type:** Private
- **Ownership %:** 9%
- **Federal:** 89%
- **Reservation/RIA:** 0%
- **State:** 2%
- **Out of Idaho:** 0%

**NFIP Statistics (2014)**

- **NFIP Policies:** 0
- **Total Coverage:** 50
- **Total Premiums:** 50
- **Paid Claims:** 0

**Total flood mitigation actions:** 34

A majority of the proposed mitigation actions are not location-specific and can be found in the flood plan for each county.
Idaho Multi-Hazard Risk Portfolio

Wildfire

**Little Lost**

**Risk Rank:** L

**Introduction**

The Little Lost watershed is home to 333 people and there is no Wildland Urban Interface. There are no areas of concentrated population within the Little Lost watershed.

**What is the risk?**

Fires within the Little Lost watershed have the potential to severely disrupt life, property, and economic activity. Since 1980, 4,240 acres have burned during 15 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Little Lost watershed has 42.1% low risk, 50.1% low-moderate risk, 7.8% moderate risk, and 0% high-moderate risk to wildfire to the communities within the watershed.

- 3 out of the 4 counties in the Little Lost watershed identified wildfire as their number one hazard.
- 1 out of the 4 counties in the Little Lost watershed identified wildfire as their number three hazard.

**Conclusion**

The counties within the Little Lost watershed have identified wildfire as a hazard of significance, though the small population in the watershed is at an overall low risk to wildfire events.

**Counties and Tribes**

Butte, Clark, Custer, Lemhi

**Cities**

Clark, Custer

**Total wildfire mitigation actions:** 59

A majority of the proposed mitigation actions are location specific and can be found in the the county HMMAP.
**Little Lost**

**Risk Rank:** M

**Introduction**
There are no areas of concentrated population within the Little Lost watershed boundaries.

**What is the risk?**
An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas. There are also 148 miles of canals and 1 levee that are receptive to seismic disturbances.

There is 1 essential facility within 25 miles of a quaternary fault.

- 0 out of the 4 counties within the Little Lost watershed identified seismic as their number one hazard.
- 0 out of the 4 counties within the Little Lost watershed identified seismic as their number two hazard.
- 0 out of the 4 counties within the Little Lost watershed identified seismic as their number three hazard.

**Counties and Tribes**
Butte, Clark, Custer, Lemhi:

**Cities**

---

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>966</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>333</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,859</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>148</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,780</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>12,155</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>1</td>
</tr>
<tr>
<td>In Watershed within 25 miles of Fault</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Type</th>
<th>% of Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>9%</td>
</tr>
<tr>
<td>Federal</td>
<td>89%</td>
</tr>
<tr>
<td>Reservation/BLM</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>2%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Ground Acceleration**

<table>
<thead>
<tr>
<th>Level</th>
<th>% of Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>32%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>68%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Total seismic mitigation actions:** 44

A majority of the proposed mitigation actions are not location specific and can be found in the the county action plans.
Idaho Multi-Hazard Risk Portfolio

Flood

Little Salmon

Risk Rank: M

Introduction
Areas of concentrated population within the Little Salmon watershed boundaries are New Meadows and Riggins. There are 2,399 total people who live within the watershed, of which 103 are at risk of flooding. The watershed is two thirds federally managed.

What is the risk?
Flooding hazards include seasonal high stream flows that exceed bankfull discharge. At the USGS gauge near the city of Riggins, this discharge is 4000 cfs. Annual peaks often exceed bankfull, with the county AHAH's reporting 3 significant flood events in recent history. There are 3 high or significant hazard dams in the Little Salmon watershed. There are 5 communities participating in the NFIP with 18 policies contributing to $16,400 of premiums paid in exchange for $4,991,000 of coverage.

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>577</td>
</tr>
<tr>
<td>Population</td>
<td>2,399</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,281</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>21</td>
</tr>
<tr>
<td>Min. Elevation</td>
<td>1,706</td>
</tr>
<tr>
<td>Max. Elevation</td>
<td>9,350</td>
</tr>
<tr>
<td>Dam of Concern</td>
<td>3</td>
</tr>
<tr>
<td>P2P at Flood Risk</td>
<td>103</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>33%</td>
</tr>
<tr>
<td>Federal</td>
<td>66%</td>
</tr>
<tr>
<td>Reservation/RIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>4%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th>P2P Claims</th>
<th>Paid Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>$4,091,000</td>
<td>$16,400</td>
<td>$3,500</td>
<td></td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 45
A majority of the proposed mitigation actions are not location specific and can be found in the the counties AHAH.

USGS 13316550 LITTLE SALMON RIVER AT RIGGINS ID

County All Hazards Mitigation Plans Flood Mitigation Actions

<table>
<thead>
<tr>
<th>Action Status</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inactive</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Proposed</td>
<td>Location Specific</td>
</tr>
<tr>
<td>Complete</td>
<td>Location Specific</td>
</tr>
<tr>
<td>Not approved</td>
<td>Location Specific</td>
</tr>
<tr>
<td>Not feasible</td>
<td>Location Specific</td>
</tr>
</tbody>
</table>
Little Salmon

Risk Rank: M

Introduction
The Little Salmon watershed is home to 2,399 people, roughly half of whom live in or near the Wildland-Urban Interface. Areas of concentrated population within the Little Salmon watershed boundaries are New Meadows and Riggins.

What is the risk?
Fires within the Little Salmon watershed have the potential to severely disrupt life, property and economic activity. There are 1,809 structures located within the WUI of the Little Salmon watershed. Since 2000, 20,042 acres have burned during 1,623 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Little Salmon watershed has 7.3% low risk, 0.2% low-moderate risk, 77.1% moderate risk, 15.4% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

2 out of the 3 counties in the Little Salmon watershed identified wildfire as their number one hazard.
1 out of the 3 counties in the Little Salmon watershed identified wildfire as their number two hazard.
1 out of the 3 counties in the Little Salmon watershed identified wildfire as their number three hazard.

Conclusion
The population within the Little Salmon watershed is at a moderate risk to future wildfires. Past events have been small and infrequent, though wildfire is identified as a significant hazard by all three counties within the watershed.

Counties and Tribes
Adams, Idaho, Valley
Cites
New Meadows, Riggins
Little Salmon

**Risk Rank:** H

**Introduction**

Areas of concentrated population within the Little Salmon watershed boundaries are New Meadows and Riggins.

What is the risk?

An earthquake within the watershed has a high potential to cause damage to the life and property of those within these areas. There are also 21 miles of canals that are receptive to seismic disturbances.

There are 3 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 3 counties within the Little Salmon watershed identified seismic as their number one hazard.
- 0 out of the 3 counties within the Little Salmon watershed identified seismic as their number two hazard.
- 0 out of the 3 counties within the Little Salmon watershed identified seismic as their number three hazard.

**Counties and Tribes**

Adams, Idaho, Valley

**Cities**

New Meadows, Riggins

**Subbasin Metrics**

- Area (sq. miles): 577
- Population (2010): 2,399
- Miles of Stream: 1,281
- Miles of Canal: 21
- Min. Elevation (ft): 1,700
- Max. Elevation (ft): 9,350
- Est. Facilities Near Fault: 3
- % Watershed with 25 Miles of Fault: 88%

**Subbasin Ownership**

- Private: 31%
- Federal: 66%
- Reservation/ BIA: 0%
- State: 4%
- Out of Idaho: 0%

**Ground Acceleration**

- Low: 0%
- Low-Moderate: 75%
- Moderate: 21%
- Moderate-High: 0%
- High: 0%

**Total seismic mitigation actions:** 24

A majority of the proposed mitigation actions are not location-specific and can be found in the the county areas.
Risk Rank: 1

Introduction

Only 2% of the Little Spokane watershed lies within Idaho. There are 691 total people who live within the watershed, of which 0 are at risk of flooding.

What is the risk?

Life and property are present along both sides of the Pend Oreille River, though only 1.6 miles of the river runs through the Idaho portion of the Little Spokane watershed. There are 0 high or significant hazard dams in the Little Spokane watershed. There is 1 community participating in the NFIP with 0 policies contributing to $0 of premiums paid in exchange for $0 of coverage. 0 out of the 1 county in the Little Spokane watershed identified flood as their number one hazard. 0 out of the 1 county in the Little Spokane watershed identified flood as their number two hazard. 0 out of the 1 county in the Little Spokane watershed identified flood as their number three hazard.

UDAR data availability
No UDAR data is available.

Conclusion

The small population and small amount of waters within the Idaho portion of the Little Spokane watershed make it a low flood risk watershed.

Counties and Tribes

Bonner
Cities

Not Available
Wildfire

Little Spokane Watershed

Risk Rank: M

Introduction

The Little Spokane watershed is home to 691 people, roughly half of which live in the Wildland Urban Interface. There are no concentrated areas of population within the Little Spokane watershed.

What is the risk?

Fires within the Little Spokane watershed have the potential to severely disrupt life, property and economic activity. There are 260 structures located within the WUI of the Little Spokane watershed. Since 2000, there have been no wildfire events. Based on data from the Idaho Forest Action Plan (2019), the Little Spokane watershed has 0% low risk, 0% low-moderate risk, 0% moderate risk, 100% moderate-high risk and 0% high risk of wildfire risk to the communities within the watershed.

• Out of the 1 county in the Little Spokane watershed identified wildfire as their number one hazard.
• Out of the 1 county in the Little Spokane watershed identified wildfire as their number two hazard.
• Out of the 1 county in the Little Spokane watershed identified wildfire as their number three hazard.

Conclusion

Though the population is relatively low, the entire watershed within Idaho is designated as a WUI, giving the Little Spokane Watershed an overall moderate risk of wildfire.

Counties and Tribes

Bonner

Cities

Total wildfire mitigation actions: 16

A majority of the proposed mitigation actions are not location specific and can be found in the the county NMMP.
Little Spokane

Risk Rank: L

Introduction

There are no areas of concentrated population within the Little Spokane watershed boundaries.

What is the risk?

An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas. There is also a 1 mile stretch of canals receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

• 0 out of the 1 county within the Little Spokane watershed identified seismic as their number one hazard.
• 0 out of the 1 county within the Little Spokane watershed identified seismic as their number two hazard.
• 0 out of the 1 county within the Little Spokane watershed identified seismic as their number three hazard.

Counties and Tribes

Bonner

Cities

Total seismic mitigation actions: 9

A majority of the proposed mitigation actions are not location specific and can be found in the the county area.
Little Wood Watershed

Risk Rank: H

Introduction
Areas of concentrated population within the Little Wood watershed boundaries are Carey, Dietrich, Gooding, Richfield, and Shoshone. There are 10,009 total people who live within the watershed, of which 3,543 are at risk of flooding. Roughly one third of the watershed is privately owned.

What is the risk?
High stream flow of the Little Wood river can potentially damage life and property. As reported by the county AHMPs, 11 significant flood events have occurred in recent history. There are 2 high or significant hazard dams in the Little Wood watershed. There are 8 communities participating in the NFIP with 96 policies contributing to $180,344 of premiums paid in exchange for $15,593,600 of coverage.

Data availability:
LIDAR data availability within the Little Wood watershed is as follows:
-ITD, District 4 - US 93 (2007)
-Boise River Valley (2019)

Conclusion
Nearly one third of the Little Wood watershed's population is at risk of flooding. The significant hazard dams, large amount of NFIP policies, and large population all contribute to the Little Wood watershed's high flood risk ranking.

Counties and Tribes
Blaine, Butte, Custer, Gooding, Jerome, Lincoln
Cities
Carey, Dietrich, Gooding, Richfield, Shoshone

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,172</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>10,009</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,820</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>221</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>3,445</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>11,762</td>
</tr>
<tr>
<td>Farms of Concern</td>
<td>1</td>
</tr>
<tr>
<td>Pop at Flood Risk</td>
<td>3,543</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% of Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>35%</td>
</tr>
<tr>
<td>Federal</td>
<td>55%</td>
</tr>
<tr>
<td>Reservation/RRA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>6%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>$15,593,600</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Coverage</td>
<td>$180,344</td>
</tr>
<tr>
<td>Total Premiums</td>
<td>$103,344</td>
</tr>
<tr>
<td>Paid Claims</td>
<td>$15,479</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 88
A majority of the proposed mitigation actions are not location specific and can be found in the county AHMPs.
Little Wood Watershed

**Communities at Risk of Wildfire**
- Low
- Moderate
- High
- Wildland-Urban Interface
- Watershed

**Introduction**

The Little Wood watershed is home to 10,005 people, a very small portion of which live in or near the Wildland-Urban Interface. Areas of concentrated population within the Little Wood watershed boundaries are Carey, Dietrich, Gooding, Richfield, and Shoshone.

**What is the risk?**

Fires within the Little Wood watershed have the potential to severely disrupt life, property and economic activity. There are 15 structures located within the WUI of the Little Wood watershed. Since 2000, 249,995 acres have burned during 181 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Little Wood watershed has 6.1% low risk, 13.2% low-moderate risk, 42% moderate risk, 37.6% moderate-high risk and 1.1% high risk of wildfire to the communities within the watershed.

- 5 out of the 6 counties in the Little Wood watershed identified wildfire as their number one hazard.
- 2 out of the 6 counties in the Little Wood watershed identified wildfire as their number two hazard.
- 1 out of the 6 counties in the Little Wood watershed identified wildfire as their number three hazard.

**Conclusion**

Wildfire events in the Little Wood watershed have been regular and relatively large. All six of the counties within the watershed have identified wildfire as a significant hazard. Despite the lack of population in the Wildland-Urban Interface, the communities within the Little Wood watershed are at a moderate risk of wildfire.

**Counties and Tribes**
- Blaine, Butte, Custer, Gooding, Jerome, Lincoln

**Cities**
- Carey, Dietrich, Gooding, Richfield, Shoshone

**Total wildfire mitigation actions:** 82
Idaho Multi-Hazard Risk Portfolio

Little Wood

Risk Rank: M

Introduction
Areas of concentrated population within the Little Wood watershed boundaries are Carey, Dietrich, Gooding, Richfield and Shoshone.

What is the risk?
An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas. There are also 22.1 miles of canals and 1 levee that are receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 6 counties within the Little Wood watershed identified seismic as their number one hazard.
- 0 out of the 6 counties within the Little Wood watershed identified seismic as their number two hazard.
- 0 out of the 6 counties within the Little Wood watershed identified seismic as their number three hazard.

Counties and Tribes
Blaine, Butte, Custer, Gooding, Jerome, Lincoln

Cities
Carey, Dietrich, Gooding, Richfield, Shoshone

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,172</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>10,005</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,820</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>221</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>3,445</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>11,782</td>
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<tr>
<td>Est. Facilities Near Fault</td>
<td>0</td>
</tr>
<tr>
<td>In Watershed with 25 Miles of Fault</td>
<td>9%</td>
</tr>
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</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>38%</td>
</tr>
<tr>
<td>Federal</td>
<td>59%</td>
</tr>
<tr>
<td>State</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Category</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>43%</td>
</tr>
<tr>
<td>Low-Med.</td>
<td>37%</td>
</tr>
<tr>
<td>Med.</td>
<td>20%</td>
</tr>
<tr>
<td>Med-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 58

A majority of the proposed mitigation actions are not location specific and can be found in the the county inventories.
Idaho Multi-Hazard Risk Portfolio

Flood

Lochsa Watershed

Risk Rank: 1

Introduction
There are 79 total people who live within the Lochsa watershed, of which none are at risk of flooding. The watershed is largely federally managed.

What is the risk?
The Lochsa River is a major waterway that runs through the mountains of north Idaho County. USGS stream gauges taken near Lewell indicate highly varied streamflows of the Lochsa watershed. According to county AHMP reports, 3 flood significant flood events have occurred in the watershed in recent history. There are 3 high or medium hazard dams in the Lochsa watershed. There are no communities participating in the NFIP with 1 policy contributing to $030 worth of premium paid in exchange for $20,000 of coverage.

- 0 out of the 3 counties in the Lochsa watershed identified flood as their number one hazard.
- 0 out of the 3 counties in the Lochsa watershed identified flood as their number two hazard.
- 0 out of the 2 counties in the Lochsa watershed identified flood as their number three hazard.

LIDAR data availability
LIDAR availability within the Lochsa watershed is as follows:
- Lolo Creek - very small portion (2006)
- Shoshone Creek (2009)
- Twin (One) Creek (2009)

Conclusion
The small population within the watershed makes the Lochsa watershed a low flood risk watershed.

Counties and Tribes
Clearwater, Idaho

Cities

Subbasin Metrics

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,181</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>79</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>2,005</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>1,460</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>8,777</td>
</tr>
<tr>
<td>Dams of Concern</td>
<td>0</td>
</tr>
<tr>
<td>Pop. at Flood Risk</td>
<td>0</td>
</tr>
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Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>95%</td>
</tr>
<tr>
<td>Reservation/RRI</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

| NFIP Policies | 4 |
| Total Coverage | $203,200 |
| Total Premiums | $9,300 |
| # Claims | 0 |
| Paid Claims | $0 |

Total flood mitigation actions: 42
A majority of the proposed mitigation actions are not location specific and can be found in the county AHMP.
Wildfire

Idaho Multi-Hazard Risk Portfolio

Lochsa

Risk Rank: L

Introduction
The Lochsa watershed is home to 79 people and there is no WUI. There are no areas of concentrated population.

What is the risk?
Fires within the Lochsa watershed have the potential to severely disrupt life, property, and economic activity. Since 2000, 191,705 acres have burned during 324 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Lochsa watershed has 35% low risk, 0% low-moderate risk, 47% moderate risk, 0% moderate-high risk and 8% high risk of wildfire to the communities within the watershed.

- 2 out of the 2 counties in the Lochsa watershed identified wildfire as their number one hazard.
- 0 out of the 2 counties in the Lochsa watershed identified wildfire as their number two hazard.

Conclusion
The Lochsa experiences regular wildfire events, though the population at risk of damage from these events is very low. Overall, the Lochsa watershed is at a low risk of wildfire.

Counties and Tribes:
Clearwater, Idaho

Cities

Subbasin Metrics

| Area (sq. miles) | 1,181 |
| Population (2010) | 79 |
| Miles of Stream | 2,005 |
| Miles of Canal | 0 |
| Min. Elevation (ft) | 1,146 |
| Max. Elevation (ft) | 8,272 |
| Structures in WUI | No WUI |
| Historic Fire Events | 324 |

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>5%</td>
</tr>
<tr>
<td>Federal</td>
<td>95%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of State</td>
<td>0%</td>
</tr>
</tbody>
</table>

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>5.3%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>4.7%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 55

A majority of the proposed mitigation actions are not location specific and can be found in the statewide WMMAs.
Lochsa

Risk Rank: L

Introduction
There are no areas of concentrated population within the Lochsa watershed boundaries.

What is the risk?
An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas.

There are 0 essential facilities within 25 miles of a quaternary fault.

• 0 out of the 2 counties within the Lochsa watershed identified seismic as their number one hazard.
• 0 out of the 2 counties within the Lochsa watershed identified seismic as their number two hazard.
• 0 out of the 2 counties within the Lochsa watershed identified seismic as their number three hazard.

Counties and Tribes
Clearwater, Idaho

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,181</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>73</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>2,005</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>1,460</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>8,727</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>0</td>
</tr>
<tr>
<td>In Watershed W/25 Miles of Fault</td>
<td>0%</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>95%</td>
</tr>
<tr>
<td>Federal</td>
<td>95%</td>
</tr>
<tr>
<td>Reservation</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Acceleration</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>84%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>16%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 11

A majority of the proposed mitigation actions are not location specific and can be found in the Lochsa county areas.
Idaho Multi-Hazard Risk Portfolio

Flood

Risk Rank: M

Introduction

There are 3,367 total people who live within the Lower Bear-Malad watershed, of which 7 are at risk of flooding. Malad City is the only area of concentrated population within the watershed. Roughly one quarter of the watershed is privately owned and over half of the watershed lies in Utah.

What is the risk?

The Malad River is the largest water system in the watershed. As reported by the county AHMPs, 5 significant flood events have occurred in recent history within the watershed. There are 7 high or significant hazard dams in the Lower Bear-Malad watershed. There are 5 communities participating in the NFIP with 0 policies contributing to $0 of premiums paid in exchange for $0 of coverage.

Lower Bear-Malad Watershed

- 6 out of the 4 counties in the Lower Bear-Malad watershed identified flood as their number one hazard.
- 6 out of the 4 counties in the Lower Bear-Malad watershed identified flood as their number two hazard.
- 6 out of the 4 counties in the Lower Bear-Malad watershed identified flood as their number three hazard.

Lighting data availability

No LiDAR is available.

Conclusion

Because of the moderate population and number of moderate hazard dams, life and property within the Lower Bear-Malad watershed is considered to be at a moderate risk of damaging flood events.

Counties and Tribes

- Bannock, Franklin, Oneida, Power

Cities

- Malad City

Lower Bear-Malad

Subbasin Metrics

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>1,256</th>
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</thead>
<tbody>
<tr>
<td>Population (2010)</td>
<td>9,867</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,032</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>72</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,183</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>9,364</td>
</tr>
<tr>
<td>Dam of Concern</td>
<td>7</td>
</tr>
<tr>
<td>Pop. at Flood Risk</td>
<td>7</td>
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Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>23%</td>
</tr>
<tr>
<td>Federal</td>
<td>16%</td>
</tr>
<tr>
<td>Reservation/RIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>3%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>60%</td>
</tr>
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</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th>Flood Claims</th>
<th>Flood Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 33

A majority of the proposed mitigation actions are not location specific and can be found in the county AHMPs.

---

USGS 10125500 MALAD RIVER AT WOODRUFF ID

County All Hazard Mitigation Plans Flood Mitigation Actions

- Action Status
- Flood Zone
- Evacuation Plan
- Compete
- Flood Mitigation Map
- Flood Mitigation Map
- Flood Mitigation Map

---

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Idaho Multi-Hazard Risk Portfolio

Wildfire

Lower Bear-Malad

Risk Rank: M

Introduction

The Lower Bear-Malad watershed is home to 3,967 people, a small portion of which live in or near the Wildland-Urban Interface. The only area of concentrated population within the Lower Bear-Malad watershed boundaries is Malad City.

What is the risk?

Fires within the Lower Bear-Malad watershed have the potential to severely disrupt life, property and economic activity. There are 89 structures located within the WUI of the Lower Bear-Malad watershed. Since 2000, 28,757 acres have burned during 55 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Lower Bear-Malad watershed has 13.7% low risk, 17.8% low-moderate risk, 23.3% moderate risk, 42.8% moderate-high risk and 2.4% high risk of wildfire in the communities within the watershed.

1 out of the 4 counties in the Lower Bear-Malad watershed identified wildfire as their number one hazard.
3 out of the 4 counties in the Lower Bear-Malad watershed identified wildfire as their number two hazard.
2 out of the 4 counties in the Lower Bear-Malad watershed identified wildfire as their number three hazard.

Conclusion

The recent frequency of wildfires and moderate population within the WUI put the Lower Bear-Malad watershed at an overall moderate risk of wildfire events.

Counties and Tribes

Bannock, Franklin, Owyhee, Power

Cities

Malad City

Total wildfire mitigation actions: 42

A majority of the proposed mitigation actions are not location-specific and can be found in the the county HMP.
**Seismic**

**Lower Bear-Malad**

**Risk Rank:** H

**Introduction**

The area of concentrated population within the Lower Bear-Malad watershed boundaries is Malad City.

**What is the risk?**

An earthquake within the watershed has a high potential to cause damage to the life and property of those within these areas. There are 72 miles of canals that are receptive to seismic disturbances.

There are 8 essential facilities within 25 miles of a quaternary fault.

- 1 out of the 4 counties within the Lower Bear-Malad watershed identified seismic as their number one hazard.
- 0 out of the 4 counties within the Lower Bear-Malad watershed identified seismic as their number two hazard.
- 0 out of the 4 counties within the Lower Bear-Malad watershed identified seismic as their number three hazard.

**Counties and Tribes**

Bannock, Franklin, Oneida, Power

**Cities**

Malad City

---

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,256</td>
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<tr>
<td>Population (2010)</td>
<td>3,807</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,022</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>77</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,183</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>9,364</td>
</tr>
<tr>
<td>Est. Facilities Near Faults</td>
<td>8</td>
</tr>
<tr>
<td>% Watered W/10 miles of Fault</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>23%</td>
</tr>
<tr>
<td>Federal</td>
<td>16%</td>
</tr>
<tr>
<td>Reservoir/IRA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>1%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>60%</td>
</tr>
</tbody>
</table>

**Ground Acceleration**

<table>
<thead>
<tr>
<th>Acceleration Level</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>23%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>7%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Total seismic mitigation actions:** 27

A majority of the proposed mitigation actions are not location-specific and can be found in the the county inventories.
Idaho Multi-Hazard Risk Portfolio

Flood

Lower Boise

Risk Rank: M

Introduction

There are 573,657 total people who live within the watershed, of which 30,238 are at risk of flooding. The watershed is 75% privately owned.

What is the risk?

Spring snowmelt is a significant threat to people and property located along the Boise River. While the Lucky Peak, Arrowrock, and Anderson Ranch dams upstream of this watershed provide flood control and storage capacity for the Boise River and its tributaries (a notable example being Cottonwood Creek), variable spring snowmelt patterns make it difficult to predict runoff levels. Historically, this has resulted in ~4 separate flood events according to the county AHMP. There are 20 high or significant hazard dams in the Lower Boise watershed, the most substantial being Diversion Dam. There are 17 communities participating in the NFIP with 2,005 policies contributing to $1,765,807 of premiums paid in exchange for $668,812,800 of coverage.

- 0 out of the 6 counties in the Lower Boise watershed identified flood as their number one hazard.
- 1 out of the 6 counties in the Lower Boise watershed identified flood as their number two hazard.

LIDAR data availability

LIDAR availability within the Lower Boise watershed is as follows:
- Middleton (2001)
- Payette River and Gem Valley every small portion (2001)
- Ton Mile and Fifteen Mile Creek (2003)
- Boise River (2006)
- Dry Creek, Boise Front (2007, 2009)
- Bird’s of Prey (2013)

Conclusion

Because of the high population and hazardous flood potential in the Lower Boise watershed it is classified as a high risk watershed.

Counties and Tribes

Ada, Boise, Canyon, Elmore, Gem, Payette

Cities

Boise, Caldwell, Eagle, Garden City, Greenleaf, Kuna, Meridian, Meridian, Middleton, Nampa, Notus, Kuna, Star, Wilder

USGS

USGS 13202000 BOISE RIVER NR BOISE ID

Total flood mitigation actions: 311

A majority of the proposed mitigation actions are location specific, depicted in the map below.
Wildfire

The Lower Boise watershed is home to 573,637 people, a very large portion of which live in the Wildland Urban Interface. Areas of concentrated population within the Lower Boise watershed boundaries are Boise, Caldwell, Eagle, Garden City, Greenleaf, Kuna, Meridian, Middleton, Middleton, Nampa, Notus, Parma, Star and Wilder.

What is the risk?

Fires within the Lower Boise watershed have the potential to severely disrupt life, property and economic activity. There are 182,070 structures located within the WUI of the Lower Boise watershed. Since 2000, 357,257 acres have burned during 285 wildfire events. Based on data from the Idaho Forest Action Plan 2010, the Lower Boise watershed has 36.3% low risk, 3% low/moderate risk, 13.9% moderate risk, 28.4% moderate-high risk and 22.3% high risk of wildfire to the communities within the watershed.

- 5 out of the 5 counties in the Lower Boise watershed identified wildfire as their number one hazard.
- 4 out of the 5 counties in the Lower Boise watershed identified wildfire as their number two hazard.
- 6 out of the 5 counties in the Lower Boise watershed identified wildfire as their number three hazard.

Conclusion

The Lower Boise watershed contains the highest population in the state and much of it resides within the WUI. All of the counties within the watershed identify wildfire as a significant hazard. The people and property within the Lower Boise watershed are at an overall high wildfire risk.

Counties and Tribes

Ada, Boise, Canyon, Elmore, Gem, Payette

Cities

Boise, Caldwell, Eagle, Garden City, Greenleaf, Kuna, Meridian, Meridian, Middleton, Nampa, Notus, Parma, Star, Wilder

Total wildfire mitigation actions: 55

A majority of the proposed mitigation actions are not location specific and can be found in the county IHAPPS.
Idaho Multi-Hazard Risk Portfolio

Lower Boise

Risk Rank: H

Introduction

Areas of concentrated population within the Lower Boise watershed boundaries are Boise, Caldwell, Eagle, Garden City, Greenleaf, Kuna, Meridian, Meridian, Middleton, Nampa, Notus, Parma, Star and Wilder.

What is the risk?

An earthquake within the watershed has a high potential to cause damage to the life and property of persons within these areas. There are 1,504 miles of canals and 20 levees that are receptive to seismic disturbances.

There are 333 essential facilities within 25 miles of a quaternary fault.

- 6 out of the 6 counties within the Lower Boise watershed identified seismic as their number one hazard.
- 1 out of the 6 counties within the Lower Boise watershed identified seismic as their number two hazard.
- 1 out of the 6 counties within the Lower Boise watershed identified seismic as their number three hazard.

Counties and Tribes

Ada, Boise, Canyon, Elmore, Gem, Payette

Cities

Boise, Caldwell, Eagle, Garden City, Greenleaf, Kuna, Meridian, Meridian, Middleton, Nampa, Notus, Parma, Star, Wilder

Subbasin Metrics

- Area (sq. miles): 1,371
- Population (2010): 573,637
- Miles of Stream: 1,948
- Miles of Canal: 1,504
- Min. Elevation (ft): 2,172
- Max. Elevation (ft): 6,939
- % Waterbody w/in 25 Miles of Fault: 47%

Subbasin Ownership

- Private: 75%
- Federal: 26%
- Reservation/BIA: 0%
- State: 5%
- Out of Idaho: 0%

Ground Acceleration

- Accel. Amount % Watershed Area:
  - 69%
  - Low-Moderate: 31%
  - Moderate: 0%
  - Moderate-High: 0%
  - High: 0%

Total seismic mitigation actions: 72

A majority of the proposed mitigation actions are not location specific and can be found in the six county MRFPs.
Lower Clark Fork Watershed

**Risk Rank: M**

**Introduction**

There are 1,619 total people who live within the Lower Clark Fork watershed of which 141 are at risk of flooding. Land outside the city of Clark Fork is largely undeveloped. The vast majority of the watershed lies outside of Idaho and is largely federally managed within the state.

**What is the risk?**

The Clark Fork River, Lightning Creek and Spring Creek are all contribute to the flood risk of the Lower Clark Fork watershed. According to the county AHMPs, there have been reports of 5 significant floods. Historically, the Cabinet Gorge Dam is considered to be a high or significant hazard. There are 8 communities participating in the NFIP with 27 policies contributing to $20,569 of premiums paid in exchange for $3,816,000 of coverage.

- 6 out of the 2 counties in the Lower Clark Fork watershed identified flood as their number one hazard.
- 6 out of the 2 counties in the Lower Clark Fork watershed identified flood as their number two hazard.
- 1 out of the 2 counties in the Lower Clark Fork watershed identified flood as their number three hazard.

**LIDAR data availability**

LIDAR availability within the Lower Clark Fork watershed is as follows:


**Conclusion**

Though the majority of the watershed lies outside of Idaho, the population within the state’s boundaries is considered to be at a moderate risk of damaging flood events.

**Counties and Tribes**

Bonner, Shoshone

**Cities**

Clark Fork

---

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Subbasin Metrics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Area (sq. miles)</strong></td>
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<tr>
<td><strong>Population (2010)</strong></td>
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<tr>
<td><strong>Miles of Stream</strong></td>
<td>385</td>
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<tr>
<td><strong>Miles of Canal</strong></td>
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</tr>
<tr>
<td><strong>Min. Elevation (ft)</strong></td>
<td>2047</td>
</tr>
<tr>
<td><strong>Max. Elevation (ft)</strong></td>
<td>8,668</td>
</tr>
<tr>
<td><strong>Dams of Concern</strong></td>
<td>1</td>
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<tr>
<td><strong>Pop. at Risk</strong></td>
<td>141</td>
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**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>2%</td>
</tr>
<tr>
<td>Federal</td>
<td>7%</td>
</tr>
<tr>
<td>Reservation/RRA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>91%</td>
</tr>
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**NFIP Statistics (2014)**

<table>
<thead>
<tr>
<th>NFIP Policies</th>
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<tr>
<td><strong>Total Coverage</strong></td>
<td>$5,816,000</td>
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<tr>
<td><strong>Total Premiums</strong></td>
<td>$20,569</td>
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<td>0</td>
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<tr>
<td><strong>Paid Claims</strong></td>
<td>50</td>
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</tbody>
</table>

**Total flood mitigation actions: 99**

A majority of the proposed mitigation actions are not location specific and can be found in the federal AHMP.
Idaho Multi-Hazard Risk Portfolio

Wildfire

Lower Clark Fork

Risk Rank: M

Introduction

The Lower Clark Fork watershed is home to 1,619 people, most of which live in the Wildland Urban Interface. The only area of concentrated population within the Lower Clark Fork watershed boundaries is the town of Clark Fork.

What is the risk?

Fires within the Lower Clark Fork watershed have the potential to severely disrupt life, property and economic activity. There are 1015 structures located within the WUI of the Lower Clark Fork watershed. Since 2000, 28 acres have burned in 31 wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Lower Clark Fork watershed has 10.6% low risk, 0% low-moderate risk, 32.2% moderate risk, 37.3% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

- 40 out of the 2 counties in the Lower Clark Fork watershed identified wildfire as their number one hazard.
- 1 out of the 2 counties in the Lower Clark Fork watershed identified wildfire as their number two hazard.
- 1 out of the 2 counties in the Lower Clark Fork watershed identified wildfire as their number three hazard.

Conclusion

Though there is a lack of significant wildfires in recent record, much of the population of the watershed is located in the WUI. Lower Clark Fork watershed is at a moderate risk to damage from wildfire.

Counties and Tribes

Bonner, Shoshone

Cities

Clark Fork

Total wildfire mitigation actions: 25

A majority of the proposed mitigation actions are not location specific and can be found in the county MHP.

Subbasin Metrics

<table>
<thead>
<tr>
<th></th>
<th></th>
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<tbody>
<tr>
<td>2,321</td>
<td>1,619</td>
<td>588</td>
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<td>2,047</td>
<td>8,096</td>
<td>1,010</td>
<td>33</td>
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Subbasin Ownership

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<thead>
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<th>% Subbasin Area</th>
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</thead>
<tbody>
<tr>
<td>Private</td>
<td>2%</td>
</tr>
<tr>
<td>Federal</td>
<td>7%</td>
</tr>
<tr>
<td>Reservation/BLA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of State</td>
<td>91%</td>
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</table>

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
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</thead>
<tbody>
<tr>
<td>Low</td>
<td>30.6%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>32.3%</td>
</tr>
<tr>
<td>Moderate/High</td>
<td>37.2%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Counties All Hazards Mitigation Plan Wildfire Mitigation Actions

[Map showing mitigation actions]
Risk Rank: L

Introduction
The area of concentrated population within the Lower Clark Fork watershed boundaries is Clark Fork.

What is the risk?
An earthquake within the watershed has the potential to cause damage to the life and property of those within these areas. There are 216 locations that are susceptible to seismic disturbances.

There are 60 essential facilities within 25 miles of a Quaternary fault.

- 0 out of 2 counties within the Lower Clark Fork watershed identified seismic as their number one hazard.
- 0 out of 2 counties within the Lower Clark Fork watershed identified seismic as their number two hazard.
- 0 out of 2 counties within the Lower Clark Fork watershed identified seismic as their number three hazard.

Counties and Tribes
Bonner, Shoshone

Cities
Clark Fork
**Lower Henry’s**

**Risk Rank:** H

**Introduction**
Areas of concentrated population within the Lower Henrys watershed boundaries are Ashton, Drummond, Parker, Reedsburg and St. Anthony. There are 36,196 total people who live within the watershed of which 61% are at risk of flooding. Nearly 60% of the watershed is privately owned and nearly 30% of the watershed lies outside of Idaho.

**What is the risk?**
Residential, commercial and agricultural properties along the Henrys Fork could all be damaged in the event of a flood. The Henrys Fork can have a fairly variable stream flow, often exceeding 6,000 cfs near St. Anthony. As reported in the county AHMPs, these flows have resulted in 15 reported significant floods within the watershed in recent history. There are 5 low-ways within the watershed. There is 1 high or significant hazard dam in the Lower Henrys watershed. There are 6 communities participating in the NFIP with 26 policies contributing to $21,913 of premiums paid in exchange for $5,887,900 of coverage.

1. 1 out of the 4 counties in the Lower Henrys watershed identified flood as their number one hazard.
2. 1 out of the 4 counties in the Lower Henrys watershed identified flood as their number two hazard.
3. 2 out of the 4 counties in the Lower Henrys watershed identified flood as their number three hazard.

**LIDAR data availability**
LIDAR availability within the Lower Henrys watershed is as follows:
- Jefferson County (2009)
- Madison County (2009)
- Henry’s Fork and Teton (2011)

**Conclusion**
The watershed’s high population and reliance on levee protection, as well as the presence of a hazardous dam place the watershed into the high risk category.

**Counties and Tribes**
Clark, Fremont, Jefferson, Madison

**Cities**
Ashton, Drummond, Parker, Reedsburg, St. Anthony

---

**Total flood mitigation actions:** 24
A majority of the proposed mitigation actions are not location specific and can be found in the county AHMP.
Wildfire

Lower Henry’s

Risk Rank: M
Introduction
The Lower Henry’s watershed is home to 38,196 people, a small amount of which live in the Wildland Urban Interface. Areas of concentrated population within the Lower Henry’s watershed boundaries are Ashton, Drummond, Parker, Rexburg and St. Anthony.

What is the risk?
Fires within the Lower Henry’s watershed have the potential to severely disrupt life, property and economic activity. There are 106 structures located within the WUI of the Lower Henry’s watershed. Since 2000, 11,567 acres have burned during 28 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Lower Henry’s watershed has 45.7% low risk, 16.3% low-moderate risk, 33.6% moderate risk, 2.8% moderate-high risk and 1.5% high risk of wildfire to the communities within the watershed.

2 out of the 4 counties in the Lower Henry’s watershed identified wildfire as their number one hazard.

4 out of the 4 counties in the Lower Henry’s watershed identified wildfire as their number two hazard.

8 out of the 4 counties in the Lower Henry’s watershed identified wildfire as their number three hazard.

Conclusion
The communities within the Lower Henry’s watershed are at a moderate risk to damage resulting from wildfire events based on the population, property within the WUI and IDL wildfire data used in the analysis.

Counties and Tribes
Clark, Fremont, Jefferson, Madison
Cities
Ashton, Drummond, Parker, Rexburg, St. Anthony

Watershed Fire Risk

Total wildfire mitigation actions: 40

A majority of the proposed mitigation actions are site-specific and can be found in the respective county’s wildfire Mitigation Action Plan.
Idaho Multi-Hazard Risk Portfolio

Seismic

Lower Henry's

**Risk Rank:** H

**Introduction**
Areas of concentrated population within the Lower Henrys watershed boundaries are Ashton, Drummond, Parker, Rexburg, and St. Anthony.

What is the risk?
An earthquake within the watershed has the potential to cause damage to the lives and property of those within these areas. There are also 305 miles of canals and 5 levees that are receptive to seismic disturbances.

There are 19 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 4 counties within the Lower Henrys watershed identified seismic as their number one hazard.
- 0 out of the 4 counties within the Lower Henrys watershed identified seismic as their number two hazard.
- 0 out of the 4 counties within the Lower Henrys watershed identified seismic as their number three hazard.

**Counties and Tribes**
Clark, Fremont, Jefferson, Madison

**Cities**
Ashton, Drummond, Parker, Rexburg, St. Anthony

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>901</th>
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</thead>
<tbody>
<tr>
<td>Population (2010)</td>
<td>30,196</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>706</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>305</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,800</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>9,200</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>19</td>
</tr>
<tr>
<td>In Watershed with 10 Miles of Fault</td>
<td>86%</td>
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**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
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<td>Private</td>
<td>38%</td>
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<tr>
<td>Federal</td>
<td>23%</td>
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<tr>
<td>State</td>
<td>10%</td>
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<tr>
<td>Out of Idaho</td>
<td>29%</td>
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**Ground Acceleration**

<table>
<thead>
<tr>
<th>Accel. Amount</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>77%</td>
</tr>
<tr>
<td>Moderate-Moderate</td>
<td>22%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
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</tbody>
</table>

**Total seismic mitigation actions:** 23
A majority of the proposed mitigation actions are not location specific and can be found in the city and county areas.
Idaho Multi-Hazard Risk Portfolio

Lower Kootenai

Risk Rank: H

Introduction
The Lower Kootenai watershed largely lies outside of Idaho to the north, though the majority of the population within Idaho lives along the Kootenai River. Areas of concentrated population within the watershed boundaries are Bonners Ferry and Moyie Springs. There are 10,481 total people who live within the watershed, of which 282 are at risk of flooding.

What is the risk?
The Kootenai River is the major water system in the watershed. There is a high or significant hazard area in the Lower Kootenai watershed. According to the county ARMPs, there have been reports of 13 significant flood events in recent history within the watershed. There are 3 communities participating in the NFIP with 15 policies contributing to $13,717 of premiums paid in exchange for $4,343,000 of coverage.

• 0 out of the 3 counties in the Lower Kootenai watershed identified flood as their number one hazard.
• 0 out of the 2 counties in the Lower Kootenai watershed identified flood as their number two hazard.
• 0 out of the 3 counties in the Lower Kootenai watershed identified flood as their number three hazard.

LIDAR data availability
LIDAR availability within the Lower Kootenai watershed is as follows:
- U.S. Army Corps of Engineers (2006)
- U.S. Geological Survey (2014)

Conclusion
Because of the large amount of people and property at risk of damaging flood events within the Lower Kootenai watershed, the watershed is considered to be a high risk.

Counties and Tribes
Bonner, Boundary, Kootenai Tribe
Cities
Bonners Ferry, Moyie Springs

Subbasin Metrics

<table>
<thead>
<tr>
<th></th>
<th>Subbasin Area</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>8%</td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>Reservation/Rita</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>78%</td>
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NFIP Statistics (2014)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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<tbody>
<tr>
<td>Total Coverage</td>
<td>$4,343,000</td>
<td>$4,343,000</td>
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<tr>
<td>Total Premiums</td>
<td>$13,717</td>
<td>$13,717</td>
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<tr>
<td>Num Claims</td>
<td>93</td>
<td>93</td>
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</tbody>
</table>

Total flood mitigation actions: 21

A majority of the proposed mitigation actions are not location specific and can be found in the county ARMP.
Idaho Multi-Hazard Risk Portfolio

Wildfire

Lower Kootenai

Risk Rank: H

Introduction

The Lower Kootenai watershed is home to 18,481 people, the majority of which live in the Wildland-Urban Interface. Areas of concentrated population within the Lower Kootenai watershed boundaries are Bonners Ferry and Moyie Springs.

What is the risk?

Fires within the Lower Kootenai watershed have the potential to severely disrupt life, property and economic activity. There are 3,747 structures located within the WUI of the Lower Kootenai watershed. Since 2000, 9,600 acres have burned in 38 wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Lower Kootenai watershed has 4.3% low risk, 7.2% low-moderate risk, 71.1% moderate risk, 16.8% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

• 1 out of the 2 counties in the Lower Kootenai watershed identified wildfire as their number one hazard.
• 2 out of the 2 counties in the Lower Kootenai watershed identified wildfire as their number two hazard.
• 2 out of the 2 counties in the Lower Kootenai watershed identified wildfire as their number three hazard.

Conclusion

The large population living in the WUI and small amount of recent wildfire events in the Lower Kootenai watershed indicates that the communities within the watershed are at an overall high risk to damaging wildfire events in the future.

Counties and Tribes

Bonner, Boundary, Kootenai Tribe

Cities

Bonners Ferry, Moyie Springs

Total wildfire mitigation actions: 39
Lower Kootenai

Risk Rank: M

Introduction
Areas of concentrated population within the Lower Kootenai watershed boundaries are Bonners Ferry and Moyie Springs.

What is the risk?
An earthquake within the watershed has a high potential to cause damage to the life and property of those within these areas. There are also 107 miles of canals and 22 levees that are receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

• 0 out of the 2 counties within the Lower Kootenai watershed identified seismic as their number one hazard.
• 0 out of the 2 counties within the Lower Kootenai watershed identified seismic as their number two hazard.
• 0 out of the 2 counties within the Lower Kootenai watershed identified seismic as their number three hazard.

Counties and Tribes
Bonner, Boundary, Kootenai Tribe

Cities
Bonner’s Ferry, Moyie Springs

Total seismic mitigation actions: 12

A majority of the proposed mitigation actions are not location specific and can be found in the the county areas.
Idaho Multi-Hazard Risk Portfolio

Flood

Lower Middle Fork Salmon

Risk Rank: 4.

Introduction
There are 4 total people who live within the Lower Middle Fork Salmon watershed, of which none are at risk of flooding. The watershed is 99% federally managed.

What is the risk?
There are 2 high or significant hazard dams in the Lower Middle Fork Salmon watershed. There are no communities participating in the NFIP with 0 policies contributing to $0 of premiums paid in exchange for $0 of coverage.

- 0 out of 4 counties in the Lower Middle Fork Salmon watershed identified flood as their number one hazard.
- 0 out of 4 counties in the Lower Middle Fork Salmon watershed identified flood as their number two hazard.
- 0 out of 4 counties in the Lower Middle Fork Salmon watershed identified flood as their number three hazard.

LiDAR data availability
No LiDAR data is available.

Conclusion
Due to the low population within the watershed, the Lower Middle Fork Salmon watershed is considered a low risk watershed.

Counties and Tribes
Custer, Idaho, Lemhi, Valley

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Subbasin Metrics</th>
<th>Value</th>
</tr>
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<td>Area (sq. miles)</td>
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<tr>
<td>Population (2010)</td>
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<tr>
<td>Miles of Stream</td>
<td>3,008</td>
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<tr>
<td>Float Size of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>3,018</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>10,016</td>
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<tr>
<td>Bams of Concern</td>
<td>1</td>
</tr>
<tr>
<td>Pop. at Flood Risk</td>
<td>0</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>99%</td>
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<tr>
<td>Reservation/BIA</td>
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<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
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NFIP Statistics (2014)

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<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
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<th>Average Premium</th>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 40
A majority of the proposed mitigation actions are not location specific and can be found in the county DEPSP.

USGS 13301099 MT SALMON RIVER AT MOUTH NR SHOUP, ID

Country All Hazard Mitigation Plan Flood Mitigation Actions

Map showing flood risk and mitigation actions in the Lower Middle Fork Salmon watershed.
Wildfire

Risk Rank: L

Introduction
The Lower Middle Fork Salmon watershed is home to 4 people, none of which live in the Wildland Urban Interface. There are no areas of concentrated population within the watershed.

What is the risk?
Fires within the Lower Middle Fork Salmon watershed have the potential to severely disrupt life, property and economic activity. There are 35 structures located within the WUI of the Lower Middle Fork Salmon watershed. Since 2000, 244,139 acres have burned in 128 wildfire events. Based on data from the Idaho Forest Action Plan (2016), the Lower Middle Fork Salmon watershed has 26.7% low risk, 2.8% low-moderate risk, 67.1% moderate risk, 0% moderate-high risk and 3.3% high risk of wildfire to the communities within the watershed.

4 out of the 4 counties in the Lower Middle Fork Salmon watershed identified wildfire as their number one hazard.

0 out of the 4 counties in the Lower Middle Fork Salmon watershed identified wildfire as their number two hazard.

0 out of the 4 counties in the Lower Middle Fork Salmon watershed identified wildfire as their number three hazard.

Conclusion
Despite the moderately high frequency of wildfires in recent history, the population of the Lower Middle Fork Salmon watershed is very low, translating into a low risk of damage to people and property as the result of wildfire events.

Counties and Tribes
Custer, Idaho, Lemhi, Valley

Cities

Total wildfire mitigation actions: 31

A majority of the proposed mitigation actions are not location-specific and can be found in the Idaho Multi-Hazard Mitigation Plan.
Lower Middle Fork Salmon

**Risk Rank:** L

**Introduction**

There are no areas of concentrated population within the Lower Middle Fork Salmon watershed boundaries.

What is the risk?

An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 4 counties within the Lower Middle Fork Salmon watershed identified seismic as their number one hazard.
- 0 out of the 4 counties within the Lower Middle Fork Salmon watershed identified seismic as their number two hazard.
- 0 out of the 4 counties within the Lower Middle Fork Salmon watershed identified seismic as their number three hazard.

**Counties and Tribes:**

Custer, Idaho, Lemhi, Valley

**Cities**

Custer, Idaho, Lemhi, Valley

---

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
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</thead>
<tbody>
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<tr>
<td>Population (2010)</td>
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</tr>
<tr>
<td>Miles of Stream</td>
<td>3,008</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>3,018</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>10,046</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>0</td>
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<tr>
<td>In Watershed with 25 Miles of Fault</td>
<td>12%</td>
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**Subbasin Ownership**

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<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>0%</td>
</tr>
<tr>
<td>Federal</td>
<td>99%</td>
</tr>
<tr>
<td>Reservation/BA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Ground Acceleration**

<table>
<thead>
<tr>
<th>Acceleration Level</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Total seismic mitigation actions:** 45

A majority of the proposed mitigation actions are not location specific and can be found in the county hazard maps.
Lower North Fork Clearwater Watershed

Risk Rank: L

Introduction
The only area of concentrated population within the Lower North Fork Clearwater watershed boundaries is Elk River. There are 662 total people who live within the watershed, of which 52 are at risk of flooding. The watershed is 43% privately owned.

What is the risk?
There is 1 high or significant hazard dam in the Lower North Fork Clearwater watershed. The main concern in the watershed is the Dworshak Dam which is hazardous to many thousands of people downstream, outside of the watershed. According to the county AVMAPs, there have been reports of 8 significant flood events in recent history in the watershed. There are 3 communities participating in the NFIP with 1 policy contributing to $601 of premiums paid in exchange for $60,000 of coverage.

- 0 out of the 3 counties in the Lower North Fork Clearwater watershed identified flood as their number one hazard.
- 1 out of the 3 counties in the Lower North Fork Clearwater watershed identified flood as their number two hazard.
- 1 out of the 3 counties in the Lower North Fork Clearwater watershed identified flood as their number three hazard.

USDA data availability
LiDAR availability within the Lower North Fork Clearwater watershed is as follows:
- Nez Perce Reservation (2002, small portion located at the confluence of the Dworshak Dam)
- Columbia River Treaty 1947/1964 Projects (2006, small portion located at the confluence of the Dworshak Dam)

Conclusion
The Lower North Fork Clearwater watershed contains a very small amount of people and property, as well as one hazardous dam. It is considered a low flood hazard watershed.

Counties and Tribes
Clearwater, Latah, Nez Perce Tribe, Shoshone

Cities
Elk River

Subbasin Metrics

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,149</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>662</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>2,642</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>958</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>7,084</td>
</tr>
<tr>
<td>Dam of Concern</td>
<td></td>
</tr>
<tr>
<td>Pop. at Flood Risk</td>
<td>51</td>
</tr>
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Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>61%</td>
</tr>
<tr>
<td>Federal</td>
<td>34%</td>
</tr>
<tr>
<td>Reservation/RPA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>25%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th># Claims</th>
<th># Paid Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$560,000</td>
<td>$403,000</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 152
A majority of the proposed mitigation actions are not location specific and can be found in the county AVMAP.
Lower North Fork Clearwater

Risk Rank: L

Introduction
The Lower North Fork Clearwater watershed is home to 662 people, nearly all of which live in the Wildland Urban Interface. The only area of concentrated population within the Lower North Fork Clearwater watershed boundaries is Elk River.

What is the risk?
Fires within the Lower North Fork Clearwater watershed have the potential to severely disrupt life, property and economic activity. There are 488 structures located within the WUI of the Lower North Fork Clearwater watershed. Since 2000, 5,941 acres have burned during 122 wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Lower North Fork Clearwater watershed has 10.2% low risk, 3% low-moderate risk, 74.1% moderate risk, 3.7% moderate-high risk and 0% high risk of wildfire in the communities within the watershed.

2 out of the 3 counties in the Lower North Fork Clearwater watershed identified wildfire as their number two hazard.
1 out of the 3 counties in the Lower North Fork Clearwater watershed identified wildfire as their number one hazard.
4 out of the 3 counties in the Lower North Fork Clearwater watershed identified wildfire as their number three hazard.

Conclusion
Though the majority of the population resides within the WUI, the overall relative risk of wildfire is low.

Counties and Tribes
Clearwater, Latah, Nez Perce Tribe, Shoshone

Cities
Elk River

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>41%</td>
</tr>
<tr>
<td>Federal</td>
<td>34%</td>
</tr>
<tr>
<td>Reservation</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>25%</td>
</tr>
<tr>
<td>Out of State</td>
<td>0%</td>
</tr>
</tbody>
</table>

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>19.2%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>3%</td>
</tr>
<tr>
<td>Moderate</td>
<td>74.1%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>3.7%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 81

A majority of the proposed mitigation actions are location specific and can be found in the the county HMMR.
**Lower North Fork Clearwater**

**Risk Rank:** L

**Introduction**

The area of concentrated population within the Lower North Fork Clearwater watershed boundaries is Elk River.

**What is the risk?**

An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas.

There are no essential facilities within 25 miles of a quaternary fault.

- 0 out of the 3 counties within the Lower North Fork Clearwater watershed identified seismic as their number one hazard.
- 0 out of the 3 counties within the Lower North Fork Clearwater watershed identified seismic as their number two hazard.
- 0 out of the 3 counties within the Lower North Fork Clearwater watershed identified seismic as their number three hazard.

**Counties and Tribes**

Clearwater, Latah, Nez Perce Tribe, Shoshone

**Cities**

Elk River

<table>
<thead>
<tr>
<th>Subbasin Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
</tr>
<tr>
<td>Population (2010)</td>
</tr>
<tr>
<td>Miles of Stream</td>
</tr>
<tr>
<td>Miles of Canal</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
</tr>
<tr>
<td>Subbasins Near Fault</td>
</tr>
<tr>
<td>9 Mile Buffer</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subbasin Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner Type % Subbasin Area</td>
</tr>
<tr>
<td>Private</td>
</tr>
<tr>
<td>Federal</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
</tr>
<tr>
<td>State</td>
</tr>
<tr>
<td>Out of Idaho</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ground Acceleration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accel. Magnitude % Watershed Area</td>
</tr>
<tr>
<td>Low</td>
</tr>
<tr>
<td>Low-Moderate</td>
</tr>
<tr>
<td>Moderate</td>
</tr>
<tr>
<td>Moderate-High</td>
</tr>
<tr>
<td>High</td>
</tr>
</tbody>
</table>

**Total seismic mitigation actions:** 25

A majority of the proposed mitigation actions are not location specific and can be found in the the county areas.
Idaho Multi-Hazard Risk Portfolio

**Lower Salmon Watershed**

**Risk Rank: M**

**Introduction**

Areas of concentrated population within the Lower Salmon watershed boundaries are Riggs and White Bird. There are 1,870 total people who live within the watershed, of which 10% are at risk of flooding. The watershed is two-thirds federally managed.

**What is the risk?**

There are 9 high or significant hazard dams in the Lower Salmon watershed. According to the county ARMPs, there have been reports of 5 significant flood events within the watershed in recent history. There are 4 communities participating in the NFIP with 5 policies contributing to $3,826 in premiums paid in exchange for $1,341,200 of coverage.

- 6 out of the 4 counties in the Lower Salmon watershed identified flood as their number one hazard.
- 3 out of the 4 counties in the Lower Salmon watershed identified flood as their number two hazard.
- 1 out of the 4 counties in the Lower Salmon watershed identified flood as their number three hazard.

**LIDAR data availability**

- Gatz Creek (2006)
- White Bird Creek (2008)

**Conclusion**

The Lower Salmon watershed is considered a moderate flood risk watershed because of the population near the Salmon River and the numerous levees in use.

**Counties and Tribes**

- Idaho, Lewis, Nez Perce, Valley

**Cities**

- Riggs, White Bird

**Subbasin Metrics**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1,186</td>
<td>1,870</td>
<td>2,628</td>
<td>6</td>
<td>692</td>
<td>8,800</td>
<td>0</td>
<td>48</td>
</tr>
</tbody>
</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>61%</td>
</tr>
<tr>
<td>Federal</td>
<td>46%</td>
</tr>
<tr>
<td>Reservation/AI</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>11%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

**NFIP Statistics (2014)**

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th>Paid Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>$1,341,200</td>
<td>$3,826</td>
<td>80</td>
</tr>
</tbody>
</table>

**Total flood mitigation actions: 70**

A majority of the proposed mitigation actions are not location specific and can be found in the the county ARMPs.
Wildfire

Lower Salmon

**Risk Rank:** M

**Introduction**

The Lower Salmon watershed is home to 1,858 people, a small portion of which live in the Wildland Urban Interface. Areas of concentrated population within the Lower Salmon watershed boundaries are Riggins and White Bird.

**What is the risk?**

Fires within the Lower Salmon watershed have the potential to severely disrupt life, property and economic activity. There are 446 structures located within the WUI of the Lower Salmon watershed. Since 2000, 168,229 acres have burned during 148 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Lower Salmon watershed has 10.1% low risk, 0.2% low-moderate risk, 39.8% moderate risk, 12.9% moderate-high risk and 7.0% high risk of wildfire to the communities within the watershed.

- 4 out of the 4 counties in the Lower Salmon watershed identified wildfire as their number one hazard.
- 0 out of the 4 counties in the Lower Salmon watershed identified wildfire as their number two hazard.
- 0 out of the 4 counties in the Lower Salmon watershed identified wildfire as their number three hazard.

**Conclusion**

The population within the Lower Salmon watershed is relatively low, but the overall risk of wildfire damage to people and property within the watershed is moderate.

**Counties and Tribes**

Idaho, Lewis, Nez Perce, Valley

**Cities**

Riggins, White Bird

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>1,186</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2010)</td>
<td>1,858</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>2,628</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>809</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>8,807</td>
</tr>
<tr>
<td>Structures in WUI</td>
<td>480</td>
</tr>
<tr>
<td>Historic Fire Events</td>
<td>146</td>
</tr>
<tr>
<td>Acres Burned (1995)</td>
<td>168,229</td>
</tr>
</tbody>
</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>41%</td>
</tr>
<tr>
<td>Federal</td>
<td>48%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>11%</td>
</tr>
<tr>
<td>Out of State</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Watershed Fire Risk**

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>10.8%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>9.2%</td>
</tr>
<tr>
<td>Moderate</td>
<td>50.8%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>12.9%</td>
</tr>
<tr>
<td>High</td>
<td>7.3%</td>
</tr>
</tbody>
</table>

**Total wildfire mitigation actions:** 43

A majority of the proposed mitigation actions are not location specific and can be found in the county MHP.
Idaho Multi-Hazard Risk Portfolio

Seismic

**Lower Salmon**

**Risk Rank:** L

**Introduction**

Areas of concentrated population within the Lower Salmon watershed boundaries are Riggins and White Bird.

What is the risk?

An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas. There are also 6 miles of canals that are receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 4 counties within the Lower Salmon watershed identified seismic as their number one hazard.
- 0 out of the 4 counties within the Lower Salmon watershed identified seismic as their number two hazard.
- 0 out of the 4 counties within the Lower Salmon watershed identified seismic as their number three hazard.

**Counties and Tribes**

Idaho, Lewis, Nez Perce, Valley

**Cities**

Riggins, White Bird

---

**Subbasin Metrics**

- **Area (sq. miles):** 1,196
- **Population (2010):** 1,858
- **Miles of Stream:** 2,628
- **Miles of Canal:** 0
- **Min. Elevation (ft):** 892
- **Max. Elevation (ft):** 8,802
- **Est. Facilities Near Fault:** 0
- **In Watershed with 25 Miles of Fault:** 8%

**Subbasin Ownership**

- **Private:** 43%
- **Federal:** 48%
- **Reservation/USA:** 0%
- **State:** 11%
- **Out of Idaho:** 0%

**Ground Acceleration**

- **Accl. Amount**
  - **Watershed Area**
    - Low: 80%
    - Low-Moderate: 20%
    - Moderate: 0%
    - Moderate-High: 0%
    - High: 0%

---

**Total seismic mitigation actions:** 26

A majority of the proposed mitigation actions are not location specific and can be found in the the county inventories.
Idaho Multi-Hazard Risk Portfolio

Flood

Lower Selway

Risk Rank: 1

Introduction
There are 28 total people who live within the Lower Selway watershed, of which 1 is at risk of flooding. The watershed is entirely federally managed.

What is the risk?
The Selway River is a major water system in the Lower Selway watershed. According to the Idaho County AHHP, there have been reports of 3 significant flood events within the watershed in recent history. There are 0 high or significant hazard dams in the Lower Selway watershed. There are 0 communities participating in the NFIP with 0 policies contributing to $1,972 of premiums paid in exchange for $880,000 of coverage.
- 1 out of the 1 county in the Lower Selway watershed identified flood as their number one hazard.
- 1 out of the 1 county in the Lower Selway watershed identified flood as their number two hazard.
- 1 out of the 1 county in the Lower Selway watershed identified flood as their number three hazard.

LIDAR data availability
No LIDAR is available.

Conclusion
The lack of population and private property make the Lower Selway a low flood risk watershed.

Counties and Tribes
Idaho

Cities

Subbasin Metrics
- Area (sq. miles): 1,028
- Population (2010): 28
- Miles of Stream: 0
- Miles of Canal: 0
- Min. Elevation (ft): 1,457
- Max. Elevation (ft): 8,540
- Dam(s) of Concern: 0
- Pop. at Flood Risk: 1

Subbasin Ownership
- Owner Type: % Subbasin Area
  - Private: 0%
  - Federal: 100%
  - Reservation/BIA: 0%
  - State: 0%
  - Out of Idaho: 0%

NFIP Statistics (2014)
- NFIP Policies: 1
- Total Coverage: $980,000
- Total Premiums: $3,472
- Total Claims: 0
- Paid Claims: 0

Total flood mitigation actions: 7
A majority of the proposed mitigation actions are not location specific and can be found in the the county AHHP.

CREDIT: USGS 13335509 SELWAY RIVER NR LOWELL ID

Country All Hazard Mitigation Plans Flood Mitigation Actions

Action Status
- Underway
- Planned
- Proposed
- Completed
-签订了
- Completing
- Other

Countrywide and Statewide

Miles

0 5 10 15

Miles

0 5 10 15

Miles
Idaho Multi-Hazard Risk Portfolio

Wildfire

Risk Rank: L

Introduction
The Lower Selway watershed is home to 9 people; therefore there is no Wildland Urban Interface.

What is the risk?
Fires within the Lower Selway watershed have the potential to severely disrupt life, property and economic activity. Since 2000, 129,565 acres have burned during 340 individual wildfire events. Based on data from the Idaho forest Action Plan (2010), the Upper Selway watershed has 51.7% low risk, 0% low-moderate risk, 48.3% moderate risk, 0% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.
- 1 out of the 2 counties in the Upper Selway watershed identified wildfire as their number one hazard.
- 1 out of the 2 counties in the Upper Selway watershed identified wildfire as their number two hazard.
- 1 out of the 2 counties in the Upper Selway watershed identified wildfire as their number three hazard.

Conclusion
The Lower Selway watershed experiences regular fire events but there are no people or properties within the watershed at risk. Therefore, the overall risk of wildfire is low.

Counties and Tribes
Idaho
Cities

Lower Selway Watershed

Communities at Risk of Wildfire
- Low
- Low-Moderate
- Moderate
- Moderate-High
- High
- Wildland-Urban Interface
- Watershed

Subbasin Metrics
- Area (sq. miles): 1,028
- Population (2010): 28
- Miles of Stream: 2,120
- Miles of Canal: 0
- Min. Elevation (ft): 1,462
- Max. Elevation (ft): 9,536
- Structures in WUI: 40
- Historic Fire Events: 340

Subbasin Ownership
- Owner Type: 100%
- Private: 0%
- Federal: 100%
- Reservation/ BIA: 0%
- State: 0%
- Out of Idaho: 0%

Watershed Fire Risk
- Risk Level: 25%
- Low: 25%
- Low-Moderate: 0%
- Moderate: 75%
- Moderate-High: 0%
- High: 0%

Total wildfire mitigation actions: 6

A majority of the proposed mitigation actions are location-specific and can be found in the county RMPs.
Lower Selway

Risk Rank: L

Introduction
There are no areas of concentrated population within the Lower Selway watershed boundaries.

What is the risk?
An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 1 county within the Lower Selway watershed identified seismic as their number one hazard.
- 0 out of the 1 county within the Lower Selway watershed identified seismic as their number two hazard.
- 0 out of the 1 county within the Lower Selway watershed identified seismic as their number three hazard.

Counties and Tribes
Idaho

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,028</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>28</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>2,120</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>1,457</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>8,530</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>0</td>
</tr>
<tr>
<td>In watershed with 12 miles of fault</td>
<td>0%</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>0%</td>
</tr>
<tr>
<td>Federal</td>
<td>100%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Acceleration</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>100%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 6

A majority of the proposed mitigation actions are not location specific and can be found in the the county plans.
**Lower Snake-Asotin**

**Risk Rank:** 134

**Introduction**
Areas of concentrated population within the watershed boundaries include parts of Lewiston. There are 13,754 total people who live within the watershed, of which 273 are at risk of flooding. Approximately half of the subbasin within Idaho is privately owned.

**What is the risk?**
The Snake River is a major water system in the Northwest United States. Land along the banks of the river within the Lower Snake-Asotin watershed is clear of human development until one reaches the Lewiston area. According to the county AROMPs, there have been 3 reports of flash floods in recent history within the watershed. There are 0 high or significant hazard dams in the Lower Snake-Asotin. There are 3 communities participating in the NFIP with 54 policies contributing to $9,780 of premiums paid in exchange for $3,624,800 of coverage.

- 0 out of the 3 counties in the Lower Snake-Asotin watershed identified flood as their number one hazard.
- 0 out of the 3 counties in the Lower Snake-Asotin watershed identified flood as their number two hazard.
- 0 out of the 3 counties in the Lower Snake-Asotin watershed identified flood as their number three hazard.

**LIDAR data availability**
LIDAR availability within the Lower Snake-Asotin watershed is as follows:
- Net Perso Reservation—very small portion (2000)
- Ash Creek (2008)
- Captain John Creek (2009)

**Conclusion**
Human development is significant in only the Lewiston portion of the watershed. The lack of hazardous flood factors places the Lower Snake-Asotin watershed in the moderate flood risk.

**Counties and Tribes**
Idaho, Nez Perce, Nez Perce Tribe

---

**Flood**

**Lower Snake-Asotin Watershed**

**USGS 13317860 SNAKE RIVER BL MCDUFF RAPIDS AT CHINA GARDENS, ID**
**Wildfire**

**Lower Snake-Asotin**

**Risk Rank:** H

**Introduction**

The Lower Snake-Asotin watershed is home to 13,754 people, a small number of which live in the Wildland Urban Interface. The only area of concentrated population within the Lower Snake-Asotin watershed boundaries is the portion of Lewiston.

**What is the risk?**

Fires within the Lower Snake-Asotin watershed have the potential to severely disrupt life, property and economic activity. There are 92 structures located within the WUI of the Lower Snake-Asotin watershed. Since 2000, 116,931 acres have burned during 12 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Lower Snake-Asotin watershed has 0.2% low risk, 38.2% low-moderate risk, 14.4% moderate risk, 27.7% moderate-high risk and 19.5% high risk of wildfire to the communities within the watershed.

- 2 out of the 2 counties in the Lower Snake-Asotin watershed identified wildfire as their number one hazard.
- 0 out of the 2 counties in the Lower Snake-Asotin watershed identified wildfire as their number two hazard.
- 0 out of the 2 counties in the Lower Snake-Asotin watershed identified wildfire as their number three hazard.

**Conclusion**

The Lower Snake-Asotin watershed is at an overall high risk of wildfire because of the relatively high population and relatively high risk based on IDL wildfire data.

**Counties and Tribes**

Idaho, Nez Perce, Nez Perce Tribe

**Cities**

Lewiston

---

**Subbasin Metrics**

- Area (sq. miles): 696
- Population (2010): 13,754
- Miles of Stream: 600
- Miles of Canal: 6
- Min. Elevation (ft): 719
- Max. Elevation (ft): 6,204
- Structures in WUI: 92
- Historic Fire Events: 12

**Subbasin Ownership**

- Owner Type: % Subbasin Area
  - Private: 13%
  - Federal: 5%
  - Reservation/BIA: 0%
  - State: 8%
  - Out of State: 74%

**Watershed Fire Risk**

- Risk Level: % Watershed Area
  - Low: 0.2%
  - Low-Moderate: 38.2%
  - Moderate: 14.4%
  - Moderate-High: 27.7%
  - High: 19.5%
Lower Snake-Asotin

Risk Rank: M

Introduction
The area of concentrated population within the Lower Snake-Asotin watershed boundaries is Lewiston.

What is the risk?
An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas. There are also 9 miles of canals that are receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.
- 0 out of the 2 counties within the Lower Snake-Asotin watershed identified seismic as their number one hazard.
- 0 out of the 2 counties within the Lower Snake-Asotin watershed identified seismic as their number two hazard.
- 0 out of the 2 counties within the Lower Snake-Asotin watershed identified seismic as their number three hazard.

Counties and Tribes
Idaho, Nez Perce, Nez Perce Tribe

Cities
Lewiston

Total seismic mitigation actions: 4

A majority of the proposed mitigation actions are not location specific and can be found in the the county areas.
Idaho Multi-Hazard Risk Portfolio

**Flood**

### Medicine Lodge

**Risk Level:** 1

**Introduction:**
The main area of concentrated population within the Medicine Lodge watershed boundaries is Mud Lake. There are 825 total people who live within the watershed, of which 380 are at risk of flooding. Roughly one quarter of the watershed is privately owned.

**What is the risk?**
There are 6 high or significant hazard dams in the Medicine Lodge watershed. According to the county AHPs, there has been one historical report of riverine flooding within the watershed. There are 6 communities participating in the NFIP with 6 policies contributing to $9,948 of premiums paid in exchange for $390,000 of coverage.

- 2 out of the 6 counties in the Medicine Lodge watershed identified flood as their number one hazard.
- 0 out of the 6 counties in the Medicine Lodge watershed identified flood as their number two hazard.
- 1 out of the 6 counties in the Medicine Lodge watershed identified flood as their number three hazard.

**LIDAR data availability:**
LIDAR availability within the Medicine Lodge watershed is as follows:
- IN/ID Birch Creek Control (2002)
- IN/ID Fire (2007)
- Carson National Wildlife Refuge (2011)

**Conclusion:**
Because of the low population, small amount of private ownership and lack of hazardous dams, the Medicine Lodge watershed is considered to be a low risk.

**Counties and Tribes:**
Binghum, Bonneville, Butte, Clark, Jefferson, Lemhi

**Cities:**
Mud Lake

### Subbasin Metrics

- **Area (sq. miles):** 972
- **Population (2010):** 825
- **Miles of Stream:** 1,160
- **Miles of Canal:** 221
- **Min. Elevation (ft):** 4,752
- **Max. Elevation (ft):** 13,368
- **Bunds of Concern:** 0
- **Pop at Flood Risk:** 383

### Subbasin Ownership

- **Owner Type:**
  - Federal: 22%
  - Private: 78%
- **% Subbasin Area:**
  - Federal: 0%
  - State: 1%
  - Out of Idaho: 0%

### NFIP Statistics (2014)

- **NFIP Policies:** 5
- **Total Coverage:** $390,000
- **Total Premiums:** $9,948
- **Paid Claims:** 0

**Total flood mitigation actions: 5**

A majority of the proposed mitigation actions are not location specific and can be found in the county AHPs.
The Medicine Lodge watershed is home to 825 people, though there is no WUI. The only area of concentrated population within the Medicine Lodge watershed boundaries is Mud Lake.

**What is the risk?**
Fires within the Medicine Lodge watershed have the potential to severely disrupt life, property and economic activity. Since 2000, 151,359 acres have burned during 52 individual wildfire events.

Based on data from the Idaho Forest Action Plan (2010), the Medicine Lodge watershed has 34% low risk, 40.4% low moderate risk, 16.6% moderate risk, 6.6% moderate-high risk and 2.3% high risk of wildfire to the communities within the watershed.

*8 out of the 8 counties in the Medicine Lodge watershed identified wildfire as their number one hazard.*

*1 out of the 6 counties in the Medicine Lodge watershed identified wildfire as their number two hazard.*

*8 out of the 6 counties in the Medicine Lodge watershed identified wildfire as their number three hazard.*

**Conclusion**
All of the counties within the Medicine Lodge watershed have identified wildfire as a significant hazard. However, there is no major population within the WUI. Thus, severe events have a low likelihood to threaten life and property within the watershed.

**Counties and Tribes**

- Bingham, Bonneville, Butte, Clark, Jefferson, Lemhi

**Cities**
Mud Lake

**Medicine Lodge Watershed**

**Medicine Lodge**

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>Population (2010)</th>
<th>Miles of Stream</th>
<th>Miles of Canal</th>
</tr>
</thead>
<tbody>
<tr>
<td>677</td>
<td>825</td>
<td>1,660</td>
<td>223</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4,751</td>
<td>11,388</td>
<td>No WUI</td>
<td>32</td>
<td>151,359</td>
</tr>
</tbody>
</table>

**Watershed Fire Risk**

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>34%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>40.4%</td>
</tr>
<tr>
<td>Moderate</td>
<td>16.6%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>5.6%</td>
</tr>
<tr>
<td>High</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

**Total wildfire mitigation actions:**

60

A majority of the proposed mitigation actions are not location specific and can be found in the the county WMMAs.
Seismic

Risk Rank: M

Introduction

The area of concentrated population within the Medicine Lodge watershed boundaries is Mud Lake.

What is the risk?

An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas. There are also 228 miles of canals that are receptive to seismic disturbances.

There is 1 essential facility within 25 miles of a quaternary fault.

- 0 out of the 6 counties within the Medicine Lodge watershed identified seismic as their number one hazard.
- 0 out of the 6 counties within the Medicine Lodge watershed identified seismic as their number two hazard.
- 0 out of the 6 counties within the Medicine Lodge watershed identified seismic as their number three hazard.

Counties and Tribes

Bingham, Bonneville, Butte, Clark, Jefferson, Lemhi

Cities

Mud Lake

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>972</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,660</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>207</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>-751</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>11,388</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>1</td>
</tr>
<tr>
<td>In Watershed with 25 Miles of Fault</td>
<td>94%</td>
</tr>
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</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>23%</td>
</tr>
<tr>
<td>Federal</td>
<td>76%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
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<tr>
<td>State</td>
<td>1%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Acceleration</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>22%</td>
</tr>
<tr>
<td>Moderate</td>
<td>54%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>22%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 56

A majority of the proposed mitigation actions are not location specific and can be found in the their county areas.
Middle Bear

Risk Rank: M

Introduction
Areas of concentrated population within the Middle Bear watershed boundaries are Clifton, Dayton, Franklin, Grace, Oxford, Preston and Weston. There are 14,847 total people who live within the watershed, of which 10 are at risk of flooding. Half of the watershed is privately owned and 25% of the Middle Bear watershed lies in Utah.

What is the risk?
The Bear River is the main water system, flowing south across the watershed. According to the county AHSWAP, there have been reports of 66 flash floods historically within the watershed. There are 18 high or significant hazard dams in the Middle Bear watershed. Large portions of the watershed are used for agricultural purposes. There are 9 communities participating in the NFIP with 8 policies contributing to $2,277 of premiums paid in exchange for $1,159,800 of coverage.

• 6 out of the 8 counties in the Middle Bear watershed identified flood as their number one hazard.
• 6 out of the 8 counties in the Middle Bear watershed identified flood as their number two hazard.
• 6 out of the 8 counties in the Middle Bear watershed identified flood as their number three hazard.

LiDAR data availability
No LiDAR is available.

Conclusion
The Middle Bear watershed is considered a high risk watershed because of the relatively high population, large amount of moderate hazard dams and large amount of private property that could be damaged by a flood event.

Counties and Tribes
Bannock, Bear Lake, Caribou, Franklin, Oneida

Cities
Clifton, Dayton, Franklin, Grace, Oxford, Preston, Weston

Middle Bear Watershed

Subbasin Metrics

<table>
<thead>
<tr>
<th>Subbasin</th>
<th>Area (sq. miles)</th>
<th>Population</th>
<th>Miles of Stream</th>
<th>Miles of Canal</th>
<th>Min. Elevation (ft)</th>
<th>Max. Elevation (ft)</th>
<th>Days of Concern</th>
<th>Pop. at Flood Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,288</td>
<td>14,847</td>
<td>1,700</td>
<td>354</td>
<td>4,393</td>
<td>9,943</td>
<td>15</td>
<td>18</td>
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</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>50%</td>
</tr>
<tr>
<td>Federal</td>
<td>20%</td>
</tr>
<tr>
<td>Reservation/RIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>6%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>25%</td>
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</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th>PP Claims</th>
<th>PA Claims</th>
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<tbody>
<tr>
<td>6</td>
<td>$1,150,800</td>
<td>$2,077</td>
<td>$3,587</td>
<td>$3,587</td>
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</table>

Total flood mitigation actions: 39
A majority of the proposed mitigation actions are not location specific and can be found in the state's NFIP.
**Middle Bear**

**Risk Rank:** M

**Introduction**

The Middle Bear watershed is home to 14,847 people, a small portion of which live in the Wildland Urban Interface. Areas of concentrated population within the Middle Bear watershed boundaries are Clifton, Dayton, Franklin, Grace, Oxford, Preston and Weston.

**What is the risk?**

Fires within the Middle Bear watershed have the potential to severely disrupt life, property and economic activity. There are 21 structures located within the WUI of the Middle Bear watershed. Since 2000, 27,718 acres have burned during 48 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Middle Bear watershed has 83% low risk, 14% low-moderate risk, 55% moderate risk, 14% moderate-high risk and 2% high risk of wildfire to the communities within the watershed.

- 1 out of the 5 counties in the Middle Bear watershed identified wildfire as their number one hazard.
- 4 out of the 5 counties in the Middle Bear watershed identified wildfire as their number two hazard.
- 8 out of the 5 counties in the Middle Bear watershed identified wildfire as their number three hazard.

**Conclusion**

The people and property of the Middle Bear watershed are at an overall moderate risk of damaging wildfire events.

**Counties and Tribes**

Bannock, Bear Lake, Caribou, Franklin, Oneida

**Cities**

Clifton, Dayton, Franklin, Grace, Oxford, Preston, Weston

**Subbasin Metrics**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1,288</td>
<td>14,847</td>
<td>1,700</td>
<td>354</td>
<td>4,999</td>
<td>9,938</td>
<td>21</td>
<td>48</td>
<td>27,758</td>
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**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>50%</td>
</tr>
<tr>
<td>Federal</td>
<td>20%</td>
</tr>
<tr>
<td>Reservation/BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>8%</td>
</tr>
<tr>
<td>Out of State</td>
<td>25%</td>
</tr>
</tbody>
</table>

**Watershed Fire Risk**

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>5.3%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>21.3%</td>
</tr>
<tr>
<td>Moderate</td>
<td>55.9%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>14.5%</td>
</tr>
<tr>
<td>High</td>
<td>2%</td>
</tr>
</tbody>
</table>

**Total wildfire mitigation actions:** 69

A majority of the proposed mitigation actions are not location specific and can be found in the the county MMRP.
**Middle Bear**

**Risk Rank:** H

**Introduction**

Areas of concentrated population within the Middle Bear watershed boundaries are Clifton, Dayton, Franklin, Grace, Oxford, Preston and Westen.

**What is the risk?**

An earthquake within the watershed has a high potential to cause damage to the life and property of those within these areas. There are also 354 miles of canals that are receptive to seismic disturbances.

There are 19 essential facilities within 25 miles of a quaternary fault.

- 1 out of the 5 counties within the Middle Bear watershed identified seismic as their number one hazard.
- 1 out of the 5 counties within the Middle Bear watershed identified seismic as their number two hazard.
- 6 out of the 5 counties within the Middle Bear watershed identified seismic as their number three hazard.

**Counties and Tribes**

Bannock, Bear Lake, Caribou, Franklin, Oneida

**Cities**

Clifton, Dayton, Franklin, Grace, Oxford, Preston, Westen

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**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Subbasin Metrics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,288</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>14,847</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,700</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>354</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,393</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>9,932</td>
</tr>
<tr>
<td>Out. Facilities Near Fault</td>
<td>39</td>
</tr>
<tr>
<td>In Watershed with Life at Risk</td>
<td>100%</td>
</tr>
</tbody>
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**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Subbasin Area</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Out of Idaho</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Ground Acceleration**

<table>
<thead>
<tr>
<th>Area</th>
<th>Watershed Area</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Moderate-High</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>

**Total seismic mitigation actions:** 37

A majority of the proposed mitigation actions are not location-specific and can be found in the county plans.
Middle Fork Clearwater

Risk Ranks: M

Introduction
The only area of concentrated population within the Middle Fork Clearwater watershed boundaries is Kooska. There are 1,598 total people who live within the watershed, of which 69 are at risk of flooding. Approximately one third of the watershed is privately owned.

What is the risk?
The Middle Fork Clearwater River is a large river without significant flood control structures. Much of the land is forested public property. According to the Idaho County AHIP, there has been a single report of riverine flooding in the watershed in recent history. There are 0 high or significant hazard dams in the Middle Fork Clearwater watershed. There are 2 communities participating in the NFIP with 7 policies contributing to $4,247 of premiums paid in exchange for $1,188,000 of coverage.

- 0 of the 1 county in the Middle Fork Clearwater watershed identified flood as their number one hazard.
- 1 out of the 1 county in the Middle Fork Clearwater watershed identified flood as their number two hazard.
- 0 out of the 1 county in the Middle Fork Clearwater watershed identified flood as their number three hazard.

USDA data availability
LiDAR availability within the Middle Fork Clearwater watershed is as follows:

Clear Creek (2009)

Conclusion
The low population and presence of levees within the Middle Fork Clearwater watershed contribute to the moderate flood risk rating.

Counties and Tribes
Idaho, Nez Perce Tribe
Cities
Kooska

Flood

<table>
<thead>
<tr>
<th>Subbasin Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
</tr>
<tr>
<td>Population (2010)</td>
</tr>
<tr>
<td>Miles of Stream</td>
</tr>
<tr>
<td>Miles of Canal</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
</tr>
<tr>
<td>Dams of Concern</td>
</tr>
<tr>
<td>Pop. at Flood Risk</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subbasin Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner Type</td>
</tr>
<tr>
<td>Private</td>
</tr>
<tr>
<td>Federal</td>
</tr>
<tr>
<td>Reservation/RCA</td>
</tr>
<tr>
<td>State</td>
</tr>
<tr>
<td>Out of Idaho</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NFIP Statistics (2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFIP Policies</td>
</tr>
<tr>
<td>Total Coverage</td>
</tr>
<tr>
<td>Total Premiums</td>
</tr>
<tr>
<td>In Claims</td>
</tr>
<tr>
<td>Paid Claims</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 12
Middle Fork Clearwater

Risk Rank: M

Introduction
The Middle Fork Clearwater watershed is home to 1,598 people, a small portion of which live in or near the Wildland Urban Interface. The only area of concentrated population within the Middle Fork Clearwater watershed boundaries is Kooskia.

What is the risk?
Fires within the Middle Fork Clearwater watershed have the potential to severely disrupt life, property and economic activity. There are 282 structures located within the WUI of the Middle Fork Clearwater watershed. Since 2000, 3,618 acres have burned in 51 wildfire events. Based on data from the Idaho Forest Action Plan (2018), the Middle Fork Clearwater watershed has 0% low risk, 9% low-moderate risk, 63% moderate risk, 30% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

- 1 out of the 1 county in the Middle Fork Clearwater watershed identified wildfire as their number one hazard.
- 1 out of the 1 county in the Middle Fork Clearwater watershed identified wildfire as their number two hazard.
- 1 out of the 1 county in the Middle Fork Clearwater watershed identified wildfire as their number three hazard.

Conclusion
Despite the low population of the Middle Fork Clearwater watershed, IDL data determined the watershed to be at an overall moderate risk of wildfire.

Counties and Tribes
Idaho, Nez Perce Tribe

Cities
Kooskia

Total wildfire mitigation actions: 9

A majority of the proposed mitigation actions are not location-specific and can be found in the IDMHA.
Middle Fork Clearwater

**Risk Rank:** L

**Introduction:**
The only area of concentrated population within the Middle Fork Clearwater watershed boundaries is Kooskia.

**What is the risk?**
An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas. There is also 1 levee that is receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 1 county within the Middle Fork Clearwater watershed identified seismic as their number one hazard.
- 0 out of the 1 county within the Middle Fork Clearwater watershed identified seismic as their number two hazard.
- 0 out of the 1 county within the Middle Fork Clearwater watershed identified seismic as their number three hazard.

**Counties and Tribes:**
Idaho, Nez Perce Tribe

**Cities:**
Kooskia

**Subbasin Metrics:**
- **Area (sq. miles):** 221
- **Population (2010):** 1,598
- **Miles of Stream:** 421
- **Miles of Canal:** 0
- **Min. Elevation (ft):** 1,224
- **Max. Elevation (ft):** 6,601
- **Est. Facilities Near Fault:** 0
- **% Watered with 25 Miles of Fault:** 0%

**Subbasin Ownership:**
- **Owner Type:** % Subbasin Area
  - Private: 36%
  - Federal: 49%
  - Reservation/ BIA: 1%
  - State: 14%
  - Out of Idaho: 0%

**Ground Acceleration:**
- **Accel. Amount % Watershed Area**
  - Low: 100%
  - Low-Moderate: 0%
  - Moderate: 0%
  - Moderate-High: 0%
  - High: 0%

**Total seismic mitigation actions:** 4

A majority of the proposed mitigation actions are not location specific and can be found in the the county areas.
Idaho Multi-Hazard Risk Portfolio

Flood

Middle Fork Payette

Risk Rank: 1

Introduction
The only area of concentrated population within the Middle Fork Payette watershed boundaries is Crouch. There are 1,330 total people who live within the watershed, of which 66 are at risk of flooding. The watershed is only 7% privately owned.

What is the risk?
Flood events could be due to rain or snow events, localized intense rainfall and inadequate urban drainage systems. There are 0 high or significant hazard dams in the Middle Fork Payette watershed. There are 3 communities participating in the NFIP with 17 properties contributing to $6,945 of premiums paid in exchange for $4,879,200 of coverage.

- 6 out of the 2 counties in the Middle Fork Payette watershed identified flood as their number one hazard.
- 0 out of the 2 counties in the Middle Fork Payette watershed identified flood as their number two hazard.
- 1 out of the 2 counties in the Middle Fork Payette watershed identified flood as their number three hazard.

LIDAR data availability
No LIDAR data is available.

Conclusion
The main water system is the Middle Fork Payette River, though the population within the watershed is small and there are no major contributing factors to flood risk in the watershed. It is considered to be low risk.

Counties and Tribes
Boise, Valley
Cities
Crouch

Subbasin Metrics

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>340</td>
<td>1,330</td>
<td>743</td>
<td>2</td>
<td>2,976</td>
<td>8,625</td>
<td>0</td>
<td>66</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>7%</td>
</tr>
<tr>
<td>Federal</td>
<td>90%</td>
</tr>
<tr>
<td>Reservation/RRI</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>3%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th>Flood Claims</th>
<th>Paid Claims</th>
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<tbody>
<tr>
<td>27</td>
<td>$4,879,200</td>
<td>$6,945</td>
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<td>$4</td>
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</table>

Total flood mitigation actions: 27
A majority of the proposed mitigation actions are not location specific and can be found in the the county reports.
**Idaho Multi-Hazard Risk Portfolio**

**Wildfire**

**Middle Fork Payette**

**Risk Rank:** M

**Introduction**

The Middle Fork Payette watershed is home to 1,350 people, all of which live in the Wildland Urban Interface. The only area of concentrated population within the Middle Fork Payette watershed boundaries is Crouch.

**What is the risk?**

Fires within the Middle Fork Payette watershed have the potential to severely disrupt life, property and economic activity. There are 1,740 structures located within the WIU of the Middle Fork Payette watershed. Since 2000, 31,536 acres have burned during 133 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Middle Fork Payette watershed has 0% low risk, 0% low-moderate risk, 10.8% moderate risk, 9.2% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

- 2 out of the 2 counties in the Middle Fork Payette watershed identified wildfire as their number two hazard.
- 2 out of the 2 counties in the Middle Fork Payette watershed identified wildfire as their number three hazard.

**Conclusion**

Given the large population within the WIU and the moderate size of historic fires, the Middle Fork Payette watershed is at an overall moderate risk of wildfire.

**Counties and Tribes**

- Boise, Valley

**Cities**

- Crouch

---

**Middle Fork Payette Watershed**

**Communities at Risk of Wildfire**

- Low
- Low-Moderate
- Moderate
- Moderate-High
- High
- Wildland-Urban Interface
- Watershed

---

**Subbasin Metrics**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>346</td>
<td>1,350</td>
<td>743</td>
<td>4</td>
<td>2,976</td>
<td>8,625</td>
<td>1,740</td>
<td>133</td>
<td>51,536</td>
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**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>7%</td>
</tr>
<tr>
<td>Federal</td>
<td>90%</td>
</tr>
<tr>
<td>Reservation/BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>3%</td>
</tr>
<tr>
<td>Out-of-State</td>
<td>0%</td>
</tr>
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</table>

**Watershed Fire Risk**

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
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<tr>
<td>Low/Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>90.8%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>9.2%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Total wildfire mitigation actions:** 1

A majority of the proposed mitigation actions are not location specific and can be found in the in the county WMA.
Middle Fork Payette

Risk Rank: M

Introduction
The area of concentrated population within the Middle Fork Payette watershed boundaries is Crouch.

What is the risk?
An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas. There are also 2 miles of canals that are receptive to seismic disturbances.

There is 1 essential facility within 25 miles of a quaternary fault.

- 0 out of the 2 counties within the Middle Fork Payette watershed identified seismic as their number one hazard.
- 0 out of the 2 counties within the Middle Fork Payette watershed identified seismic as their number two hazard.
- 0 out of the 2 counties within the Middle Fork Payette watershed identified seismic as their number three hazard.

Counties and Tribes
Boise, Valley

Cities
Crouch

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>340</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>1,350</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>763</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>2</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>2,976</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>8,825</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>1</td>
</tr>
<tr>
<td>% Watershed w/ 12 Miles of Fault</td>
<td>79%</td>
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Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>7%</td>
</tr>
<tr>
<td>Federal</td>
<td>93%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
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<tr>
<td>State</td>
<td>3%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Acceleration</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>97%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>3%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 27

A majority of the proposed mitigation actions are not location specific and can be found in the the county areas.
Risk Rank: 1

Introduction:
Only 2% of the Middle Kootenai watershed lies within Idaho, all of which is federally managed and devoid of population and development.

What is the risk?
There are many small lakes and streams within the Middle Kootenai watershed, though the area is uninhabited. This river is reported to flood consistently, although one significantly damaging flood was reported by the county AHMPS in recent history. There are 0 high or significant hazard dams in the Middle Kootenai watershed and 6 communities participating in the NFIP.

- 0 out of the 2 counties in the Middle Kootenai watershed identified flood as their number one hazard.
- 0 out of the 2 counties in the Middle Kootenai watershed identified flood as their number two hazard.
- 0 out of the 2 counties in the Middle Kootenai watershed identified flood as their number three hazard.

No LiDAR data is available.

Conclusion:
Because of the lack of population and private property within the watershed, the Middle Kootenai watershed is considered low risk.

Counties and Tribes:
Bonner, Boundary

Cities:

Middle Kootenai Watershed

Flood

Middle Kootenai

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>2,243</td>
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<tr>
<td>Population (2010)</td>
<td>0</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>175</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>1,686</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>8,637</td>
</tr>
<tr>
<td>Dams of Concern</td>
<td>0</td>
</tr>
<tr>
<td>Pop. at Flood Risk</td>
<td>0</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>0%</td>
</tr>
<tr>
<td>Federal</td>
<td>0%</td>
</tr>
<tr>
<td>Reservation/R/I</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>98%</td>
</tr>
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NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>NFIP Policies</td>
<td>0</td>
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<tr>
<td>Total Coverage</td>
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<tr>
<td>Total Premiums</td>
<td>50</td>
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<tr>
<td>Insured Homes</td>
<td>0</td>
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<tr>
<td>Paid Claims</td>
<td>50</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 21
Idaho Multi-Hazard Risk Portfolio

Wildfire

Middle Kootenai

Risk Rank: L

Introduction
The Middle Kootenai watershed is home to 6 people.

What is the risk?
Since 2000, 1 acre has burned in 4 wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Middle Kootenai watershed has 100% low risk, 0% low-moderate risk, 0% moderate risk, 0% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

1. Out of the 2 counties in the Middle Kootenai watershed identified wildfire as their number one hazard.
2. Out of the 2 counties in the Middle Kootenai watershed identified wildfire as their number two hazard.
3. Out of the 2 counties in the Middle Kootenai watershed identified wildfire as their number three hazard.

Conclusion
There are no communities at risk of wildfire within the Middle Kootenai watershed. Therefore, the overall wildfire risk is low.

Counties and Tribes
Bonner, Boundary

Cities

Subbasin Metrics
- Area (sq. miles): 2,243
- Population (2010): 0
- Miles of Stream: 175
- Miles of Canal: 0
- Min. Elevation (ft): 1,686
- Max. Elevation (ft): 8,632
- Structures in WUI: No WUI
- Historic Fire Events: 4
- Acres Burned (1995-): 1

Subbasin Ownership
- Owner Type
  - Federal: 0%
  - Reservation/BIA: 0%
  - State: 0%
  - Out of Idaho: 98%

Watershed Fire Risk
- Risk Level
  - Low: 100%
  - Low-Moderate: 0%
  - Moderate: 0%
  - Moderate-High: 0%
  - High: 0%

Total wildfire mitigation actions: 39

A majority of the proposed mitigation actions are not location-specific and can be found in the Multi-Hazard Mitigation Planning Areas.
Middle Kootenai

Risk Rank: L

Introduction
There are no areas of concentrated population within the Middle Kootenai watershed boundaries.

What is the risk?
An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas.

There are 0 essential facilities within 25 miles of a quaternary fault.

• 0 out of the 2 counties within the Middle Kootenai watershed identified seismic as their number one hazard.
• 0 out of the 2 counties within the Middle Kootenai watershed identified seismic as their number two hazard.
• 0 out of the 2 counties within the Middle Kootenai watershed identified seismic as their number three hazard.

Counties and Tribes
Bonner, Boundary

Cities

Total seismic mitigation actions: 12

A majority of the proposed mitigation actions are not location specific and can be found in the the county areas.
Risk Rank: L

Introduction
There are 21 total people who live within the watershed, of which 0 are at risk of flooding. The majority of the watershed lies outside of Idaho.

What is the risk?
There is 1 high or significant hazard dam in the Middle Owyhee watershed. There are 0 communities participating in the NFIP with 0 policies contributing to 0 of premiums paid in exchange for 0 of coverage.
- 0 out of the 1 county in the Middle Owyhee watershed identified flood as their number one hazard.
- 0 out of the 1 county in the Middle Owyhee watershed identified flood as their number two hazard.
- 0 out of the 1 county in the Middle Owyhee watershed identified flood as their number three hazard.

LiDAR data availability
LiDAR availability within the Middle Owyhee watershed is as follows:
- South Mountain (2007)
- Juniper Mtn, Transect (2008)

Conclusion
The small amount of people within the watershed deems the Middle Owyhee watershed to be of low risk.

Counties and Tribes
Owyhee

Cities

Middle Owyhee Watershed

Current LiDAR

Proposed LiDAR

Dams

Levees

Interstate

Cities

Reservations

Lakes

U.S. Highway

Counties

Rivers

Middle Owyhee Watershed

Not Available
Wildfire

Middle Owyhee

Risk Rank: L

Introduction

The Middle Owyhee watershed is home to 21 people and there is no Wildland Urban Interface.

What is the risk?

Since 2000, 15,434 acres have burned during 24 individual wildfire events. Based on data from the Idaho Forest Action Plan (2018), the Middle Owyhee watershed has 9.8% low risk, 0.2% low-moderate risk, 0% moderate risk, 9% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

1 out of the 1 county in the Middle Owyhee watershed identified wildfire as their number one hazard.

0 out of the 1 county in the Middle Owyhee watershed identified wildfire as their number two hazard.

0 out of the 1 county in the Middle Owyhee watershed identified wildfire as their number three hazard.

Conclusion

The risk of wildfire to people and property within the Middle Owyhee watershed is low.

Counties and Tribes

Owyhee

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Subbasin Ownership</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>3%</td>
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<tr>
<td>Federal</td>
<td>16%</td>
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<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
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<tr>
<td>State</td>
<td>1%</td>
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<tr>
<td>Out of State</td>
<td>81%</td>
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</tbody>
</table>

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>99.8%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>0.2%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 10

A majority of the proposed mitigation actions are not location specific and can be found in the the county WHMP.
Middle Owyhee

Risk Rank: L

Introduction
There are no areas of concentrated population within the Middle Owyhee watershed boundaries.

What is the risk?
An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas. There are also .09 miles of canals that are receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 1 county within the Middle Owyhee watershed identified seismic as their number one hazard.
- 0 out of the 1 county within the Middle Owyhee watershed identified seismic as their number two hazard.
- 0 out of the 1 county within the Middle Owyhee watershed identified seismic as their number three hazard.

Counties and Tribes

Owyhee

Cities

Total seismic mitigation actions: 2

A majority of the proposed mitigation actions are not location specific and can be found in the the county areas.
Middle Salmon-Chamberlain Watershed

Risk Rank: L

Introduction
There are 47 total people who live within the Middle Salmon-Chamberlain watershed, of which 3 are at risk of flooding. The watershed is 99% federally managed.

What is the risk?
Due to the absence of any major towns within this watershed, there is limited risk to human safety caused by flooding. County ARMPs have reported only 2 significant flooding events in the watershed in recent history. There are 0 high or significant hazard dams in the Middle Salmon-Chamberlain watershed. There are no communities participating in the NFIP with 2 policies contributing to 8% of premiums paid in exchange for $700,000 of coverage.

- 0 out of the 3 counties in the Middle Salmon-Chamberlain watershed identified flood as their number one hazard.
- 1 out of the 3 counties in the Middle Salmon-Chamberlain watershed identified flood as their number two hazard.
- 1 out of the 3 counties in the Middle Salmon-Chamberlain watershed identified flood as their number three hazard.

LIDAR data availability
LIDAR availability within the Middle Salmon-Chamberlain watershed is as follows:
- Bitterroot National Forest (2013)

Conclusion
Due to the low population and lack of significant flood hazards, the Middle Salmon-Chamberlain is considered a low flood risk watershed.

 Counties and Tribes
Idaho, Latah, Valley
Cities

Middle Salmon-Chamberlain Watershed

Flood

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,674</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>47</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>3,335</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>1,872</td>
</tr>
<tr>
<td>Max. Elevation</td>
<td>9,206</td>
</tr>
<tr>
<td>Dams of Concern</td>
<td>0</td>
</tr>
<tr>
<td>Pop. at Flood Risk</td>
<td>3</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>1%</td>
</tr>
<tr>
<td>Federal</td>
<td>99%</td>
</tr>
<tr>
<td>Reservation/RI/A</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th>Claims</th>
<th>Paid Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>$700,000</td>
<td>$874.00</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 31
Idaho Multi-Hazard Risk Portfolio

Wildfire

Middle Salmon-Chamberlain

Risk Rank: L

Introduction

The Middle Salmon-Chamberlain watershed is home to 47 people, a small amount of which live in or near the Wildland Urban Interface.

What is the risk?

Since 2000, 752,258 acres have burned during 393 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Middle Salmon-Chamberlain watershed has 6.9% low risk, 1.4% low moderate risk, 9.1% moderate risk, 0.5% moderate-high risk and 1.2% high risk of wildfire to the communities within the watershed.

- 3 out of the 3 counties in the Middle Salmon-Chamberlain watershed identified wildfire as their number one hazard.
- 5 out of the 3 counties in the Middle Salmon-Chamberlain watershed identified wildfire as their number two hazard.
- 5 out of the 3 counties in the Middle Salmon-Chamberlain watershed identified wildfire as their number three hazard.

Conclusion

Significant wildfire events occur regularly within the Middle Salmon-Chamberlain watershed, though the affected population is small and at a low risk to damage.

Counties and Tribes

Idaho, Lemhi, Valley

Cities

Middle Salmon-Chamberlain Watershed

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,674</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>47</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>5,333</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>1,873</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>9,288</td>
</tr>
<tr>
<td>Structures in WMU</td>
<td>0</td>
</tr>
<tr>
<td>Historic Fire Events</td>
<td>393</td>
</tr>
<tr>
<td>Acres Burned (1995)</td>
<td>725,258</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>1%</td>
</tr>
<tr>
<td>Federal</td>
<td>99%</td>
</tr>
<tr>
<td>Reservation/BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of State</td>
<td>0%</td>
</tr>
</tbody>
</table>

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>5.9%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>1.4%</td>
</tr>
<tr>
<td>Moderate</td>
<td>90.1%</td>
</tr>
<tr>
<td>Moderate/High</td>
<td>0.5%</td>
</tr>
<tr>
<td>High</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 17

A majority of the proposed mitigation actions are not location specific and can be found in the the county WRRP.
Middle Salmon-Chamberlain

Risk Rank: L

Introduction
There are no areas of concentrated population within the Middle Salmon-Chamberlain watershed boundaries.

What is the risk?
An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 3 counties within the Middle Salmon-Chamberlain watershed identified seismic as their number one hazard.
- 0 out of the 3 counties within the Middle Salmon-Chamberlain watershed identified seismic as their number two hazard.
- 0 out of the 3 counties within the Middle Salmon-Chamberlain watershed identified seismic as their number three hazard.

Counties and Tribes
Idaho, Lemhi, Valley

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,874</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>47</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>3,335</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elev. (ft)</td>
<td>1,873</td>
</tr>
<tr>
<td>Max. Elev. (ft)</td>
<td>9,288</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>0</td>
</tr>
<tr>
<td>In Watershed with 25 Miles of Fault</td>
<td>0%</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>3%</td>
</tr>
<tr>
<td>Federal</td>
<td>99%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>12%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>27%</td>
</tr>
<tr>
<td>Moderate</td>
<td>21%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 30

A majority of the proposed mitigation actions are not location specific and can be found in the the county plans.
Flood

Middle Salmon-Panther

Risk Rank: H

Introduction
The only area of concentrated population within the watershed boundaries is Salmon. There are 5,895 total people who live within the watershed, of which 183 are at risk of flooding. The watershed is primarily federally managed.

What is the risk?
There are 2 high or significant hazard dams in the Middle Salmon-Panther watershed. According to county AHRPs, the watershed has reported 6 riverine floods and 5 flash flood events in recent history. There are 3 communities participating in the NFIP with 87 policies contributing to $73,592 of premiums paid in exchange for $15,159,700 of coverage.

8 out of the 3 counties in the Middle Salmon-Panther watershed identified flood as their number one hazard.
1 out of the 3 counties in the Middle Salmon-Panther watershed identified flood as their number two hazard.
6 out of the 3 counties in the Middle Salmon-Panther watershed identified flood as their number three hazard.

LIDAR data availability
LIDAR availability within the Middle Salmon Panther watershed is as follows:
- Lemhi River (2008)
- Pahsimoor River (2009)

Conclusion
The Middle Salmon-Panther watershed is considered a high flood risk watershed because of its moderate population and the presence of hazardous dams and levees.

Counties and Tribes
Custer, Lemhi
Cities
Salmon

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,790</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>5,895</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>6,012</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>61</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>3,018</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>10,955</td>
</tr>
<tr>
<td>Areas of Concern</td>
<td>3</td>
</tr>
<tr>
<td>Pop. at Flood Risk</td>
<td>163</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>5%</td>
</tr>
<tr>
<td>Federal</td>
<td>94%</td>
</tr>
<tr>
<td>Reservation/FIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>1%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th>Paid Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>87</td>
<td>$15,159,700</td>
<td>$73,592</td>
<td>$157,541</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 41
A majority of the proposed mitigation actions are location specific, depicted in the map below.
**Risk Rank: M**

**Introduction**

The Middle Salmon-Panther watershed is home to 5,895 people, the majority of which live in near the Wildland Urban Interface. The only area of concentrated population within the Middle Salmon-Panther watershed boundaries is Salmon.

**What is the risk?**

Fires within the Middle Salmon-Panther watershed have the potential to severely disrupt life, property and economic activity. There are 2,332 structures located within the WUI of the Middle Salmon-Panther watershed. Since 2000, 214,764 acres have burned during 301 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Middle Salmon-Panther watershed has 7.1% low risk, 8% moderate risk, 69.1% moderate risk, 6.8% moderate-high risk and 7.8% high risk of wildfire to the communities within the watershed.

- 2 out of the 2 counties in Middle Salmon-Panther watershed identified wildfire as their number one hazard.
- 8 out of the 2 counties in the Middle Salmon-Panther watershed identified wildfire as their number three hazard.

**Conclusion**

Though the population within the Middle Salmon-Panther watershed is relatively low, the population within the WUI is large. Fires are frequent and the overall wildfire risk in the watershed is moderate.

**Counties and Tribes**

Custer, Lemhi

**Cities**

Salmon

---

**Watershed Fire Risk**

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>7.1%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>69.1%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>6.8%</td>
</tr>
<tr>
<td>High</td>
<td>7.9%</td>
</tr>
</tbody>
</table>

**Total wildfire mitigation actions:** 31

A majority of the proposed mitigation actions are not location specific and can be found in the the county WHPA.
Middle Salmon-Panther

Risk Rank: H

Introduction
The area of concentrated population within the Middle Salmon-Panther watershed boundaries is Salmon.

What is the risk?
An earthquake within the watershed has a high potential to cause damage to the life and property of those within these areas. There are also 61 miles of canals and 31 levees that are receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 2 counties within the Middle Salmon-Panther watershed identified seismic as their number one hazard.
- 0 out of the 2 counties within the Middle Salmon-Panther watershed identified seismic as their number two hazard.
- 0 out of the 2 counties within the Middle Salmon-Panther watershed identified seismic as their number three hazard.

Counties and Tribes
- Custer, Lemhi

Cities
- Salmon

Subbasin Metrics

<table>
<thead>
<tr>
<th>Subbasin Metrics</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,790</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>5,895</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>4,012</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>3,018</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>10,933</td>
</tr>
<tr>
<td>Ext. Facilities Near Fault</td>
<td>0</td>
</tr>
<tr>
<td>In Watered W/12 Miles of Fault</td>
<td>2.7%</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>5%</td>
</tr>
<tr>
<td>Federal</td>
<td>94%</td>
</tr>
<tr>
<td>State</td>
<td>1%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Acceleration Level</th>
<th>% of Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>15%</td>
</tr>
<tr>
<td>Moderate</td>
<td>55%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>33%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 29

A majority of the proposed mitigation actions are not location specific and can be found in the county areas.
Idaho Multi-Hazard Risk Portfolio

Middle Snake-Payette

Risk Rank: M

Introduction
Areas of concentrated population within the Middle Snake-Payette watershed boundaries are Fruitland, Payette and Weiser. There are 12,149 total people who live within the watershed, of which 759 are at risk of flooding. The majority of the watershed lies outside of Idaho, though nearly one third is privately owned.

What is the risk?
This watershed is home to the confluence of the Payette and Snake Rivers. According to county AHRMPs, there is one report of significant flooding within the watershed in recent history. There is 3 high or significant hazard dam in the Middle Snake-Payette watershed. There are 5 communities participating in the NIP with 23 policies contributing to $19,682 of premiums paid in exchange for $4,185,600 of coverage.

- 0 out of the 3 counties in the Middle Snake-Payette watershed identified flood as their number one hazard.
- 1 out of the 3 counties in the Middle Snake-Payette watershed identified flood as their number two hazard.
- 2 out of the 3 counties in the Middle Snake-Payette watershed identified flood as their number three hazard.

LIDAR data availability
LIDAR availability within the Middle Snake-Payette watershed is as follows:
- Payette River and Gem Valley (2000)
- Boise River (2006)

Conclusion
The Middle Snake-Payette watershed is considered to be a moderate flood risk watershed because of its moderate population and small amount of hazardous features.

Counties and Tribes
Canyon, Payette, Washington
Cities
Fruitland, Payette, Weiser

Total flood mitigation actions: 61
A majority of the proposed mitigation actions are not location specific and can be found in the county AHRMPs.
Idaho Multi-Hazard Risk Portfolio

Wildfire

Middle Snake-Payette

Risk Rank: H

Introduction

The Middle Snake-Payette watershed is home to 11,145 people, a small portion of which live in or near the Wildland Urban Interface. Areas of concentrated population within the Middle Snake-Payette watershed boundaries are Fruitland, Payette and Weiser.

What is the risk?

Fires within the Middle Snake-Payette watershed have the potential to severely disrupt life, property and economic activity. There are 569 structures located within the WUI of the Middle Snake-Payette watershed. Since 2000, 3,793 acres have burned during 12 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Middle Snake-Payette watershed has a 2.6% low risk, 1.8% low-moderate risk, 46.3% moderate risk, 32.2% moderate-high risk and 17.1% high risk of wildfire to the communities within the watershed.

1 out of the 3 counties in the Middle Snake-Payette watershed identified wildfire as their number one hazard.

6 out of the 3 counties in the Middle Snake-Payette watershed identified wildfire as their number two hazard.

9 out of the 3 counties in the Middle Snake-Payette watershed identified wildfire as their number three hazard.

Conclusion

In the Middle Snake-Payette watershed, the communities are at a high risk of wildfire. Based on the small historic fires and relatively high population, there is potential for future fires to cause damage to life and property within the watershed.

Counties and Tribes

Canyon, Payette, Washington

Cities

Fruitland, Payette, Weiser

Subbasin Metrics

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>278</td>
<td>11,145</td>
<td>273</td>
<td>80</td>
<td>2,093</td>
<td>3,451</td>
<td>569</td>
<td>12</td>
<td>3,995</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>35%</td>
</tr>
<tr>
<td>Federal</td>
<td>6%</td>
</tr>
<tr>
<td>Reservation/BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>3%</td>
</tr>
<tr>
<td>Out-of-State</td>
<td>57%</td>
</tr>
</tbody>
</table>

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>2.0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>1.8%</td>
</tr>
<tr>
<td>Moderate</td>
<td>46.3%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>32.2%</td>
</tr>
<tr>
<td>High</td>
<td>17.1%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 2

A majority of the proposed mitigation actions are not location specific and can be found in the the county AHMPs.
Middle Snake-Payette

Risk Rank: H

Introduction:
Areas of concentrated population within the Middle Snake-Payette watershed boundaries are Fruitland, Payette, and Weiser.

What is the risk?
An earthquake within the watershed has the potential to cause damage to the life and property of those within these areas. There are also 80 miles of canals that are receptive to seismic disturbances.

There are 7 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 3 counties within the Middle Snake-Payette watershed identified seismic as their number one hazard.
- 1 out of the 3 counties within the Middle Snake-Payette watershed identified seismic as their number two hazard.
- 0 out of the 3 counties within the Middle Snake-Payette watershed identified seismic as their number three hazard.

Counties and Tribes
Canyon, Payette, Washington

Cities
Fruitland, Payette, Weiser

Total seismic mitigation actions: 11

A majority of the proposed mitigation actions are not location specific and can be found in the tri-county AHMRPs.
Middle Snake-Succor

**Risk Rank:** H

**Introduction:**
Areas of concentrated population within the Middle Snake-Succor watershed boundaries are Grand View, Homedale, Marsing and Melba. There are 18,071 total people who live within the watershed, of which 2,706 are at risk of flooding. The watershed is over 50% federally managed.

**What is the risk?**
Flood hazards can include seasonal high stream flows that exceed bankfull discharge. According to county AHPs, there have been 3 significant flood events along tributaries within the watershed historically. There are 10 high or significant hazard dams in the Middle Snake-Succor watershed. There are 6 communities participating in the NFIP with 8 policies contributing to $6,522 of premiums paid in exchange for $2,005,000 of coverage:
- 0 out of the 6 counties in the Middle Snake-Succor watershed identified flood as their number one hazard.
- 0 out of the 6 counties in the Middle Snake-Succor watershed identified flood as their number two hazard.
- 2 out of the 6 counties in the Middle Snake-Succor watershed identified flood as their number three hazard.

**LiDAR data availability**
LiDAR availability within the Middle Snake-Succor watershed is as follows:
- Boise River (2006)
- Reynolds Creek (2007, 2008)
- Bird's of Prey (2013, 2013)

**Conclusion**
Because of the high population downstream of the numerous hazardous dams, the Middle Snake-Succor watershed is considered to be at a high flood risk.

**Counties and Tribes**
Ada, Canyon, Elmore, Owyhee

**Cities**
Grand View, Homedale, Marsing, Melba

---

**Middle Snake-Succor Watershed**

**Flood**

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Subbasin Ownership</th>
<th>Subbasin Area</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>59%</td>
<td></td>
</tr>
<tr>
<td>Reservation/BIA</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>14%</td>
<td></td>
</tr>
</tbody>
</table>

**NFIP Statistics (2014)**

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th>Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>$2,005,000</td>
<td>$6,522</td>
<td>8</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**USGS**

**USGS 13172500 SNAKE RIVER NR MURPHY ID**

---

**Total flood mitigation actions:** 126

A majority of the proposed mitigation actions are not location specific and can be found in the Idaho AHPs.
Wildfire

Middle Snake-Succor

Risk Rank: H

Introduction
The Middle Snake-Succor watershed is home to 18,071 people, a substantial portion of which live in the Wildland Urban Interface. Areas of concentrated population within the Middle Snake-Succor watershed boundaries are Grand View, Homedale, Marsing and Melba.

What is the risk?
Fires within the Middle Snake-Succor watershed have the potential to severely disrupt life, property and economic activity. There are 2,078 structures located within the WUI of the Middle Snake-Succor watershed. Since 2000, 119,995 acres have burned during 206 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Middle Snake-Succor watershed has 24.4% low risk, 32.3% low-moderate risk, 24.2% moderate risk, 16.8% moderate-high risk and 0.6% high risk of wildfire to the communities within the watershed.

• 3 out of the 4 counties in the Middle Snake-Succor watershed identified wildfire as their number one hazard.
• 1 out of the 4 counties in the Middle Snake-Succor watershed identified wildfire as their number two hazard.
• 1 out of the 4 counties in the Middle Snake-Succor watershed identified wildfire as their number three hazard.

Conclusion
Given the high population in the WUI and frequency of wildfire events, the Middle Snake-Succor watershed is at a high risk of wildfire events.

Counties and Tribes
Ada, Canyon, Elmore, Owyhee
Cities
Grand View, Homedale, Marsing, Melba

Total wildfire mitigation actions: 51

A majority of the proposed mitigation actions are not location specific and can be found in the county ARPA's.
Middle Snake-Sucor

Risk Rank: M

Introduction
Areas of concentrated population within the Middle Snake-Sucor watershed boundaries are Grand View, Homedale, Marsing, and Melba.

What is the risk?
An earthquake within the watershed has the potential to cause damage to the life and property of those within these areas. There are also 723 miles of canals and 2 levees that are receptive to seismic disturbances.

There are 7 essential facilities within 25 miles of a quaternary fault.

- 4 out of the 4 counties within the Middle Snake-Sucor watershed identified seismic as their number one hazard.
- 1 out of the 4 counties within the Middle Snake-Sucor watershed identified seismic as their number two hazard.
- 1 out of the 4 counties within the Middle Snake-Sucor watershed identified seismic as their number three hazard.

Counties and Tribes
Ada, Canyon, Elmore, Owyhee

Cities
Grand View, Homedale, Marsing, Melba

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>2,327</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>18,071</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>3,104</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>723</td>
</tr>
<tr>
<td>Min Elevation (ft)</td>
<td>2,178</td>
</tr>
<tr>
<td>Max Elevation (ft)</td>
<td>8,359</td>
</tr>
<tr>
<td>% Waterfront within 25 Miles of Fault</td>
<td>7%</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>23%</td>
</tr>
<tr>
<td>Federal</td>
<td>59%</td>
</tr>
<tr>
<td>Reservation/BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>5%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>14%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Level</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>100%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 23

A majority of the proposed mitigation actions are not location specific and can be found in the vicinity of the Middle Snake-Sucor.
Idaho Multi-Hazard Risk Portfolio

Flood

Risk Rank: 1

Introduction
The main area of concentrated population within the Moyie watershed boundaries is Moyie Springs. There are 925 total people who live within the watershed, of which 73 are at risk of flooding. The majority of the watershed lies outside of Idaho and the portion within Idaho is largely federally managed.

What is the risk?
The main water system within the Moyie watershed is the Moyie River, whose flow is quite variable, as can be seen via the stream gauge chart below. There is 1 high or significant hazard dam in the Moyie watershed. There is 1 community participating in the NFIP with 4 policies contributing to $9,003 of premiums paid in exchange for $1,091,500 of coverage.

- 0 out of the 1 county in the Moyie watershed identified flood as their number one hazard.
- 0 out of the 1 county in the Moyie watershed identified flood as their number two hazard.
- 0 out of the 1 county in the Moyie watershed identified flood as their number three hazard.

LIDAR data availability
LIDAR availability within the Moyie watershed is as follows:

Conclusion
Despite the presence of a hazardous dam and the variable nature of stream flows the Moyie watershed has a low population overall and a small amount of those inhabitants are at risk of flooding. For this reason, the watershed has a low flood risk.

Counties and Tribes
Boundary
Cities
Moyie Springs:

Subbasin Metrics
Area (sq. miles) 329
Population (2010) 925
Miles of Stream 271
Miles of Canal 0
Min. Elevation (ft) 1,768
Max. Elevation (ft) 7,697
Barns of Concern 1
Pop at Flood Risk 2

Subbasin Ownership
Owner Type % Subbasin Area
Private 0%
Federal 19%
Reservation/RRA 0%
State 0%
Out of Idaho 77%

NFIP Statistics (2014)
NFIP Policies 4
Total Coverage $1,091,500
Total Premiums $3,003
# Claims 0
Paid Claims $0

Total flood mitigation actions: 7
A majority of the proposed mitigation actions are not location specific and can be found in the the county ARPS.
Wildfire

Risk Rank: L

Introduction

The Moyie watershed is home to 925 people, the majority of which live in the Wildland Urban Interface. The only area of concentrated population within the Moyie watershed boundaries is Moyie Springs.

What is the risk?

Fires within the Moyie watershed have the potential to severely disrupt life, property and economic activity. There are 374 structures located within the WUI of the Moyie watershed. Since 2000, 8 acres have burned in 14 individual fires. Based on data from the Idaho Forest Action Plan (2010), the Lower Kootenai watershed has 4.9% low risk, 7.2% low-moderate risk, 71.1% moderate risk, 16.3% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

*1 out of the 1 county in the Moyie watershed identified wildfire as their number one hazard.
*0 out of the 1 county in the Moyie watershed identified wildfire as their number two hazard.
*0 out of the 1 county in the Moyie watershed identified wildfire as their number three hazard.

Conclusion

The low population and lack of significant fire events place the Moyie watershed at a low risk of damaging wildfire events.

Counties and Tribes

Boundary

Cities

Moyie Springs

Subbasin Metrics

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>328</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2010)</td>
<td>925</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>271</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>1,768</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>7,693</td>
</tr>
<tr>
<td>Structures in WUI</td>
<td>374</td>
</tr>
<tr>
<td>Historic Fire Events</td>
<td>14</td>
</tr>
<tr>
<td>Acres Burned (1995-2010)</td>
<td>8</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>4%</td>
</tr>
<tr>
<td>Federal</td>
<td>19%</td>
</tr>
<tr>
<td>Reservation/BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of State</td>
<td>77%</td>
</tr>
</tbody>
</table>

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>20.8%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>66.8%</td>
</tr>
<tr>
<td>Moderate/High</td>
<td>12.3%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 23

A majority of the proposed mitigation actions are not location-specific and can be found in the Idaho MRMA.
Risk Rank: L

Introduction
The only area of concentrated population within the Moyie watershed boundaries is Moyie Springs.

What is the risk?
An earthquake within the watershed has the potential to cause damage to the life and property of those within these areas. There are 0 miles of canals that are receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 1 county within the Lower Kootenai watershed identified seismic as their number one hazard.
- 0 out of the 1 county within the Lower Kootenai watershed identified seismic as their number two hazard.
- 0 out of the 1 county within the Lower Kootenai watershed identified seismic as their number three hazard.

Counties and Tribes
Boundary
Cities
Moyie Springs

Moyie Watershed

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>320</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>925</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>271</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>1,783</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>7,697</td>
</tr>
<tr>
<td>Subbasin Facilities</td>
<td>0</td>
</tr>
<tr>
<td>0 miles of fault</td>
<td>0</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>4%</td>
</tr>
<tr>
<td>Federal</td>
<td>19%</td>
</tr>
<tr>
<td>Reservation/ IRA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>77%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Type</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>100%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 3

A majority of the proposed mitigation actions are not location specific and can be found in the the county assessors.
North and Middle Forks Boise

**North and Middle Forks Boise Watershed**

**Risk Rank:** 1

**Introduction:**
There are 44 total people who live within the watershed, of which 0 are at risk of flooding. The watershed is 99% federally managed.

**What is the risk?**
There are 0 high or significant hazard dams in the North and Middle Forks Boise watershed. According to county HMRPs, there have been 5 significant flood events within the watershed historically. There are 0 communities participating in the NFIP with 1 policies contributing to $4,507 of premiums paid in exchange for $215,000 of coverage.

*0 out of the 3 counties in the North and Middle Forks Boise watershed identified flood as their number one hazard.*

*1 out of the 3 counties in the North and Middle Forks Boise watershed identified flood as their number two hazard.*

*2 out of the 3 counties in the North and Middle Forks Boise watershed identified flood as their number three hazard.*

**LIDAR data availability**
LIDAR availability within the North and Middle Forks Boise watershed is as follows:

-Bannonid (2007)

**Conclusion:**
The population within the North and Middle Forks Boise watershed is low and it lacks any factors that contribute to flood risk, classifying the watershed as a low risk to flood.

**Counties and Tribes**
Boise, Blaine, Camas, Custer, Elmore, Shoshone

**Cities**

**North and Middle Forks Boise**

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>762</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>44</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,692</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>3,452</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>10,384</td>
</tr>
<tr>
<td>BLM of Concern</td>
<td>0</td>
</tr>
<tr>
<td>Pdp. at Flood Risk</td>
<td>0</td>
</tr>
</tbody>
</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>0%</td>
</tr>
<tr>
<td>Federal</td>
<td>99%</td>
</tr>
<tr>
<td>Reservation/RIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

**NFIP Statistics (2014)**

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th># Claims</th>
<th>Paid Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$250,000</td>
<td>$4,507</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Total flood mitigation actions: 94**

A majority of the proposed mitigation actions are not location specific and can be found in the following:

- Boise
- Blaine
- Camas
- Custer
- Elmore
- Shoshone

**USGS**

**Boise River NR Twin Springs ID**

**Country All Hazard Mitigation Plans Flood Mitigation Actions**

- Proposed Actions
- Completed Actions
- Underway
- Ongoing
- Planned
- Deferred
Introduction

The North and Middle Forks Boise watershed is home to 44 people, all of which live in the Wildland-Urban Interface. There are no areas of concentrated population within the North and Middle Forks Boise watershed boundaries.

What is the risk?

Fires within the North and Middle Forks Boise watershed have the potential to severely disrupt life, property and economic activity. There are 60 structures located within the WUI of the North and Middle Forks Boise watershed. Since 2000, 1,50,640 acres have burned during 1,009 individual wildfire events. Based on data from the Idaho Forest Action Plan (2018), the North and Middle Forks Boise watershed has 54.7% low risk, 2.9% low-moderate risk, 35.4% moderate risk, 2% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

5 out of the 5 counties in the North and Middle Forks Boise watershed identified wildfire as their number one hazard.

8 out of the 5 counties in the North and Middle Forks Boise watershed identified wildfire as their number three hazard.

Conclusion

Though there is a recent record of large fires, the overall risk of wildfire to communities is low because of the low population within the watershed.

Counties and Tribes

Blaine, Boise, Camas, Custer, Elmore

Cities

North and Middle Forks Boise Watershed

<table>
<thead>
<tr>
<th>Subbasin Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
</tr>
<tr>
<td>Population (2010)</td>
</tr>
<tr>
<td>Miles of Stream</td>
</tr>
<tr>
<td>Miles of Canal</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
</tr>
<tr>
<td>Structures in WUI</td>
</tr>
<tr>
<td>Historic Fire Events</td>
</tr>
<tr>
<td>Acres Burned (1995-2016)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subbasin Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner Type</td>
</tr>
<tr>
<td>Private</td>
</tr>
<tr>
<td>Federal</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
</tr>
<tr>
<td>State</td>
</tr>
<tr>
<td>Out of Idaho</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Watershed Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Level</td>
</tr>
<tr>
<td>Low</td>
</tr>
<tr>
<td>Low/Moderate</td>
</tr>
<tr>
<td>Moderate</td>
</tr>
<tr>
<td>Moderate/High</td>
</tr>
<tr>
<td>High</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 84

A majority of the proposed mitigation actions are not location specific and can be found in the the county WUI.

Idaho Multi-Hazard Risk Portfolio
North and Middle Forks Boise

Risk Rank: L

Introduction
There are no areas of concentrated population within the North and Middle Forks Boise watershed boundaries.

What is the risk?
An earthquake within a watershed has the potential to cause damage to the life and property of those within these areas.

There is 1 essential facility within 25 miles of a quaternary fault.

- 0 out of the 5 counties within the North and Middle Forks Boise watershed identified seismic as their number one hazard.
- 0 out of the 5 counties within the North and Middle Forks Boise watershed identified seismic as their number two hazard.
- 0 out of the 5 counties within the North and Middle Forks Boise watershed identified seismic as their number three hazard.

Counties and Tribes
- Blaine, Boise, Camas, Custer, Elmore

Cites

Subbasin Metrics

<table>
<thead>
<tr>
<th>Subbasin Metrics</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>762</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>64</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,692</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>3,451</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>10,344</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>1</td>
</tr>
<tr>
<td>% Waterfront within 25 Miles of Fault</td>
<td>52%</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>0%</td>
</tr>
<tr>
<td>Federal</td>
<td>99%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Accel. Amount</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>70%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>30%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 56

A majority of the proposed mitigation actions are not location specific and can be found in the the county AHMPs.
Risk Rank: H

Introduction
Areas of concentrated population within the North Fork Payette watershed boundaries are Cascade, Donnelly and McCall. There are 9,791 total people who live within the watershed, of which 2,186 are at risk of flooding. The watershed is nearly half privately owned.

What is the risk?
According to county AVHRR, the watershed has reported 5 significant flood events in recent history. The flooding of Dead Horse Creek has impaired access to northern sections of Payette Lake and is a target for flood risk mitigation efforts. There are 25 high or significant hazard dams in the North Fork Payette watershed. There are 8 communities participating in the NFIP with 49 policies contributing to $49,537 of premiums paid in exchange for $11,016,790 of coverage.

- 0 out of the 5 counties in the North Fork Payette watershed identified flood as their number one hazard.
- 1 out of the 5 counties in the North Fork Payette watershed identified flood as their number two hazard.
- 2 out of the 5 counties in the North Fork Payette watershed identified flood as their number three hazard.

LIDAR data availability
LIDAR availability within the North Fork Payette watershed is as follows:
- North Fork Payette River (2012)

Conclusion
The moderate populations at risk of flooding and large presence of hazardous dams contribute to this watershed’s high flood risk ranking.

Counties and Tribes
Adams, Boise, Gem, Idaho, Valley
Cities
Cascade, Donnelly, McCall
Wildfire

North Fork Payette

Risk Rank: H

Introduction
The North Fork Payette watershed is home to 9,791 people, a large portion of which live in the Wildland Urban Interface. Areas of concentrated population within the North Fork Payette watershed boundaries are Cascade, Donnelly, and McCall.

What is the risk?
Fires within the North Fork Payette watershed have the potential to severely disrupt life, property and economic activity. There are 6,845 structures located within the WUI of the North Fork Payette watershed. Since 2000, 9,209 acres have burned during 117 individual wildfire events.

Based on data from the Idaho Forest Action Plan (2010), the North Fork Payette watershed has 13.9% low-risk, 15.1% low/moderate risk, 43.5% moderate risk, 25.5% moderate/high risk and 0% high risk of wildfire to the communities within the watershed.

4 out of the 5 counties in the North Fork Payette watershed identified wildfire as their number one hazard.

1 out of the 5 counties in the North Fork Payette watershed identified wildfire as their number two hazard.

0 out of the 5 counties in the North Fork Payette watershed identified wildfire as their number three hazard.

Conclusion
The overall wildfire risk to people and property within the North Fork Payette watershed is high.

Counties and Tribes
Adams, Boise, Gem, Idaho, Valley

Cities
Cascade, Donnelly, McCall

Total wildfire mitigation actions: 18

A majority of the proposed mitigation actions are not location specific and can be found in the “All Counties” section.
North Fork Payette

Risk Rank: H

Introduction
Areas of concentrated population within the North Fork Payette watershed boundaries are Cascade, Donnelly and McCall.

What is the risk?
An earthquake within the watershed has the potential to cause damage to the life and property of those within these areas. There are also 101 miles of canals that are receptive to seismic disturbances.

There are 24 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 5 counties within the North Fork Payette watershed identified seismic as their number one hazard.
- 0 out of the 5 counties within the North Fork Payette watershed identified seismic as their number two hazard.
- 0 out of the 5 counties within the North Fork Payette watershed identified seismic as their number three hazard.

Counties and Tribes
Adams, Boise, Gom, Idaho, Valley

Cities
Cascade, Donnelly, McCall

Total seismic mitigation actions: 38

A majority of the proposed mitigation actions are not location specific and can be found in the the county Annexes.
Idaho Multi-Hazard Risk Portfolio

Pahsimeroi

Risk Rank: 1

Introduction
There are 255 total people who live within the Pahsimeroi watershed, of which 16 are at risk of flooding. The majority of the watershed is federally managed.

What is the risk?
There are 0 high or significant hazard dams in the Pahsimeroi watershed. There are 0 communities participating in the NFIP with 0 policies contributing to $0 of premiums paid in exchange for $0 of coverage.

- 0 out of the 3 counties in the Pahsimeroi watershed identified flood as their number one hazard.
- 1 out of the 3 counties in the Pahsimeroi watershed identified flood as their number two hazard.
- 0 out of the 3 counties in the Pahsimeroi watershed identified flood as their number three hazard.

LiDAR data availability
LiDAR availability within the Pahsimeroi watershed is as follows:
- Pahsimeroi River (2009)

Conclusion
Because of the low population and low flood hazards, the Pahsimeroi is considered a low risk watershed.

Counties and Tribes
Gusto, Lemhi

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>536</td>
</tr>
<tr>
<td>Population</td>
<td>255</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,157</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>177</td>
</tr>
<tr>
<td>Min. Elevation</td>
<td>4,636</td>
</tr>
<tr>
<td>Max. Elevation</td>
<td>12,585</td>
</tr>
<tr>
<td>Dam(s) of Concern</td>
<td>0</td>
</tr>
<tr>
<td>Pop. at Flood Risk</td>
<td>16</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% of Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>9%</td>
</tr>
<tr>
<td>Federal</td>
<td>88%</td>
</tr>
<tr>
<td>Reservation/RIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>4%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th>Paid Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50</td>
<td>50</td>
<td>0</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 23
A majority of the proposed mitigation actions are not location specific and can be found in the the county AHPs.

USGS 13902005 PAHSIMEROI RIVER AT ELLIS ID

Country All Hazard Mitigation Plans Flood Mitigation Actions

| Action Status | Action Category | Action Details |
|---------------|-----------------|----------------|--------------|
| Ongoing       | Mitigation Plan | Parent Mitigation Plan |
| Proposed      | Mitigation Plan | Child Mitigation Plan |
| Completed     | Mitigation Plan | Mitigation Plan Details |
| Deemed       | Mitigation Plan | Mitigation Plan Details |
| Approved      | Mitigation Plan | Mitigation Plan Details |
| Disapproved   | Mitigation Plan | Mitigation Plan Details |
Idaho Multi-Hazard Risk Portfolio

Wildfire

**Pahsimerei**

**Risk Rank:** 1

**Introduction**

The Pahsimerei watershed is home to 255 people, a handful of which live in or near the Wildland Urban Interface. There are no areas of concentrated population within the watershed.

**What is the risk?**

There are 61 structures located within the WUI of the Pahsimerei watershed. Since 2000, 5,800 acres have burned in 16 wildfire events. Based on data from the Idaho Forest Action Plan (2018), the Pahsimerei watershed has 48.4% low risk, 23.6% low-moderate risk, 22.8% moderate risk, 3.3% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

- 2 out of the 2 counties in the Pahsimerei watershed identified wildfire as their number one hazard.
- 0 out of the 2 counties in the Pahsimerei watershed identified wildfire as their number two hazard.
- 0 out of the 2 counties in the Pahsimerei watershed identified wildfire as their number three hazard.

**Conclusion**

In the Pahsimerei watershed, the communities are at a overall low risk to wildfire, based on the few historic fires, IDL data and small population within the WUI.

**Counties and Tribes**

Custer, Lemhi

**Cities**

Custer, Lemhi

---

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>836</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2010)</td>
<td>255</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,987</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>177</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,636</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>1,585</td>
</tr>
<tr>
<td>Structures in WUI</td>
<td>5</td>
</tr>
<tr>
<td>Historic Fire Events</td>
<td>16</td>
</tr>
<tr>
<td>Acres Burned (1990 -)</td>
<td>5,800</td>
</tr>
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</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>9%</td>
</tr>
<tr>
<td>Federal</td>
<td>88%</td>
</tr>
<tr>
<td>Reservation / BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>4%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Watershed Fire Risk**

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>48.4%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>23.6%</td>
</tr>
<tr>
<td>Moderate</td>
<td>22.8%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>3.3%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Total wildfire mitigation actions:** 25

A majority of the proposed mitigation actions are not location specific and can be found in the the county AFHs.
Idaho Multi-Hazard Risk Portfolio

Seismic

Pahsimeroi

Risk Rank: L

Introduction

There are no areas of concentrated population within the Pahsimeroi watershed boundaries.

What is the risk?

An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas. There are also 177 miles of canals that are receptive to seismic disturbances.

There is 1 essential facility within 25 miles of a quaternary fault.

- 0 out of the 2 counties within the Pahsimeroi watershed identified seismic as their number one hazard.
- 0 out of the 2 counties within the Pahsimeroi watershed identified seismic as their number two hazard.
- 0 out of the 2 counties within the Pahsimeroi watershed identified seismic as their number three hazard.

Counties and Tribes

Custer, Lemhi

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>828</td>
</tr>
<tr>
<td>Population 2010</td>
<td>255</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,987</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>177</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,636</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>12,585</td>
</tr>
<tr>
<td>Eta Facilities Near Fault</td>
<td>1</td>
</tr>
<tr>
<td>% Watered with 25 miles of fault</td>
<td>100%</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>9%</td>
</tr>
<tr>
<td>Federal</td>
<td>88%</td>
</tr>
<tr>
<td>Reservation/BLA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>4%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Level</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>100%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 29

A majority of the proposed mitigation actions are not location specific and can be found in the the county areas.
Idaho Multi-Hazard Risk Portfolio

Flood

Palisades

Risk Rank: M

Introduction
The majority of the population within the Palisades watershed lives in, or near the floodplains of the Snake River. Areas of concentrated population within the watershed boundaries are Irwin and Swan Valley. There are 761.7 total people who live within the watershed, of which 73 are at risk of flooding. The watershed is largely federally managed.

What is the risk?
The stream flow of the Snake River near the town of Irwin is fairly variable and can pose a threat to the people and property along the river. According to county AHMPs, this has resulted in one significant flood event in the watershed in recent history. There are 29 high or significant hazard dams in the Palisades watershed, including the Palisades dam which has a storage volume of 1.788 KAF. There are 5 communities participating in the NFIP with 7 policies contributing to $6,087 of premiums paid in exchange for $1,620,000 of coverage.

- 2 out of the 3 counties in the Palisades watershed identified flood as their number one hazard.
- 1 out of the 3 counties in the Palisades watershed identified flood as their number two hazard.
- 0 out of the 3 counties in the Palisades watershed identified flood as their number three hazard.

LIDAR data availability
LIDAR availability within the Palisades watershed is as follows:
- Swan Valley (2006)
- ITD, District 4 - US 26 (2018)

Conclusion
The relatively small population has a number of flood risks that could damage life and property in the Palisades watershed. Because of this, it is considered to be a moderate risk watershed.

Counties and Tribes
Bonneville, Madison, Teton

Cities
Irwin, Swan Valley

Total flood mitigation actions: 33
A majority of the proposed mitigation actions are not location specific and can be found in the other counties' AHMPs.
**Idaho Multi-Hazard Risk Portfolio**

**Wildfire**

The Palisades watershed is home to 761 people, the majority of which live in the Wildland Urban Interface. Areas of concentrated population within the Palisades watershed boundaries are Swan River and Swan Valley.

**What is the risk?**

Fires within the Palisades watershed have the potential to severely disrupt life, property, and economic activity. There are 163 structures located within the WUI of the Palisades watershed. Since 2000, 7,882 acres have burned during 49 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Palisades watershed has 14.7% low risk, 27.4% moderate risk, 14.3% moderate-high risk, 1.7% high risk, and 0% high risk of wildfire to the communities within the watershed.

- 40 out of the counties in the Palisades watershed identified wildfire as their number one hazard.
- 31 out of the 3 counties in the Palisades watershed identified wildfire as their number two hazard.
- 1 out of the 3 counties in the Palisades watershed identified wildfire as their number three hazard.

**Conclusion**

In the Palisades watershed, the communities are at a low risk to wildfire based on the low population and large portion of the the watershed under federal management.

**Counties and Tribes**

Bonneville, Madison, Teton

**Cities**

Irwin, Swan Valley

**Total wildfire mitigation actions:** 27

A majority of the proposed mitigation actions are not location specific and can be found in the the county MMRP.
Idaho Multi-Hazard Risk Portfolio

Seismic

Palisades

Risk Rank: M

Introduction
Areas of concentrated population within the Palisades watershed boundaries are Irwin and Swan Valley.

What is the risk?
An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas. There are also 6 miles of canals that are receptive to seismic disturbances.

There are 3 essential facilities within 25 miles of a quaternary fault.
- 0 out of the 3 counties within the Palisades watershed identified seismic as their number one hazard.
- 0 out of the 3 counties within the Palisades watershed identified seismic as their number two hazard.
- 1 out of the 3 counties within the Palisades watershed identified seismic as their number three hazard.

Counties and Tribes
Bonneville, Madison, Teton

Cities
Irwin, Swan Valley

Subbasin Metrics

<table>
<thead>
<tr>
<th>Subbasin Area</th>
<th>920</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2010)</td>
<td>761</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,769</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>5,020</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>9,884</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>3</td>
</tr>
</tbody>
</table>

A majority of the proposed mitigation actions are not location specific and can be found in the the county inventories.

Total seismic mitigation actions: 31
Idaho Multi-Hazard Risk Portfolio

Flood

Palouse

Risk Rank: M

Introduction
Areas of concentrated population within the Palouse watershed boundaries are Genesee, Moscow, Onaway and Potlatch. There are 31,487 total people who live within the watershed, of which 1,447 are at risk of flooding. The watershed is largely privately owned.

What is the risk?
The Palouse River flows from the eastern edge of the watershed into Washington state. According to county AHMPs, there have been 2 reports of significant flash floods in recent history in the watershed. There is 1 high or significant hazard dam in the Palouse watershed. There are 3 communities participating in the NFIP with 186 policies contributing to $41,945 of premiums paid in exchange for $22,637,009 of coverage.

- 0 out of the 3 counties in the Palouse watershed identified flood as their number one hazard.
- 5 out of the 5 counties in the Palouse watershed identified flood as their number two hazard.
- 0 out of the 3 counties in the Palouse watershed identified flood as their number three hazard.

LiDAR data availability
LiDAR availability within the Palouse watershed is as follows:
- Small portion of Emerald Creek coverage (2006)
- Coeur d'Alene Reservation (2005)

Conclusion
The high population in the urban areas of the Palouse watershed and the presence of one hazardous dam classify the watershed as a moderate flood risk watershed.

Counties and Tribes
Benewah, Latah, Nez Perce, Nez Perce Tribe
Cities
Genesee, Moscow, Onaway, Potlatch

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>2,322</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,419</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>2</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>542</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>5,326</td>
</tr>
<tr>
<td>Dam of Concern</td>
<td>1</td>
</tr>
<tr>
<td>Pop. at Flood Risk</td>
<td>1,447</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>80%</td>
</tr>
<tr>
<td>Federal</td>
<td>16%</td>
</tr>
<tr>
<td>Reservation/RIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>3%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Coverage</th>
<th>Premiums</th>
</tr>
</thead>
<tbody>
<tr>
<td>186</td>
<td>$32,617,000</td>
<td>$18,545</td>
</tr>
<tr>
<td>2,479</td>
<td>$189,434</td>
<td>$198,345</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 153
A majority of the proposed mitigation actions are not location specific and can be found in the county AHMPs.
Idaho Multi-Hazard Risk Portfolio

Wildfire

The Palouse watershed is home to 31,487 people, a small portion of which live in the Wildland Urban Interface. Areas of concentrated population within the Palouse watershed boundaries are Genesees, Moscow, Oroway and Potlatch.

What is the risk?

Fires within the Palouse watershed have the potential to severely disrupt life, property and economic activity. There are 3,185 structures located within the WUI of the Palouse watershed. Since 2000, 2,913 acres have burned in 17 wildfire events. Based on data from the Idaho Forest Action Plan (2019), the Palouse watershed has 25.1% low risk, 3.6% low-moderate risk, 29% moderate risk, 42.3% moderate-high risk and 9% high risk of wildfire to the communities within the watershed.

Conclusion

The Palouse watershed is at a high wildfire risk because of the high population and amount of property within the watershed’s Wildland Urban Interface.

Counties and Tribes

Benewah, Latah, Nez Perce, Nez Perce Tribe

Cities

Genesees, Moscow, Oroway, Potlatch

Total wildfire mitigation��_actions: 82

A majority of the proposed mitigation actions are not location specific and can be found in the the county MRRR.
Risk Rank: M

Introduction
Areas of concentrated population within the Palouse watershed boundaries are Genesee, Moscow, Onaway and Potlatch.

What is the risk?
An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas. There are also 2 miles of canals and 1 levee that are receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 3 counties within the Palouse watershed identified seismic as their number one hazard.
- 0 out of the 3 counties within the Palouse watershed identified seismic as their number two hazard.
- 0 out of the 3 counties within the Palouse watershed identified seismic as their number three hazard.

Counties and Tribes
Benewah, Latah, Nez Perce, Nez Perce Tribe

Cities
Genesee, Moscow, Onaway, Potlatch
Idaho Multi-Hazard Risk Portfolio

**Flood**

**Payette**

**Risk Rank:** H

**Introduction**
Areas of concentrated population within the Payette watershed boundaries are Emmett, Fruitland, Horseshoe Bend, New Plymouth, and Payette. There are 30,522 total people who live within the watershed, of which 4,017 are at risk of flooding. The watershed is largely privately owned.

**What is the risk?**
Flood hazards can include high stream flows that exceed bankfull discharge. At the USGS gauge near the city of Horseshoe Bend the discharge is 3,700 cfs. From the graph below one can see annual peak flow events that regularly exceed bankfull. According to county AMAPs, this has resulted in 11 significant flood events reported in the watershed in recent history. There are 14 high or significant hazard dams in the Payette watershed. There are 9 communities participating in the NFIP with 68 policies contributing to $41,370 of premiums paid in exchange for $12,878,800 of coverage.

- 6 out of the 6 counties in the Payette watershed identified flood as their number one hazard.
- 1 out of the 6 counties in the Payette watershed identified flood as their number two hazard.
- 3 out of the 6 counties in the Payette watershed identified flood as their number three hazard.

**LIDAR data availability**
LIDAR availability within the Payette watershed is as follows:
- Dry Creek, Boise Front (2007, 2008)
- Payette River and Kinn Valley (2011)

**Conclusion**
The large population and presence of many hazardous dams, coupled with the frequently high stream flows of the Payette River place the Payette watershed in the high risk category.

**Counties and Tribes**
- Adams, Butte, Gem, Payette, Valley, Washington

**Cities**
- Emmett, Fruitland, Horseshoe Bend, New Plymouth, Payette

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,232</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>30,522</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>2,989</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>508</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>2,123</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>8,327</td>
</tr>
<tr>
<td>Burnt of Concerns</td>
<td>14</td>
</tr>
<tr>
<td>Pop. at Flood Risk</td>
<td>4,017</td>
</tr>
</tbody>
</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>55%</td>
</tr>
<tr>
<td>Federal</td>
<td>34%</td>
</tr>
<tr>
<td>Reservation/RI</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>7%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

**NFIP Statistics (2014)**

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th>Total Claims</th>
<th>Paid Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$12,878,800</td>
<td>$44,370</td>
<td>$264,130</td>
<td></td>
</tr>
</tbody>
</table>

**Total flood mitigation actions:** 86
A majority of the proposed mitigation actions are not location specific and can be found in the county AMAP.
Idaho Multi-Hazard Risk Portfolio

Wildfire

Risk Rank: H

Introduction

The Payette watershed is home to 30,522 people, a good portion of which live in the Wildland Urban Interface. Areas of concentrated population within the Payette watershed boundaries are Emmett, Fruitland, Horizon Hot Springs, New Plymouth and Payette.

What is the risk?

Fires within the Payette watershed have the potential to severely disrupt life, property and economic activity. There are 4,973 structures located within the Wildland Urban Interface of the Payette watershed.

Since 2000, 114,119 acres have burned during 145 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Payette watershed has 2.2% low risk, 0% low moderate risk, 35.4% moderate risk, 39.2% moderate high risk and 22.2% high risk of wildfire to the communities within the watershed.

5 out of the 6 counties in the Payette watershed identified wildfire as their number one hazard.

1 out of the 6 counties in the Payette watershed identified wildfire as their number two hazard.

8 out of the 6 counties in the Payette watershed identified wildfire as their number three hazard.

Conclusion

In the Payette watershed, the communities are at a high risk to wildfire. The population that resides within the Wildland Urban Interface is large and all of the counties within the Payette watershed have identified wildfire to be a significant hazard. Additionally, there is a recent record of frequent wildfires.

Counties and Tribes

Adams, Boise, Gem, Payette, Valley, Washington

Cities

Emmett, Fruitland, Horizon Hot Springs, New Plymouth, Payette

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>2.1%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>27%</td>
</tr>
<tr>
<td>Moderate/High</td>
<td>30.4%</td>
</tr>
<tr>
<td>High</td>
<td>40.4%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 12

A majority of the proposed mitigation actions are not location specific and can be found in the the county MHAO.
Payette

Risk Rank: H

Introduction
Areas of concentrated population within the Payette watershed boundaries are Emmett, Fruitland, Horseshoe Bend, New Plymouth and Payette.

What is the risk?
An earthquake within the watershed has a high potential to cause damage to the life and property of those within these areas. There are also 508 miles of canals and 18 levees that are receptive to seismic disturbances.

There are 40 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 6 counties within the Payette watershed identified seismic as their number one hazard.
- 0 out of the 6 counties within the Payette watershed identified seismic as their number two hazard.
- 0 out of the 6 counties within the Payette watershed identified seismic as their number three hazard.

Counties and Tribes
Adams, Boise, Gem, Payette, Valley, Washington

Cities
Emmett, Fruitland, Horseshoe Bend, New Plymouth, Payette

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,227</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>30,522</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>2,989</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>508</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>2,123</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>6,327</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>40</td>
</tr>
<tr>
<td>% Watered w/ 15 Miles Fault</td>
<td>100%</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>55%</td>
</tr>
<tr>
<td>Federal</td>
<td>34%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>7%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Level</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>15%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>55%</td>
</tr>
<tr>
<td>Moderate</td>
<td>30%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 42

A majority of the proposed mitigation actions are not location specific and can be found in the the county action plan.
Idaho Multi-Hazard Risk Portfolio

Pend Oreille

Risk Rank: M

Introduction
Areas of concentrated population within the Pend Oreille Lake watershed boundaries are Athol, Dover, East Hope, Hope, Koosata, Oldtown, Priest River, Sandpoint and Spirit Lake. There are 37,818 total people who live within the watershed, of which 1,662 are at risk of flooding. Over half of the watershed is privately owned.

What is the risk?
Since the majority of the watershed is privately owned, the risk to people and property is significant. The Rock River, Sand Creek and the Pend Oreille River are contributing systems to flood risk. According to county AHMPs, there have been 39 reports of significant flooding within the watershed in recent history. There are 3 high or significant hazard dams in the Pend Oreille Lake watershed. There are 12 communities participating in the NFIP with 225 policies contributing to $307,616 of premiums paid in exchange for $78,905,700 of coverage.

- 6 out of the 4 counties in the Pend Oreille Lake watershed identified flood as their number one hazard.
- 6 out of the 4 counties in the Pend Oreille Lake identified flood as their number two hazard.
- 2 out of the 4 counties in the Pend Oreille Lake watershed identified flood as their number three hazard.

LIDAR data availability
LIDAR availability within the Pend Oreille Lake watershed is as follows:
- Priest Area (2012)

Conclusion
The Pend Oreille Lake watershed is considered to be at a moderate risk of damaging flood events because of its population and small amount of hazardous dams.

Counties and Tribes
Bonner, Boundary, Kootenai, Shoshone

Cities
Athol, Dover, East Hope, Hope, Koosata, Oldtown, Ponderay, Priest River, Sandpoint, Spirit Lake

Pend Oreille Watershed

Subbasin Metrics

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,222</td>
<td>37,818</td>
<td>1,414</td>
<td>4</td>
<td>2,044</td>
<td>7,589</td>
<td>1,662</td>
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Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
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<tbody>
<tr>
<td>Federal</td>
<td>57%</td>
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<tr>
<td>State</td>
<td>18%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>6%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th>In Claims</th>
<th>Paid Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>225</td>
<td>$78,905,700</td>
<td>$187,636</td>
<td>21</td>
<td>$224,682</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 173

A majority of the proposed mitigation actions are not location specific and can be found in the county AHMP.
Pend Oreille Watershed

**Risk Rank:** H

**Introduction**
The Pend Oreille Lake watershed is home to 37,818 people, nearly all of which live in the Wildland Urban Interface. Areas of concentrated population within the Pend Oreille Lake watershed boundaries are Athol, Dover, East Hope, Hope, Kootenai, Oldtown, Ponderay, Priest River, Sandpoint and Spirit Lake.

**What is the risk?**
Fires within the Pend Oreille Lake watershed have the potential to severely disrupt life, property and economic activity. There are 17,332 structures located within the WUI of the Pend Oreille Lake watershed. Since 2010, 713 acres have burned in 216 wildfire events. Based on data from the Idaho Forest Action Plan (2018), the Pend Oreille Lake watershed has 1% low risk, 22% low-moderate risk, 30.9% moderate risk, 36% moderate-high risk and 8.1% high risk of wildfire to the communities within the watershed.

- 2 out of the 4 counties in the Pend Oreille Lake watershed identified wildfire as their number one hazard.
- 1 out of the 4 counties in the Pend Oreille Lake watershed identified wildfire as their number two hazard.
- 0 out of the 4 counties in the Pend Oreille Lake watershed identified wildfire as their number three hazard.

**Conclusion**
Though there have not been significant fires in recent history, the majority of the population of the Pend Oreille Lake watershed resides within the WUI and is therefore at risk to wildfire. The overall risk is high.

**Counties and Tribes**
Bonner, Boundary, Kootenai, Shoshone

**Cities**
Athol, Dover, East Hope, Hope, Kootenai, Oldtown, Ponderay, Priest River, Sandpoint, Spirit Lake.

**Total wildfire mitigation actions:** 113

**Watershed Risk**

- **Risk Level**: Low 0%
- **Watershed Risk**: Low 0%
- **Moderate**: 99%
- **Moderate-High**: 1%
- **High**: 0.4%

A majority of the proposed mitigation actions are not location-specific and can be found in the the county AHPs.
**Pend Oreille**

**Risk Rank:** M

**Introduction**
Areas of concentrated population within the Pend Oreille Lake watershed boundaries are Athol, Dover, East Hope, Hope, Kootenai, Oldtown, Ponderay, Priest River, Sandpoint, and Spirit Lake.

**What is the risk?**
An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas. There are also 4 miles of canals that are receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.
- 0 out of the 4 counties within the Pend Oreille Lake watershed identified seismic as their number one hazard.
- 0 out of the 4 counties within the Pend Oreille Lake watershed identified seismic as their number two hazard.
- 0 out of the 4 counties within the Pend Oreille Lake watershed identified seismic as their number three hazard.

**Counties and Tribes**
Bonner, Boundary, Kootenai, Shoshone

**Cities**
Athol, Dover, East Hope, Hope, Kootenai, Oldtown, Ponderay, Priest River, Sandpoint, Spirit Lake

### Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,222</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>37,818</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,414</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>5</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>2,040</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>7,539</td>
</tr>
<tr>
<td>% Watershed with 25 Miles of Fault</td>
<td>0%</td>
</tr>
</tbody>
</table>

### Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
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</thead>
<tbody>
<tr>
<td>Private</td>
<td>51%</td>
</tr>
<tr>
<td>Federal</td>
<td>27%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>4%</td>
</tr>
</tbody>
</table>

### Ground Acceleration

<table>
<thead>
<tr>
<th>Acceleration</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>75%</td>
</tr>
<tr>
<td>Low Moderate</td>
<td>25%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

### Total seismic mitigation actions:
31

---

A majority of the proposed mitigation actions are not location specific and can be found in the county actions.
Pend Oreille Lake

Risk Rank: L

Introduction
Though 99% of the Pend Oreille watershed lies in Washington, the entirety of the land in Idaho is privately owned. There are 1,321 total people who live within the watershed, largely within the community of Oldtown, of which 19 are at risk of flooding.

What is the risk?
The Pend Oreille River has an annual peak flow of 150,000 cfs, making it one of the largest rivers by volume in the state. There is 1 high or significant hazard dam in the Pend Oreille watershed, the Alcan Falls Dam. There are 8 communities participating in the NFIP with 4 policies contributing to $8,870 of premiums paid in exchange for $736,000 of coverage.

6 out of the 3 counties in the Pend Oreille watershed identified flood as their number one hazard.
6 out of the 3 counties in the Pend Oreille watershed identified flood as their number two hazard.
6 out of the 3 counties in the Pend Oreille watershed identified flood as their number three hazard.

LiDAR data availability
LiDAR availability within the Pend Oreille watershed is as follows:

Conclusion
Despite an overall moderate population and the presence of a moderate hazard dam, the Pend Oreille watershed has a small amount of inhabitants with a direct flood risk. For this reason, the watershed is considered to be a low risk watershed.

Counties and Tribes

Benton, Boundary
Cities
Oldtown

Subbasin Metrics

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>1,096</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2010)</td>
<td>1,321</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>21</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>1,334</td>
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<tr>
<td>Max. Elevation (ft)</td>
<td>7,506</td>
</tr>
<tr>
<td>Dam of Concern</td>
<td>1</td>
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<tr>
<td>Pop. at Flood Risk</td>
<td>19</td>
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Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>1%</td>
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<tr>
<td>Federal</td>
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<tr>
<td>Reservation/R/I</td>
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<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of idaho</td>
<td>99%</td>
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NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Policies</th>
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<tr>
<td>Total Coverage</td>
<td>$736,000</td>
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<tr>
<td>Total Premiums</td>
<td>$3,670</td>
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<td># Claims</td>
<td>2</td>
</tr>
<tr>
<td>Paid Claims</td>
<td>$2,425</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 24
A majority of the proposed mitigation actions are not location specific and can be found in the state. (49%)
Wildfire

Pend Oreille Lake

Risk Rank: M

Introduction
The Pend Oreille watershed is home to 1,321 people, nearly half of which live in the Wildland Urban Interface. The only area of concentrated population within the Pend Oreille watershed boundaries is Oldtown.

What is the risk?
Aires within the Pend Oreille watershed have the potential to severely disrupt life, property and economic activity. There are 551 structures located within the Wildfires of the Pend Oreille watershed. Since 2000, 31 acres have burned in one wildfire event. Based on data from the Idaho Forest Action Plan (2010), the Pend Oreille watershed has 0% low risk, 0% low/moderate risk, 20% moderate risk, 75.4% moderate-high risk, and 0% high risk of wildfire to the communities within the watershed.

Conclusion
In the Pend Oreille watershed, the communities are at a moderate risk to wildfire. Based on the lack of historic fires, relatively high population within the WUI and overall identified risk of wildfire to communities, it is likely that there may be hazardous fires affecting life and property in the future.

Counties and Tribes

Bonner, Boundary

Cities

oldtown

Total wildfire mitigation actions: 39
**Pend Oreille Lake**

**Risk Rank:** 1

**Introduction**

The area of concentrated population within the Pend Oreille watershed boundaries is Glouton.

**What is the risk?**

An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 2 counties within the Pend Oreille watershed identified seismic as their number one hazard.
- 0 out of the 2 counties within the Pend Oreille watershed identified seismic as their number two hazard.
- 0 out of the 2 counties within the Pend Oreille watershed identified seismic as their number three hazard.

**Counties and Tribes**

- Bonner, Boundary

**Cities**

- Glouton

---

**Subbasin Metrics**

- Area (acres): 1,098
- Population (2010): 1,522
- Miles of Stream: 21
- Miles of Canal: 0
- Min. Elevation (ft): 1,254
- Max. Elevation (ft): 7,450
- Edc. Facilities Near Fault: 0
- % Watershed within 25 Miles of Fault: 0%

**Subbasin Ownership**

- Owner-Type % Subbasin Area
  - Private: 1%
  - Federal: 0%
  - Reservation/ BIA: 0%
  - State: 0%
  - Out of Idaho: 99%

**Ground Acceleration**

- Accel. Amount % Watershed Area
  - Low: 100%
  - Low-Moderate: 0%
  - Moderate: 0%
  - Moderate-High: 0%
  - High: 0%
Idaho Multi-Hazard Risk Portfolio

Portneuf Watershed

Risk Rank: H

Introduction
Areas of concentrated population within the watershed boundaries are Arbon Valley, Arine, Bancroft, Chubbuck, Downey, Fort Hall, Inkom, Lava Hot Springs, McConnnell, and Pocatello. There are 86,145 total people who live within the watershed, of which 2,242 are at risk of flooding. Nearly half of the watershed is privately owned.

What is the risk?
Flood hazards include high stream flows that exceed bankfull discharge. Bankfull discharge at the gauge shown below is 1,150 cfs. Additionally, flash flood events of Rapid and Jackson Creeks have caused significant damage in Inkom. According to the Bannock County AHMP, this has resulted in 64 reports of significant flooding along the main stem and flash floods along tributaries in recent history. There are 4 high or significant hazard dams in the Portneuf watershed, as well as a number of levees. There are 13 communities participating in the NFIP with 146 policies contributing to $335,486 of premiums paid in exchange for $22,917,600 of coverage.

-1 out of the 6 counties in the Portneuf watershed identified flood as their number one hazard.
-6 out of the 6 counties in the Portneuf watershed identified flood as their number two hazard.
-6 out of the 6 counties in the Portneuf watershed identified flood as their number three hazard.

LiDAR data availability
LiDAR availability within the Portneuf watershed is as follows:
- Pocatello (2005)

Conclusion
The high population, large portion of private ownership, presence of hazardous dams and number of levees all contribute to the high flood risk in the Portneuf watershed.

Counties and Tribes
Bannock, Bingham, Canyon, Franklin, Oneida, Power, Shoshone-Bannock Tribes

Cities
Arbon Valley, Arine, Bancroft, Chubbuck, Downey, Fort Hall, Inkom, Lava Hot Springs, McConnnell, Pocatello

Total flood mitigation actions: 78
A majority of the proposed mitigation actions are not location specific and can be found in the the county AHMP.
**Wildfire**

**Portneuf Watershed**

**Introduction**

The Portneuf watershed is home to 86,445 people, a small portion of which live in or near the Wildland Urban Interface. Areas of concentrated population within the Portneuf watershed boundaries are Arbon Valley, Arimo, Bannock, Chubbuck, Downey, Fort Hall, Idaho Falls, Lava Hot Springs, McCall, and Pocatello.

**What is the risk?**

Fires within the Portneuf watershed have the potential to severely disrupt life, property, and economic activity. There are 148 structures homes located within the WUI of the Portneuf watershed. Since 2000, 73,054 acres have burned during 217 individual wildfire events. Based on data from the Idaho Forest Action Plan (2005), the Idaho Falls watershed has 23.7% low risk, 19.9% low-moderate risk, 28.5% moderate risk, 26.8% moderate-high risk and 8.1% high risk of wildfire to the communities within the watershed.

*1 out of the 6 counties in the Portneuf watershed identified wildfire as their number one hazard.*

*5 out of the 6 counties in the Portneuf watershed identified wildfire as their number three hazard.*

**Conclusion**

Based on the high population of the watershed and the identified wildfire hazard from IFL, the Portneuf watershed is at a high-risk of wildfire damage to people and property.

**Counties and Tribes**

Bannock, Bingham, Caribou, Franklin, Fremont, Power, Shoshone-Bannock Tribes

**Cities**

Arbon Valley, Arimo, Bannock, Chubbuck, Downey, Fort Hall, Idaho Falls, Lava Hot Springs, McCall, and Pocatello

**Total wildfire mitigation actions:** 100

A majority of the proposed mitigation actions are not location-specific and can be found in the Idaho All Hazard Mitigation Plan WUI Mitigation Actions.
Idaho Multi-Hazard Risk Portfolio

Portneuf

Risk Rank: H

Introduction

Areas of concentrated population within the Portneuf watershed boundaries are Arbon Valley, Arimo, Bancroft, Chubbuck, Downey, Fort Hall, Inkom, Lava Hot Springs, McCammon, and Pocatello.

What is the risk?

An earthquake within the watershed has a high potential to cause damage to the life and property of those within these areas. There are also 900 miles of canals and 7 levees that are receptive to seismic disturbances.

There are 13 essential facilities within 25 miles of a quaternary fault.

• 1 out of the 6 counties within the Portneuf watershed identified seismic as their number one hazard.
• 0 out of the 6 counties within the Portneuf watershed identified seismic as their number two hazard.
• 1 out of the 6 counties within the Portneuf watershed identified seismic as their number three hazard.

Counties and Tribes

Bannock, Bingham, Caribou, Franklin, Oneida, Power, Shoshone-Bannock Tribes

Cities

Arbon Valley, Arimo, Bancroft, Chubbuck, Downey, Fort Hall, Inkom, Lava Hot Springs, McCammon, Pocatello

Subbasin Metrics

<table>
<thead>
<tr>
<th>Subbasin Ownership</th>
<th>% Subbasin Area</th>
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</thead>
<tbody>
<tr>
<td>Owner Type</td>
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<tr>
<td>Private</td>
<td>46%</td>
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<tr>
<td>Federal</td>
<td>25%</td>
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<tr>
<td>Reserve/BIA</td>
<td>20%</td>
</tr>
<tr>
<td>State</td>
<td>3%</td>
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<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 59

A majority of the proposed mitigation actions are not location specific and can be found in the the county analaysis.
Idaho Multi-Hazard Risk Portfolio

Flood

Priest

Risk Rank: L

Introduction
Areas of concentrated population within the watershed boundaries include the City of Priest River. There are 3,423 total people who live within the watershed, of which 129 are at risk of flooding. Only 9% of the watershed is privately owned.

What is the risk?
Flood hazards within the Priest watershed include high stream and variable stream flows from the Priest River as can be seen on the graph below. Based on county AHMPs, this has resulted in one significant flood event in the watershed in recent history. There are 0 high or significant hazard dams in the Priest. There are 3 communities participating in the NFIP with 39 policies contributing to $25,422 of premiums paid in exchange for $6,972,800 of coverage.

- 0 out of the 2 counties in the Priest watershed identified flood as their number one hazard.
- 0 out of the 2 counties in the Priest watershed identified flood as their number two hazard.
- 0 out of the 2 counties in the Priest watershed identified flood as their number three hazard.

LIDAR data availability
LIDAR availability within the Priest watershed is as follows:
- Priest River Experimental Forest (2002)
- Priest Area (2012)

Conclusion
Though the watershed has a moderately sized population, the small portion of privately owned land and low population at risk of flooding makes the Priest a low flood risk watershed.

Counties and Tribes
Bonner, Boundary
Cities
Priest River

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>978</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,068</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>2,060</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>7,566</td>
</tr>
<tr>
<td>Arms of Concern</td>
<td>0</td>
</tr>
<tr>
<td>Pop. at Risk</td>
<td>129</td>
</tr>
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Subbasin Ownership

<table>
<thead>
<tr>
<th>Ownership Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>9%</td>
</tr>
<tr>
<td>Reservation/H/I</td>
<td>32%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>22%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Statements</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFIP Policies</td>
<td>39</td>
</tr>
<tr>
<td>Total Coverage</td>
<td>$6,972,800</td>
</tr>
<tr>
<td>Total Premiums</td>
<td>$25,422</td>
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<tr>
<td>Number Claims</td>
<td>8</td>
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<tr>
<td>Paid Claims</td>
<td>$8,601</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 36
A majority of the proposed mitigation actions are not location specific and can be found in the county AHMP.
The Priest watershed is home to 3,023 people, most of which live in the Wildland Urban Interface. The only area of concentrated population within the Priest watershed boundaries is Priest River.

What is the risk?
Fires within the Priest watershed have the potential to severely disrupt life, property, and economic activity. There are 3,424 structures within the WUI of the Priest watershed. Since 2000, 2,233 acres have burned during 55 individual wildfire events. Based on data from the Idaho Forest Action Plan (2018), the Priest watershed has 0% low risk, 0% low moderate risk, 73.7% moderate risk, 24.8% moderate high risk and 1.5% high risk of wildfire to the communities within the watershed.

1 out of the 2 counties in the Priest watershed identified wildfire as their number one hazard.
60 out of the 2 counties in the Priest watershed identified wildfire as their number two hazard.
60 out of the 2 counties in the Priest watershed identified wildfire as their number three hazard.

Conclusion
The majority of the population within the Priest watershed lives within the WUI and are at a moderate-high risk to damage from wildfire events. One of the counties within the Priest watershed has identified wildfire as a primary hazard of concern and has enacted numerous mitigation actions in efforts to reduce their risk. The overall identified wildfire risk in the Priest watershed is high.

Counties and Tribes
Bonner, Boundary
Cities
Priest River

Total wildfire mitigation actions: 54
**Priest Watershed**

**Risk Rank:** 1

**Introduction:**
The area of concentrated population within the Priest watershed boundaries is Priest River.

**What is the risk?**
An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas.

There are 0 essential facilities within 2.5 miles of a quaternary fault.

- 0 out of the 2 counties within the Priest watershed identified seismic as their number one hazard.
- 0 out of the 2 counties within the Priest watershed identified seismic as their number two hazard.
- 0 out of the 2 counties within the Priest watershed identified seismic as their number three hazard.

**Counties and Tribes:**
Bonner, Boundary

**Cities:**
Priest River

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>2,060</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,068</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>2,060</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>7,546</td>
</tr>
<tr>
<td>% Facilities Near Fault</td>
<td>0</td>
</tr>
<tr>
<td>% Watershed with Faults</td>
<td>0</td>
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</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>9%</td>
</tr>
<tr>
<td>Federal</td>
<td>37%</td>
</tr>
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<td>State</td>
<td>22%</td>
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<tr>
<td>Out of Idaho</td>
<td>36%</td>
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**Ground Acceleration**

<table>
<thead>
<tr>
<th>Acceleration</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>100%</td>
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<tr>
<td>Low-Moderate</td>
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<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
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</tbody>
</table>

**Total seismic mitigation actions:** 12

A majority of the proposed mitigation actions are not location specific and can be found in the the county areas.
Raft

Risk Rank: M

Introduction
1,977 total people who live within the watershed, of which 162 are at risk of flooding. Roughly one third of the watershed is privately owned.

What is the risk?
The Raft watershed is susceptible to flash flooding due to the large alluvial fans that have developed along the surrounding mountains and extend to the Raft River Valley floor. The majority of the development in the Raft watershed is agricultural within two miles of the Raft River. There is 1 high or significant hazard dam in the Raft watershed. There are 2 communities participating in the NFIP with 3 policies contributing to $1,950 of premiums paid in exchange for $46,100 of coverage.

- 6 out of the 3 counties in the Raft watershed identified flood as their number one hazard.
- 1 out of the 3 counties in the Raft watershed identified flood as their number two hazard.
- 0 out of the 3 counties in the Raft watershed identified flood as their number three hazard.

LiDAR data availability
LiDAR availability within the Raft watershed is as follows:
- City of Rocks National Monument (2011)

Conclusion
The relatively low population and moderate private ownership, as well as the presence of a hazardous dam place the Raft watershed into the moderate flood risk category.

Counties and Tribes
Cassia, Orovoda, Power

Cities
Malta

Flood Subbasin Metrics

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>1.490</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2010)</td>
<td>1,577</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>3,294</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>74</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,196</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>10,126</td>
</tr>
<tr>
<td>Areas of Concern</td>
<td>1</td>
</tr>
<tr>
<td>Pop at Risk</td>
<td>162</td>
</tr>
</tbody>
</table>

Flood Subbasin Ownership

<table>
<thead>
<tr>
<th>Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>55%</td>
</tr>
<tr>
<td>Federal</td>
<td>44%</td>
</tr>
<tr>
<td>Reservation/RRA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>1%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>19%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Coverage</td>
<td>$666,000</td>
</tr>
<tr>
<td>Total Premiums</td>
<td>$3,950</td>
</tr>
<tr>
<td>Total Claims</td>
<td>1</td>
</tr>
<tr>
<td>Paid Claims</td>
<td>5</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 44
A majority of the proposed mitigation actions are not location specific and can be found in the county plan.
Idaho Multi-Hazard Risk Portfolio

Wildfire

Raft

Risk Rank: M

Introduction

The Raft watershed is home to 1,877 people and there is no identified WUI. The only area of concentrated population within the Raft watershed boundaries is Malta.

What is the risk?

Fires within the Raft watershed have the potential to severely disrupt life, property and economic activity. Since 2000, 155,755 acres have burned during 154 individual wildfire events. Based on data from the Idaho Fire Action Plan (2010), the Raft watershed has 4.4% low risk, 26.8% low-moderate risk, 38.7% moderate risk, 23.2% moderate-high risk and 3% high risk of wildfire to the communities within the watershed.

Conclusion

The three counties in the Raft watershed have identified wildfire to be a significant hazard and have proposed actions to mitigate the risk. Though the small population and lack of WUI contribute to the overall moderate wildfire risk.

Counties and Tribes

Cassia, Onerida, Power

Cities

Malta

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>4.4%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>25.8%</td>
</tr>
<tr>
<td>Moderate</td>
<td>38.7%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>27.2%</td>
</tr>
<tr>
<td>High</td>
<td>3%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 34

A majority of the proposed mitigation actions are non-structural and can be found in the county WMP.
Raft

Risk Rank: M

Introduction
The area of concentrated population within the Raft watershed boundaries is Malta.

What is the risk?
An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas. There are also 74 miles of canals that are receptive to seismic disturbances.

There are 6 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 3 counties within the Raft watershed identified seismic as their number one hazard.
- 0 out of the 3 counties within the Raft watershed identified seismic as their number two hazard.
- 0 out of the 3 counties within the Raft watershed identified seismic as their number three hazard.

Counties and Tribes
Cassia, Otero, Power

Cities
Malta

Subbasin Metrics

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>1,490</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2010)</td>
<td>1,877</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>3,294</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>74</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,195</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>10,325</td>
</tr>
<tr>
<td>Crit. Facilities Near Fault</td>
<td>0</td>
</tr>
</tbody>
</table>
| In Wished Adj. 25 Miles of Fault | 0%

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>35%</td>
</tr>
<tr>
<td>Federal</td>
<td>44%</td>
</tr>
<tr>
<td>Reservation/ IHA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>3%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>19%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Level</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>46%</td>
</tr>
<tr>
<td>Moderate</td>
<td>52%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 27

A majority of the proposed mitigation actions are not location specific and can be found in the the county forests.
Idaho Multi-Hazard Risk Portfolio

Flood

Rock Watershed

Risk Rank: L

Introduction
There are 36 total people who live within the Rock watershed, of which 0 are at risk of flooding. The majority of the watershed lies outside of Idaho.

What is the risk?
The flood risk is negligible as the majority of the population resides on farmlands away from any notable bodies of water. There are 0 high or significant hazard dams in the Rock watershed. There are no communities participating in the NFIP with 0 policies contributing to $0 of premiums paid in exchange for $0 of coverage.

UDAR data availability
There is no UDAR yet available for this watershed.

Conclusion
The small population and rural character of this watershed contribute to its low flood risk ranking.

Counties and Tribes
Coeur d’Alene Tribe, Benewah, Latah

Cities

NFIP Statistics (2014)
NFIP Policies 0
Total Coverage 50
Total Premiums 50
Total Claims 0
Paid Claims 50

Total flood mitigation actions: 110
A majority of the proposed mitigation actions are not location specific and can be found in the county Action Plans.
Idaho Multi-Hazard Risk Portfolio

Wildfire

Rock

Risk Rank: L

Introduction

The Rock watershed is home to 36 people, most of which live in the Wildland Urban Interface. There are no areas of concentrated population within the Rock watershed boundaries.

What is the risk?

Fires within the Rock watershed have the potential to severely disrupt life, property and economic activity. There are 43 structures located within the WUI of the Rock watershed. Since 2000, there have been no significant wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Rock watershed has 22.6% low risk, 76.5% low/moderate risk, 0.9% moderate risk, 0% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

Conclusion

The low population within the Rock watershed is at a low risk of wildfire, though both counties have identified wildfire to be the primary hazard of concern.

Counties and Tribes

Coeur d'Alene Tribe, Benewah, Latah

Cities

Total wildfire mitigation actions: 59

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>22.6%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>76.5%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0.9%</td>
</tr>
<tr>
<td>Moderate/High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

County All-Hazard Mitigation Plan Wildfire Mitigation Actions

A majority of the proposed mitigation actions are not location specific and can be found in the the county MHP.
Rock

Risk Rank: L

Introduction
There are no areas of concentrated population within the Rock watershed boundaries.

What is the risk?
An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas.

There are 0 essential facilities within 35 miles of a quaternary fault.

- 0 out of the 2 counties within the Rock watershed identified seismic as their number one hazard.
- 0 out of the 2 counties within the Rock watershed identified seismic as their number two hazard.
- 0 out of the 2 counties within the Rock watershed identified seismic as their number three hazard.

Counties and Tribes
Coeur d’Alene Tribe, Benewah, Latah

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>954</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2010)</td>
<td>36</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>49</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>1,285</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>4,334</td>
</tr>
<tr>
<td>Facilities Near Fault</td>
<td>0</td>
</tr>
<tr>
<td>In Watershed with 35 Miles of Fault</td>
<td>0 %</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>2%</td>
</tr>
<tr>
<td>Federal</td>
<td>0%</td>
</tr>
<tr>
<td>Reservation/BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>98%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Acceleration</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>100%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 10

A majority of the proposed mitigation actions are not location specific and can be found in the the county Mitigation Actions.
Salmon Falls

Risk Rank: M

Introduction
The main area of concentrated population within the Salmon Falls watershed boundaries is Castleford. There are 882 total people who live within the watershed, of which 43 are at risk of flooding. The majority of the watershed lies outside of Idaho, leaving only 32% privately owned.

What is the risk?
There are 2 high or significant hazard dams in the Salmon Falls watershed that could potentially endanger life and property downstream. According to county AHMPs, there have been 2 reports of significant floods within the watershed in recent history. There is 1 community participating in the NFIP with 2 policies contributing to $4,855 of premiums paid in exchange for $703,800 of coverage.
- 0 out of the 3 counties in the Salmon Falls watershed identified flood as their number one hazard.
- 0 out of the 3 counties in the Salmon Falls watershed identified flood as their number two hazard.
- 0 out of the 3 counties in the Salmon Falls watershed identified flood as their number three hazard.

LiDAR data availability
LiDAR availability within the Salmon Falls watershed is as follows:
- Box Canyon (2006)
- Hellister (2010, 2011)

Conclusion
Though the population and portion of the watershed under private ownership is low, the presence of hazardous dams increases the overall flood risk of the watershed to moderate classification.

Counties and Tribes
Owyhee, Treasure Falls
Cities
Castleford

Subbasin Metrics

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>12%</td>
</tr>
<tr>
<td>Federal</td>
<td>3%</td>
</tr>
<tr>
<td>Reservation/RIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>8%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>5%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th>Total Claims</th>
<th>Paid Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>$703,800</td>
<td>$4,855</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 17
A majority of the proposed mitigation actions are not location specific and can be found in the county AHMPs.
Wildfire

Salmon Falls

Risk Rank: L

Introduction

The Salmon Falls watershed is home to 812 people, roughly half of which live in the Wildland-Urban Interface. The only area of concentrated population within the Salmon Falls watershed boundaries is Castleford.

What is the risk?

Fires within the Salmon Falls watershed have the potential to severely disrupt life, property and economic activity. There are 363 structures located within the WUI of the Salmon Falls watershed. Since 2000, 315,412 acres have burned during 127 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Salmon Falls watershed has 48.3% low risk, 15.2% low-moderate risk, 27.5% moderate risk, 7.4% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

2 out of the 2 counties in the Salmon Falls watershed identified wildfire as their number one hazard.

4 out of the 2 counties in the Salmon Falls watershed identified wildfire as their number two hazard.

Conclusion

Fire events within the Salmon Falls watershed tend to be large and occur regularly. Though the population is relatively low, it can still be affected by wildfire. As such, both counties within the watershed have identified wildfire events to be the primary hazard of concern. The overall risk of the Salmon Falls watershed is low.

Counties and Tribes

Owyhee, Twin Falls

Cities

Castleford

Total wildfire mitigation actions: 15
Salmon Falls

Risk Rank: L

Introduction
The area of concentrated population within the Salmon Falls watershed boundaries is Castleford.

What is the risk?
An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas. There are also 144 miles of canals that are receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 2 counties within the Salmon Falls watershed identified seismic as their number one hazard.
- 0 out of the 2 counties within the Salmon Falls watershed identified seismic as their number two hazard.
- 0 out of the 2 counties within the Salmon Falls watershed identified seismic as their number three hazard.

Counties and Tribes
Owyhee, Twin Falls

Cities
Castleford

Subbasin Metrics

<table>
<thead>
<tr>
<th>Subbasin Metrics</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>2,085</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>882</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,647</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>144</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>2,900</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>10,157</td>
</tr>
<tr>
<td># Facilities Near Fault</td>
<td>0</td>
</tr>
</tbody>
</table>
| # Watershed with 25 miles of Fault | 0%

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>12%</td>
</tr>
<tr>
<td>Federal</td>
<td>31%</td>
</tr>
<tr>
<td>Reservation/BLM</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>2%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>56%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Acceleration</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>94%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>5%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 9

A majority of the proposed mitigation actions are not location-specific and can be found in the the county atlas.
Flood

Idaho Multi-Hazard Risk Portfolio

Salt

Risk Rank: 1

Introduction

There are 342 total people who live within the Salt watershed, of which none are at risk of flooding. The watershed is largely federally managed and covers half of the Salt watershed lies in Wyoming.

What is the risk?

Flood hazards include 2 high or significant hazard dams in the Salt watershed. According to county

AHNRD, there has been a single report of significant flooding within the watershed. There are 0 communities participating in the NFIP with 0 policies contributing to $0 of premiums paid in exchange for $0 of coverage.

* 1 out of the 3 counties in the Salt watershed identified flood as their number one hazard.
* 6 out of the 3 counties in the Salt watershed identified flood as their number two hazard.
* 6 out of the 3 counties in the Salt watershed identified flood as their number three hazard.

LiDAR data availability

No LiDAR data is available.

Conclusion

The Salt watershed’s low population and lack of incorporated communities within the Idaho portion of the watershed, as well as a small amount of flood hazards deem the Salt a low risk watershed.

Counties and Tribes

Bear Lake, Bonneville, Caribou

Cities

209 | Page
Idaho Multi-Hazard Risk Portfolio

Wildfire

Risk Rank: L

Introduction

The Salt watershed is home to 242 people, roughly half of which live in or near the Wildland Urban Interface. There are no areas of concentrated population within the Salt watershed boundaries.

What is the risk?

Fires within the Salt watershed have the potential to severely disrupt life, property and economic activity. There are 61 structures located within the WUI of the Salt watershed. Since 2000, 3,730 acres have burned in 10 wildfire events. Based on data from the Idaho Forest Action Plan (2018), the Salt watershed has 22.5% low risk, 24.9% low-moderate risk, 50.2% moderate risk, 0.1% moderate-high risk and 2.3% high risk of wildfire to the communities within the watershed.

1 out of the 3 counties in the Salt watershed identified wildfire as their number one hazard.
1 out of the 3 counties in the Salt watershed identified wildfire as their number two hazard.
1 out of the 3 counties in the Salt watershed identified wildfire as their number three hazard.

Conclusion

Based on the few historic fires, low population within the WUI and overall identified risk of wildfire to communities within the Salt watershed there is a low risk for future wildfire events to threaten life and property.

Counties and Tribes
Bear Lake, Bonneville, Caribou

Cities

Salt Watershed

Communities at Risk of Wildfire
Low
Low Moderate
Moderate
Moderate High
High
Wildland Urban Interface
Watershed

Subbasin Metrics
Area (sq. miles) 876
Population (2010) 242
Miles of Stream 908
Miles of Canal 0
Min. Elevation (ft) 5,614
Max. Elevation (ft) 10,698
Structures in WUI 61
Historic Fire Events 10

Subbasin Ownership
Owner Type % Subbasin Area
Private 8%
Federal 38%
Reservation/BIA 0%
State 0%
Out of Idaho 54%

Watershed Fire Risk
Risk Level % Watershed Area
Low 22.5%
Low/Moderate 24.3%
Moderate 50.2%
Moderate/High 0.1%
High 2.9%

Total wildfire mitigation actions: 29

A majority of the proposed mitigation actions are not location specific and can be found in the statewide RNWA.
Idaho Multi-Hazard Risk Portfolio

Seismic

Salt

Risk Rank: M

Introduction
There are no areas of concentrated population within the Salt watershed boundaries.

What is the risk?
An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas.

There are 6 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 3 counties within the Salt watershed identified seismic as their number one hazard.
- 0 out of the 3 counties within the Salt watershed identified seismic as their number two hazard.
- 1 out of the 3 counties within the Salt watershed identified seismic as their number three hazard.

Counties and Tribes
Bear Lake, Bonneville, Caribou

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>876</td>
<td>252</td>
<td>908</td>
<td>9</td>
<td>5,614</td>
<td>10,655</td>
<td>0</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>0%</td>
</tr>
<tr>
<td>Federal</td>
<td>38%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>54%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Acceleration</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>40%</td>
</tr>
<tr>
<td>High</td>
<td>60%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 25

A majority of the proposed mitigation actions are not location-specific and can be found in the three county areas.
Idaho Multi-Hazard Risk Portfolio

Flood

South Fork Boise

Risk Rank: L

Introduction
There are 261 total people who live within the South Fork Boise watershed, of which 19 are at risk of flooding. The majority of the watershed is federally managed.

What is the risk?
There are 2 high or significant hazard dams in the South Fork Boise watershed, including Anderson Ranch Dam. According to county AHMPs, there have been two reports of significant flooding in the watershed in recent history. There are 2 communities participating in the NFIP with 7 policies contributing to $6,465 of premiums paid in exchange for $1,666,700 of coverage.

Population data availability
No population data is available.

LiDAR data availability
No LiDAR data is available.

Conclusion
The flood risk to life and property within the South Fork Boise watershed is low, though the two hazardous dams could cause significant damage to communities outside of the South Fork Boise watershed.

Counties and Tribes
Malheur, Cassia, Elmore

Cities

South Fork Boise Watershed

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,304</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>261</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>3,339</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>4.3</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>3,005</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>10,316</td>
</tr>
<tr>
<td>Units of Concern</td>
<td>1.3</td>
</tr>
<tr>
<td>Pop. at Flood Risk</td>
<td>19</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>13%</td>
</tr>
<tr>
<td>Federal</td>
<td>83%</td>
</tr>
<tr>
<td>State</td>
<td>4%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFIP Policies</td>
<td>7</td>
</tr>
<tr>
<td>Total Coverage</td>
<td>$1,466,292</td>
</tr>
<tr>
<td>Total Premiums</td>
<td>$6,665</td>
</tr>
<tr>
<td># Claims</td>
<td>0</td>
</tr>
<tr>
<td>Paid Claims</td>
<td>0</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 74
A majority of the proposed mitigation actions are not location specific and can be found in the the county AHMPs.
**Wildfire**

**South Fork Boise**

**Risk Rank:** L

**Introduction**

The South Fork Boise watershed is home to 261 people, most of which live within the Wildland Urban Interface. There are no areas of concentrated population within the South Fork Boise watershed boundaries.

**What is the risk?**

Homes within the South Fork Boise watershed have the potential to severely disrupt life, property, and economic activity. There are 516 structures located within the WUI of the South Fork Boise watershed. Since 2000, 308,723 acres have burned during 1,366 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the South Fork Boise watershed has 31.1% low risk, 9.3% low to moderate risk, 15.8% moderate to high risk, and 43.8% high risk of wildfire to the communities within the watershed.

- 3 out of the 3 counties in the South Fork Boise watershed identified wildfire as their number one hazard.
- 0 out of the 3 counties in the South Fork Boise watershed identified wildfire as their number two hazard.
- 0 out of the 3 counties in the South Fork Boise watershed identified wildfire as their number three hazard.

**Conclusion**

Though the population within the South Fork Boise watershed is small, it is threatened by large, frequent, and potentially damaging wildfires. All three counties have identified fire to be the primary hazard of concern as it can damage life and property as well as disrupt recreation in the area. The overall risk of the South Fork Boise watershed is low.

**Counties and Tribes**

Blaine, Camas, Elmore

**Cities**

- Boise
- Custer
- Gooding
- Idaho County
- Blaine
- Camas
- Elmore

**Subbasin Metrics**

- Area (sq. miles): 1,304
- Population: 261
- Miles of Stream: 3,339
- Miles of Canal: 41
- Min. Elevation (ft): 2,205
- Max. Elevation (ft): 10,311
- Structures in Wildfire: 516
- Historic Fire Events: 136

**Subbasin Ownership**

- Private: 13%
- Federal: 83%
- Reservation/BIA: 0%
- State: 4%
- Out of Idaho: 0%

**Watershed Fire Risk**

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>31.1%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>9.3%</td>
</tr>
<tr>
<td>Moderate</td>
<td>35%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>14.8%</td>
</tr>
<tr>
<td>High</td>
<td>9.8%</td>
</tr>
</tbody>
</table>

**Total wildfire mitigation actions:** 69

A majority of the proposed mitigation actions are not location specific and can be found in the the county MRPs.
South Fork Boise Watershed

Risk Rank: L

Introduction
There are no areas of concentrated population within the South Fork Boise watershed boundaries.

What is the risk?
An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas. There are also 43 miles of canals that are receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 3 counties within the South Fork Boise watershed identified seismic as their number one hazard.
- 0 out of the 3 counties within the South Fork Boise watershed identified seismic as their number two hazard.
- 0 out of the 3 counties within the South Fork Boise watershed identified seismic as their number three hazard.

Counties and Tribes
Blaine, Camas, Elmore
Cites

Total seismic mitigation actions: 27

A majority of the proposed mitigation actions are not location specific and can be found in the the county AHRMPs.
South Fork Clearwater Watershed

**South Fork Clearwater**

**Risk Rank:** H

**Introduction**
Areas of concentrated population within the watershed boundaries are Cottonwood, Grangeville, Kooskia, and Stites. There are 9,233 total people who live within the watershed, of which 470 are at risk of flooding. The majority of the watershed is federally managed.

**What is the risk?**
Federal hazard includes seasonal high stream flows that exceed bankfull discharge. USGS streamflow data near Stites indicates a varied flow. Historically, this has resulted in 7 reports of significant floods in recent history, according to county AMHMR. There is 1 high or significant hazard dam in the South Fork Clearwater. There are 5 communities participating in the NFIP with 10 policies contributing to $20,200 of premiums paid in exchange for $2,505,800 of coverage.

- 0 out of the 1 county in the South Fork Clearwater watershed identified flood as their number one hazard.
- 0 out of the 1 county in the South Fork Clearwater watershed identified flood as their number two hazard.
- 0 out of the 1 county in the South Fork Clearwater watershed identified flood as their number three hazard.

**USDA data availability**
USDA availability within the South Fork Clearwater watershed is as follows:
- South Fork Clearwater River (2000)

**Conclusion**
Due to the moderate population and presence of levees and hazardous dams, the South Fork Clearwater watershed is considered a high flood risk watershed.

**Counties and Tribes**
Idaho, Nez Perce Tribe

**Cities**
Cottonwood, Grangeville, Kooskia, Stites

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,174</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>9,131</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>2,622</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>5</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>1,224</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>8,858</td>
</tr>
<tr>
<td>Acres of Concerns</td>
<td>470</td>
</tr>
<tr>
<td>Pop. at Flood Risk</td>
<td>470</td>
</tr>
</tbody>
</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>22%</td>
</tr>
<tr>
<td>Federal</td>
<td>70%</td>
</tr>
<tr>
<td>Reservation/RIF</td>
<td>2%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

**NFIP Statistics (2014)**

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th># Claims 2</th>
<th>Paid Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$2,505,800</td>
<td>$20,200</td>
<td>2</td>
<td>$9,981</td>
</tr>
</tbody>
</table>

**Total flood mitigation actions:** 12

A majority of the proposed mitigation actions are not location specific and can be found in the the county AMHMR.
Wildfire

**South Fork Clearwater**

**Risk Rank:** H

**Introduction**
The South Fork Clearwater watershed is home to 9,131 people, most of which live in the Wildland-Urban Interface. Areas of concentrated population within the South Fork Clearwater watershed boundaries are Cottonwood, Grangeville, Kooskia, and Stites.

**What is the risk?**
Fires within the South Fork Clearwater watershed have the potential to severely disrupt life, property and economic activity. There are 4,133 structures located within the WUI of the South Fork Clearwater watershed. Since 2000, 35,595 acres have burned during 213 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the South Fork Clearwater watershed has 14.9% low risk, 3.2% low-moderate risk, 75% moderate risk, 4.4% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

- 1 out of the 1 county in the South Fork Clearwater watershed identified wildfire as their number one hazard.
- 1 out of the 1 county in the South Fork Clearwater watershed identified wildfire as their number two hazard.
- 1 out of the 1 county in the South Fork Clearwater watershed identified wildfire as their number three hazard.

**Conclusion**
In the South Fork Clearwater watershed, the communities are at a high risk to wildfire, based on the few significant fires on record, high portion of the watershed residing within the WUI and overall identified risk of wildfire to communities.

**Counties and Tribes**
Idaho, Nez Perce Tribe

**Cities**
Cottonwood, Grangeville, Kooskia, Stites

---

**Watershed Fire Risk**

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>14.4%</td>
</tr>
<tr>
<td>Lower/Moderate</td>
<td>3.2%</td>
</tr>
<tr>
<td>Moderate</td>
<td>76%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>5.4%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

---

**Total wildfire mitigation actions:** 9

A majority of the proposed mitigation actions are not location-specific and can be found in the county HHMAs.
**South Fork Clearwater**

**Risk Rank:** M

**Introduction**

Areas of concentrated population within the South Fork Clearwater watershed boundaries are Cottonwood, Grangeville, Kooskia and Sites.

**What is the risk?**

An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas. There are also 5 miles of canals and 45 levees that are receptive to seismic disturbances. There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 1 county within the South Fork Clearwater watershed identified seismic as their number one hazard.
- 0 out of the 1 county within the South Fork Clearwater watershed identified seismic as their number two hazard.
- 0 out of the 1 county within the South Fork Clearwater watershed identified seismic as their number three hazard.

**Counties and Tribes**

Idaho, Nez Perce Tribe

**Cities**

Cottonwood, Grangeville, Kooskia, Sites

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,174</td>
</tr>
<tr>
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</tr>
<tr>
<td>Miles of Stream</td>
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</tr>
<tr>
<td>Miles of Canal</td>
<td>5</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>1,224</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>4,858</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>0</td>
</tr>
<tr>
<td>In Watershed with 25 miles of fault</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Ground Acceleration**

<table>
<thead>
<tr>
<th>Category</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>100%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Total seismic mitigation actions:** 4

A majority of the proposed mitigation actions are not location specific and can be found at the county level.

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>28%</td>
</tr>
<tr>
<td>Federal</td>
<td>70%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>2%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

---

**Image Description**

- **South Fork Clearwater Watershed Map**
- **USGS Ground Acceleration Map**
- **County All Hazard Mitigation Plan Summary Mitigation Actions**
**South Fork Coeur d’Alene**

**Risk Rank:** H

**Introduction**

Areas of concentrated population within the South Fork Coeur d’Alene watershed boundaries are Kellogg, Mullin, Osburn, Pinehurst, Smokeyville, Wallace and Wandor. There are 11,085 total people who live within the watershed, of which 3,711 are at risk of flooding. Nearly half of the watershed is privately owned.

**What is the risk?**

The South Fork Coeur d’Alene watershed has considerable risk to life and property. According to the county floodplains, there have been 12 reports of significant flooding within the watershed in recent history. The seven main communities lie along the South Fork Coeur d’Alene River. There are 23 high or significant hazard dams in the South Fork Coeur d’Alene watershed. There are 10 communities participating in the NFIP with 287 policies contributing to $419,298 of premiums paid in exchange for $1,303,709 of coverage.

- 0 out of the 3 counties in the South Fork Coeur d’Alene watershed identified flooding as their number one hazard.
- 1 out of the 3 counties in the South Fork Coeur d’Alene watershed identified flooding as their number two hazard.
- 2 out of the 3 counties in the South Fork Coeur d’Alene watershed identified flooding as their number three hazard.

**LiDAR data availability**

LiDAR availability within the South Fork Coeur d’Alene watershed is as follows:

- Coeur d’Alene River (2002)

**Conclusion**

Because of the large amount of people and property at risk, relatively large number of hazardous dams and proximity to the South Fork Coeur d’Alene River, the watershed is considered to be a high risk watershed.

**Counties and Tribes**

Benewah, Kootenai, Shoshone

**Cities**

Kellogg, Mullin, Osburn, Pinehurst, Smokeyville, Wallace, Wandor

**NFIP Statistics (2014)**

- NFIP Policies: 287
- Total Coverage: $81,020,200
- Total Premiums: $443,258
- Paid Claims: $171,414

**Total flood mitigation actions:** 175

A majority of the proposed mitigation actions are not location specific and can be found in the accompanying factsheets.
Wildfire

The South Fork Coeur d'Alene watershed is home to 11,035 people, most of which live in the Wildland Urban Interface. Areas of concentrated population within the South Fork Coeur d'Alene watershed boundaries are Kellogg, Mullan, Osburn, Pinehurst, Smoletsville, Wallace and Wardner.

What is the risk?

Fires within the South Fork Coeur d'Alene watershed have the potential to severely disrupt life, property and economic activity. There are 5,826 structures located within the WUI of the South Fork Coeur d'Alene watershed. Since 2000, 579 acres have burned in 30 wildfire events. Based on data from the Idaho Forest Action Plan (2010), the South Fork Coeur d'Alene watershed has 0% low risk, 0% low-moderate risk, 23.4% moderate risk, 76.6% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

>2 out of the 3 counties in the South Fork Coeur d'Alene watershed identified wildfire as their number one hazard.

>1 out of the counties in the South Fork Coeur d'Alene watershed identified wildfire as their number two hazard.

>0 out of the 3 counties in the South Fork Coeur d'Alene watershed identified wildfire as their number three hazard.

Conclusion

The South Fork Coeur d'Alene watershed is at a high risk of wildland to life and property because of its relatively high population being centralised in the identified WUI.

Counties and Tribes

Benewah, Kootenai, Shoshone

Cities

Kellogg, Mullan, Osburn, Pinehurst, Smoletsville, Wallace, Wardner

Total wildfire mitigation actions: 65

A majority of the proposed mitigation actions are not location specific and can be found in the the county AHPMA.
**Risk Rank:** M

**Introduction**

Areas of concentrated population within the South Fork Coeur d’Alene watershed boundaries are Kellogg, Mullan, Osburn, Pinehurst, Smelterville, Wallace and Wardner.

**What is the risk?**

An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas. There are also 19 lowess that are receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 3 counties within the South Fork Coeur d’Alene watershed identified seismic as their number one hazard.
- 0 out of the 3 counties within the South Fork Coeur d’Alene watershed identified seismic as their number two hazard.
- 0 out of the 3 counties within the South Fork Coeur d’Alene watershed identified seismic as their number three hazard.

**Counties and Tribes**

Benewah, Kootenai, Shoshone

**Cities**

Kellogg, Mullan, Osburn, Pinehurst, Smelterville, Wallace, Wardner

**Subbasin Metrics**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>297</td>
<td>11,035</td>
<td>620</td>
<td>0</td>
<td>2,155</td>
<td>6,765</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Subbasin Ownership**

- **Owner Type**: Federal - 53%
- **Reservation/ BIA**: 0%
- **State**: 3%
- **Out of Idaho**: 0%

**Ground Acceleration**

- **Accel. Amount**: Low - 2%
- **Watershed Area**: Low - 2%
- **Moderate**: 0%
- **Moderate High**: 0%
- **High**: 0%

**Total seismic mitigation actions:** 26

A majority of the proposed mitigation actions are not location specific and can be found in the the county annexes.
Idaho Multi-Hazard Risk Portfolio

Flood

South Fork Owyhee

Risk Rank: 2

Introduction
There are 0 total people who live within the watershed. The majority of the watershed lies outside of Idaho.

What is the risk?
There are 0 high or significant hazard dams in the South Fork Owyhee watershed. There are 0 communities participating in the NFIP with 0 policies contributing to $0 of premiums paid in exchange for $0 of coverage.

- 0 out of the 1 county in the South Fork Owyhee watershed identified flood as their number one hazard.
- 0 out of the 1 county in the South Fork Owyhee watershed identified flood as their number two hazard.
- 0 out of the 1 county in the South Fork Owyhee watershed identified flood as their number three hazard.

LiDAR data availability
No LiDAR data is available.

Conclusion
There are no people or property at risk of flooding events in the South Fork Owyhee watershed, giving it a low flood risk classification.

Counties and Tribes

Owyhee, Shoshone-Paiute Tribes

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,876</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>0</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>517</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>1</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,236</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>10,400</td>
</tr>
<tr>
<td>Areas of Concern</td>
<td>0</td>
</tr>
<tr>
<td>Pop at Flood Risk</td>
<td>0</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>0%</td>
</tr>
<tr>
<td>Federal</td>
<td>13%</td>
</tr>
<tr>
<td>Reservation/RRA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>87%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFIP Policies</td>
<td>0</td>
</tr>
<tr>
<td>Total Coverage</td>
<td>50</td>
</tr>
<tr>
<td>Total Premiums</td>
<td>50</td>
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<tr>
<td># Claims</td>
<td>0</td>
</tr>
<tr>
<td>Paid Claims</td>
<td>50</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 26

A majority of the proposed mitigation actions are not location specific and can be found in the state醍醐AHP.

USGS

South Fork Owyhee Watershed

USGS 1317780 S FK OYWHEE RV MR WHITEROCK, NV

County All Hazard Mitigation Plans Flood Mitigation Actions

<table>
<thead>
<tr>
<th>Action Status</th>
<th>Action Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ongoing</td>
<td>Thorough</td>
</tr>
<tr>
<td>Proposed</td>
<td>Complete</td>
</tr>
<tr>
<td>Completed</td>
<td>Thorough</td>
</tr>
</tbody>
</table>
Wildfire

South Fork Owyhee

Risk Rank: L

Introduction
The South Fork Owyhee watershed is home to 8 people. Within Idaho, the South Fork Owyhee watershed is entirely federally managed land.

What is the risk?
Since 2000, 932 acres have burned during 4 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the South Fork Owyhee watershed has 100% low risk, 0% low-moderate risk, 0% moderate risk, 0% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.
- 1 out of the 1 county in the South Fork Owyhee watershed identified wildfire as their number one hazard.
- But of the 1 county in the South Fork Owyhee watershed identified wildfire as their number two hazard.
- Out of the 1 county in the South Fork Owyhee watershed identified wildfire as their number three hazard.

Conclusion
The South Fork Owyhee watershed is federally managed land devoid of permanent human inhabitants, therefore the wildfire threat to life and property is low.

Counties and Tribes
Owyhee, Shoshone-Paiute Tribes

Cities

Subbasin Metrics

| Subbasin Area | 1,876 |
| Miles of Stream | 517 |
| Miles of Canal | 4 |
| Min. Elevation (ft) | 4,238 |
| Max. Elevation (ft) | 10,400 |
| Structures in Wildfire Risk | No Wildfire Risk |
| Historic Fire Events | 4 |

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>0%</td>
</tr>
<tr>
<td>Federal</td>
<td>13%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of State</td>
<td>87%</td>
</tr>
</tbody>
</table>

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>100%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 10

A majority of the proposed mitigation actions are not location specific and can be found in the the county WMA.
South Fork Owyhee

Risk Rank: L

Introduction

There are no areas of concentrated population within the South Fork Owyhee watershed boundaries.

What is the risk?

An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas. There is also 1 canal of which is receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 1 county within the South Fork Owyhee watershed identified seismic as their number one hazard.
- 0 out of the 1 county within the South Fork Owyhee watershed identified seismic as their number two hazard.
- 0 out of the 1 county within the South Fork Owyhee watershed identified seismic as their number three hazard.

Counties and Tribes

Owyhee, Shoshone-Paiute Tribes

Cities

South Fork Owyhee Watershed

Subbasin Metrics

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>1,878</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2010)</td>
<td>0</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>517</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>1</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,238</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>10,600</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>0</td>
</tr>
<tr>
<td>In Watershed with 10 Miles of Fault</td>
<td>0 %</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>0%</td>
</tr>
<tr>
<td>Federal</td>
<td>13%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>87%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Accel. Amount</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>100%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 3

A majority of the proposed mitigation actions are not location specific and can be found in the the county actions.
Flood

South Fork Payette Watershed

Risk Ranks: 1.

Introduction

There are 537 total people who live within the South Fork Payette watershed, of which 32 are at risk of flooding. The watershed is almost entirely federally managed.

What is the risk?

According to county flood maps, there have been 2 reports of significant flooding within the watershed in recent history. The South Fork Payette contains two significant waterways: the Deadwood River and the South Fork of the Payette River. There is 1 high or significant hazard dam in the South Fork Payette. There are 4 communities participating in the NFIP with 36 policies contributing to $30,766 of premiums paid in exchange for $4,414,500 of coverage.

- 6 out of the 4 counties in the South Fork Payette watershed identified flood as their number one hazard.
- 1 out of the 4 counties in the South Fork Payette watershed identified flood as their number two hazard.
- 2 out of the 4 counties in the South Fork Payette watershed identified flood as their number three hazard.

LiDAR availability

LiDAR availability within the South Fork Payette watershed is as follows:
- Bull Trout Lake, Stanley (2009)
- Boise National Forest (2011)

Conclusion

Because of the low population at risk of damage resulting from a flood event, the South Fork Payette is considered to be a low risk watershed.

Counties and Tribes

Boise, Custer, Elmore, Valley

Cities

<table>
<thead>
<tr>
<th>Subbasin Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
</tr>
<tr>
<td>Population (2010)</td>
</tr>
<tr>
<td>Miles of Stream</td>
</tr>
<tr>
<td>Miles of Canal</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
</tr>
<tr>
<td>Dam of Concern</td>
</tr>
<tr>
<td>Pop. at Flood Risk</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subbasin Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner Type</td>
</tr>
<tr>
<td>Private</td>
</tr>
<tr>
<td>Federal</td>
</tr>
<tr>
<td>Reservation/RRA</td>
</tr>
<tr>
<td>State</td>
</tr>
<tr>
<td>Out of Idaho</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NFIP Statistics (2014)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFIP Policies</td>
</tr>
<tr>
<td>Total Coverage</td>
</tr>
<tr>
<td>Total Premiums</td>
</tr>
<tr>
<td>Paid Claims</td>
</tr>
<tr>
<td>Paid Claims</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: $4

A majority of the proposed mitigation actions are not location specific and can be found in the flood risk mitigation plans.
Wildfire

South Fork Payette

Risk Rank: L

Introduction

The South Fork Payette watershed is home to 557 people, most of which live in or near the Wildland Urban Interface. There are no areas of concentrated population within the watershed.

What is the risk?

Fires within the South Fork Payette watershed have the potential to severely disrupt life, property, and economic activity. There are 844 identified parcels located within the WUI of the South Fork Payette watershed. Since 2000, 90,753 acres have burned during 516 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the South Fork Payette watershed has a 26.4% low risk, 18.8% moderate-low risk, 31.5% moderate risk, 10.3% moderate-high risk and 3.6% high risk of wildfire to the communities within the watershed.

- 4 out of the 4 counties in the South Fork Payette watershed identified wildfire as their number one hazard.
- 4 out of the 4 counties in the South Fork Payette watershed identified wildfire as their number two hazard.
- 4 out of the 4 counties in the South Fork Payette watershed identified wildfire as their number three hazard.

Conclusion

The South Fork Payette watershed is at an overall low risk of wildfire because of the relatively low population and low population within the watershed’s WUI.

Counties and Tribes

Bolivar, Custer, Elmore, and Valley

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>820</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2010)</td>
<td>557</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,696</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>1,645</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>2,972</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>10,561</td>
</tr>
<tr>
<td>Structures in WUI</td>
<td>844</td>
</tr>
<tr>
<td>Historic Fire Events</td>
<td>206</td>
</tr>
<tr>
<td>Acres Burned (1995-)</td>
<td>90,753</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>2%</td>
</tr>
<tr>
<td>Federal</td>
<td>58%</td>
</tr>
<tr>
<td>Reservation/BIA</td>
<td>2%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of State</td>
<td>0%</td>
</tr>
</tbody>
</table>

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>26.4%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>3.8%</td>
</tr>
<tr>
<td>Moderate</td>
<td>61.5%</td>
</tr>
<tr>
<td>Moderate/High</td>
<td>5.8%</td>
</tr>
<tr>
<td>High</td>
<td>2.0%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 39

A majority of the proposed mitigation actions are not location-specific and can be found in the the county WUIs.
**Risk Rank: M**

**Introduction**

There are no areas of concentrated population within the South Fork Payette watershed boundaries.

**What is the risk?**

An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas. There is also less than 1 mile of canal that is receptive to seismic disturbances.

There are 4 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 4 counties within the South Fork Payette watershed identified seismic as their number one hazard.
- 0 out of the 4 counties within the South Fork Payette watershed identified seismic as their number two hazard.
- 0 out of the 4 counties within the South Fork Payette watershed identified seismic as their number three hazard.

**Counties and Tribes**

Boise, Custer, Elmore, Valley

**Cities**

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>820</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>557</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,696</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>1</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>2,979</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>10,551</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>4</td>
</tr>
<tr>
<td>% Watershed within 25 Miles of Fault</td>
<td>76%</td>
</tr>
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</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>2%</td>
</tr>
<tr>
<td>Federal</td>
<td>98%</td>
</tr>
<tr>
<td>Reservation/ IIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Ground Acceleration**

<table>
<thead>
<tr>
<th>Level</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>20%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>73%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Total seismic mitigation actions: 44**

A majority of the proposed mitigation actions are not location specific and can be found in the city plans.
Idaho Multi-Hazard Risk Portfolio

**Flood**

**South Fork Salmon**

**Risk Rank:** L

**Introduction**

There are 64 total people who live within the South Fork Salmon watershed, of which none are at risk of flooding. The watershed is 89% federally managed.

**What is the risk?**

Though there are no major towns, there are a number of private lodges and resorts within the watershed, some of which are inhabited year-round. There are 0 high or significant hazard dams in the South Fork Salmon watershed. There are 0 communities participating in the NFIP with 0 policies contributing to $0 of premiums paid in exchange for $0 of coverage.

- 0 out of the 3 counties in the South Fork Salmon watershed identified flood as their number one hazard.
- 1 out of the 3 counties in the South Fork Salmon watershed identified flood as their number two hazard.
- 1 out of the 3 counties in the South Fork Salmon watershed identified flood as their number three hazard.

**LIDAR data availability**

LIDAR availability within the South Fork Salmon watershed is as follows:
- South Fork Salmon and Snake River (2008)

**Conclusion**

Due to the lack of population, the South Fork Salmon is considered a low flood risk watershed.

**Counties and Tribes**

Idaho, Valley

**Cities**

**South Fork Salmon Watershed**

*Figure showing the South Fork Salmon watershed with various labels and icons.*

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,317</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>64</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>2,325</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>2,110</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>9,288</td>
</tr>
<tr>
<td>Dam of Concern</td>
<td>0</td>
</tr>
<tr>
<td>Pop. at Flood Risk</td>
<td>0</td>
</tr>
</tbody>
</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>99%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

**NFIP Statistics (2014)**

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th>50% Premiums</th>
<th>Paid Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>50</td>
<td>50</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**Total flood mitigation actions:** 20

A majority of the proposed mitigation actions are not location specific and can be found in the the county plans.

*Figure showing flood data and charts.*
Wildfire

South Fork Salmon

Risk Rank: L

Introduction

The South Fork Salmon watershed is home to 64 people and there is no Wildland Urban Interface. There are no areas of concentrated population within the South Fork Salmon watershed boundaries.

What is the risk?

Since 2000, 563,150 acres have burned during 283 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the South Fork Salmon watershed has 26.9% low risk, 2.4% low-moderate risk, 79.7% moderate risk, 6% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

- 2 of the 2 counties in the South Fork Salmon watershed identified wildfire as their number one hazard.
- 0 out of the 2 counties in the South Fork Salmon watershed identified wildfire as their number two hazard.
- 0 out of the 2 counties in the South Fork Salmon watershed identified wildfire as their number three hazard.

Conclusion

Though there is a history of large and frequent fires, the population of the watershed is very low. Given this, the overall risk of wildfire within the South Fork Salmon watershed is low.

Counties and Tribes

Idaho, Valley

Cities

<table>
<thead>
<tr>
<th>Subbasin Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
</tr>
<tr>
<td>Population (2010)</td>
</tr>
<tr>
<td>Miles of Stream</td>
</tr>
<tr>
<td>Miles of Canal</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
</tr>
<tr>
<td>Structures in WMU</td>
</tr>
<tr>
<td>Historic Fire Events</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subbasin Ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner Type</td>
</tr>
<tr>
<td>Private</td>
</tr>
<tr>
<td>Federal</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
</tr>
<tr>
<td>State</td>
</tr>
<tr>
<td>Out of State</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Watershed Fire Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Level</td>
</tr>
<tr>
<td>Low</td>
</tr>
<tr>
<td>Low/Moderate</td>
</tr>
<tr>
<td>Moderate</td>
</tr>
<tr>
<td>Moderate/High</td>
</tr>
<tr>
<td>High</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 6

A majority of the proposed mitigation actions are not location specific and can be found in the state's AHA, WMP.
**South Fork Salmon**

**Risk Rank:** L

**Introduction**
There are no areas of concentrated population within the South Fork Salmon watershed boundaries.

What is the risk?
An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 2 counties within the South Fork Salmon watershed identified seismic as their number one hazard.
- 0 out of the 2 counties within the South Fork Salmon watershed identified seismic as their number two hazard.
- 0 out of the 2 counties within the South Fork Salmon watershed identified seismic as their number three hazard.

**Counties and Tribes**
Idaho, Valley

**Cities**

---

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>3,317</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>64</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>2,325</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>0</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>9,288</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>0</td>
</tr>
<tr>
<td>In Watershed w/12 Miles of Fault</td>
<td>8.7%</td>
</tr>
</tbody>
</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>99%</td>
</tr>
<tr>
<td>Federal</td>
<td>0%</td>
</tr>
<tr>
<td>Reservation/USA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Ground Acceleration**

<table>
<thead>
<tr>
<th>Type</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>15%</td>
</tr>
<tr>
<td>Moderate</td>
<td>75%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>12%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Total seismic mitigation actions:** 16

A majority of the proposed mitigation actions are not location specific and can be found in the three county areas.
Flood

St. Joe

Risk Rank: H

Introduction
The St. Joe and St. Maries are the main river system within the St. Joe watershed. Areas of concentrated population within the watershed boundaries are Plummer and St. Maries. There are 8,738 total people who live within the watershed, of which 892 are at risk of flooding. Around 40% of the watershed is privately owned.

What is the risk?
According to county AVMAFs, the watershed has reported 9 floods in recent history, including ice jam flooding. There are 5 high or significant hazard dams in the St. Joe. There are 7 communities participating in the NFIP with 106 policies contributing to $81,227 of premiums paid in exchange for $23,963,400 of coverage.
• 0 out of the 5 counties in the St. Joe watershed identified flood as their number one hazard.
• 0 out of the 5 counties in the St. Joe watershed identified flood as their number two hazard.
• 2 out of the 5 counties in the St. Joe watershed identified flood as their number three hazard.

LiDAR data availability
LiDAR availability within the St. Joe watershed is as follows:
- Emerald Creek (2004)
- Coeur d’Alene Reservation (2005)

Conclusion
The population within the St. Joe is moderate, though many of the communities are protected by levees. Because of these factors the watershed is considered high risk.

Counties and Tribes
Benewah, Clearwater, Coeur d’Alene Tribe, Kootenai, Latah, Shoshone
Cities
Plummer, Plummer, St. Maries

St. Joe Watershed

Subbasin Metrics

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.645</td>
<td>8,738</td>
<td>6,674</td>
<td>18</td>
<td>2,116</td>
<td>7,687</td>
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</table>

Popp. at risk: 892

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>60%</td>
</tr>
<tr>
<td>Federal</td>
<td>52%</td>
</tr>
<tr>
<td>Reservation/RiA</td>
<td>1%</td>
</tr>
<tr>
<td>State</td>
<td>7%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>1%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th>Total Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>106</td>
<td>$21,963,400</td>
<td>$81,227</td>
<td>$682,440</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 283

A majority of the proposed mitigation actions are not location specific and can be found in the the county AVMAFs.
Idaho Multi-Hazard Risk Portfolio

Wildfire

**St. Joe**

<table>
<thead>
<tr>
<th>Risk Rank: H</th>
</tr>
</thead>
</table>

**Introduction**

The St. Joe watershed is home to 8,738 people, most of which live in the Wildland Urban Interface. Areas of concentrated population within the St. Joe watershed boundaries are Paradise, Plummer, and St. Maries.

**What is the risk?**

Fires within the St. Joe watershed have the potential to severely disrupt life, property, and economic activity. There are 4,108 structures located within the WUI of the St. Joe watershed. Since 2000, 2,518 acres have burned in 37 wildfire events. Based on data from the Malo Forest Action Plan (2010), the St. Joe watershed has 0% low risk, 0.1% low-moderate risk, 74.1% moderate risk, 24.8% moderate-high risk, and 0% high risk of wildfire to the communities within the watershed.

- 4 out of the 5 counties in the St. Joe watershed identified wildfire as their number one hazard.
- 1 out of the 5 counties in the St. Joe watershed identified wildfire as their number two hazard.
- 3 out of the 5 counties in the St. Joe watershed identified wildfire as their number three hazard.

**Conclusion**

Communities within the St. Joe watershed are at a high risk of damage to life and property from wildfire events. All five counties have identified wildfire to be a significant hazard and have enacted mitigation actions around the areas of concentrated population in efforts to lessen the risk of damage resulting from future wildfires.

**Counties and Tribes**

Benewah, Clearwater, Coeur d’Alene Tribe, Kootenai, Latah, Shoshone

**Cities**

Paradise, Plummer, St. Maries

**Subbasin Metrics**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1,845</td>
<td>8,738</td>
<td>4,674</td>
<td>7,118</td>
<td>2,152</td>
<td>7,687</td>
<td>4,108</td>
<td>176</td>
<td>2,518</td>
</tr>
</tbody>
</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>40%</td>
</tr>
<tr>
<td>Federal</td>
<td>52%</td>
</tr>
<tr>
<td>Reservation/BIA</td>
<td>1%</td>
</tr>
<tr>
<td>State</td>
<td>7%</td>
</tr>
<tr>
<td>Out of State</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Watershed Fire Risk**

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>0.1%</td>
</tr>
<tr>
<td>Moderate</td>
<td>74.1%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>25.8%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Total wildfire mitigation actions:**

162

A majority of the proposed mitigation actions are not location-specific and can be found in the Watershed Mitigation Action Plan.

231 | Page
South Fork Salmon

Risk Rank: L

Introduction
There are no areas of concentrated population within the South Fork Salmon watershed boundaries.

What is the risk?
An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas.

There are 6 essential facilities within 25 miles of a quaternary fault.

• 0 out of the 2 counties within the South Fork Salmon watershed identified seismic as their number one hazard.
• 0 out of the 2 counties within the South Fork Salmon watershed identified seismic as their number two hazard.
• 0 out of the 2 counties within the South Fork Salmon watershed identified seismic as their number three hazard.

Counties and Tribes
Idaho, Valley

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1.317</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>64</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>2.325</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>1,120</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>9,288</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>0</td>
</tr>
<tr>
<td>In Watershed with 25 miles of Fault</td>
<td>47%</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>1%</td>
</tr>
<tr>
<td>Federal</td>
<td>99%</td>
</tr>
<tr>
<td>Reservation/ BLM</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Acceleration</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>15%</td>
</tr>
<tr>
<td>Moderate</td>
<td>75%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>12%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 16

A majority of the proposed mitigation actions are not location specific and can be found in the the county areas.
Idaho Multi-Hazard Risk Portfolio

Flood

Teton

Risk Rank: M

Introduction
Areas of concentrated population within the Teton watershed boundaries are Driggs, Newdale, Roadburg, St. Anthony, Sugar City, Teton, Teton Valley, and Victor. There are 27,668 total people who live within the watershed, of which 3,704 are at risk of flooding. Over half of the watershed is privately owned, with 26% lying outside of Idaho.

What is the risk?
Flood events could be due to several causes including rain or snow events. In 1897, the Teton Dam broke, resulting in a peak flow of 1.4 million cfs (41,250 m³/s) shown by the logarithmic scale of the graph below. This breach caused significant damage to life and property downstream. Additionally, there have been 36 reports from the watershed of significant flooding in recent history according to the county AHMPs not including annual repetitive losses. There are 0 levees and 0 high or significant hazard dams in the Teton watershed. There are 8 communities participating in the NFIP with 118 policies contributing to $92,695 of premiums paid in exchange for $35,697,100 of coverage.

- 2 out of the 4 counties in the Teton watershed identified flood as their number one hazard.
- 1 out of the 4 counties in the Teton watershed identified flood as their number two hazard.
- 1 out of the 4 counties in the Teton watershed identified flood as their number three hazard.

LiDAR data availability
LiDAR availability within the Teton watershed is as follows:
- Madison County (2009)
- Henry’s Fork and Teton (2011)

Conclusion
There is a moderate amount of people and private property within the Teton, though the water systems within the watershed do not pose a significant threat. Due to these factors the Teton watershed is considered to be a moderate risk watershed.

Counties and Tribes
- Bonneville, Fremont, Madison, Teton
- Cities
- Driggs, Newdale, Roadburg, St. Anthony, Sugar City, Teton, Teton Valley, Victor

NFIP Statistics (2014)
- NFIP Policies: 118
- Total Coverage: $35,697,100
- Total Premiums: $92,695
- # Claims: 0
- Paid Claims: $23,150

Total flood mitigation actions: 52
A majority of the proposed mitigation actions are not location specific and can be found in the county AHMPs.

Legend
- Current LiDAR
- Proposed LiDAR
- Levees
- Interstate
- Canals
- Slough Highway
- Reservations
- Lakes
- U.S. Highway
- Bridges
- Counties
- USGS

County AHMPs: Idaho, Montana, Wyoming

Teton Watershed Map

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Wildfire

Risk Rank: M

Introduction

The Teton watershed is home to 27,668 people, a small portion of which live in the Wildland Urban Interface. Areas of concentrated population within the Teton watershed boundaries are Driggs, Newdale, Redburg, St. Anthony, Sugar City, Teton, Tetonia and Victor.

What is the risk?

Fires within the Teton watershed have the potential to severely disrupt life, property and economic activity. There are 83 structures located within the WUI of the Teton watershed. Since 2000, 2,087 acres have burned during 35 individual wildfire events. Based on data from the Idaho Forest Action Plan (2019), the Teton watershed has 39.7% low risk, 36.3% low-moderate risk, 21.3% moderate risk, 2.4% moderate-high risk and 0.1% high risk of wildfire to the communities within the watershed.

- 80 out of the 4 counties in the Teton watershed identified wildfire as their number one hazard.
- 40 out of the 4 counties in the Teton watershed identified wildfire as their number two hazard.
- 1 out of the 4 counties in the Teton watershed identified wildfire as their number three hazard.

Conclusion

Recent wildfire events within the Teton watershed have been small and few. The population within the WUI is very small and overall the communities within the watershed are at a moderate risk to damage from wildfire.

Counties and Tribes

Bonneville, Fremont, Madison, Teton

Cities

Driggs, Newdale, Redburg, St. Anthony, Sugar City, Teton, Tetonia, Victor

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>39.7%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>35.3%</td>
</tr>
<tr>
<td>Moderate</td>
<td>21.3%</td>
</tr>
<tr>
<td>Moderate/High</td>
<td>2.0%</td>
</tr>
<tr>
<td>High</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 46

A majority of the proposed mitigation actions are location specific and can be found in the the county, WICMA.


**Teton**

**Risk Rank:** H

**Introduction**

Areas of concentrated population within the Teton watershed boundaries are Driggs, Newdale, Rexburg, St. Anthony, Sugar City, Teton, Tetonias and Victor.

**What is the risk?**

An earthquake within the watershed has a high potential to cause damage to the life and property of those within these areas. There are also 277 miles of canals that are receptive to seismic disturbances.

There are 32 essential facilities within 25 miles of a quaternary fault or historic quake area.

- 0 out of the 4 counties within the Teton watershed identified seismic as their number one hazard.
- 0 out of the 4 counties within the Teton watershed identified seismic as their number two hazard.
- 1 out of the 4 counties within the Teton watershed identified seismic as their number three hazard.

**Counties and Tribes**

Bonneville, Fremont, Madison, Teton

**Cities**

Driggs, Newdale, Rexburg, St. Anthony, Sugar City, Teton, Tetonias, Victor

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>1,090</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2010)</td>
<td>27,628</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,625</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>277</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,813</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>11,637</td>
</tr>
<tr>
<td>Ext. Facilities Near Fault</td>
<td>32</td>
</tr>
<tr>
<td>In Watershed with 25 Miles of Fault</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>55%</td>
</tr>
<tr>
<td>Federal</td>
<td>17%</td>
</tr>
<tr>
<td>Reservation/SBA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>3%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>26%</td>
</tr>
</tbody>
</table>

**Ground Acceleration**

<table>
<thead>
<tr>
<th>Accel. Amount</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>52%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Total seismic mitigation actions:** 42

A majority of the proposed mitigation actions are not location specific and can be found in the the county annexes.
**Upper Coeur d'Alene**

**Risk Rank:** 1

**Introduction:**
The Upper Coeur d'Alene watershed is the headwater of the Coeur d'Alene River. There are 481 total people who live within the watershed, of which 128 are at risk of flooding. The vast majority of the watershed is federally managed.

**What is the risk?**
There is great variability of stream flow from the Coeur d'Alene River. Historically, this has resulted in 17 significant flood events according to county AHMPs. There are 6 high or significant hazard dams in the Upper Coeur d'Alene watershed. There are 3 communities participating in the NFIP with 48 policies contributing to $28,956 of premiums paid in exchange for $6,045,400 of coverage.

- 40 out of the 8 counties in the Upper Coeur d'Alene watershed identified flood as their number one hazard.
- 60 out of the 3 counties in the Upper Coeur d'Alene watershed identified flood as their number two hazard.
- 2 out of the 3 counties in the Upper Coeur d'Alene watershed identified flood as their number three hazard.

**LIDAR data availability**
LIDAR availability within the Upper Coeur d'Alene watershed is as follows:
- Coeur d'Alene River (2002)

**Conclusion**
Because of the low population and small amount of private ownership, the Upper Coeur d'Alene is considered to be a low flood risk watershed.

**Counties and Tribes**
Benewah, Kootenai, Shoshone

**Cities**

---

**Flood**

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>248</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>481</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>2,046</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>1</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>2,162</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>6,795</td>
</tr>
<tr>
<td>Dams of Concern</td>
<td>0</td>
</tr>
<tr>
<td>Pop at Flood Risk</td>
<td>128</td>
</tr>
</tbody>
</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>95%</td>
</tr>
<tr>
<td>Reservation/BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>1%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

**NFIP Statistics (2014)**

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th>Floyd Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>$6,045,400</td>
<td>$28,956</td>
<td>$644,940</td>
</tr>
</tbody>
</table>

**Total flood mitigation actions:** 156

A majority of the proposed mitigation actions are not location specific and can be found in the County AHMP.
Idaho Multi-Hazard Risk Portfolio

Wildfire

Upper Coeur d'Alene

Risk Rank: L

Introduction
The Upper Coeur d'Alene watershed is home to 481 people, none of which live in the Wildland Urban Interface. There are no areas of concentrated population within the Upper Coeur d'Alene watershed boundaries. The watershed is almost entirely federally managed.

What is the risk?
Fires within the Upper Coeur d'Alene watershed have the potential to severely disrupt life, property and economic activity. Since 2000, 4,419 acres have burned in 201 wildfire events. Based on data from the Idaho Forest Action Plan (2016), the Upper Coeur d'Alene watershed has 9% low risk, 8% moderate risk, 3% moderate-high risk, 1% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

- 1 out of the 3 counties in the Upper Coeur d'Alene watershed identified wildfire as their number one hazard.
- 1 out of the 3 counties in the Upper Coeur d'Alene watershed identified wildfire as their number two hazard.
- 0 out of the 3 counties in the Upper Coeur d'Alene watershed identified wildfire as their number three hazard.

Conclusion
The low population of the Upper Coeur d'Alene watershed is at an overall low risk to damaging wildfire events.

Counties and Tribes
Bonner, Kootenai, Shoshone

Cities

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>% of Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>98.7%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>1.3%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 66

A majority of the proposed mitigation actions are not location-specific and can be found in the the county AHPMA.
Upper Coeur d’Alene

**Risk Rank:** L

**Introduction**

There are no areas of concentrated population within the Upper Coeur d’Alene watershed boundaries.

**What is the risk?**

An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas. There is also less than 1 mile of canal that is receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 3 counties within the Upper Coeur d’Alene watershed identified seismic as their number one hazard.
- 0 out of the 3 counties within the Upper Coeur d’Alene watershed identified seismic as their number two hazard.
- 0 out of the 3 counties within the Upper Coeur d’Alene watershed identified seismic as their number three hazard.

**Counties and Tribes**

Bonner, Kootenai, Shoshone

**Cities**

A majority of the proposed mitigation actions are location specific and can be found in the the county inventories.

**Total seismic mitigation actions:** 31

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>800</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (2010)</td>
<td>481</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>2,048</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>1</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>2,152</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>6,795</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>0</td>
</tr>
<tr>
<td>% Watered with 25 Miles of Fault</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>4%</td>
</tr>
<tr>
<td>Federal</td>
<td>95%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>1%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Ground Acceleration**

<table>
<thead>
<tr>
<th>Type</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>100%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>
Upper Henry’s

Risk Rank: M

Introduction
Areas of concentrated population within the watershed boundaries are Ashton, Island Park and Warm River. There are 2,845 total people who live within the watershed, of which 91 are at risk of flooding. The majority of the Upper Henry's watershed is federally managed.

What is the risk?
Major flood hazards come from the 7 high or significant hazard dams in the Upper Henry's watershed, including the Henry Lake Dam and the Island Park Reservoir. According to the county AHMPs, there have been 2 reports of significant flooding within the watershed in recent history. There are 2 communities participating in the NFIP with 9 policies contributing to $13,122 of premiums paid in exchange for $2,198,706 of coverage.

• 0 out of the 3 counties in the Upper Henry’s watershed identified flood as their number one hazard.
• 0 out of the 3 counties in the Upper Henry’s watershed identified flood as their number two hazard.
• 2 out of the 3 counties in the Upper Henry’s watershed identified flood as their number three hazard.

LIDAR data availability
LIDAR availability within the Upper Henry’s watershed is as follows:
- Henry’s Fork and Tetons (2011)

Conclusion
Though the population is relatively low and the watershed is largely federally managed, the hazardous dams within the watershed place the Upper Henry's watershed in the moderate flood risk category.

Counties and Tribes
- Clark, Fremont
- Cities
  - Ashton, Island Park, Warm River

Total flood mitigation actions: 20
A majority of the proposed mitigation actions are location specific, depicted in the map below.
Upper Henry’s

Risk Rank: M

Introduction
The Upper Henrys watershed is home to 2,845 people, most of which live in the Wildland Urban Interface. Areas of concentrated population within the Upper Henrys watershed boundaries are Ashton, Island Park and Warm River.

What is the risk?
Fires within the Upper Henrys watershed have the potential to severely disrupt life, property and economic activity. There are 4,111 structures located within the WUI of the Upper Henry’s watershed. Since 2000, 1,850 acres have burned during 52 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Upper Henrys watershed has 17.6% low risk, 11.1% low-moderate risk, 47% moderate risk, 4.4% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

• 1 out of the 2 counties in the Upper Henrys watershed identified wildfire as their number one hazard.
• 1 out of the 2 counties in the Upper Henrys watershed identified wildfire as their number two hazard.

Conclusion
In the Upper Henrys watershed, the communities are at an overall moderate risk to wildfire. Based on the small historic fires, high population within the WUI and overall identified risk of wildfire to communities there may be potentially hazardous fires in the future.

Counties and Tribes
Clark, Fremont
Cities
Ashton, Island Park, Warm River

Total wildfire mitigation actions: 25

A majority of the proposed mitigation actions are location specific and can be found in the the county MHPs.
Upper Henry's

Risk Rank: H

Introduction
Areas of concentrated population within the Upper Henry's watershed boundaries are Ashton, Island Park and Warm River.

What is the risk?
An earthquake within the watershed has a high potential to cause damage to the life and property of those within these areas. There are also 84 miles of canals that are receptive to seismic disturbance.

There are 6 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 2 counties within the Upper Henry's watershed identified seismic as their number one hazard.
- 0 out of the 2 counties within the Upper Henry's watershed identified seismic as their number two hazard.
- 0 out of the 2 counties within the Upper Henry's watershed identified seismic as their number three hazard.

Counties and Tribes
Clark, Fremont

Cities
Ashton, Island Park, Warm River

Upper Henry's Watershed

Seismic

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,111</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>2,845</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,769</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>84</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>5,143</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>10,602</td>
</tr>
<tr>
<td>Facilities Near Fault</td>
<td>1</td>
</tr>
<tr>
<td>In watershed with 25 miles of fault</td>
<td>93%</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>12%</td>
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<tr>
<td>Federal</td>
<td>78%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>7%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>2%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Type</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>52%</td>
</tr>
<tr>
<td>High</td>
<td>41%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 12

A majority of the proposed mitigation actions are not location specific and can be found in the the county areas.
Upper Middle Fork Salmon Watershed

Risk Rank: 1

Introduction
There are 5 total people who live within the watershed, of which none are at risk of flooding. The watershed is 99% federally managed.

What is the risk?
There are 1 high or significant hazard zones in the Upper Middle Fork Salmon watershed. There are 0 communities participating in the NFIP with 0 policies contributing to $0 of premiums paid in exchange for $0 of coverage.

- 0 out of the 6 counties in the Upper Middle Fork Salmon watershed identified flood as their number one hazard.
- 0 out of the 4 counties in the Upper Middle Fork Salmon watershed identified flood as their number two hazard.
- 0 out of the 4 counties in the Upper Middle Fork Salmon watershed identified flood as their number three hazard.

LIDAR data availability
LIDAR availability within the Upper Middle Fork Salmon:
- Bull Trout Lake, Stanley (2009)
- Stanley (2011)

Conclusion
Because of the lack of population and flood hazards, the Upper Middle Fork Salmon is considered a low flood risk watershed.

Counties and Tribes
Boise, Custer, Lemhi, Valley

Cities
Wildfire

Upper Middle Fork Salmon

Risk Rank: L

Introduction
The Upper Middle Fork Salmon watershed is home to 5 people and there is no Wildland Urban Interface. There are no concentrated areas of population within the watershed.

What is the risk?
Since 2000, 448,353 acres have burned during 179 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Upper Middle Fork Salmon watershed has 98.7% low risk, 0.1% low-moderate risk, 11.3% moderate risk, 0% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

4 out of the 4 counties in the Upper Middle Fork Salmon watershed identified wildfire as their number one hazard.

4 out of the 4 counties in the Upper Middle Fork Salmon watershed identified wildfire as their number two hazard.

4 out of the 4 counties in the Upper Middle Fork Salmon watershed identified wildfire as their number three hazard.

Conclusion
The Upper Middle Fork Salmon watershed is prone to large and regular fire events, though the population at risk of these events is very small. Overall, the risk faced by the population within the watershed is low.

Counties and Tribes
Boise, Custer, Lemhi, Valley

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,494</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>5</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>3,182</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>2</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,612</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>10,500</td>
</tr>
<tr>
<td>Structures in WM</td>
<td>0</td>
</tr>
<tr>
<td>Historic Fire Events</td>
<td>179</td>
</tr>
<tr>
<td>Acres Burned (1995)</td>
<td>448,353</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>0%</td>
</tr>
<tr>
<td>Federal</td>
<td>99%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>38.7%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>61.3%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0.1%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 41
Upper Middle Fork Salmon

Risk Rank: L

Introduction
There are no areas of concentrated population within the Upper Middle Fork Salmon watershed boundaries.

What is the risk?
An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas. There is also 1 mile of canal that is receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

• 0 out of the 4 counties within the Upper Middle Fork Salmon watershed identified seismic as their number one hazard.
• 0 out of the 4 counties within the Upper Middle Fork Salmon watershed identified seismic as their number two hazard.
• 0 out of the 4 counties within the Upper Middle Fork Salmon watershed identified seismic as their number three hazard.

Counties and Tribes
Boise, Custer, Lemhi, Valley

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,494</td>
</tr>
<tr>
<td>Population 2010</td>
<td>5</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>3,183</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>1</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>-4,012</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>10,305</td>
</tr>
<tr>
<td>Ext. Facilities Near Fault</td>
<td>0</td>
</tr>
<tr>
<td>% Within 25 miles of Fault</td>
<td>50%</td>
</tr>
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</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>0%</td>
</tr>
<tr>
<td>Federal</td>
<td>95%</td>
</tr>
<tr>
<td>Reservation/BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Acceleration Level</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>100%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 56

A majority of the proposed mitigation actions are not location specific and can be found in the the county action.
Upper North Fork Clearwater

**Risk Rating:** L

**Introduction:**
There are 0 total people who live within the Upper North Fork Clearwater watershed. The watershed is 95% federally managed.

**What is the risk?**
Development in the area is primarily used for pasture or hayland. Bankfull discharge of the Clearwater River is 16,303 cfs. According to county AWWAs, there have been 0 reports of significant flooding within the watershed in recent history. There are 0 high or significant hazard dams in the Upper North Fork Clearwater watershed. There are no communities participating in the NFIP with 0 policies contributing to $0 of premiums paid in exchange for $0 of coverage.

- 0 out of the 3 counties in the Upper North Fork Clearwater watershed identified flood as their number one hazard.
- 0 out of the 3 counties in the Upper North Fork Clearwater watershed identified flood as their number two hazard.
- 0 out of the 3 counties in the Upper North Fork Clearwater watershed identified flood as their number three hazard.

**LIDAR data availability**
LIDAR availability within the Upper North Fork Clearwater watershed is as follows:
- Morgan Creek (2009)

**Conclusion**
The lack of residents and private property in the Upper North Fork Clearwater makes it a low flood risk watershed.

**Counties and Tribes**
- Clearwater, Idaho, Shoshone
- Cities
  - Shoshone
Wildfire

Upper North Fork Clearwater

Risk Rank: L

Introduction
The Upper North Fork Clearwater watershed is home to 0 people.

What is the risk?
Since 2000, 26,379 acres have burned during 139 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Upper North Fork Clearwater watershed has 52% low risk, 0% low-moderate risk, 48% moderate risk, 0% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

2 out of the 3 counties in the Upper North Fork Clearwater watershed identified wildfire as their number one hazard.
1 out of the 3 counties in the Upper North Fork Clearwater watershed identified wildfire as their number two hazard.
0 out of the 3 counties in the Upper North Fork Clearwater watershed identified wildfire as their number three hazard.

Conclusion
There are no permanent inhabitants residing within the Upper North Fork Clearwater watershed at risk of wildfire. Therefore, the overall risk of wildfire is low.

Counties and Tribes
Clearwater, Idaho, Shoshone

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1,300</td>
<td>0</td>
<td>3,080</td>
<td>0</td>
<td>673</td>
<td>7,851</td>
<td>No WUI</td>
<td>339</td>
<td>26,379</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>4%</td>
</tr>
<tr>
<td>Federal</td>
<td>95%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>1%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>32%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>68%</td>
</tr>
<tr>
<td>Moderate/High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total wildfire mitigation actions: 64

A majority of the proposed mitigation actions are location specific and can be found in the the county MRR.

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Upper North Fork Clearwater

Risk Rank: L

Introduction
There are no areas of concentrated population within the Upper North Fork Clearwater watershed boundaries.

What is the risk?
An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 3 counties within the Upper North Fork Clearwater watershed identified seismic as their number one hazard.
- 0 out of the 3 counties within the Upper North Fork Clearwater watershed identified seismic as their number two hazard.
- 0 out of the 3 counties within the Upper North Fork Clearwater watershed identified seismic as their number three hazard.

Counties and Tribes
Clearwater, Idaho, Shoshone

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Subbasin Metrics</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,300</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>0</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>3,080</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>1,673</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>7,851</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>0</td>
</tr>
<tr>
<td>% Watershed w/ 25 Miles of Fault</td>
<td>0%</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>4%</td>
</tr>
<tr>
<td>Federal</td>
<td>95%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>1%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Category</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>85%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>11%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 27

A majority of the proposed mitigation actions are not location specific and can be found in the the county annexes.
Idaho Multi-Hazard Risk Portfolio

Upper Owyhee Watershed

Risk Rank: M

Introduction
There are 381 total people who live within the Upper Owyhee watershed, of which 20 are at risk of flooding. Over half of the watershed is federally managed.

What is the risk?
The Owyhee River is the main water system in the watershed, though it poses little threat to life and property. There are 4 high or significant hazard dams in the Upper Owyhee watershed. There are 6 communities participating in the NFIP with 0 policies contributing to $0 of premiums paid in exchange for $0 of coverage.

• 6 of the 1 county in the Upper Owyhee watershed identified flood as their number one hazard.
• 6 of the 1 county in the Upper Owyhee watershed identified flood as their number two hazard.
• 6 of the 1 county in the Upper Owyhee watershed identified flood as their number three hazard

LIDAR data availability
LIDAR availability within the Upper Owyhee watershed is as follows:
- Smith Creek (2007)

Conclusion
The low population in the Upper Owyhee watershed is at a moderate risk of flooding because of the hazardous dams upstream.

Counties and Tribes
Owyhee; Duck Valley

Cities

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>5%</td>
</tr>
<tr>
<td>Federal</td>
<td>55%</td>
</tr>
<tr>
<td>Reservation/RIA</td>
<td>9%</td>
</tr>
<tr>
<td>State</td>
<td>5%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>20%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th>Active Claims</th>
<th>Paid Claims</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>50</td>
<td>50</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 28

A majority of the proposed mitigation actions are not location specific and can be found in the county AHPs.
The Upper Owyhee watershed is home to 381 people and there is no Wildland Urban Interface. There are no areas of concentrated population within the Upper Owyhee watershed boundaries.

What is the risk?
Since 2000, 81,231 acres have burned during 68 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Upper Owyhee watershed has 85.3% low risk, 7.9% low-moderate risk, 0.7% moderate risk, 0.0% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

1. Out of the 1 county in the Upper Owyhee watershed identified wildfire as their number one hazard.
2. Out of the 1 county in the Upper Owyhee watershed identified wildfire as their number two hazard.
3. Out of the 1 county in the Upper Owyhee watershed identified wildfire as their number three hazard.

Conclusion
The risk to communities within the Middle Owyhee watershed is low. The recent wildfires within the watershed have been large, though the population at risk is low.

Counties and Tribes
Owyhee, Duck Valley

Cities
Upper Owyhee

Risk Rank: "L"

Introduction

There are no areas of concentrated population within the Upper Owyhee watershed boundaries.

What is the risk?

An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas. There are also 53 miles of canals that are receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 1 county within the Upper Owyhee watershed identified seismic as their number one hazard.
- 0 out of the 1 county within the Upper Owyhee watershed identified seismic as their number two hazard.
- 0 out of the 1 county within the Upper Owyhee watershed identified seismic as their number three hazard.

Counties and Tribes

Owyhee; Duck Valley

Cities

Total seismic mitigation actions: 3

A majority of the proposed mitigation actions are not location specific and can be found in the the county areas.
Idaho Multi-Hazard Risk Portfolio

Upper Salmon

Risk Rank: M

Introduction
Areas of concentrated population within the watershed boundaries are Challis, Clayton and Stanley. There are 2,856 total people who live within the watershed, of which 102 are at risk of flooding. The watershed is 50% federally managed.

What is the risk?
Flood hazards can include seasonal high stream flows. At the USGS gauge near the City of Challis, this discharge is 7,660 cfs. According to county AHRP's, there have been reports of 12 significant riverine and flash flood events within the watershed in recent history. There are 5 high or significant hazard dams in the Upper Salmon watershed. With 36 policies contributing to $19,150 of premiums paid in exchange for $6,471,200 of coverage:
- 2 out of the 6 counties in the Upper Salmon watershed identified flood as their number one hazard.
- 6 out of the 6 counties in the Upper Salmon watershed identified flood as their number two hazard.
- 2 out of the 6 counties in the Upper Salmon watershed identified flood as their number three hazard.

LIDAR data availability
LIDAR availability within the Upper Salmon watershed is as follows:
- Sawtooth North - Red Fish Lake (2009)
- Sawtooth South - Pettit Lake (2001)
- Small portion of Payette River (2009)
- Challis Valley (2011)
- East Fork Salmon River (2011)
- Stanley (2011)

Conclusion
Though the majority of the watershed is not privately owned, the five hazardous dams increase the flood risk to the people and property within the watershed to moderate.

Counties and Tribes
- Boise, Blaine, Camas, Custer, Elmore, Lemhi

Cities
- Challis, Clayton, Stanley

Flood

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>2,427</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>2,856</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>5,654</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>146</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,636</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>13,149</td>
</tr>
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</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>5%</td>
</tr>
<tr>
<td>Federal</td>
<td>94%</td>
</tr>
<tr>
<td>Reservation/RRA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>2%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFIP Policies</td>
<td>30</td>
</tr>
<tr>
<td>Total Coverage</td>
<td>$6,471,200</td>
</tr>
<tr>
<td>Total Premiums</td>
<td>$19,150</td>
</tr>
<tr>
<td># Claims</td>
<td>6</td>
</tr>
<tr>
<td>Paid Claims</td>
<td>30</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 111

A majority of the proposed mitigation actions are not location specific and can be found in the the county AHRPs.
### Upper Salmon

**Risk Rank:** M

**Introduction**

The Upper Salmon watershed is home to 2,856 people and is a Wildland Urban Interface. Areas of concentrated population within the Upper Salmon watershed boundaries are Challis, Clayton, and Stanley.

**What is the risk?**

Fires within the Upper Salmon watershed have the potential to severely disrupt life, property, and economic activity. Since 2000, 179,015 acres have burned during 176 individual wildfire events.

Based on data from the Idaho Forest Action Plan (2015), the Upper Salmon watershed has 4.1% low risk, 5.3% low-moderate risk, 66.8% moderate risk, 3.7% moderate-high risk, and 0% high risk of wildfire to the communities within the watershed.

- 6 out of 6 counties in the Upper Salmon watershed identified wildfire as their number one hazard.
- 0 out of the 6 counties in the Upper Salmon watershed identified wildfire as their number two hazard.
- 0 out of the 6 counties in the Upper Salmon watershed identified wildfire as their number three hazard.

**Conclusion**

The Upper Salmon watershed is prone to somewhat frequent wildfire events, though the population at risk is fairly low and the watershed is over 98% federally managed. The overall risk is low.

**Counties and Tribes**

- Blaine, Boise, Camas, Custer, Elmore, Lemhi

**Cities**

- Challis, Clayton, Stanley

---

### Watershed Fire Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>% of Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>13.7%</td>
</tr>
<tr>
<td>Low/Moderate</td>
<td>15.9%</td>
</tr>
<tr>
<td>Moderate</td>
<td>66.8%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>3.7%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Total wildfire mitigation actions:** 134

A majority of the proposed mitigation actions are not location-specific and can be found in the the county/WMA.
Upper Salmon

Risk Rank: H

Introduction
Areas of concentrated population within the Upper Salmon watershed boundaries are Challis, Clayton and Stanley. An earthquake within the watershed has a high potential to cause damage to the life and property of those within these areas. There are also 58 miles of canals that are receptive to seismic disturbances.

There are 10 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 6 counties within the Upper Salmon watershed identified seismic as their number one hazard.
- 0 out of the 6 counties within the Upper Salmon watershed identified seismic as their number two hazard.
- 0 out of the 6 counties within the Upper Salmon watershed identified seismic as their number three hazard.

Counties and Tribes:
- Blaine, Boise, Camas, Custer, Elmore, Lemhi

Cities:
- Challis, Clayton, Stanley

<table>
<thead>
<tr>
<th>Subbasin Metrics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>2,427</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>2,856</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>5,524</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>5</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,635</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>11,735</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>30</td>
</tr>
<tr>
<td>In Watershed with 25 Miles of Fault</td>
<td>97%</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Subbasin Ownership</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>5%</td>
</tr>
<tr>
<td>Federal</td>
<td>94%</td>
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<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>2%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Accl. Amount % Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
</tr>
<tr>
<td>Low-Moderate</td>
</tr>
<tr>
<td>Moderate</td>
</tr>
<tr>
<td>Moderate-High</td>
</tr>
<tr>
<td>High</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 70

A majority of the proposed mitigation actions are not location specific and can be found in the the county areas.
Idaho Multi-Hazard Risk Portfolio

Upper Selway

Risk Ranks: 1

Introduction
There are 0 total people who live within the Upper Selway watershed. The watershed is entirely federally managed.

What is the risk?
There are no people in danger of flood events in the Upper Selway watershed. According to county AHMPs, there have been 0 reports of significant flooding within the watershed in recent history. There are 0 high or significant hazard dams in the Upper Selway. There are no communities participating in the NFIP with 0 policies contributing to 0% of premium paid in exchange for $0 of coverage. 0 out of the 2 counties in the Upper Selway watershed identified flood as their number one hazard. 0 out of the 2 counties in the Upper Selway watershed identified flood as their number two hazard.

LiDAR data availability
No LiDAR data is available.

Conclusion
Because of the lack of permanent residents, the Upper Selway is considered to be a low flood risk watershed.

Counties and Tribes
Idaho, Lemhi

Cities

Total flood mitigation actions: 0

A majority of the proposed mitigation actions are not location specific and can be found in the the county AHMPs.

USGS 12350990 SELWAY RIVER ABV MOOSE CREEK NR MOOSE CREEK R. S.

Current LiDAR
Watershed
Dams
Proposed LiDAR
Levees
Interstate
Cities
Canals
State Highway
Reservations
Lakes
U.S. Highway
Counties
Rivers
Bridges

Montana
Lemhi
Idaho

NFIP Policies
Total Coverage: 0
Total Premiums: 0
F Claims: 0
Paid Claims: 0
Wildfire

Idaho Multi-Hazard Risk Portfolio

Upper Selway Watershed

Risk Rank: L

Introduction
The Upper Selway watershed is home to 0 people and is entirely federally managed.

What is the risk?
Since 2000, 354,312 acres have burned during 250 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Upper Selway watershed has 51.7% low risk, 0% low-moderate risk, 48.3% moderate risk, 0% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

* 2 out of the 2 counties in the Upper Selway watershed identified wildfire as their number one hazard.
* 0 out of the 2 counties in the Upper Selway watershed identified wildfire as their number two hazard.
* 0 out of the 2 counties in the Upper Selway watershed identified wildfire as their number three hazard.

Conclusion
The Upper Selway watershed experiences regular fire activity, though with no permanent inhabitants the risk to life and property is low.

Counties and Tribes
Idaho, Lemhi

Cities

Subbasin Metrics

- Area (sq. miles): 1,030
- Population (2010): 0
- Miles of Stream: 2,111
- Miles of Canal: 0
- Min. Elevation (ft): 2,188
- Max. Elevation (ft): 9,301
- Structures in Wildfire Risk Zone: No WUI
- Historic Fire Events: 250
- Acres Burned (1995-): 354,312

Subbasin Ownership

- Owner Type: % Subbasin Area
  - Private: 0%
  - Federal: 100%
  - Reservation: 0%
  - State: 0%
  - Out of State: 0%

Watershed Fire Risk

- Risk Level: % Watershed Area
  - Low: 51.7%
  - Low Moderate: 0%
  - Moderate: 48.3%
  - Moderate High: 0%
  - High: 0%

Total wildfire mitigation actions: 17

A majority of the proposed mitigation actions are not location specific and can be found in the the county WUIA.
Upper Selway Watershed

Risk Rank: L

Introduction
There are no areas of concentrated population within the Upper Selway watershed boundaries.

What is the risk?
An earthquake within the watershed has a low potential to cause damage to the life and property of those within these areas.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 2 counties within the Upper Selway watershed identified seismic as their number one hazard.
- 0 out of the 2 counties within the Upper Selway watershed identified seismic as their number two hazard.
- 0 out of the 2 counties within the Upper Selway watershed identified seismic as their number three hazard

Counties and Tribes
Idaho, Lemhi

Cities

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,030</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>0</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>2,121</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>0</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>2,188</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>9,301</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>0</td>
</tr>
<tr>
<td>In Watershed with 12 Miles of Fault</td>
<td>0</td>
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</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>0%</td>
</tr>
<tr>
<td>Federal</td>
<td>100%</td>
</tr>
<tr>
<td>Reservation/IRA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>0%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Category</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>73%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>23%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 17

A majority of the proposed mitigation actions are not location specific and can be found in the the county plans.
Idaho Multi-Hazard Risk Portfolio

Upper Snake-Rock

Risk Rank: H

Introduction
Areas of concentrated population within the Upper Snake-Rock watershed boundaries are Bliss, Buhl, Eden, Filer, Hagerman, Hagerman, Horseshoe, Hollister, Jerome, Kimberly, Mertshaugh, Twin Falls, and Wendell. There are 107,967 total people who live within the watershed, of which 2,272 are at risk of flooding. Roughly half of the watershed is privately owned.

What is the risk?
There are 14 high or significant hazard dams in the Upper Snake-Rock watershed. Flash flooding is a major concern, according to county AMAPs, with 57 significant flood events reported in recent history within the watershed. There are 11 communities participating in the NFIP with 37 policies contributing to $66,103 of premiums paid in exchange for $15,317,600 of coverage.

- 0 out of the 9 counties in the Upper Snake-Rock watershed identified flood as their number one hazard.
- 2 out of the 9 counties in the Upper Snake-Rock watershed identified flood as their number two hazard.
- 3 out of the 9 counties in the Upper Snake-Rock watershed identified flood as their number three hazard.

LIDAR data availability
LIDAR availability within the Upper Snake Rock watershed is as follows:
- Salmon Falls (2002, 2010)
- Boise Canyon (2006)
- Hollister (2010, 2011)
- IDT, District 4 - US 93 (2013)

Conclusion
Despite the relatively few residents or properties that exist within the Issac Snake River Canyon, the large portion of private ownership and presence of 14 hazardous dams place the Upper Snake-Rock watershed into the high flood risk category.

Counties and Tribes
- Camas, Cassia, Elmore, Gooding, Jerome, Lincoln, Minidoka, Owyhee, Twin Falls
- Cities
  - Bliss, Buhl, Eden, Filer, Hagerman, Horseshoe, Hollister, Jerome, Kimberly, Mertshaugh, Twin Falls, Wendell

Total flood mitigation actions: 124
A majority of the proposed mitigation actions are not location specific and can be found in the the county AMAPs.
Wildfire

Upper Snake-Rock

Risk Rank: H

Introduction

The Upper Snake-Rock watershed is home to 107,887 people, the majority of which live in the Wildland Urban Interface. Areas of concentrated population within the Upper Snake-Rock watershed boundaries are Bliss, Buft, Eden, Hagerman, Hansen, Hazelton, Hollister, Jerome, Kimberly, Murtough, Twin Falls and Wendell.

What is the risk?

Fires within the Upper Snake-Rock watershed have the potential to severely disrupt life, property and economic activity. There are 27,060 structures located within the WUI of the Upper Snake-Rock watershed. Since 2000, 565,939 acres have burned during 552 individual wildfire events. Based on data from the Idaho Forest Action Plan (2013), the Upper Snake-Rock watershed has 9.2% low risk, 40.2% low to moderate risk, 20.1% moderate risk, 19.4% moderate to high risk and 1.6% high risk of wildfire to the communities within the watershed.

+ 9 out of the 9 counties in the Upper Snake-Rock watershed identified wildfire as their number one hazard.
+ 0 out of the 9 counties in the Upper Snake-Rock watershed identified wildfire as their number two hazard.
+ 0 out of the 9 counties in the Upper Snake-Rock watershed identified wildfire as their number three hazard.

Conclusion

The Upper Snake-Rock watershed is one of the most populated watersheds in the state. The majority of the population resides within the WUI and the watershed is prone to very frequent fires. The overall risk of wildfire in the Upper Snake-Rock watershed is high.

Counties and Tribes

Camas, Cassia, Elmore, Gooding, Jerome, Lincoln, Minidoka, Owyhee, Twin Falls

Cities

Bliss, Buft, Eden, Hagerman, Hansen, Hazelton, Hollister, Jerome, Kimberly, Murtough, Twin Falls, Wendell

Watershed Risk

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>%Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>9.2%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>40.2%</td>
</tr>
<tr>
<td>Moderate</td>
<td>20.1%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>19.4%</td>
</tr>
<tr>
<td>High</td>
<td>1.6%</td>
</tr>
</tbody>
</table>

A majority of the proposed mitigation actions are not location specific and can be found in the the county MHPs.
Upper Snake-Rock

Risk Rank: M

Introduction
Areas of concentrated population within the Upper Snake-Rock watershed boundaries are Bliss, Buhl, Eden, Filer, Hagman, Hansen, Hazleton, Hollister, Jerome, Kimberly, Murtaugh, Twin Falls and Wendell.

What is the risk?
An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas. There are also 1,217 miles of canals that are receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 9 counties within the Upper Snake-Rock watershed identified seismic as their number one hazard.
- 0 out of the 9 counties within the Upper Snake-Rock watershed identified seismic as their number two hazard.
- 0 out of the 9 counties within the Upper Snake-Rock watershed identified seismic as their number three hazard.

Counties and Tribes
Camas, Cassia, Elmore, Gooding, Jerome, Lincoln, Minidoka, Owyhee, Twin Falls

Cities
Bliss, Buhl, Eden, Filer, Hagman, Hansen, Hazleton, Hollister, Jerome, Kimberly, Murtaugh, Twin Falls, Wendell

Ground Acceleration

Total seismic mitigation actions: 42

A majority of the proposed mitigation actions are not location specific and can be found in the the county ASREPs.
Idaho Multi-Hazard Risk Portfolio

**Upper Spokane**

**Risk Rank:** 4

**Introduction:**

The Upper Spokane watershed is heavily populated and largely privately owned. Areas of concentrated population within the watershed boundaries are Athol, Coeur d’Alene, Dalton Gardens, Hauser, Hayden Lake, Hayden, Hauser, Post Falls, Rathdrum, and State Line. There are 59,092 total people who live within the watershed, of which 1,668 are at risk of flooding.

**What is the risk?**

The Spokane River is highly variable as can be seen on gauge near Post Falls. According to the Kootenai County AWWP, there is a single report of significant flooding since major settlement of the valley. There are 7 high or significant hazard dams in the Upper Spokane watershed. There are 5 communities participating in the NFIP with 191 policies contributing to $132,278 of premiums paid in exchange for $49,083,000 of coverage.

- 6 out of the 5 counties in the Upper Spokane watershed identified flood as their number one hazard.
- 1 out of the 5 counties in the Upper Spokane watershed identified flood as their number two hazard.
- 1 out of the 5 counties in the Upper Spokane watershed identified flood as their number three hazard.

**LIDAR data availability**

LIDAR availability within the Upper Spokane watershed is as follows:

- Coeur d’Alene Reservation (2003)

**Conclusion**

Due to the high population, variable flows of the Spokane River, large amount of private property and presence of moderate hazard dams, the Upper Spokane is considered a high risk watershed.

**Counties and Tribes**

Kootenai

Cities:

- Athol, Coeur d’Alene, Dalton Gardens, Hauser, Hayden Lake, Hayden, Hauser, Post Falls, Rathdrum, State Line

**NFIP Statistics (2014)**

- NFIP Policies: 191
- Total Coverage: $49,083,000
- Total Premiums: $132,278
- Claim: 0
- Paid Claims: $80,744

**Total flood mitigation actions:** 22

A majority of the proposed mitigation actions are site specific and can be found in the county AWWP.

---

**USGS 12419030 SPOKANE RIVER NR POST FALLS ID**

**Country All Hazard Mitigation Plans Flood Mitigation Actions**

**Action Status**

- Ongoing
- Downstream
- Complete
Upper Spokane

**Risk Rank:** H

**Introduction**

The Upper Spokane watershed is home to 99,852 people, the vast majority of which live in or near the Wildland Urban Interface. Areas of concentrated population within the Upper Spokane watershed boundaries are Athol, Coeur d’Alene, Dalton Gardens, Hauser, Hayden Lake, Hayden, Huetter, Post Falls, Rathdrum, and State Line.

**What is the risk?**

Fires within the Upper Spokane watershed have the potential to severely disrupt life, property, and economic activity. There are 14,123 structures located within the WUI of the Upper Spokane watershed. Since 2000, 50 acres have burned in 20 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Upper Spokane watershed has 0% low risk, 0% low-moderate risk, 71.8% moderate risk, 28.2% moderate-high risk, and 0% high risk of wildfire to the communities within the watershed.

- 1 out of the 1 county in the Upper Spokane watershed identified wildfire as their number one hazard.
- 0 out of the 1 county in the Upper Spokane watershed identified wildfire as their number two hazard.
- 0 out of the 1 county in the Upper Spokane watershed identified wildfire as their number three hazard.

**Conclusion**

The Upper Spokane watershed is one of the most populated watersheds in the state. Additionally, the majority of it is privately owned. The overall risk of wildfire to people and property in the Upper Spokane watershed is high.

**Counties and Tribes**

Kootenai

Cities

Athol, Coeur d’Alene, Dalton Gardens, Hauser, Hayden Lake, Hayden, Huetter, Post Falls, Rathdrum, State Line

**Total wildfire mitigation actions:** 29

A majority of the proposed mitigation actions are not location specific and can be found in the the county MHA.
Idaho Multi-Hazard Risk Portfolio

**Upper Spokane**

**Risk Rank:** M

**Introduction**

Areas of concentrated population within the Upper Spokane watershed boundaries are Athol, Coeur d'Alene, Dalton Gardens, Hauser, Hayden Lake, Hayden, Huetter, Post Falls, Rathdrum and State Line.

**What is the risk?**

An earthquake within the watershed has a moderate potential to cause damage to the life and property of those within these areas. There are also 21 miles of canals and 3 levees that are receptive to seismic disturbances.

There are 0 essential facilities within 25 miles of a quaternary fault.

- 0 out of the 1 counties within the Upper Spokane watershed identified seismic as their number one hazard.
- 0 out of the 1 counties within the Upper Spokane watershed identified seismic as their number two hazard.
- 0 out of the 1 counties within the Upper Spokane watershed identified seismic as their number three hazard.

**Counties and Tribes**

Kootenai

**Cities**

Athol, Coeur d’Alene, Dalton Gardens, Hauser, Hayden Lake, Hayden, Huetter, Post Falls, Rathdrum, State Line

**Total seismic mitigation actions:** 3

A majority of the proposed mitigation actions are not location specific and can be found in the the county assessors.

---

**Subbasin Metrics**

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>562</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>99,092</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>394</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>21</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>1,716</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>5,603</td>
</tr>
<tr>
<td>Out. Facilities Near Fault</td>
<td>0</td>
</tr>
</tbody>
</table>

**Subbasin Ownership**

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>50%</td>
</tr>
<tr>
<td>Federal</td>
<td>9%</td>
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<tr>
<td>Reservation/ BIA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>5%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>37%</td>
</tr>
</tbody>
</table>

**Ground Acceleration**

<table>
<thead>
<tr>
<th>Category</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>60%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>31%</td>
</tr>
<tr>
<td>Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>
Idaho Multi-Hazard Risk Portfolio

Flood

Weiser

Risk Rank: H

Introduction
Areas of concentrated population within the watershed boundaries are Council, Cambridges, Midvale and Weiser. There are 6,771 total people who live within the watershed, of which 1,095 are at risk of flooding. Half of the watershed is privately owned.

What is the risk?
The Weiser River is an unregulated stream that floods regularly resulting in flood damage to infrastructure and agricultural properties near the City of Weiser. According to county AHRP, there have been 3 reports of significant flooding events within the watershed in recent history. Flood hazards include seasonal high stream flows that exceed bankfull discharge. There are 18 high or significant hazard dams in the Weiser watershed. There are 8 communities participating in the NFIP with 64 policies contributing to $62,482 of premiums paid in exchange for $9,096,200 of coverage.

• 0 out of the 4 counties in the Weiser watershed identified flood as their number one hazard.
• 0 out of the 4 counties in the Weiser watershed identified flood as their number two hazard.
• 3 out of the 4 counties in the Weiser watershed identified flood as their number three hazard.

LiDAR data availability
LiDAR availability within the Weiser watershed is as follows:
- Payette River and Gum Valley (2011)
- Weiser River Basin (2011)

Conclusion
The Weiser watershed is considered to be of high risk because of the presence of hazardous dams, levees and a moderately sized population exposed to flood hazards.

Counties and Tribes
- Adams, Gem, Valley, Washington

Cities
- Cambridge, Council, Midvale, Weiser

Subbasin Metrics

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>Population (2020)</th>
<th>Miles of Stream</th>
<th>Miles of Canal</th>
<th>Min. Elevation (ft)</th>
<th>Max. Elevation (ft)</th>
<th>Dam(s) of Concern</th>
<th>Pop. at Flood Risk</th>
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</thead>
<tbody>
<tr>
<td>1,683</td>
<td>6,771</td>
<td>3,932</td>
<td>243</td>
<td>2,093</td>
<td>8,114</td>
<td>15</td>
<td>1,095</td>
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</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>51%</td>
</tr>
<tr>
<td>Federal</td>
<td>43%</td>
</tr>
<tr>
<td>Reservation/RRA</td>
<td>0%</td>
</tr>
<tr>
<td>State</td>
<td>6%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>NFIP Policies</th>
<th>Total Coverage</th>
<th>Total Premiums</th>
<th>Claim(s)</th>
<th>Paid Claims</th>
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</thead>
<tbody>
<tr>
<td>64</td>
<td>$9,096,200</td>
<td>$6,065,582</td>
<td>826</td>
<td>$855,039</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 5

A majority of the proposed mitigation actions are not location specific and can be found in the county AHRP.

Weiser Watershed

USGS 12266600 WEISER RIVER NR WEISER ID

Counties All Hazard Mitigation Plans Flood Mitigation Actions

<table>
<thead>
<tr>
<th>Action Status</th>
<th>Action Details</th>
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<tbody>
<tr>
<td>Active</td>
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</tr>
<tr>
<td>Underway</td>
<td></td>
</tr>
<tr>
<td>Complete</td>
<td></td>
</tr>
</tbody>
</table>
Idaho Multi-Hazard Risk Portfolio

Wildfire

Weiser

Risk Rank: H

Introduction
The Weiser watershed is home to 6,771 people, roughly half of which live in the Wildland Urban Interface. Areas of concentrated population within the Weiser watershed boundaries are Council, Cambridge, Middale, and Weiser.

What is the risk?
Fires within the Weiser watershed have the potential to severely disrupt life, property, and economic activity. There are 1,757 structures located within the WUI of the Weiser watershed. Since 2000, 64,184 acres have burned during 155 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Weiser watershed has 2.4% low risk, 0.7% low-moderate risk, 3.5% moderate risk, 4.6% moderate-high risk, and 41.4% high risk of wildfire to the communities within the watershed.

- 3 out of the 4 counties in the Weiser watershed identified wildfire as their number one hazard.
- 1 out of the 4 counties in the Weiser watershed identified wildfire as their number two hazard.
- 2 out of the 4 counties in the Weiser watershed identified wildfire as their number three hazard.

Conclusion
In the Weiser watershed, the communities are at a high risk to wildfire. The historic fires have been moderately sized and could continue to threaten life and property in the future.

Counties and Tribes
Adams, Gem, Valley, Washington

Cities
Cambridge, Council, Middale, Weiser

Total wildfire mitigation actions: 11

A majority of the proposed mitigation actions are not location specific and can be found in the the county WMP.
Weiser

Risk Rank: H

Introduction
Areas of concentrated population within the Weiser watershed boundaries are Council, Cambridge, Midvale and Weiser.

What is the risk?
An earthquake within the watershed has a high potential to cause damage to the life and property of those within these areas. There are also 243 miles of canals and 12 levees that are receptive to seismic disturbances.

There are 16 essential facilities within 25 miles of a quaternary fault.

• 0 out of the 4 counties within the Weiser watershed identified seismic as their number one hazard.
• 0 out of the 4 counties within the Weiser watershed identified seismic as their number two hazard.
• 0 out of the 4 counties within the Weiser watershed identified seismic as their number three hazard.

Counties and Tribes
Adams, Gem, Valley, Washington

Cities
Cambridge, Council, Midvale, Weiser

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>1,683</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>6,771</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>3,922</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>243</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>2,037</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>8,134</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>51%</td>
</tr>
<tr>
<td>Federal</td>
<td>43%</td>
</tr>
<tr>
<td>State</td>
<td>5%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Level</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>46%</td>
</tr>
<tr>
<td>Moderate</td>
<td>54%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>0%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
</tbody>
</table>

Total seismic mitigation actions: 22

A majority of the proposed mitigation actions are not location specific and can be found in the the county analysts.
Idaho Multi-Hazard Risk Portfolio

Flood

Willow Watershed

Risk Rank: M

Introduction:
There are 6,250 total people who live within the watershed, of which 128 are at risk of flooding, though there are no major areas of concentrated population. The watershed is largely privately owned.

What is the risk?
There is 1 high or significant hazard zone in the Willow watershed. There are 5 communities participating in the NFIP with 3 policies contributing to $1,150 of premiums paid in exchange for $700,000 of coverage. According to the county AHPFs, the watershed has reported one significant flood event in recent history.

- 2 out of the 4 counties in the Willow watershed identified flood as their number one hazard.
- 1 out of the 4 counties in the Willow watershed identified flood as their number three hazard.

LiDAR data availability:
LiDAR availability within the Willow watershed is as follows:
- Payette River and Gorey Valley (2011)
- Waiver River Basin (2011)

Conclusion:
The Willow watershed’s relatively low population, large amount of private ownership and the presence of a hazard dam place the watershed into the moderate flood risk category.

Counties and Tribes:
Bingem, Bonnevillo, Caribou, Jefferson

Cities:
Idaho Falls, Ririe

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>647</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>6,250</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,437</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>69</td>
</tr>
<tr>
<td>Min. Elevation</td>
<td>6,692</td>
</tr>
<tr>
<td>Max. Elevation</td>
<td>9,777</td>
</tr>
<tr>
<td>Bigs of Concern</td>
<td>128</td>
</tr>
<tr>
<td>Pop. at Flood Risk</td>
<td>128</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>62%</td>
</tr>
<tr>
<td>Federal</td>
<td>15%</td>
</tr>
<tr>
<td>Reservation/RRA</td>
<td>1%</td>
</tr>
<tr>
<td>State</td>
<td>23%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
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</table>

NFIP Statistics (2014)

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>NFIP Policies</td>
<td>3</td>
</tr>
<tr>
<td>Total Coverage</td>
<td>$700,000</td>
</tr>
<tr>
<td>Total Premiums</td>
<td>$1,150</td>
</tr>
<tr>
<td>Claims</td>
<td>1</td>
</tr>
<tr>
<td>Paid Claims</td>
<td>$53,049</td>
</tr>
</tbody>
</table>

Total flood mitigation actions: 35

A majority of the proposed mitigation actions are not location specific and can be found in the the county AHPFs.
**Willow Watershed**

### Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>647</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>2,926</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,437</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>65</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,540</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>7,777</td>
</tr>
<tr>
<td>Structures in Wildfire</td>
<td>22</td>
</tr>
<tr>
<td>Historic Fire Events</td>
<td>47</td>
</tr>
</tbody>
</table>

### Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>62%</td>
</tr>
<tr>
<td>Federal</td>
<td>35%</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>1%</td>
</tr>
<tr>
<td>State</td>
<td>23%</td>
</tr>
<tr>
<td>Out of State</td>
<td>0%</td>
</tr>
</tbody>
</table>

### County All Hazard Mitigation Plan Wildfire Mitigation Actions

- Total wildfire mitigation actions: 36

---

**Introduction**

The Willow watershed is home to 6,290 people, a very small amount of which live in or near the Wildland Urban Interface. Areas of concentrated population within the Willow watershed boundaries are portions of Idaho Falls and Rigby.

**What is the risk?**

Fires within the Willow watershed have the potential to severely disrupt life, property and economic activity. There are 27 structures located within the WUI of the Willow watershed. Since 2000, 10,407 acres have burned during 42 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Willow watershed has 47.5% low risk, 34% low moderate risk, 14.5% moderate risk, 4% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

- 1 out of the 4 counties in the Willow watershed identified wildfire as their number one hazard.
- 2 out of the 4 counties in the Willow watershed identified wildfire as their number two hazard.
- 1 out of the 4 counties in the Willow watershed identified wildfire as their number three hazard.

**Conclusion**

Due to a relatively small amount of population and property in the WUI and low population throughout the subbasin, the Willow watershed is at a low risk to wildfire.

**Counties and Tribes**

- Bingham, Bonneville, Caribou, Jefferson

**Cities**

- Idaho Falls, Rigby
Risk Rank: H

Introduction

Areas of concentrated population within the Willow Watershed boundaries are Idaho Falls and Rigby.

What is the risk?

An earthquake within the watershed has a high potential to cause damage to the life and property of those within these areas. There are also 69 miles of canals that are receptive to seismic disturbances.

There are 5 essential facilities within 25 miles of a quaternary fault.

• 0 out of the 4 counties within the Willow watershed identified seismic as their number one hazard.
• 0 out of the 4 counties within the Willow watershed identified seismic as their number two hazard.
• 1 out of the 4 counties within the Willow watershed identified seismic as their number three hazard.

Counties and Tribes

Bingham, Bonneville, Caribou, Jefferson

Cities

Idaho Falls, Rigby

Subbasin Metrics

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area (sq. miles)</td>
<td>667</td>
</tr>
<tr>
<td>Population (2010)</td>
<td>6,290</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>1,427</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>63</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>4,692</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>9,777</td>
</tr>
<tr>
<td>Ext. Facilities Near Fault</td>
<td>5</td>
</tr>
<tr>
<td>% Watered within 25 Miles of Fault</td>
<td>73%</td>
</tr>
</tbody>
</table>

Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>% Subbasin Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>62%</td>
</tr>
<tr>
<td>Federal</td>
<td>15%</td>
</tr>
<tr>
<td>Reservation/USA</td>
<td>15%</td>
</tr>
<tr>
<td>State</td>
<td>2%</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>0%</td>
</tr>
</tbody>
</table>

Ground Acceleration

<table>
<thead>
<tr>
<th>Level</th>
<th>% Watershed Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>0%</td>
</tr>
<tr>
<td>Low-Moderate</td>
<td>0%</td>
</tr>
<tr>
<td>Moderate</td>
<td>20%</td>
</tr>
<tr>
<td>Moderate-High</td>
<td>80%</td>
</tr>
<tr>
<td>High</td>
<td>0%</td>
</tr>
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</table>

Total seismic mitigation actions: 34
### Flood

**MAP**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Subbasin Metrics**

- **Subbasin Ownership**
  - Owner Type: Private
  - Subbasin Area: 1

**NFIP Statistics (2016)**

- NFIP Policies: 0
- Total Coverage: 0
- Total Premiums: 0
- # Claims: 0
- Paid Claims: 0

**Mitigation Actions**
## FLOOD REFERENCES

<table>
<thead>
<tr>
<th>Reference ID</th>
<th>Reference Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Watershed Name associated with 8th field hydrologic units (HUC-8) ranked for flood risk.</td>
</tr>
<tr>
<td>B</td>
<td>Risk category determined by equation table with inputs and weights developed by IBHS and participating technical advisory groups (2014).</td>
</tr>
<tr>
<td>E</td>
<td>Derived from Land Management dataset. IDWR.</td>
</tr>
<tr>
<td>F</td>
<td>Idaho Administrative Shapefiles retrieved internally at IBHS (2014).</td>
</tr>
<tr>
<td>G</td>
<td>GIS Area of HUC-8 watersheds rank in the report.</td>
</tr>
<tr>
<td>H</td>
<td>Derived from High Resolution NHD clipped by HUC 8 boundaries.</td>
</tr>
<tr>
<td>I</td>
<td>Summed 2010 block population value by watershed. Where blocks were not completely contained by the watershed, population based on the percent area of the block within the watershed.</td>
</tr>
<tr>
<td>K</td>
<td>Derived from USGS National Elevation Dataset 10 m tiles (1/3 arc-second).</td>
</tr>
<tr>
<td>L</td>
<td>Dam Hazard Map package retrieved from IDWR.</td>
</tr>
<tr>
<td>N</td>
<td>Flood Hazard Mitigation Projects retrieved internally at IBHS (2014).</td>
</tr>
<tr>
<td>O</td>
<td>Current Idaho LiDAR Boundaries dataset retrieved from Idaho LiDAR Consortium (2014).</td>
</tr>
<tr>
<td>Mitigation Actions</td>
<td>Completed, discontinued, and ongoing county mitigation actions related to flood. Dataset obtained from most recently updated County All-Hazard Mitigation Plans (2008-2015). GIS spatial join run between point and line specific actions and county-wide actions.</td>
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FIRE REFERENCES

<table>
<thead>
<tr>
<th>Reference ID</th>
<th>Reference Description</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>Watershed Name associated with 8th field hydrologic units (HUC-8) ranked for wildfire risk.</td>
</tr>
<tr>
<td>B</td>
<td>Risk category determined by equation table with inputs and weights developed by IBHS and participating technical advisory groups (2014).</td>
</tr>
<tr>
<td>D</td>
<td>Relative Risk to Communities and Ecosystems from Uncharacteristic Wildfires dataset (2010). Clipped by HUC-8 watershed boundaries.</td>
</tr>
<tr>
<td>E</td>
<td>Derived from Land Management dataset. IDWR.</td>
</tr>
<tr>
<td>F</td>
<td>Idaho Administrative Shapefiles retrieved internally at IBHS (2014).</td>
</tr>
<tr>
<td>G</td>
<td>GIS Area of HUC-8 watersheds rank in the report.</td>
</tr>
<tr>
<td>H</td>
<td>Derived from High Resolution NHD clipped by HUC 8 boundaries.</td>
</tr>
<tr>
<td>I</td>
<td>Summed 2010 block population value by watershed. Where blocks were not completely contained by the watershed, population based on the percent area of the block within the watershed.</td>
</tr>
<tr>
<td>J</td>
<td>Historic Fire Perimeters obtained from fire perimeter data derived from National Fire Interagency Center (NIFC) databases, USGS GeoMAC, and USGS MTSB datasets. WUI data retrieved from IBHS State Hazard Mitigation Plan geodatabase (2013).</td>
</tr>
<tr>
<td>K</td>
<td>Derived from USGS National Elevation Dataset 10 m tiles (1/3 arc-second).</td>
</tr>
<tr>
<td>L</td>
<td>Fire Hazard Mitigation Projects retrieved internally at IBHS (2014).</td>
</tr>
<tr>
<td>Mitigation Actions</td>
<td>Completed, discontinued, and ongoing county mitigation actions related to wildfire. Dataset obtained from most recently updated County All-Hazard Mitigation Plans (2008-2015). GIS spatial join run between point and line specific actions and county-wide actions.</td>
</tr>
<tr>
<td>Rank</td>
<td>B</td>
</tr>
<tr>
<td>------</td>
<td>---</td>
</tr>
<tr>
<td>C</td>
<td></td>
</tr>
<tr>
<td>What is the risk?</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Counties and Tribes</td>
<td></td>
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<tr>
<td>F</td>
<td></td>
</tr>
<tr>
<td>Cities</td>
<td></td>
</tr>
</tbody>
</table>

### Subbasin Metrics

<table>
<thead>
<tr>
<th>Area (sq. miles)</th>
<th>G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population 2010</td>
<td>H</td>
</tr>
<tr>
<td>Miles of Stream</td>
<td>I</td>
</tr>
<tr>
<td>Miles of Canal</td>
<td>J</td>
</tr>
<tr>
<td>Min. Elevation (ft)</td>
<td>K</td>
</tr>
<tr>
<td>Max. Elevation (ft)</td>
<td>L</td>
</tr>
<tr>
<td>Est. Facilities Near Fault</td>
<td>M</td>
</tr>
<tr>
<td>%Watershed &gt; 10 Mils of Fault</td>
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### Subbasin Ownership

<table>
<thead>
<tr>
<th>Owner Type</th>
<th>Subbasin Area</th>
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</thead>
<tbody>
<tr>
<td>Private</td>
<td>E</td>
</tr>
<tr>
<td>Federal</td>
<td>E</td>
</tr>
<tr>
<td>Reservation/ BIA</td>
<td>E</td>
</tr>
<tr>
<td>State</td>
<td>E</td>
</tr>
<tr>
<td>Out of Idaho</td>
<td>E</td>
</tr>
</tbody>
</table>

### Ground Acceleration

<table>
<thead>
<tr>
<th>Accel. Amount % Watershed Area</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Low-Moderate</td>
<td></td>
</tr>
<tr>
<td>Moderate</td>
<td></td>
</tr>
<tr>
<td>Moderate-High</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td></td>
</tr>
</tbody>
</table>
## SEISMIC REFERENCES

<table>
<thead>
<tr>
<th>Reference ID</th>
<th>Reference Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Watershed Name associated with 8th field hydrologic units (HUC-8) ranked for seismic risk.</td>
</tr>
<tr>
<td>B</td>
<td>Risk category determined by equation table with inputs and weights developed by IBHS and participating technical advisory groups (2014).</td>
</tr>
<tr>
<td>E</td>
<td>Derived from Land Management dataset, IDWR.</td>
</tr>
<tr>
<td>F</td>
<td>Idaho Administrative Shapefiles retrieved internally at IBHS (2014).</td>
</tr>
<tr>
<td>G</td>
<td>GIS Area of HUC-8 watersheds rank in the report.</td>
</tr>
<tr>
<td>H</td>
<td>Derived from High Resolution NHD clipped by HUC 8 boundaries.</td>
</tr>
<tr>
<td>I</td>
<td>Summed 2010 block population value by watershed. Where blocks were not completely contained by the watershed, population based on the percent area of the block within the watershed.</td>
</tr>
<tr>
<td>J</td>
<td>Essential Facilities obtained from IBHS State Hazard Mitigation Plan geodatabase (2013). Fault data obtained from USGS Quaternary Fault (2014), database queried to include only faults 130,000 years and younger. Faults were buffered by 25 miles.</td>
</tr>
<tr>
<td>K</td>
<td>Derived from USGS National Elevation Dataset 10 m tiles (1/3 arc-second).</td>
</tr>
<tr>
<td>M</td>
<td>Seismic Hazard Mitigation Projects retrieved internally at IBHS (2014).</td>
</tr>
<tr>
<td>Mitigation Actions</td>
<td>Completed, discontinued, and ongoing county mitigation actions related to seismicity. Dataset obtained from most recently updated County All-Hazard Mitigation Plans (2008-2015). GIS spatial join run between point and line specific actions and county-wide actions.</td>
</tr>
</tbody>
</table>
Glossary of Select Terms:

Boise State University (BSU)
Bureau Land Management (BLM)
Bureau of Indian Affairs (BIA)
Environmental Protection Agency (EPA)
Federal Emergency Management Agency (FEMA)
Idaho Bureau of Homeland Security (IBHS)
Idaho Department of Agriculture (DOA)
Idaho Department of Environmental Quality (DEQ)
Idaho Department of Insurance (DOI)
Idaho Department of Lands (IDL)
Idaho Department of Parks and Recreation (IDPR)
Idaho Department of Water Resources (IDWR)
Idaho Division of Building Safety (DBS)
Idaho Geological Survey (IGS)
Idaho National Laboratory (INL)
Idaho Transportation Department (ITD)
National Oceanic and Atmospheric Administration (NOAA)
SuperValu, Inc.
United States Army Corps of Engineers (USACE)
United States Bureau of Reclamation (USBR)
United States Department of Agriculture (USDA)
United States Forest Service (USFS)
United States Geological Survey (USGS)

C.F.S. - Cubic Feet per Second
Canal – A long narrow place that is filled with water and was created by people so that boats could pass through it or to supply fields, crops, etc., with water.
Claim – A person or entity who believes that he or she has a right to something such as an amount of money (Regarding a claim related to Flood Insurance).
Coverage – A financial protection provided by a (flood) insurance policy.
Development – The act or process of growing or causing something to grow or become larger or more advanced (i.e. a developed tract of land; especially one with improved structures built on it).
Earthquake – A shaking or trembling of the earth that is volcanic or tectonic in origin.
Epicenter – The part of the earth’s surface that is directly above the place where an earthquake starts.
Equation – The act or process of being equated; specifically a usually formal statement of the equality or equivalence of mathematical or logical expressions.
Essential Facility – Within this analysis: School, Hospital, Fire Station or Emergency Operation Center (EOC).
Fault – A rift, or fracture in the crust of the earth accompanied by a displacement of one side of the fracture with respect to the other usually in a direction parallel to the fracture.
Floodplain – Any land area susceptible to being inundated by floodwaters from any source (FEMA NFIP definition).
Ground Acceleration – A ground motion measurement of ground shaking, specifically maximum peak ground acceleration; as per a modified Mercalli intensity scale (USGS criteria).
HUC – Hydrologic Unit Code is the term used by the USGS, and others, to define the area drained by a river and all its tributaries. HUC’s levels generally refer to the size of basins. HUC’s are a nationally consistent watershed dataset subdivided into 6 levels (12-digit HUC’s) and is maintained by the USGS.
Jurisdiction – The authority of a sovereign power to govern, legislate, interpret and apply law.
LiDAR – Light Detection and Ranging technology that is used to make maps; a device similar to radar but emits pulsed laser light instead of microwaves to accurately measure distance.
Methodology – the set of methods, rules, concepts, principals and ideas that are important for creating the Idaho Multi-Hazard Risk Portfolio.
Mitigation – to make less severe.
NFIP – National Flood Insurance Program.
Ownership – the state or fact of owning real property.
Portfolio – a set of risk maps, assessments and plans presented together.
Premium – the consideration paid for a contract of insurance.
Reservation – an area of land in the U.S. that is kept separate as a place for Native Americans to live.
Sq Mi. – Square Miles
Subbasin – The area drained by a river and all its tributaries.
Tribe – A group of Native American people that includes many families and relatives who have the same language, customs and beliefs.
Watershed - The area drained by a river and all its tributaries.
WUI – Wildland Urban Interface (WUI) is an area where structures and undeveloped lands coincide and are subject to wildfire.