











Introduction Flood Methodology Wildfire Methodology Seismic Methodology

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High

High

Low Medium

Medium Low

Medium

Medium

Medium

High

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Teton	Medium	233				
Upper Coeur d'Alene	Low	236				
Upper Henrys	Medium	239				
Upper Middle Fork Salmon	Low	242				
Upper North Fork Clearwater	Low	245				
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Lower Henrys

Lower Salmon
Lower Selway

Medicine Lodge

Middle Bear

Lower Snake-Asotin

Middle Fork Clearwater

Lower Kootenai

Lower Middle Fork Salmon

Lower North Fork Clearwater

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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 Department of Lands
Idaho Bureau of Homeland Security
Idaho Department of Agriculture
Idaho Department of Insurance
United States Forest Service

### Cover Photo Credits:

- 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)
- 3. Right: Beaver Creek Fire, AP Photo/Times-News, Ashley Smith (2013)

# 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

### 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

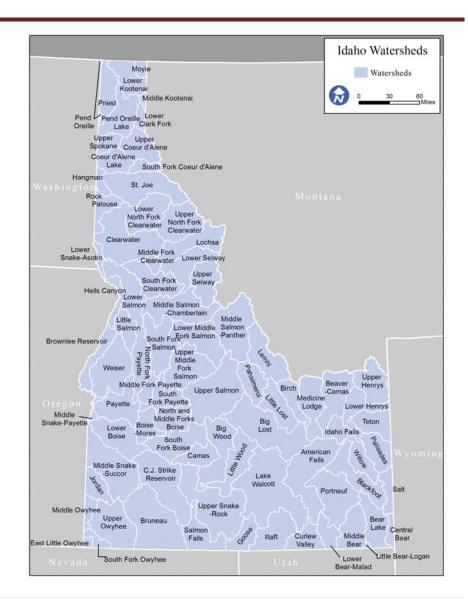
Flooding is perhaps the single most common, costly, and predictable natural hazard in Idaho. Riverine flooding continues to be hazardous to the population living near streams and other water bodies, especially when spring rains compound runoff from mountain snow pack into water systems near areas of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

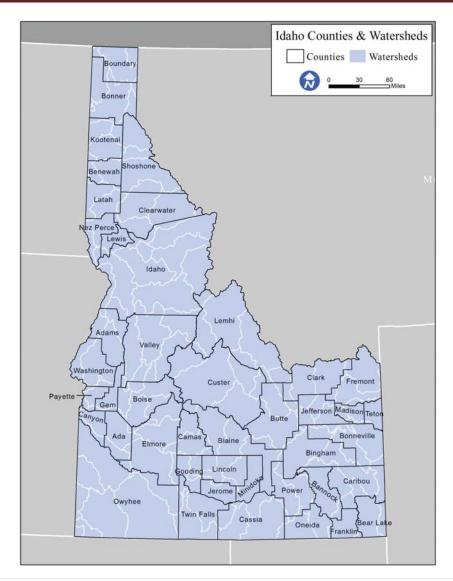
### Seismic

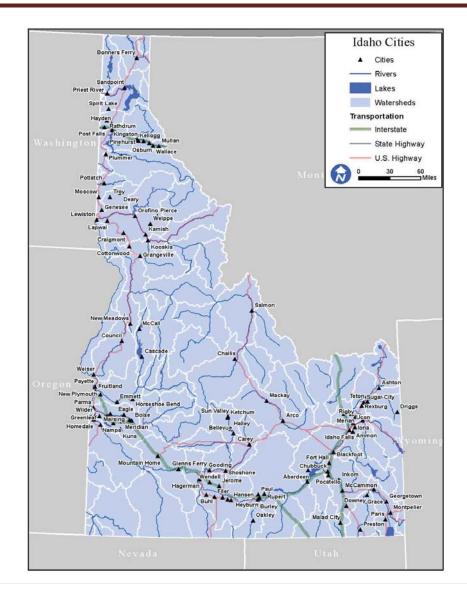
Idaho sits between the Pacific Coast's fault lines and the volcanic hotspot of Yellowstone to the east, as well as within the Basin and Range tectonic province. This translates into a seismic risk throughout all of Idaho. Within the state, there are a small number of quaternary fault lines that are considered 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.







City Name	Watershed
Aberdeen	American Falls
Acequia	Lake Walcott
Albion	Lake Walcott
American Falls	American Falls
Ammon	Blackfoot
Arco	Big Lost
Arimo	Portneuf
Ashton	Upper Henrys
Athol	Upper Spokane
Atomic City	Big Lost
Bancroft	Portneuf
Basalt	American Falls
Bellevue	Big Wood
Blackfoot	American Falls
Bliss	Upper Snake-Rock
Bloomington	Bear Lake
Boise	Lower Boise
Bonners Ferry	Lower Kootenai
Bovill	Clearwater
Buhl	Upper Snake-Rock
Burley	Lake Walcott
Butte City	Big Lost
Caldwell	Lower Boise
Cambridge	Weiser
Carey	Little Wood
Cascade	North Fork Payette
Castleford	Salmon Falls
Challis	Upper Salmon
Chubbuck	Portneuf
Clark Fork	Lower Clark Fork
Clayton	Upper Salmon
Clifton	Middle Bear
Coeur d'Alene	Coeur d'Alene Lake
Cottonwood	South Fork Clearwater
Council	Weiser
Craigmont	Clearwater
Crouch	Middle Fork Payette
Culdesac	Clearwater
Dayton	Middle Bear
Deary	Clearwater
Declo	Lake Walcott
Dietrich	Little Wood
Donnelly	North Fork Payette
Dover	Pend Oreille Lake
Downey	Portneuf
Driggs	Teton
Drummond	Lower Henrys
Dubois	Beaver-Camas
Eagle	Lower Boise
Sagle	Upper Coeur d'Alene

City Name	Watershed								
East Hope	Pend Oreille Lake								
Eden	Upper Snake-Rock								
Elk River	Lower North Fork Clearwater								
Emmett	Payette								
Fairfield	Camas								
Ferdinand	Clearwater								
Fernan Lake	Coeur d'Alene Lake								
Filer	Upper Snake-Rock								
Firth	American Falls								
Franklin	Middle Bear								
Fruitland	Middle Snake-Payette								
Garden City	Lower Boise								
Genesee	Palouse								
Georgetown	Bear Lake								
Glenns Ferry	C.J. Strike Reservoir								
Gooding	Little Wood								
Grace	Middle Bear								
Grand View	Middle Snake-Succor								
Grangeville	South Fork Clearwater								
Greenleaf	Lower Boise								
Hagerman	Upper Snake-Rock								
Hailey	Big Wood								
Hamer	Beaver-Camas								
Hansen	Upper Snake-Rock								
Harrison	Coeur d'Alene Lake								
Hauser	Upper Spokane								
Hayden	Upper Spokane								
Hayden Lake	Upper Spokane								
Hazelton	Upper Snake-Rock								
Heyburn	Lake Walcott								
Hollister	Upper Snake-Rock								
Homedale	Middle Snake-Succor								
Норе	Pend Oreille Lake								
Horseshoe Bend	Payette								
Huetter	Upper Spokane								
Idaho City	Boise-Mores								
Idaho Falls	American Falls								
Inkom	Portneuf								
Iona	Blackfoot								
Irwin	Palisades								
Island Park	Upper Henrys								
Jerome	Upper Snake-Rock								
Juliaetta	Clearwater								
Kamiah	Clearwater								
Kellogg	South Fork Coeur d'Alene								
Kendrick	Clearwater								
Ketchum	Big Wood								
Kimberly	Upper Snake-Rock								
Kooskia	Clearwater								
Kootenai	Pend Oreille Lake								
Kuna	Lower Boise								

City Name	Watershed
Lapwai	Clearwater
Lava Hot Springs	Portneuf
Leadore	Lemhi
Lewiston	Clearwater
Lewisville	Idaho Falls
Mackay	Big Lost
Malad City	Lower Bear-Malad
Malta	Raft
Marsing	Middle Snake-Succor
McCall	North Fork Payette
McCammon	Portneuf
Melba	Middle Snake-Succor
Menan	Idaho Falls
Meridian	Lower Boise
Middleton	Lower Boise
Midvale	Weiser
Minidoka	Lake Walcott
Montpelier	Bear Lake
Moore	Big Lost
Moscow	Palouse
Mountain Home	C.J. Strike Reservoir
Moyie Springs	Moyie
Mud Lake	Beaver-Camas
Mullan	South Fork Coeur d'Alene
Murtaugh	Upper Snake-Rock
Nampa	Lower Boise
New Meadows	Little Salmon
New Plymouth	Payette
Newdale	Teton
Nez Perce	Clearwater
Notus	Lower Boise
Oakley	Goose
Oldtown	Pend Oreille
Onaway	Palouse
Orofino	Clearwater
Osburn	South Fork Coeur d'Alene
Oxford	Middle Bear
Paris	Bear Lake
Parker	Lower Henrys
Parma	Lower Boise
Paul	Lake Walcott
Payette	Payette
Peck	Clearwater
Pierce	Clearwater
Pinehurst	Little Salmon
Pinehurst	South Fork Coeur d'Alene
Pillellurst	
Placerville	Boise-Mores
	Boise-Mores St. Joe
Placerville	
Placerville Plummer	St. Joe

City Name	Watershed
Potlatch	Palouse
Preston	Middle Bear
Priest River	Priest
Rathdrum	Upper Spokane
Reubens	Clearwater
Rexburg	Teton
Richfield	Little Wood
Rigby	Idaho Falls
Riggins	Little Salmon
Ririe	Idaho Falls
Roberts	Idaho Falls
Rockland	Lake Walcott
Rupert	Lake Walcott
Salmon	Middle Salmon-Panther
Sandpoint	Pend Oreille Lake
Shelley	American Falls
Shoshone	Little Wood
Smelterville	South Fork Coeur d'Alene
Soda Springs	Bear Lake
Spencer	Beaver-Camas
Spirit Lake	Pend Oreille Lake
St. Anthony	Lower Henrys
St. Charles	Bear Lake
St. Maries	St. Joe
Stanley	Upper Salmon
Star	Lower Boise
State Line	Upper Spokane
Stites	South Fork Clearwater
Sugar City	Teton
Sun Valley	Big Wood
Swan Valley	Palisades
Tensed	Hangman
Teton	Teton
Tetonia	Teton
Troy	Clearwater
Twin Falls	Upper Snake-Rock
Ucon	Idaho Falls
Victor	Teton
Wallace	South Fork Coeur d'Alene
Wardner	South Fork Coeur d'Alene
Weippe	Clearwater
Weiser	Brownlee Reservoir
Wendell	Upper Snake-Rock
Weston	Middle Bear
Whitebird	Lower Salmon
Wilder	Lower Boise
Winchester	Clearwater
Worley	Hangman

# 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.

$$Risk\ Score = C(P_w + F_w + E_w) * H(D_w + L_w)$$

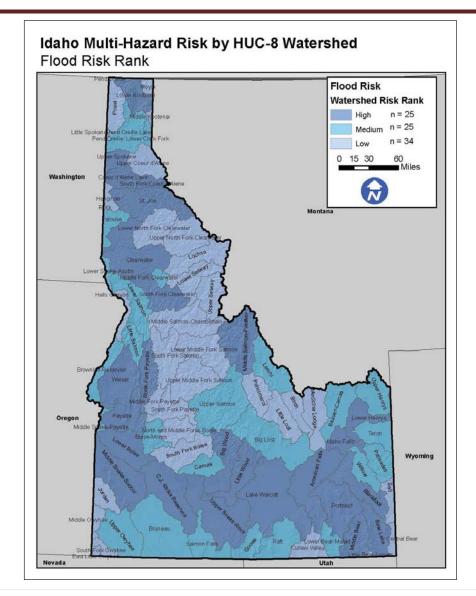
Pw = Weighted Population score

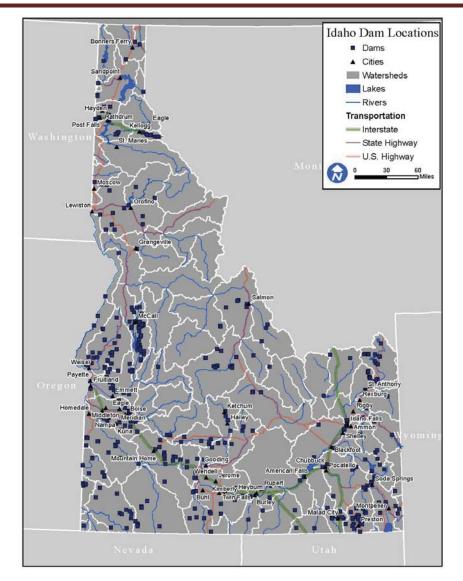
Fw = Weighted Population at Risk of Flooding score

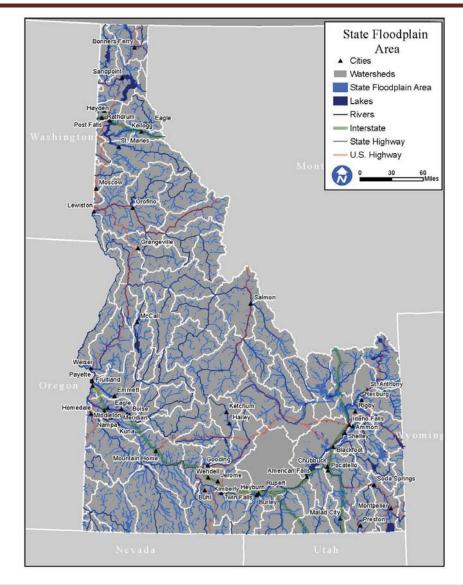
E<sub>w</sub> = Weighted Essential Facilities in the Floodplain score

D<sub>w</sub> = Weighted Dams of Concern score

L<sub>w</sub> = Weighted Levee score







Flood Risk Ranking Table																		
		2012 IFSRP				Essential Facilities in	Essential Facilities	Dams(Significant or High			Population	Pop. @ Risk Rank	Essential Facilities Rank	Consequence	Dam Hazard	Levee	Hazard	
Watershed	RISK RANK	Rank	2010 Population Pop. Rank	Pop. @ Risk of Flood	Flood Pop. Rank	Floodplain	Rank	Hazard) Dam F	lazard Rank Levees	Levee Rank	Rank Weighted	Weighted	Weighted	Subtotal	Weighted	Weight	Subtotal	TOTAL RISK
Lower Boise Clearwater	H	1	573637 45898	78 30238 72 1710	67 55	1	2	20	13 20 9 44	13 17	136.5 126	113.9 93.5	2	252.4 220.5	3.25 2.25	3.25 4.25	6.5 6.5	16 143
Pavette	H	3		66 4357	65	4	5	14	11 18		115.5	93.5 110.5	5		2.75	2.75	5.5	143
Big Wood	Н	7		62 1314	51	11		7	7 23		108.5	86.7	9		1.75	4	5.75	117
South Fork Coeur d'Alene	Н	4	11035	57 3711	62	7	7	8	8 19	12	99.75	105.4	7	212.15	2	3	5	1060
	Н	5		50 1055	48	8		18	12 12		87.5	81.6	8		3	2.25	5.25	929.
South Fork Clearwater Blackfoot	H	33 19		52 470 73 5546	42 66	0		1 2	2 45 3 13		91 127.75	71.4 112.2	1		0.5 0.75	4.5 2.5	5 3.25	783.0
	H	19		74 2935	59	0		5	6 8		127.75	100.3			1.5	1.75	3.25	783.0
Upper Snake-Rock	Н	2		77 2217	56	14	10	14	11 0	1	134.75	95.2	10		2.75	0.25	3	719
	Н	8	10481	56 285	36	0		1	2 22	15	98	61.2	1	160.2	0.5	3.75	4.25	680
	Н	11		75 2242		3	4	4	5 7	-	131.25	96.9	4		1.25	1.5	2.75	638.4
St. Joe	Н	6		51 802	46	0	1	0	1 21	14	89.25	78.2	1	168.45	0.25	3.5	3.75	631.6
	H	15		68 3126	60	0		0	1 13		119	102	1		0.25	2.5		61
North Fork Payette Middle Snake-Succor	H	20 31		54 218 61 2908	33 58	30 14	11 10	25 10	14 0 10 0	1 1	94.5 106.75	56.1 98.6	11 10	161.6 215.35	3.5 2.5	0.25 0.25	3.75 2.75	592.2
	H	16		76 1608		0	1	7	7 3		133	90.1	1		1.75	0.75	2.5	560
C.J. Strike Reservoir	Н	30		63 1134	49	0		10	10 0		110.25	83.3	1		2.5	0.25	2.75	535.0
	Н	26		71 3873	64	5		7	7 0	1	124.25	108.8	6		1.75	0.25	2	47
Middle Bear	Н	24		60 18	8	5	6	18	12 0		105	13.6	6		3	0.25	3.25	404
Middle Salmon-Panther	H	48		47 163 53 453	30 41	2		2	3 11		82.25	51	3		0.75	2	2.75	374.6
Bear Lake Coeur d'Alene Lake	H	28 17		53 453 69 1219	41 50	1 0		7 0	7 0	1 5	92.75 120.75	69.7 85			1.75 0.25	0.25 1.25	1.5	32 310.:
Lower Henrys	H	27		65 614	43	0		1	2 5		120.75	73.1	1		0.25	1.25	1.5	281.
	Н	13		55 3543		1		2	3 1		96.25	103.7	2		0.75	0.5	1.25	252.4
Upper Salmon	M	50		41 302	37	0		5	6 0	1	71.75	62.9	1		1.5	0.25	1.75	237.3
Upper Henrys	M	46	2845	40 94	22	2	3	7	7 0	1	70	37.4	3		1.75	0.25	2	22
	M	18		70 1662				2	3 0		122.5	91.8			0.75	0.25		21
Lower Salmon Palouse	M	36 14	1858 31487	35 48 67 1447	14 52	0		0 1	1 12 2 1	9 2	61.25 117.25	23.8 88.4	1 1	86.05 206.65	0.25 0.5	2.25 0.5	2.5	215.:
	M	37		44 7	52	2		7	7 0		77	10.2	3		1.75	0.25	2	18
Middle Snake-Payette	M	29		58 799	45	0		1	2 2		101.5	76.5	1		0.5	0.25	1	10
Bruneau	M	59	670	23 164	31	1	2	4	5 0	1	40.25	52.7	2	94.95	1.25	0.25	1.5	142.
Little Salmon	M	40	2399	38 103		0	1	3	4 0	1	66.5	39.1	1	106.6	1	0.25	1.25	133
Goose	M	35		49 1006	47	0		1	2 0		85.75	79.9	1		0.5	0.25	0.75	124.9
	M	44 22	3998 1881	45 632 37 159	44 28	1 0		1	2 0	1 2	78.75 64.75	74.8 47.6	2	155.55 113.35	0.5 0.5	0.25	0.75	116.6
Brownlee Reservoir	M	42		46 388		0	1	1	2 0		80.5	66.3	1		0.5	0.25	0.75	110
	M	12		64 3774		0		0	1 0		112	107.1	1		0.25	0.25	0.5	110
Camas	M	32	1034	29 173	32	1	2	2	3 0	1	50.75	54.4	2		0.75	0.25	1	107
Lower Clark Fork	M	60	1619	33 141	27	1	2	1	2 2	2	57.75	45.9	2	105.65	0.5	0.5	1	105
	M	21		42 223	34	0		1	2 0		73.5	57.8	1		0.5	0.25	0.75	99.:
Willow Raft	M	25 39		48 128 36 162		1 0	2	1	2 0		84	42.5	2		0.5	0.25	0.75	96.
Lower Snake-Asotin	M	39		36 162 59 273	29 35	0		0	1 0	1 1	63 103.25	49.3 59.5	1	113.3 163.75	0.5 0.25	0.25 0.25	0.75 0.5	84.
Upper Owyhee	M	64		19 20		1		4	5 0	1	33.25	18.7	2		1.25	0.25	1.5	80.9
Palisades	M	49	761	25 73	20	2	3	2	3 0	1	43.75	34	3		0.75	0.25	1	80
Salmon Falls	M	51	882	27 43	13	0	1	2	3 0	1	47.25	22.1	1	70.35	0.75	0.25	1	70
Beaver-Camas	M	34		39 408		0	1	0	1 0	1	68.25	68	1		0.25	0.25	0.5	68.0
	M	41		32 69		0		0	1 1		56	32.3	1		0.25	0.5	0.75	66.
Priest Medicine Lodge	L	23 47		43 129 26 383		0	1	0	1 0	1 1	75.25 45.5	44.2 64.6	1	120.45 111.1	0.25 0.25	0.25 0.25	0.5 0.5	60.i
Pend Oreille	i	65		30 19		0		1	2 0		52.5	17	1		0.23	0.25	0.75	52.
Moyie	L	61	925	28 21	12	0		1	2 0		49	20.4	1	70.4	0.5	0.25	0.75	5
Lower North Fork Clearwater	L	43	662	22 52		2	3	1	2 0	1	38.5	27.2	3	68.7	0.5	0.25	0.75	51.
Jordan	L	57		11 0		7		5	6 0		19.25	1.7			1.5	0.25	1.75	48.9
Hangman Country Country	L	45		34 73		0		0	1 0		59.5	35.7	1		0.25	0.25	0.5	4
South Fork Payette Little Lost	L	69 58	557 333	21 52 17 54		0		1 0	2 0	1 2	36.75 29.75	25.5 28.9	1	63.25 59.65	0.5 0.25	0.25	0.75 0.75	47.4
South Fork Boise	L	55		16 19		0		2	3 0		29.75	28.9 15.3	1		0.75	0.25		44.7
	L	52		31 66		0		0	1 0		54.25	30.6	1		0.75	0.25	0.5	42.5
Curlew Valley	L	56		18 6	5	1	2	2	3 0		31.5	8.5	2		0.75	0.25	1	
Upper Coeur d'Alene	L	66	481	20 128		0	1	0	1 0	1	35	40.8	1	76.8	0.25	0.25	0.5	3
Salt	L	63		14 0		0		2	3 0		24.5	1.7	1		0.75	0.25	1	2
Little Spokane Pahsimeroi	L	67 62		24 0 15 16	1 7	0		0	1 0	1	42 26.25	1.7 11.9		44.7 39.15	0.25 0.25	0.25 0.25	0.5 0.5	19.1
Pansimeroi Central Bear	L I	54	255 135	15 16			1	0	1 0	1	26.25	11.9	1		0.25	0.25	0.5	19.5
Lochsa	i.	68		12 0		0		0	1 0	1	22.73	1.7	1		0.25	0.25	0.5	11
Middle Salmon-Chamberlain	L	75	47	9 3	3	0	1	0	1 0	1	15.75	5.1	1	21.85	0.25	0.25	0.5	10.
South Fork Salmon	L	74	64	10 0	1	0		0	1 0		17.5	1.7	1	20.2	0.25	0.25	0.5	1
Lower Middle Fork Salmon	L	78	4	2 0		3		2	3 0	1	3.5	1.7	4		0.75	0.25	1	
Hells Canyon	L	53	21	5 0		0		1	2 0	1	8.75	1.7			0.5	0.25	0.75	8.5
Middle Owyhee North and Middle Forks Boise	L	71 76	21 44	5 0		0		1 0	2 0		8.75 14	1.7	1		0.5 0.25	0.25 0.25	0.75	8.5
Rock	i	73	36	7 0	1	0	1	0	1 0	1	12.25	1.7		14.95	0.25	0.25	0.5	7.
Lower Selway	L	77	28	6 1	2	0		0	1 0	1	10.5	3.4	1	14.95	0.25	0.25	0.5	7
Birch	L	70	18	4 0		0	1	0	1 0	1	7	1.7		9.7	0.25	0.25	0.5	4
Upper Middle Fork Salmon	L	79	5	3 0		0		0	1 0		5.25	1.7	1	7.95	0.25	0.25	0.5	3.
East Little Owyhee	L	80	0	1 0		0		0	1 0	1	1.75	1.7	1		0.25	0.25	0.5	2.:
Little Bear-Logan	L	83	0	1 0		0	1	0	1 0	1	1.75	1.7	1	4.45	0.25	0.25	0.5	2.:
	L	84	0	1 0		0	_	0	1 0		1.75	1.7			0.25	0.25	0.5	2.1
South Fork Owyhee	L	81 72	0	1 0		0	1	0	1 0	1 1	1.75 1.75	1.7	1	4.45 4.45	0.25 0.25	0.25 0.25	0.5 0.5	2
Upper North Fork Clearwater Upper Selway	i i	82		1 0		n	1	0	1 0		1.75	1.7			0.25	0.25	0.5	2.3

# 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.

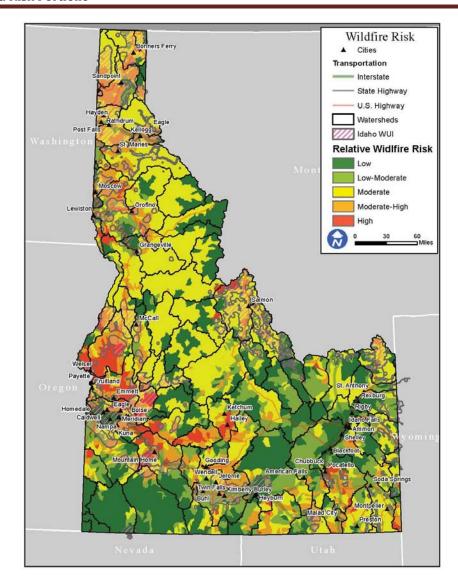
The 25 with the highest score are considered to be high risk, the next 25 are considered to be of medium risk, and the remainder are considered to be of low risk. The table used to determine the risk, including all inputs, weights, and ranks can be found on the following page. It was determined that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

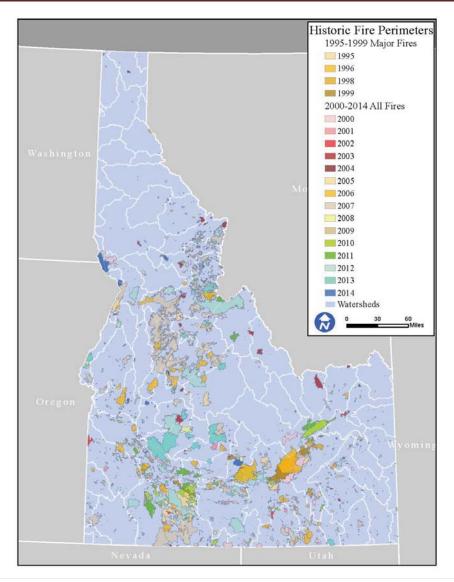
$$Risk\ Score = C(P_W + W_W) * H(R_W)$$

P<sub>w</sub> = Weighted Population score

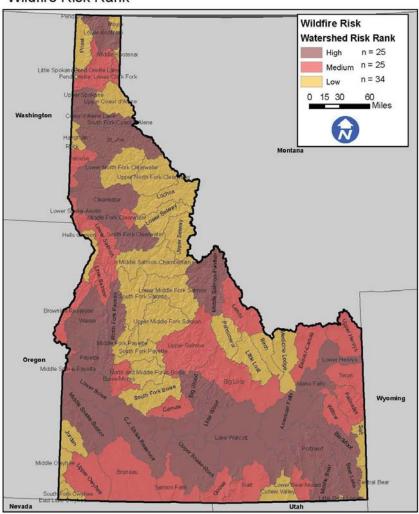
W<sub>w</sub> = Weighted Structures in WUI score

R<sub>w</sub> = Weighted Overall Wildfire Risk Score





# Idaho Multi-Hazard Risk by HUC-8 Watershed Wildfire Risk Rank



Wildfire Risk Rankin	g Ta	ble																	
Watershed	RISK	2010	Population Rank	Structures in WUI	WUI Rank	% HUC Low Risk	% Low HUC Weighted	% HUC Low- Mod	% HUC Low-Mod Weight	% HUC Moderate	% HUC Mod Weight	% HUC Mod- High	% HUC Mod-High Weight	% HUC High	% HUC High Weight	HUC Fire Hazard Subtotal	PopWeight	Consequence WUIWeight Subtotal	Total Risk
Payette	Н	30522	67	4575	46	0.02	0.0055	0.00	0	0.27	0.108	0.30	0.152	0.40		0.5483	134		180 98.694
Lower Boise	н	573637	79	182070	54	0.36	0.09075	0.03		0.12	0.0476	0.26	0.132	0.22		0.43695	158		92.6334
Upper Spokane Pend Oreille Lake	H	99092 37818	77 71	14123 17322	51 52	0.00	0	0.00		0.71 0.31	0.2856 0.1236	0.29	0.143 0.233	0.00		0.4286 0.4364	154 142		205 87.863 194 84.6616
Coeur d'Alene Lake	н	34838	70	11614	49	0.00	0	0.02		0.56		0.47	0.2085	0.00		0.44025	142		189 83.20725
Clearwater	н	45898	73		38	0.07	0.0165	0.20		0.32	0.1292	0.36	0.1775	0.06		0.43415	146		184 79.8836
South Fork Coeur d'Alene	н	11035	58	5626	47	0.00	0	0.00		0.23		0.77	0.383	0.00	0	0.4766	116	47 1	163 77.6858
Weiser	н	6771	51	1757	33	0.02	0.005	0.01	0.00245	0.21	0.084	0.35	0.1745	0.41	0.2898	0.55575	102	33 1	135 75.02625
C.J. Strike Reservoir	н	26527	64		37	0.25	0.06275	0.17		0.13		0.24	0.122	0.21		0.44055	128		165 72.69075
Upper Snake-Rock Palouse	H	107887 31487	78 68		53 40	0.09	0.023 0.06275	0.45		0.21	0.082 0.116	0.13 0.42	0.067 0.2115	0.02	0.0112	0.3414 0.40285	156 136	53 2	71.3526 70.9016
Middle Snake-Payette	н	11145	59		26	0.03	0.0065	0.02		0.46		0.32	0.161	0.17		0.4787	118		144 68,9328
Brownlee Reservoir	н	5185	47		34	0.17	0.043	0.04		0.23		0.22	0.11			0.4966	94		128 63.5648
Lower Kootenai	Н	10481	57		42	0.05	0.01225	0.07	0.0252	0.71	0.2844	0.17	0.084	0.00	0	0.40585	114	42 1	156 63.3126
Portneuf	н	86445	76		1	0.22	0.05425	0.18		0.25		0.27	0.1345			0.4131	152		153 63.2043
North Fork Payette St. Joe	н	9791 8738	55 52		50 43	0.16	0.03975	0.15		0.44		0.26 0.26	0.1275 0.129	0.00		0.3941 0.42575	110 104		160 63.056 147 62.58525
Lower Snake-Asotin	н	13754	60	92	14	0.00	0.0005	0.38		0.74	0.2964	0.28	0.129	0.20		0.42575	120		134 62.5512
Lake Walcott	н	37901	72		48	0.52	0.13025	0.25		0.13		0.09	0.0425	0.01		0.3221	144		192 61.8432
Boise-Mores	н	3416	43	2898	39	0.11	0.02725	0.07		0.23		0.20	0.101	0.34		0.4853	86		125 60.6625
	н	18071	62		35	0.24	0.061	0.32		0.24		0.19	0.093			0.3677	124		159 58.4643
South Fork Clearwater	н	9131	53		45	0.14	0.036	0.03		0.76		0.06	0.032	0.00		0.3832	106		151 57.8632
Priest Big Wood	H	3623 23221	44 63	3424 0	41	0.00	0.036	0.00 0.13		0.74 0.36		0.25 0.23	0.124 0.1165	0.02		0.4293 0.434	88 126		129 55.3797 127 55.118
Blackfoot	н	23221 58074	74	0	1	0.14	0.036	0.13		0.36	0.1436	0.23	0.1165	0.1:		0.434	126		149 53.64
Middle Bear	M	14847	61	21	5	0.06	0.01575	0.21	0.07455	0.56	0.2236	0.15	0.0725	0.02	0.014	0.4004	122	5 1	127 50.8508
Middle Salmon-Panther	М	5895	48		36	0.07	0.01775	0.00	0	0.69	0.2764	0.07	0.034	0.08	0.0553	0.38345	96	36 1	132 50.6154
American Falls	М	77212	75	0	1	0.34	0.0855	0.51		0.09	0.0376	0.05	0.026	0.01		0.33005	150		151 49.83755
	М	10005	56		4	0.06	0.01525	0.13		0.42		0.38	0.188			0.42515	112		116 49.3174
Lower Henrys Upper Henrys	M	30196 2845	66 41	106 4111	15 44	0.46	0.11425 0.044	0.16 0.11		0.33	0.1304 0.268	0.04	0.019 0.022	0.00		0.3312 0.37285	132 82		147 48.6864 126 46.9791
	M	27668	65		12	0.40	0.09925	0.36		0.21		0.03	0.022	0.00		0.3252	130		142 46.1784
	M	2399	39	1609	31	0.07	0.01825	0.00	0.0007	0.77	0.3084	0.15	0.077	0.00	0.0007	0.40435	78		109 44.07415
Idaho Falls	М	33155	69	0	1	0.45	0.11225	0.39	0.13475	0.15	0.06	0.02	0.008	0.00		0.315	138	1 1	139 43.785
	М	3867	45		13	0.14	0.03425	0.18		0.23		0.43	0.214			0.42055	90		103 43.31665
Bear Lake	М	9713	54	0	1	0.00	0.00025	0.34		0.64		0.02	0.0085	0.00		0.38505	108		109 41.97045
Pend Oreille Lembi	M	1321 1881	31	531 743	25 28	0.00	0 0335	0.00	0 0672	0.21	0.0832	0.79	0.396	0.00		0.4792 0.384	62 76		87 41.6904 104 39.936
	M	1350	32		32	0.00	0.0333	0.00		0.91		0.09	0.046			0.4092	64		96 39.2832
Lower Salmon	M	1858	36	486	21	0.11	0.027	0.09		0.60	0.2392	0.13	0.0645	0.07	0.0511	0.414	72		93 38.502
Lower Clark Fork	М	1619	34		30	0.31	0.0765	0.00	0	0.32		0.37	0.186	0.00	0	0.3913	68		98 38.3474
Middle Fork Clearwater	М	1598	33	282	18	0.00	0	0.00		0.61		0.40	0.1975	0.00		0.4395	66		84 36.918
Goose	М	6613	50	260	1 16	0.37	0.09225	0.34		0.07	0.0268	0.23	0.114	0.00		0.35065	100		35.41565
Little Spokane Willow	M	691 6290	25 49		1b 6	0.00	0 0.11875	0.00				1.00	0.5			0.5 0.31575	98		66 33 104 32.838
Camas	M	1034	30		1	0.03	0.0085	0.08		0.09		0.48	0.24			0.53295	60		61 32.50995
	M	2856	42		1	0.14	0.03425	0.16		0.67	0.2672	0.04	0.0185	0.00		0.3756	84		85 31.926
Raft	М	1877	37	0	1	0.04	0.011	0.27		0.39		0.27	0.136	0.03		0.4166	74		75 31.245
Big Lost	М	3998	46	0	1	0.41	0.10275	0.29		0.27	0.1068	0.03	0.0145	0.00		0.32625	92		93 30.34125
Hangman Moyie	M L	1726 925	35 29		8 20	0.00	0.00025 0.052	0.63		0.23	0.0916 0.2672	0.14 0.12	0.071 0.062	0.00		0.38265 0.3812	70 58		78 29.8467 78 29.7336
Beaver-Camas	-	2403	40	3/4	1	0.30	0.07575	0.15		0.52		0.12	0.062			0.3492	80		81 28.2852
Palisades	Ĺ	761	26	503	23	0.15	0.03675	0.27	0.0959	0.56	0.2252	0.02	0.0085	0.00	0	0.36635	52		75 27.47625
South Fork Payette	L	557	22	844	29	0.26	0.066	0.04	0.0133	0.62	0.246	0.06	0.029	0.03	0.0182	0.3725	44	29	73 27.1925
Lower North Fork Clearwater	L	662	23	488	22	0.19	0.048	0.03	0.0105	0.74	0.2964	0.04	0.0185	0.00	0	0.3734	46		68 25.3912
Salmon Falls	L	882	28		19	0.48	0.12075	0.16		0.28		0.08	0.039	0.00		0.3268	56		75 24.51
South Fork Boise Bruneau	L	261 670	17 24	516 594	24 27	0.31 0.80	0.07775 0.2005	0.09	0.03255 0.03465	0.35	0.14 0.0216	0.15 0.05	0.074 0.0225		0.0686	0.3929 0.27995	34 48		58 22.7882 75 20.99625
Medicine Lodge	L	825	27		1	0.34	0.085	0.40		0.03		0.07	0.0223	0.02		0.3419	54		55 18.8045
Upper Coeur d'Alene	L	481	21	0	1	0.00	0	0.00	0	0.89	0.3548	0.11	0.0565	0.00	0	0.4113	42	1	43 17.6859
Curlew Valley	L	362	19	0	1	0.16	0.041	0.28	0.0994	0.30	0.118	0.26	0.1285	0.00	0.0007	0.3876	38		39 15.1164
	L	242 135	15		10	0.23	0.05625	0.24		0.50 0.15		0.00	0.0005	0.03		0.3629	30		40 14.516 29 13.9461
Central Bear Pahsimeroi	L	135 255	14 16		1 11	0.11	0.02725 0.121	0.10 0.26		0.15		0.45	0.2235 0.016	0.19		0.4809 0.3178	28 32		29 13.9461 43 13.6654
	L	255 333	16		11	0.48	0.121	0.26		0.23		0.03	0.016			0.3178	36		37 11.5366
	L	381	20		1	0.85	0.21325	0.08		0.07	0.0268	0.00	0			0.2677	40		41 10.9757
North and Middle Forks Boise	L	44	9	281	17	0.60	0.14925	0.03		0.35		0.02	0.01	0.00		0.311	18	17	35 10.885
Jordan	L	78	12	0	1	0.18	0.044	0.44		0.18	0.0732	0.12	0.0605	0.09		0.39015	24		25 9.75375
Middle Salmon-Chamberlain	L	47	10		3	0.07	0.01725	0.01		0.90	0.3604	0.01	0.0025	0.01		0.39345	20		23 9.04935
Lochsa Colores	L	79 64	13 11	0	1	0.53	0.1325 0.05225	0.00		0.47		0.00	0	0.00		0.3205	26		27 8.6535 23 8.45135
South Fork Salmon Rock	L L	36	11 8		1 9	0.21	0.05225	0.02 0.77	0.0084	0.77	0.3068	0.00	0			0.36745 0.32785	22 16		23 8.45135 25 8.19625
Lower Selway	L	28	7	0	1	0.25	0.0625	0.00		0.75	0.0030	0.00	0			0.3625	14		15 5.4375
Hells Canyon	L	21	5	0	1	0.06	0.016	0.11	0.0392	0.78		0.05	0.023	0.00	0	0.3894	10	1	11 4.2834
Lower Middle Fork Salmon	L	4	2		7	0.27	0.06675	0.03		0.67		0.00	0			0.36805	4		11 4.04855
Middle Owyhee	L	21	6	0	1	1.00	0.2495	0.00		0.00	0	0.00	0			0.2502	12		13 3.2526
Birch	L.	18	4	7	2	0.80	0.19975 0.09675	0.17		0.00	0.2452	0.03	0.016			0.2749	8		10 2.749 7 2.3961
Upper Middle Fork Salmon Little Bear-Logan	L	5	3	0	1	0.39	0.09675	0.00		1.00		0.00	0			0.3423	6	1	7 2.3961 3 1.2
	L	0	1		1	0.32	0.08	0.00	0	0.68	0.272	0.00	0		0	0.352	2	1	3 1.056
Upper Selway	L	0	1		1	0.52	0.12925	0.00		0.48		0.00	0			0.32245	2	1	3 0.96735
East Little Owyhee	L	0			1	1.00	0.25	0.00		0.00		0.00	0			0.25	2	1	3 0.75
Middle Kootenai	L	0	1		1	1.00	0.25	0.00		0.00		0.00	0			0.25	2	1	3 0.75
	L	0	1	0		1.00	0.25	0.00	0		0	0.00	0			0.25	2	1	3 0.75
WEIGHTS			2		1	0.25		0.35		0.40		0.50		0.70	)				

# Seismic

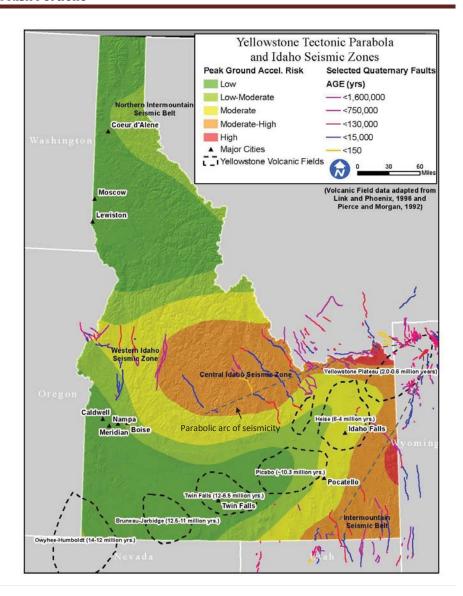
This third update to the Risk Portfolio builds upon the last Idaho Flood and Seismic Risk Portfolio's analysis of seismic risk in Idaho to include a comprehensive analysis of each individual watershed.

# 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 millon 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.

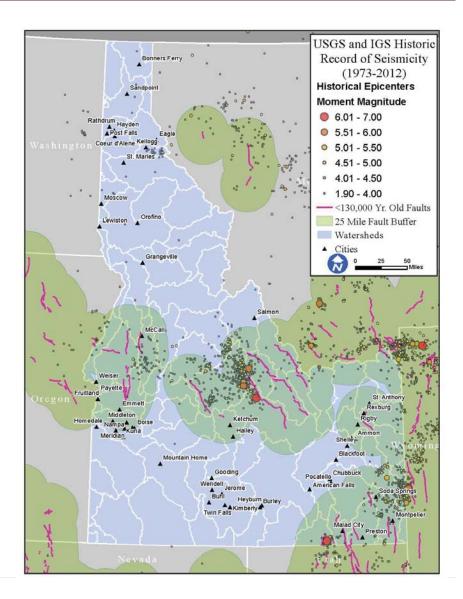
$$Risk\ Score = C(P_w + E_w) * H(GA_w + F_w)$$

P<sub>w</sub> = Weighted Population score

E<sub>w</sub> = Weighted Essential Facilities within 25 Miles of a Fault score

GA<sub>w</sub> = Weighted Ground Acceleration Subtotal

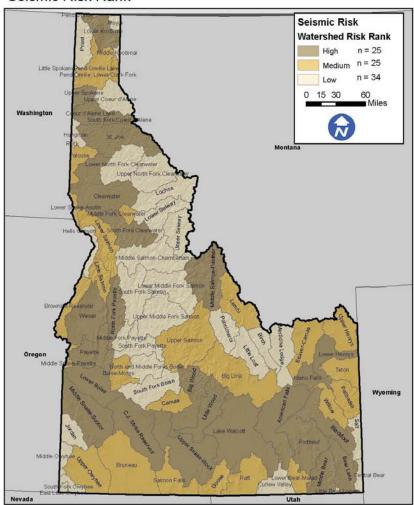
F<sub>w</sub> = Weighted Percentage of Watershed within 25 Miles of a Fault



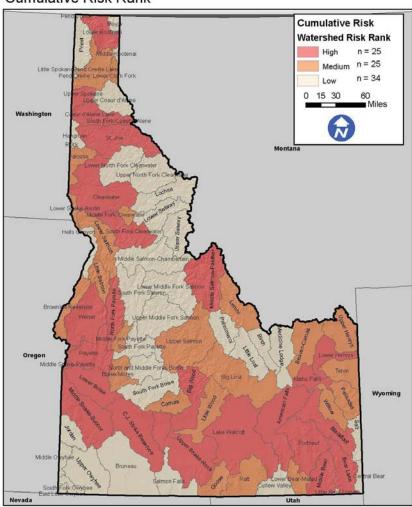
Seismic Risk Rar	nking Tab	ole																I								
	RISK	2010	Pop.	Pop.	Est. Fac. Within 25mi	Est. Facilities	Est. Facilities	Ground	GA Low	GA Low-	GA Low- Mod	GA	GA Mod	GA Mod-	GA Mod- High	GA	GA High	% HUC within 25 miles of Q	% HUC	Pop.	Est. Facilities	Consequence	% HUC	Ground Acceleration	Hazard	Total
Watershed Blackfoot	CLASS	Population 58074	Rank 73	Weighted 146	of Q fault 21	Rank 14	Weight 16.8	Accel Low 0.00	Weight 0.00	Moderate 0.00	Weight 0.00	Mod 0.38	Weight 0.15	High 0.61	Weight 0.31	High 0.01	Weight 0.007	Fault 0.68	Weight 0.14	Weighted 146	Weight 16.8	Subtotal 162.8	Weight 0.14	Subtotal 0.46	Subtotal 0.60	Risk 97.58266
Teton	Н	27668	64	128	32	18		0.00	0.00	0.00	0.00	0.48	0.13	0.52	0.31	0.00	0.007	1.00	0.20	128	21.6	149.6	0.14	0.45	0.65	97.47731
Middle Bear	Н	14847	60	120	19			0.00		0.00		0.00		1.00	0.50	0.00	0		0.20	120	15.6	135.6	0.20	0.50	0.70	94.91999
Portneuf Idaho Falls	H	86445 33155	75 68	150 136	13	11		0.00	0.00	0.03	0.01	0.58	0.23	0.39	0.20	0.00	0	0.69	0.14	150 136	13.2	163.2 155.2	0.14	0.44	0.57	93.83496 90.95138
Bear Lake	н	9713	53	106	30	17		0.00		0.00		0.00		1.00	0.50	0.00	0		0.20	106	20.4	126.4	0.20	0.50	0.70	88.48
Lower Henrys	Н	30196	65	130	19	13	15.6	0.00	0.00	0.00	0.00	0.73	0.29	0.27	0.14	0.00	0	0.86	0.17	130	15.6	145.6	0.17	0.43	0.60	87.08135
Payette North Fork Payette	H	30522 9791	66 54	132	40 24			0.15		0.55		0.30	0.12	0.00	0.00	0.00	0		0.20	132 108	22.8 19.2	154.8 127.2	0.20 0.20	0.35	0.55	85.13999 75.9384
Big Wood	Н	23221	62	124	22			0.15	0.04	0.23	0.02			0.00	0.14	0.00	0		0.10	124	18	142	0.10	0.39	0.49	69.79237
American Falls	Н	77212	74	148	30	17		0.04	0.01	0.53		0.43	0.17	0.00	0.00	0.00	0	0.19	0.04	148	20.4	168.4	0.04	0.37	0.41	68.29642
Lower Boise Upper Henrys	H	573637 2845	78 40	156 80	333	20	8.4	0.69	0.17	0.31	0.11	0.00	0.00	0.00	0.00	0.00	0.287	0.47	0.09	156 80	24 8.4	180 88.4	0.09	0.28 0.58	0.37	67.37868 67.27937
Lower Bear-Malad	н	3867	44	88	8	9	10.8	0.00		0.00		0.02		0.77	0.29	0.00	0.287	1.00	0.20	88	10.8	98.8	0.10	0.48	0.68	66.8876
Weiser	Н	6771	50	100	16			0.00	0.00	0.46	0.16	0.54	0.22	0.00	0.00	0.00	0		0.20	100	14.4	114.4	0.20	0.38	0.58	65.93053
Upper Salmon Willow	H	2856 6290	41 48	82 96	10 5	10		0.00	0.00	0.00	0.00	0.00	0.00	1.00 0.80	0.50 0.40	0.00	0		0.19 0.15	82 96	12 7.2	94 103.2	0.19 0.15	0.50 0.48	0.69	65.31362 64.51954
Big Lost	Н	3998	45	90	13			0.00	0.00	0.31	0.00		0.08	0.40	0.40	0.00	0		0.20	90	13.2	103.2	0.13	0.42	0.62	64.06714
Middle Snake-Payette	Н	11145	58	116	7		9.6	0.75	0.19	0.25	0.09	0.00	0.00	0.00	0.00	0.00	0	0.97	0.19	116	9.6	125.6	0.19	0.28	0.47	59.02673
Lemhi	H	1881	37	74	3	4		0.00		0.00		0.16	0.06	0.84	0.42	0.00	0	0.93	0.19	74	4.8	78.8	0.19	0.48	0.67	52.75383
Beaver-Camas Brownlee Reservoir	H	2403 5185	39 46	78 92	6	7	8.4	0.00	0.00	0.08	0.03	0.48	0.19 0.13	0.38	0.19	0.05	0.035	0.75	0.15 0.19	78 92	8.4 1.2	86.4 93.2	0.15 0.19	0.45	0.60	51.48504 51.30717
Middle Salmon-Panther	Н	5895	47	94	0		1.2	0.00	0.00	0.13	0.05	0.56	0.22	0.31	0.16	0.00	0	0.27	0.05	94	1.2	95.2	0.05	0.42	0.48	45.55093
Lake Walcott	Н	37901	71	142	0	1	1.2	0.68	0.17	0.24	0.08	0.08	0.03	0.00	0.00	0.00	0	0.13	0.03	142	1.2	143.2	0.03	0.29	0.31	44.58025
Little Salmon Upper Spokane	H M	2399 99092	38 76	76 152	3 0	4		0.00		0.79		0.21	0.08	0.00	0.00	0.00	0	0.88	0.18	76 152	4.8 1.2	80.8 153.2	0.18	0.36 0.28	0.54 0.28	43.39483 43.0492
Palisades	M	761	25	50	3	4	4.8	0.00	0.00	0.00	0.00	0.03	0.01	0.75	0.38	0.23	0.161	1.00	0.20	50	4.8	54.8	0.20	0.55	0.75	40.9904
South Fork Coeur d'Alene	М	11035	57	114	0	1	1.2	0.02	0.01	0.98		0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	114	1.2	115.2	0.00	0.35	0.35	40.0896
Upper Snake-Rock Pend Oreille Lake	M	107887 37818	77 70	154 140	0	1 1	1.2	0.92	0.23	0.08	0.03	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	154 140	1.2	155.2 141.2	0.00	0.26	0.26	40.0416 38.83
Coeur d'Alene Lake	M	34838	69	138	0	1		0.75		0.25		0.00	0.00	0.00	0.00	0.00	0		0.00	138	1.2	139.2	0.00	0.28	0.28	38.28
Little Wood	M	10005	55	110	0	1	1.2	0.43	0.11	0.37	0.13	0.20	0.08	0.00	0.00	0.00	0	0.09	0.02	110	1.2	111.2	0.02	0.32	0.33	37.1922
Boise-Mores Clearwater	M	3416 45898	42	84 144	1 0	2		0.00 1.00	0.00	0.17		0.83	0.33	0.00	0.00	0.00	0		0.03	84	2.4	86.4	0.03	0.39	0.42	36.66568
Middle Fork Payette	M	45898 1350	72 31	144 62	1	2	1.2	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	144 62	1.2 2.4	145.2 64.4	0.00 0.16	0.25 0.40	0.25 0.56	36.3 36.14185
Palouse	M	31487	67	134	0	1		1.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	134	1.2	135.2	0.00	0.25	0.25	33.8
C.J. Strike Reservoir	М	26527	63	126	0			0.87		0.13		0.00	0.00	0.00	0.00	0.00	0		0.00	126	1.2	127.2	0.00	0.26	0.26	33.4536
Middle Snake-Succor Goose	M	18071 6613	61 49	122 98	7	8	9.6	1.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0		0.00	122 98	9.6 2.4	131.6 100.4	0.00	0.25 0.33	0.25	33.29318 33.0316
Medicine Lodge	M	825	26	52	1	2		0.00	0.00	0.22	0.08		0.22	0.23	0.12	0.00	0		0.19	52	2.4	54.4	0.19	0.41	0.60	32.46718
South Fork Payette	M	557	21	42	4	5		0.00	0.00	0.00	0.00		0.12	0.71	0.36	0.00	0		0.15	42	6	48	0.15	0.47	0.62	29.93465
Lower Snake-Asotin St. Joe	M	13754 8738	59 51	118 102	0	1	1.2	1.00	0.25 0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	118 102	1.2	119.2 103.2	0.00	0.25 0.28	0.25 0.28	29.8 29.3088
Raft	M	1877	36	72	0	1		0.00		0.48		0.52	0.21	0.00	0.00	0.00	0		0.00	72	1.2	73.2	0.00	0.38	0.28	28.46672
Lower Kootenai	M	10481	56	112	0	1		1.00	0.25	0.00		0.00	0.00	0.00	0.00	0.00	0		0.00	112	1.2	113.2	0.00	0.25	0.25	28.3
South Fork Clearwater Curlew Valley	M	9131 362	52 18	104 36	0 2	1	1.2	1.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00 1.00	0.00	104 36	1.2 3.6	105.2 39.6	0.00	0.25 0.45	0.25	26.3 25.58693
Little Lost	M	333	17	34	1			0.00		0.00		0.32		0.47	0.24	0.00	0		0.20	34	2.4	36.4	0.20	0.47	0.67	24.3152
Salt	M	242	14	28	0	1	1.2	0.00	0.00	0.00	0.00		0.00	0.40	0.20	0.60	0.42	1.00	0.20	28	1.2	29.2	0.20	0.62	0.82	23.944
Camas Pahsimeroi	M	1034 255	29 15	58	0	2	1.2	0.00	0.00	0.51		0.49	0.20	0.00	0.00	0.00	0	0.11	0.02	58 30	1.2	59.2 32.4	0.02	0.37	0.40	23.50991
Lower Clark Fork	L	1619	33	66	0			0.20	0.05	0.80	0.00		0.00	0.00	0.00	0.00	0		0.00	66	1.2	67.2	0.00	0.33	0.70	22.176
Priest	L	3623	43	86		1		1.00		0.00		0.00	0.00	0.00	0.00	0.00	0		0.00	86	1.2	87.2	0.00	0.25	0.25	21.8
Central Bear Lower Salmon	L	135 1858	13 35	26 70	2	3		0.00	0.00	0.00	0.00		0.00	1.00 0.00	0.50	0.00	0		0.20	26 70	3.6 1.2	29.6 71.2	0.20	0.50 0.27	0.70	20.72
Hangman	L	1726	34	68	1	2		1.00		0.00		0.00		0.00	0.00	0.00	0		0.00	68	2.4	70.4	0.00	0.25	0.25	17.6
Middle Fork Clearwater	L	1598	32	64	0	1	1.2	1.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	64	1.2	65.2	0.00	0.25	0.25	16.3
South Fork Boise Pend Oreille	L	261 1321	16 30	32 60	0			0.00 1.00		0.20	0.07	0.75	0.30	0.05	0.03	0.00	0		0.07	32 60	1.2	33.2 61.2	0.07	0.40 0.25	0.46 0.25	15.40881 15.3
Upper Coeur d'Alene	L	481	20	40	0	1	1.2	0.00	0.25	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	40	1.2	41.2	0.00	0.35	0.25	14.42
Moyie	L	925	28	56	0	1	1.2	1.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	56	1.2	57.2	0.00	0.25	0.25	14.3
Salmon Falls Little Spokane	L	882	27	54	0	1		0.94		0.06	0.02		0.00	0.00	0.00	0.00	0		0.00	54	1.2	55.2	0.00	0.26	0.26	14.1312
Bruneau Bruneau	L	691 670	24 23	48 46	0	1	1.2	1.00	0.25 0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0		0.00	48 46	1.2	49.2 47.2	0.00	0.25 0.25	0.25 0.25	12.3 11.8
Lower North Fork Clearwater	L	662	22	44	0		1.2	1.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	44	1.2	45.2	0.00	0.25	0.25	11.3
South Fork Salmon	L	64	10	20	0	1	1.2	0.00	0.00	0.13	0.05	0.75	0.30	0.12	0.06	0.00	0	0.47	0.09	20	1.2	21.2	0.09	0.41	0.50	10.56845
North and Middle Forks Boise Upper Owyhee	L	44 381	8 19	16 38	0	1	2.4	0.00 1.00	0.00 0.25	0.00	0.00	0.70	0.28	0.30	0.15 0.00	0.00	0		0.10	16 38	2.4 1.2	18.4 39.2	0.10	0.43 0.25	0.53 0.25	9.808791 9.8
Birch	L	18	4	8	1			0.00	0.00	0.02	0.01		0.14	0.64	0.32	0.00	0		0.20	8	2.4	10.4	0.20	0.46	0.66	6.8952
Lochsa	L	79	12	24	0	1		0.84		0.16		0.00		0.00	0.00	0.00	0		0.00	24	1.2	25.2	0.00	0.27	0.27	6.7032
Middle Salmon-Chamberlain Jordan	I L	47 78	9	18 22	0	1	1.2	0.12 1.00	0.03 0.25	0.67	0.23	0.21	0.08	0.00	0.00	0.00	0	0.00	0.00	18 22	1.2	19.2 23.2	0.00	0.35 0.25	0.35	6.691978 5.8
Upper Middle Fork Salmon	L	5	3	6	0	1	1.2	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.50	0.00	0	0.50	0.10	6	1.2	7.2	0.10	0.50	0.60	4.318432
Rock	L	36	7	14	0	1	1.2	1.00	0.25	0.00	0.00			0.00	0.00	0.00	0		0.00	14	1.2	15.2	0.00	0.25	0.25	3.8
Hells Canyon Lower Selway	L	21 28	5	10 12	0	1		0.64	0.16 0.25	0.36	0.13	0.00	0.00	0.00	0.00	0.00	0		0.03	10 12	1.2	11.2	0.03	0.29	0.32	3.569315 3.3
Middle Owyhee	L	28	5	10	0			1.00		0.00	0.00		0.00	0.00	0.00	0.00	0		0.00	10	1.2	11.2	0.00	0.25	0.25	2.8
Lower Middle Fork Salmon	L	4	2	4	0	1	1.2	0.00	0.00	0.00	0.00	0.53	0.21	0.47	0.24	0.00	0	0.12	0.02	4	1.2	5.2	0.02	0.45	0.47	2.450747
Little Bear-Logan East Little Owvhee	I L	0	1	2	0	1	1.2	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.50	0.00	0	1.00	0.20	2	1.2	3.2 3.2	0.20	0.50	0.70	2.24 0.8928
Upper Selway	L	0	1	2	0	1	1.2	0.71		0.29		0.00	0.00	0.00	0.00	0.00	0		0.00	2	1.2	3.2	0.00	0.28	0.28	0.8928
Upper North Fork Clearwater	L	0	1	2	0	1	1.2	0.89	0.22	0.11	0.04	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	2	1.2	3.2	0.00	0.26	0.26	0.8352
Middle Kootenai	I L	0	1	2	0	1	1.2	0.92		0.08		0.00	0.00	0.00	0.00	0.00	0		0.00	2	1.2	3.2	0.00	0.26	0.26	0.8256
South Fork Owyhee		0			0		1.2	1.00	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00		1.2	3.2	0.00	0.25	0.25	0.8

WEIGHTS 2 1.2 0.25 0.35 0.40 0.50 0.70

# Idaho Multi-Hazard Risk by HUC-8 Watershed Seismic Risk Rank



# Idaho Multi-Hazard Risk by HUC-8 Watershed Cumulative Risk Rank



# 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

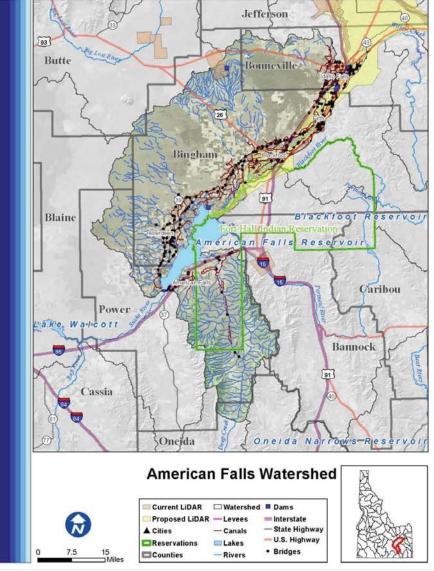
If 2 M, then M

If 2 L, then L

If [(1 H and 1 M) and 1 L] then Professional Judgment

# Idaho Multi-Hazard Risk Rank Summary Table

Watershed Name	OVERALL RISK RANK	FLOOD RISK RANK	WILDFIRE RISK RANK	SEISMIC RISK RANK
American Falls	н	Н	M	Н
	Н	Н	M	н
Big Wood	H	H H	H	H
	H	H	H	M M
C.J. Strike Reservoir Clearwater	Н	Н	H	M
Coeur d'Alene Lake	Н	н	н	M
Idaho Falls	н	н	M	н
	Н	Н	Н	Н
Lower Boise	н	н	Н	Н
	н	Н	M	Н
Lower Kootenai	Н	Н	Н	M
Middle Bear	Н	Н	M	H
Middle Salmon-Panther	H	H	M	
Middle Snake-Payette Middle Snake-Succor	H	M H	H H	H M
North Fork Payette	Н	н	Н	H
Payette	H	H	H	Н
	н	н	Н	н
South Fork Clearwater	Н	н	Н	M
South Fork Coeur d'Alene	Н	Н	Н	M
St. Joe	Н	Н	Н	М
	Н	Н	Н	M
Upper Spokane	H	H	H	M
	H	H	H	H
Beaver-Camas Big Lost	M M	M M	M .	H
Big Lost Boise-Mores	M	M	H	H M
	M	M	H	H
	M	M	M	M
Goose	M	M	M	M
	M	M	M	н
	M	M	M	Н
Little Wood	M	Н	M	M
Lower Bear-Malad	M	M	M	н
Lower Clark Fork	M	M	M	L
Lower Salmon	M	M	M	L
Lower Snake-Asotin	M	М	Н	M
Middle Fork Clearwater	M	M L	M	L M
Middle Fork Payette Palisades	M M	M	M L	M
Palouse	M	M	H	M
Pend Oreille Lake	M	M	Н	M
Raft	M	M	M	M
Teton	M	M	M	Н
Upper Henrys	M	M	M	Н
Upper Salmon	M	M	M	Н
Willow	M	M	M	Н
	L	L	L	L
Bruneau	L	M	L	L
Central Bear	L	L	L	L
Curlew Valley	L	L	L	M
	L	L	L M	L
Hangman Hells Canyon	L	L	M .	-
Jordan	L	L	L	L
	L	L	L	L
Little Lost	L	L	L	M
Little Spokane	L	L	M	L
Lochsa	L	L	L	L
	L	L	L	L
Lower North Fork Clearwater	L	L	L	L
	L	L	L	L
Medicine Lodge Middle Kootenai	L	L	L	M
	L	L	L	I I
	L	L	L	L
	L	L	L	1
	L	L	L	L
	L	L	L	L
	L	L	M	L
Priest	L	L	Н	L
Rock	L	L	L	L
	L	M	L	L
	L	L	L	М
South Fork Boise	L	L	L	L
	L	L	L	L
	L	L	L	M
South Fork Salmon	L	L	1	L
	L	L	L	L
	L	L	L	1
	L	M	L	L
Upper Selway	L	L	L	L



# American Falls

### Risk Rank: H

### Introduction

Areas of concentrated population within the American Falls watershed include Aberdeen, American Falls, Arbon Valley, Basalt, 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, 53 flood events have been reported. Most of these reported events are flash floods. There are 5 high or significant hazard dams in the American Falls watershed, including the Gem State and Simplot El dams. There are 13 communities participating in the National Flood Insurance Program (NFIP), with 94 policies contributing to \$62,984 of premiums paid in exchange for \$22,026,400 of coverage.

- •2 out of the 7 counties in the American Falls watershed identified flood as their number one hazard.
- 0 out of the 7 counties in the American Falls watershed identified flood as their number two hazard.
- •0 out of the 7 counties in the American Falls watershed identified flood as their number three hazard.

### LIDAR data availability

LIDAR availability within the American Falls watershed is as follows:

-INL FIRE (2007)

-Snake River (2012)

-A greater portion of the Snake River within the American Falls watershed is planned to be obtained (2014)

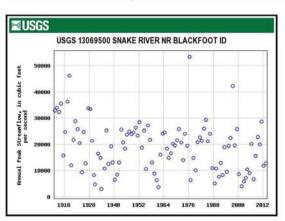
### Conclusion

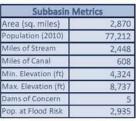
Due to variable flows of the Snake River, the high number of NFIP policies, high population and presence of a number of hazardous dams, the American Falls watershed is considered a high risk watershed.

### **Counties and Tribes**

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

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

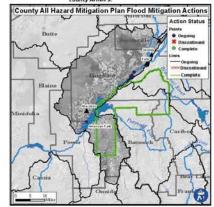


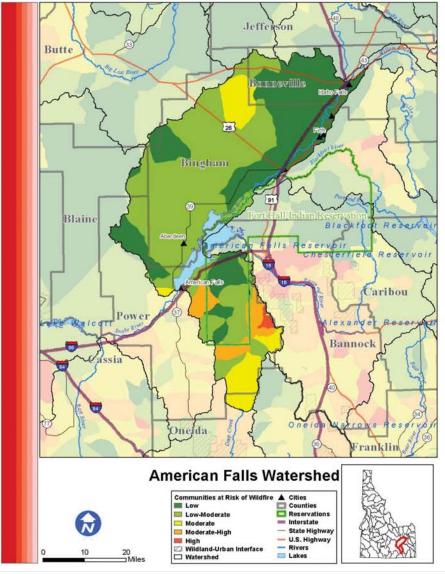


Subbasin Ownership									
Owner Type	% Subbasin Area								
Private	49%								
Federal	33%								
Reservation/BIA	11%								
State	7%								
Out of Idaho	0%								

NFIP Statistics (2014)	
NFIP Policies	93
Total Coverage	\$22,026,400
Total Premiums	\$62,984
# Claims	22
Paid Claims	\$97,767

### Total flood mitigation actions: 120





# American Falls

### Risk Rank: M

### Introduction

The American Falls watershed is home to 77,212 people. 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

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 234 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the American Falls watershed has 34.2% low risk, 50.7% low-moderate risk, 9.4% 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 Tribe

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

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

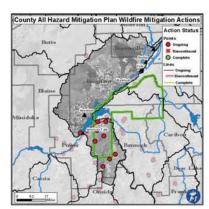
Subbasin Metrics	
Area (sq. miles)	2,870
Population (2010)	77,212
Miles of Stream	2,448
Miles of Canal	608
Min. Elevation (ft)	4,324
Max. Elevation (ft)	8,737
Structures in WUI	C
Historic Fire Events	234
Acres Burned (1995-)	568,849

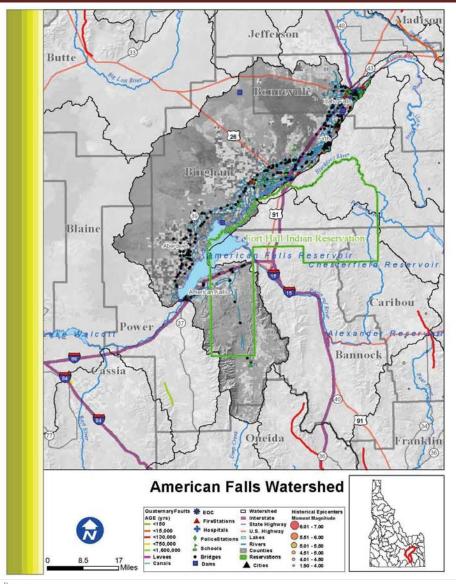
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	49%
Federal	33%
Reservation/BIA	11%
State	7%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	34.2%
Low-Moderate	50.7%
Moderate	9.4%
Moderate-High	5.2%
High	0.5%



# Total wildfire mitigation actions: 117





# **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

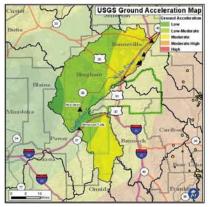
### Cities

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

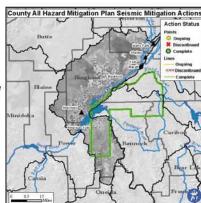
Subbasin	Metrics	
Area (sq. miles)		2,870
Population (2010)	7	77,212
Miles of Stream		2,448
Miles of Canal		608
Min. Elevation (ft)	Ţ.	4,324
Max. Elevation (ft)		8,737
Est. Facilities Near F	ault	30
% Watershed w/in 25 M	lles of Fault	19%

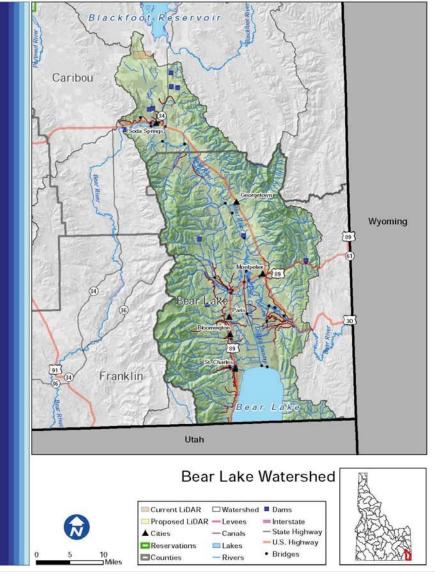
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	49%
Federal	33%
Reservation/ BIA	11%
State	7%
Out of Idaho	0%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	4%
Low-Moderate	53%
Moderate	43%
Moderate-High	0%
High	0%



# Total seismic mitigation actions: 77





# 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 9,713 total people who live within the watershed, of which 453 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 AHMP, there have been 44 historic flash floods. There are 7 high or significant hazard dams in the Bear Lake watershed. There are 7 communities participating in the NFIP with 3 policies contributing to \$2,328 of premiums paid in exchange for \$205,300 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 two 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:

-China 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

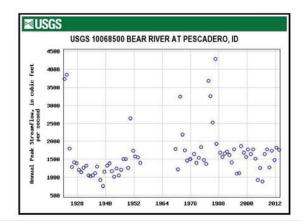
Subbasin Met	trics
Area (sq. miles)	1,273
Population (2010)	9,713
Miles of Stream	1,512
Miles of Canal	212
Min. Elevation (ft)	5,715
May Fleyation (ft)	0.865

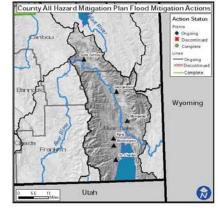
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	44%
Federal	33%
Reservation/BIA	0%
State	2%
Out of Idaho	21%

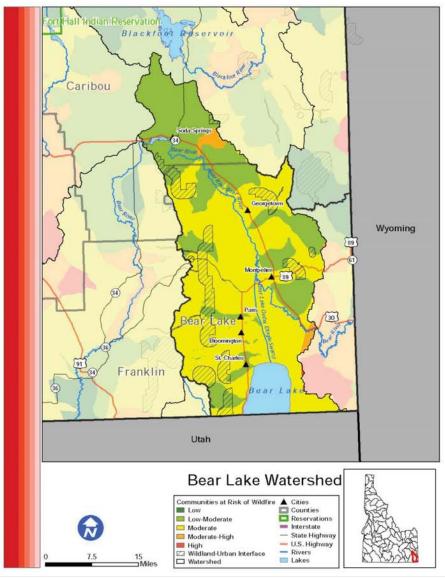
op. at Flood Risk

NFIP Statistics (2014)	
NFIP Policies	3
Total Coverage	\$205,300
Total Premiums	\$2,328
# Claims	0
Paid Claims	ŚO

### Total flood mitigation actions: 20







# 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, 3,608 acres have burned during 38 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Idaho Falls 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
- 0 out of the 3 counties in the Bear Lake watershed identified wildfire as their number thre hazard.

### Conclusion

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

### **Counties and Tribes**

Bear Lake, Caribou, Franklin

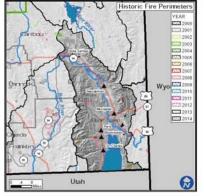
### Cities

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

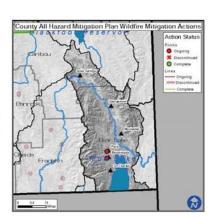
Subbasin Metrics	
Area (sq. miles)	1,273
Population (2010)	9,713
Miles of Stream	1,512
Miles of Canal	212
Min. Elevation (ft)	5,715
Max. Elevation (ft)	9,865
Structures in WUI	0
Historic Fire Events	38
Acres Burned (1995-)	3,608

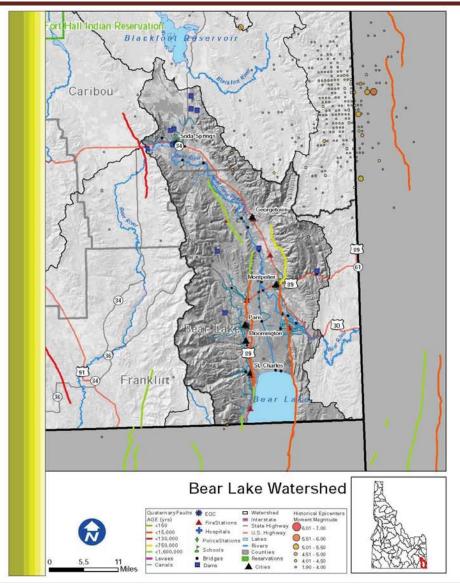
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	44%
Federal	33%
Reservation/BIA	0%
State	2%
Out of Idaho	21%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	0.1%
Low-Moderate	34.4%
Moderate	63.8%
Moderate-High	1.7%
High	0.1%



Total wildfire mitigation actions:





# 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,

### tarbant in the sheet of the

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

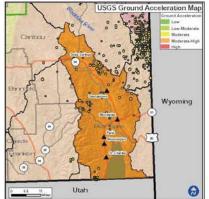
### Cities

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

Subbasin	Me	trics	
Area (sq. miles)			1,273
Population (2010)			9,713
Miles of Stream			1,512
Miles of Canal			212
Min. Elevation (ft)	į.		5,715
Max. Elevation (ft)			9,865
Est. Facilities Near F	ault		30
% Watershed w/in 25 M	les of	Fault	100%

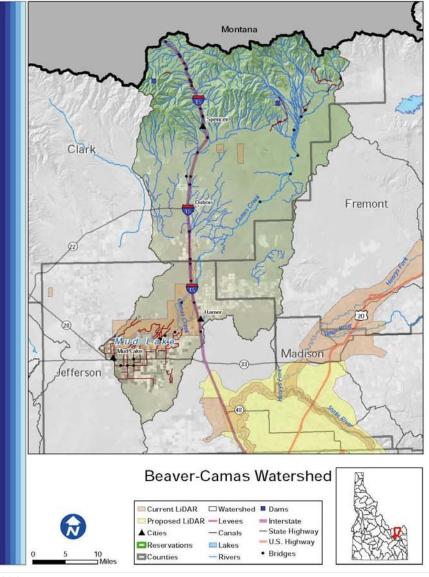
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	44%
Federal	33%
Reservation/ BIA	0%
State	2%
Out of Idaho	21%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	0%
Moderate-High	100%
High	0%



# Total seismic mitigation actions: 29





# 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 2,403 total people who live within the watershed, of which 408 are at risk of flooding. Nearly half of the watershed is privately owned.

### What is the rick

The bankfull discharge of Beaver Creek (264 cfs) is often exceeded as can been seen on the USGS graph below. According to the county AHMPs, there have been two significant flood events. There are 0 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.

- •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.
- •2 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:

- -Sheep Station (2002)
- -Sheep Station before burning (2005)
- -Sheep Station after burning (2005)
- -Camas National Wildlife Refuge (2011)

### 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

### Citie

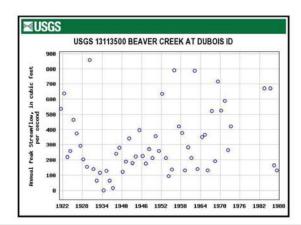
Dubois, Hamer, Mud Lake, Spencer

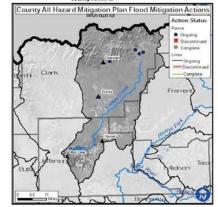
Subbasin Metrics		
Area (sq. miles)	1,002	
Population (2010)	2,403	
Miles of Stream	1,633	
Miles of Canal	232	
Min. Elevation (ft)	4,777	
Max. Elevation (ft)	9,872	
Dams of Concern	0	
Pop. at Flood Risk	408	

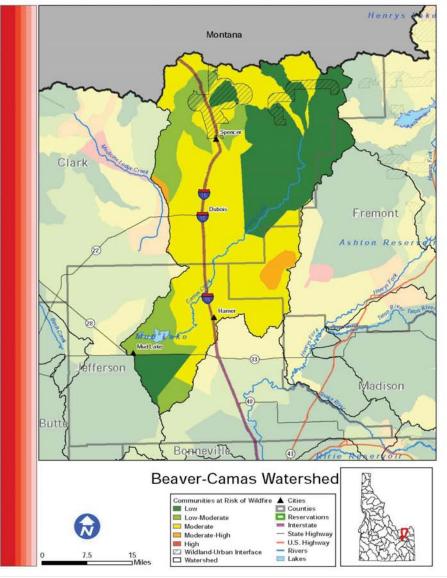
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	42%
Federal	47%
Reservation/BIA	0%
State	11%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	13
Total Coverage	\$2,730,200
Total Premiums	\$30,341
# Claims	0
Paid Claims	\$0

## Total flood mitigation actions: 36







# Beaver-Camas

### 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, 41,557 acres have burned during 46 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010),, the Beaver-Camas watershed has 30.3% low risk, 15.1% low-moderate risk, 52.4% moderate risk, 2.2% 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.

• 0 out of the 4 counties in the Beaver-Camas watershed identified wildfire as their number two

•0 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

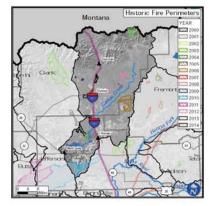
### Cities

Dubois, Hamer, Mud Lake, Spencer

Subbasin Metrics	
Area (sq. miles)	1,002
Population (2010)	2,403
Miles of Stream	1,633
Miles of Canal	232
Min. Elevation (ft)	4,777
Max. Elevation (ft)	9,872
Structures in WUI	0
Historic Fire Events	46
1 2 1/2005 1	44 000

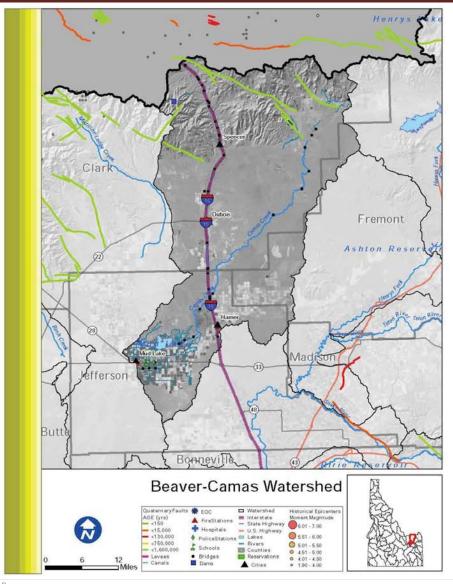
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	42%	
Federal	47%	
Reservation/BIA	0%	
State	11%	
Out of Idaho	0%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	30.3%
Low-Moderate	15.1%
Moderate	52.4%
Moderate-High	2.2%
High	0%



# Total wildfire mitigation actions:





# **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 sick?

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

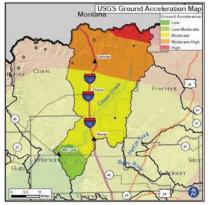
### Cities

Dubois, Hamer, Mud Lake, Spencer

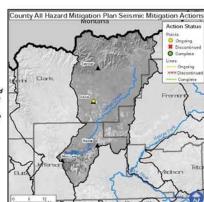
Subbasin Metrics			
Area (sq. miles)			1,002
Population (2010)			2,403
Miles of Stream			1,633
Miles of Canal			232
Min. Elevation (ft)	į.		4,777
Max. Elevation (ft) 9,87		9,872	
Est. Facilities Near Fault		6	
% Watershed w/in 25 Miles of Fault 70		75%	

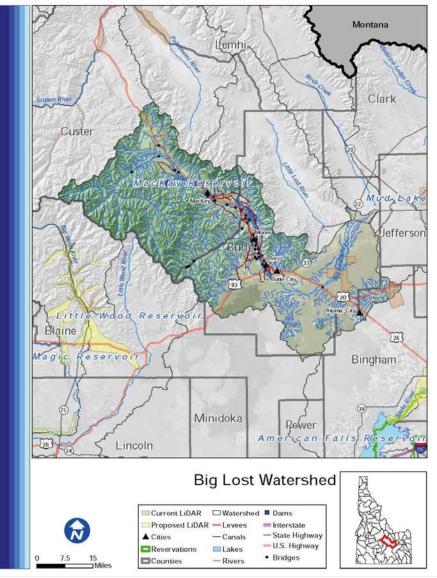
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	42%	
Federal	47%	
Reservation/BIA	0%	
State	11%	
Out of Idaho	0%	

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	8%
Moderate	48%
Moderate-High	38%
High	5%



Total seismic mitigation actions:





# **Big Lost**

### 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 rick

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 15 significant historic flood events within the watershed. There is 1 high or significant hazard dam in the Big Lost watershed. There are 6 communities participating in the NFIP with 81 policies contributing to \$15,859 of premiums paid in exchange for \$3,196,200 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.
- •O 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:

- -INL/ Birch Creek 5 (2002)
- -INL/ Birch Creek Dunes (2002)
- -Borah Scarp (2005)
- -INL (2006)
- -INL Fire (2007)
- -INL (2010)

### Conclusion

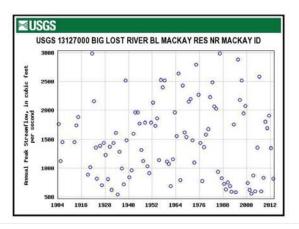
Significant hazards are present downstream of the Mackay Dam, though the watershed is largely federally managed, it is placed into the moderate flood risk category.

## **Counties and Tribes**

Bingham, Blaine, Butte, Custer

### Cities

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

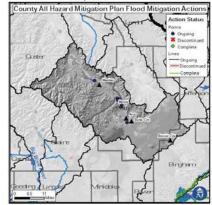


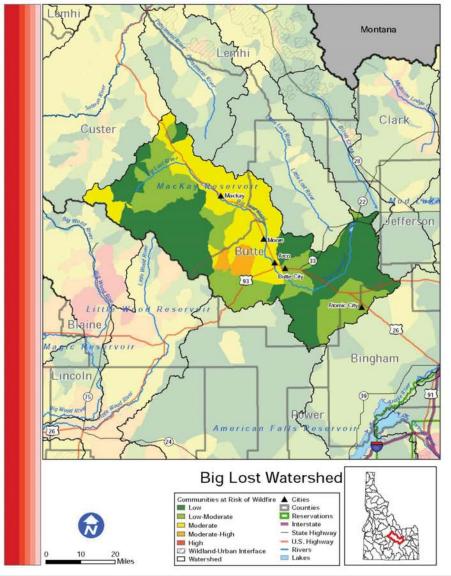
Subbasin Metrics	
Area (sq. miles)	1,983
Population (2010)	3,998
Miles of Stream	3,650
Miles of Canal	353
Min. Elevation (ft)	4,770
Max. Elevation (ft)	12,605
Dams of Concern	1
Pop. at Flood Risk	632

Subbasin Ownership	
Owner Type	% Subbasin Area
Private	13%
Federal	86%
Reservation/BIA	0%
State	1%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	18
Total Coverage	\$3,196,200
Total Premiums	\$15,859
# Claims	1
Paid Claims	\$1,902

### Total flood mitigation actions: 88





# **Big Lost**

### Risk Rank: M

### Introduction

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

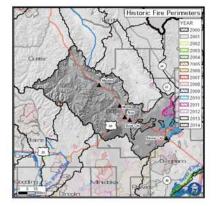
### Citios

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

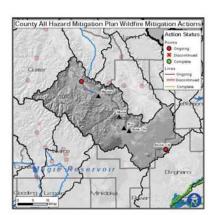
Subbasin Metrics	
Area (sq. miles)	1,983
Population (2010)	3,998
Miles of Stream	3,650
Miles of Canal	353
Min. Elevation (ft)	4,770
Max. Elevation (ft)	12,605
Structures in WUI	No WUI
Historic Fire Events	82
Acres Burned (1995-)	183,671

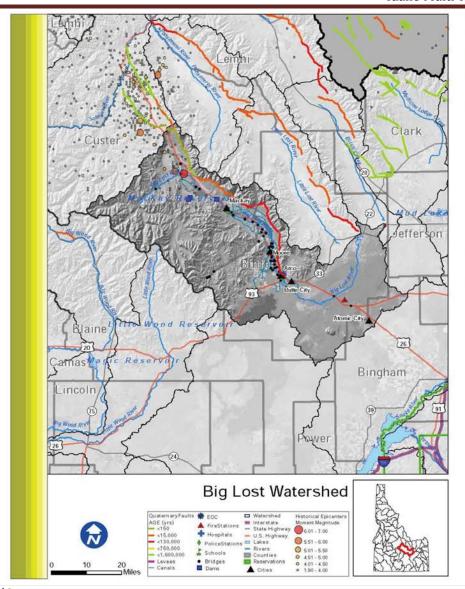
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	13%
Federal	86%
Reservation/BIA	0%
State	1%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	41.1%
Low-Moderate	29.2%
Moderate	26.7%
Moderate-High	2.9%
High	0%



# Total wildfire mitigation actions:





# **Big Lost**

### 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.

### tarbant in the about 10

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

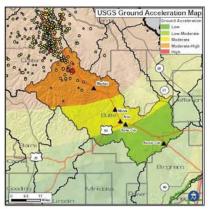
### Cities

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

Subbasin Metrics			
Area (sq. miles)			1,983
Population (2010)	1		3,998
Miles of Stream	Ĭ.		3,650
Miles of Canal			353
Min. Elevation (ft)	Į.		4,770
Max. Elevation (ft)		- 5	12,605
Est. Facilities Near Fault		13	
% Watershed w/in 25 Miles of Fault		98%	

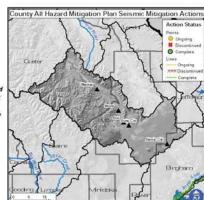
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	13%
Federal	86%
Reservation/BIA	0%
State	1%
Out of Idaho	0%

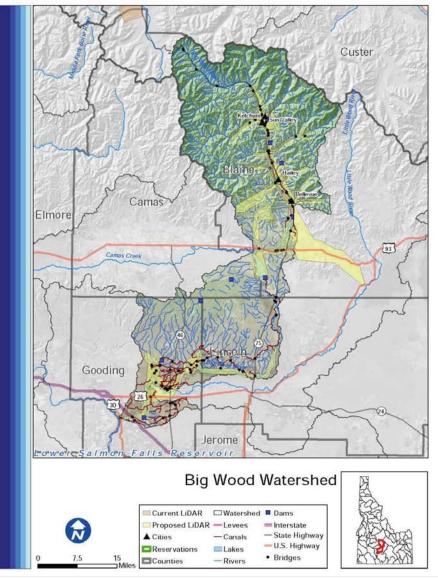
Ground Acceleration	
	%Watershed Are
Low	0%
Low-Moderate	31%
Moderate	29%
Moderate-High	40%
High	0%



Total seismic mitigation actions:

54





# Big Wood

### Risk Rank: H

### ntroduction

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 1,314 are at risk of flooding. 75% of the watershed is federally managed.

### What is the rick

The NWS recognizes that the flood level for the Big Wood River at Hailey is 3,500cfs. As can be seen below this has been exceeded regularly at a return interval of "4.1 years, resulting in 38 significant flood events according to the county AHMPs. There are 7 high or significant hazard dams in the Big Wood watershed. There are 9 communities participating in the NFIP with 527 policies contributing to \$406,018 of premiums paid in exchange for \$170,859,600 of coverage.

- •0 out of the 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 (2007)
- -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 NFHL detail study (2014)

### Conclusion

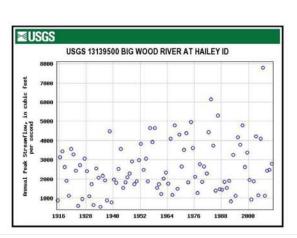
The high population, variable streamflow and presence of hazardous dams contribute to the Big Wood watershed's high flood risk categorization.

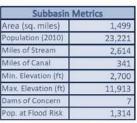
### **Counties and Tribes**

Blaine, Camas, Custer, Gooding, Lincoln

### Cities

Bellevue, Gooding, Hailey, Ketchum, Sun Valley

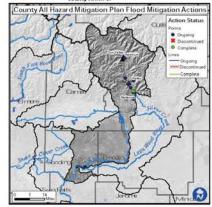


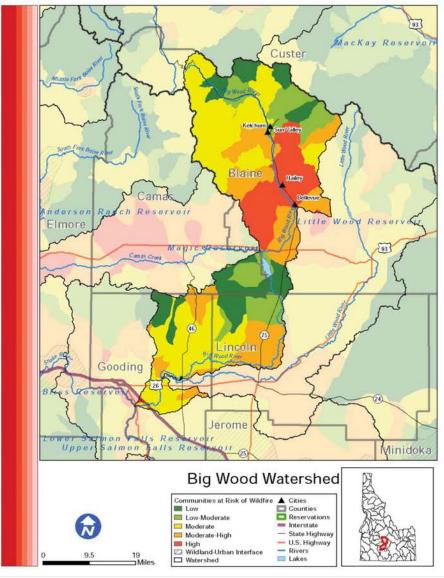


Subbasin Ownership	
Owner Type	% Subbasin Area
Private	23%
Federal	75%
Reservation/BIA	0%
State	2%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	527
Total Coverage	\$170,859,600
Total Premiums	\$406,018
# Claims	86
Paid Claims	\$653,538

### Total flood mitigation actions: 95





# 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, 186,931 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, 35.9% moderate risk, 23.3% moderate-high risk and 13% high risk of wildfire to the communities within the watershed.

•5 out of the 5 counties in the Big Wood watershed identified wildfire as their number one hazard.
•0 out of th 5 counties in the Big Wood watershed identified wildfire as their number two hazard.
•0 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

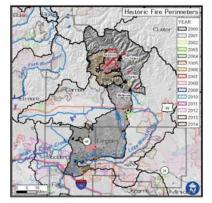
### Cities

Bellevue, Gooding, Hailey, Ketchum, Sun Valley

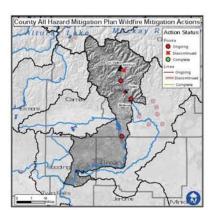
Subbasin Metrics	
Area (sq. miles)	1,499
Population (2010)	23,221
Miles of Stream	2,614
Miles of Canal	341
Min. Elevation (ft)	2,700
Max. Elevation (ft)	11,913
Structures in WUI	No WUI
Historic Fire Events	195
A B 1 (2005 )	105 021

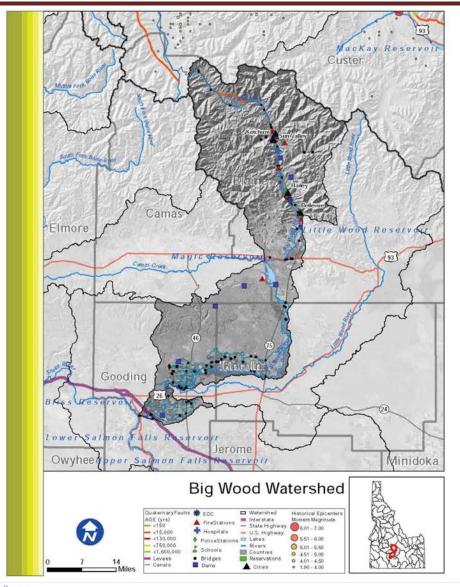
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	23%
Federal	75%
Reservation/BIA	0%
State	2%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	14.4%
Low-Moderate	13.4%
Moderate	35.9%
Moderate-High	23.3%
High	13%



# Total wildfire mitigation actions:





# Big Wood

### 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

### Citie

Bellevue, Gooding, Hailey, Ketchum, Sun Valley

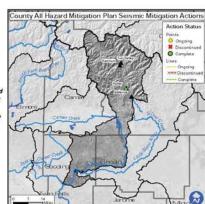
Subbasin Metrics	
1,499	
23,221	
2,614	
341	
2,700	
11,913	
22	
Fault 51%	

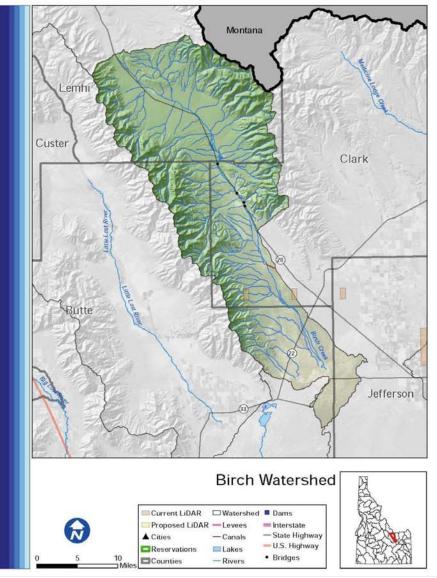
Subbasin Ownership	
% Subbasin Area	
23%	
75%	
0%	
2%	
0%	

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	15%
Low-Moderate	23%
Moderate	33%
Moderate-High	28%
High	0%



Total seismic mitigation actions:





# Birch

### Risk Rank: L

### 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.
- •1 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:

- -INL Birch Creek West (2002)
- -INL Birch Creek Central (2002)

### Conclusion

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

### **Counties and Tribes**

Butte, Clark, Jefferson, Lemhi

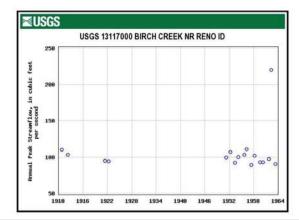
Cities

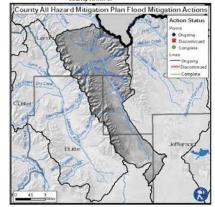
Subbasin Metrics	
Area (sq. miles)	707
Population (2010)	18
Miles of Stream	1,153
Miles of Canal	14
Min. Elevation (ft)	4,770
Max. Elevation (ft)	12,152
Dams of Concern	0
Pop. at Flood Risk	0

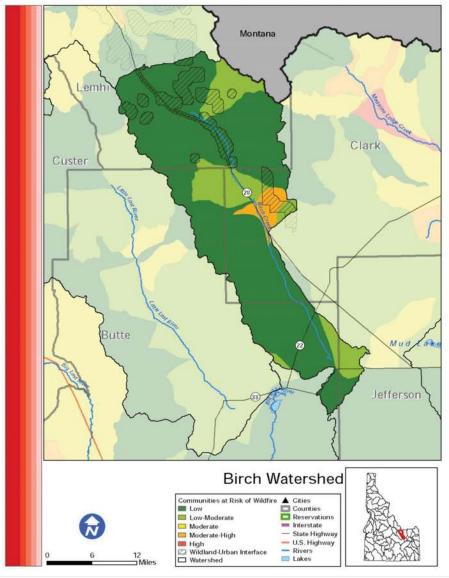
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	3%
Federal	96%
Reservation/BIA	0%
State	1%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	SO

## Total flood mitigation actions: 26







# 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 (2010), 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

- •3 out of the 4 counties in the Birch watershed identified wildfire as their number one hazard.
- •0 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

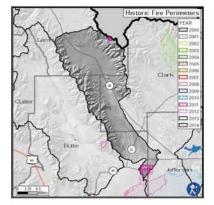
Butte, Clark, Jefferson, Lemhi

Cities

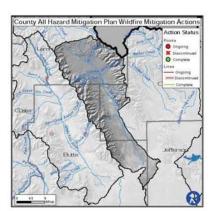
Subbasin Metrics	
Area (sq. miles)	707
Population (2010)	18
Miles of Stream	1,153
Miles of Canal	14
Min. Elevation (ft)	4,770
Max. Elevation (ft)	12,152
Structures in WUI	7
Historic Fire Events	17
Acres Burned (1995-)	4,200

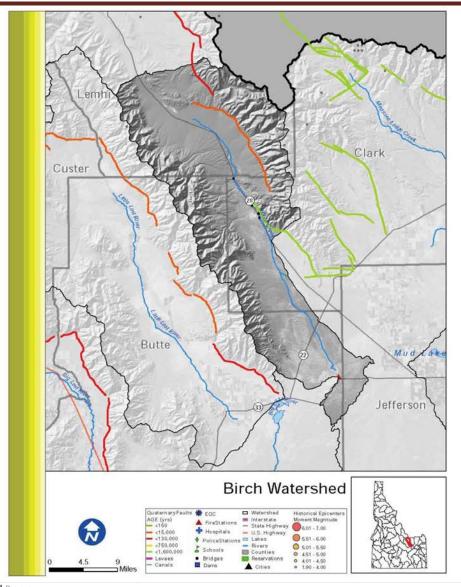
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	3%
Federal	96%
Reservation/BIA	0%
State	1%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	79.9%
Low-Moderate	16.9%
Moderate	0%
Moderate-High	3.2%
High	0%



# Total wildfire mitigation actions:





# Birch

### Risk Rank: L

### Introduction

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

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

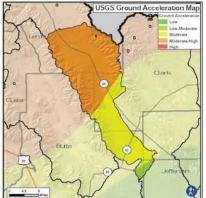
Butte, Clark, Jefferson, Lemhi

Cities

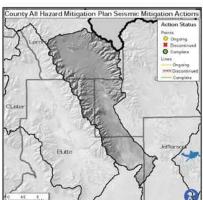
Subbasin Metrics		
Area (sq. miles)	1 -	707
Population (2010)		18
Miles of Stream		1,153
Miles of Canal		14
Min. Elevation (ft)	į.	4,770
Max. Elevation (ft)		12,152
Est. Facilities Near Fault 1		1
% Watershed w/in 25 Miles of Fault 1		100%

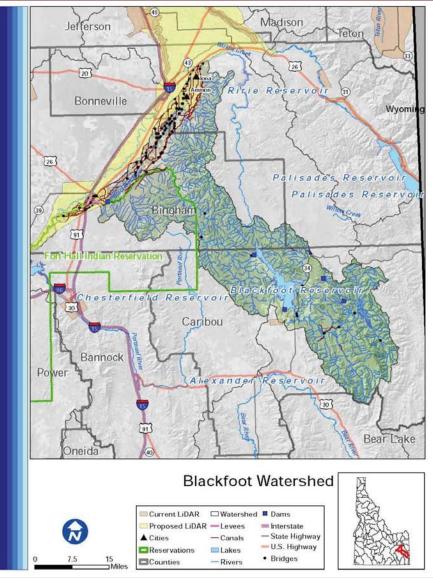
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	3%	
Federal	96%	
Reservation/BIA	0%	
State	1%	
Out of Idaho	0%	

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	2%
Moderate	34%
Moderate-High	64%
High	0%



# Total seismic mitigation actions: 34





# Blackfoot

### Risk Rank: H

### ntroduction

Areas of concentrated population within the Blackfoot watershed boundaries are Ammon, Blackfoot, Idaho Falls and Iona. There are 58,074 total people who live within the watershed, of which 5,546 are at risk of flooding. Nearly half of the watershed is privately owned.

### What is the rick

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 AHMPs. At the USGS gauge on the Blackfoot River near Goshen this is 5.3cfs. 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 \$127,824 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, Iona

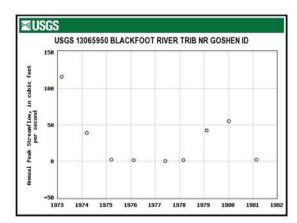
Subbasin Metrics	
Area (sq. miles)	1,089
Population (2010)	58,074
Miles of Stream	2,632
Miles of Canal	280
Min. Elevation (ft)	4,406
Max. Elevation (ft)	8,970
Dams of Concern	2

Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	48%	
Federal	20%	
Reservation/BIA	17%	
State	17%	
Out of Idaho	0%	

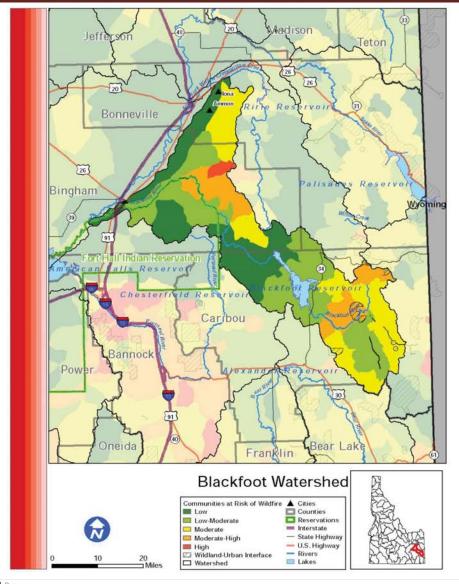
op. at Flood Risk

NFIP Statistics (2014)		
NFIP Policies	181	
Total Coverage	\$34,791,300	
Total Premiums	\$127,824	
# Claims	3	
Paid Claims	\$4,796	

## Total flood mitigation actions: 43







## Blackfoot

#### Risk Rank: H

#### Introduction

The Blackfoot watershed is home to 58,074 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, 53,090 acres have burned during 89 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Blackfoot watershed has 26.1% low risk, 35.3% low-moderate risk, 24% moderate risk, 13.5% moderate-high risk and 1.1% high risk of wildfire to the communities within the watershed.

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

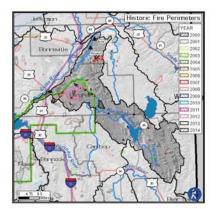
#### Cities

Ammon, Blackfoot, Idaho Falls, Iona

Subbasin Metrics		
Area (sq. miles)	1,089	
Population (2010)	58,074	
Miles of Stream	2,632	
Miles of Canal	280	
Min. Elevation (ft)	4,406	
Max. Elevation (ft)	8,970	
Structures in WUI	0	
Historic Fire Events	89	
Acres Burned (1995-)	53,090	

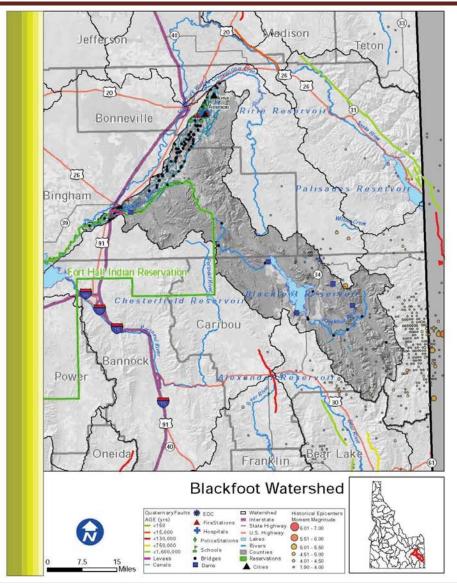
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	48%	
Federal	20%	
Reservation/BIA	17%	
State	17%	
Out of Idaho	0%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	26.1%
Low-Moderate	35.3%
Moderate	24%
Moderate-High	13.5%
High	1.1%



# Total wildfire mitigation actions:





## 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

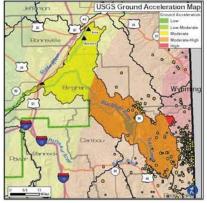
#### Cities

Ammon, Blackfoot, Idaho Falls, Iona

Subbasin Metrics			
Area (sq. miles)			1,089
Population (2010)		- 1	58,074
Miles of Stream		2,632	
Miles of Canal		280	
Min. Elevation (ft)			4,406
Max. Elevation (ft)			8,970
Est. Facilities Near Fault			21
% Watershed w/in 25 Miles of Fault		68%	

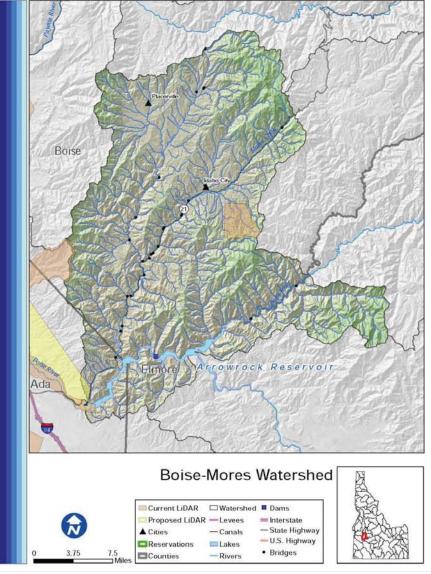
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	48%
Federal	20%
Reservation/ BIA	17%
State	17%
Out of Idaho	0%

Ground Acceleration		
Accel. Amoun	%Watershed Are	
Low	0%	
Low-Moderate	0%	
Moderate	38%	
Moderate-High	61%	
High	1%	



Total seismic mitigation actions: 38





## **Boise-Mores**

#### Risk Rank: M

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 3 significant flood events according to county AHMPs. 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

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

LIDAR availability within the Boise-Mores watershed is as follows:

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

Ada, Boise, Elmore

Cities

Idaho City, Placerville

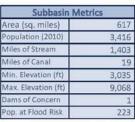
paid in exchange for \$2,902,300 of coverage.

1	DA	D	data	avallability	

-Bannock (2007)

-Dry Creek, Boise Front (2007)

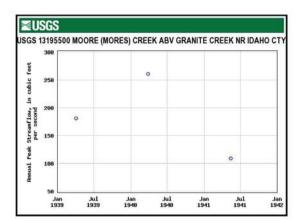
#### **Counties and Tribes**



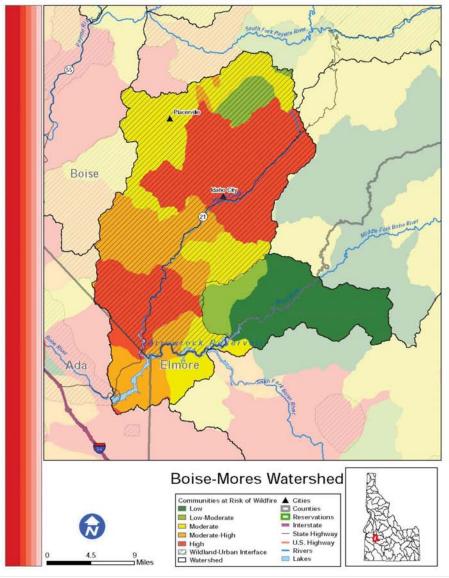
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	21%
Federal	66%
Reservation/BIA	0%
State	13%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	17
Total Coverage	\$2,902,300
Total Premiums	\$13,437
# Claims	0
Paid Claims	\$0

## Total flood mitigation actions: 92







## 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, 20,808 acres have burned during 158 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Boise-Mores watershed has 10.9% low risk, 6.9% 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.
- •0 out of the 3 counties in th 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

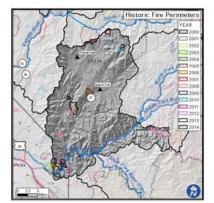
## Cities

Idaho City, Placerville

Subbasin N	Subbasin Metrics		
Area (sq. miles)	617		
Population (2010)	3,416		
Miles of Stream	1,403		
Miles of Canal	19		
Min. Elevation (ft)	3,035		
Max. Elevation (ft)	9,068		
Structures in WUI	2,898		
Historic Fire Events	158		
Acres Burned (1995-)	20,808		

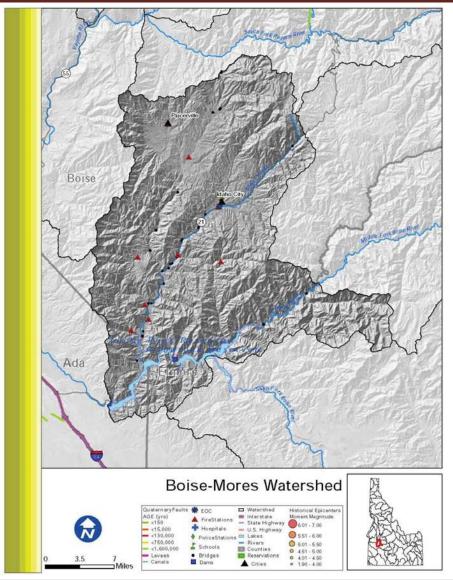
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	21%
Federal	66%
Reservation/BIA	. 0%
State	13%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level %Watershed Ar	
Low	10.9%
Low-Moderate	6.9%
Moderate	23.2%
Moderate-High	20.2%
High	34.3%



# Total wildfire mitigation actions:





## **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

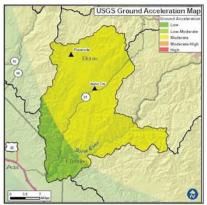
#### Cities

Idaho City, Placerville

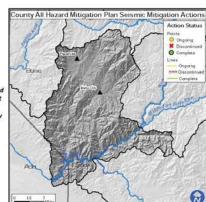
Subbasin Metrics		
Area (sq. miles)	1 -	617
Population (2010)		3,416
Miles of Stream		1,403
Miles of Canal		19
Min. Elevation (ft)	į.	3,035
Max. Elevation (ft)		9,068
Est. Facilities Near F	ault	1
% Watershed w/in 25 M	lles of Fault	16%

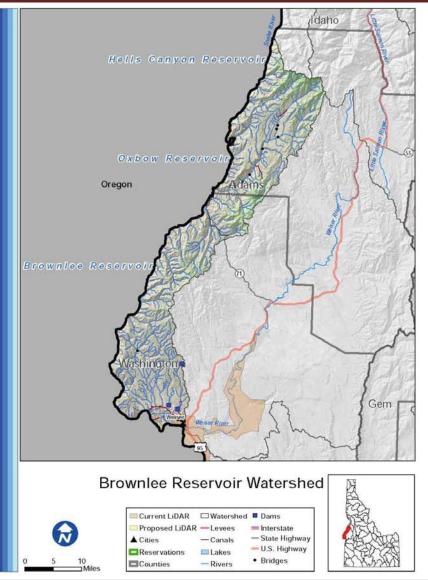
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	21%
Federal	66%
Reservation/BIA	0%
State	13%
Out of Idaho	0%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	17%
Moderate	83%
Moderate-High	0%
High	0%



Total seismic mitigation actions: 28





## Brownlee Reservoir

#### Risk Rank: M

#### ntroduction

The only area of concentrated population within the Brownlee watershed boundaries is Weiser. There are 5,185 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 rick

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 3 communities participating in the NFIP with 8 policies contributing to \$4,474 of premiums paid in exchange for \$1,362,600 of coverage.

- •0 out of the 2 counties in the Brownlee Reservoir watershed identified flood as their number one hazard.
- •0 out of the 2 counties in the Brownlee Reservoir watershed identified flood as their number two hazard.
- •1 out of the 2 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:

-Columbia River Treaty 2014/ 2024 Project (2010)

#### Conclusion

The Browniee 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

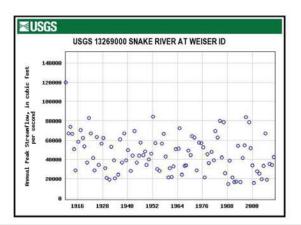
Weiser

Subbasin Metrics	
Area (sq. miles)	1,296
Population (2010)	5,185
Miles of Stream	1,468
Miles of Canal	23
Min. Elevation (ft)	1,608
Max. Elevation (ft)	9,557
Dams of Concern	1
Pop. at Flood Risk	388

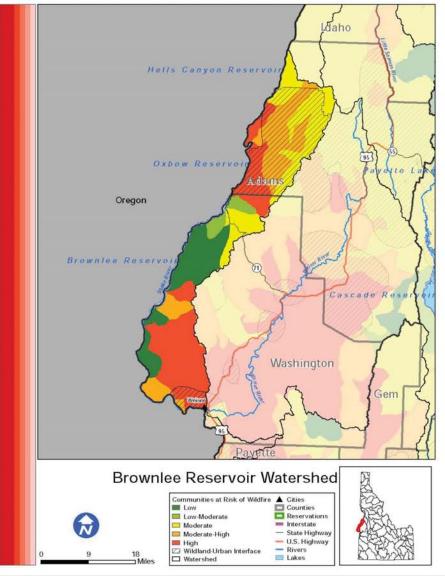
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	16%
Federal	29%
Reservation/BIA	0%
State	5%
Out of Idaho	49%

NFIP Statistics (2014)	
NFIP Policies	8
Total Coverage	\$1,362,600
Total Premiums	\$4,474
# Claims	0
Paid Claims	\$0

## Total flood mitigation actions: 43







## **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 1,960 structures located within the WUI of the Brownlee Reservoir watershed. Since 2000, 97,278 acres have burned during 91 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Brownlee Reservoir watershed has 17.2% low risk, 3.8% low-moderate risk, 22.9% moderate risk, 22% moderate-high risk and 34.1% high risk of wildfire to the communities within the watershed.

- I 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.
- •0 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

Cities

Weiser

Subbasin Metrics	
Area (sq. miles)	1,296
Population (2010)	5,185
Miles of Stream	1,468
Miles of Canal	23
Min. Elevation (ft)	1,608
Max. Elevation (ft)	9,557
Structures in WUI	1,960
Historic Fire Events	91
Acres Burned (1995-)	97,278

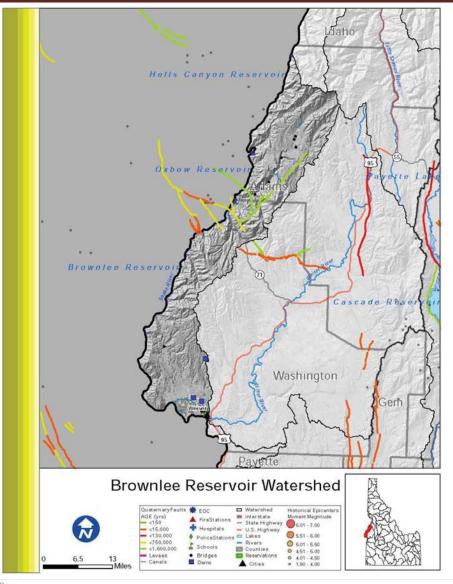
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	16%
ederal	29%
Reservation/BIA	0%
itate	5%
Out of Idaho	49%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	17.2%
Low-Moderate	3.8%
Moderate	22.9%
Moderate-High	22%
High	34.1%



# Total wildfire mitigation actions:





## **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

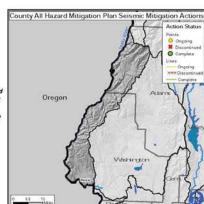
Subbasin Metrics			
Area (sq. miles)			1,296
Population (2010)			5,185
Miles of Stream			1,468
Miles of Canal			23
Min. Elevation (ft)	į.		1,608
Max. Elevation (ft)			9,557
Est. Facilities Near F	ault		0
% Watershed w/in 25 Miles of Fault		95%	

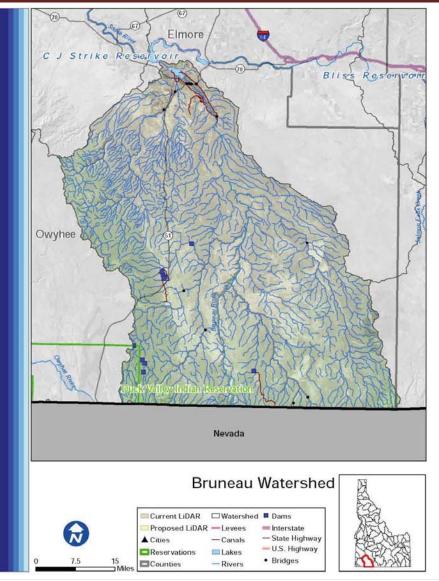
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	16%
Federal	29%
Reservation/BIA	0%
State	5%
Out of Idaho	49%

Ground	Acceleration
Accel. Amoun	%Watershed Are
Low	5%
Low-Moderate	63%
Moderate	32%
Moderate-High	0%
High	0%



Total seismic mitigation actions: 9





## Bruneau

#### Risk Rank: M

#### ntroduction

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 bankfull discharge of the Bruneau River near Hot Springs is 2,200 cfs. Peak annual flows 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 AHMP. There are 4 high or significant hazard dams in the Bruneau 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 2 counties in the Bruneau watershed identified flood as their number one hazard.
- •0 out of the 2 counties in the Bruneau watershed identified flood as their number two hazard.
  •0 out of the 2 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 of 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

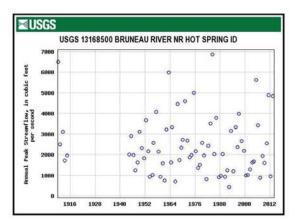
Cities

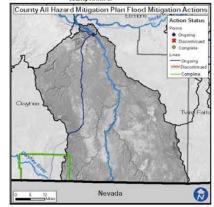
Subbasin Metrics	
Area (sq. miles)	3,304
Population (2010)	670
Miles of Stream	4,819
Miles of Canal	101
Min. Elevation (ft)	2,451
Max. Elevation (ft)	10,764
Dams of Concern	4
Pop. at Flood Risk	164

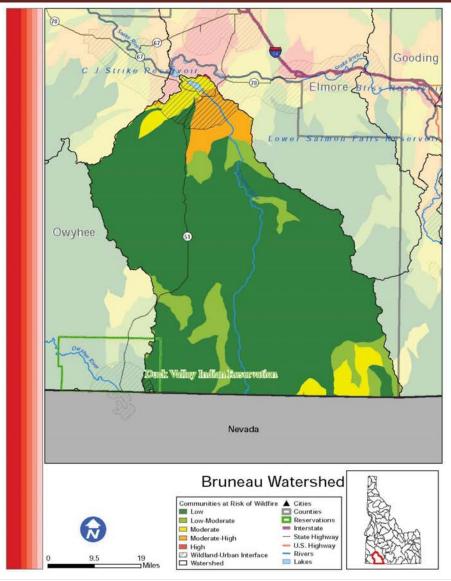
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	6%	
Federal	68%	
Reservation/BIA	1%	
State	4%	
Out of Idaho	20%	

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	ŚO

## Total flood mitigation actions: 33







## 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 186 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Bruneau watershed has 80.2% low risk, 9.9% low-moderate risk, 5.4% moderate risk, 4.5% moderate-high risk and 0.1% high risk of wildfire to the communities within the watershed.

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

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

#### Counties and Tribes

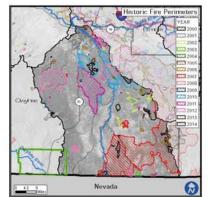
Owyhee, Twin Falls, Shoshone-Paiute Tribes

Cities

Subbasin Metrics	
Area (sq. miles)	3,304
Population (2010)	670
Miles of Stream	4,819
Miles of Canal	101
Min. Elevation (ft)	2,451
Max. Elevation (ft)	10,764
Structures in WUI	594
Historic Fire Events	186
Acres Burned (1995-)	882,870

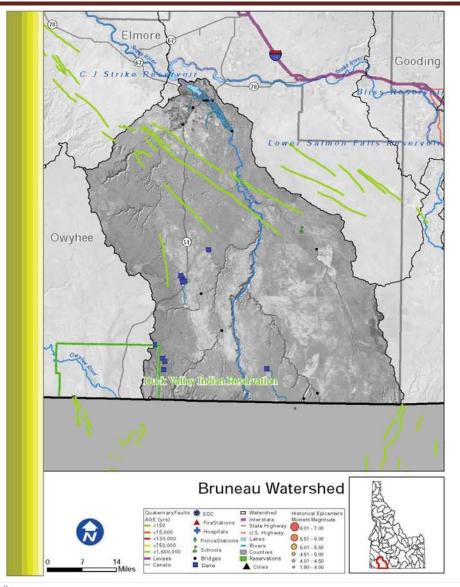
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	6%	
Federal	68%	
Reservation/BIA	1%	
State	4%	
Out of Idaho	20%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	80.2%
Low-Moderate	9.9%
Moderate	5.4%
Moderate-High	4.5%
High	0.1%



Total wildfire mitigation actions: 15





## 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

Citio

Subbasin	Me	trics	
Area (sq. miles)			3,304
Population (2010)			670
Miles of Stream	l e		4,819
Miles of Canal			101
Min. Elevation (ft)	į.		2,451
Max. Elevation (ft)			10,764
Est. Facilities Near F	ault		0
% Watershed w/in 25 M	les of	Fault	0%

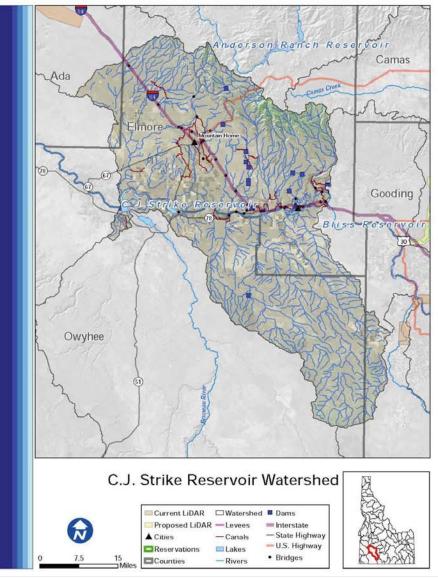
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	6%	
Federal	68%	
Reservation/ BIA	1%	
State	4%	
Out of Idaho	20%	

Ground Acceleration		
Accel. Amoun	%Watershed Are	
Low	100%	
Low-Moderate	0%	
Moderate	0%	
Moderate-High	0%	
High	0%	



Total seismic mitigation actions: 10





## 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. IDWR 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 \$92,501 of premiums paid in exchange for \$19,027,900 of coverage.

0 out of the 4 counties in the C.J. Strike Reservoir watershed identified flood as their number one hazard.
 0 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.

#### onelission

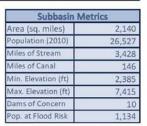
The high population downstream of hazardous dams is the main threat of flood damage potential, contributing to the high flood risk classification of the C.J. Strike Reservoir watershed.

#### Counties and Tribes

Ada, Elmore, Owyhee, Twin Falls

#### Cities

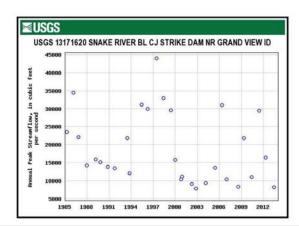
Glenns Ferry, Mountain Home, Mountain Home AFB

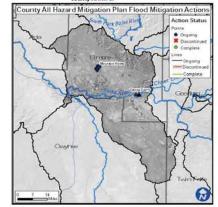


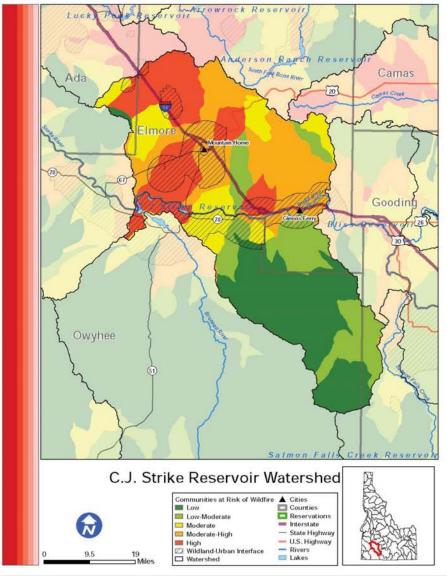
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	23%
Federal	69%
Reservation/BIA	0%
State	8%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	121
Total Coverage	\$19,027,900
Total Premiums	\$92,501
# Claims	2
Paid Claims	\$62,355

## Total flood mitigation actions: 141







## C.J. Strike Reservoir

#### Risk Rank: H

#### Introduction

The C.J. Strike Reservoir watershed is home to 26,527 people, a moderate portion of which live in or near the Wildiand 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, 1,449,085 acres have burned during 534 individual wildfire events. More than 100% 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 (2010), the C.J. Strike Reservoir watershed has 25.1% 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.

- •3 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
- O out of the 4 ounties 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

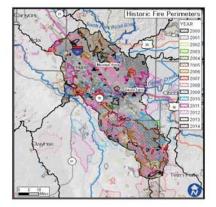
#### Cities

Glenns Ferry, Mountain Home, Mountain Home AFB

Subbasin Metrics	
Area (sq. miles)	2,140
Population (2010)	26,527
Miles of Stream	3,428
Miles of Canal	146
Min. Elevation (ft)	2,385
Max. Elevation (ft)	7,415
Structures in WUI	2,674
Historic Fire Events	534
Acres Burned (1995-)	1,449,085

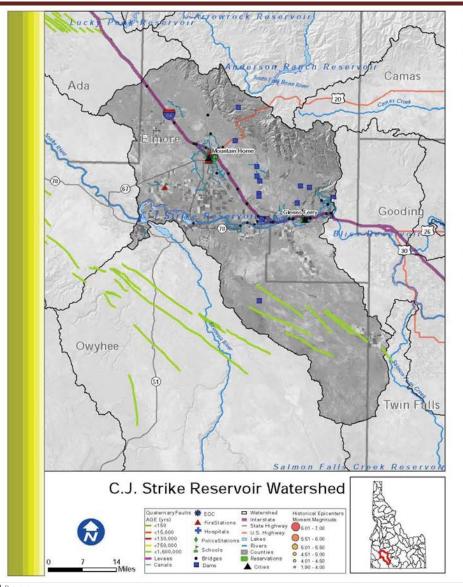
Subbasin Ownership			
Owner Type			
rivate	23%		
ederal	69%		
eservation/BIA	0%		
tate	8%		
Out of Idaho	0%		

Watershed Fire Risk				
Risk Level %Watershed				
Low	25.1%			
Low-Moderate	17.4%			
Moderate	12.5%			
Moderate-High	24.4%			
High	20.7%			



# Total wildfire mitigation actions:





## 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.

#### tarbant in the about 10

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			
Area (sq. miles)			2,140
Population (2010)		į	26,527
Miles of Stream			3,428
Miles of Canal	146		
Min. Elevation (ft)		2,385	
Max. Elevation (ft) 7,41		7,415	
Est. Facilities Near Fault		0	
% Watershed w/in 25 Miles of Fault		0%	

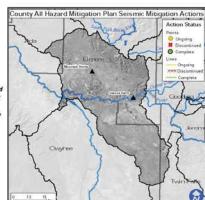
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	23%	
Federal	69%	
Reservation/ BIA	0%	
State	8%	
Out of Idaho	0%	

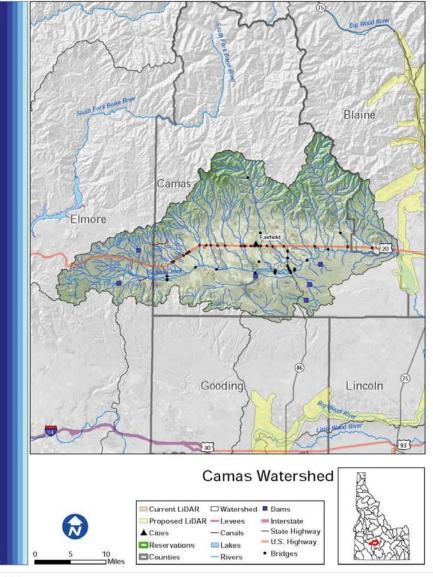
Ground Acceleration			
Accel. Amoun	%Watershed Are		
Low	87%		
Low-Moderate	13%		
Moderate	0%		
Moderate-High	0%		
High	0%		



## Total seismic mitigation actions:

23





## Camas

#### Risk Rank: M

#### Introduction

The main area of concentrated population within the Camas watershed boundaries is Fairfield. There are 1,034 total people who live within the watershed, of which 173 are at risk of flooding. The majority of the watershed is privately owned.

#### What is the rick

The city of Fairfield resides on an alluvial fan at the foot of a drainage basin that feeds into Soldier 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 AHMP. High flows from rain or snow events could produce flooding. There are 2 high or significant hazard dams in the Camas watershed. There are 4 communities participating in the NFIP with 3 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

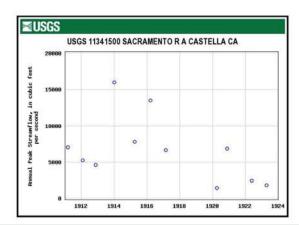
Fairfield

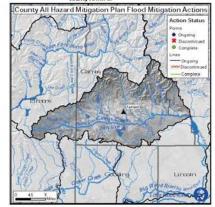
Subbasin Metrics			
Area (sq. miles)	683		
Population (2010)	1,034		
Miles of Stream	1,824		
Miles of Canal	33		
Min. Elevation (ft)	4,793		
Max. Elevation (ft)	10,079		
Dams of Concern	2		
Pop. at Flood Risk	173		

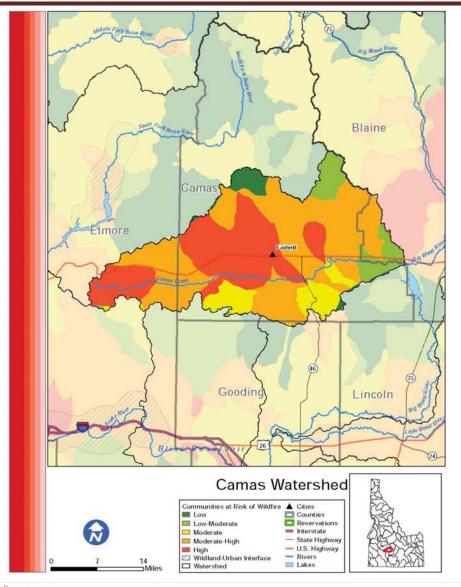
Subbasin Ownership			
Owner Type % Subbasin Are			
Private	62%		
Federal	32%		
Reservation/BIA	0%		
State	6%		
Out of Idaho	0%		

NFIP Statistics (2014)		
NFIP Policies	3	
Total Coverage	\$735,000	
Total Premiums	\$1,187	
# Claims	0	
Paid Claims	ŚO	

## Total flood mitigation actions: 81







## 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 39 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 two 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

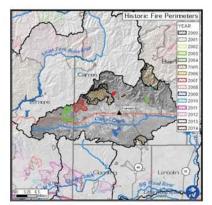
#### Cities

Fairfield

Subbasin Metrics		
Area (sq. miles)	683	
Population (2010)	1,034	
Miles of Stream	1,824	
Miles of Canal	33	
Min. Elevation (ft)	4,793	
Max. Elevation (ft)	10,079	
Structures in WUI	No WU	
Historic Fire Events	39	
Acres Burned (1995-)	91,658	

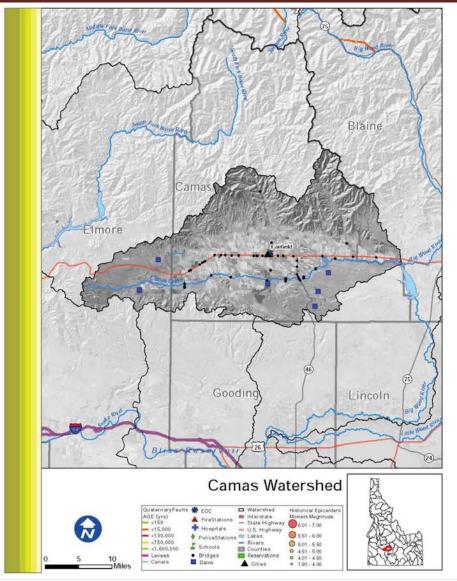
Subbasin Ownership			
Owner Type	% Subbasin Area		
Private	62%		
Federal	32%		
Reservation/BIA	0%		
State	6%		
Out of Idaho	0%		

Watershed Fire Risk		
Risk Level	%Watershed Are	
Low	3.4%	
Low-Moderate	8.3%	
Moderate	8.9%	
Moderate-High	48%	
High	31.4%	



# Total wildfire mitigation actions:





## 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

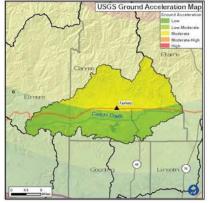
#### Cities

Fairfield

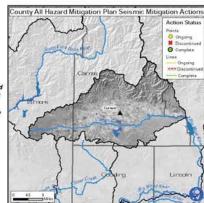
Subbasin Metrics			
Area (sq. miles)		683	
Population (2010)	1,034		
Miles of Stream	1,824		
Miles of Canal	33		
Min. Elevation (ft)	4,793		
Max. Elevation (ft)	10,079		
Est. Facilities Near Fault		0	
% Watershed w/in 25 Miles of Fault 11		11%	

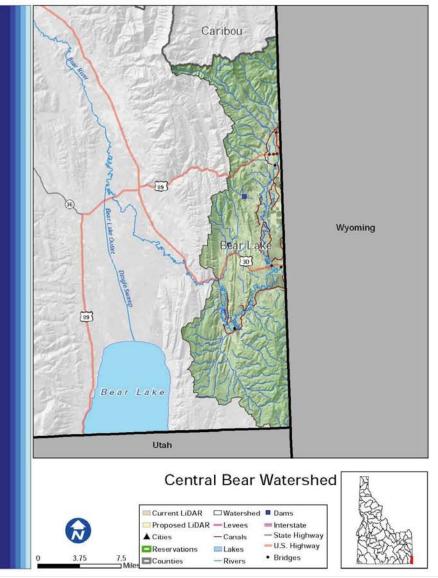
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	62%
Federal	32%
Reservation/ BIA	0%
State	6%
Out of Idaho	0%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	51%
Moderate	49%
Moderate-High	0%
High	0%



## Total seismic mitigation actions: 29





## Central Bear

#### Risk Rank: L

#### ntroduction

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 0 policies contributing to \$0 in premiums paid in exchange for \$0 of coverage.

- •0 out of the 2 counties in the Central Bear watershed identified flood as their number one hazard.
  •0 out of the 2 counties in the Central Bear watershed identified flood as their number two hazard.
- •0 out of the 2 counties in the Central Bear watershed identified flood as their number two 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 equate to a low risk of flood.

## **Counties and Tribes**

Bear Lake, Caribou

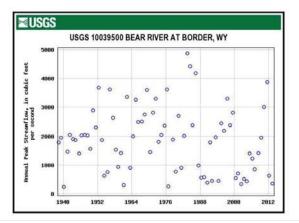
Cities

Subbasin Metrics	
Area (sq. miles)	824
Population (2010)	135
Miles of Stream	448
Miles of Canal	69
Min. Elevation (ft)	5,991
Max. Elevation (ft)	10,722
Dams of Concern	0
Pop. at Flood Risk	6.

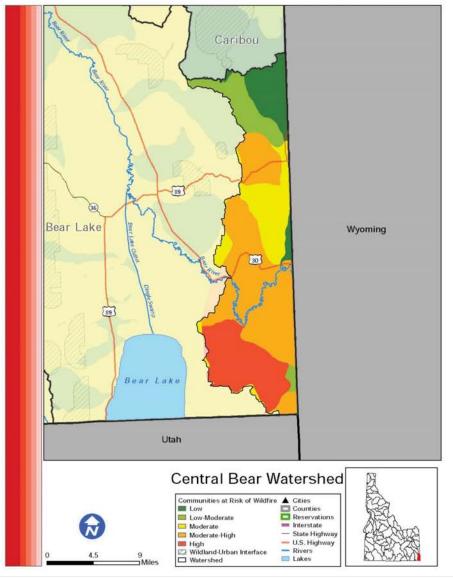
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	15%
Federal	11%
Reservation/BIA	0%
State	1%
Out of Idaho	73%

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	\$0

## Total flood mitigation actions: 8







## 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 8 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Idaho Falls watershed has 10.9% low risk, 10.1% low-moderate risk, 15.1% moderate risk, 44.7% moderate-high risk and 19.2% high risk of wildfire to the communities within the watershed.

- •1 out of the 2 counties in the Central Bear watershed identified wildfire as their number one hazard.
- •1 out of the 2 counties in the Central Bear watershed identified wildfire as their number two hazard.
- •0 out of the 2 counties in the Central Bear watershed identified wildfire as their number three haza.rd

#### Conclusion

Given the very low population and lack of WUI within the Central Bear watershed, the watershed is at an overall low risk to damaging wildfire.

## **Counties and Tribes**

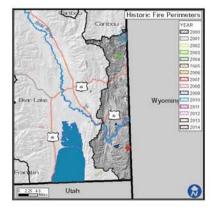
Bear Lake, Caribou

Cities

Subbasin Metrics	
Area (sq. miles)	824
Population (2010)	135
Miles of Stream	448
Miles of Canal	69
Min. Elevation (ft)	5,991
Max. Elevation (ft)	10,722
Structures in WUI	No WUI
Historic Fire Events	8
Acres Burned (1995-)	3,257

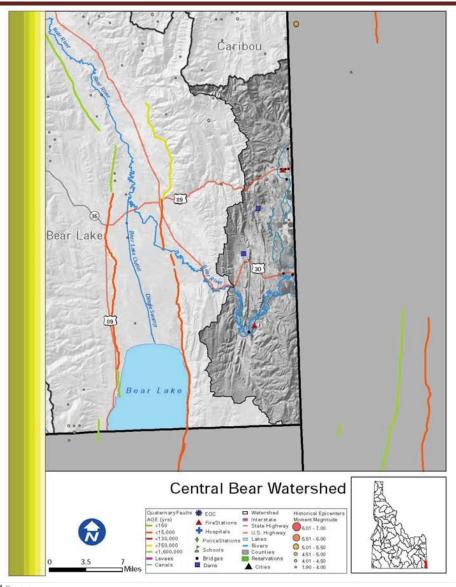
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	15%
ederal	11%
Reservation/BIA	0%
tate	1%
Out of Idaho	73%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	10.9%
Low-Moderate	10.1%
Moderate	15.1%
Moderate-High	44.7%
High	19.2%



Total wildfire mitigation actions:





## Central Bear

### Risk Rank: L

#### Introduction

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

## 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

12 21 12 20 21 21 20 21	WARTER BO	20000000	
Subbasin	Me	trics	
Area (sq. miles)			824
Population (2010)			135
Miles of Stream			448
Miles of Canal			69
Min. Elevation (ft)	Įį.		5,991
Max. Elevation (ft)			10,722
Est. Facilities Near F	ault		2
% Watershed w/in 25 M	les of	Fault	100%

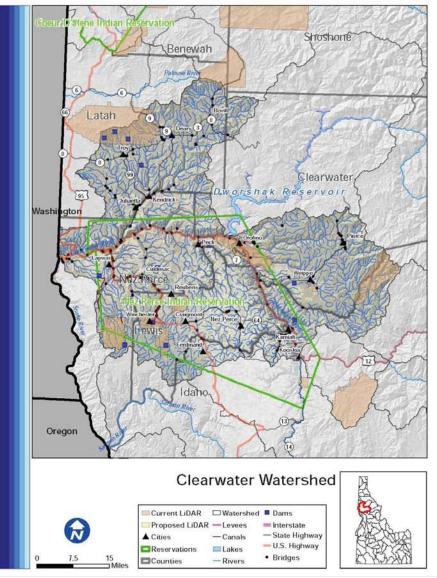
Subbasin Ownership		
wner Type	% Subbasin Area	
rivate	15%	
ederal	11%	
eservation/BIA	0%	
tate	1%	
of Idaho	73%	

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	0%
Moderate-High	100%
High	0%



Total seismic mitigation actions: 10





## Clearwater

#### Risk Rank: H

#### Introduction

Areas of concentrated population within the watershed boundaries are Bovill, Craigmont, Culdesac, Deary, Ferdinand, Juliaetta, Kamiah, Kendrick, Kooskia, Lapwai,Lewiston, Nezperce, Orofino, Peck, Pierce, Reubens, Troy, Weippe and Winchester. There are 45,898 total people who live within the watershed, of which 1,710 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 AHMPs, 17 significant historic flood events have occurred. There are 9 high or significant hazard dams in the Clearwater watershed, including the Dworshak Reservoir upstream of this watershed. There are 21 communities participating in the NFIP with 126 policies contributing to \$158,908 of premiums paid in exchange for \$24,926,600 of coverage.

- 0 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.
- 0 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:

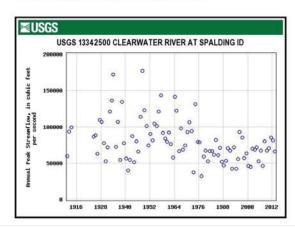
- -Nez Perce Reservation (2002)
- -Moscow Mtn, Bennet Lumber, & U of I Exp Forest (2003)
- -Emerald Creek (2004)
- -Lolo Creek (2006)
- -Deary Area (2008)
- -Jim Ford Creek (2008)
- -Nikesa Creek (2008)
- -Columbia River Treaty 2014/2024 Project (2010)

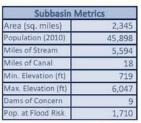
#### Conclusion

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

## **Counties and Tribes**

Clearwater, Idaho, Latah, Lewis, Nez Perce, Nez Perce Tribe



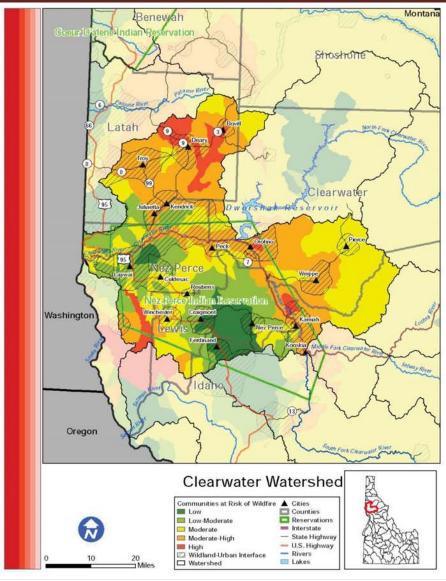


Subbasin Ownership	
Owner Type	% Subbasin Area
Private	75%
Federal	10%
Reservation/BIA	7%
State	8%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	126
Total Coverage	\$24,926,600
Total Premiums	\$158,908
# Claims	9
Paid Claims	\$92,070

## Total flood mitigation actions: 191





## Clearwater

#### 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 Bovill, Craigmont, Culdesac, Deary, Ferdinand, Juliaetta, Kamiah, Kendrick, Kooskia, Lapwai, Lewiston, Nezperce, Orolino, Peck, Pierce, Reubens, Troy, Weippe and Winchester.

## What is the risk?

Fires within the Clearwater watershed have the potential to severely disrupt life, property and economic activity. There are 2,808 structures located within the WUI of the Clearwater watershed. Since 2000, 14,162 acres have burned during 168 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, 35.5% moderate-high risk and 6.1% high risk of wildfire to the communities within the watershed.

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

• 0 out of the 5 counties in the Clearwater watershed identified wildfire as their number two hazard.

•0 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, Idaho, Latah, Lewis, Nez Perce, Nez Perce Tribe

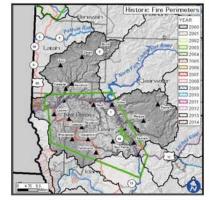
#### Cities

Bovill, Craigmont, Culdesac, Deary, Ferdinand, Juliaetta, Kamiah, Kendrick, Kooskia, Lapwai, Lewiston, Nezperce, Orofino, Peck, Pierce, Reubens, Troy, Weippe, Winchester

Subbasin Metrics	
Area (sq. miles)	2,345
Population (2010)	45,898
Miles of Stream	5,594
Miles of Canal	18
Min. Elevation (ft)	719
Max. Elevation (ft)	6,047
Structures in WUI	2,808
Historic Fire Events	168
Acres Burned (1995-)	14,162

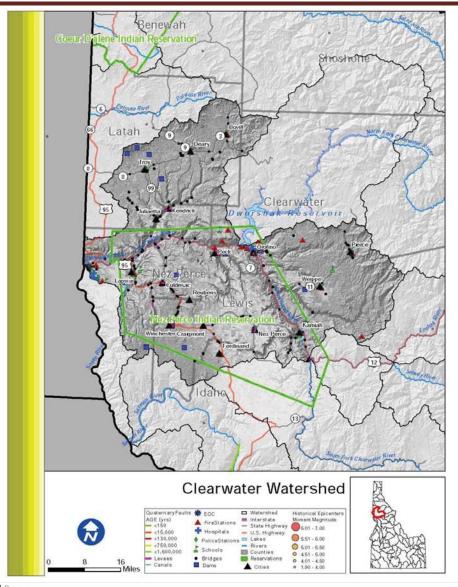
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	75%
Federal	10%
Reservation/BIA	7%
State	8%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	6.6%
Low-Moderate	19.5%
Moderate	32.3%
Moderate-High	35.5%
High	6.1%



# Total wildfire mitigation actions:





## Clearwater

### Risk Rank: M

#### Introduction

Areas of concentrated population within the Clearwater watershed boundaries are Bovill, Craigmont, Culdesac, Deary, Ferdinand, Juliaetta, Kamiah, Kendrick, Kooskia, Lapwai, Lewiston, Nezperce, 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

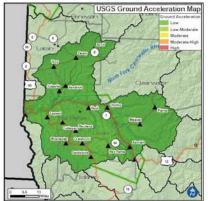
#### Cities

Bovill, Craigmont, Culdesac, Deary, Ferdinand, Juliaetta, Kamiah, Kendrick, Kooskia, Lapwai, Lewiston, Nezperce, Orofino, Peck, Pierce, Reubens, Troy, Weippe, Wischeste

Subbasin Metrics		
Area (sq. miles)		2,345
Population (2010)		45,898
Miles of Stream		5,594
Miles of Canal		18
Min. Elevation (ft)	į.	719
Max. Elevation (ft)		6,047
Est. Facilities Near Fault (		. 0
% Watershed w/in 25 Mi	les of Fault	0%

Subbasin Ownership	
Owner Type	% Subbasin Area
Private	75%
Federal	10%
Reservation/BIA	7%
State	8%
Out of Idaho	0%

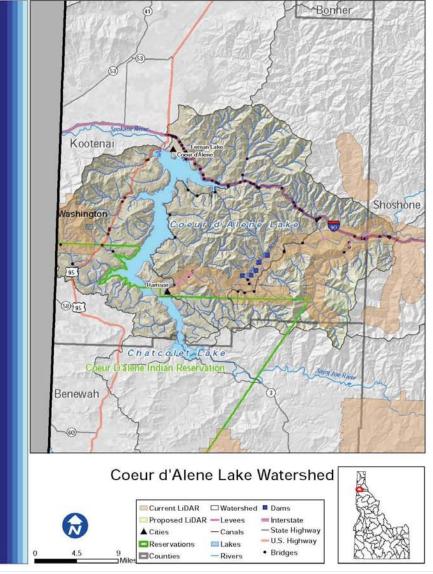
Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	100%
Low-Moderate	0%
Moderate	0%
Moderate-High	0%
High	0%



Total seismic mitigation actions: 19



1,219



## Coeur d'Alene Lake

#### Risk Rank: H

#### ntroduction

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 rick

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.

- •0 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 Couer d'Alene Lake watershed is as follows:

-Coeur d'Alene River (2002)

-Coeur d'Alene Reservation (2005)

#### Conclusion

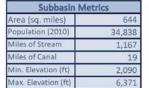
Because of the high population within the watershed and its proximity to the Coeur d'Alene River, the watershed is considered to be at high risk to losses resulting from flood damage.

#### Counties and Tribes

Benewah, Coeur d'Alene Tribe, Kootenai, Shoshone

#### Citie

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



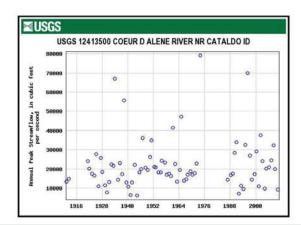
Dams of Concern

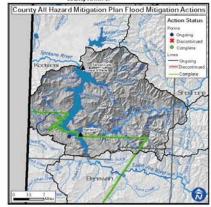
Pop. at Flood Risk

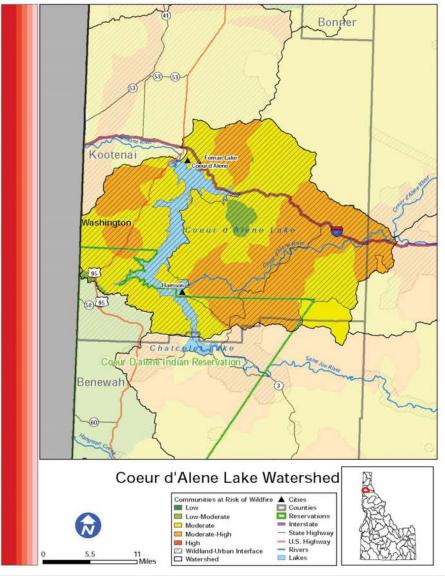
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	59%
Federal	25%
Reservation/BIA	1%
State	13%
Out of Idaho	1%

NFIP Statistics (2014)	
NFIP Policies	172
Total Coverage	\$32,667,900
Total Premiums	\$135,686
# Claims	49
Paid Claims	\$807 384

## Total flood mitigation actions: 191







## 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, 1,058 acres have burned during 63 wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Coeur d'Alene Lake watershed has 0% low risk, 2.1% low-moderate risk, 56.1% moderate risk, 41.7% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

- •2 out of the 3 countis 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 willdlire events since 2000, the potential for future damage to life and property by way of wildfire is identified as high.

## **Countles and Tribes**

Benewah, Coeur d'Alene Tribe, Kootenai, Shoshone

#### Cities

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

Subhasin &	Subbasin Metrics	
Area (sq. miles)	644	
Population (2010)	34,838	
Miles of Stream	1,167	
Miles of Canal	19	
Min. Elevation (ft)	2,090	
Max. Elevation (ft)	6,371	
Structures in WUI	11,614	
Historic Fire Events	63	
Acres Burned (1995-)	1,058	

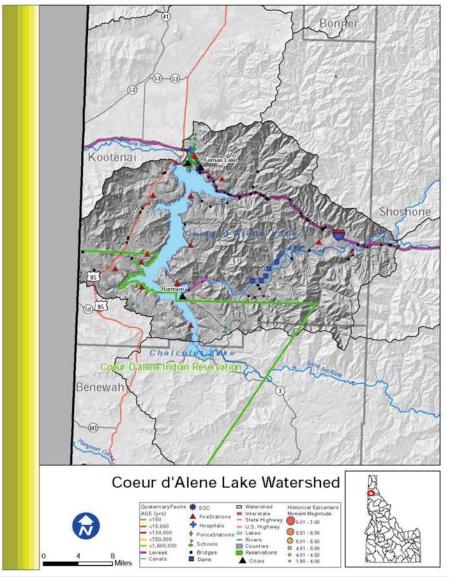
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	59%
Federal	25%
Reservation/BIA	1%
State	13%
Out of Idaho	1%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	0%
Low-Moderate	2.1%
Moderate	56.1%
Moderate-High	41.7%
High	0%



Total wildfire mitigation actions: 91





## 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

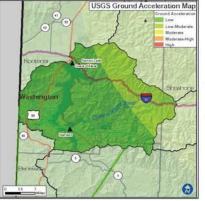
#### Citie

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

Subbasin Metrics			
Area (sq. miles)			644
Population (2010)		- 5	34,838
Miles of Stream			1,167
Miles of Canal			19
Min. Elevation (ft)	į.		2,090
Max. Elevation (ft)			6,371
Est. Facilities Near Fault 0		0	
% Watershed w/in 25 Miles of Fault 0%		0%	

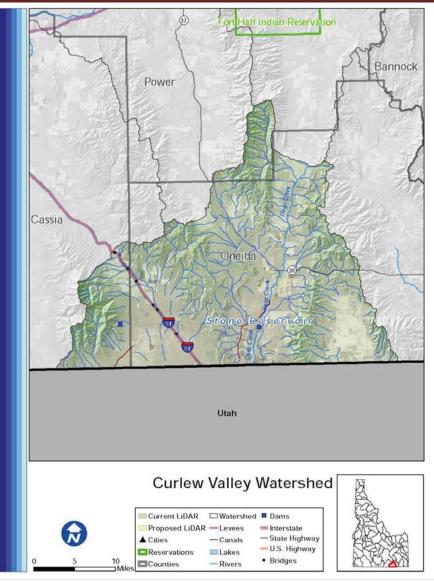
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	59%	
Federal	25%	
Reservation/ BIA	1%	
State	13%	
Out of Idaho	1%	

Ground Acceleration		
Accel. Amoun	%Watershed Are	
Low	75%	
Low-Moderate	25%	
Moderate	0%	
Moderate-High	0%	
High	0%	



Total seismic mitigation actions: 29





# **Curlew Valley**

#### Risk Rank: L

#### ntroduction

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 rick?

According to the Oneida County AHMP, the watershed has experienced 5 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 0 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

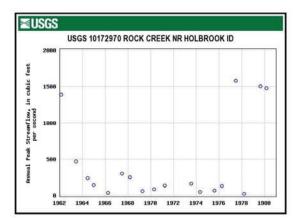
Cities

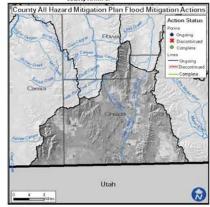
Subbasin Metrics	
Area (sq. miles)	2,266
Population (2010)	362
Miles of Stream	1,549
Miles of Canal	20
Min. Elevation (ft)	4,186
Max. Elevation (ft)	9,485
Dams of Concern	2
Pop. at Flood Risk	6.

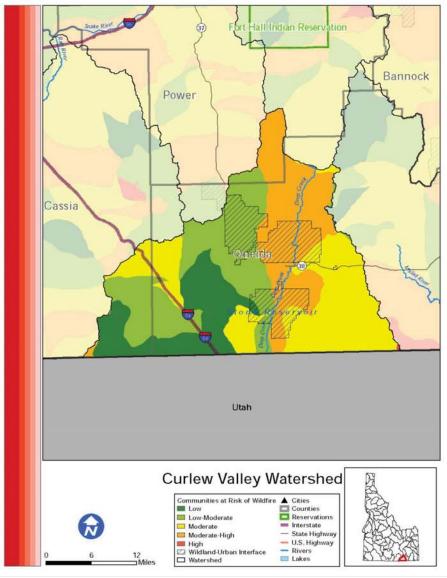
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	11%	
Federal	20%	
Reservation/BIA	0%	
State	1%	
Out of Idaho	68%	

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	\$0

## Total flood mitigation actions: 38







# 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?

Fires 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, 178,667 acres have burned during 50 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Curlew Valley watershed has 16.4% low risk, 28.4% low-moderate risk, 29.5% moderate risk, 25.7% 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

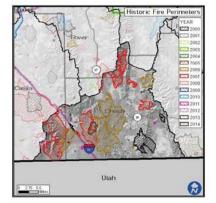
Cassia, Oneida, Power

Cities

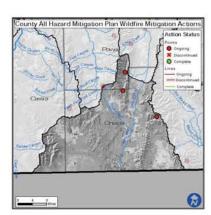
Subbasin Metrics		
Area (sq. miles)	2,266	
Population (2010)	362	
Miles of Stream	1,549	
Miles of Canal	20	
Min. Elevation (ft)	4,186	
Max. Elevation (ft)	9,485	
Structures in WUI	0	
Historic Fire Events	93	
Acres Burned (1995-)	175,608	

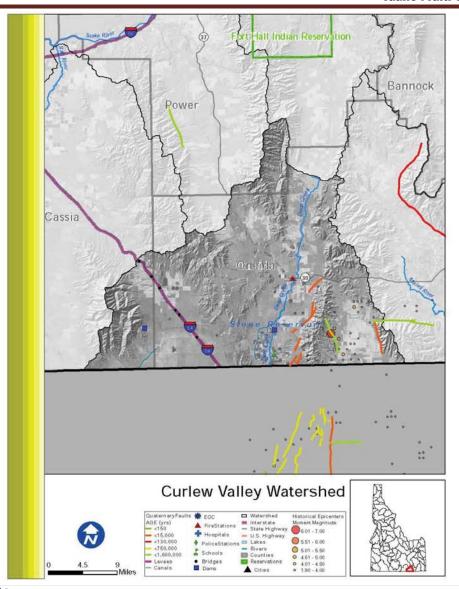
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	11%	
Federal	20%	
Reservation/BIA	0%	
State	1%	
Out of Idaho	68%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	16.4%
Low-Moderate	28.4%
Moderate	29.5%
Moderate-High	25.7%
High	0.1%



Total wildfire mitigation actions:





## **Curlew Valley**

#### Risk Rank: M

#### Introduction

There no 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 the 3 counties within the Curlew Valley watershed identified seismic as their number one hazard.
- •0 out of the 3 counties within the Curlew Valley watershed identified seismic as their number two hazard.
- •0 out of the 3 counties within the Curlew Valley watershed identified seismic as their number three haza.

#### **Counties and Tribes**

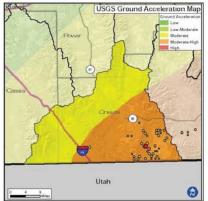
Cassia, Oneida, Power

Cities

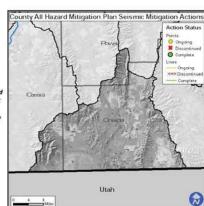
Subbasin Metrics			
Area (sq. miles)			2,266
Population (2010)			362
Miles of Stream			1,549
Miles of Canal			20
Min. Elevation (ft)	į.		4,186
Max. Elevation (ft)			9,485
Est. Facilities Near Fault		2	
% Watershed w/in 25 Miles of Fault 100%		100%	

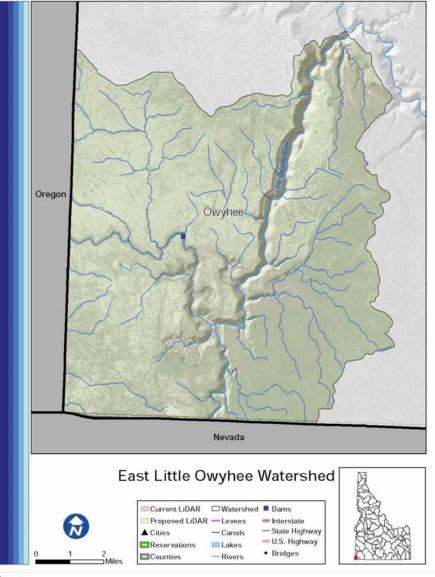
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	11%	
Federal	20%	
Reservation/ BIA	0%	
State	1%	
Out of Idaho	68%	

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	53%
Moderate-High	47%
High	0%



Total seismic mitigation actions: 27





## East Little Owyhee

#### Risk Rank: L

#### 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 1 county in the East Little Owyhee watershed identified flood as their number one hazard.
•0 out of the 1 county in the East Little Owyhee watershed identified flood as their number two hazard.

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

#### LIDAR data availability

No LiDAR 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

Subbasin Metrics		
Area (sq. miles)	922	
Population (2010)	0	
Miles of Stream	204	
Miles of Canal	0	
Min. Elevation (ft)	4,347	
Max. Elevation (ft)	8,369	
Dams of Concern	0	
Pop. at Flood Risk	0	

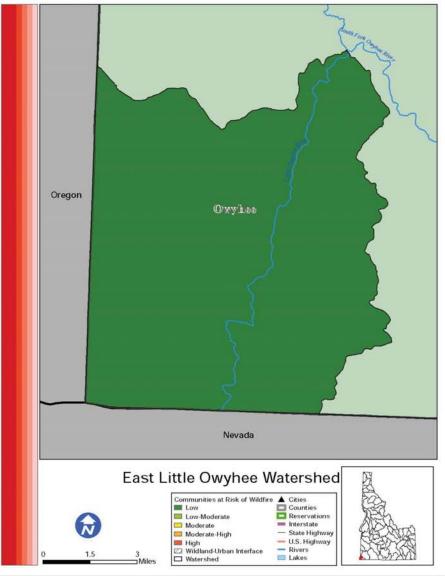
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	0%
Federal	9%
Reservation/BIA	0%
State	0%
Out of Idaho	90%

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	\$0

## Total flood mitigation actions: 15







# 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 (2010), 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 to 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.

#### Countles and Tribes

Owyhee

Cities

Subbasin Metrics	
Area (sq. miles)	922
Population (2010)	0
Miles of Stream	204
Miles of Canal	0
Min. Elevation (ft)	4,347
Max. Elevation (ft)	8,369
Structures in WUI	No WUI
Historic Fire Events	0
Acres Burned (1995-)	0

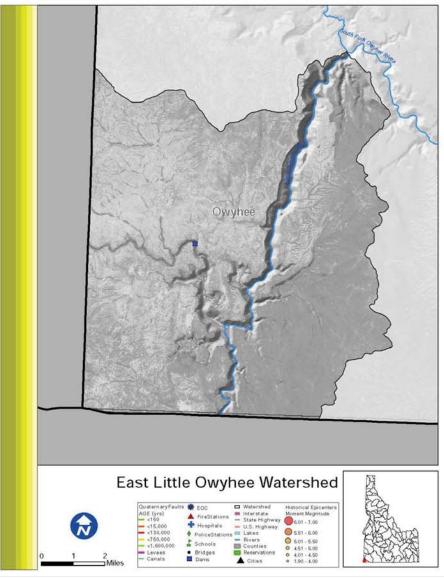
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	0%
Federal	9%
Reservation/BIA	0%
State	0%
Out of Idaho	90%

Watershed Fire Risk	
Risk Level %Watershed Ar	
Low	100%
Low-Moderate	0%
Moderate	0%
Moderate-High	0%
High	0%



Total wildfire mitigation actions:





# East Little Owyhee

### Risk Rank: L

#### Introduction

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

## What is the risk?

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**

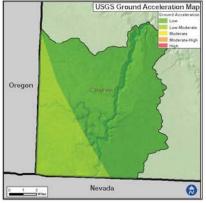
## Owyhee

Cities

Subbasin Metrics			
Area (sq. miles)			922
Population (2010)			0
Miles of Stream			204
Miles of Canal			0
Min. Elevation (ft)			4,347
Max. Elevation (ft)			8,369
Est. Facilities Near F	ault		0
% Watershed w/in 25 M	lles of	Fault	0%

Subbasin Ownership	
Owner Type	% Subbasin Area
Private	0%
Federal	9%
Reservation/BIA	0%
State	0%
Out of Idaho	90%

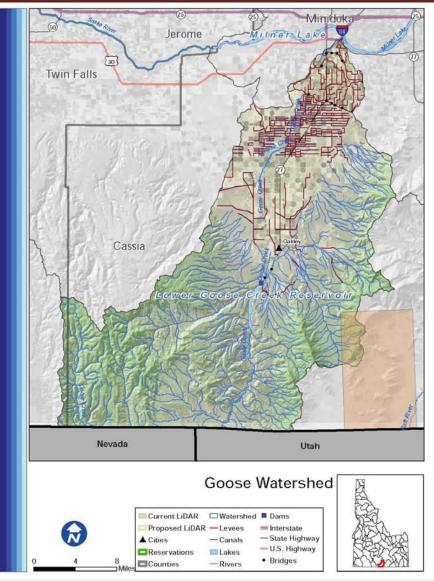
Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	71%
Low-Moderate	29%
Moderate	0%
Moderate-High	0%
High	0%



## Total seismic mitigation actions: 2



1,006



## Goose

#### Risk Rank: M

#### ntroduction

The areas of concentrated population within the Goose watershed boundaries are Burley and Oakley. There are 6,613 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 rick

The city of Oakley is the population center for high intensity agriculutural 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 \$2,681 of premiums paid in exchange for \$1,239,800 of coverage.

- •0 out of the 2 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 2 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 Rocks National Monument (2011)

#### Conclusio

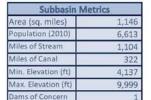
Because of the moderate population, amount of private property and presence of hazardous dams, the Goose watershed is considered to be at a moderate risk of flood damage.

#### Counties and Tribes

Cassia, Twin Falls

#### Cities

Burley, Oakley

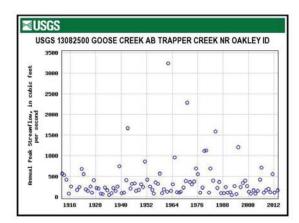


Subbasin Ownership	
Owner Type	% Subbasin Area
Private	24%
Federal	35%
Reservation/BIA	0%
State	2%
Out of Idaho	40%

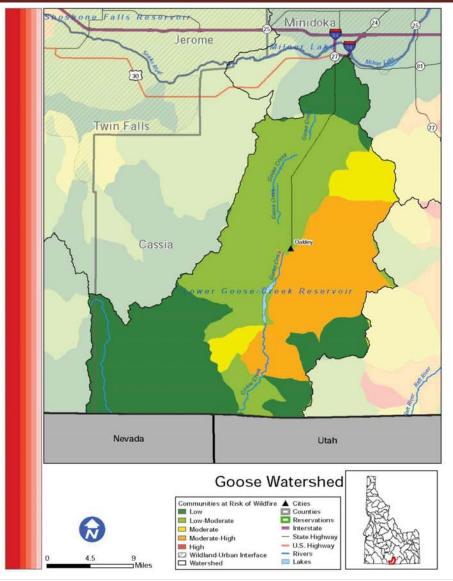
Pop. at Flood Risk

NFIP Statistics (2014)	
NFIP Policies	5
Total Coverage	\$1,239,800
Total Premiums	\$2,681
# Claims	0
Paid Claims	ŚO

## Total flood mitigation actions: 24







## Goose

#### Risk Rank: M

#### Introduction

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

#### What is the risk?

Fires within the Goose watershed have the potential to severely disrupt life, property and economic activity. Since 2000, 56,093 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 two 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

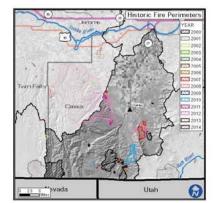
#### Cities

**Burley**, Oakley

Subbasin Metrics	
Area (sq. miles)	1,146
Population (2010)	6,613
Miles of Stream	1,104
Miles of Canal	322
Min. Elevation (ft)	4,137
Max. Elevation (ft)	9,999
Structures in WUI	No WUI
Historic Fire Events	119
Acres Burned (1995-)	56,093

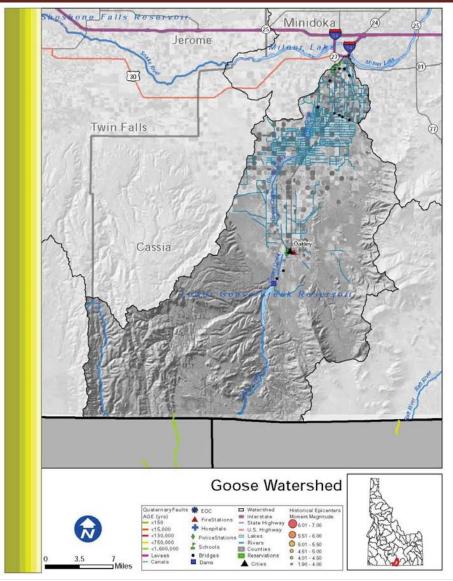
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	24%
Federal	35%
Reservation/BIA	0%
State	2%
Out of Idaho	40%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	36.9%
Low-Moderate	33.6%
Moderate	6.7%
Moderate-High	22.8%
High	0%



# Total wildfire mitigation actions:





## 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

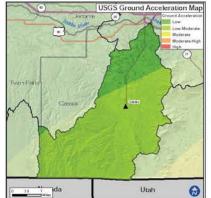
#### Cities

**Burley, Oakley** 

Subbasin	Me	trics	
Area (sq. miles)			1,146
Population (2010)			6,613
Miles of Stream			1,104
Miles of Canal			322
Min. Elevation (ft)	į.		4,137
Max. Elevation (ft)			9,999
Est. Facilities Near F	ault		1
% Watershed w/in 25 M	les of	Fault	0%

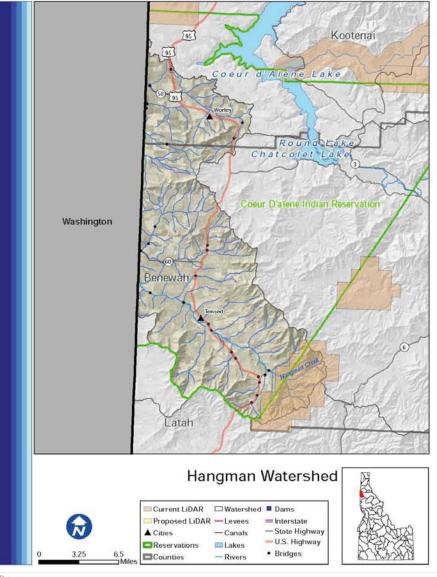
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	24%
Federal	35%
Reservation/BIA	0%
State	2%
Out of Idaho	40%

Ground .	Acceleration
Accel. Amoun	%Watershed Are
Low	21%
Low-Moderate	79%
Moderate	0%
Moderate-High	0%
High	0%



## Total seismic mitigation actions: 20





## Hangman

#### Risk Rank: L

#### 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 rick

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 0 policies contributing to \$0 of premiums paid in exchange for \$0 of coverage.

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

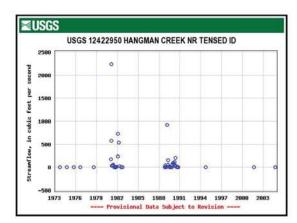
Subbasin Metrics	
Area (sq. miles)	692
Population (2010)	1,726
Miles of Stream	653
Miles of Canal	0
Min. Elevation (ft)	1,716
Max. Elevation (ft)	4,915
Dams of Concern	0

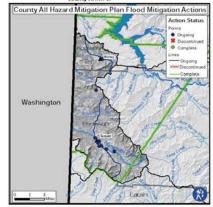
Pop. at Flood Risk

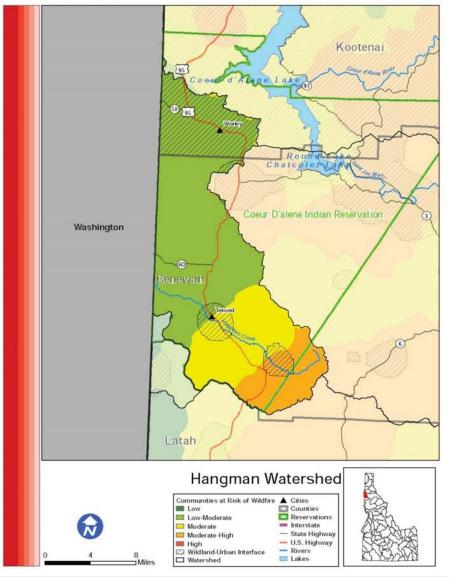
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	23%
Federal	1%
Reservation/BIA	11%
State	1%
Out of Idaho	65%

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	\$0

## Total flood mitigation actions: 155







# Hangman

# Risk Rank: M

# 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, 658 acres have burned in 128 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, 14.2% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

3 out of the 3 counties in the Hangman watershed identified wildfire as their number one hazard.
 0 out of the 3 counties in the Hangman watershed identified wildfire as their number two

 $\bullet 0$  out of the 3 counties in the Hangman watershed identified wildfire as their number three hazard.

#### Conclusion

Despite the small amount of homes in the Wul 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

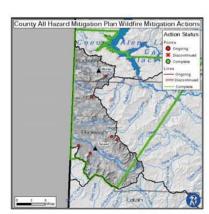
Subbasin Metrics	
Area (sq. miles)	692
Population (2010)	1,726
Miles of Stream	653
Miles of Canal	0
Min. Elevation (ft)	1,716
Max. Elevation (ft)	4,915
Structures in WUI	40
Historic Fire Events	28
Acres Burned (2005)	cco

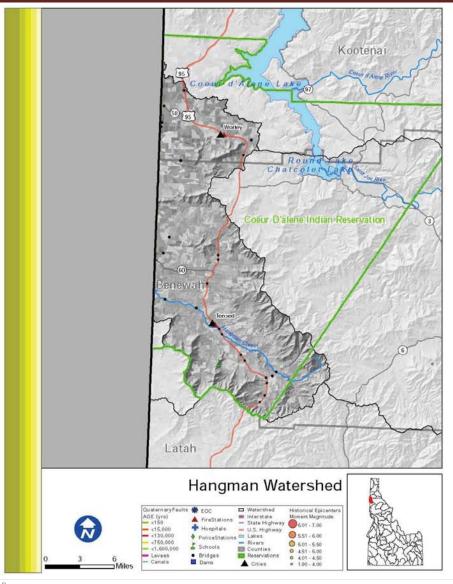
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	23%	
Federal	1%	
Reservation/BIA	11%	
State	1%	
Out of Idaho	65%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	0.1%
Low-Moderate	62.8%
Moderate	22.9%
Moderate-High	14.2%
High	0%



# Total wildfire mitigation actions:





# Hangman

# Risk Rank: L

#### Introduction

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

# 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 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

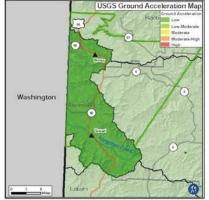
#### Cities

Tensed, Worley

Subbasin Metrics			
Area (sq. miles)			692
Population (2010)			1,726
Miles of Stream			653
Miles of Canal			0
Min. Elevation (ft)	į.		1,716
Max. Elevation (ft)			4,915
Est. Facilities Near Fault		1	
% Watershed w/in 25 Miles of Fault		ault	0%

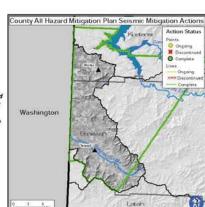
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	23%	
Federal	1%	
Reservation/ BIA	11%	
State	1%	
Out of Idaho	65%	

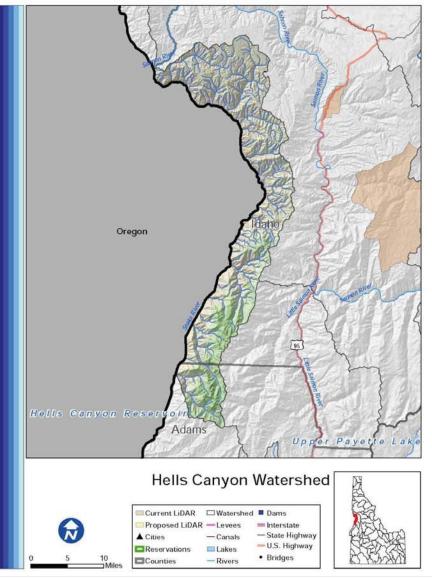
Ground Acceleration		
Accel. Amoun	%Watershed Are	
Low	100%	
Low-Moderate	0%	
Moderate	0%	
Moderate-High	0%	
High	0%	



Total seismic mitigation actions:

13





# **Hells Canyon**

# Risk Rank: L

There are 21 total people who live within the Hells Canyon watershed, of which none are at risk of flooding. 23% of the watershed is privately owned.

#### What is the risk?

The Snake River is a powerful water source with has flood hazards due to seasonal high stream flows that exceed its bankfull discharge with one major flood event reported in the Idaho County AHMP. 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.

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

#### LIDAR data availability

LIDAR availability within the Hells Canyon watershed is as follows: -Columbia River Treaty 2014/2024 Project (2010)

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

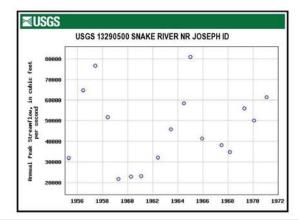
Cities

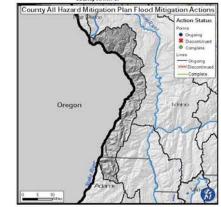
Subbasin Me	trics
Area (sq. miles)	538
Population (2010)	21
Miles of Stream	2,617
Miles of Canal	3
Min. Elevation (ft)	902
Max. Elevation (ft)	9,337
Dams of Concern	1
Pop. at Flood Risk	0

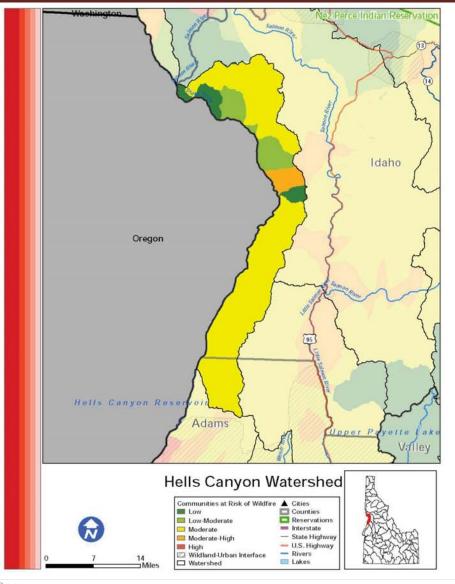
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	23%	
Federal	39%	
Reservation/BIA	0%	
State	2%	
Out of Idaho	36%	

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	\$0

# Total flood mitigation actions: 29







# 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, 133,396 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.
- •0 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

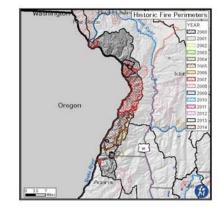
Adams, Idaho

Cities

Subbasin Metrics		
Area (sq. miles)	538	
Population (2010)	21	
Miles of Stream	2,617	
Miles of Canal	3	
Min. Elevation (ft)	902	
Max. Elevation (ft)	9,337	
Structures in WUI	No WUI	
Historic Fire Events	32	
Acres Burned (1995-)	133,396	

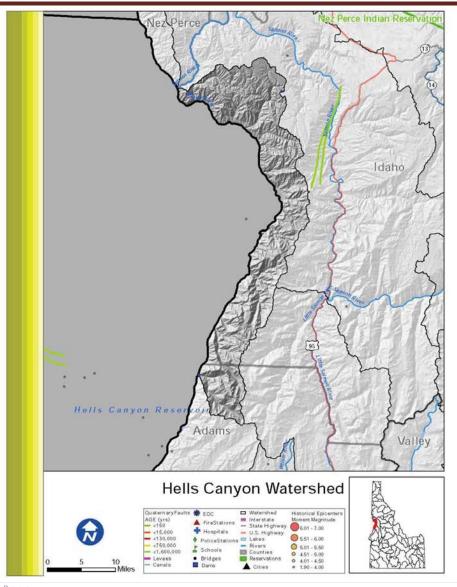
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	23%	
Federal	39%	
Reservation/BIA	0%	
State	2%	
Out of Idaho	36%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	5.4%
Low-Moderate	11.2%
Moderate	77.8%
Moderate-High	4.6%
High	0%



Total wildfire mitigation actions:





# **Hells Canyon**

# 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			
Area (sq. miles)			538
Population (2010)			21
Miles of Stream	į.		2,617
Miles of Canal			3
Min. Elevation (ft)	į.		902
Max. Elevation (ft)			9,337
Est. Facilities Near F	ault		0
% Watershed w/in 25 Mi	les of Fa	ault	16%

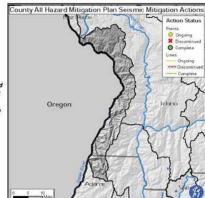
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	23%	
Federal	39%	
Reservation/ BIA	0%	
State	2%	
Out of Idaho	36%	

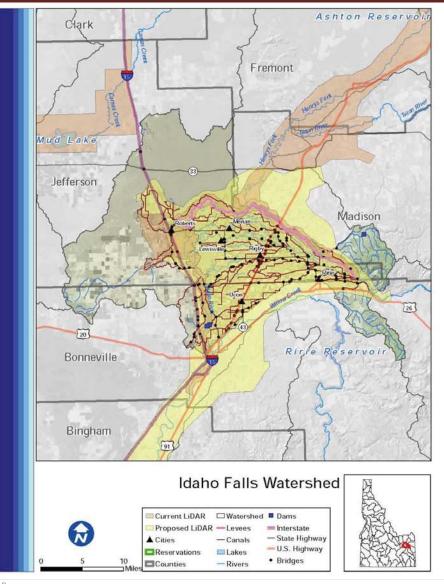
Ground Acceleration		
Accel. Amoun	%Watershed Are	
Low	64%	
Low-Moderate	36%	
Moderate	0%	
Moderate-High	0%	
High	0%	



# Total seismic mitigation actions:

11





# Idaho Falls

# Risk Rank: H

#### Introduction

Areas of concentrated population within the watershed boundaries are Hamer, Idaho Falls, Lewisville, Menan, Rigby, Ririe, Roberts and Ucon. There are 33,155 total people who live within the watershed, of which 3,126 are at risk of flooding. The watershed is largely privately owned.

#### What is the rick

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 out of the 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 \$56,057 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 (2009)
- -Madison County (2009)
- -Snake River (2012)

#### Conclusion

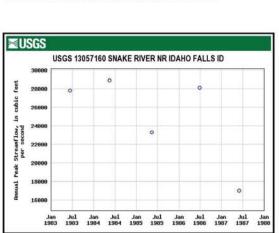
Because of the high population within the watershed, the large amount of private property and the number of levees protecting life and property, the Idaho Falls watershed is considered a high risk watershed.

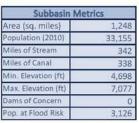
#### **Counties and Tribes**

Bonneville, Jefferson, Madison

#### Cities

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

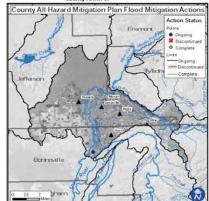


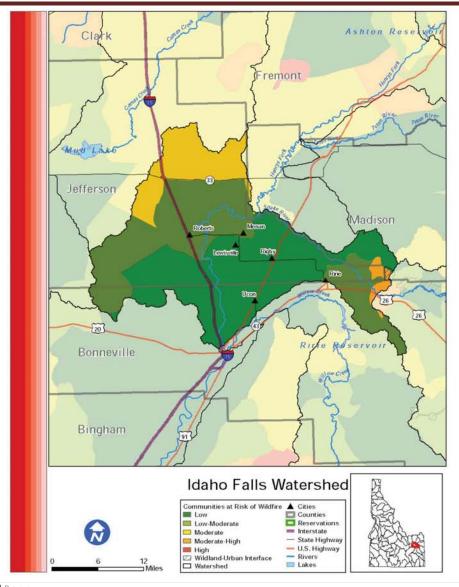


Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	71%	
Federal	24%	
Reservation/BIA	0%	
State	5%	
Out of Idaho	0%	

NFIP Statistics (2014)		
NFIP Policies	78	
Total Coverage	\$19,777,400	
Total Premiums	\$56,057	
# Claims	12	
Paid Claims	\$115,665	

# Total flood mitigation actions: 31





# 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 Ucon.

#### What is the risk?

Fires within the Idaho Falls watershed have the potential to severely disrupt life, property and economic activity. There are 0 homes located within the WUI of the Idaho Falls watershed. Since 2000, 19,650 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, 15% 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.
- 0 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

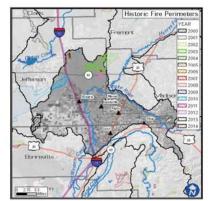
Hamer, Idaho Falls, Lewisville, Menan, Rigby, Ririe, Roberts, Ucon

Subbasin Metrics		
Area (sq. miles)	1,248	
Population (2010)	33,155	
Miles of Stream	342	
Miles of Canal	338	
Min. Elevation (ft)	4,698	
Max. Elevation (ft)	7,077	
Structures in WUI	No WUI	
Historic Fire Events	24	

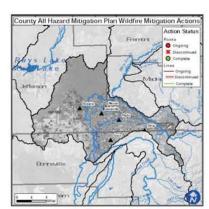
cres Burned (1995

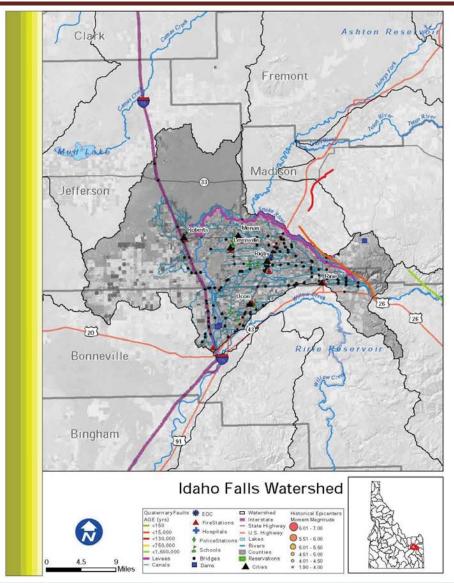
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	71%	
Federal	24%	
Reservation/BIA	0%	
State	5%	
Out of Idaho	0%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	44.9%
Low-Moderate	38.5%
Moderate	15%
Moderate-High	1.6%
High	0%



# Total wildfire mitigation actions:





# Idaho Falls

# Risk Rank: H

#### Introduction

Areas of concentrated population within the Idaho Falls watershed boundaries are Hamer, Idaho Falls, Lewisville, Menan, Rigby, Ririe, Roberts and Ucon.

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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

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

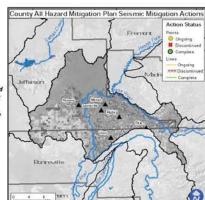
Subbasin Metrics			
Area (sq. miles)			1,248
Population (2010)		- 1	33,155
Miles of Stream			342
Miles of Canal			338
Min. Elevation (ft)	Į.		4,698
Max. Elevation (ft)			7,077
Est. Facilities Near F	ault		24
% Watershed w/in 25 M	les of	Fault	94%

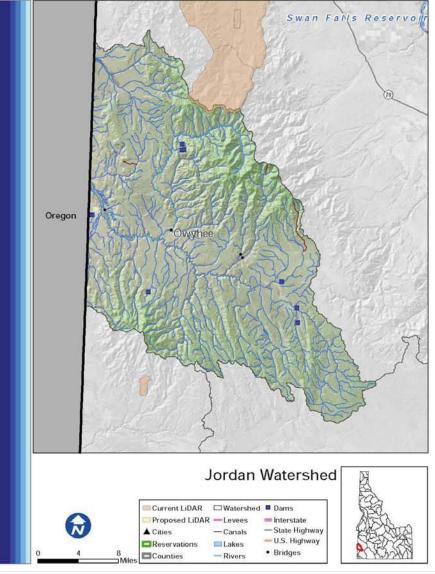
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	71%	
Federal	24%	
Reservation/ BIA	0%	
State	5%	
Out of Idaho	0%	

Ground Acceleration		
Accel. Amoun	%Watershed Are	
Low	0%	
Low-Moderate	6%	
Moderate	93%	
Moderate-High	1%	
High	0%	



Total seismic mitigation actions: 26





# Jordan

# Risk Rank: L

#### 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

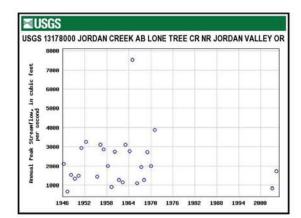
Cities

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	
Dams of Concern	5	
Pop. at Flood Risk	0	

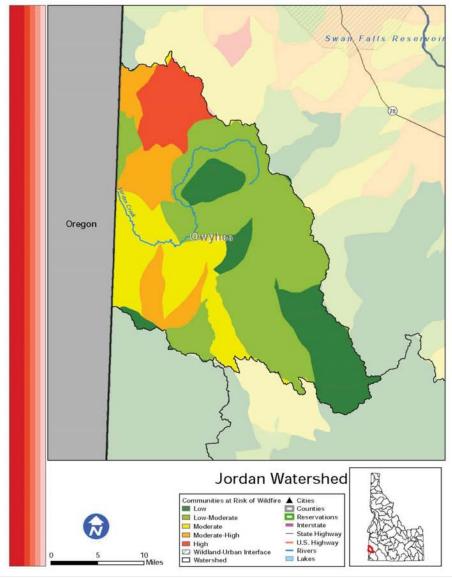
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	14%	
Federal	24%	
Reservation/BIA	0%	
State	8%	
Out of Idaho	54%	

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	\$0

# Total flood mitigation actions: 18







# Jordan

# Risk Rank: L

# Introduction

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, 43.5% low-moderate risk, 18.3% moderate risk, 12.1% moderate-high risk and 8.6% high risk of wildfire to the communities within the watershed.

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

#### 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.

# **Countles and Tribes**

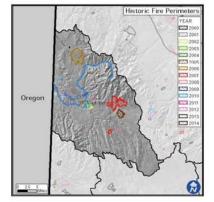
# Owyhee

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
Structures in WUI	No WUI
Historic Fire Events	24
Acres Burned (1995-)	18,888

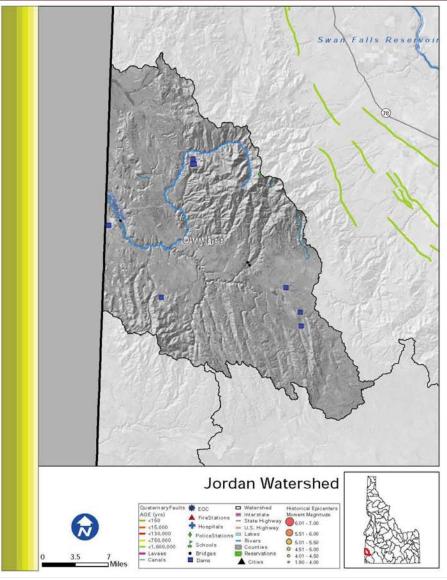
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	14%	
Federal	24%	
Reservation/BIA	0%	
State	8%	
Out of Idaho	54%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	17.6%
Low-Moderate	43.5%
Moderate	18.3%
Moderate-High	12.1%
High	8.6%



# Total wildfire mitigation actions:





# 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**

# Owyhee

Cities

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

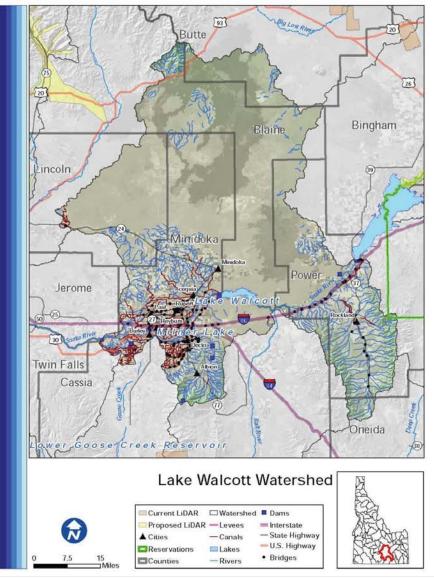
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	14%	
Federal	24%	
Reservation/ BIA	0%	
State	8%	
Out of Idaho	54%	

Ground Acceleration		
Accel. Amoun	%Watershed Are	
Low	100%	
Low-Moderate	0%	
Moderate	0%	
Moderate-High	0%	
High	0%	



# Total seismic mitigation actions: 2





# Lake Walcott

# Risk Rank: H

#### ntroduction

Areas of concentrated population within the Lake Walcott watershed boundaries are Acequia, Albion, American Falls, Burley, Dedo, 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 AHMPs, 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 \$34,092 of premiums paid in exchange for \$12,260,700 of coverage.

- •0 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.

#### onclusion

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

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

#### Cities

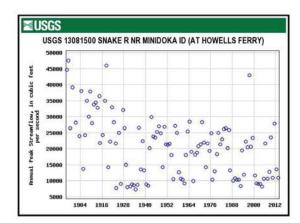
Acequia, Albion, American Falls, Burley, Declo, Heyburn, Minidoka, Paul, Rockland, Rupert

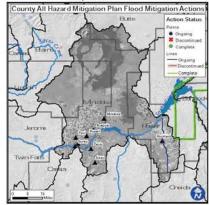
Subbasin Metrics	
Area (sq. miles)	3,582
Population (2010)	37,901
Miles of Stream	2,244
Miles of Canal	1,319
Min. Elevation (ft)	4,085
Max. Elevation (ft)	9,239
Dams of Concern	7
Pop. at Flood Risk	3,873

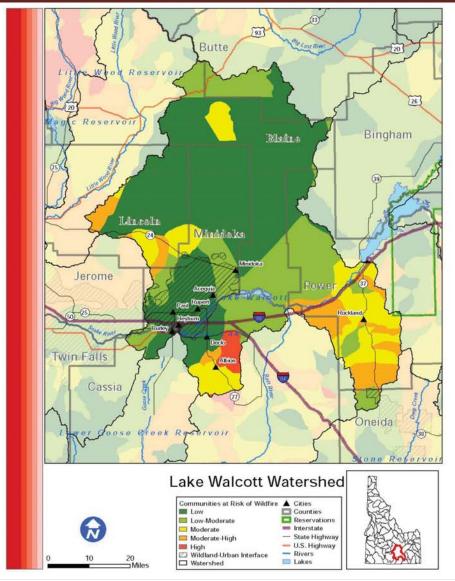
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	33%	
Federal	64%	
Reservation/BIA	0%	
State	3%	
Out of Idaho	0%	

NFIP Statistics (2014)	
NFIP Policies	45
Total Coverage	\$12,260,700
Total Premiums	\$34,092
# Claims	4
Paid Claims	\$229,177

# Total flood mitigation actions: 123







# 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 Acequia, 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 6,785 structures located within the WUI of the Lake Walcott watershed. Since 2000, 1,131,522 acres have burned during 386 individual wildfire events. This cumulative burn area amounts to half of the total watershed area. Based on data from the Idaho Forest Action Plan (2010), the Lake Walcott watershed has 52.1% 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 Tribe

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

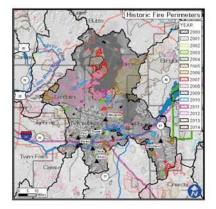
#### Cities

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

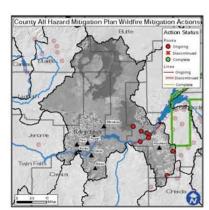
Subbasin Metrics		
Area (sq. miles)	3,582	
Population (2010)	37,901	
Miles of Stream	2,244	
Miles of Canal	1,319	
Min. Elevation (ft)	4,085	
Max. Elevation (ft)	9,239	
Structures in WUI	6,785	
Historic Fire Events	386	
Acres Burned (1995-)	1,131,522	

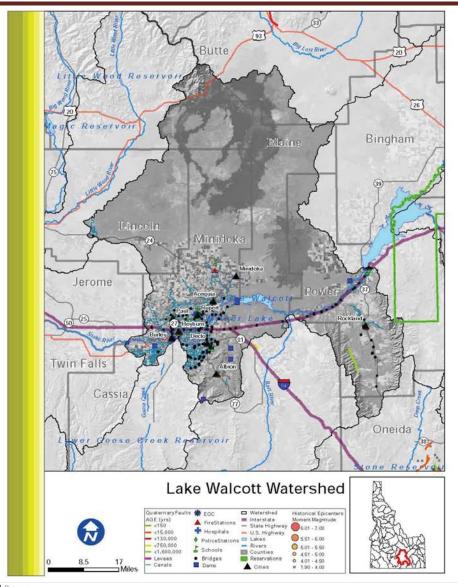
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	33%	
Federal	64%	
Reservation/BIA	0%	
State	3%	
Out of Idaho	0%	

Watershed Fire Risk		
Risk Level	%Watershed Are	
Low	52.1%	
Low-Moderate	24.9%	
Moderate	13.1%	
Moderate-High	8.5%	
High	1.4%	



# Total wildfire mitigation actions:





# 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

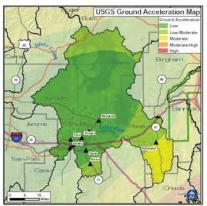
#### Citie

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

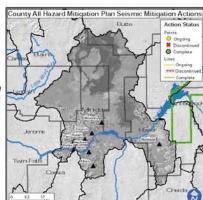
Subbasin	Me	trics	
Area (sq. miles)			3,582
Population (2010)		- 1	37,901
Miles of Stream			2,244
Miles of Canal			1,319
Min. Elevation (ft)	į.		4,085
Max. Elevation (ft)			9,239
Est. Facilities Near I	ault		0
% Watershed w/in 25 M	lles of	Fault	13%

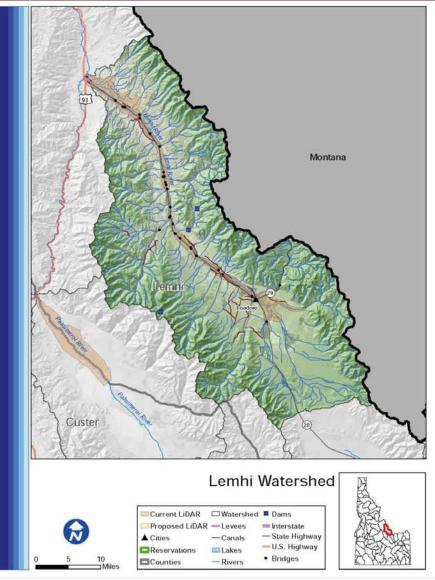
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	33%	
Federal	64%	
Reservation/BIA	0%	
State	3%	
Out of Idaho	0%	

Ground Acceleration		
Accel. Amoun	%Watershed Are	
Low	68%	
Low-Moderate	24%	
Moderate	8%	
Moderate-High	0%	
High	0%	



Total seismic mitigation actions: 84





# Lemhi

# 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 rick

Flood hazards can be due to rain on snow events, localized intensive rainfall and high streamflows exceeding bankful discharge. According to the Lemhi County AHMP, there has been 2 reports of flash floods within the watershed in recent history. There is 1 high or significant hazard dam in the Lemhi. There are 4 communities participating in the NFIP with 17 policies contributing to \$16,168 of premiums paid in exchange for \$3,948,400 of coverage.

- •0 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

LIDAR availability within the Lemhi watershed is as follows:

-Lemhi River (2008, 2010, 2011)

#### 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** 

Custer, Lemhi

Cities

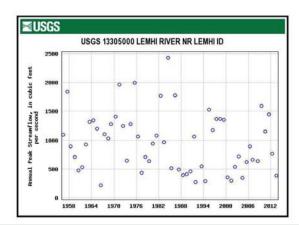
Leadore, Salmon

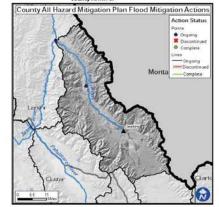
Subbasin Metrics			
Area (sq. miles)	1,261		
Population (2010)	1,881		
Miles of Stream	2,574		
Miles of Canal	358		
Min. Elevation (ft)	3,911		
Max. Elevation (ft)	11,316		
Dams of Concern	1		
Pop. at Flood Risk	159		

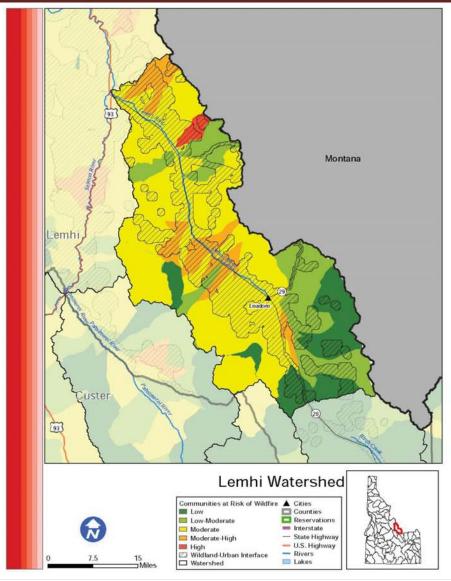
Subbasin Ownership			
Owner Type % Subbasin Are			
Private	19%		
Federal	78%		
Reservation/BIA	0%		
State	3%		
Out of Idaho	0%		

NFIP Statistics (2014)		
NFIP Policies		
Total Coverage	\$3,948,400	
Total Premiums	\$16,168	
# Claims	0	
Paid Claims	ŚO	

# Total flood mitigation actions: 26







# 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, 23,705 acres have burned during 65 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Lemhi watershed has 13.4% low risk, 19.2% low-moderate risk, 56.1% moderate risk, 10.1% 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

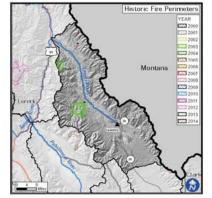
# Cities

Leadore, Salmon

Subbasin Metrics		
Area (sq. miles)	1,261	
Population (2010)	1,881	
Miles of Stream	2,574	
Miles of Canal	358	
Min. Elevation (ft)	3,911	
Max. Elevation (ft)	11,316	
Structures in WUI	743	
Historic Fire Events	65	
Acres Burned (1995-)	23,705	

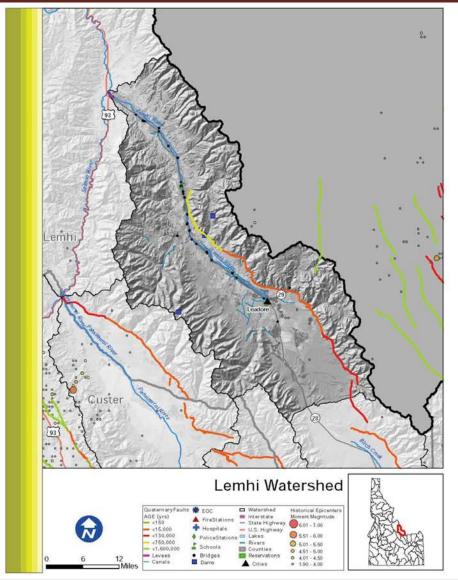
Subbasin Ownership		
Owner Type	% Subbasin Area	
rivate	19%	
ederal	78%	
eservation/BIA	0%	
tate	3%	
out of Idaho	0%	

Watershed Fire Risk		
Risk Level	%Watershed Are	
Low	13.4%	
Low-Moderate	19.2%	
Moderate	56.1%	
Moderate-High	10.1%	
High	1.2%	



# Total wildfire mitigation actions:





# Lemhi

# Risk Rank: H

#### Introduction

Areas of concentrated population within the Lemhi watershed boundaries are Leadore and Salmon.

# 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 358 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 2 counties within the Lemhi watershed identified seismic as their number one hazard.
- •0 out of the 2 counties within the Lemhi watershed identified seismic as their number two hazard.
- •0 out of the 2 counties within the Lemhi watershed identified seismic as their number three hazard.

# Counties and Tribes

Custer, Lemhi

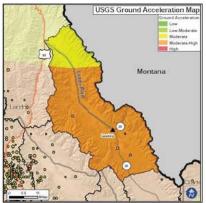
#### Cities

Leadore, Salmon

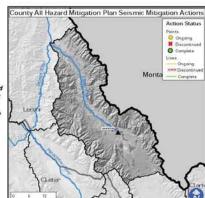
Subbasin Metrics			
Area (sq. miles)			1,261
Population (2010)			1,881
Miles of Stream	2,574		2,574
Miles of Canal	358		358
Min. Elevation (ft)	3,911		3,911
Max. Elevation (ft)	11,316		
Est. Facilities Near Fault		3	
% Watershed w/in 25 Miles of Fault		93%	

Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	19%	
Federal	78%	
Reservation/BIA	0%	
State	3%	
Out of Idaho	0%	

Ground .	Acceleration
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	16%
Moderate-High	84%
High	0%



Total seismic mitigation actions: 29





# Little Bear-Logan

# Risk Rank: L

#### ntroduction

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-Loran.

- •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.

# LIDAR data availability

No LiDAR 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

Subbasin Metrics	
Area (sq. miles)	888
Population (2010)	0
Miles of Stream	45
Miles of Canal	0
Min. Elevation (ft)	4,393
Max. Elevation (ft)	9,934
Dams of Concern	0
Pop. at Flood Risk	0

Subbasin Ownership	
Owner Type	% Subbasin Area
Private	0%
Federal	4%
Reservation/BIA	0%
State	0%
Out of Idaho	96%

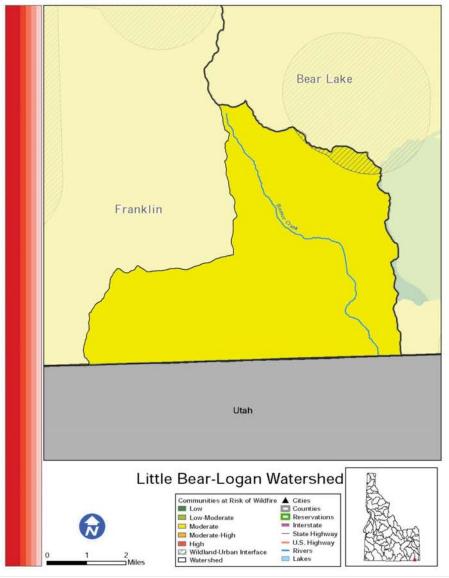
NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	\$0

# Total flood mitigation actions: 15

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

# 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 (2010), 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 wildifre evnets. The watershed is at a low risk of future wildfire events.

#### Counties and Tribes

Bear Lake, Franklin

Cities

Subbasin Metrics	
Area (sq. miles)	888
Population (2010)	0
Miles of Stream	45
Miles of Canal	0
Min. Elevation (ft)	4,393
Max. Elevation (ft)	9,934
Structures in WUI	0
Historic Fire Events	0
Acres Burned (1995-)	0

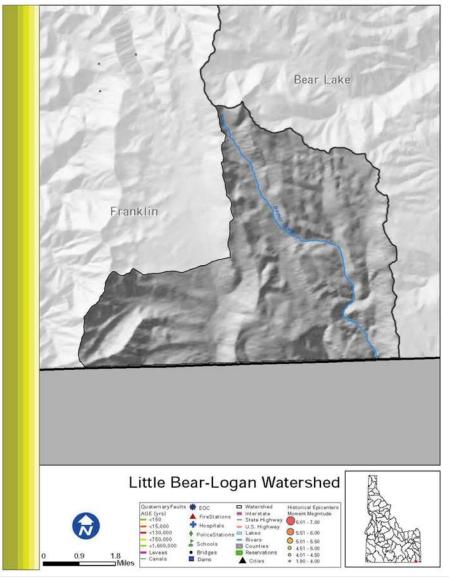
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	0%
Federal	4%
Reservation/BIA	0%
State	0%
Out of Idaho	96%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	100%
Moderate-High	0%
High	0%



Total wildfire mitigation actions: 22





# 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

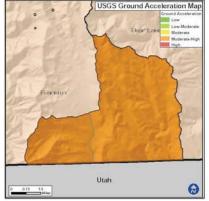
Bear Lake, Franklin

Cities

Subbasin	Me	trics	
Area (sq. miles)			888
Population (2010)			0
Miles of Stream			45
Miles of Canal			0
Min. Elevation (ft)	ĮÎ.		4,393
Max. Elevation (ft)			9,934
Est. Facilities Near F	ault		0
% Watershed w/in 25 M	les of	Fault	100%

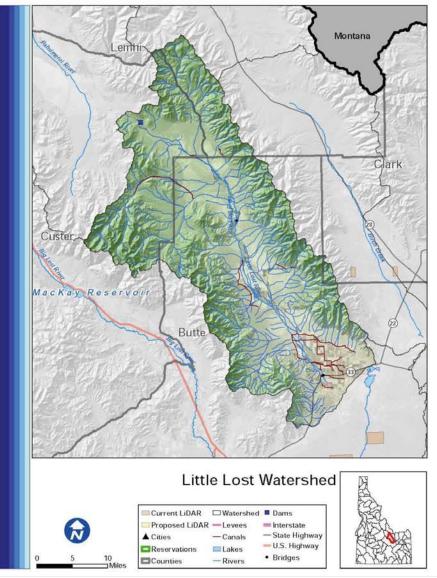
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	0%
Federal	4%
Reservation/ BIA	0%
State	0%
Out of Idaho	96%

Ground .	Acceleration
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	0%
Moderate-High	100%
High	0%



# Total seismic mitigation actions:





# 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 albeit low stream flow. There are 0 high or significant hazard dams in the Little Lost 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 Little Lost watershed identified flood as their number one hazard.
- •1 out of the 4 counties in the Little Lost watershed identified flood as their number two hazard.
- •0 out of the 4 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 into the low risk category.

# **Counties and Tribes**

Butte, Clark, Custer, Lemhi

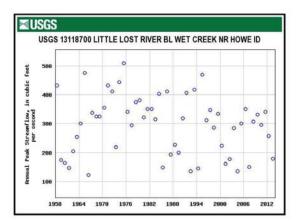
Cities

Subbasin Metrics		
Area (sq. miles)	966	
Population (2010)	333	
Miles of Stream	1,859	
Miles of Canal	148	
Min. Elevation (ft)	4,780	
Max. Elevation (ft)	12,155	
Dams of Concern	0	
Pop. at Flood Risk	54.	

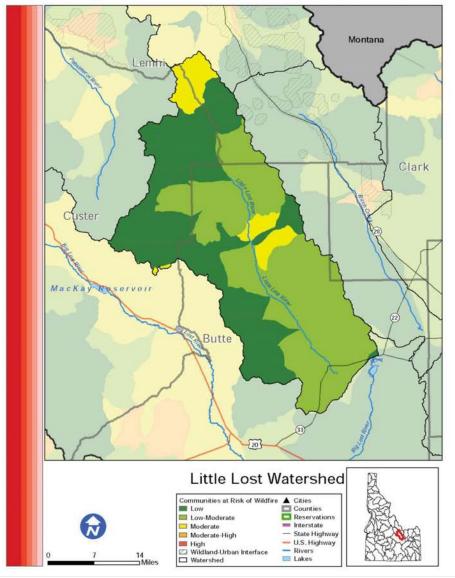
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	9%
ederal	89%
Reservation/BIA	0%
State	2%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	\$0

# Total flood mitigation actions: 34







# 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 2000, 2,140 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, 0% moderate-high risk and 0% high risk of 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.
- 0 out of the 4 counties in the Little Lost watershed identified wildfire as their number two 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**

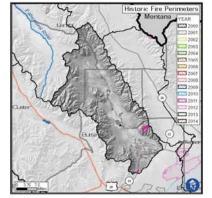
Butte, Clark, Custer, Lemhi

Cities

Subbasin Metrics	
Area (sq. miles)	966
Population (2010)	333
Miles of Stream	1,859
Miles of Canal	148
Min. Elevation (ft)	4,780
Max. Elevation (ft)	12,155
Structures in WUI	No WUI
Historic Fire Events	15
Acres Burned (1995-)	2,140

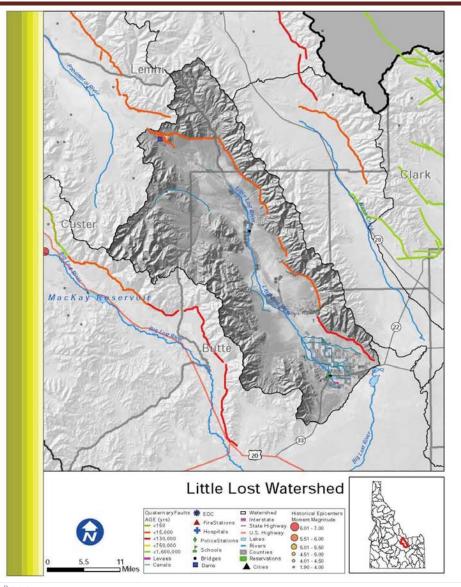
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	9%	
Federal	89%	
Reservation/BIA	0%	
State	2%	
Out of Idaho	0%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	42.1%
Low-Moderate	50.1%
Moderate	7.8%
Moderate-High	0%
High	0%



# Total wildfire mitigation actions:





# 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**

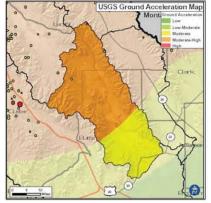
Butte, Clark, Custer, Lemhi

Cities

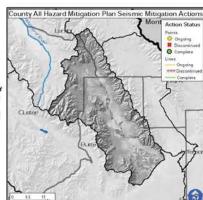
Subbasin Metrics			
Area (sq. miles)			966
Population (2010)			333
Miles of Stream			1,859
Miles of Canal			148
Min. Elevation (ft)	į.		4,780
Max. Elevation (ft)			12,155
Est. Facilities Near F	ault		1
% Watershed w/in 25 M	lles of	Fault	100%

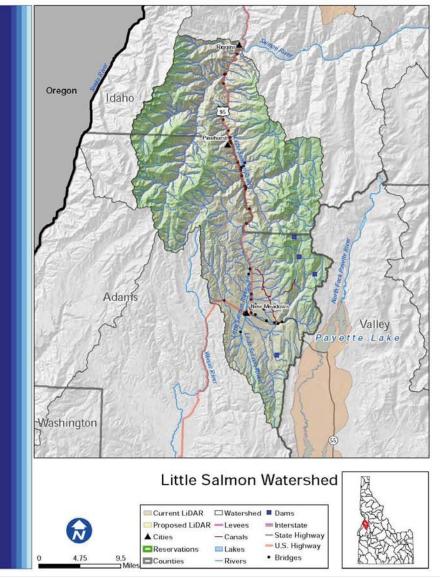
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	9%
Federal	89%
Reservation/ BIA	0%
State	2%
Out of Idaho	0%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	32%
Moderate-High	68%
High	0%



Total seismic mitigation actions:





# Little Salmon

# Risk Rank: M

#### ntroduction

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 4900 cfs. Annual peaks often exceed bankfull, with the county AHMPs reporting 3 siginficant 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 \$16,490 of premiums paid in exchange for \$4,091,000 of coverage.

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

#### LIDAR data availability

No LiDAR data is available.

#### Conclusion

Due to the moderate population in proximity to the water systems of the Little Salmon watershed and the presence of hazardous dams, the Little Salmon watershed is considered a moderate flood risk watershed.

#### Counties and Tribes

Adams, Idaho, Valley

# Cities

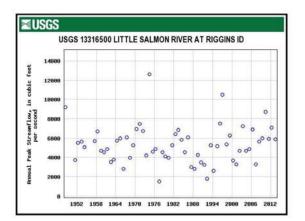
New Meadows, Riggins

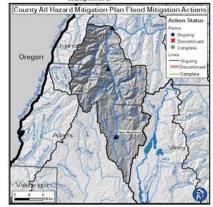
Subbasin Metrics		
Area (sq. miles)	577	
Population (2010)	2,399	
Miles of Stream	1,281	
Miles of Canal	21	
Min. Elevation (ft)	1,706	
Max. Elevation (ft)	9,350	
Dams of Concern	3	
Pop. at Flood Risk	103	

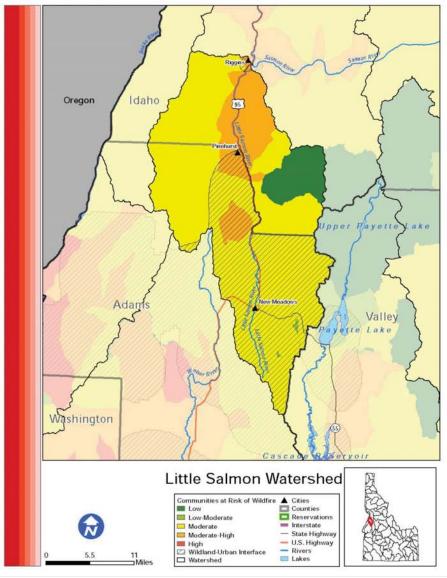
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	31%
Federal	66%
Reservation/BIA	0%
State	4%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	18
Total Coverage	\$4,091,000
Total Premiums	\$16,490
# Claims	1
Paid Claims	\$3,500

# Total flood mitigation actions: 45







# Little Salmon

# Risk Rank: M

# Introduction

The Little Salmon watershed is home to 2,399 people, roughly half of which 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 1,609 structures located within the WUI of the Little Salmon watershed. Since 2000, 20,042 cares have burned during 129 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.

•0 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 indentified as a significant hazard by all three counties within the watershed.

#### **Counties and Tribes**

Adams, Idaho, Valley

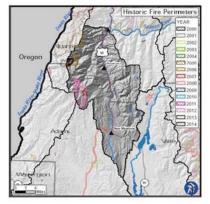
# Cities

New Meadows, Riggins

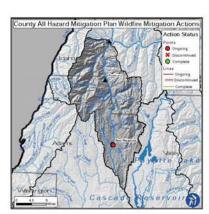
T-	
Subbasin Metrics	
Area (sq. miles)	577
Population (2010)	2,399
Miles of Stream	1,281
Miles of Canal	21
Min. Elevation (ft)	1,706
Max. Elevation (ft)	9,350
Structures in WUI	1,609
Historic Fire Events	129
Acres Burned (1995-)	20,042

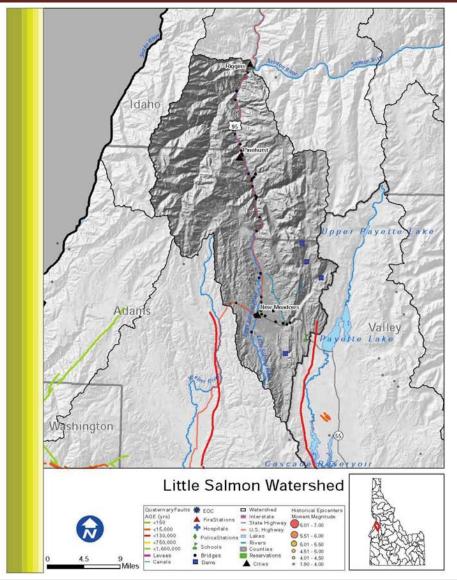
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	31%	
Federal	66%	
Reservation/BIA	0%	
State	4%	
Out of Idaho	0%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	7.3%
Low-Moderate	0.2%
Moderate	77.1%
Moderate-High	15.4%
High	0%



Total wildfire mitigation actions:





# Little Salmon

# Risk Rank: H

#### Introduction

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

#### tarbone in along alote?

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

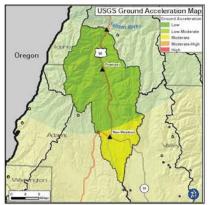
#### Cities

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)	į.	1,706	
Max. Elevation (ft)		9,350	
Est. Facilities Near Fault		3	
% Watershed w/in 25 Miles of Fault		88%	

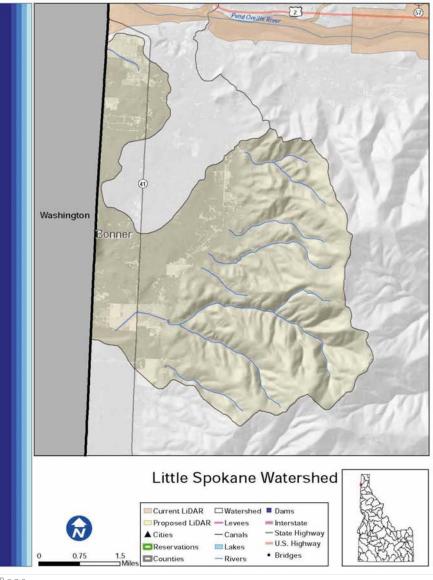
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	31%	
Federal	66%	
Reservation/BIA	0%	
State	4%	
Out of Idaho	0%	

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	79%
Moderate	21%
Moderate-High	0%
High	0%



Total seismic mitigation actions: 24





# Little Spokane

# Risk Rank: L

#### ntroduction

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 run 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.

#### LiDAR data availability

No LiDAR 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

Subbasin Metrics		
Area (sq. miles)	709	
Population (2010)	691	
Miles of Stream	25	
Miles of Canal	1	
Min. Elevation (ft)	1,522	
Max. Elevation (ft)	5,863	
Dams of Concern	0	
Pop. at Flood Risk	0	

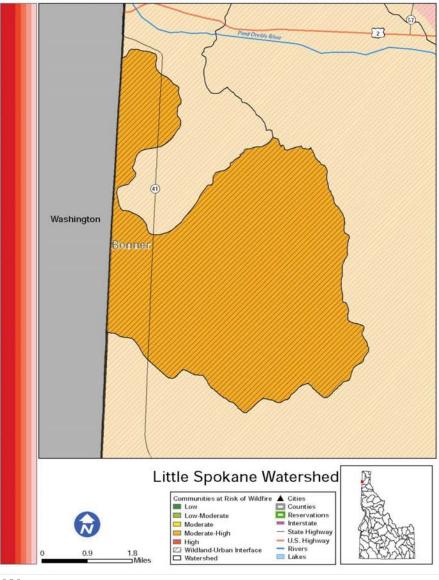
Subbasin Ownership			
Owner Type % Subbasin A			
rivate	2%		
ederal	0%		
Reservation/BIA	0%		
tate	0%		
Out of Idaho	97%		

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	\$0

# Total flood mitigation actions: 14







# Little Spokane

# 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 WII of the Little Spokane watershed. Since 2000, there have been no wildfire events. Based on data from the Idaho Forest Action Plan (2010), 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 to the communities within the watershed.

- •0 out of the 1 county in the Little Spokane watershed identified wildfire as their number one hazard.
- •0 out of the 1 county in the Little Spokane watershed identified wildfire as their number two hazard.
- •0 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

Subbasin Metrics		
Area (sq. miles)	709	
Population (2010)	691	
Miles of Stream	25	
Miles of Canal	1	
Min. Elevation (ft)	1,522	
Max. Elevation (ft)	5,863	
Structures in WUI	260	
Historic Fire Events	0	
Acres Burned (1995-)	0	

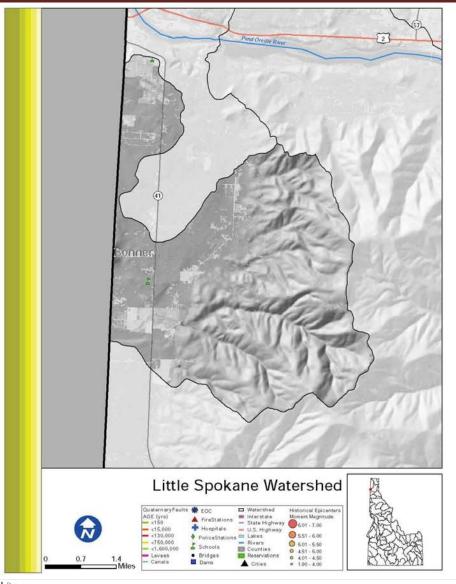
Subbasin Ownership			
Owner Type % Subbasin Area			
Private	2%		
Federal	0%		
Reservation/BIA	0%		
State	0%		
Out of Idaho	97%		

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	0%
Moderate-High	100%
High	0%



Total wildfire mitigation actions:





# 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

Subbasin Metrics			
Area (sq. miles)		709	
Population (2010)			691
Miles of Stream			25
Miles of Canal	1		
Min. Elevation (ft)			1,522
Max. Elevation (ft)	5,863		
Est. Facilities Near Fault		0	
% Watershed w/in 25 Miles of Fault		0%	

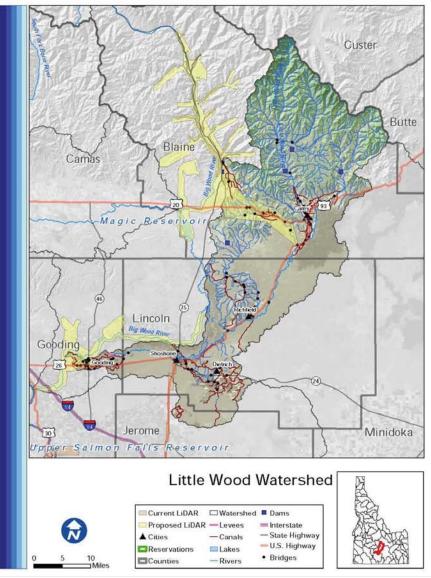
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	2%
Federal	0%
Reservation/BIA	0%
State	0%
Out of Idaho	97%

Ground .	Acceleration
Accel. Amoun	%Watershed Are
Low	100%
Low-Moderate	0%
Moderate	0%
Moderate-High	0%
High	0%



# Total seismic mitigation actions: 9





# Little Wood

# Risk Rank: H

#### ntroduction

Areas of concentrated population within the Little Wood watershed boundaries are Carey, Dietrich, Gooding, Richfield and Shoshone. There are 10,005 total people who live within the watershed, of which 3,543 are a trisk of flooding. Roughly one third of the watershed is privately owned.

#### What is the rick

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 9 communities participating in the NFIP with 96 policies contributing to \$103,344 of premiums paid in exchange for \$15,593,600 of coverage.

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

#### LIDAR data availability

LIDAR availability within the Little Wood watershed is as follows:

- -ITD, District 4 US 93 (2007)
- -Big Wood River Valley (2013)

#### 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.

# Countles and Tribes

Blaine, Butte, Custer, Gooding, Jerome, Lincoln

#### Citie

Carey, Dietrich, Gooding, Richfield, Shoshone

Subbasin Metrics		
Area (sq. miles)	1,172	
Population (2010)	10,005	
Miles of Stream	1,820	
Miles of Canal	221	
Min. Elevation (ft)	3,445	
Max. Elevation (ft)	11,782	

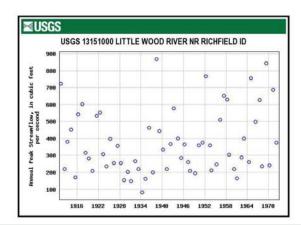
ams of Concern

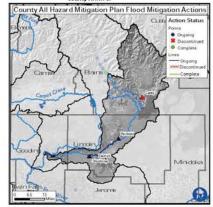
op. at Flood Risk

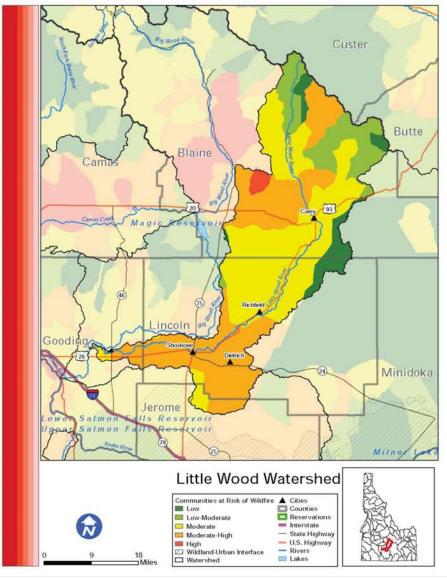
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	35%
Federal	59%
Reservation/BIA	0%
State	6%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	96
Total Coverage	\$15,593,600
Total Premiums	\$103,344
# Claims	2
Paid Claims	\$15,479

# Total flood mitigation actions: 88







# Little Wood

# Risk Rank: M

# 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. A reas 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, 249,905 acres have burned during 161 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.
- 0 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

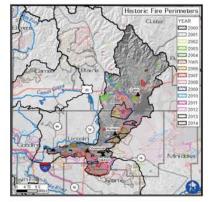
#### Cities

Carey, Dietrich, Gooding, Richfield, Shoshone

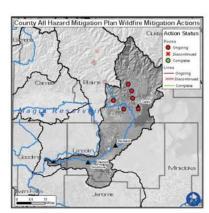
Subbasin Metrics	
Area (sq. miles)	1,172
Population (2010)	10,005
Miles of Stream	1,820
Miles of Canal	221
Min. Elevation (ft)	3,445
Max. Elevation (ft)	11,782
Structures in WUI	15
Historic Fire Events	161
Acres Burned (1995-)	249,905

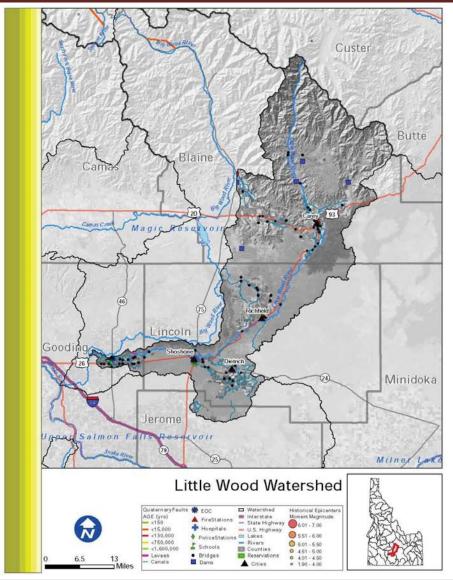
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	35%
Federal	59%
Reservation/BIA	0%
State	6%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	6.1%
Low-Moderate	13.2%
Moderate	42%
Moderate-High	37.6%
High	1.1%



# Total wildfire mitigation actions:





# Little Wood

# Risk Rank: M

#### Introduction

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

#### tarbant in the about 10 le

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 221 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	
Area (sq. miles)		1,172
Population (2010)		10,005
Miles of Stream		1,820
Miles of Canal		221
Min. Elevation (ft)	Ţ.	3,445
Max. Elevation (ft)		11,782
Est. Facilities Near F	ault	0
% Watershed w/in 25 M	lles of Fault	9%

Subbasin Ownership	
Owner Type	% Subbasin Area
Private	35%
Federal	59%
Reservation/ BIA	0%
State	6%
Out of Idaho	0%

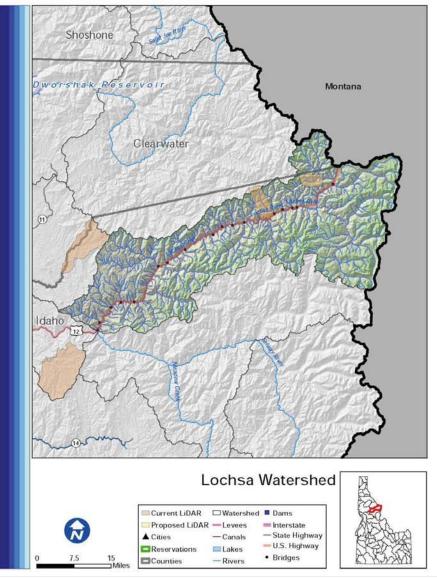
Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	43%
Low-Moderate	37%
Moderate	20%
Moderate-High	0%
High	0%



Total seismic mitigation actions:

58





# Lochsa

# Risk Rank: L

#### ntroduction

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 Lowell 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 0 high or significant hazard dams in the Lochsa watershed. There are no communities participating in the NFIP with 1 policy contributing to \$930 worth of premiums paid in exchange for \$203,200 of coverage.

- •0 out of the 2 counties in the Lochsa watershed identified flood as their number one hazard.
- •1 out of the 2 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)
- -Shotgun Creek (2009)
- -Twin (Doe) Creek (2009)

#### Conclusion

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

#### Counties and Tribes

Clearwater, Idaho

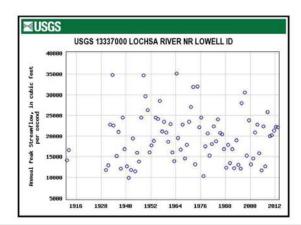
Cities

Subbasin Metrics	
Area (sq. miles)	1,181
Population (2010)	79
Miles of Stream	2,005
Miles of Canal	0
Min. Elevation (ft)	1,460
Max. Elevation (ft)	8,727
Dams of Concern	0
Pon at Flood Risk	Ω

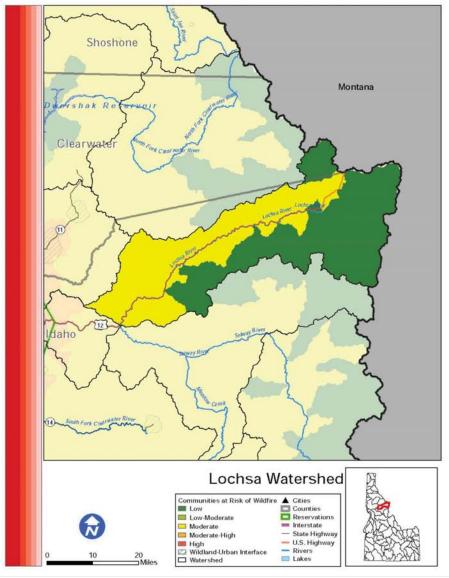
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	5%
Federal	95%
Reservation/BIA	0%
State	0%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	1
Total Coverage	\$203,200
Total Premiums	\$930
# Claims	0
Paid Claims	ŚO

# Total flood mitigation actions: 42







# 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 53% low risk, 0% low-moderate risk, 47% 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 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.
- •0 out of the 2 counties in the Lochsa watershed identified wildfire as their number three 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.

#### **Countles and Tribes**

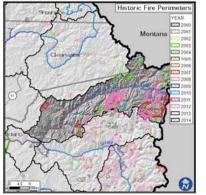
Clearwater, Idaho

Cities

Subbasin Metrics	
Area (sq. miles)	1,181
Population (2010)	79
Miles of Stream	2,005
Miles of Canal	0
Min. Elevation (ft)	1,460
Max. Elevation (ft)	8,727
Structures in WUI	No WUI
Historic Fire Events	324
Acres Burned (1995-)	191,705

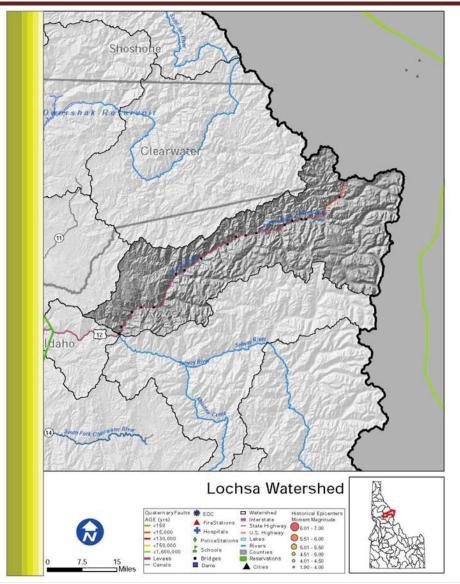
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	5%
Federal	95%
Reservation/BIA	0%
State	0%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	53%
Low-Moderate	0%
Moderate	47%
Moderate-High	0%
High	0%



Total wildfire mitigation actions:





# 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

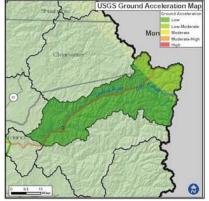
Clearwater, Idaho

Cities

Subbasin Metrics		Ī
Area (sq. miles)	1,18	31
Population (2010)	- 7	79
Miles of Stream	2,00	)5
Miles of Canal		0
Min. Elevation (ft)	1,46	60
Max. Elevation (ft)	8,72	27
Est. Facilities Near F	ault	0
% Watershed w/in 25 Miles of Fault 09		)%

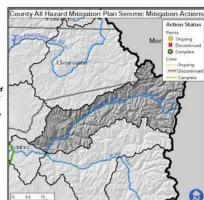
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	5%
Federal	95%
Reservation/ BIA	0%
State	0%
Out of Idaho	0%

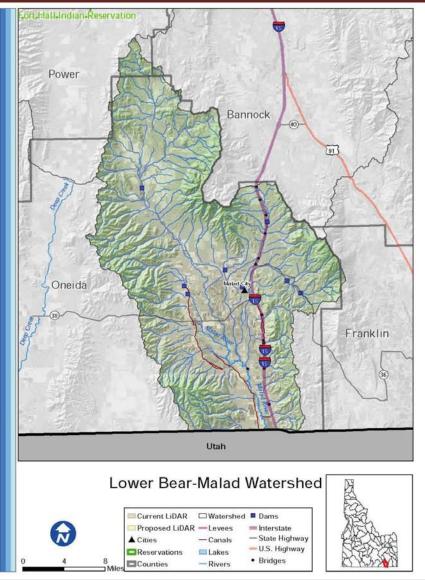
Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	84%
Low-Moderate	16%
Moderate	0%
Moderate-High	0%
High	0%



# Total seismic mitigation actions:

11





# Lower Bear-Malad

# Risk Rank: M

#### ntroduction

There are 3,867 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 ocurred 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.

•0 out of the 4 counties in the Lower Bear-Malad watershed identified flood as their number one hazard.

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

# LIDAR 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

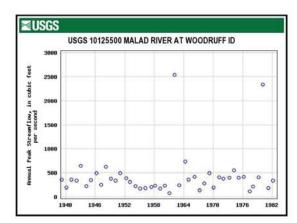
Malad City

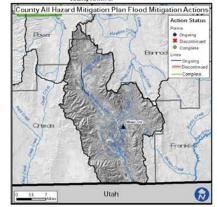
Subbasin Metrics	
Area (sq. miles)	1,256
Population (2010)	3,867
Miles of Stream	1,032
Miles of Canal	72
Min. Elevation (ft)	4,183
Max. Elevation (ft)	9,364
Dams of Concern	7
Pop. at Flood Risk	7.

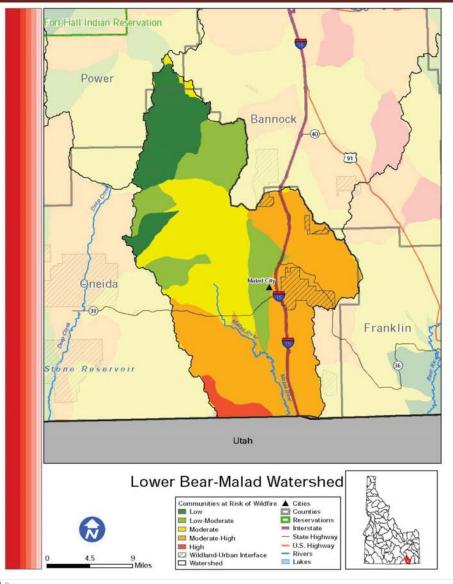
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	23%
Federal	16%
Reservation/BIA	0%
State	1%
Out of Idaho	60%

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	\$0

# Total flood mitigation actions: 33







# Lower Bear-Malad

# Risk Rank: M

# Introduction

The Lower Bear-Malad watershed is home to 3,867 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 to 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.
- •0 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, Oneida, Power

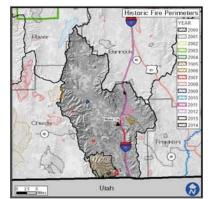
### Citie

Malad City

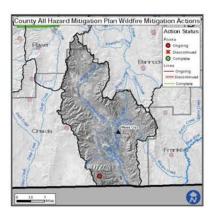
Subbasin Metrics			
Area (sq. miles)	1,256		
Population (2010)	3,867		
Miles of Stream	1,032		
Miles of Canal	72		
Min. Elevation (ft)	4,183		
Max. Elevation (ft)	9,364		
Structures in WUI	89		
Historic Fire Events	55		
Acres Burned (1995-)	28,757		

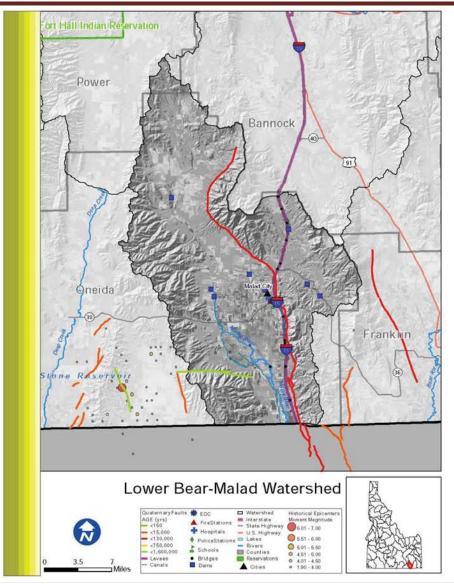
Subbasin Ownership			
Owner Type	% Subbasin Area		
Private	23%		
Federal	16%		
Reservation/BIA	0%		
State	1%		
Out of Idaho	60%		

Watershed Fire Risk			
Risk Level %Watershed Ar			
Low	13.7%		
Low-Moderate	17.8%		
Moderate	23.3%		
Moderate-High	42.8%		
High	2.4%		



# Total wildfire mitigation actions:





# 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

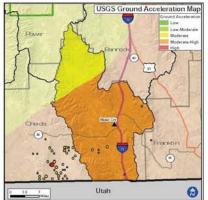
### Cities

Malad City

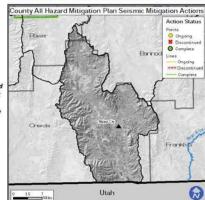
Subbasin Metrics				
Area (sq. miles)			1,256	
Population (2010)	3,867			
Miles of Stream	1,032			
Miles of Canal	72			
Min. Elevation (ft)	4,183			
Max. Elevation (ft)	9,364			
Est. Facilities Near Fault		8		
% Watershed w/in 25 Miles of Fault 1009			100%	

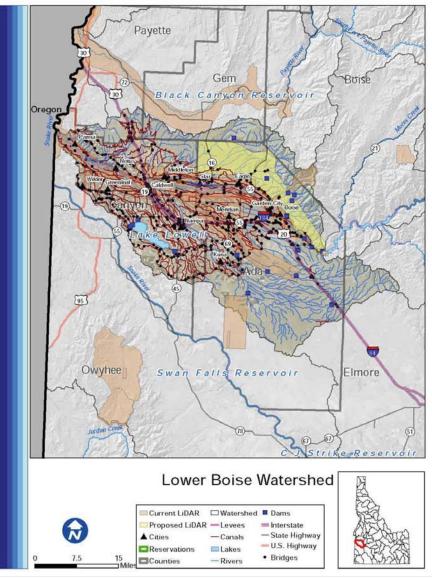
Subbasin Ownership			
Owner Type	% Subbasin Area		
rivate	23%		
ederal	16%		
leservation/BIA	0%		
tate	1%		
Out of Idaho	60%		

Ground Acceleration		
Accel. Amoun	%Watershed Are	
Low	0%	
Low-Moderate	0%	
Moderate	23%	
Moderate-High	77%	
High	0%	



# Total seismic mitigation actions: 27





# Lower Boise

# Risk Rank: H

### ntroduction

There are 573,637 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 flooding 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 54 separate flood events according to the county AHMPs. 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 2,505 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 -very small portion (2001)
- -Ten Mile and Fifteen Mile Creek (2003)
- -Boise River (2006)
- -Dry Creek, Boise Front (2007, 2009)
- -Birds of Prey (2013)

## Conclusion

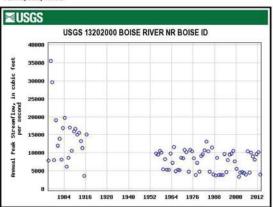
Because of the high population and hazardous flood potential in the Lower Boise watershed it is classified as a high risk watershed.

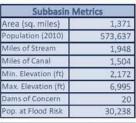
# Counties and Tribes

Ada, Boise, Canyon, Elmore, Gem, Payette

### Cities

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



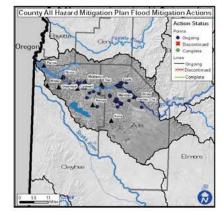


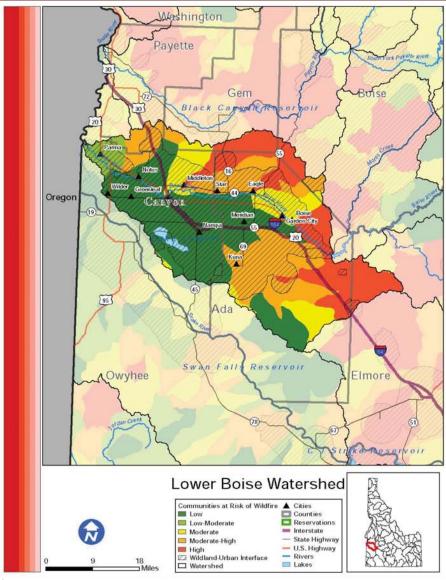
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	75%	
Federal	20%	
Reservation/BIA	0%	
State	5%	
Out of Idaho	0%	

NFIP Statistics (2014)		
NFIP Policies	2505	
Total Coverage	\$668,812,800	
Total Premiums	\$1,765,807	
# Claims	43	
Paid Claims	\$233,340	

# Total flood mitigation actions: 311

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





# Lower Boise

# Risk Rank: H

## Introduction

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, Meridian, 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, 157,257 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, 11.9% moderate risk, 26.4% moderate-high risk and 22.3% high risk of wildfire to the communities within the watershed.

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

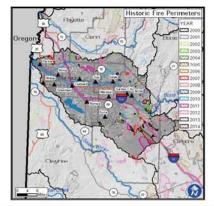
### Citie

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

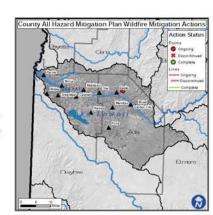
Subbasin Metrics			
Area (sq. miles)	1,371		
Population (2010)	573,637		
Miles of Stream	1,948		
Miles of Canal	1,504		
Min. Elevation (ft)	2,172		
Max. Elevation (ft)	6,995		
Structures in WUI	182,070		
Historic Fire Events	285		
Acres Burned (1995-)	157,257		

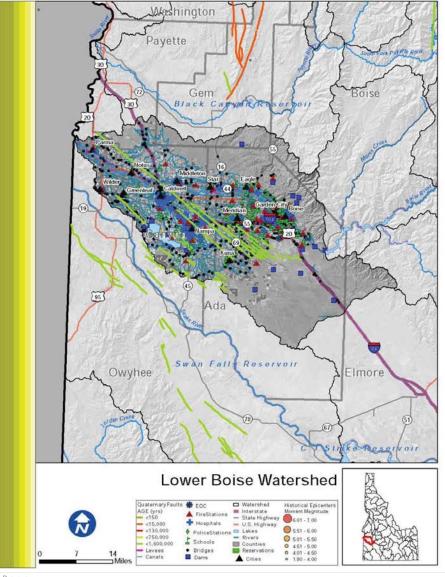
Subbasin Ownership			
Owner Type	% Subbasin Area		
Private	75%		
Federal	20%		
Reservation/BIA	0%		
State	5%		
Out of Idaho	0%		

Watershed Fire Risk				
Risk Level %Watershed Are				
Low	36.3%			
Low-Moderate	3%			
Moderate	11.9%			
Moderate-High	26.4%			
High	22.3%			



# Total wildfire mitigation actions:





# 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 those 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.

- •0 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

### Citie

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)	6,995		
Est. Facilities Near Fault		333	
% Watershed w/in 25 Miles of Fault			47%

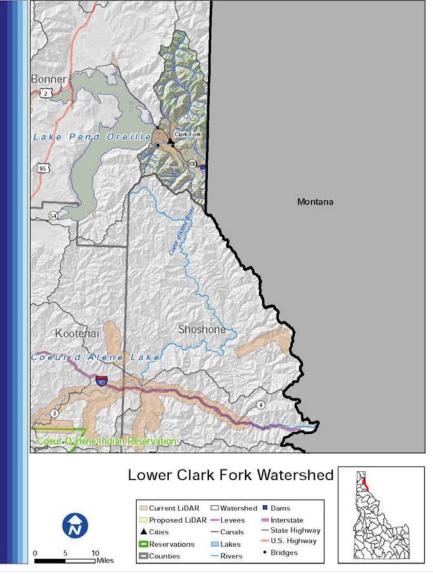
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	75%
Federal	20%
Reservation/ BIA	0%
State	5%
Out of Idaho	0%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	69%
Low-Moderate	31%
Moderate	0%
Moderate-High	0%
High	0%



# Total seismic mitigation actions:





# Lower Clark Fork

# Risk Rank: M

#### ntroduction

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 3 communities participating in the NFIP with 27 policies contributing to \$20,569 of premiums paid in exchange for \$5.816,000 of coverage.

- •0 out of the 2 counties in the Lower Clark Fork watershed identified flood as their number one hazard.
- •0 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:

-Jack Waite Mine -very small portion (2007)

-Columbia River Treaty 2014/2024 Project (2010)

### 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

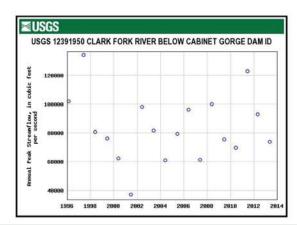
Clark Fork

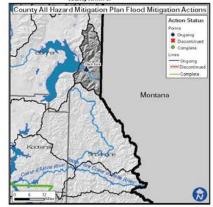
Subbasin Metrics	
Area (sq. miles)	2,336
Population (2010)	1,619
Miles of Stream	389
Miles of Canal	0
Min. Elevation (ft)	2,047
Max. Elevation (ft)	8,698
Dams of Concern	1
Pop. at Flood Risk	141

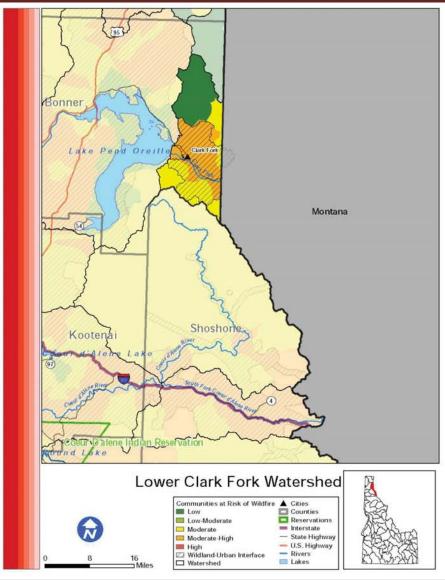
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	2%
Federal	7%
Reservation/BIA	0%
State	0%
Out of Idaho	91%

NFIP Statistics (2014)	
NFIP Policies	27
Total Coverage	\$5,816,000
Total Premiums	\$20,569
# Claims	0
Paid Claims	ŚO

# Total flood mitigation actions: 99







# 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, 24 acres have burned in 33 wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Lower Clark Fork watershed has 30.6% low risk, 0% low-moderate risk, 32.2% moderate risk, 37.2% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

- 0 out of the 2 counties in the Lower Clark Fork watershed identified wildfire as their number one
- 1 out of the 2 counties in the Lower Clark Fork watershed identified wildfire as their number two hazard.
- •0 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

Subbasin Metrics	
Area (sq. miles)	2,336
Population (2010)	1,619
Miles of Stream	389
Miles of Canal	0
Min. Elevation (ft)	2,047
Max. Elevation (ft)	8,698
Structures in WUI	1,010
Historic Fire Events	33
Acres Burned (1995-)	24

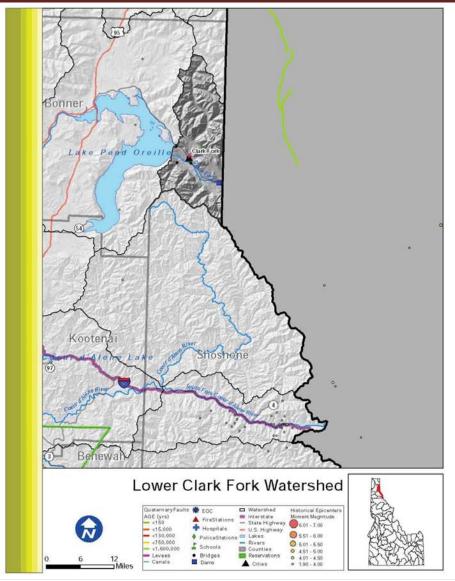
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	2%
Federal	7%
Reservation/BIA	0%
State	0%
Out of Idaho	91%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	30.6%
Low-Moderate	0%
Moderate	32.2%
Moderate-High	37.2%
High	0%



# Total wildfire mitigation actions:





# Lower Clark Fork

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

# Counties and Tribes

Bonner, Shoshone

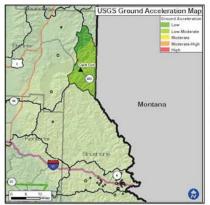
# Cities

Clark Fork

Subbasin Metrics		
Area (sq. miles)		2,336
Population (2010)		1,619
Miles of Stream		389
Miles of Canal		0
Min. Elevation (ft)	Ţ	2,047
Max. Elevation (ft)		8,698
Est. Facilities Near Fault		0
% Watershed w/in 25 Miles of Fault		0%

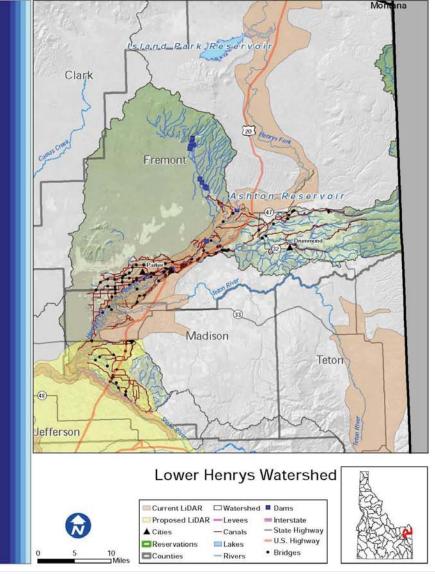
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	2%
Federal	7%
Reservation/ BIA	0%
State	0%
Out of Idaho	91%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	20%
Low-Moderate	80%
Moderate	0%
Moderate-High	0%
High	0%



# Total seismic mitigation actions: 25





# Lower Henry's

# Risk Rank: H

### ntroduction

Areas of concentrated population within the Lower Henrys watershed boundaries are Ashton, Drummond, Parker, Rexburg and St. Anthony. There are 30,196 total people who live within the watershed, of which 614 are at risk of flooding. Nearly 40% 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 levees 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 out of the 4 counties in the Lower Henrys watershed identified flood as their number one hazard.
- •1 out of the 4 counties in the Lower Henrys watershed identified flood as their number two hazard.
- •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, Rexburg, St. Anthony

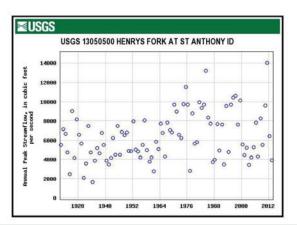
Area (sq. miles)	991	
Population (2010	30,196	
Miles of Stream	706	
Miles of Canal	305	
Min. Elevation (ft	4,800	
Max. Elevation (ft	9,259	
Dams of Concern	1	
Pop. at Flood Risk	614	
Subbasin Ownership		
Owner Type	% Subbasin Area	
Deivoto	300/	

Subbasin Metrics

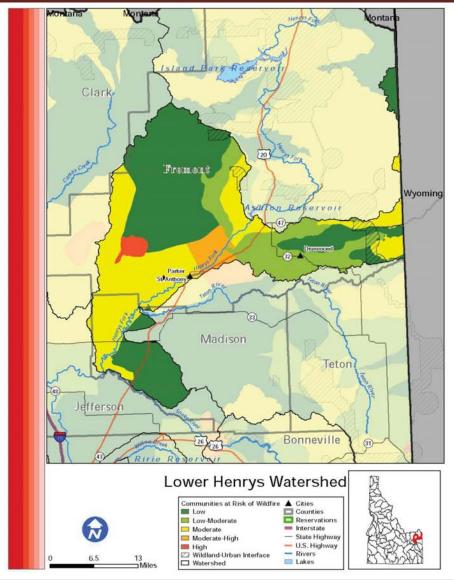
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	38%
Federal	23%
Reservation/BIA	0%
State	10%
Out of Idaho	29%

NFIP Statistics (2014)	
NFIP Policies	26
Total Coverage	\$5,887,900
Total Premiums	\$21,913
# Claims	3
Paid Claims	\$15,025

# Total flood mitigation actions: 24







# Lower Henry's

# Risk Rank: M

# Introduction

The Lower Henrys watershed is home to 30,196 people, a small amount of which live in the Wildland Urban Interface. Areas of concentrated population within the Lower Henrys 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 Henrys watershed. Since 2000, 11,567 acres have burned during 28 individual wildlife events. Based on data from the Idaho Forest Action Plan (2010), the Lower Henrys watershed has 45.7% low risk, 16.3% low-moderate risk, 32.6% moderate risk, 3.8% 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

• 0 out of the 4 counties in the Lower Henry's watershed identified wildfire as their number two hazard.

•0 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

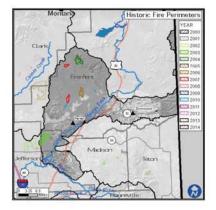
# Cities

Ashton, Drummond, Parker, Rexburg, St. Anthony

Subbasin Metrics	
Area (sq. miles)	991
Population (2010)	30,196
Miles of Stream	706
Miles of Canal	305
Min. Elevation (ft)	4,800
Max. Elevation (ft)	9,259
Structures in WUI	106
Historic Fire Events	28
Acres Burned (1995-)	11,567

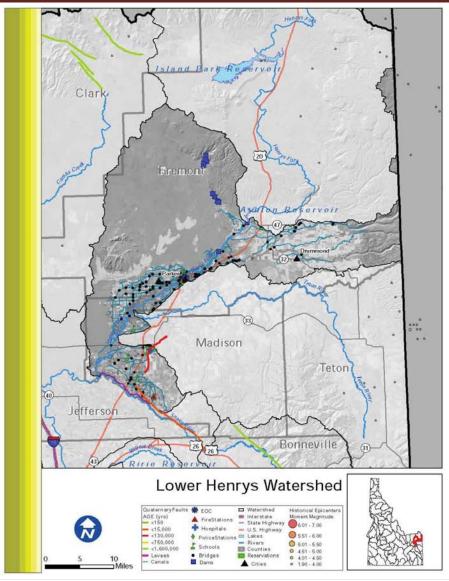
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	38%
Federal	23%
Reservation/BIA	0%
State	10%
Out of Idaho	29%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	45.7%
Low-Moderate	16.3%
Moderate	32.6%
Moderate-High	3.8%
High	1.5%



# Total wildfire mitigation actions:





# 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 life 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

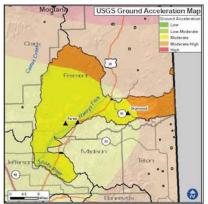
### Cities

Ashton, Drummond, Parker, Rexburg, St. Anthony

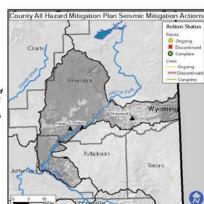
Subbasin Metrics		
Area (sq. miles)		991
Population (2010)		30,196
Miles of Stream	į.	706
Miles of Canal		305
Min. Elevation (ft)	į	4,800
Max. Elevation (ft)		9,259
Est. Facilities Near F	ault	19
% Watershed w/in 25 M	les of Fa	ult 86%

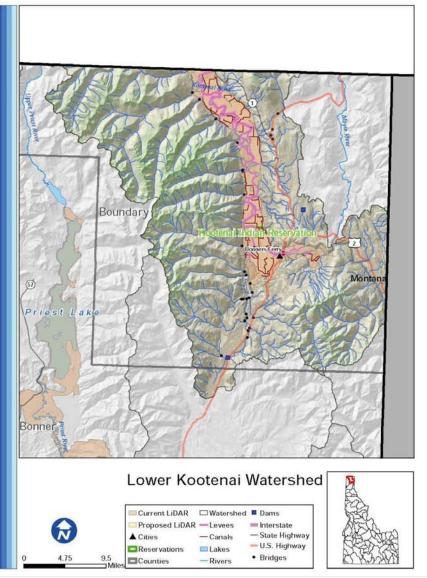
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	38%	
Federal	23%	
Reservation/BIA	0%	
State	10%	
Out of Idaho	29%	

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	73%
Moderate-High	27%
High	0%



Total seismic mitigation actions: 23





# Lower Kootenai

# Risk Rank: H

### ntroduction

The Lower Kootenai watershed largely lies outside of Idaho to the north, though the majority of the population within Idaho lies 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 285 are at risk of flooding.

## What is the risk?

The Kootenai River is the major water system in the watershed. There is 1 high or significant hazard dam in the Lower Kootenai watershed. According to the county AHMPs, 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 \$11,717 of premiums paid in exchange for \$4,343,900 of coverage.

- •0 out of the 2 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 2 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:

-Columbia River Treaty 2014/2024 Project (2010)

### 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

### Citie

Bonner's Ferry, Moyie Springs

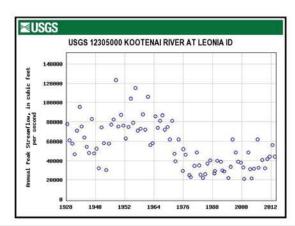
Subbasin Metrics	
Area (sq. miles)	921
Population (2010)	10,481
Miles of Stream	1,101
Miles of Canal	107
Min. Elevation (ft)	1,204
Max. Elevation (ft)	7,694
Dams of Concern	1

Pop. at Flood Risk

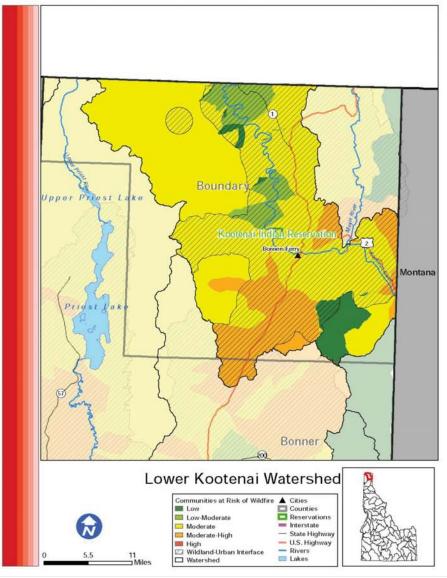
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	8%
Federal	13%
Reservation/BIA	0%
State	1%
Out of Idaho	78%

NFIP Statistics (2014)	
NFIP Policies	15
Total Coverage	\$4,343,900
Total Premiums	\$11,717
# Claims	1
Paid Claims	\$8.395

# Total flood mitigation actions: 21







# Lower Kootenai

# Risk Rank: H

# Introduction

The Lower Kootenai watershed is home to 10,481 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, 3,600 acres have burned in 38 wildfire events. 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, 16.8% 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.
- 0 out of the 2 counties in the Lower Kootenai watershed identified wildfire as their number two hazard.
- •0 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

Bonner's Ferry, Moyie Springs

Subbasin Metrics	
Area (sq. miles)	921
Population (2010)	10,481
Miles of Stream	1,101
Miles of Canal	107
Min. Elevation (ft)	1,204
Max. Elevation (ft)	7,694
Structures in WUI	3,747
Historic Fire Events	38
Acres Burned (1995-)	3,600

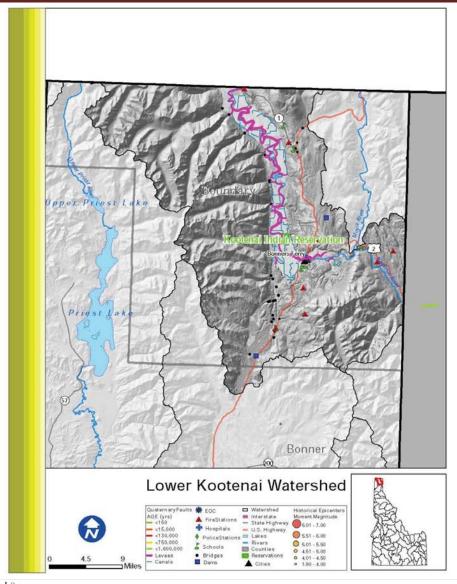
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	8%	
Federal	13%	
Reservation/BIA	0%	
State	1%	
Out of Idaho	78%	

Watershed Fire Risk		
Risk Level	%Watershed Are	
Low	4.9%	
Low-Moderate	7.2%	
Moderate	71.1%	
Moderate-High	16.8%	
High	0%	



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

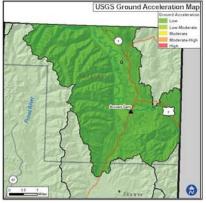
### Cities

Bonner's Ferry, Moyie Springs

Subbasin Metrics			
Area (sq. miles)	0		921
Population (2010)		- 1	10,481
Miles of Stream			1,101
Miles of Canal			107
Min. Elevation (ft)	į.		1,204
Max. Elevation (ft)			7,694
Est. Facilities Near Fault		0	
% Watershed w/in 25 Miles of Fault		0%	

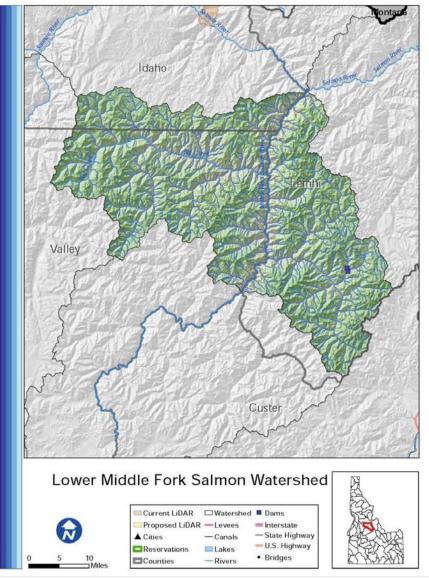
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	8%	
Federal	13%	
Reservation/ BIA	0%	
State	1%	
Out of Idaho	78%	

Ground Acceleration		
Accel. Amoun	%Watershed Are	
Low	100%	
Low-Moderate	0%	
Moderate	0%	
Moderate-High	0%	
High	0%	



Total seismic mitigation actions: 12





# Lower Middle Fork Salmon

# Risk Rank: L

### 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 the 4 counties in the Lower Middle Fork Salmon watershed identified flood as their number one hazard.

•2 out of the 4 counties in the Lower Middle Fork Salmon watershed identified flood as their number two hazard.

•1 out of the 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

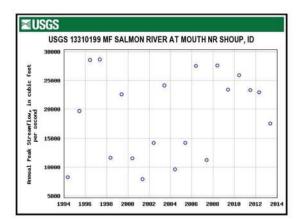
Cities

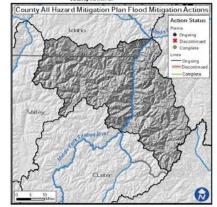
Subbasin Metrics		
Area (sq. miles)	1,375	
Population (2010)	4	
Miles of Stream	3,008	
Miles of Canal	0	
Min. Elevation (ft)	3,018	
Max. Elevation (ft)	10,046	
Dams of Concern	2	
Pop. at Flood Risk	0	

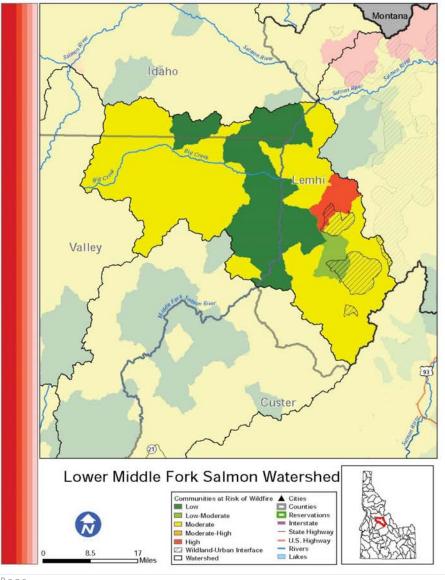
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	0%	
Federal	99%	
Reservation/BIA	0%	
State	0%	
Out of Idaho	0%	

NFIP Statistics (2014)		
NFIP Policies	0	
Total Coverage	\$0	
Total Premiums	\$0	
# Claims	0	
Paid Claims	\$0	

# Total flood mitigation actions: 40







# Lower Middle Fork Salmon

# 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 (2010), 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**

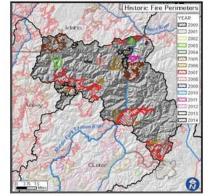
Custer, Idaho, Lemhi, Valley

Cities

Subbasin Metrics			
Area (sq. miles)	1,375		
Population (2010)	4		
Miles of Stream	3,008		
Miles of Canal	0		
Min. Elevation (ft)	3,018		
Max. Elevation (ft)	10,046		
Structures in WUI	35		
Historic Fire Events	128		
Acres Burned (1995-)	244,139		

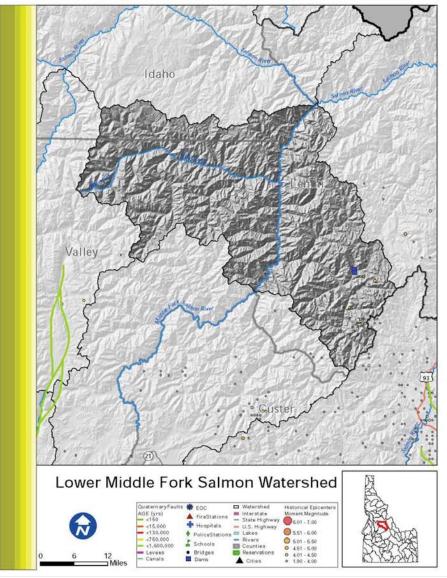
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	0%	
Federal	99%	
Reservation/BIA	0%	
State	0%	
Out of Idaho	0%	

Watershed Fire Risk		
Risk Level	%Watershed Are	
Low	26.7%	
Low-Moderate	2.8%	
Moderate	67.1%	
Moderate-High	0%	
High	3.3%	



Total wildfire mitigation actions:





# 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.
- o out of the 4 counties within the Lower Middle Fork Salmon watershed identified seismic as their number three hazard.

# Counties and Tribes

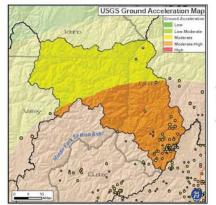
Custer, Idaho, Lemhi, Valley

Cities

Subbasin Metrics			
Area (sq. miles)			1,375
Population (2010)			4
Miles of Stream	l e		3,008
Miles of Canal			0
Min. Elevation (ft)	į.		3,018
Max. Elevation (ft)			10,046
Est. Facilities Near F	ault		0
% Watershed w/in 25 M	les of I	Fault	12%

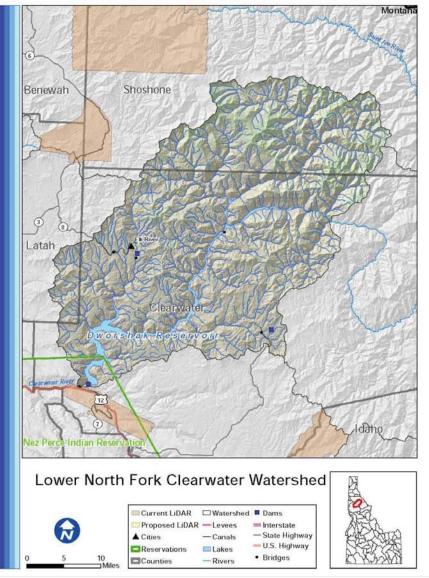
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	0%
Federal	99%
Reservation/ BIA	0%
State	0%
Out of Idaho	0%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	53%
Moderate-High	47%
High	0%



Total seismic mitigation actions:





# Lower North Fork Clearwater

# Risk Rank: L

### ntroduction

The only area of concentrated population within the Lower North Fork Ckearwater 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 41% privately owned.

### What is the rick

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 AHMPs, there have been reports of 9 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 \$69,000 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.

## LIDAR data availability

LIDAR availability within the Lower North Fork Clearwater watershed is as follows:
-Nez Perce Reservation (2002, small portion located at the talwaters of the Dworshak Dam)

-Nez Perce Reservation (2002, small portion located at the talwaters of the Dworshak Dam)
 -Columbia River Treaty 2014/2024 Project (2010, small portion located at the talwaters of the Dworshak Dam)

### Conclusion

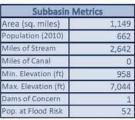
The Lower North Fork Clearwater watershed contains a very small amount of people and property, as well as one hazardous dam. It is considered a low flood hazard watershed.

# **Counties and Tribes**

Clearwater, Latah, Nez Perce Tribe, Shoshone

# Cities

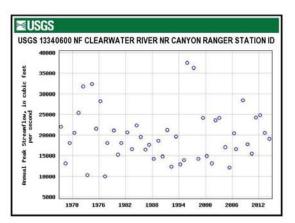
Elk River



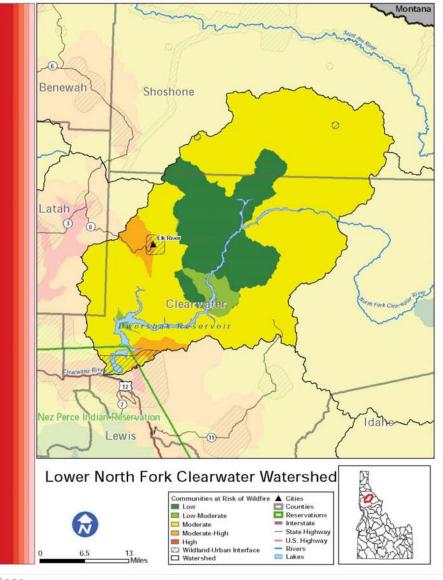
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	41%
Federal	34%
Reservation/BIA	0%
State	25%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	1
Total Coverage	\$69,000
Total Premiums	\$601
# Claims	0
Paid Claims	\$0

# Total flood mitigation actions: 152







# 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 Elik 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, 3,941 acres have burned during 122 wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Lower North Fork Clearwater watershed has 19.2% low risk, 3% low-moderate risk, 74.1% moderate risk, 3.7% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

- •2 out of the 3 counties in the Lower North Fork Clearwater watershed identified wildfire as their number one hazard.
- •1 out of the 3 counties in the Lower North Fork Clearwater watershed identified wildfire as their number two hazard.
- •0 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 Metrics	
Area (sq. miles)	1,149
Population (2010)	662
Miles of Stream	2,642
Miles of Canal	0
Min. Elevation (ft)	958
Max. Elevation (ft)	7,044
Structures in WUI	488
Historic Fire Events	122
Acres Burned (1995-)	3,941

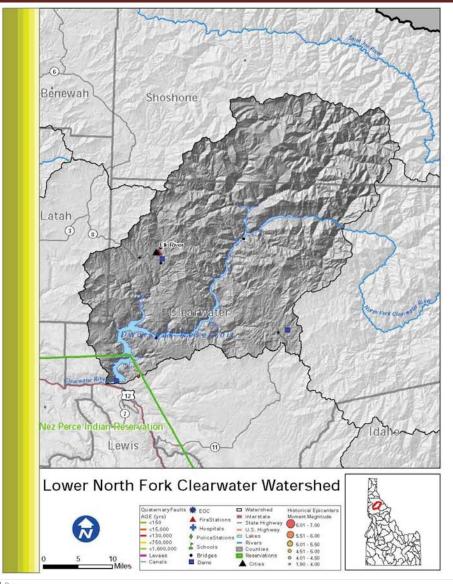
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	41%
ederal	34%
Reservation/BIA	0%
itate	25%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	19.2%
Low-Moderate	3%
Moderate	74.1%
Moderate-High	3.7%
High	0%



# Total wildfire mitigation actions: 81





# Lower North Fork Clearwater

# Risk Rank: L

## Introduction

The area of concentrated population within the Lower North Fork Clearwater watershed boundaries is Elk River.

### tarbant in the sheet of the

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

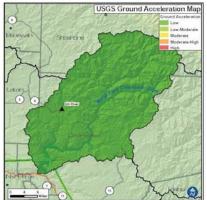
### Cities

Elk River

Subbasin Metrics	
Area (sq. miles)	1,149
Population (2010)	662
Miles of Stream	2,642
Miles of Canal	0
Min. Elevation (ft)	958
Max. Elevation (ft)	7,044
Est. Facilities Near F	ault 0
% Watershed w/in 25 M	lles of Fault 0%

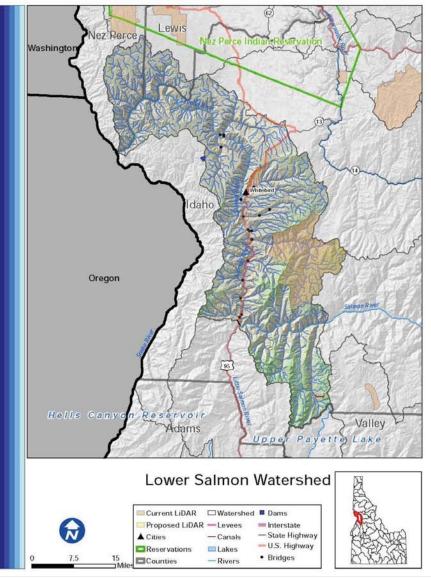
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	41%
Federal	34%
Reservation/BIA	0%
State	25%
Out of Idaho	0%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	100%
Low-Moderate	0%
Moderate	0%
Moderate-High	0%
High	0%



Total seismic mitigation actions: 25





# Lower Salmon

# Risk Rank: M

Areas of concentrated population within the Lower Salmon watershed boundaries are Riggins and White Bird. There are 1,858 total people who live within the watershed, of which 103 are at risk of flooding. The watershed is two-thirds federally managed.

There are 0 high or significant hazard dams in the Lower Salmon watershed. According to the county AHMPs, 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 of premiums paid in exchange for \$1,341,700 of coverage.

- •0 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

- -Slate Creek (2006)
- -White Bird Creek (2008)
- -Columbia River Treaty 2014/2024 Project -very small portion (2010)

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

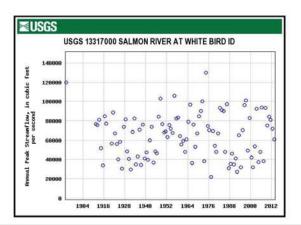
Riggins, White Bird

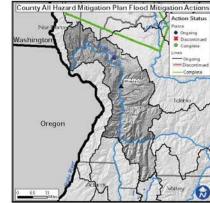
Subbasin Metrics	
Area (sq. miles)	1,186
Population (2010)	1,858
Miles of Stream	2,628
Miles of Canal	6
Min. Elevation (ft)	892
Max. Elevation (ft)	8,802
Dams of Concern	0
Pop. at Flood Risk	48

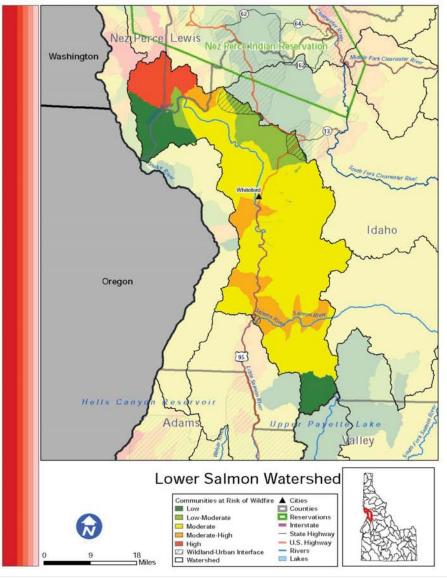
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	41%
Federal	48%
Reservation/BIA	0%
State	11%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	5
Total Coverage	\$1,341,700
Total Premiums	\$3,826
# Claims	0
Paid Claims	ŚO

# Total flood mitigation actions: 70







# 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 486 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 10.8% low risk, 9.2% low-moderate risk, 59.8% moderate risk, 12.9% moderate-high risk and 7.3% 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

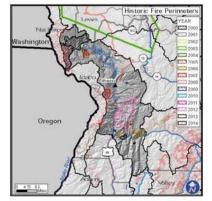
### Cities

Riggins, White Bird

Subbasin Metrics	
Area (sq. miles)	1,186
Population (2010)	1,858
Miles of Stream	2,628
Miles of Canal	6
Min. Elevation (ft)	892
Max. Elevation (ft)	8,802
Structures in WUI	486
Historic Fire Events	148
Acres Burned (1995-)	168.229

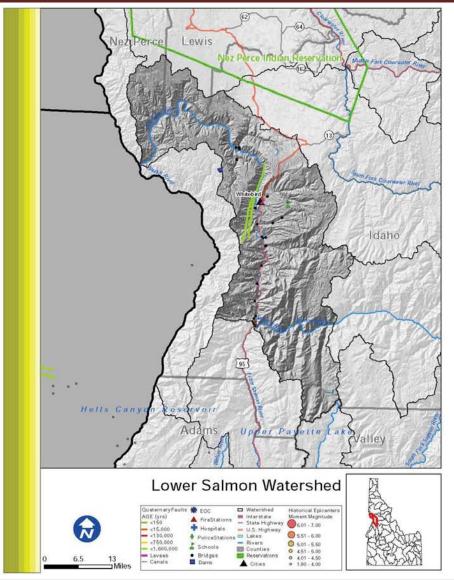
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	41%
Federal	48%
Reservation/BIA	0%
State	11%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	10.8%
Low-Moderate	9.2%
Moderate	59.8%
Moderate-High	12.9%
High	7.3%



# Total wildfire mitigation actions:





# **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)		1,186
Population (2010)		1,858
Miles of Stream		2,628
Miles of Canal		6
Min. Elevation (ft)	į	892
Max. Elevation (ft)		8,802
Est. Facilities Near Fault (		0
% Watershed w/in 25 M	lles of Fau	t 8%

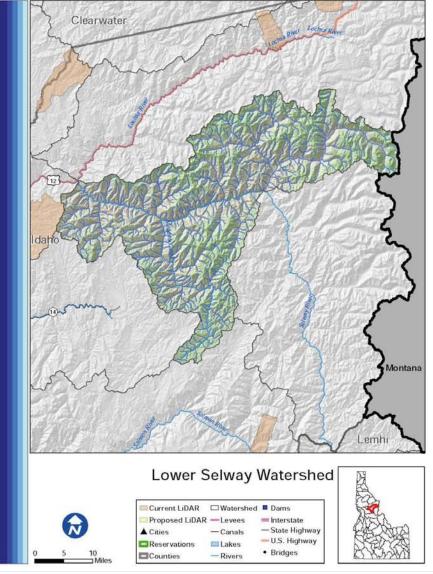
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	41%
Federal	48%
Reservation/ BIA	0%
State	11%
Out of Idaho	0%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	80%
Low-Moderate	20%
Moderate	0%
Moderate-High	0%
High	0%



Total seismic mitigation actions: 26





# **Lower Selway**

# Risk Rank: L

### 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 AHMP, 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 4 policies contributing to \$1,472 of premiums paid in exchange for \$980,000 of coverage.

- •0 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.
  •0 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

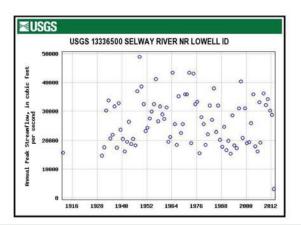
Cities

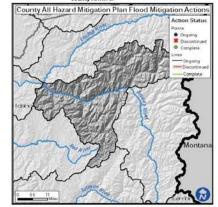
Subbasin Metrics	
Area (sq. miles)	1,028
Population (2010)	28
Miles of Stream	2,120
Miles of Canal	0
Min. Elevation (ft)	1,457
Max. Elevation (ft)	8,530
Dams of Concern	0
Pop. at Flood Risk	1.

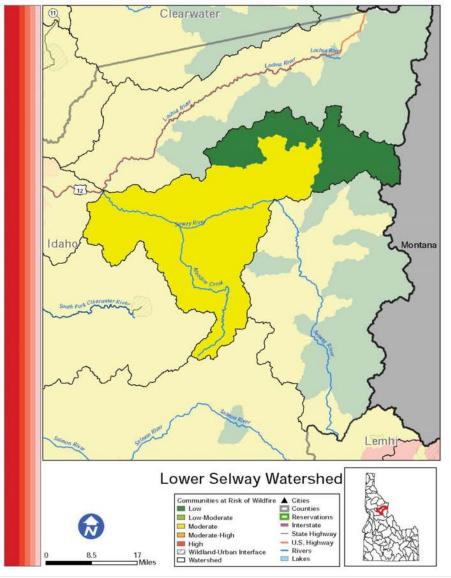
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	0%
Federal	100%
Reservation/BIA	0%
State	0%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	4
Total Coverage	\$980,000
Total Premiums	\$1,472
# Claims	0
Paid Claims	\$0

# Total flood mitigation actions: 7







# Lower Selway

# Risk Rank: L

# Introduction

The Lower Selway watershed is home to 0 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 1 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 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**

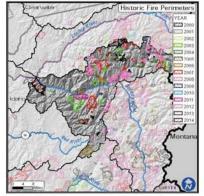
Idaho

Cities

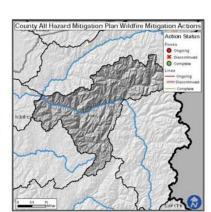
Subbasin Metrics	
Area (sq. miles)	1,028
Population (2010)	28
Miles of Stream	2,120
Miles of Canal	0
Min. Elevation (ft)	1,457
Max. Elevation (ft)	8,530
Structures in WUI	No WUI
Historic Fire Events	340
Acres Burned (1995-)	129,565

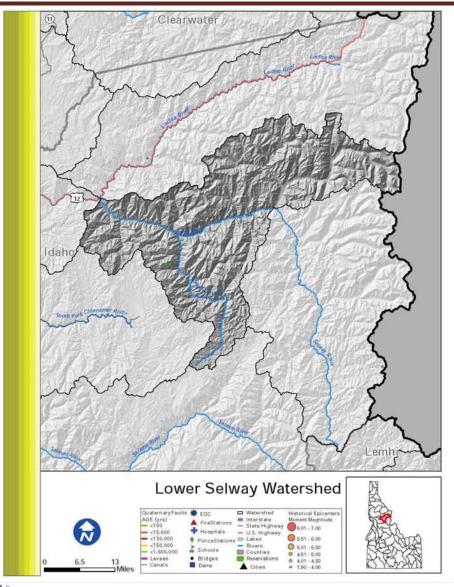
THE RESERVE	The state of the s	
Subbasin Ownership		
Owner Type	% Subbasin Area	
rivate	0%	
ederal	100%	
eservation/BIA	. 0%	
tate	0%	
out of Idaho	0%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	25%
Low-Moderate	0%
Moderate	75%
Moderate-High	0%
High	0%



# Total wildfire mitigation actions:





# 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 hard.

Counties and Tribes

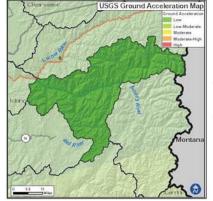
Idaho

Cities

Subbasin Metrics			
Area (sq. miles)			1,028
Population (2010)			28
Miles of Stream			2,120
Miles of Canal			0
Min. Elevation (ft)	į.		1,457
Max. Elevation (ft)			8,530
Est. Facilities Near Fault		0	
% Watershed w/in 25 Miles of Fault		0%	

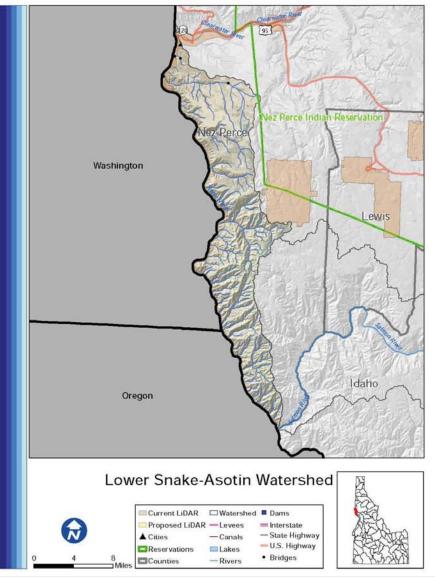
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	0%
Federal	100%
Reservation/BIA	0%
State	0%
Out of Idaho	0%

Ground .	Acceleration
Accel. Amoun	%Watershed Are
Low	100%
Low-Moderate	0%
Moderate	0%
Moderate-High	0%
High	0%



Total seismic mitigation actions:





# Lower Snake-Asotin

## Risk Rank: M

### ntroduction

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 rick

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 AHMPs, 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 14 policies contributing to \$9,780 of premiums paid in exchange for \$3,624,800 of coverage.

- •0 out of the 2 counties in the Lower Snake-Asotin watershed identified flood as their number one hazard.
- •2 out of the 2 counties in the Lower Snake-Asotin watershed identified flood as their number two hazard.

•0 out of the 2 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:

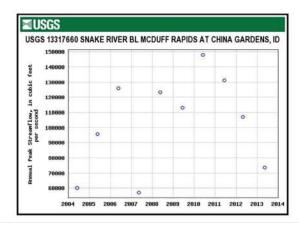
- -Nez Perce Reservation -very small portion (2002)
- -Aston Creek (2008)
- -Captain John Creek (2009)
- -Columbia River Treaty 2014/2024 Project (2010)

### Conclusio

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



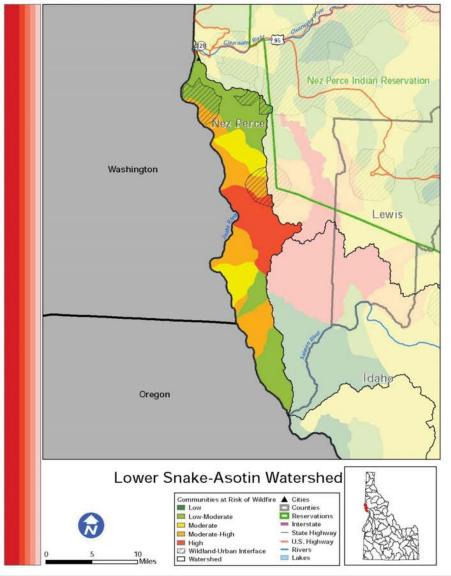
Subbasin Metrics		
Area (sq. miles)	696	
Population (2010)	13,754	
Miles of Stream	600	
Miles of Canal	0	
Min. Elevation (ft)	719	
Max. Elevation (ft)	6,204	
Dams of Concern	0	
Pop. at Flood Risk	273	

Subbasin Ownership	
Owner Type	% Subbasin Area
Private	13%
Federal	5%
Reservation/BIA	0%
State	8%
Out of Idaho	74%

NFIP Statistics (2014)	
NFIP Policies	14
Total Coverage	\$3,624,800
Total Premiums	\$9,780
# Claims	1
Paid Claims	\$924

# Total flood mitigation actions: 38





# 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 a portion 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, 116,331 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

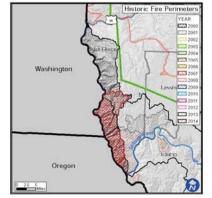
# Cities

Lewiston

Subbasin Metrics		
Area (sq. miles)	696	
Population (2010)	13,754	
Miles of Stream	600	
Miles of Canal	0	
Min. Elevation (ft)	719	
Max. Elevation (ft)	6,204	
Structures in WUI	92	
Historic Fire Events	12	
Acres Burned (1995-)	116 331	

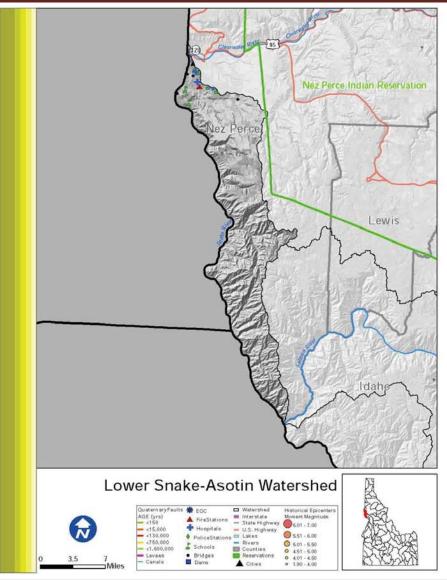
THE RESERVE AND ADDRESS OF THE PARTY OF THE		
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	13%	
ederal	5%	
Reservation/BIA	0%	
itate	8%	
Out of Idaho	74%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	0.2%
Low-Moderate	38.2%
Moderate	14.4%
Moderate-High	27.7%
High	19.5%



# Total wildfire mitigation actions:





# 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

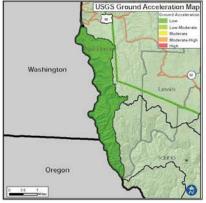
# Cities

Lewiston

Subbasin Metrics			
Area (sq. miles)			696
Population (2010)	1	- 1	13,754
Miles of Stream	Ĭ.		600
Miles of Canal	0		
Min. Elevation (ft)	in. Elevation (ft) 719		719
Max. Elevation (ft) 6,20		6,204	
Est. Facilities Near Fault (		0	
% Watershed w/in 25 Miles of Fault 0		0%	

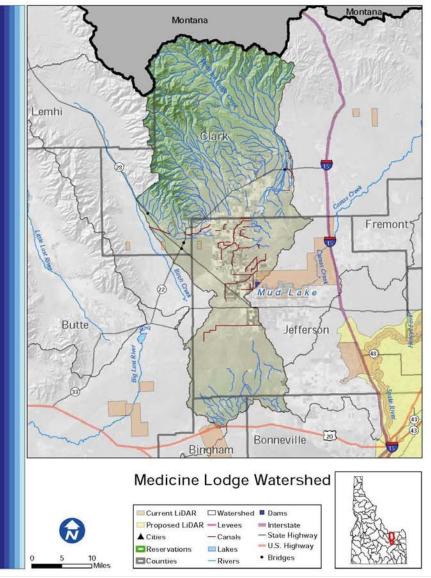
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	13%	
Federal	5%	
Reservation/ BIA	0%	
State	8%	
Out of Idaho	74%	

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	100%
Low-Moderate	0%
Moderate	0%
Moderate-High	0%
High	0%



# Total seismic mitigation actions:





# **Medicine Lodge**

# Risk Rank: L

### ntroduction

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 383 are at risk of flooding. Roughly one quarter of the watershed is privately owned.

### What is the rick

There are 0 high or significant hazard dams in the Medicine Lodge watershed. According to the county AHMPs, there has been one historical report of riverine flooding within the watershed. There are 6 communities participating in the NFIP with 5 policies contributing to \$3,948 of premiums paid in exchange for \$390,900 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:

- -INL/Birch Creek Central (2002)
- -INL/ Birch Creek East (2002)
- -INL Fire (2007)
- -Camas 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.

# **Countles and Tribes**

Bingham, Bonneville, Butte, Clark, Jefferson, Lemhi

# Cities

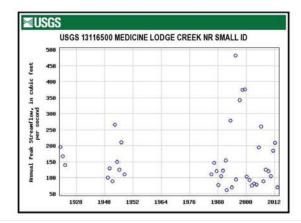
Mud Lake

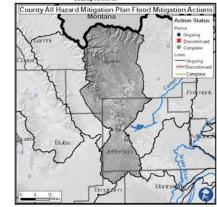
Subbasin Metrics	
Area (sq. miles)	972
Population (2010)	825
Miles of Stream	1,660
Miles of Canal	223
Min. Elevation (ft)	4,751
Max. Elevation (ft)	11,388
Dams of Concern	0
Pop. at Flood Risk	383

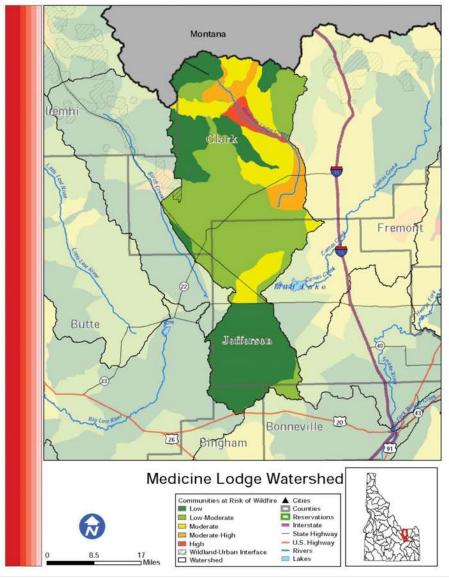
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	23%
Federal	76%
Reservation/BIA	0%
State	1%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	5
Total Coverage	\$390,900
Total Premiums	\$3,948
# Claims	0
Paid Claims	\$0

# Total flood mitigation actions: 54







# Medicine Lodge

# Risk Rank: L

# Introduction

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 32 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Medicine Lodge watershed has 34% 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.

- 3 out of the 6 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
- 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, future events have a low likelihood to threaten life and property within the watershed.

## Counties and Tribes

Bingham, Bonneville, Butte, Clark, Jefferson, Lemhi

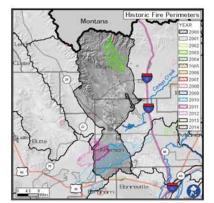
# Cities

Mud Lake

Subbasin Metrics	
Area (sq. miles)	972
Population (2010)	825
Miles of Stream	1,660
Miles of Canal	223
Min. Elevation (ft)	4,751
Max. Elevation (ft)	11,388
Structures in WUI	No WUI
Historic Fire Events	32
Acres Burned (1995-)	151 359

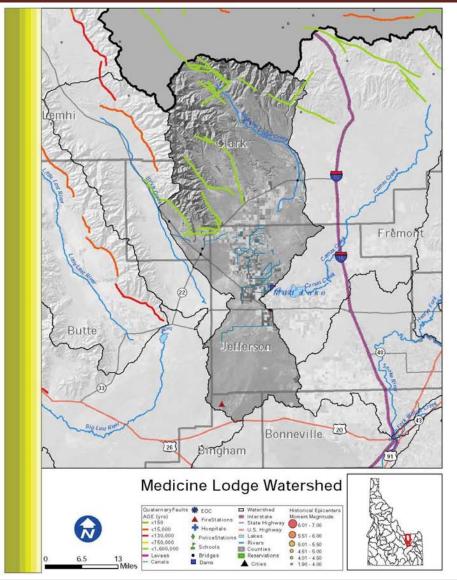
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	23%
Federal	76%
Reservation/BIA	0%
State	1%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	34%
Low-Moderate	40.4%
Moderate	16.6%
Moderate-High	6.6%
High	2.3%



# Total wildfire mitigation actions:





# Medicine Lodge

# 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 223 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			
Area (sq. miles)			972
Population (2010)			825
Miles of Stream			1,660
Miles of Canal			223
Min. Elevation (ft)	į.		4,751
Max. Elevation (ft)			11,388
Est. Facilities Near Fault		1	
% Watershed w/in 25 Miles of Fault 949		94%	

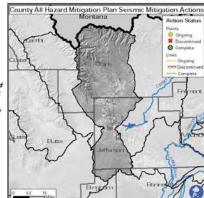
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	23%
Federal	76%
Reservation/ BIA	0%
State	1%
Out of Idaho	0%

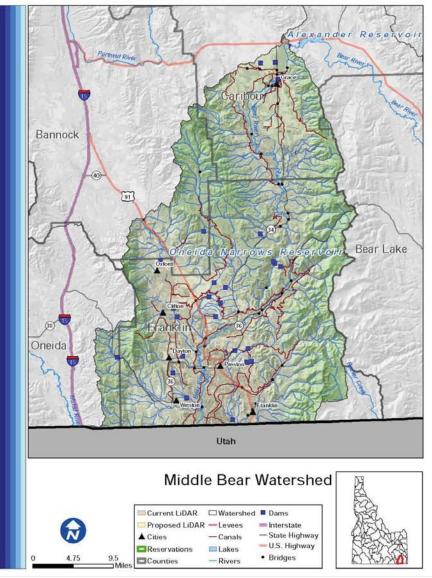
Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	22%
Moderate	54%
Moderate-High	23%
High	0%



Total seismic mitigation actions:

56





# Middle Bear

# Risk Rank: H

### ntroduction

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 18 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 AHMPs, there have been reports of 44 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 6 policies contributing to \$2,577 of premiums paid in exchange for \$1,150,800 of coverage.

- •0 out of the 5 counties in the Middle Bear watershed identified flood as their number one hazard.
- •0 out of the 5 counties in the Middle Bear watershed identified flood as their number two hazard.
- •0 out of the 5 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.

# Countles and Tribes

Bannock, Bear Lake, Caribou, Franklin, Oneida

### Citie

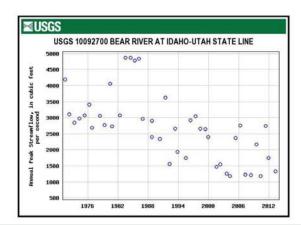
Clifton, Dayton, Franklin, Grace, Oxford, Preston, Weston

Subbasin Metrics	
Area (sq. miles)	1,288
Population (2010)	14,847
Miles of Stream	1,700
Miles of Canal	354
Min. Elevation (ft)	4,393
Max. Elevation (ft)	9,938
Dams of Concern	18
Pop. at Flood Risk	18

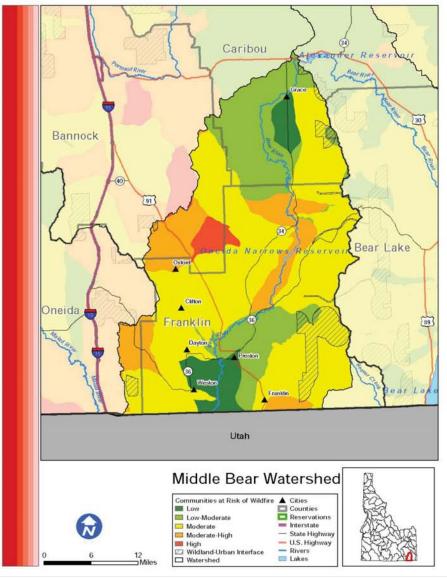
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	50%	
Federal	20%	
Reservation/BIA	0%	
State	6%	
Out of Idaho	25%	

NFIP Statistics (2014)	
NFIP Policies	6
Total Coverage	\$1,150,800
Total Premiums	\$2,577
# Claims	2
Paid Claims	\$3.587

# Total flood mitigation actions: 39







# 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, 27,758 acres have burned during 48 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Middle Bear watershed has 6.3% low risk, 21.3% low-moderate risk, 55.9% moderate risk, 14.5% 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.
- •0 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

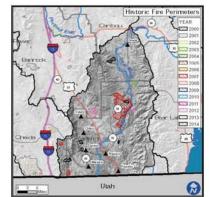
### Cities

Clifton, Dayton, Franklin, Grace, Oxford, Preston, Weston

Subbasin Metrics	
Area (sq. miles)	1,288
Population (2010)	14,847
Miles of Stream	1,700
Miles of Canal	354
Min. Elevation (ft)	4,393
Max. Elevation (ft)	9,938
Structures in WUI	21
Historic Fire Events	48
Acres Burned (1995-)	27.758

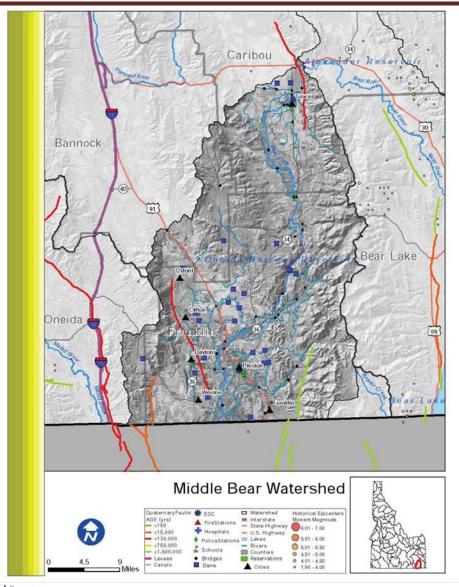
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	50%
ederal	20%
Reservation/BIA	0%
itate	6%
Out of Idaho	25%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	6.3%
Low-Moderate	21.3%
Moderate	55.9%
Moderate-High	14.5%
High	2%



# Total wildfire mitigation actions:





# Middle Bear

# Risk Rank: H

## Introduction

Areas of concentrated population within the Middle Bear watershed boundaries are Clifton, Dayton, Franklin, Grace, Oxford, Preston and Weston.

### tations in along state 2

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.
- •0 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

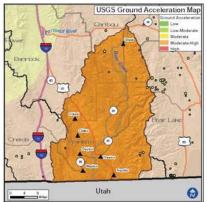
### Citie

Clifton, Dayton, Franklin, Grace, Oxford, Preston, Weston

Subbasin Metrics			
Area (sq. miles)			1,288
Population (2010)		- 4	14,847
Miles of Stream			1,700
Miles of Canal			354
Min. Elevation (ft)	į.		4,393
Max. Elevation (ft)			9,938
Est. Facilities Near Fault			19
% Watershed w/in 25 Miles of Fault		100%	

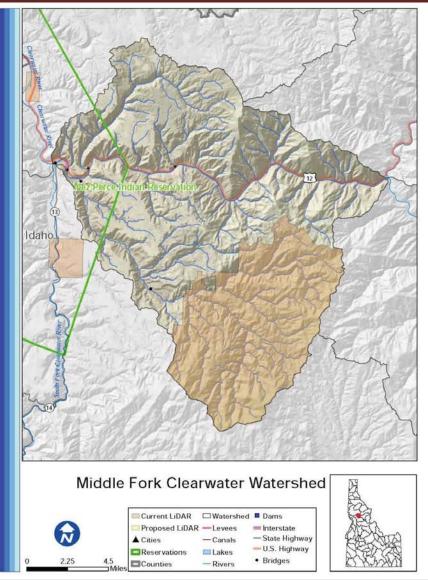
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	50%	
Federal	20%	
Reservation/BIA	0%	
State	6%	
Out of Idaho	25%	

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	0%
Moderate-High	100%
High	0%



# Total seismic mitigation actions: 37





# Middle Fork Clearwater

# Risk Rank: M

#### ntroduction

The only area of concentrated population within the Middle Fork Clearwater watershed boundaries is Kooskia. 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 rick?

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 AHMP, 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 \$1,108,000 of coverage.

•0 out 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

 $\bullet 0$  out of the 1 county in the Middle Fork Clearwater watershed identified flood as their number three hazard.

### LIDAR 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

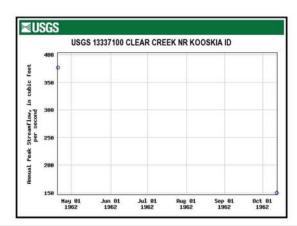
Kooskia

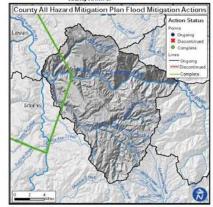
Subbasin Metrics	
Area (sq. miles)	221
Population (2010)	1,598
Miles of Stream	431
Miles of Canal	0
Min. Elevation (ft)	1,224
Max. Elevation (ft)	6,601
Dams of Concern	0
Pop. at Flood Risk	69

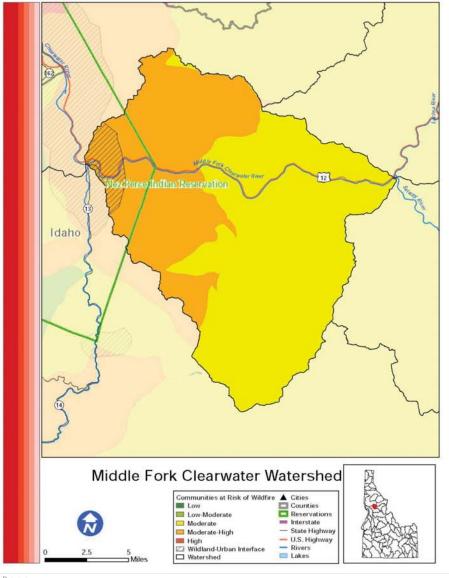
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	36%
Federal	49%
Reservation/BIA	1%
State	14%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	7
Total Coverage	\$1,108,000
Total Premiums	\$4,247
# Claims	0
Paid Claims	\$0

# 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, 3,634 acres have burned in 51 wildlire event. Based on data from the Idaho Forest Action Plan (2010), the Middle Fork Clearwater watershed has 0% low risk, 0% low-moderate risk, 60.5% moderate risk, 39.5% moderate-high risk and 0% high risk of wildlire 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.
- •0 out of the 1 county in the Middle Fork Clearwater watershed identified wildfire as their number two hazard.
- •0 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

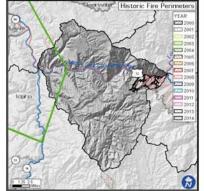
#### Cities

Kooskia

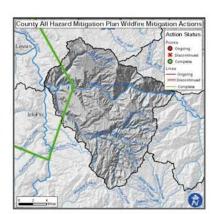
Subbasin Metrics	
Area (sq. miles)	221
Population (2010)	1,598
Miles of Stream	431
Miles of Canal	0
Min. Elevation (ft)	1,224
Max. Elevation (ft)	6,601
Structures in WUI	282
Historic Fire Events	51
Acres Burned (1995-)	3,634

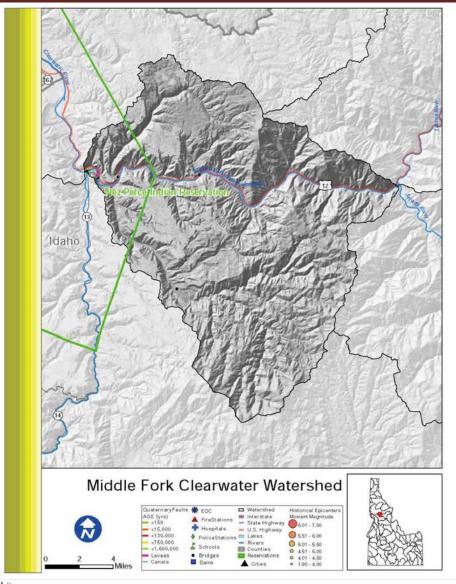
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	36%
Federal	49%
Reservation/BIA	1%
State	14%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	60.5%
Moderate-High	39.5%
High	0%



# Total wildfire mitigation actions:





# Middle Fork Clearwater

## Risk Rank: L

#### Introduction

The only area of concentrated population within the Middle Fork Clearwater watershed boundaries is Kooskia.

#### tarbone to alone alote?

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 seignic 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

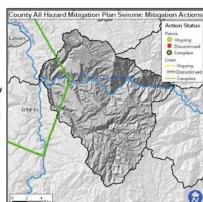
Subbasin Metrics		
Area (sq. miles)		221
Population (2010)		1,598
Miles of Stream		431
Miles of Canal		0
Min. Elevation (ft)	Ţ.	1,224
Max. Elevation (ft)		6,601
Est. Facilities Near Fault 0		
% Watershed w/in 25 Miles of Fault 0%		0%

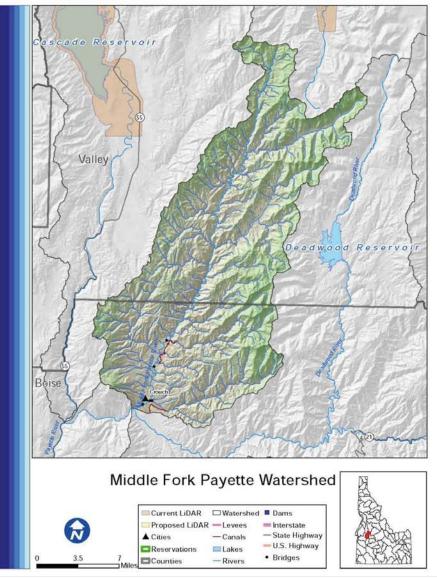
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	36%
Federal	49%
Reservation/BIA	1%
State	14%
Out of Idaho	0%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	100%
Low-Moderate	0%
Moderate	0%
Moderate-High	0%
High	0%



# Total seismic mitigation actions:





# Middle Fork Payette

#### Risk Rank: L

#### ntroduction

The only area of concentrated population within the Middle Fork Payette watershed boundaries is Crouch. There are 1,350 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 rick

Flood events could be due to rain or snow events, localized intensive 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 policies contributing to \$6,945 of premiums paid in exchange for \$4,879,200 of coverage.

•0 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

•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

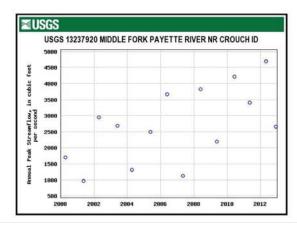
Crouch

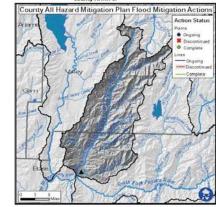
Subbasin Metrics	
Area (sq. miles)	340
Population (2010)	1,350
Miles of Stream	743
Miles of Canal	2
Min. Elevation (ft)	2,976
Max. Elevation (ft)	8,625
Dams of Concern	0
Pon at Flood Rick	66

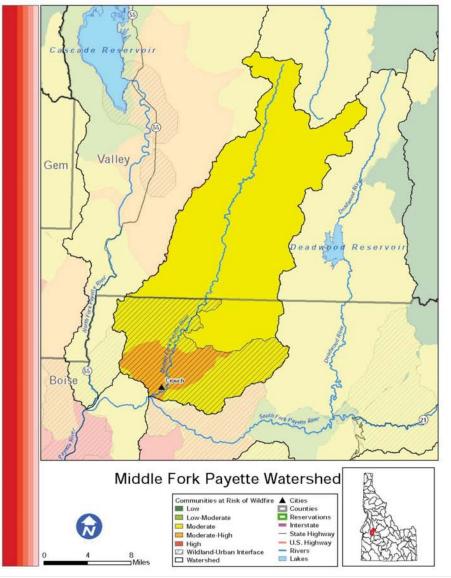
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	7%
Federal	90%
Reservation/BIA	0%
State	3%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	17
Total Coverage	\$4,879,200
Total Premiums	\$6,945
# Claims	0
Paid Claims	\$0

## Total flood mitigation actions: 27







# 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 1,748 structures located within the WUI of the Middle Fork Payette watershed. Since 2000, 51,536 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, 90.8% 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 one hazard.
- out of the 2 counties in the Middle Fork Payette watershed identified wildfire as their number two hazard.
- •0 out of the 2 counties in the Middle Fork Payette watershed identified wildfire as their number three haza.

#### Conclusion

Given the large population within the WUI 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

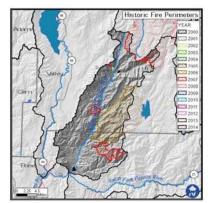
Crouch

Subbasin Metrics	
Area (sq. miles)	340
Population (2010)	1,350
Miles of Stream	743
Miles of Canal	2
Min. Elevation (ft)	2,976
Max. Elevation (ft)	8,625
Stangerung in 181111	1 740

istoric Fire Events

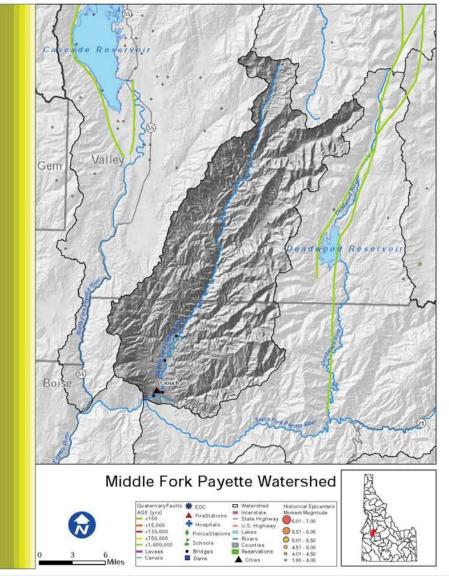
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	7%
Federal	90%
Reservation/BIA	0%
State	3%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	90.8%
Moderate-High	9.2%
High	0%



# Total wildfire mitigation actions:





# 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

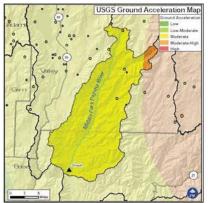
Cities

Crouch

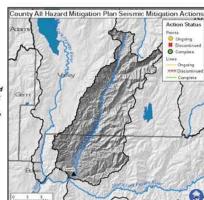
Subbasin Metrics		
Area (sq. miles)		340
Population (2010)		1,350
Miles of Stream		743
Miles of Canal		2
Min. Elevation (ft)		2,976
Max. Elevation (ft)		8,625
Est. Facilities Near F	ault	1
% Watershed w/in 25 Mi	les of Fault	79%

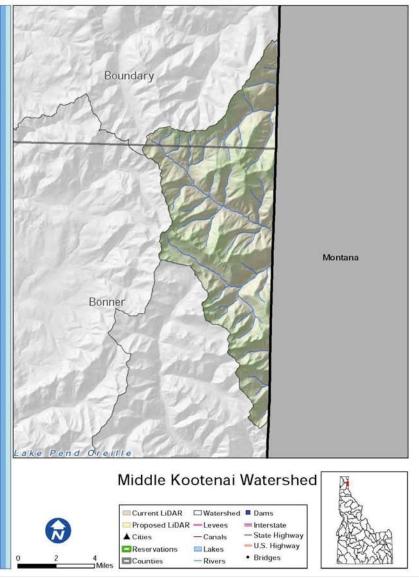
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	7%	
Federal	90%	
Reservation/ BIA	0%	
State	3%	
Out of Idaho	0%	

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	97%
Moderate-High	3%
High	0%



Total seismic mitigation actions: 27





## Middle Kootenai

#### Risk Rank: L

#### ntroduction

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 been reported by the county AHMPs in recent history. There are 0 high or significant hazard dams in the Middle Kootenai watershed and 0 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.

#### LIDAR data availability

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

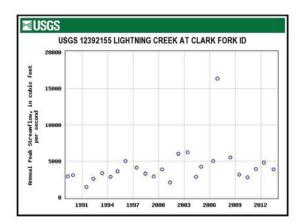
Cities

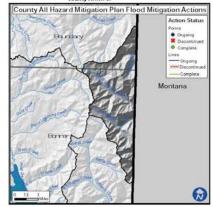
Subbasin Me	trics
Area (sq. miles)	2,243
Population (2010)	0
Miles of Stream	175
Miles of Canal	0
Min. Elevation (ft)	1,686
Max. Elevation (ft)	8,632
Dams of Concern	0
Pop. at Flood Risk	0

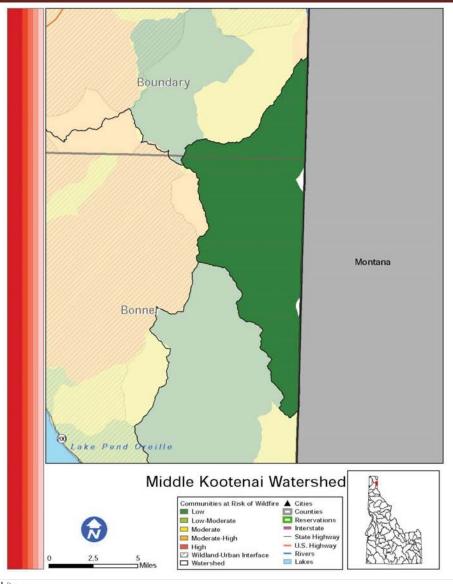
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	0%	
Federal	2%	
Reservation/BIA	0%	
State	0%	
Out of Idaho	98%	

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	\$0

## Total flood mitigation actions: 21







# Middle Kootenai

#### Risk Rank: L

#### Introduction

The Middle Kootenai watershed is home to 0 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 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.
- 0 out of the 2 counties in the Middle Kootenai watershed identified wildfire as their number two hazard.
- 0 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 WU
Historic Fire Events	4
Acres Burned (1995-)	1

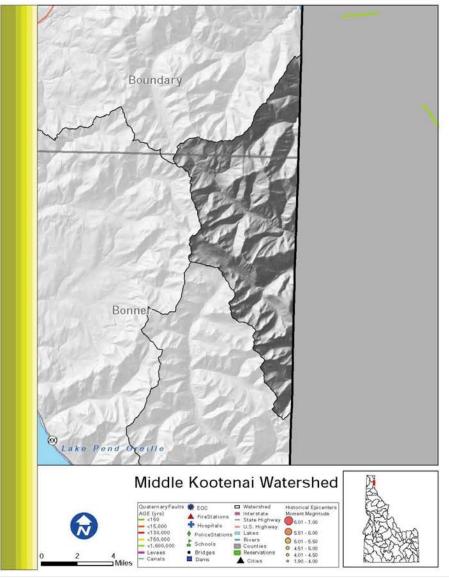
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	0%	
Federal	2%	
Reservation/BIA	0%	
State	0%	
Out of Idaho	98%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	100%
Low-Moderate	0%
Moderate	0%
Moderate-High	0%
High	0%



Total wildfire mitigation actions:





# 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

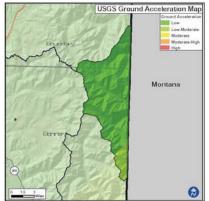
Bonner, Boundary

Cities

Subbasin Metrics			
Area (sq. miles)			2,243
Population (2010)			0
Miles of Stream			175
Miles of Canal			0
Min. Elevation (ft)	Ĵ		1,686
Max. Elevation (ft)			8,632
Est. Facilities Near Fault (		0	
% Watershed w/in 25 Miles of Fault 0		0%	

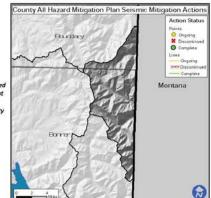
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	0%	
Federal	2%	
Reservation/BIA	0%	
State	0%	
Out of Idaho	98%	

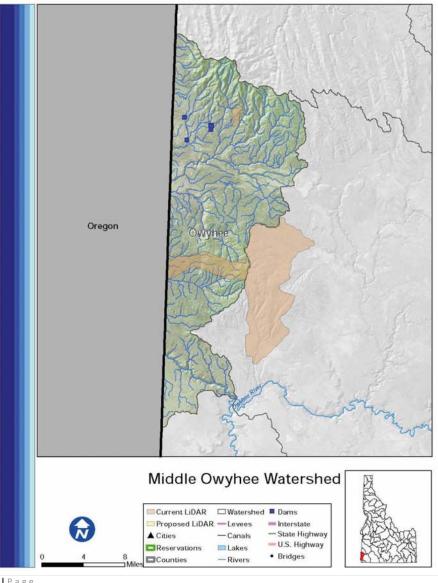
Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	92%
Low-Moderate	8%
Moderate	0%
Moderate-High	0%
High	0%



# Total seismic mitigation actions:

12





# Middle Owyhee

#### Risk Rank: L

#### ntroduction

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

Subbasin Metrics	
Area (sq. miles)	1,494
Population (2010)	21
Miles of Stream	693
Miles of Canal	0
Min. Elevation (ft)	3,337
Max. Elevation (ft)	7,759
Dams of Concern	1
Pop. at Flood Risk	0

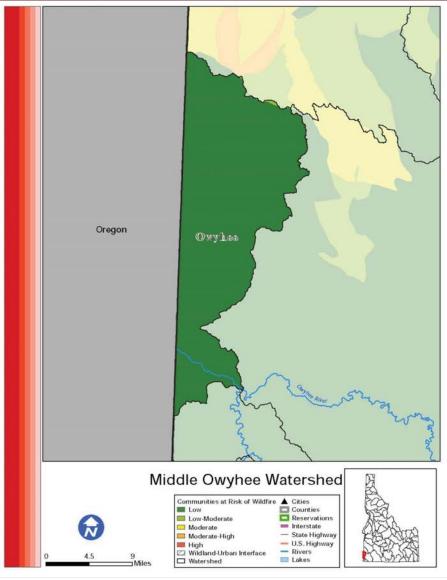
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	3%
Federal	16%
Reservation/BIA	0%
State	1%
Out of Idaho	81%

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	\$0

## Total flood mitigation actions: 15







# 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, 15,454 acres have burned during 24 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Middle Owyhee watershed has 99.8% low risk, 0.2% 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 Middle Owyhee watershed identified wildfire as their number one hazard.
- $\bullet 0$  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

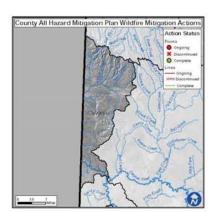
Subbasin Metrics	
Area (sq. miles)	1,494
Population (2010)	21
Miles of Stream	693
Miles of Canal	0
Min. Elevation (ft)	3,337
Max. Elevation (ft)	7,759
Structures in WUI	No WUI
Historic Fire Events	24
Acres Burned (1995-)	15,454

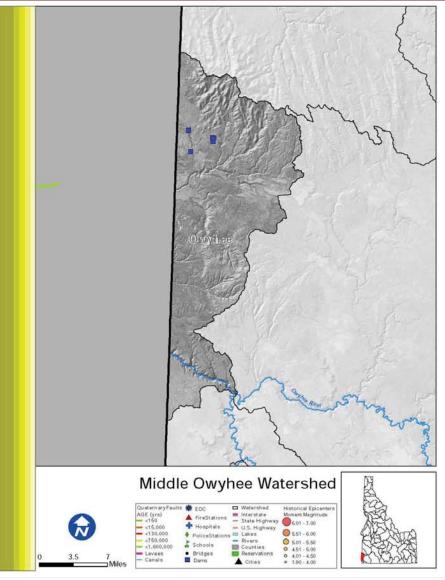
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	3%
Federal	16%
Reservation/BIA	0%
State	1%
Out of Idaho	81%

Watershed Fire Risk	
Risk Level %Watershed A	
Low	99.8%
Low-Moderate	0.2%
Moderate	0%
Moderate-High	0%
High	0%



Total wildfire mitigation actions:





# 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

Subbasin Metrics		
Area (sq. miles)	1	1,494
Population (2010)		21
Miles of Stream		693
Miles of Canal		0
Min. Elevation (ft)	į.	3,337
Max. Elevation (ft)		7,759
Est. Facilities Near Fault 0		0
% Watershed w/in 25 Miles of Fault 09		0%

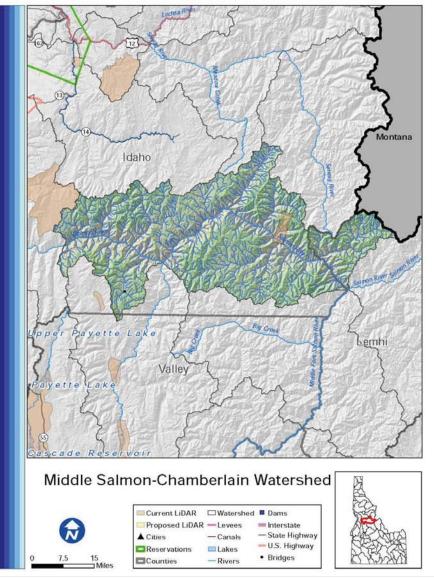
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	3%
Federal	16%
Reservation/BIA	0%
State	1%
Out of Idaho	81%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	100%
Low-Moderate	0%
Moderate	0%
Moderate-High	0%
High	0%



# Total seismic mitigation actions: 2





## Middle Salmon-Chamberlain

#### 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 AHMPs 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 \$874 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 (2011)

#### 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, Lemhi, Valley

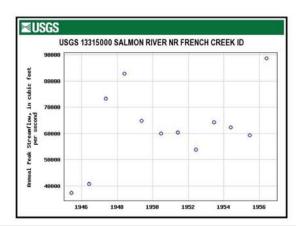
Cities

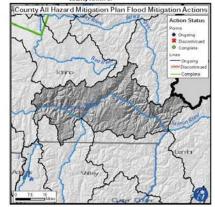
Subbasin Metrics	
Area (sq. miles)	1,674
Population (2010)	47
Miles of Stream	3,335
Miles of Canal	0
Min. Elevation (ft)	1,873
Max. Elevation (ft)	9,288
Dams of Concern	0
Pop. at Flood Risk	3

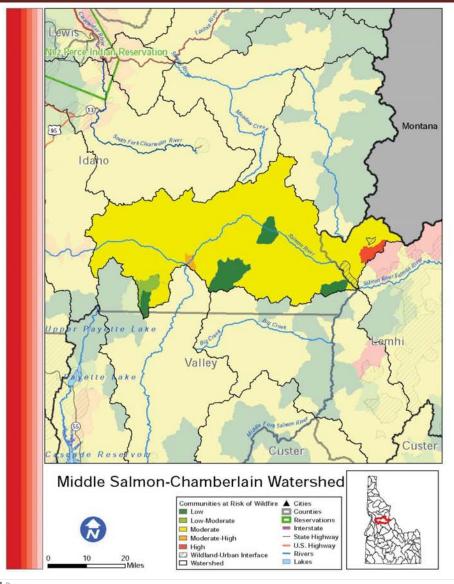
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	1%
Federal	99%
Reservation/BIA	0%
State	0%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	2
Total Coverage	\$700,000
Total Premiums	\$874
# Claims	0
Paid Claims	\$0

## Total flood mitigation actions: 31







# 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, 90.1% moderate risk, 00.5% 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.
- •0 out of the 3 counties in the Middle Salmon-Chamberlain watershed identified wildfire as their number two hazard.
- •0 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**

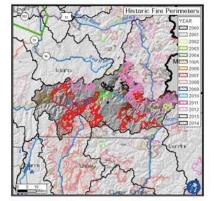
Idaho, Lemhi, Valley

Cities

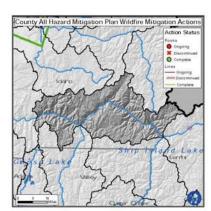
Subbasin Metrics	
Area (sq. miles)	1,674
Population (2010)	47
Miles of Stream	3,335
Miles of Canal	0
Min. Elevation (ft)	1,873
Max. Elevation (ft)	9,288
Structures in WUI	8
Historic Fire Events	393
Acres Burned (1995-)	725,258

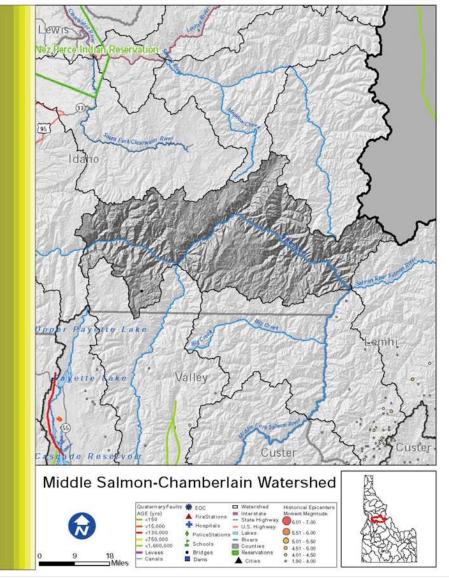
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	1%
Federal	99%
Reservation/BIA	0%
State	0%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	6.9%
Low-Moderate	1.4%
Moderate	90.1%
Moderate-High	0.5%
High	1.2%



Total wildfire mitigation actions:





# 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

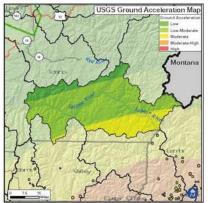
Idaho, Lemhi, Valley

Cities

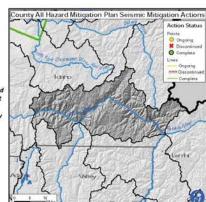
Subbasin	Subbasin Metrics	
Area (sq. miles)		1,674
Population (2010)		47
Miles of Stream		3,335
Miles of Canal		0
Min. Elevation (ft)		1,873
Max. Elevation (ft)		9,288
Est. Facilities Near F	ault	0
% Watershed w/in 25 M	lles of Fault	0%

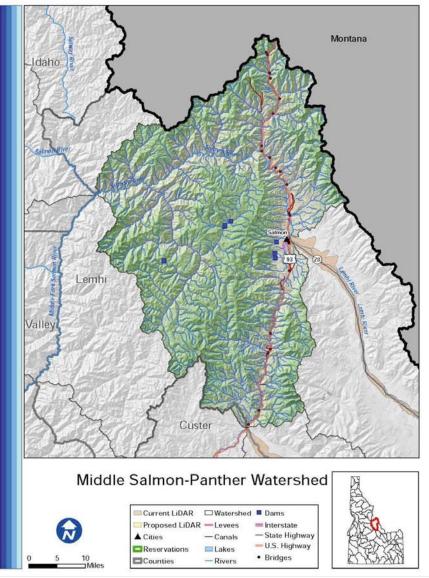
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	1%
Federal	99%
Reservation/ BIA	0%
State	0%
Out of Idaho	0%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	12%
Low-Moderate	67%
Moderate	21%
Moderate-High	0%
High	0%



Total seismic mitigation actions: 30





## 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 163 are at risk of flooding. The watershed is primarily federally managed.

#### What is the rick

There are 2 high or significant hazard dams in the Middle Salmon-Panther watershed. According to county AHMPs, 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.

- •0 out of the 2 counties in the Middle Salmon-Panther watershed identified flood as their number one hazard.
- •1 out of the 2 counties in the Middle Salmon-Panther watershed identified flood as their number two
- •0 out of the 2 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)
- -Pahsimeroi 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		
	Area (sq. miles)	1,790	
non. There are 5,895 ne watershed is	Population (2010)	5,895	
he watershed is	Miles of Stream	4,012	
	Miles of Canal	61	

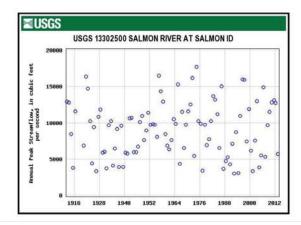
Min. Elevation (ft)	3,018
Max. Elevation (ft)	10,955
Dams of Concern	2
Pop. at Flood Risk	163

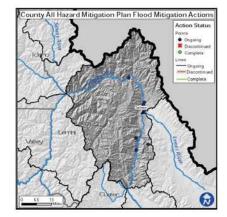
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	5%	
Federal	94%	
Reservation/BIA	0%	
State	1%	
Out of Idaho	0%	

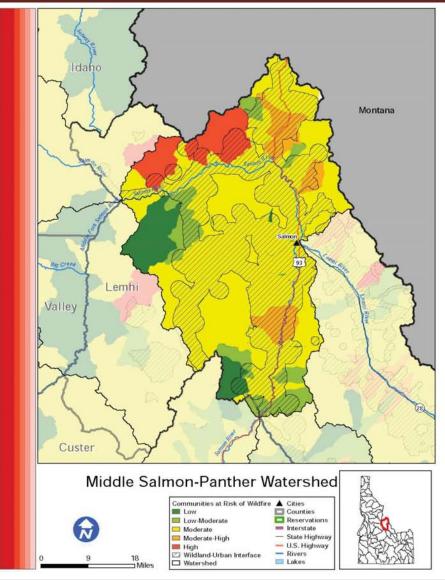
NFIP Statistics (2014)	
NFIP Policies	87
Total Coverage	\$15,159,700
Total Premiums	\$73,592
# Claims	13
Paid Claims	\$157.541

## Total flood mitigation actions: 41

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







# Middle Salmon-Panther

#### 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 2,522 structures located within the WUI of the Middle Salmon-Panther watershed. Since 2000, 254,764 acres have burned during 300 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Middle Salmon-Panther watershed has 7.1% low risk, 0% low-moderate risk, 69.1% moderate risk, 6.8% moderate-high risk and 7.9% high risk of wildfire to the communities within the watershed.

- 2 out of the 2 counties in the Middle Salmon-Panther watershed identified wildfire as their number one hazard.
- •0 out of the 2 counties in the Middle Salmon-Panther watershed identified wildfire as their number two hazard.
- 0 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

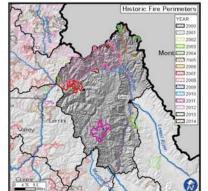
## Cities

Salmon

Subbasin Metrics	
Area (sq. miles)	1,790
Population (2010)	5,895
Miles of Stream	4,012
Miles of Canal	61
Min. Elevation (ft)	3,018
Max. Elevation (ft)	10,955
Structures in WUI	2,522
Historic Fire Events	300
Acres Burned (1995-)	254,764

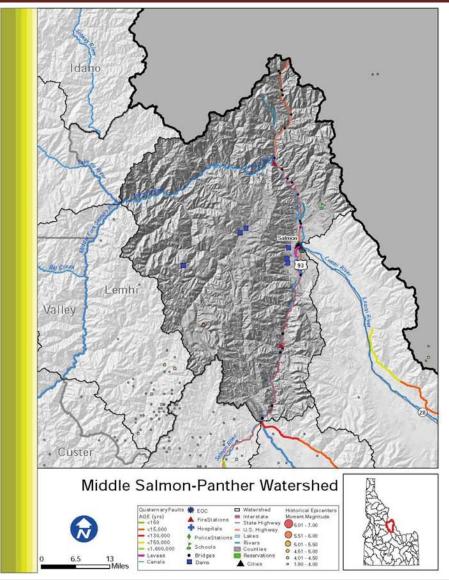
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	5%
Federal	94%
Reservation/BIA	0%
State	1%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	7.1%
Low-Moderate	0%
Moderate	69.1%
Moderate-High	6.8%
High	7.9%



# Total wildfire mitigation actions:





# 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 11 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

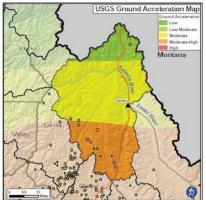
#### Cities

Salmon

Subbasin Metrics			
Area (sq. miles)	1		1,790
Population (2010)			5,895
Miles of Stream			4,012
Miles of Canal			61
Min. Elevation (ft)			3,018
Max. Elevation (ft) 10,9		10,955	
Est. Facilities Near Fault		0	
% Watershed w/in 25 Miles of Fault 279		27%	

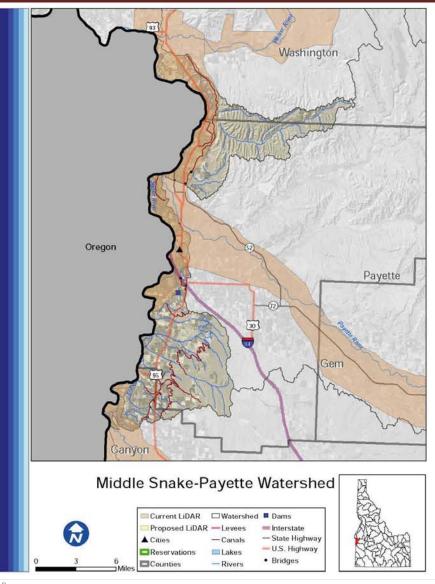
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	5%
Federal	94%
Reservation/BIA	0%
State	1%
Out of Idaho	0%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	13%
Moderate	56%
Moderate-High	31%
High	0%



Total seismic mitigation actions: 29





# Middle Snake-Payette

#### Risk Rank: M

#### ntroduction

Areas of concentrated population within the Middle Snake-Payette watershed boundaries are Fruitland, Payette and Weiser. There are 11,145 total people who live within the watershed, of which 799 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 AHMPs, there is one report of significant flooding within the watershed in recent history. There is 1 high or significant hazard dam in the Niddle Snake-Payette watershed. There are 5 communities participating in the NFIP with 25 policies contributing to \$19,082 of premiums paid in exchange for \$4,185,600 of COURTER.

- •0 out of the 3 counties in the Middle Snake-Payette watershed identified flood as their number one
- •1 out of the 3 counties in the Middle Snake-Payette watershed identified flood as their number two
- •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 (2001)

-Boise River (2006)

#### Conclusio

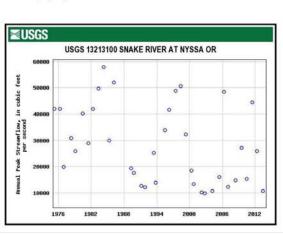
The Middle Snake-Payette watershed is considered to be a moderate flood risk watershed because of its moderate population and small amount of hazardous features.

## **Counties and Tribes**

Canyon, Payette, Washington

#### Cities

Fruitland, Payette, Weiser

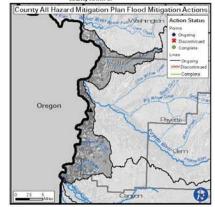


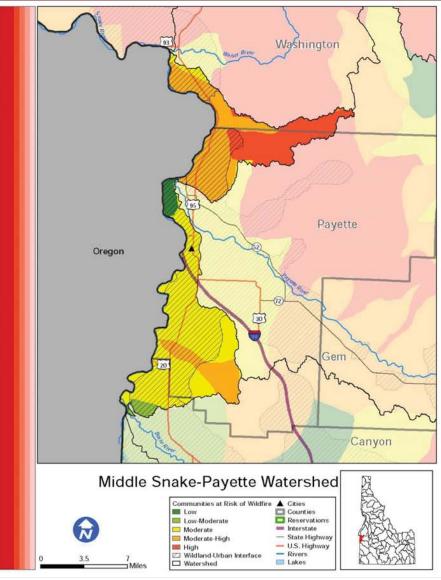
Subbasin Me	trics
Area (sq. miles)	278
Population (2010)	11,145
Miles of Stream	273
Miles of Canal	80
Min. Elevation (ft)	2,093
Max. Elevation (ft)	3,451
Dams of Concern	1
Pop. at Flood Risk	799

Subbasin Ownership	
Owner Type	% Subbasin Area
Private	35%
Federal	6%
Reservation/BIA	0%
State	3%
Out of Idaho	57%

NFIP Statistics (2014)	
NFIP Policies	25
Total Coverage	\$4,185,600
Total Premiums	\$19,082
# Claims	2
Paid Claims	\$19,887

## Total flood mitigation actions: 61





# 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, 3,995 acres have burned during 12 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Middle Snake-Payette watershed has 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.

•3 out of the 3 counties in the Middle Snake-Payette watershed identified wildfire as their number

- •0 out of the 3 counties in the Middle Snake-Payette watershed identified wildfire as their number two hazard.
- •0 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

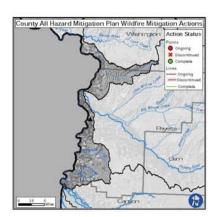
Subbasin Metrics	
Area (sq. miles)	278
Population (2010)	11,145
Miles of Stream	273
Miles of Canal	80
Min. Elevation (ft)	2,093
Max. Elevation (ft)	3,451
Structures in WUI	569
Historic Fire Events	12
Acres Burned (1995-)	3,995

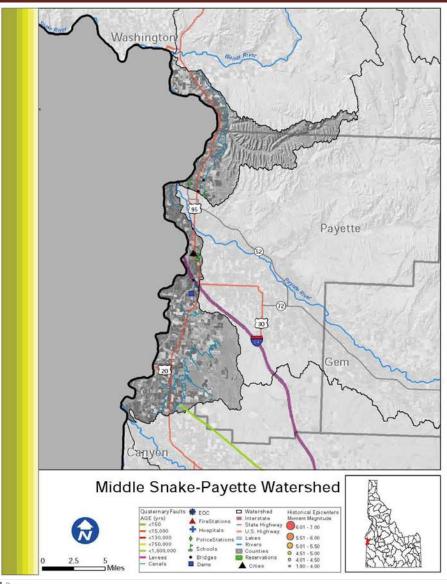
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	35%
Federal	6%
Reservation/BIA	0%
State	3%
Out of Idaho	57%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	2.6%
Low-Moderate	1.8%
Moderate	46.3%
Moderate-High	32.2%
High	17.1%



# Total wildfire mitigation actions:





# 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 sick?

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.
- O out of the 3 counties within the Middle Snake-Payette watershed identified seismic as their number three hazard.

#### **Counties and Tribes**

Canyon, Payette, Washington

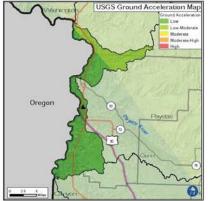
#### Cities

Fruitland, Payette, Weiser

Subbasin Metrics		
Area (sq. miles)		278
Population (2010)		11,145
Miles of Stream		273
Miles of Canal		80
Min. Elevation (ft)		2,093
Max. Elevation (ft)		3,451
Est. Facilities Near Fault 7		7
% Watershed w/in 25 M	lles of Fault	97%

Subbasin Ownership	
Owner Type	% Subbasin Area
Private	35%
Federal	6%
Reservation/ BIA	0%
State	3%
Out of Idaho	57%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	75%
Low-Moderate	25%
Moderate	0%
Moderate-High	0%
High	0%



# Total seismic mitigation actions: 11



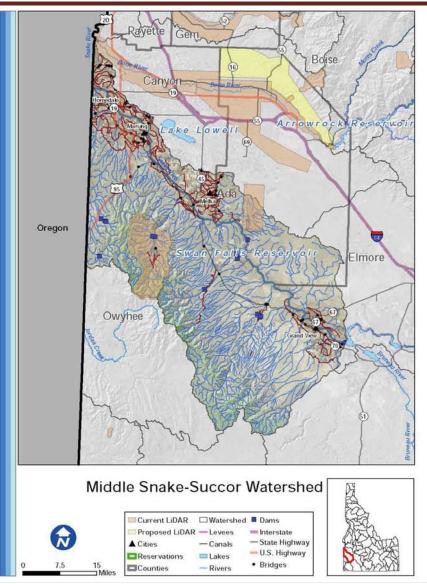
2,327

18,071

3,104

2,178

8,399



## 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 2,908 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 AHMPs, 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 \$4,522 of premiums paid in exchange

•0 out of the 4 counties in the Middle Snake-Succor watershed identified flood as their number one hazard.
•0 out of the 4 counties in the Middle Snake-Succor watershed identified flood as their number two

•0 out of the 4 counties in the Middle Snake-Succor watershed identified flood as their number tw hazard.

•2 out of the 4 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, 2009)

for \$2,005,000 of coverage.

-Birds of Prey (2011, 2013)

#### Conclusion

Because of the high population downstream of the numerous hazardous dams, the Middle Snake-Succor watershed is considered to be of a high flood risk.

## **Counties and Tribes**

Ada, Canyon, Elmore, Owyhee

#### Cities

Grand View, Homedale, Marsing, Melba



Subbasin Metrics

Area (sq. miles)

Population (2010)

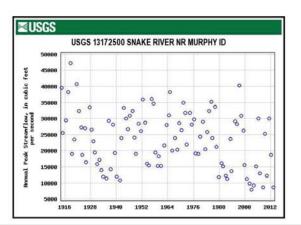
Max. Elevation (ft)

Miles of Stream

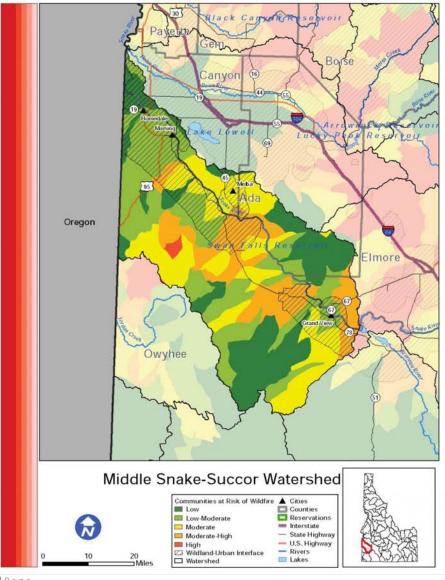
Miles of Canal Min. Elevation (ft)

NFIP Statistics (2014)	
NFIP Policies	
Total Coverage	\$2,005,000
Total Premiums	\$4,522
# Claims	0
Paid Claims	\$0

## Total flood mitigation actions: 126







# 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 2,076 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, 32.2% low-moderate risk, 24.2% moderate risk, 18.6% 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.
- •0 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

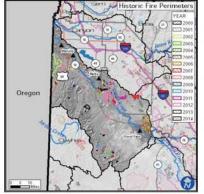
#### Cities

Grand View, Homedale, Marsing, Melba

Subbasin Metrics	
Area (sq. miles)	2,327
Population (2010)	18,071
Miles of Stream	3,104
Miles of Canal	723
Min. Elevation (ft)	2,178
Max. Elevation (ft)	8,399
Structures in WUI	2,076
Historic Fire Events	206
Acres Burned (1995-)	119,995

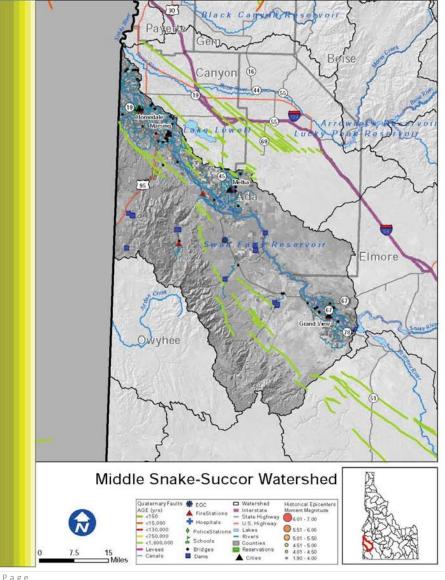
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	23%
Federal	59%
Reservation/BIA	0%
State	5%
Out of Idaho	14%

Watershed Fire Risk	
Risk Level %Watershed A	
Low	24.4%
Low-Moderate	32.2%
Moderate	24.2%
Moderate-High	18.6%
High	0.6%



# Total wildfire mitigation actions: 61





# Middle Snake-Succor

## Risk Rank: M

#### Introduction

Areas of concentrated population within the Middle Snake-Succor watershed boundaries are Grand View, Homedale, Marsing and Melba.

#### What is the sick

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.

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

#### Counties and Tribes

Ada, Canyon, Elmore, Owyhee

#### Cities

Grand View, Homedale, Marsing, Melba

Subbasin Metrics		
Area (sq. miles)		2,327
Population (2010)	1	8,071
Miles of Stream		3,104
Miles of Canal		723
Min. Elevation (ft)		2,178
Max. Elevation (ft)		8,399
Est. Facilities Near Fault		7
%-Watershed w/in 25 Miles of Fault		1%

Subbasin Ownership	
Owner Type	% Subbasin Area
Private	23%
Federal	59%
Reservation/BIA	0%
State	5%
Out of Idaho	14%

Ground Acceleration	
Accel. Amoun %Watershed	
Low	100%
Low-Moderate	0%
Moderate	0%
Moderate-High	0%
High	0%



# Total seismic mitigation actions: 23





# Moyie

#### Risk Rank: L

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 21 are at risk of flooding. The majority of the watershed lies outside of Idaho and the portion within Idaho is largely federally managed.

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 Moyle watershed. There is 1 community participating in the NFIP with 4 policies contributing to \$3,002 of premiums paid in exchange for \$1,091,500 of coverage.

- •0 out of the 1 county in the Movie 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 Moyle watershed is as follows:

-Columbia River Treaty 2014/2024 Project (2010)

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 these inhabitants are at risk of flooding. For this reason, the watershed has a low flood risk.

#### **Counties and Tribes**

Boundary Cities

**Moyie Springs** 

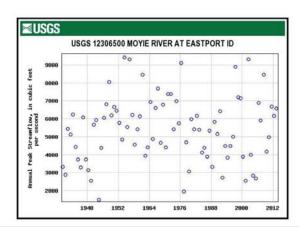
Subbasin Metrics	
Area (sq. miles)	329
Population (2010)	925
Miles of Stream	271
Miles of Canal	(
Min. Elevation (ft)	1,768
Max. Elevation (ft)	7,697
Dams of Concern	1

Pop. at Flood Risk

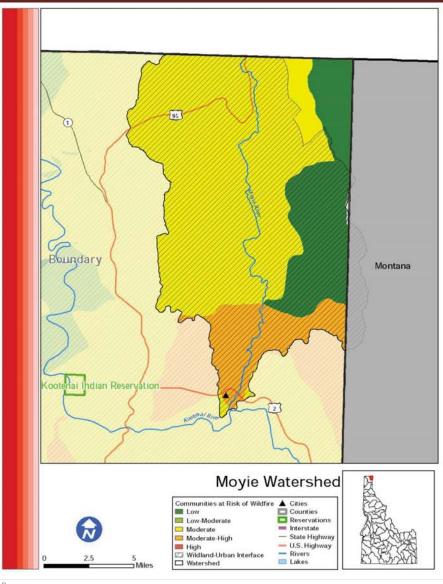
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	4%
Federal	19%
Reservation/BIA	0%
State	0%
Out of Idaho	77%

NFIP Statistics (2014)	
NFIP Policies	
Total Coverage	\$1,091,500
Total Premiums	\$3,002
# Claims	0
Paid Claims	ŚO

## Total flood mitigation actions: 7







# Moyie

#### 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 ares 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, 16.8% 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	
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
Structures in WUI	374
Historic Fire Events	14
Acres Burned (1995-)	8

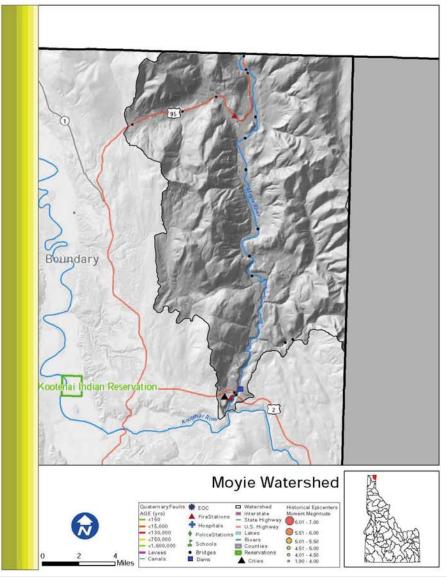
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	4%	
Federal	19%	
Reservation/BIA	0%	
State	0%	
Out of Idaho	77%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	20.8%
Low-Moderate	0%
Moderate	66.8%
Moderate-High	12.4%
High	0%



Total wildfire mitigation actions: 23





# Moyie

## 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

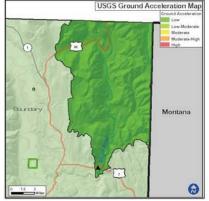
#### Cities

**Moyie Springs** 

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
Est. Facilities Near F	ault	0
% Watershed w/in 25 M	lles of Fault	0%

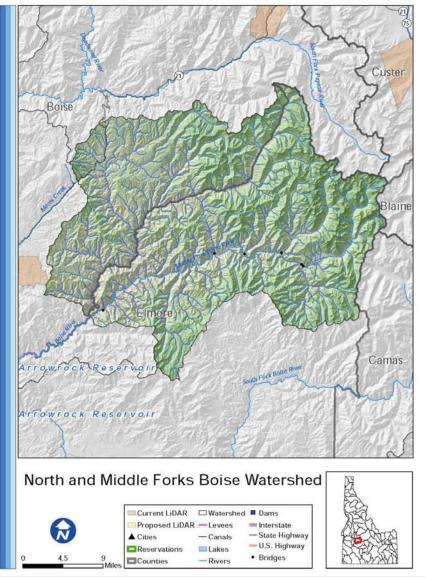
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	4%
Federal	19%
Reservation/ BIA	0%
State	0%
Out of Idaho	77%

Ground .	Acceleration
Accel. Amoun	%Watershed Are
Low	100%
Low-Moderate	0%
Moderate	0%
Moderate-High	0%
High	0%



# Total seismic mitigation actions: 3





## North and Middle Forks Boise

#### Risk Rank: L

#### 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 AHMPs, 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 \$250,000 of coverage.

- •0 out of the 5 counties in the North and Middle Forks Boise watershed identified flood as their number one hazard.
- •1 out of the 5 counties in the North and Middle Forks Boise watershed identified flood as their number
- •2 out of the 5 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: -Bannock (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

Blaine, Boise, Camas, Custer, Elmore

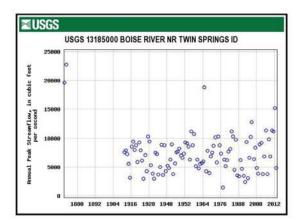
Cities

Subbasin Metrics	
Area (sq. miles)	762
Population (2010)	44
Miles of Stream	1,692
Miles of Canal	0
Min. Elevation (ft)	3,451
Max. Elevation (ft)	10,344
Dams of Concern	0
Pop. at Flood Risk	0

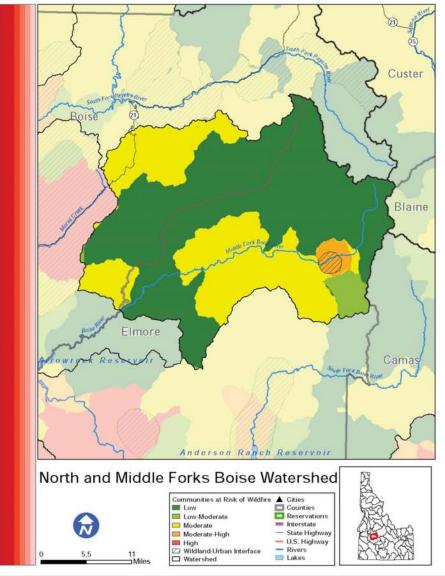
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	0%
Federal	99%
Reservation/BIA	0%
State	0%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	1
Total Coverage	\$250,000
Total Premiums	\$4,507
# Claims	0
Paid Claims	\$0

## Total flood mitigation actions: 94







# North and Middle Forks Boise

#### Risk Rank: L

#### 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, 150,646 acres have burned during 109 individual wildline events. Based on data from the Idaho Forest Action Plan (2010), the North and Middle Forks Boise watershed has 59.7% 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.

- S out of the S counties in the North and Middle Forks Boise watershed identified wildfire as their number one hazard.
- $\bullet 0$  out of the 5 counties in the North and Middle Forks Boise watershed identified wildfire as their number two hazard.
- 0 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**

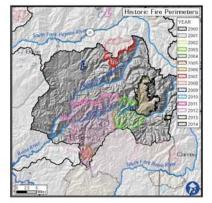
Blaine, Boise, Camas, Custer, Elmore

Cities

Subbasin Metrics		
Area (sq. miles)	762	
Population (2010)	44	
Miles of Stream	1,692	
Miles of Canal	0	
Min. Elevation (ft)	3,451	
Max. Elevation (ft)	10,344	
Structures in WUI	60	
Historic Fire Events	109	
Acres Burned (1995-)	150,646	

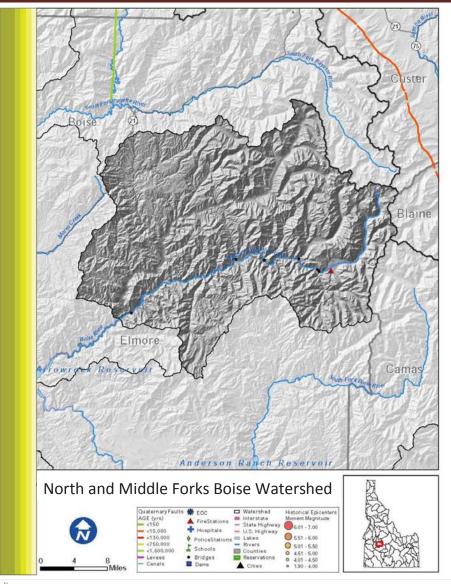
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	0%
Federal	99%
Reservation/BIA	0%
State	0%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	59.7%
Low-Moderate	2.9%
Moderate	35.4%
Moderate-High	2%
High	0%



Total wildfire mitigation actions:





# 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**

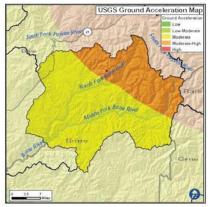
Blaine, Boise, Camas, Custer, Elmore

Cities

Subbasin Metrics		
Area (sq. miles)		762
Population (2010)		44
Miles of Stream		1,692
Miles of Canal		0
Min. Elevation (ft)		3,451
Max. Elevation (ft)		10,344
Est. Facilities Near F	ault	1
% Watershed w/in 25 M	les of Fault	52%

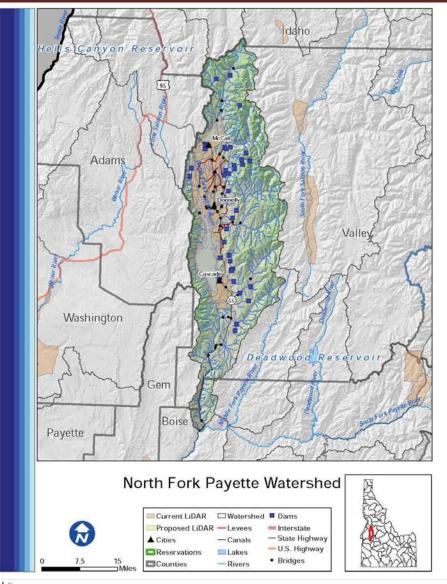
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	0%	
Federal	99%	
Reservation/ BIA	0%	
State	0%	
Out of Idaho	0%	

Ground Acceleration		
Accel. Amoun	%Watershed Are	
Low	0%	
Low-Moderate	0%	
Moderate	70%	
Moderate-High	30%	
High	0%	



Total seismic mitigation actions: 56





# North Fork Payette

#### Risk Rank: H

#### ntroduction

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 218 are at risk of flooding. The watershed is nearly half privately owned.

#### What is the rick

According to county AHMPs, 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 \$48,537 of premiums paid in exchange for \$11,016,700 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 two notes.
   2 out of the 5 counties in the North Fork Payette watershed identified flood as their number three.

#### 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

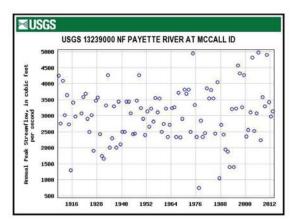
Subbasin Metrics	
Area (sq. miles)	930
Population (2010)	9,791
Miles of Stream	1,824
Miles of Canal	101
Min. Elevation (ft)	2,799
Max. Elevation (ft)	9,009
Dams of Concern	25

Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	42%	
Federal	44%	
Reservation/BIA	0%	
State	14%	
Out of Idaho	0%	

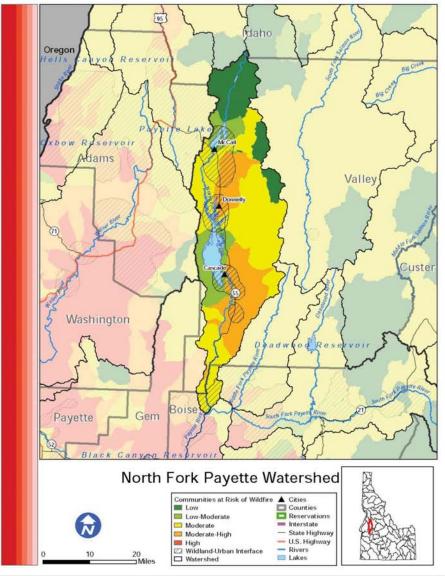
Pop. at Flood Risk

NFIP Statistics (2014)		
NFIP Policies	49	
Total Coverage	\$11,016,700	
Total Premiums	\$48,537	
# Claims	0	
Paid Claims	ŚO	

## Total flood mitigation actions: 59







# 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, 9,269 acres have burned during 117 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the North Fork Payette watershed has 15.9% 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 countiein 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

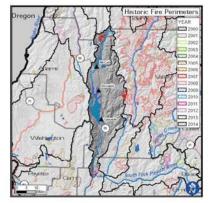
## Cities

Cascade, Donnelly, McCall

Subbasin Metrics	
Area (sq. miles)	930
Population (2010)	9,791
Miles of Stream	1,824
Miles of Canal	101
Min. Elevation (ft)	2,799
Max. Elevation (ft)	9,009
Structures in WUI	6,845
Historic Fire Events	117
Acres Burned (1995-)	9,269

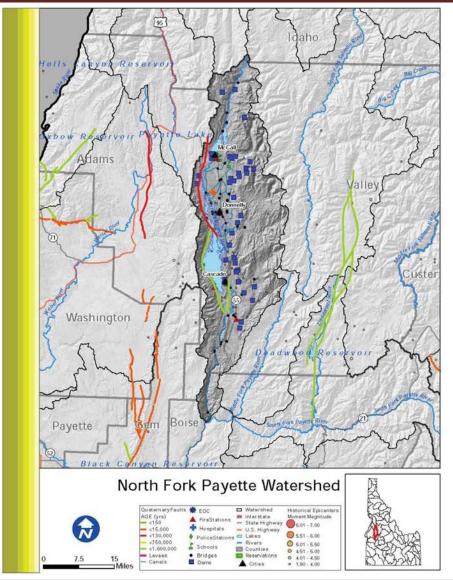
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	42%	
Federal	44%	
Reservation/BIA	0%	
State	14%	
Out of Idaho	0%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	15.9%
Low-Moderate	15.1%
Moderate	43.5%
Moderate-High	25.5%
High	0%



# Total wildfire mitigation actions:





# **North Fork Payette**

## Risk Rank: H

#### Introduction

Areas of concentrated population within the North Fork Payette watershed boundaries are Cascade, Donnelly and McCall.

#### tarbout to the about the

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, Gem, Idaho, Valley

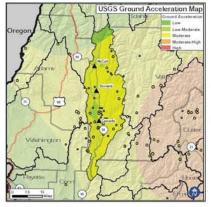
#### Cities

Cascade, Donnelly, McCall

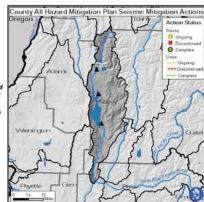
Subbasin Metrics			
Area (sq. miles)			930
Population (2010)			9,791
Miles of Stream			1,824
Miles of Canal			101
Min. Elevation (ft)	į.		2,799
Max. Elevation (ft)			9,009
Est. Facilities Near F	ault		24
% Watershed w/in 25 M	les of	Fault	100%

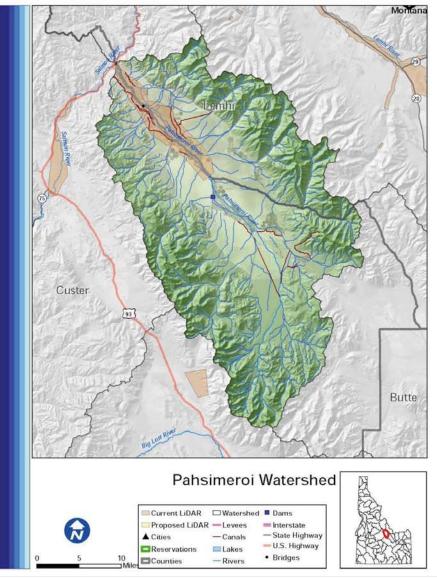
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	42%	
Federal	44%	
Reservation/BIA	0%	
State	14%	
Out of Idaho	0%	

Ground .	Acceleration
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	6%
Moderate	94%
Moderate-High	0%
High	0%



# Total seismic mitigation actions:





## Pahsimeroi

#### Risk Rank: L

#### ntroduction

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 2 counties in the Pahsimeroi watershed identified flood as their number one hazard.
  •1 out of the 2 counties in the Pahsimeroi watershed identified flood as their number two hazard.
- •0 out of the 2 counties in the Palsimeroi 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**

Custer, Lemhi

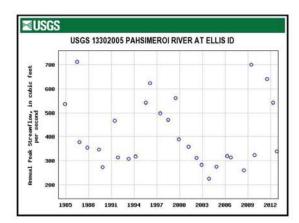
Cities

Subbasin Metrics		
Area (sq. miles)	836	
Population (2010)	255	
Miles of Stream	1,987	
Miles of Canal	177	
Min. Elevation (ft)	4,636	
Max. Elevation (ft)	12,585	
Dams of Concern	0	
Pop. at Flood Risk	16	

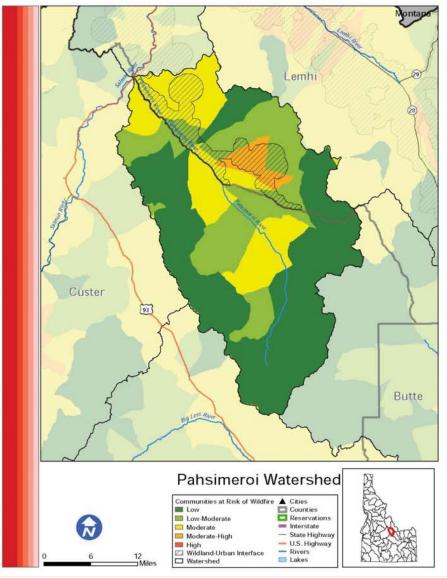
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	9%
Federal	88%
Reservation/BIA	0%
State	4%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	\$0

## Total flood mitigation actions: 23







# Pahsimeroi

#### Risk Rank: L

#### Introduction

The Pahsimeroi watershed is home to 255 people, a handfull 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 Pahsimeroi watershed. Since 2000, 5,800 acres have burned in 16 wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Pahsimeroi watershed has 48.4% low risk, 25.6% low-moderate risk, 22.8% moderate risk,

- 3.2% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.
  •2 out of the 2 counties in the Pahsimeroi watershed identified wildfire as their number one hazard.
- 0 out of the 2 counties in the Pahsimeroi watershed identified wildfire as their number two
- •0 out of the counties in the Pahsimeroi watershed identified wildfire as their number three hazard.

#### Conclusion

In the Pahsimeroi 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

	Subbasin N	/letrics
Are	ea (sq. miles)	836
Pop	oulation (2010)	255
Mil	es of Stream	1,987
Mil	es of Canal	177
Mir	n. Elevation (ft)	4,636
Ma	x. Elevation (ft)	12,585
Str	uctures in WUI	61
His	toric Fire Events	16
Acr	es Burned (1995-)	5,800

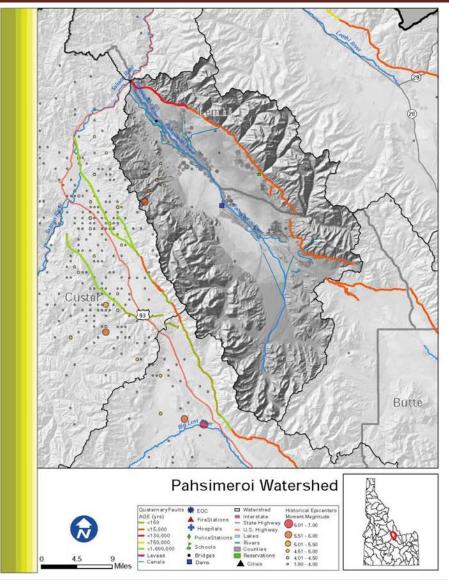
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	9%	
Federal	88%	
Reservation/BIA	0%	
State	4%	
Out of Idaho	0%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	48.4%
Low-Moderate	25.6%
Moderate	22.8%
Moderate-High	3.2%
High	0%



Total wildfire mitigation actions:





# 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**

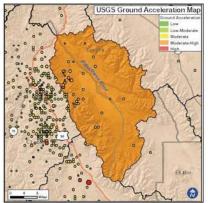
Custer, Lemhi

Cities

Subbasin	Me	trics	
Area (sq. miles)			836
Population (2010)			255
Miles of Stream			1,987
Miles of Canal			177
Min. Elevation (ft)	į.		4,636
Max. Elevation (ft)			12,585
Est. Facilities Near F	ault		. 1
% Watershed w/in 25 M	les of	Fault	100%

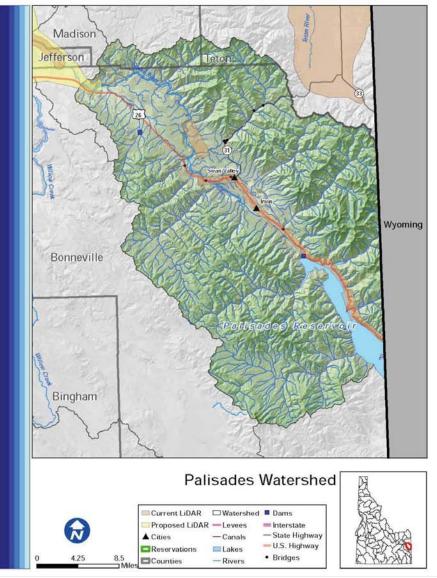
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	9%
Federal	88%
Reservation/BIA	0%
State	4%
Out of Idaho	0%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	0%
Moderate-High	100%
High	0%



Total seismic mitigation actions: 29





# **Palisades**

#### Risk Rank: M

#### Introduction

The majority of the population within the Palisades watershed lives in, or near the floodplain of the Snake River. Areas of concentrated population within the watershed boundaries are Irwin and Swan Valley. There are 761 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 2 high or significant hazard dams in the Palisades watershed, including the Palisades dam which has a storage volume of 1768 KAF. There are 5 communities participating in the NFIP with 7 policies contributing to \$4,487 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 (2002)
- -ITD, District 4 US 26 (2013)

#### 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

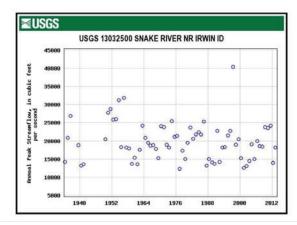
Irwin, Swan Valley

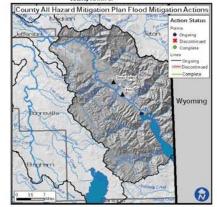
Subbasin Metrics		
Area (sq. miles)	929	
Population (2010)	761	
Miles of Stream	1,769	
Miles of Canal	6	
Min. Elevation (ft)	5,020	
Max. Elevation (ft)	9,984	
Dams of Concern	2	
Pop. at Flood Risk	73.	

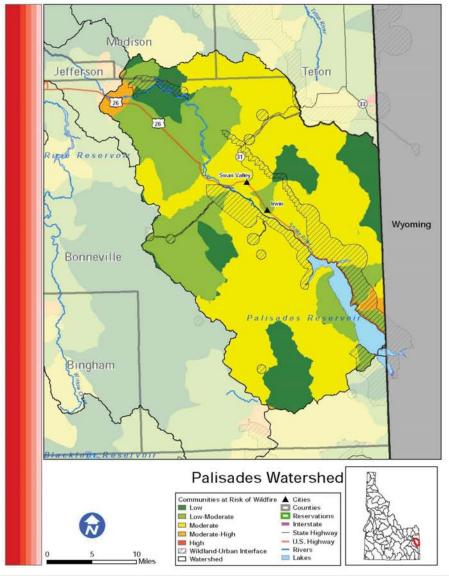
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	15%
Federal	75%
Reservation/BIA	0%
State	1%
Out of Idaho	9%

NFIP Statistics (2014)	
NFIP Policies	7
Total Coverage	\$1,620,000
Total Premiums	\$4,487
# Claims	0
Paid Claims	ŚO

## Total flood mitigation actions: 33







# Palisades

#### Risk Rank: L

#### Introduction

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 Irwin 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 503 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% low-moderate risk, 56.3% moderate risk, 1.7% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

- 0 out of the counties in the Palisades watershed identified wildfire as their number one hazard.
   0 out of the 3 counties in the Palisades watershed identified wildfire as their number two hazard.
- •1 out ofhe 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

Subbasin Metrics		
Area (sq. miles)	929	
Population (2010)	761	
Miles of Stream	1,769	
Miles of Canal	6	
Min. Elevation (ft)	5,020	
Max. Elevation (ft)	9,984	
Structures in WUI	503	
Historic Fire Events	49	
Acres Burned (1995-)	7,882	

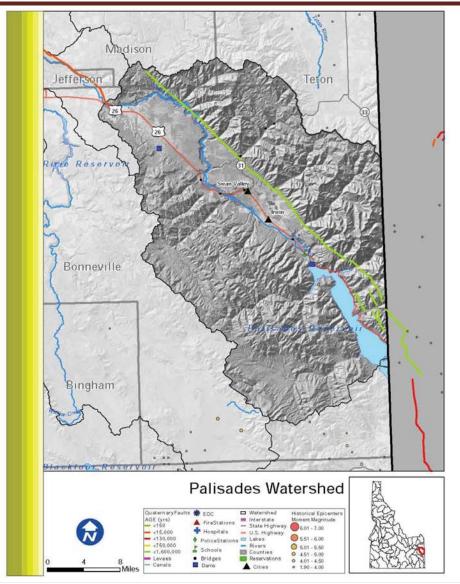
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	15%	
ederal	75%	
Reservation/BIA	0%	
itate	1%	
Out of Idaho	9%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	14.7%
Low-Moderate	27.4%
Moderate	56.3%
Moderate-High	1.7%
High	0%



Total wildfire mitigation actions:





# 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

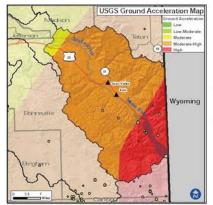
#### Citios

Irwin, Swan Valley

Subbasin	Me	trics	
Area (sq. miles)			929
Population (2010)			761
Miles of Stream			1,769
Miles of Canal			6
Min. Elevation (ft)	į.		5,020
Max. Elevation (ft)			9,984
Est. Facilities Near F	ault		3
% Watershed w/in 25 M	les of	Fault	100%

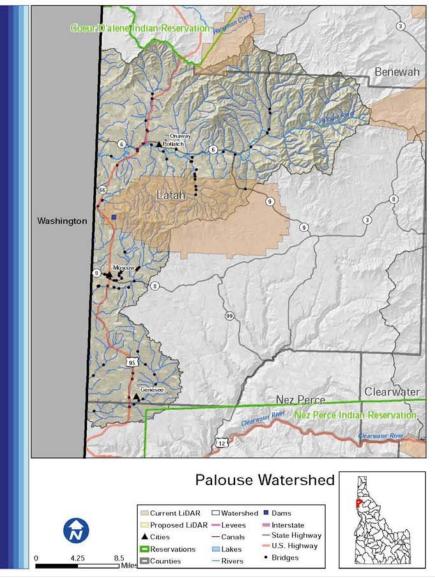
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	15%	
Federal	75%	
Reservation/BIA	0%	
State	1%	
Out of Idaho	9%	

Ground Acceleration		
Accel. Amoun	%Watershed Are	
Low	0%	
Low-Moderate	0%	
Moderate	3%	
Moderate-High	75%	
High	23%	



# Total seismic mitigation actions:





# **Palouse**

#### Risk Rank: M

#### ntroduction

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 rick

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 5 communities participating in the NFIP with 186 policies contributing to \$141,945 of premiums paid in exchange for \$32,617,400 of coverage.

- •0 out of the 3 counties in the Palouse watershed identified flood as their number one hazard.
- •3 out of the 3 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:

- -Moscow Mtn, Bennet Lumber, & U of I Exp Forest (2003)
- -Small portion of Emerald Creek coverage (2004)
- -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.

#### **Countles and Tribes**

Benewah, Latah, Nez Perce, Nez Perce Tribe

#### Cities

Genesee, Moscow, Onaway, Potlatch

Subbasin Metrics		
Area (sq. miles)	2,322	
Population (2010)	31,487	
Miles of Stream	1,419	
Miles of Canal	2	
Min. Elevation (ft)	542	
Max. Elevation (ft)	5,325	

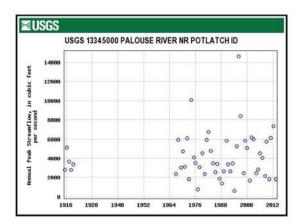
ams of Concern

op. at Flood Risk

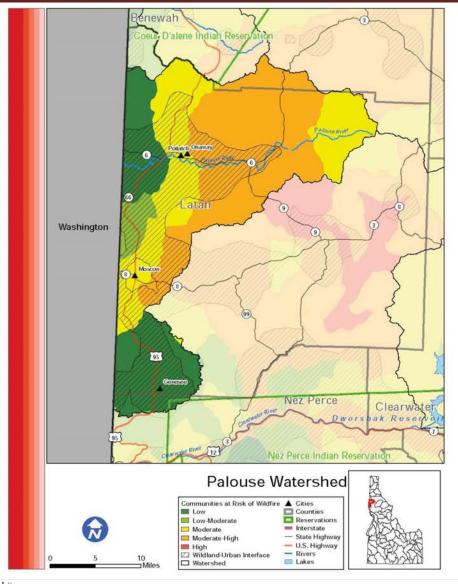
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	80%
Federal	16%
Reservation/BIA	0%
State	3%
Out of Idaho	0%

NFIP Statistics (2014)		
NFIP Policies	186	
Total Coverage	\$32,617,400	
Total Premiums	\$141,945	
# Claims	21	
Paid Claims	\$198,414	

# Total flood mitigation actions: 153







# Palouse

#### Risk Rank: H

#### Introduction

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 Genesee, Moscow, Onaway 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, 2933 acres have burned in 17 wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Palouse watershed has 25.1% low risk, 3.6% low-moderate risk, 29% moderate risk, 42.3% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

• 3 out of the 3 counties in the Palouse watershed identified wildfire as their number one hazard.
• 0 out of the 3 counties in the Palouse watershed identified wildfire as their number two hazard.
• 0 out of the 3 counties in the Palouse watershed identified wildfire as their number three hazard.

#### 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

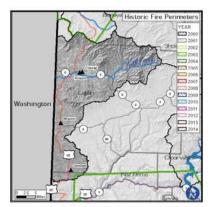
### Cities

Genesee, Moscow, Onaway, Potlatch

Subbasin Metrics		
Area (sq. miles)	2,322	
Population (2010)	31,487	
Miles of Stream	1,419	
Miles of Canal	2	
Min. Elevation (ft)	542	
Max. Elevation (ft)	5,325	
Structures in WUI	3,185	
Historic Fire Events	17	
Acros Burned (1005.)	7 022	

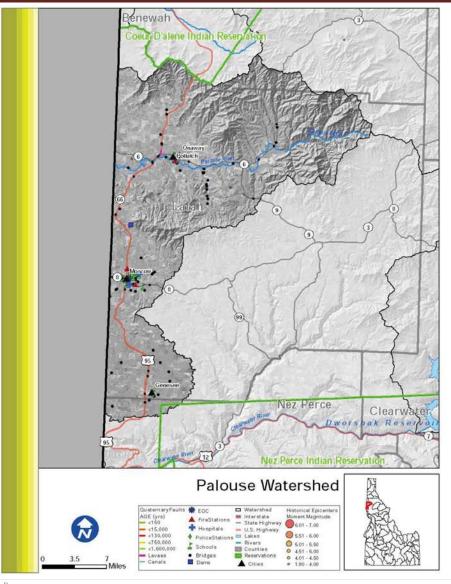
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	80%	
ederal	16%	
teservation/BIA	0%	
tate	3%	
Out of Idaho	0%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	25.1%
Low-Moderate	3.6%
Moderate	29%
Moderate-High	42.3%
High	0%



# Total wildfire mitigation actions: 82





# Palouse

#### 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

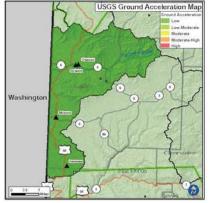
#### Citie

Genesee, Moscow, Onaway, Potlatch

Subbasin Metrics			
Area (sq. miles)			2,322
Population (2010)		- 4	31,487
Miles of Stream			1,419
Miles of Canal			2
Min. Elevation (ft)	į.		542
Max. Elevation (ft)			5,325
Est. Facilities Near Fault (		0	
% Watershed w/in 25 Miles of Fault 09		0%	

Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	80%	
Federal	16%	
Reservation/BIA	0%	
State	3%	
Out of Idaho	0%	

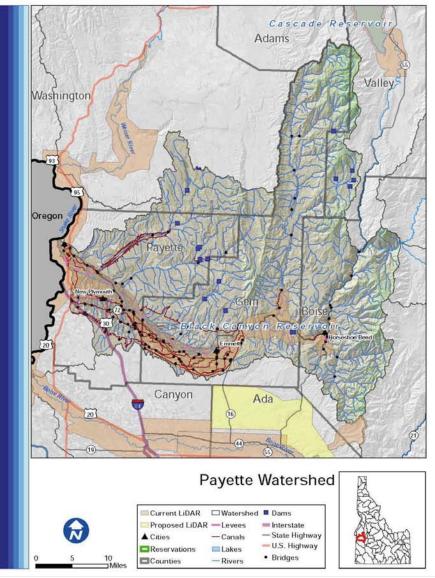
Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	100%
Low-Moderate	0%
Moderate	0%
Moderate-High	0%
High	0%



# Total seismic mitigation actions:

11





# Payette

#### Risk Rank: H

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 4,357 are at risk of flooding. The watershed is largely privately owned.

Flood hazards can include high stream flows that exceed bankfull discharge. At the USGS gauge near the city of Horseshoe Bend the discharge is 12,700 cfs. From the graph below one can see annual peak flow events that regularly exceed bankfull. According to county AHMPs, 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 69 policies contributing to \$41,370 of premiums paid in exchange for \$12,878,800 of coverage.

- •0 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, 2009)

-Payette River and Gem Valley (2011)

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, Boise, Gem, Payette, Valley, Washington

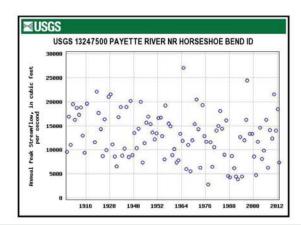
Emmett, Fruitland, Horseshoe Bend, New Plymouth, Payette

Subbasin Me	etrics
Area (sq. miles)	1,232
Population (2010)	30,522
Miles of Stream	2,989
Miles of Canal	508
Min. Elevation (ft)	2,123
Max. Elevation (ft)	8,327
Dams of Concern	14
Pop. at Flood Risk	4,357

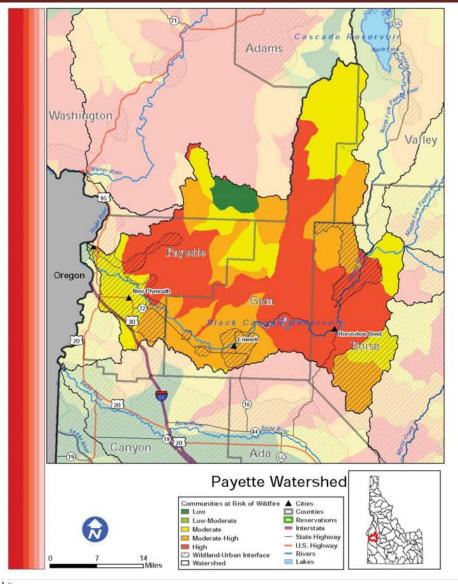
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	59%
Federal	34%
Reservation/BIA	0%
State	7%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	69
Total Coverage	\$12,878,800
Total Premiums	\$41,370
# Claims	21
Paid Claims	\$244,110

# Total flood mitigation actions: 86







# Payette

#### 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, Horseshoe Bend, 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 4,575 structures located within the WUI of the Payette watershed. Since 2000, 114,139 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, 27% moderate risk, 30.4% moderate-high risk and 40.4% 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.
- •0 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 WUI 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

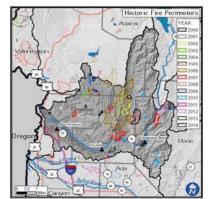
#### Cities

Emmett, Fruitland, Horseshoe Bend, New Plymouth, Payette

Subbasin Metrics		
Area (sq. miles)	1,232	
Population (2010)	30,522	
Miles of Stream	2,989	
Miles of Canal	508	
Min. Elevation (ft)	2,123	
Max. Elevation (ft)	8,327	
Structures in WUI	4,575	
Historic Fire Events	145	
Acres Burned (1995-)	114,139	

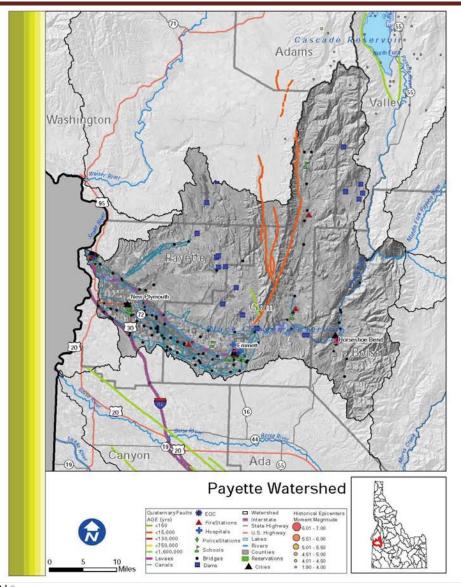
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	59%	
Federal	34%	
Reservation/BIA	0%	
State	7%	
Out of Idaho	0%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	2.2%
Low-Moderate	0%
Moderate	27%
Moderate-High	30.4%
High	40.4%



# Total wildfire mitigation actions:





# Payette

#### Risk Rank: H

#### Introduction

Areas of concentrated population within the Payette watershed boundaries are Emmett, Fruitland, Horseshoe Bend, New Plymouth and Payette.

#### tarbant in the sheet sheld?

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

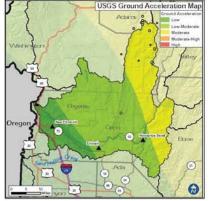
#### Cities

Emmett, Fruitland, Horseshoe Bend, New Plymouth, Payette

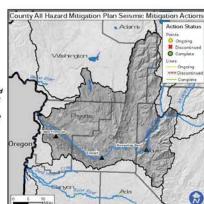
Subbasin Metrics			
Area (sq. miles)			1,232
Population (2010)		- 1	30,522
Miles of Stream			2,989
Miles of Canal			508
Min. Elevation (ft)	į.		2,123
Max. Elevation (ft)			8,327
Est. Facilities Near Fault 40		40	
% Watershed w/in 25 Miles of Fault 100%			

Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	59%	
Federal	34%	
Reservation/BIA	0%	
State	7%	
Out of Idaho	0%	

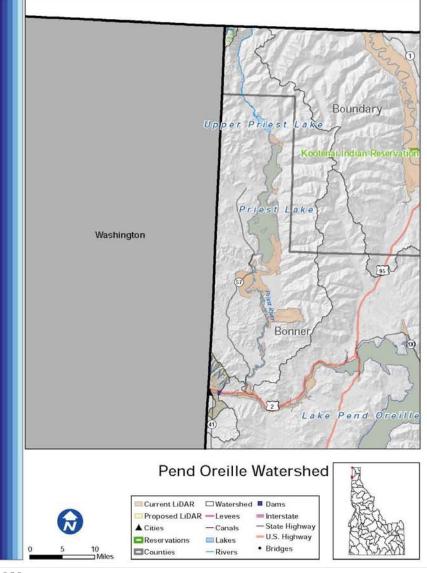
Ground Acceleration		
	%Watershed Are	
Low	15%	
Low-Moderate	55%	
Moderate	30%	
Moderate-High	0%	
High	0%	



# Total seismic mitigation actions: 42



1,662



# 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. 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 Pack River, Sand Creek and the Pend Oreille River are contributing systems to flood risk. According to county AHMPs, there have been 19 reports of significant flooding within the watershed in recent history. There are 2 high or significant hazard dams in the Pend Oreille Lake watershed. There are 12 communities participating in the NFIP with 225 policies contributing to \$187,616 of premiums paid in exchange for \$78,905,700 of coverage.

- •0 out of the 4 counties in the Pend Oreille Lake watershed identified flood as their number one hazard.
- •0 out of the 4 counties in the Pend Oreille Lake watershed 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:

- -Columbia River Treaty 2014/2024 Project (2010)
- -Priest Area (2012)

#### Conclusion

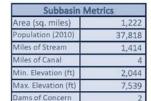
The Pend Oreille Lake watershed is considered to be at a moderate risk of damaging flood events because of its population and small amount of hazardous dams.

#### Counties and Tribes

Bonner, Boundary, Kootenai, Shoshone

#### Cities

Athol, Dover, East Hope, Hope, Kootenai, Oldtown, Ponderay, Priest River, Sandpoint, Spirit Lake

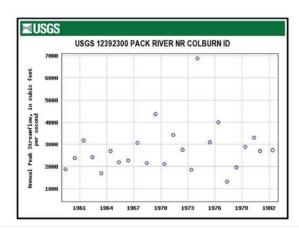


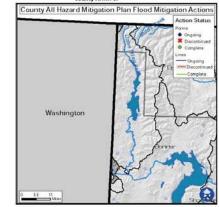
Pop. at Flood Risk

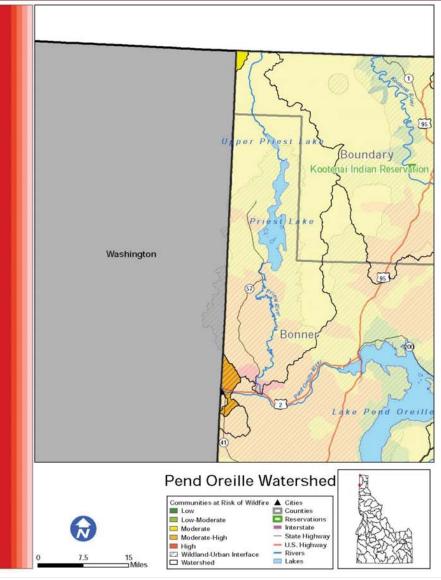
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	51%	
Federal	27%	
Reservation/BIA	0%	
State	18%	
Out of Idaho	4%	

NFIP Statistics (2014)	
NFIP Policies	225
Total Coverage	\$78,905,700
Total Premiums	\$187,616
# Claims	21
Paid Claims	\$224,632

# Total flood mitigation actions: 173







# Pend Oreille

#### 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 17,322 structures located within the WUI of the Pend Oreille Lake watershed. Since 2000, 713 acres have burned in 26 wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Pend Oreille Lake watershed has 0% low risk, 22% low-moderate risk, 30.9% moderate risk, 46.6% moderate-high risk and 0.4% 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

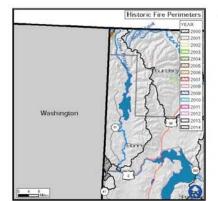
#### Cities

Athol, Dover, East Hope, Hope, Kootenai, Oldtown, Ponderay, Priest River, Sandpoint, Spirit Lake

Subbasin Metrics	
Area (sq. miles)	1,222
Population (2010)	37,818
Miles of Stream	1,414
Miles of Canal	4
Min. Elevation (ft)	2,044
Max. Elevation (ft)	7,539
Structures in WUI	17,322
Historic Fire Events	26
Acres Burned (1995-)	713

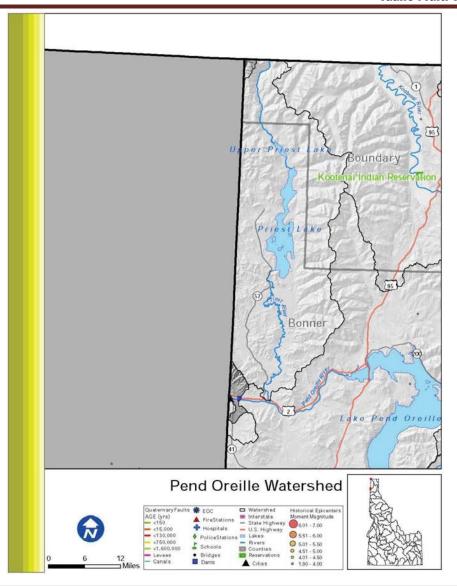
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	51%	
Federal	27%	
Reservation/ BIA	0%	
State	18%	
Out of Idaho	4%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	0%
Low-Moderate	22%
Moderate	30.9%
Moderate-High	46.6%
High	0.4%



# Total wildfire mitigation actions:





# 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

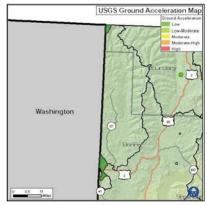
#### Cities

Athol, Dover, East Hope, Hope, Kootenai, Oldtown, Ponderay, Priest River, Sandpoint, Spirit Lake

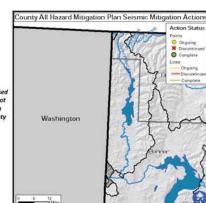
Subbasin	Met	rics	
Area (sq. miles)			1,222
Population (2010)		- 3	37,818
Miles of Stream			1,414
Miles of Canal	į.		4
Min. Elevation (ft)			2,044
Max. Elevation (ft)			7,539
Est. Facilities Near F	ault		0
% Watershed w/in 25 M	les of	Fault	0%

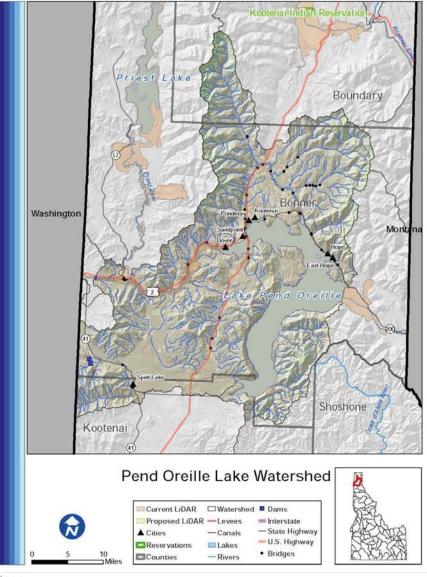
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	51%	
Federal	27%	
Reservation/BIA	0%	
State	18%	
Out of Idaho	4%	

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	75%
Low-Moderate	25%
Moderate	0%
Moderate-High	0%
High	09



Total seismic mitigation actions: 31





# **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 100,000 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 Albani Falls dam. There are 3 communities participating in the NFIP with 4 policies contributing to \$3,870 of premiums paid in exchange for \$736,000 of coverage.

•0 out of the 2 counties in the Pend Oreille watershed identified flood as their number one hazard.
•0 out of the 2 counties in the Pend Oreille watershed identified flood as their number two hazard.

# •0 out of the 2 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:

-Columbia River Treaty 2014/2024 Project (2010)

#### 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**

Bonner, Boundary

#### Cities

Oldtown

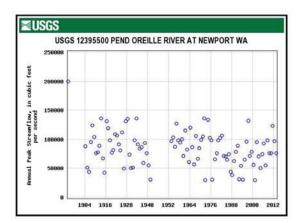
Subbasin Metrics		
Area (sq. miles)	1,096	
Population (2010)	1,321	
Miles of Stream	21	
Miles of Canal	0	
Min. Elevation (ft)	1,334	
Max. Elevation (ft)	7,546	
Dams of Concern	1	

Subbasin Ownership	
Owner Type	% Subbasin Area
Private	1%
Federal	0%
Reservation/BIA	0%
State	0%
Out of Idaho	99%

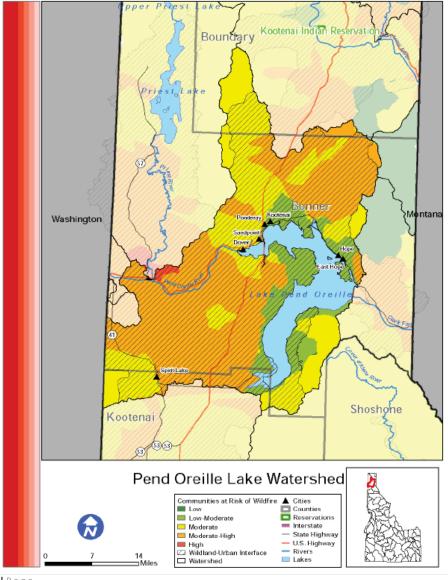
Pop. at Flood Risk

NFIP Statistics (2014)	
NFIP Policies	
Total Coverage	\$736,000
Total Premiums	\$3,870
# Claims	1
Paid Claims	\$2.825

# Total flood mitigation actions: 24







# 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?

Fires within the Pend Oreille watershed have the potential to severely disrupt life, property and economic activity. There are 531 structures located within the WUI of the Pend Oreille watershed. Since 2000, 315 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, 20.8% moderate risk, 79.2% moderate-high risk and 0% high risk of wildfire to the communities within the watershed.

•1 out of the 2 counties in the Pend Oreille watershed identified wildfire as their number one hazard.

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

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

#### 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

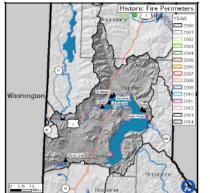
#### Cities

Oldtown

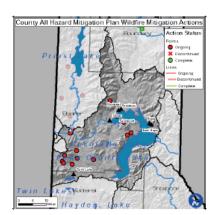
Subbasin Metrics	
Area (sq. miles)	1.096
Population (2010)	1,321
Miles of Stream	21
Miles of Canal	0
Min. Elevation (ft)	1,334
Max. Elevation (ft)	7,546
Structures in WUI	531
Historic Fire Events	1
Acres Burned (1995-)	315

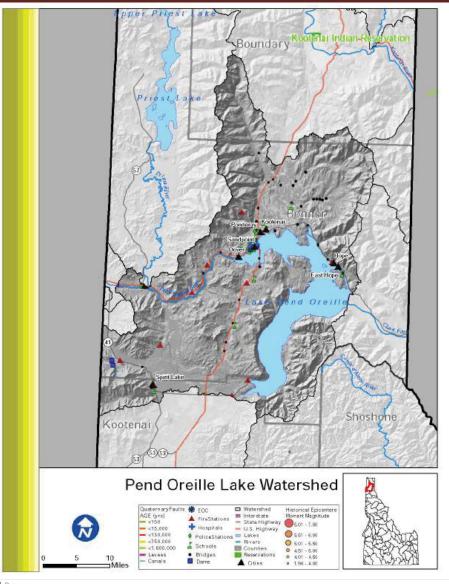
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	1%
Federal	0%
Reservation/BIA	0%
State	0%
Out of Idaho	99%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	20.8%
Moderate-High	79.2%
High	0%



Total wildfire mitigation actions:





# Pend Oreille Lake

#### Risk Rank: L

#### Introduction

The area of concentrated population within the Pend Oreille watershed boundaries is Oldtown.

# 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.
- 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

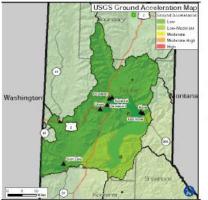
Cities

Oldtown

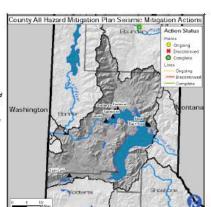
Subbasin Metrics	
Area (sq. miles)	1,096
Population (2010)	1,321
Miles of Stream	21
Miles of Canal	0
Min. Elevation (ft)	1,334
Max. Elevation (ft)	7,546
Est. Facilities Near Fault	
% Watershed w/in 25 M	iles of Fault 0%

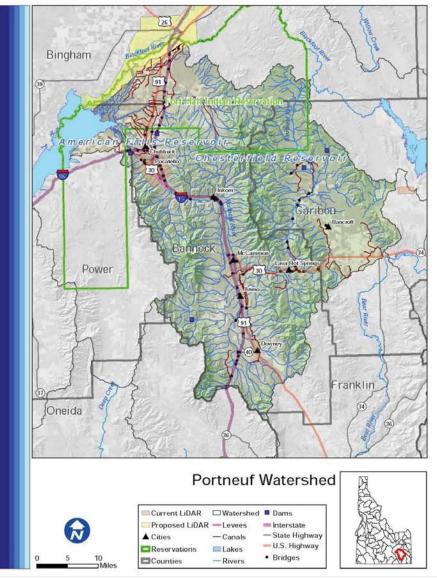
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	1%	
Federal	0%	
Reservation/ BIA	0%	
State	0%	
Out of Idaho	99%	

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	100%
Low-Moderate	0%
Moderate	0%
Moderate-High	0%
High	0%



Total seismic mitigation actions: 12





# Portneuf

#### Risk Rank: H

Areas of concentrated population within the watershed boundaries are Arbon Valley, Arimo, Bancroft, Chubbuck, Downey, Fort Hall, Inkom, Lava Hot Springs, McCammon and Pocatello. There are 86,445 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 1,130 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 \$135,486 of premiums paid in exchange for \$28,917,600 of coverage.

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

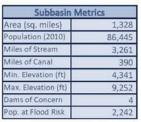
The high population, large portion of private ownership, presence of hazardous dams and number of levees all contribute to the high flood risk of the Portneuf watershed.

#### **Counties and Tribes**

Bannock, Bingham, Caribou, Franklin, Oneida, Power, Shoshone-Bannock Tribes

### Cities

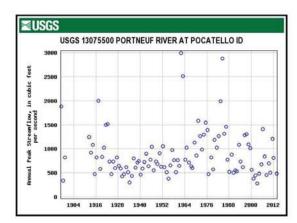
Arbon Valley, Arimo, Bancroft, Chubbuck, Downey, Fort Hall, Inkom, Lava Hot Springs, McCammon, Pocatello

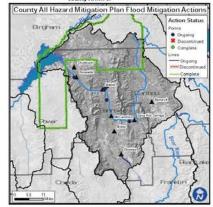


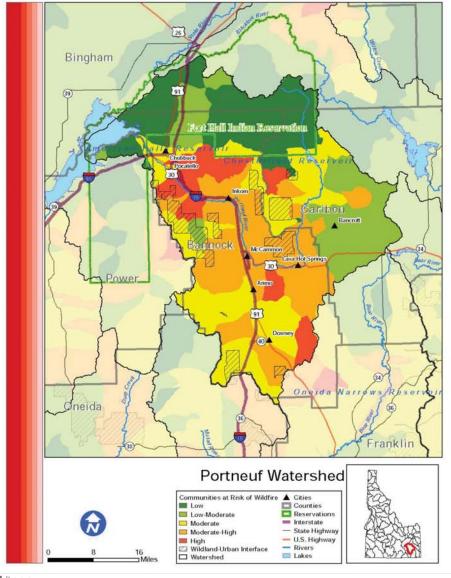
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	46%
Federal	25%
Reservation/BIA	26%
State	3%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	146
Total Coverage	\$28,917,600
Total Premiums	\$135,486
# Claims	19
Paid Claims	\$129,647

# Total flood mitigation actions: 78







# Portneuf

#### Risk Rank: H

#### 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, Bancroft, Chubbuck, Downey, Fort Hall, Inkom, Lava Hot Springs, McCammon 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 (2010), the Idaho Falls watershed has 21.7% low risk, 17.9% low-moderate risk, 24.5% moderate risk, 26.9% moderate-high risk and 9.1% 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 two hazard.
- •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 IDL, the Portneuf watershed is at a high risk of wildfire damage to people and property.

#### Counties and Triber

Bannock, Bingham, Caribou, Franklin, Oneida, Power, Shoshone-Bannock Tribes

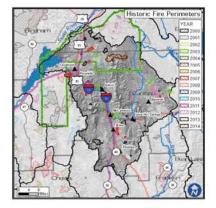
#### Cities

Arbon Valley, Arimo, Bancroft, Chubbuck, Downey, Fort Hall, Inkom, Lava Hot Springs, McCammon, Pocatello

Subbasin Metrics	
Area (sq. miles)	1,328
Population (2010)	86,445
Miles of Stream	3,261
Miles of Canal	390
Min. Elevation (ft)	4,341
Max. Elevation (ft)	9,252
Structures in WUI	148
Historic Fire Events	217
Acres Burned (1995-)	73,054

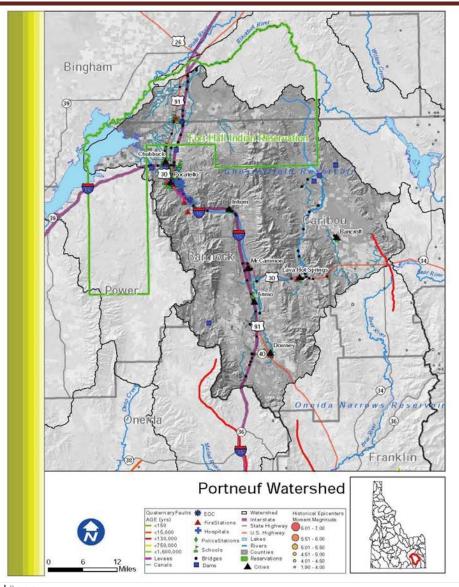
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	46%
Federal	25%
Reservation/BIA	26%
State	3%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	21.7%
Low-Moderate	17.9%
Moderate	24.5%
Moderate-High	26.9%
High	9.1%



Total wildfire mitigation actions:





# 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 390 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

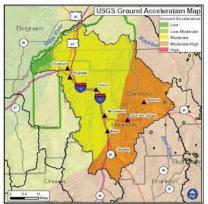
#### Citie

Arbon Valley, Arimo, Bancroft, Chubbuck, Downey, Fort Hall, Inkom, Lava Hot Springs, McCammon, Pocatello

Subbasin Metrics			
Area (sq. miles)		1,328	
Population (2010)	86,445		
Miles of Stream			3,261
Miles of Canal	390		390
Min. Elevation (ft)	4,341		
Max. Elevation (ft) 9,3		9,252	
Est. Facilities Near Fault			13
% Watershed w/in 25 Miles of Fault		69%	

Subbasin Ownership	
Owner Type	% Subbasin Area
Private	46%
Federal	25%
Reservation/ BIA	26%
State	3%
Out of Idaho	0%

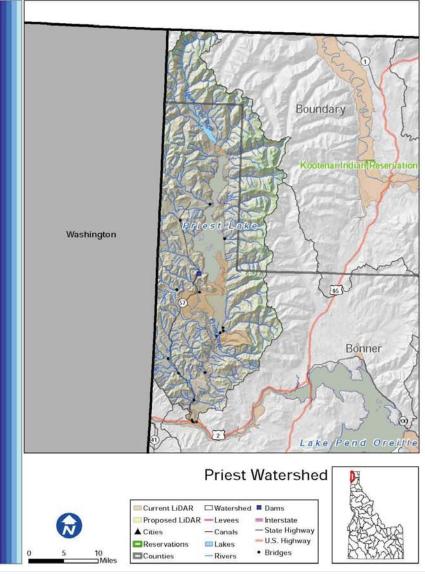
Ground Acceleration		
Accel. Amoun	%Watershed Are	
Low	0%	
Low-Moderate	3%	
Moderate	58%	
Moderate-High	39%	
High	0%	



# Total seismic mitigation actions: 59



129



# Priest

#### Risk Rank: L

#### ntroduction

Areas of concentrated population within the watershed boundaries include the City of Priest River. There are 3,623 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 rick

Flood hazards within the Priest watershed include high stream and variably 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 \$8,972.800 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)
- -Columbia River Treaty 2014/2024 Project (2010)
- -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 Area (sq. miles) 979 Population (2010) 3,623 Miles of Stream 1,068 Miles of Canal 0 Min. Elevation (ft) 2,060 Max. Elevation (ft) 7,546

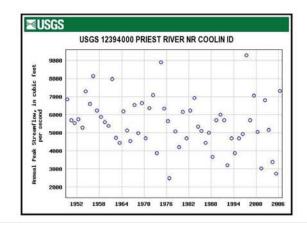
Dams of Concern

Pop. at Flood Risk

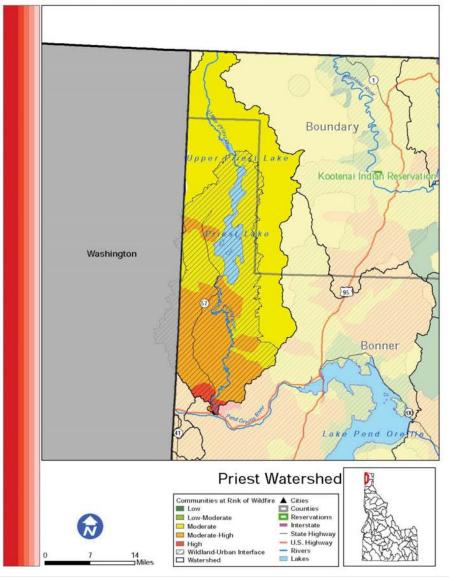
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	9%
Federal	32%
Reservation/BIA	0%
State	37%
Out of Idaho	22%

NFIP Statistics (2014)	
NFIP Policies	39
Total Coverage	\$8,972,800
Total Premiums	\$25,422
# Claims	1
Paid Claims	\$8,601

# Total flood mitigation actions: 36







# Priest

#### Risk Rank: H

#### Introduction

The Priest watershed is home to 3,623 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 event. Based on data from the Idaho Forest Action Plan (2010), 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.
- $\bullet 0 \ \text{out of the 2 counties in the Priest watershed identified wild fire as their number two hazard. } \\$
- •0 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

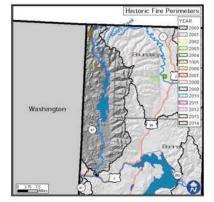
Cities

**Priest River** 

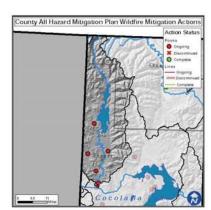
Subbasin Metrics	
Area (sq. miles)	979
Population (2010)	3,623
Miles of Stream	1,068
Miles of Canal	0
Min. Elevation (ft)	2,060
Max. Elevation (ft)	7,546
Structures in WUI	3,424
Historic Fire Events	55
Acres Burned (1995-)	2,233

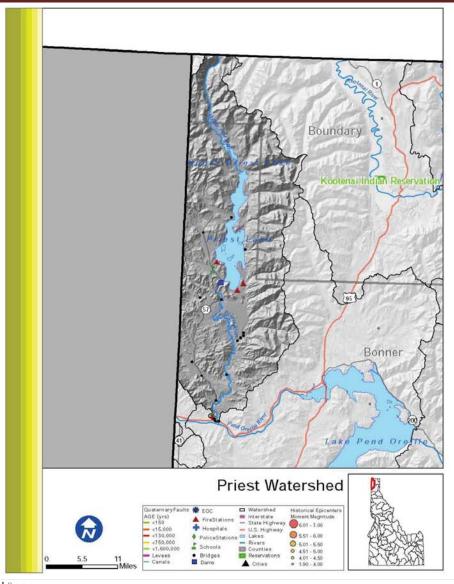
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	9%	
Federal	32%	
Reservation/BIA	0%	
State	37%	
Out of Idaho	22%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	73.7%
Moderate-High	24.8%
High	1.5%



# Total wildfire mitigation actions:





# Priest

#### Risk Rank: L

#### 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 25 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

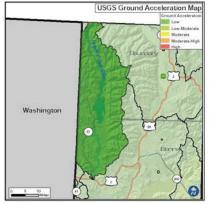
Cities

**Priest River** 

Subbasin Metrics			
Area (sq. miles)			979
Population (2010)			3,623
Miles of Stream			1,068
Miles of Canal			0
Min. Elevation (ft)	į.		2,060
Max. Elevation (ft)			7,546
Est. Facilities Near Fault			0
% Watershed w/in 25 Miles of Fault		0%	

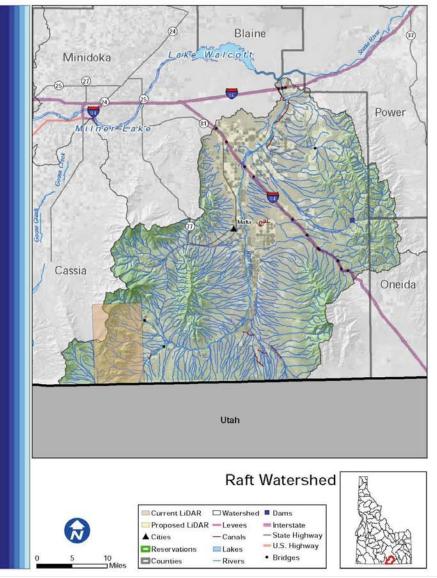
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	9%	
Federal	32%	
Reservation/BIA	0%	
State	37%	
Out of Idaho	22%	

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	100%
Low-Moderate	0%
Moderate	0%
Moderate-High	0%
High	0%



# Total seismic mitigation actions: 12





# Raft

#### Risk Rank: M

#### Introduction

1,877 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 4 communities participating in the NFIP with 3 policies contributing to \$1,950 of premiums paid in exchange for \$666,000 of coverage.

- •0 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, Oneida, Power

Cities

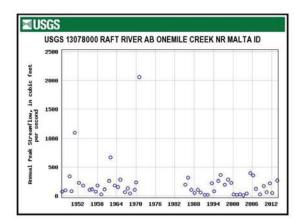
Malta

Subbasin Metrics		
Area (sq. miles)	1,490	
Population (2010)	1,877	
Miles of Stream	3,294	
Miles of Canal	74	
Min. Elevation (ft)	4,196	
Max. Elevation (ft)	10,325	
Dams of Concern	1	
Pop. at Flood Risk	162	

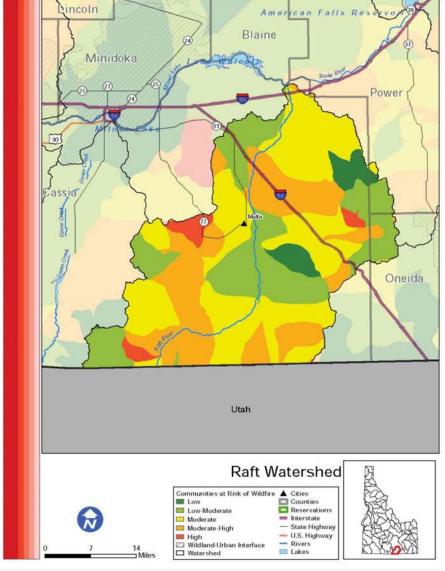
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	35%	
Federal	44%	
Reservation/BIA	0%	
State	3%	
Out of Idaho	19%	

NFIP Statistics (2014)	
NFIP Policies	3
Total Coverage	\$666,000
Total Premiums	\$1,950
# Claims	0
Paid Claims	\$0

# Total flood mitigation actions: 44







# 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 Forest Action Plan (2010), the Raft watershed has 4.4% low risk, 26.8% low-moderate risk, 38.7% moderate risk, 27.2% moderate-high risk and 3% high risk of wildfire to the communities within the watershed.

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

#### 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, Oneida, Power

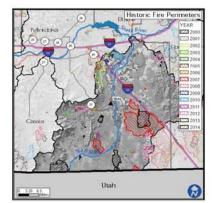
#### Cities

Malta

Subbasin Metrics		
Area (sq. miles)	1,490	
Population (2010)	1,877	
Miles of Stream	3,294	
Miles of Canal	74	
Min. Elevation (ft)	4,196	
Max. Elevation (ft)	10,325	
Structures in WUI	No WUI	
Historic Fire Events	154	
Acres Burned (1995-)	155,755	

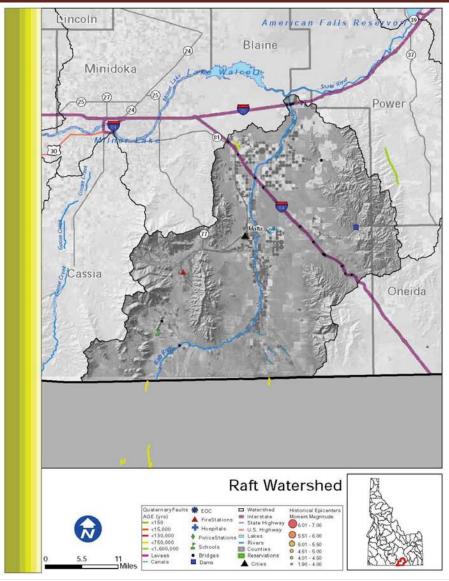
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	35%	
Federal	44%	
Reservation/BIA	0%	
State	3%	
Out of Idaho	19%	

Watershed Fire Risk	
Risk Level %Watershed	
Low	4.4%
Low-Moderate	26.8%
Moderate	38.7%
Moderate-High	27.2%
High	3%



# Total wildfire mitigation actions:





# Raft

#### Risk Rank: M

#### Introduction

The area of concentrated population within the Raft watershed boundaries is Malta.

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 0 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, Oneida, Power

Cities

Malta

Subbasin Metrics			
Area (sq. miles)			1,490
Population (2010)			1,877
Miles of Stream	l e		3,294
Miles of Canal			74
Min. Elevation (ft)	į.		4,196
Max. Elevation (ft) 10,32		10,325	
Est. Facilities Near Fault		0	
% Watershed w/in 25 Miles of Fault 69		6%	

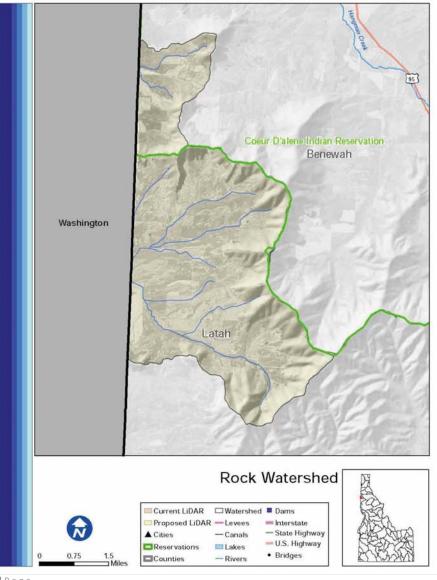
Subbasin Ownership	
Owner Type	% Subbasin Area
rivate	35%
ederal	44%
leservation/BIA	0%
tate	3%
Out of Idaho	19%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	48%
Moderate	52%
Moderate-High	0%
High	0%



# Total seismic mitigation actions: 27





# Rock

#### Risk Rank: L

#### ntroduction

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.

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

#### LiDAR data availability

There is no LiDAR 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

Subbasin Metrics	
Area (sq. miles)	954
Population (2010)	36
Miles of Stream	49
Miles of Canal	0
Min. Elevation (ft)	1,285
Max. Elevation (ft)	4,334
Dams of Concern	0
Pop. at Flood Risk	0

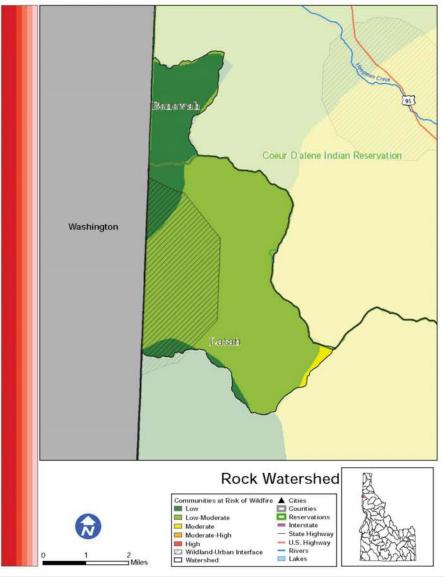
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	2%	
Federal	0%	
Reservation/BIA	0%	
State	0%	
Out of Idaho	98%	

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	\$0

### Total flood mitigation actions: 110







# 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 of wildfire to the communities within the watershed.

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

#### onclusion

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.

#### Countles and Tribes

Coeur d'Alene Tribe, Benewah, Latah

Cities

Subbasin Metrics	
Area (sq. miles)	954
Population (2010)	36
Miles of Stream	49
Miles of Canal	0
Min. Elevation (ft)	1,285
Max. Elevation (ft)	4,334
Structures in WUI	43
Historic Fire Events	0
Acres Burned (1995-)	0

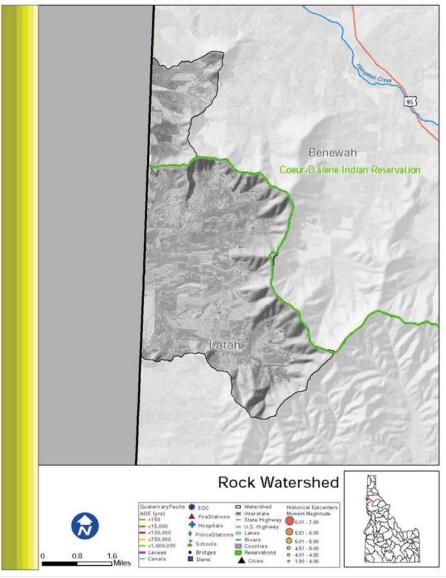
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	2%
Federal	0%
Reservation/BIA	0%
State	0%
Out of Idaho	98%

Watershed Fire Risk	
Risk Level %Watershed A	
Low	22.6%
Low-Moderate	76.5%
Moderate	0.9%
Moderate-High	0%
High	0%



# Total wildfire mitigation actions: 59





# Rock

#### Risk Rank: L

#### Introduction

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

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.

- $\bullet 0$  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

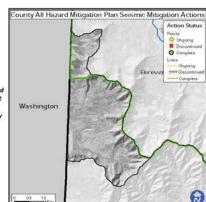
Subbasin Metrics		
Area (sq. miles)		954
Population (2010)		36
Miles of Stream		49
Miles of Canal		0
Min. Elevation (ft)		1,285
Max. Elevation (ft)		4,334
Est. Facilities Near Fault		0
% Watershed w/in 25 M	lles of Fault	0%

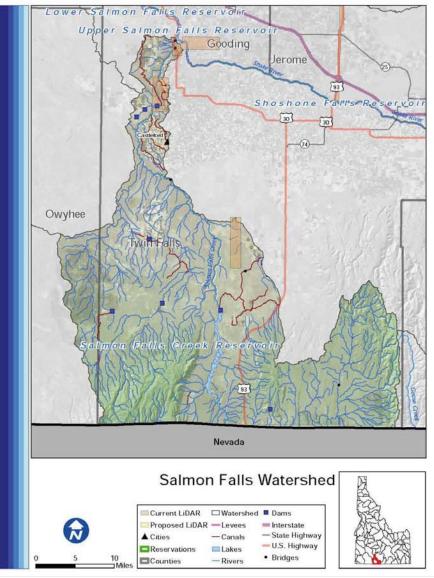
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	2%
Federal	0%
Reservation/BIA	0%
State	0%
Out of Idaho	98%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	100%
Low-Moderate	0%
Moderate	0%
Moderate-High	0%
High	0%



Total seismic mitigation actions: 10





# Salmon Falls

#### Risk Rank: M

#### troduction

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, Jeaving only 12% privately owned.

#### What is the rick

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 2 counties in the Salmon Falls watershed identified flood as their number one hazard.
- •0 out of the 2 counties in the Salmon Falls watershed identified flood as their number two hazard.
- •0 out of the 2 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:

- -Salmon Falls (2002, 2005, 2010)
- -Box canyon (2006)
- -Hollister (2010, 2011)

#### Conclusion

Though the population and portion of the watershed under private ownership is low, the presence of hazardous of dams increases the overall flood risk of the watershed to moderate classification.

#### Countles and Tribes

Owyhee, Twin Falls

Cities

Castleford

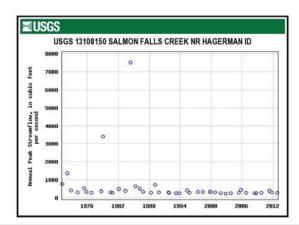
Subbasin Me	trics
Area (sq. miles)	2,085
Population (2010)	882
Miles of Stream	1,647
Miles of Canal	144
Min. Elevation (ft)	2,900
Max. Elevation (ft)	10,167
Dams of Concern	2

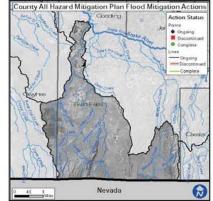
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	12%
Federal	31%
Reservation/BIA	0%
State	2%
Out of Idaho	56%

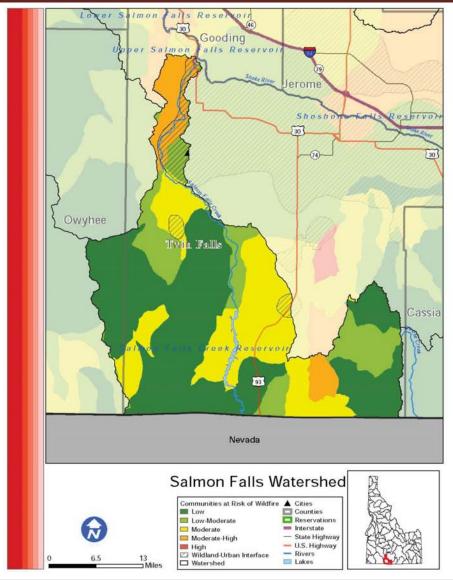
Pop. at Flood Risk

NFIP Statistics (2014)	
NFIP Policies	2
Total Coverage	\$703,800
Total Premiums	\$4,855
# Claims	0
Paid Claims	ŚO

# Total flood mitigation actions: 17







# Salmon Falls

#### Risk Rank: L

#### Introduction

The Salmon Falls watershed is home to 882 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 303 structures located within the WUI of the Salmon Falls watershed. Since 2000, 236,432 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, 16.3% low-moderate risk, 27.5% moderate risk, 7.8% 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.

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

• 0 out of the 2 counties in the Salmon Falls watershed identified wildfire as their number three 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

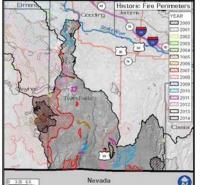
# Cities

Castleford

Subbasin Metrics	
Area (sq. miles)	2,085
Population (2010)	882
Miles of Stream	1,647
Miles of Canal	144
Min. Elevation (ft)	2,900
Max. Elevation (ft)	10,167
Structures in WUI	303
Historic Fire Events	127
Acres Burned (1995-)	236,432

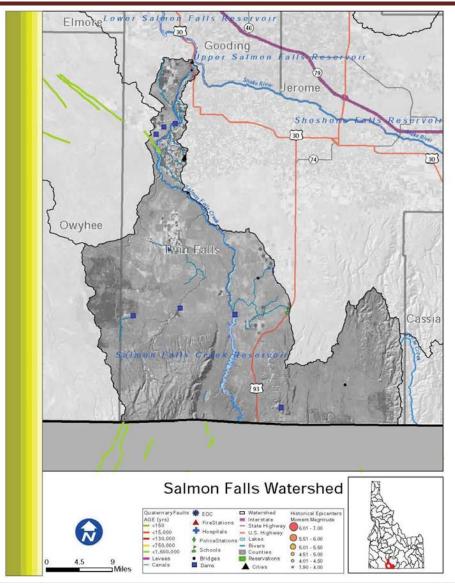
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	12%
ederal	31%
Reservation/BIA	0%
itate	2%
Out of Idaho	56%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	48.3%
Low-Moderate	16.3%
Moderate	27.5%
Moderate-High	7.8%
High	0%



# Total wildfire mitigation actions:





# 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			
Area (sq. miles)			2,085
Population (2010)	882		
Miles of Stream	1,647		
Miles of Canal	144		
Min. Elevation (ft)	2,900		2,900
Max. Elevation (ft)	10,167		
Est. Facilities Near Fault		0	
% Watershed w/in 25 Miles of Fault 09		0%	

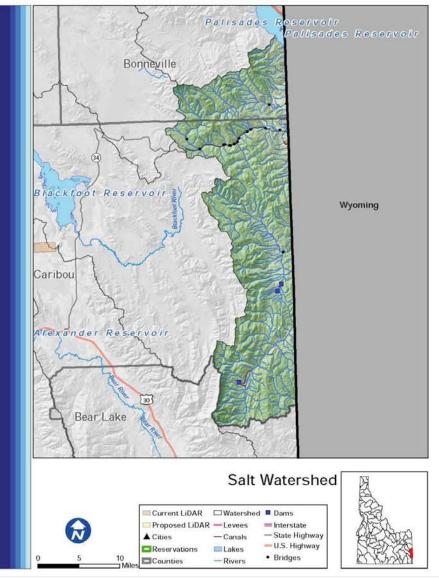
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	12%	
Federal	31%	
Reservation/ BIA	0%	
State	2%	
Out of Idaho	56%	

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	94%
Low-Moderate	6%
Moderate	0%
Moderate-High	0%
High	0%



# Total seismic mitigation actions: 9





# Salt

#### Risk Rank: L

#### Introduction

There are 242 total people who live within the Salt watershed, of which none are at risk of flooding. The watershed is largely federally managed and over 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 AHMPs, 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.
- •0 out of the 3 counties in the Salt watershed identified flood as their number two hazard.
- •0 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

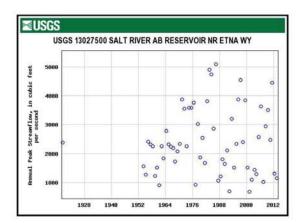
Cities

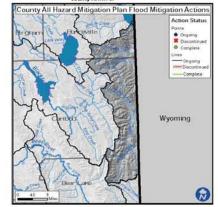
Subbasin Metrics		
Area (sq. miles)	876	
Population (2010)	242	
Miles of Stream	908	
Miles of Canal	9	
Min. Elevation (ft)	5,614	
Max. Elevation (ft)	10,699	
Dams of Concern	2	
Pop. at Flood Risk	0.	

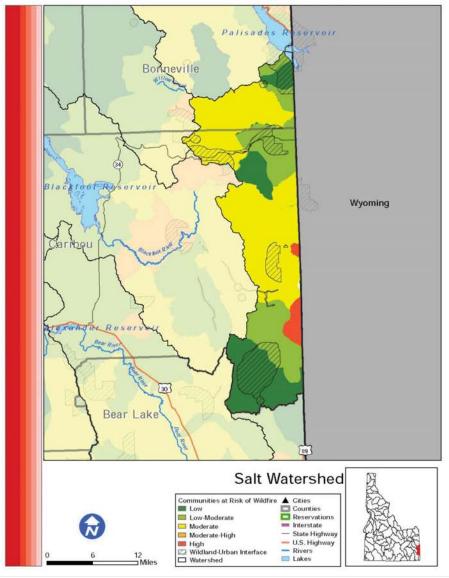
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	8%	
Federal	38%	
Reservation/BIA	0%	
State	0%	
Out of Idaho	54%	

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	ŚO

# Total flood mitigation actions: 23







# Salt

#### 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 (2010), the Salt watershed has 22.5% low risk, 24.3% low-moderate risk, 50.2% moderate risk, 0.1% moderate-high risk and 2.9% 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

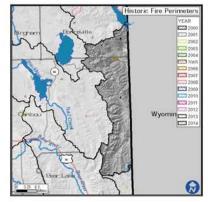
Bear Lake, Bonneville, Caribou

Cities

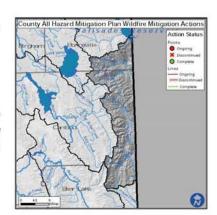
Subbasin Metrics	
Area (sq. miles)	876
Population (2010)	242
Miles of Stream	908
Miles of Canal	9
Min. Elevation (ft)	5,614
Max. Elevation (ft)	10,699
Structures in WUI	61
Historic Fire Events	10
Acres Burned (1995-)	3,730

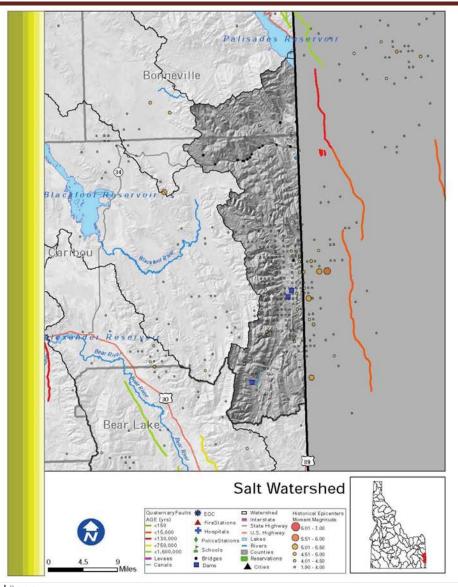
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	8%
Federal	38%
Reservation/BIA	0%
State	0%
Out of Idaho	54%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	22.5%
Low-Moderate	24.3%
Moderate	50.2%
Moderate-High	0.1%
High	2.9%



Total wildfire mitigation actions:





# Salt

#### Risk Rank: M

#### Introduction

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

An earthquake within the watershed has a moderate 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 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**

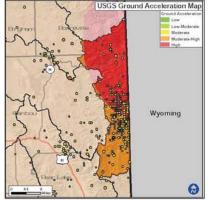
Bear Lake, Bonneville, Caribou

Cities

Subbasin Metrics			
Area (sq. miles)			876
Population (2010)			242
Miles of Stream			908
Miles of Canal			9
Min. Elevation (ft)	Ĵ		5,614
Max. Elevation (ft)			10,699
Est. Facilities Near Fault (		0	
% Watershed w/in 25 Miles of Fault		100%	

Subbasin Ownership	
Owner Type	% Subbasin Area
Private	8%
Federal	38%
Reservation/BIA	0%
State	0%
Out of Idaho	54%

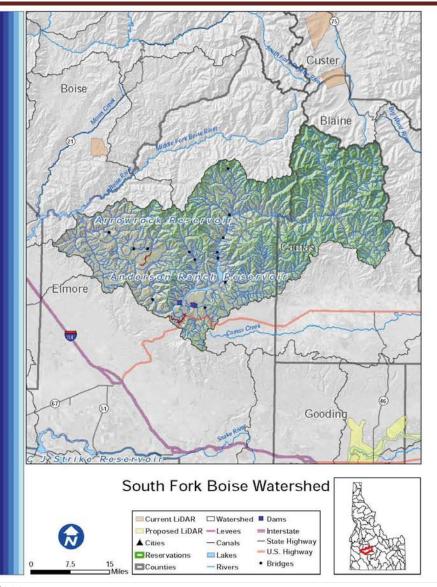
Ground Acceleration		
Accel. Amoun	%Watershed Are	
Low	0%	
Low-Moderate	0%	
Moderate	0%	
Moderate-High	40%	
High	60%	



Total seismic mitigation actions:

25





# South Fork Boise

#### Risk Rank: L

#### ntroduction

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 \$1,466,700 of coverage.

- •0 out of the 3 counties in the South Fork Boise watershed identified flood as their number one hazard.
- \*0 out of the 3 counties in the South Fork Boise watershed identified flood as their number two hazard.
- •2 out of the 3 counties in the South Fork Boise watershed identified flood as their number three hazard

#### 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**

Blaine, Camas, Elmore

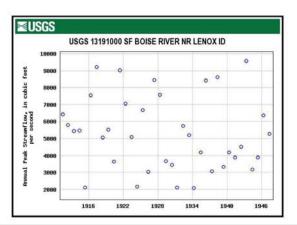
Cities

Subbasin Metrics	
Area (sq. miles)	1,304
Population (2010)	261
Miles of Stream	3,339
Miles of Canal	43
Min. Elevation (ft)	3,205
Max. Elevation (ft)	10,315
Dams of Concern	2
Pop. at Flood Risk	19

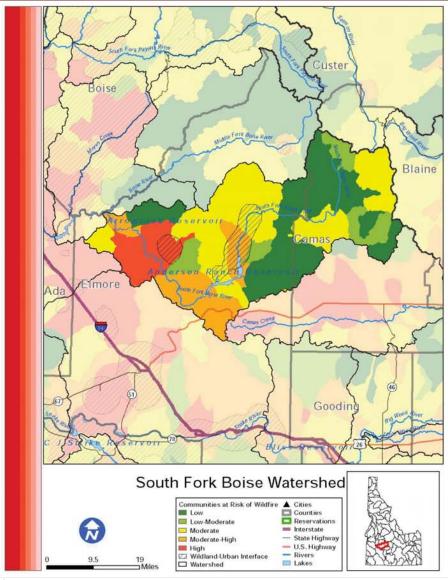
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	13%	
Federal	83%	
Reservation/BIA	0%	
State	4%	
Out of Idaho	0%	

NFIP Statistics (2014)	
NFIP Policies	7
Total Coverage	\$1,466,700
Total Premiums	\$6,465
# Claims	0
Paid Claims	ŚO

# Total flood mitigation actions: 74







# 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?

Fires 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 136 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-moderate risk, 35% moderate risk, 14.8% moderate-high risk and 9.8% 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
- 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 wildfire. 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

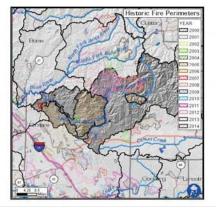
Blaine, Camas, Elmore

Cities

Subbasin Metrics		
Area (sq. miles)	1,304	
Population (2010)	261	
Miles of Stream	3,339	
Miles of Canal	43	
Min. Elevation (ft)	3,205	
Max. Elevation (ft)	10,315	
Structures in WUI	516	
Historic Fire Events	136	
Acres Burned (1995-)	308,723	

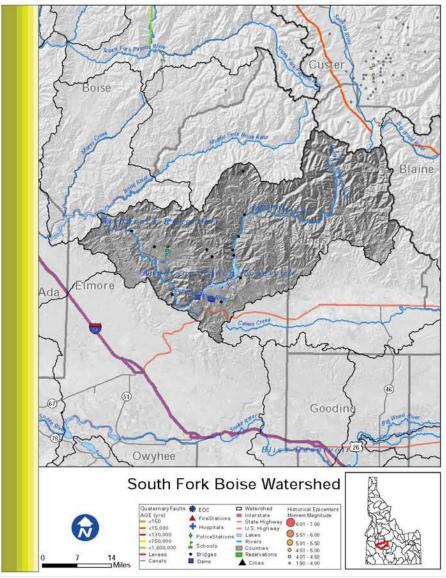
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	13%	
Federal	83%	
Reservation/BIA	0%	
State	4%	
Out of Idaho	0%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	31.1%
Low-Moderate	9.3%
Moderate	35%
Moderate-High	14.8%
High	9.8%



# Total wildfire mitigation actions:





# South Fork Boise

#### 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

Cities

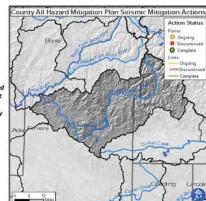
Subbasin Metrics			
Area (sq. miles)			1,304
Population (2010)			261
Miles of Stream			3,339
Miles of Canal			43
Min. Elevation (ft)			3,205
Max. Elevation (ft)			10,315
Est. Facilities Near Fault		0	
% Watershed w/in 25 Miles of Fault 35		35%	

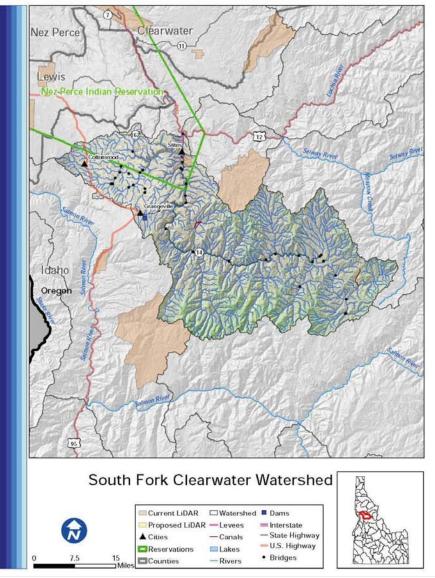
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	13%
Federal	83%
Reservation/BIA	0%
State	4%
Out of Idaho	0%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	20%
Moderate	75%
Moderate-High	5%
High	0%



# Total seismic mitigation actions: 27





# South Fork Clearwater

#### Risk Rank: H

#### Introduction

Areas of concentrated population within the watershed boundaries are Cottonwood, Grangeville, Kooskia and Stites. There are 9,131 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

Flood hazards include seasonal high stream flows that exceed bankfull discharge. USGS streamflow data near Stites indicate a varied flow. Historically, this has resulted in 7 reports of significant floods in recent history, according to county AHMPs. There is 1 high or significant hazard dam in the South Fork Clearwater. There are 5 communities participating in the NFIP with 18 policies contributing to \$20,814 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.

•1 out of the 1 county in the South Fork Clearwater watershed identified flood as their number two hazard.

ullet 0 out of the 1 county in the South Fork Clearwater watershed identified flood as their number three hazard.

#### LIDAR data availability

LIDAR availability within the South Fork Clearwater watershed is as follows: -South Fork Clearwater River (2008)

#### Conclusion

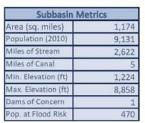
Due to the moderate population and presence of levees and hazardous dams, the South Fork Clearwater watershed is considered a high flood risk watershed.

#### Counties and Tribes

Idaho, Nez Perce Tribe

# Cities

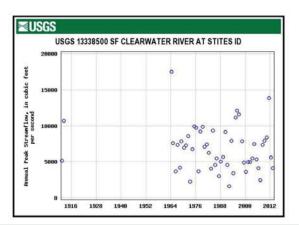
Cottonwood, Grangeville, Kooskia, Stites

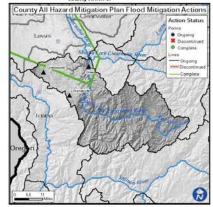


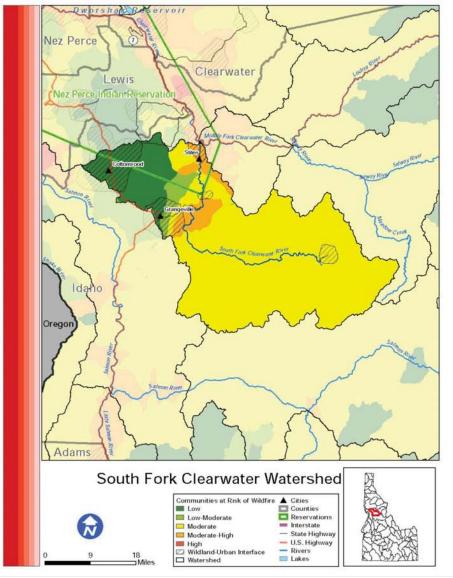
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	28%
Federal	70%
Reservation/BIA	2%
State	0%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	18
Total Coverage	\$2,505,800
Total Premiums	\$20,814
# Claims	2
Paid Claims	\$9.891

# Total flood mitigation actions: 12







# 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 4,135 structures located within the WUI of the South Fork Clearwater watershed. Since 2000, 35,965 acres have burned during 213 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the South Fork Clearwater watershed has 14.4% low risk, 3.2% low-moderate risk, 76% moderate risk, 6.4% 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.
- •0 out of the 1 county in the South Fork Clearwater watershed identified wildfire as their number two hazard.
- •0 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

Subbasin Metrics	
Area (sq. miles)	1,174
Population (2010)	9,131
Miles of Stream	2,622
Miles of Canal	5
Min. Elevation (ft)	1,224
Max. Elevation (ft)	8,858
Structures in WUI	4,135
Historic Fire Events	213
Acres Burned (1995-)	35,965

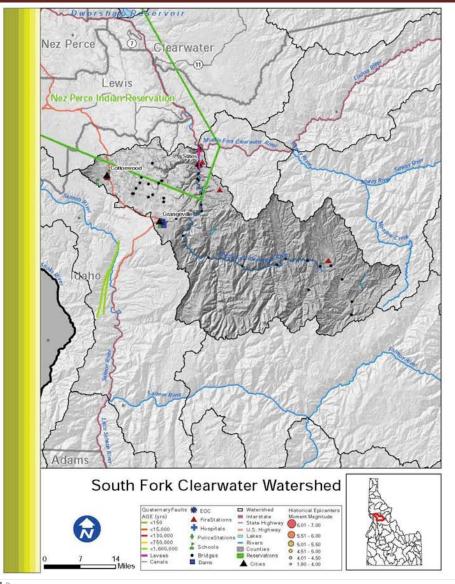
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	28%
Federal	70%
Reservation/BIA	2%
State	0%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	14.4%
Low-Moderate	3.2%
Moderate	76%
Moderate-High	6.4%
High	0%



# Total wildfire mitigation actions:





# South Fork Clearwater

# Risk Rank: M

#### Introduction

Areas of concentrated population within the South Fork Clearwater watershed boundaries are Cottonwood, Grangeville, Kooskia and Stites.

#### What is the rick?

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

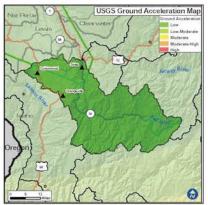
#### Cities

Cottonwood, Grangeville, Kooskia, Stites

Subbasin Metrics		
Area (sq. miles)		1,174
Population (2010)		9,131
Miles of Stream		2,622
Miles of Canal		5
Min. Elevation (ft)	į.	1,224
Max. Elevation (ft)		8,858
Est. Facilities Near Fault		0
% Watershed w/in 25 Miles of Fault 09		0%

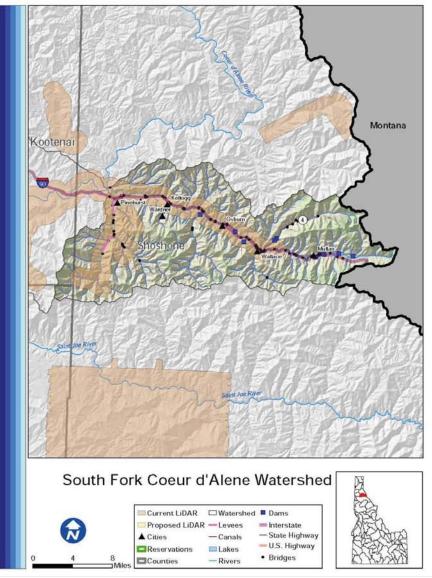
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	28%
Federal	70%
Reservation/BIA	2%
State	0%
Out of Idaho	0%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	100%
Low-Moderate	0%
Moderate	0%
Moderate-High	0%
High	0%



Total seismic 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, Mullan, Osburn, Pinehurst, Smelterville, Wallace and Wardner. There are 11,035 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 AHMPs, 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 8 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 \$343,258 of premiums paid in exchange for \$81,020,700 of coverage.

•0 out of the 3 counties in the South Fork Coeur d'Alene watershed identified flood as their number one

•1 out of the 3 counties in the South Fork Coeur d'Alene watershed identified flood as their number two

•2 out of the 3 counties in the South Fork Coeur d'Alene watershed identified flood 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)

#### Conclucion

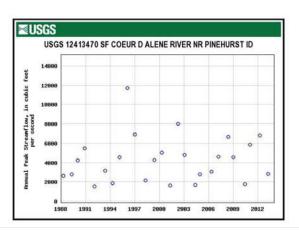
Because of the large amount of people and property at risk, relatively large number of hazardous dams and proximity to the South Fork Coeur d'Alene River, the watershed is considered to be a high risk watershed.

# **Counties and Tribes**

Benewah, Kootenai, Shoshone

# Cities

Kellogg, Mullan, Osburn, Pinehurst, Smelterville, Wallace, Wardner

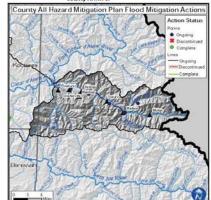


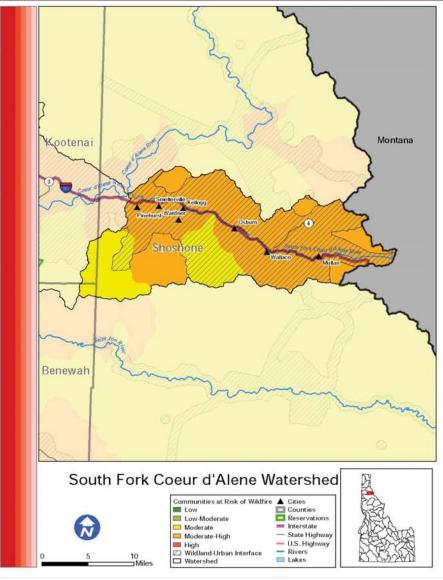
Subbasin Me	trics
Area (sq. miles)	297
Population (2010)	11,035
Miles of Stream	620
Miles of Canal	0
Min. Elevation (ft)	2,156
Max. Elevation (ft)	6,765
Dams of Concern	8
Pop. at Flood Risk	3,711

Subbasin Ownership	
Owner Type	% Subbasin Area
Private	44%
Federal	53%
Reservation/BIA	0%
State	3%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	287
Total Coverage	\$81,020,700
Total Premiums	\$343,258
# Claims	20
Paid Claims	\$171.414

# Total flood mitigation actions: 175





# South Fork Coeur d'Alene

# Risk Rank: H

# Introduction

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, Smelterville, 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 5,526 structures located within the WUI of the South Fork Coeur d'Alene watershed. Since 2000, 579 acres have burned in 20 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 wildfire to life and property because of it's relatively high population being centralized in the identified WUI.

#### **Counties and Tribes**

Benewah, Kootenai, Shoshone

#### Cities

Kellogg, Mullan, Osburn, Pinehurst, Smelterville, Wallace, Wardner

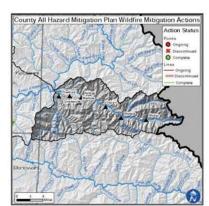
1	
Subbasin Metrics	
Area (sq. miles)	297
Population (2010)	11,035
Miles of Stream	620
Miles of Canal	0
Min. Elevation (ft)	2,156
Max. Elevation (ft)	6,765
Structures in WUI	5,626
Historic Fire Events	20
Acres Burned (1995-)	579

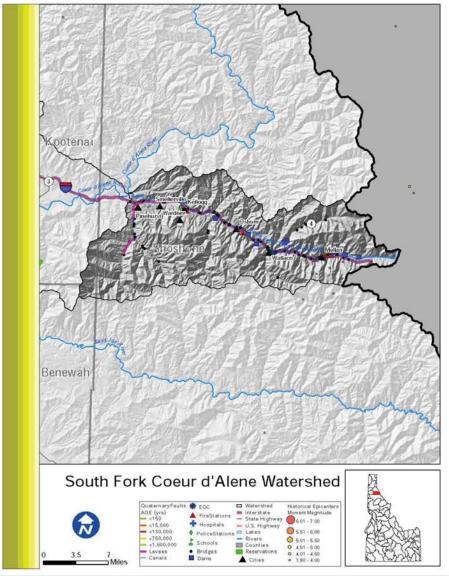
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	44%
Federal	53%
Reservation/BIA	. 0%
State	3%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	23.4%
Moderate-High	76.6%
High	0%



# Total wildfire mitigation actions:





# South Fork Coeur d'Alene

# 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 levees 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

#### Citie

Kellogg, Mullan, Osburn, Pinehurst, Smelterville, Wallace, Wardner

Metrics	
	297
	11,035
	620
	0
Ţ.	2,156
	6,765
ault	0
lles of Fault	0%
	Metrics  ault lies of Fault

Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	44%	
Federal	53%	
Reservation/BIA	0%	
State	3%	
Out of Idaho	0%	

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	2%
Low-Moderate	98%
Moderate	09/
Moderate-High	09/
High	0%



Total seismic mitigation actions: 26





# South Fork Owyhee

# Risk Rank: L

#### ntroduction

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

#### 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

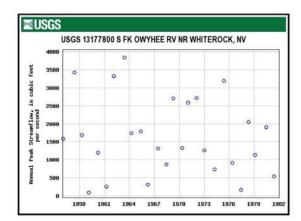
Cities

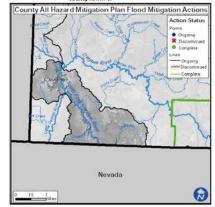
Subbasin Me	trics
Area (sq. miles)	1,876
Population (2010)	0
Miles of Stream	517
Miles of Canal	1
Min. Elevation (ft)	4,236
Max. Elevation (ft)	10,400
Dams of Concern	0
Pop. at Flood Risk	0

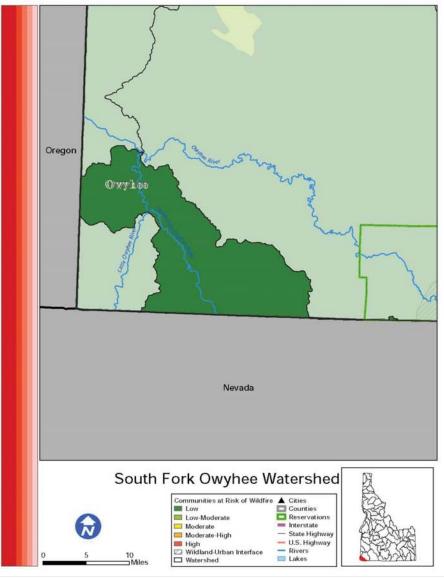
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	0%
Federal	13%
Reservation/BIA	0%
State	0%
Out of Idaho	87%

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	\$0

# Total flood mitigation actions: 26







# South Fork Owyhee

# Risk Rank: L

# Introduction

The South Fork Owyhee watershed is home to 0 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.

• Out 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**

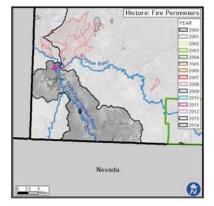
Owyhee, Shoshone-Paiute Tribes

Cities

Subbasin Metrics	
Area (sq. miles)	1,876
Population (2010)	0
Miles of Stream	517
Miles of Canal	1
Min. Elevation (ft)	4,236
Max. Elevation (ft)	10,400
Structures in WUI	No WUI
Historic Fire Events	4
Acres Burned (1995-)	932

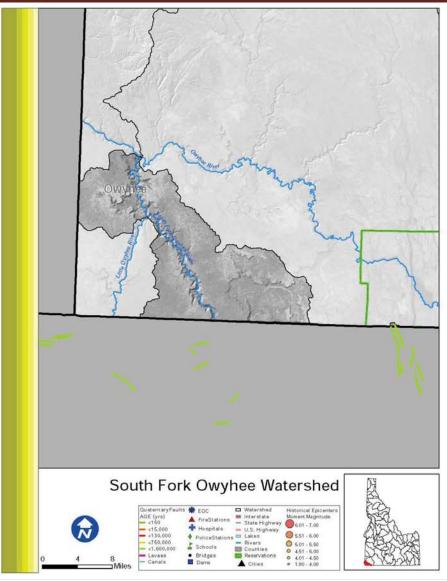
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	0%
Federal	13%
Reservation/BIA	0%
State	0%
Out of Idaho	87%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	100%
Low-Moderate	0%
Moderate	0%
Moderate-High	0%
High	0%



Total wildfire mitigation actions:





# 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 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 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

Cition

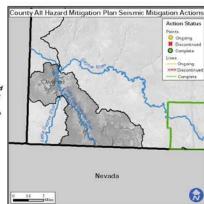
Subbasin	Me	trics	
Area (sq. miles)			1,876
Population (2010)			0
Miles of Stream			517
Miles of Canal			1
Min. Elevation (ft)	į.		4,236
Max. Elevation (ft)			10,400
Est. Facilities Near F	ault		0
% Watershed w/in 25 M	les of l	Fault	0%

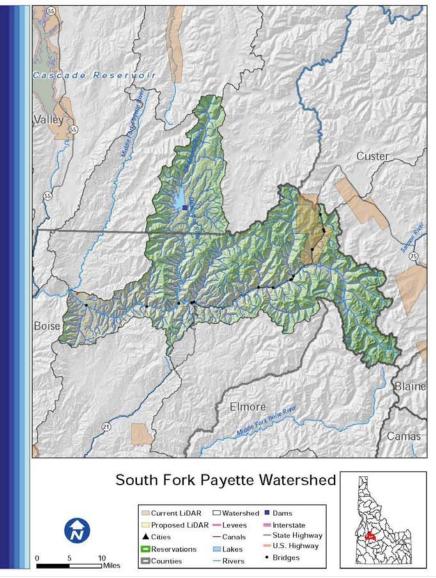
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	0%	
Federal	13%	
Reservation/ BIA	0%	
State	0%	
Out of Idaho	87%	

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	100%
Low-Moderate	0%
Moderate	0%
Moderate-High	0%
High	0%



Total seismic mitigation actions:





# South Fork Payette

# Risk Rank: L

#### ntroduction

There are 557 total people who live within the South Fork Payette watershed, of which 52 are at risk of flooding. The watershed is almost entirely federally managed.

#### What is the risk?

According to county AHMPs, 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 18 policies contributing to \$10,746 of premiums paid in exchange for \$4,414,500 of coverage.

- •0 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

#### LIDAR data 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

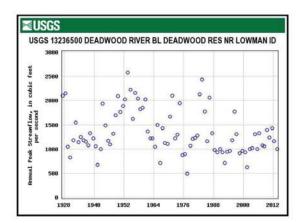
Cities

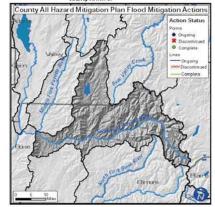
Subbasin Metrics	
Area (sq. miles)	820
Population (2010)	557
Miles of Stream	1,696
Miles of Canal	1
Min. Elevation (ft)	2,979
Max. Elevation (ft)	10,561
Dams of Concern	1
Pop. at Flood Risk	52

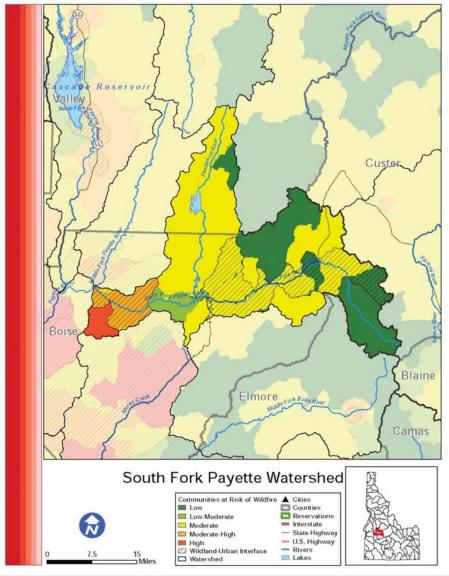
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	2%
Federal	98%
Reservation/BIA	0%
State	0%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	18
Total Coverage	\$4,414,500
Total Premiums	\$10,746
# Claims	0
Paid Claims	ŚO

# Total flood mitigation actions: 54







# 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 206 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the South Fork Payette watershed has 26.4% low risk, 3.8% low-moderate risk, 61.5% moderate risk, 5.8% moderate-high risk and 2.6% 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.

•0 out of the 4 counties in the South Fork Payette watershed identified wildfire as their number two hazard.

•0 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

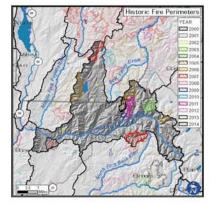
Boise, Custer, Elmore, Valley

Cities

Subbasin Metrics	
Area (sq. miles)	820
Population (2010)	557
Miles of Stream	1,696
Miles of Canal	1
Min. Elevation (ft)	2,979
Max. Elevation (ft)	10,561
Structures in WUI	844
Historic Fire Events	206
Acres Burned (1995-)	90,753

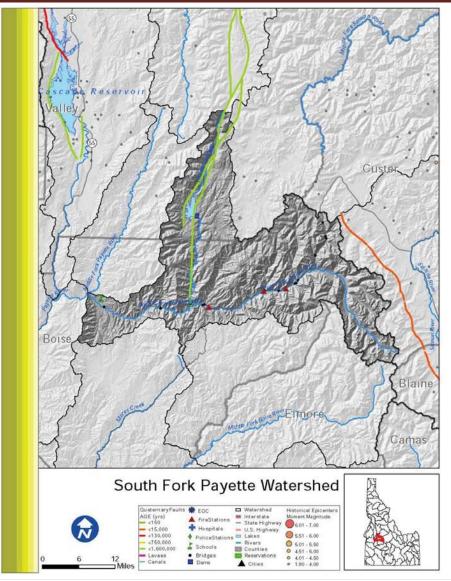
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	2%
Federal	98%
Reservation/BIA	0%
State	0%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	26.4%
Low-Moderate	3.8%
Moderate	61.5%
Moderate-High	5.8%
High	2.6%



Total wildfire mitigation actions:





# South Fork Payette

# 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**

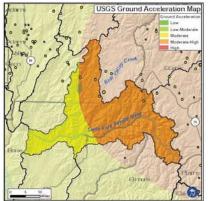
Boise, Custer, Elmore, Valley

Cities

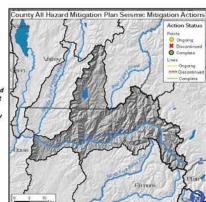
Subbasin Metrics			
Area (sq. miles)			820
Population (2010)			557
Miles of Stream			1,696
Miles of Canal			1
Min. Elevation (ft)			2,979
Max. Elevation (ft)			10,561
Est. Facilities Near Fault		4	
% Watershed w/in 25 Miles of Fault 76%		76%	

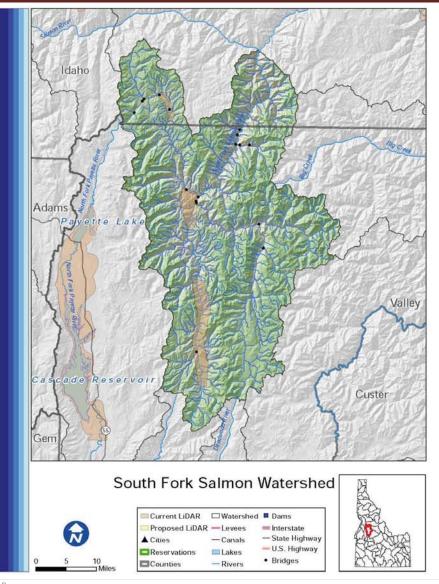
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	2%
Federal	98%
Reservation/BIA	0%
State	0%
Out of Idaho	0%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	29%
Moderate-High	71%
High	0%



Total seismic mitigation actions:





# Risk Rank: L

#### ntroduction

There are 64 total people who live within the South Fork Salmon watershed, of which none are at risk of flooding. The watershed is 99% federally managed.

#### What is the risk?

Though there are no major towns, there are a number of private lodges and retreats 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 2 counties in the South Fork Salmon watershed identified flood as their number one hazard.
- \*1 out of the 2 counties in the South Fork Salmon watershed identified flood as their number two hazard.
- •1 out of the 2 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 Secesh Rivers (2008)

#### Conclusion

Due to the lack of population, the South Fork Salmon is considered a low flood risk watershed.

#### Counties and Tribes

Idaho, Valley

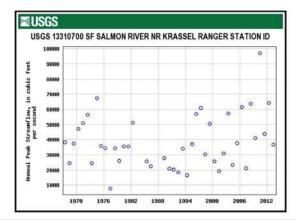
Cities

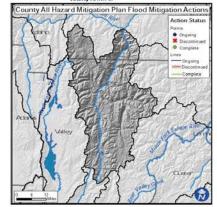
Subbasin Me	trics
Area (sq. miles)	1,317
Population (2010)	64
Miles of Stream	2,325
Miles of Canal	0
Min. Elevation (ft)	2,110
Max. Elevation (ft)	9,288
Dams of Concern	0
Pop. at Flood Risk	0

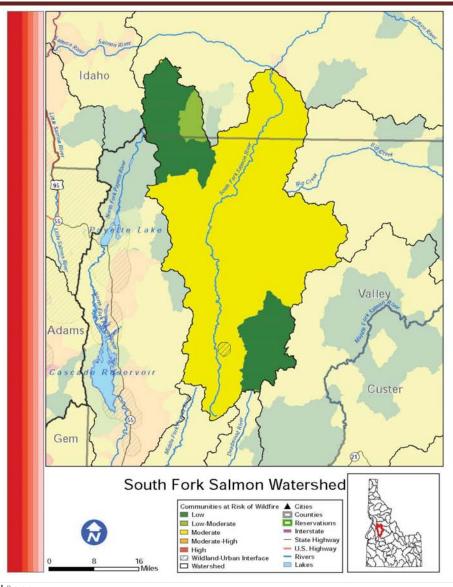
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	1%
Federal	99%
Reservation/BIA	0%
State	0%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	\$0

# Total flood mitigation actions: 20







# 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 281 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the South Fork Salmon watershed has 20.9% low risk, 2.4% low-moderate risk, 76.7% 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 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.

#### Conclusio

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

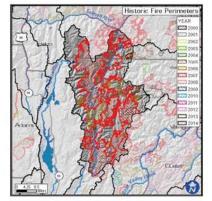
Idaho, Valley

Cities

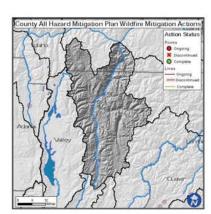
Subbasin Metrics		
Area (sq. miles)	1,317	
Population (2010)	64	
Miles of Stream	2,325	
Miles of Canal	0	
Min. Elevation (ft)	2,110	
Max. Elevation (ft)	9,288	
Structures in WUI	No WUI	
Historic Fire Events	281	
Acres Burned (1995-)	563,150	

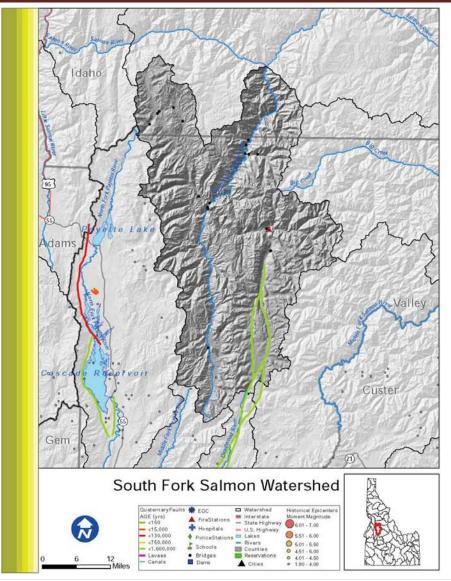
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	1%	
Federal	99%	
Reservation/BIA	0%	
State	0%	
Out of Idaho	0%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	20.9%
Low-Moderate	2.4%
Moderate	76.7%
Moderate-High	0%
High	0%



# Total wildfire mitigation actions:





# 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

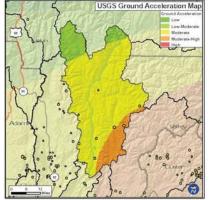
Idaho, Valley

Cities

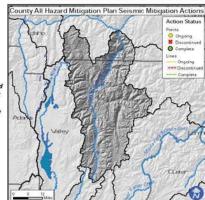
Subbasin Metrics			
Area (sq. miles)			1,317
Population (2010)			64
Miles of Stream	Ĭ.		2,325
Miles of Canal			0
Min. Elevation (ft)	Į.		2,110
Max. Elevation (ft)			9,288
Est. Facilities Near Fault		0	
% Watershed w/in 25 Miles of Fault		47%	

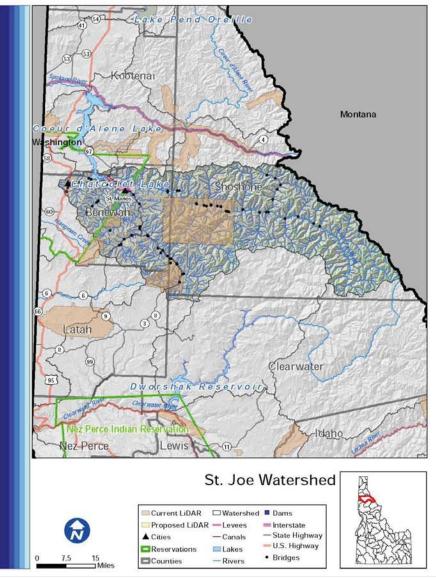
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	1%	
Federal	99%	
Reservation/BIA	0%	
State	0%	
Out of Idaho	0%	

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	13%
Moderate	75%
Moderate-High	12%
High	0%



Total seismic mitigation actions: 16





# St. Joe

# Risk Rank: H

#### ntroduction

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 Parkline, Plummer and St. Maries. There are 8,738 total people who live within the watershed, of which 802 are at risk of flooding. Around 40% of the watershed is privately owned.

#### What is the risk?

According to county AHMPs, the watershed has reported 9 floods in recent history, including ice jam flooding. There are 0 high or significant hazard dams in the St. Joe. There are 7 communities participating in the NFIP with 106 policies contributing to \$84,227 of premiums paid in exchange for \$21,963,400 of coverage.

- •0 out of the 5 counties in the St. Joe watershed identified flood as their number one hazard.
- •2 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:

- -St. Joe Woodland, Potlach and St. Joe National Forest (2003)
- -Emerald Creek (2004)
- -Coeur d'Alene Reservation (2005)

#### Conclusion

The population within the St. Joes is moderate, though many of the communities are protected by levee. Because of these factors the watershed is considered high risk.

# **Countles and Tribes**

Benewah, Clearwater, Coeur d'Alene Tribe, Kootenai, Latah, Shoshone

#### Cities

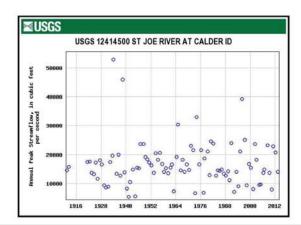
Parkline, Plummer, St. Maries

Subbasin Me	trics
Area (sq. miles)	1,845
Population (2010)	8,738
Miles of Stream	4,674
Miles of Canal	18
Min. Elevation (ft)	2,116
Max. Elevation (ft)	7,687
Dams of Concern	0
Pop. at Flood Risk	802

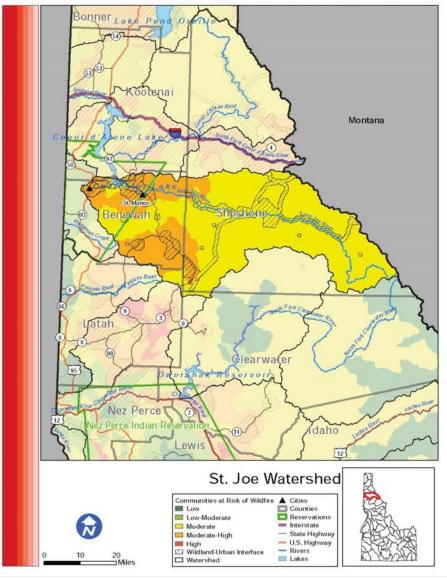
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	40%
Federal	52%
Reservation/BIA	1%
State	7%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	106
Total Coverage	\$21,963,400
Total Premiums	\$84,227
# Claims	36
Paid Claims	\$682,440

# Total flood mitigation actions: 283







# St. Joe

# Risk Rank: H

# 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 Parkline, 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 WU of the St. Joe watershed. Since 2000, 2,510 acres have burned in 176 wildfire events. Based on data from the Idaho Forest Action Plan (2010), the St. Joe watershed has 0% low risk, 0.1% low-moderate risk, 74.1% moderate risk, 25.8% 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.
- •0 out of the 5 counties in the St. Joe watershed identified wildfire as their number three hazard.

#### Conclusion

Communities within the St. Joes 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

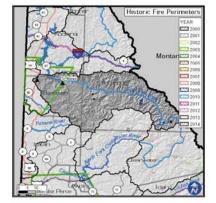
# Cities

Parkline, Plummer, St. Maries

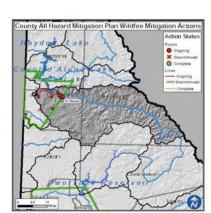
Subbasin Metrics		
Area (sq. miles)	1,845	
Population (2010)	8,738	
Miles of Stream	4,674	
Miles of Canal	18	
Min. Elevation (ft)	2,116	
Max. Elevation (ft)	7,687	
Structures in WUI	4,108	
Historic Fire Events	176	
Acres Burned (1995-)	2,510	

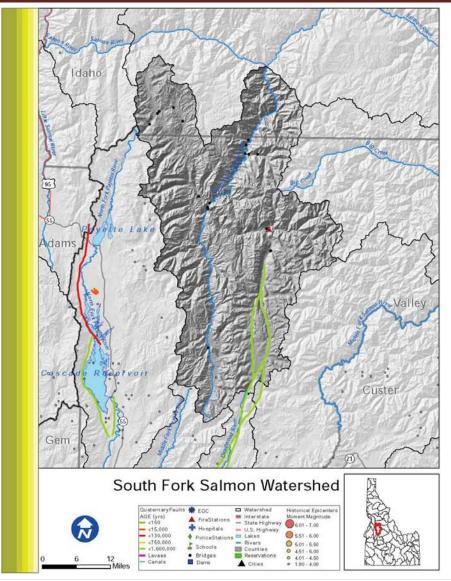
Subbasin Ownership	
Owner Type	% Subbasin Area
rivate	40%
ederal	52%
teservation/BIA	1%
tate	7%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	0%
Low-Moderate	0.1%
Moderate	74.1%
Moderate-High	25.8%
High	0%



# Total wildfire mitigation actions:





# 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

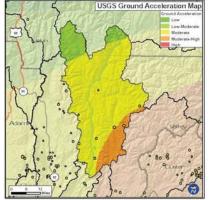
Idaho, Valley

Cities

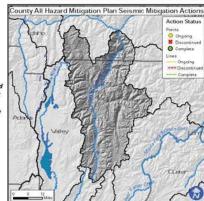
Subbasin Metrics		
Area (sq. miles)		1,317
Population (2010)		64
Miles of Stream		2,325
Miles of Canal		0
Min. Elevation (ft)	Ţ.	2,110
Max. Elevation (ft)		9,288
Est. Facilities Near F	ault	0
% Watershed w/in 25 M	lles of Fault	47%

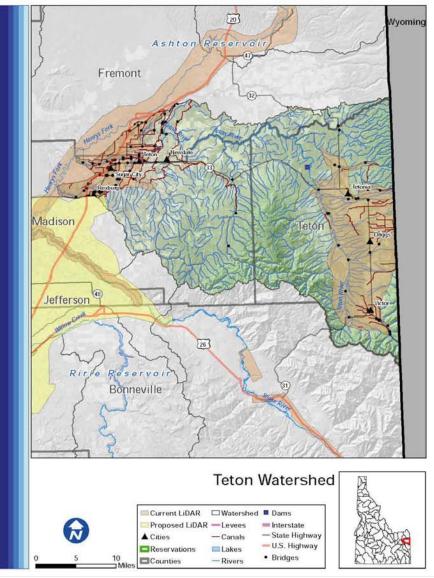
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	1%	
Federal	99%	
Reservation/BIA	0%	
State	0%	
Out of Idaho	0%	

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	13%
Moderate	75%
Moderate-High	12%
High	0%



# Total seismic mitigation actions: 16





# Teton

# Risk Rank: M

#### ntroduction

Areas of concentrated population within the Teton watershed boundaries are Driggs, Newdale, Rexburg, St. Anthony, Sugar City, Teton, Tetonia and Victor. There are 27,668 total people who live within the watershed, of which 3,774 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 1976, the Teton Dam broke, resulting in a peak flow of 1.7 million cfs (USGS) shown by the logarithmic scale of the graph below. The breach caused significant damage to life and property downstream. Additionally, there have been 16 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 \$92,639 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

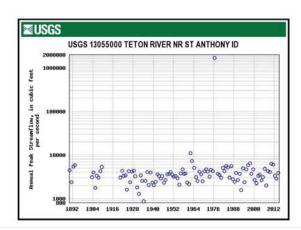
There is a moderate amount of people and private property within the Teton, though the water systems within the watershed do not pose a significant threat. Due to these factors the Teton watershed is considered to be a moderate risk watershed.

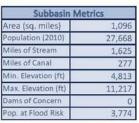
# **Counties and Tribes**

Bonneville, Fremont, Madison, Teton

#### Cities

Driggs, Newdale, Rexburg, St. Anthony, Sugar City, Teton, Tetonia, Victor

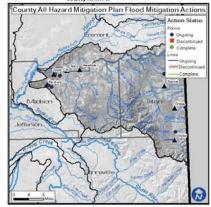


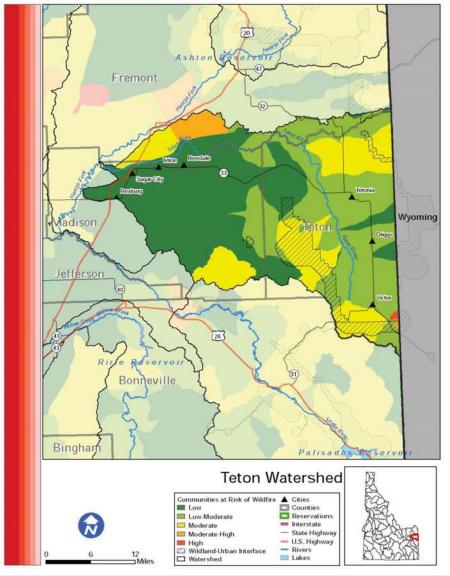


Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	55%	
Federal	17%	
Reservation/BIA	0%	
State	3%	
Out of Idaho	26%	

NFIP Statistics (2014)		
NFIP Policies	118	
Total Coverage	\$35,697,100	
Total Premiums	\$92,639	
# Claims	7	
Paid Claims	\$23,150	

# Total flood mitigation actions: 62





# Teton

# 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, Rexburg, 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 83 structures located within the WUI of the Teton watershed. Since 2000, 2,087 acres have burned during 25 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Teton watershed has 39.7% low risk, 36.3% low-moderate risk, 21.3% moderate risk, 2.6% moderate-high risk and 0.1% high risk of wildfire to the communities within the watershed.

•0 out of the 4 counties in the Teton watershed identified wildfire as their number one hazard.
•0 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

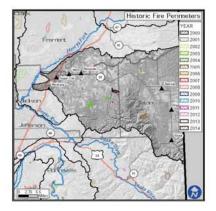
Driggs, Newdale, Rexburg, St. Anthony, Sugar City, Teton, Tetonia, Victor

Subbasin Metrics	
Area (sq. miles)	1,096
Population (2010)	27,668
Miles of Stream	1,625
Miles of Canal	277
Min. Elevation (ft)	4,813
Max. Elevation (ft)	11,217
Structures in WUI	83
Historic Fire Events	25

cres Burned (1995

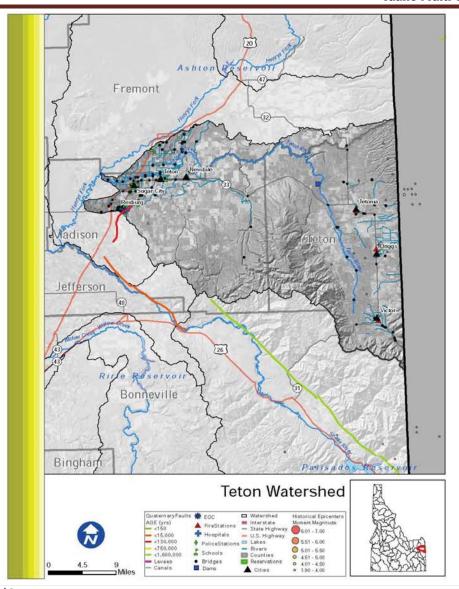
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	55%	
Federal	17%	
Reservation/BIA	0%	
State	3%	
Out of Idaho	26%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	39.7%
Low-Moderate	36.3%
Moderate	21.3%
Moderate-High	2.6%
High	0.1%



# Total wildfire mitigation actions:





# Teton

# Risk Rank: H

#### Introduction

Areas of concentrated population within the Teton watershed boundaries are Driggs, Newdale, Rexburg, St. Anthony, Sugar City, Teton, Tetonia and Victor.

#### tations in along state 2

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

- •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

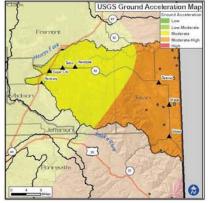
#### Citie

Driggs, Newdale, Rexburg, St. Anthony, Sugar City, Teton, Tetonia, Victor

Subbasin Metrics			
Area (sq. miles)			1,096
Population (2010)	27,668		
Miles of Stream			1,625
Miles of Canal	277		
Min. Elevation (ft)	į.		4,813
Max. Elevation (ft)	11,217		
Est. Facilities Near Fault			32
% Watershed w/in 25 Miles of Fault 1009		100%	

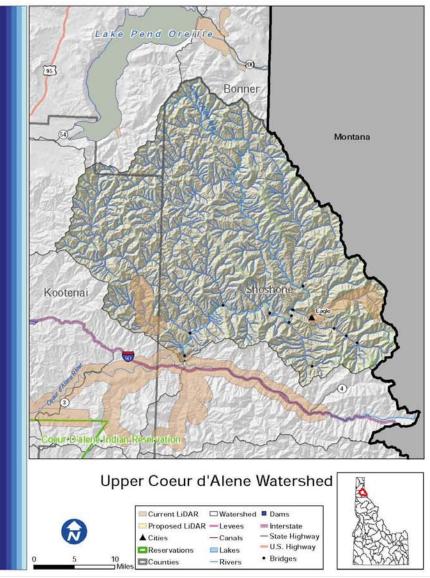
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	55%	
Federal	17%	
Reservation/ BIA	0%	
State	3%	
Out of Idaho	26%	

Ground Acceleration		
Accel. Amoun	%Watershed Are	
Low	0%	
Low-Moderate	0%	
Moderate	48%	
Moderate-High	52%	
High	0%	



# Total seismic mitigation actions: 42





# Upper Coeur d'Alene

#### Risk Rank: L

#### ntroduction

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 0 high or significant hazard dams in the Upper Coeur d'Alene watershed. There are 3 communities participating in the NFIP with 40 policies contributing to \$28,956 of premiums paid in exchange for \$6,045,400 of coverage.

•0 out of the 3 counties in the Upper Coeur d'Alene watershed identified flood as their number one hazard.

•0 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)

-Jack Waite Mine (2007)

#### 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

Bonner, Kootenai, Shoshone

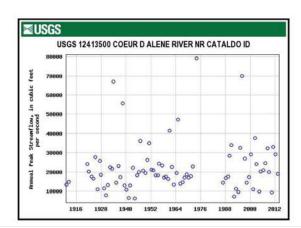
Cities

Subbasin Metrics		
Area (sq. miles)	895	
Population (2010)	481	
Miles of Stream	2,048	
Miles of Canal	1	
Min. Elevation (ft)	2,162	
Max. Elevation (ft)	6,795	
Dams of Concern	0	
Pop. at Flood Risk	128	

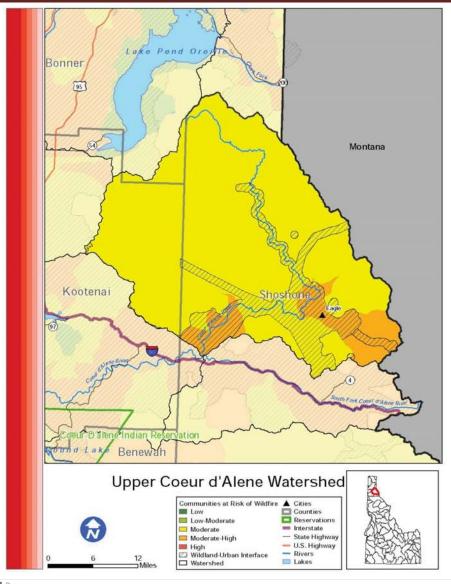
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	4%
Federal	95%
Reservation/BIA	0%
State	1%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	40
Total Coverage	\$6,045,400
Total Premiums	\$28,956
# Claims	41
Paid Claims	\$644 940

# Total flood mitigation actions: 156







# 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 (2010), the Upper Coeur d'Alene watershed has 0% low risk, 0% low-moderate risk, 88.7% moderate risk, 11.3% 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

Subbasin Metrics	
Area (sq. miles)	895
Population (2010)	481
Miles of Stream	2,048
Miles of Canal	1
Min. Elevation (ft)	2,162
Max. Elevation (ft)	6,795
Structures in WUI	0
Historic Fire Events	201
Acres Burned (1995-)	4,419

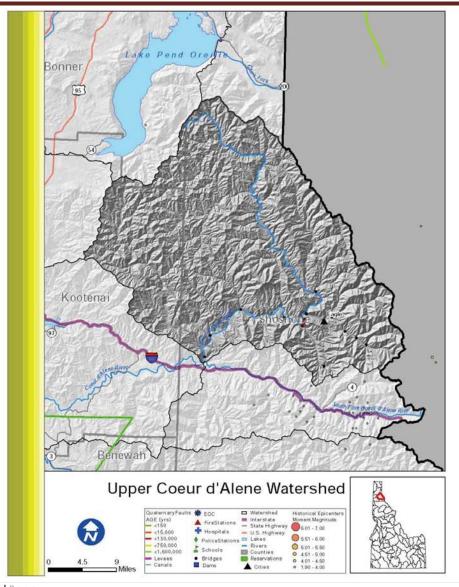
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	4%
Federal	95%
Reservation/BIA	0%
State	1%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	88.7%
Moderate-High	11.3%
High	0%



# Total wildfire mitigation actions: 66





# 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

Cition

Subbasin Metrics		
Area (sq. miles)		895
Population (2010)		481
Miles of Stream		2,048
Miles of Canal		1
Min. Elevation (ft)	į.	2,162
Max. Elevation (ft)		6,795
Est. Facilities Near Fault (		0
% Watershed w/in 25 M	les of Fault	0%

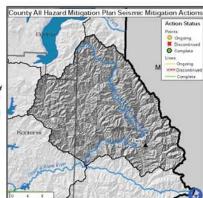
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	4%
Federal	95%
Reservation/BIA	0%
State	1%
Out of Idaho	0%

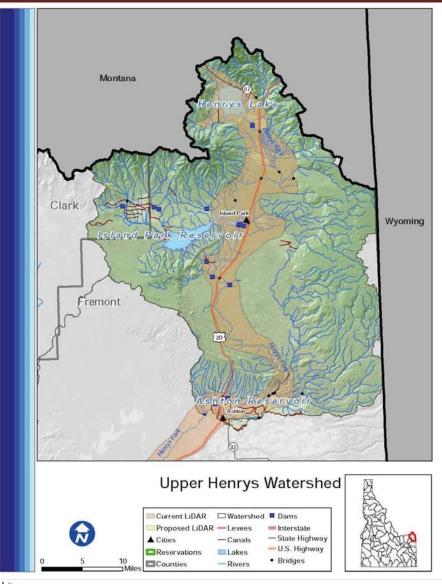
Ground	Acceleration
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	100%
Moderate	0%
Moderate-High	0%
High	0%



Total seismic mitigation actions:

31





# **Upper Henry's**

# Risk Rank: M

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 94 are at risk of flooding. The majority of the Upper Henrys watershed is federally managed.

Major flood hazards come from the 7 high or significant hazard dams in the Upper Henrys watershed, including the Henrys 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 \$2,136,200 of coverage.

- •0 out of the 2 counties in the Upper Henrys watershed identified flood as their number one hazard.
- •0 out of the 2 counties in the Upper Henrys watershed identified flood as their number two hazard.
- •2 out of the 2 counties in the Upper Henrys watershed identified flood as their number three hazard.

# LIDAR data availability

LIDAR availability within the Upper Henrys watershed is as follows:

-Henry's Fork and Teton (2011)

Though the population is relatively low and the watershed is largely federally managed, the hazardous dams within the watershed place the Upper Henrys watershed in the moderate flood risk category.

#### **Counties and Tribes**

Clark, Fremont

Ashton, Island Park, Warm River

Subbasin Metrics	
Area (sq. miles)	1,111
Population (2010)	2,845
Miles of Stream	1,769
Miles of Canal	84
Min. Elevation (ft)	5,148
Max. Elevation (ft)	10,407

Dams of Concern

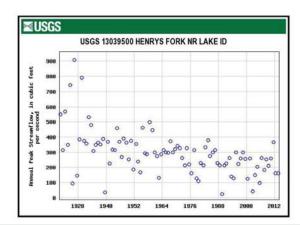
Pop. at Flood Risk

Subbasin Ownership	
Owner Type	% Subbasin Area
Private	12%
Federal	78%
Reservation/BIA	0%
State	7%
Out of Idaho	2%

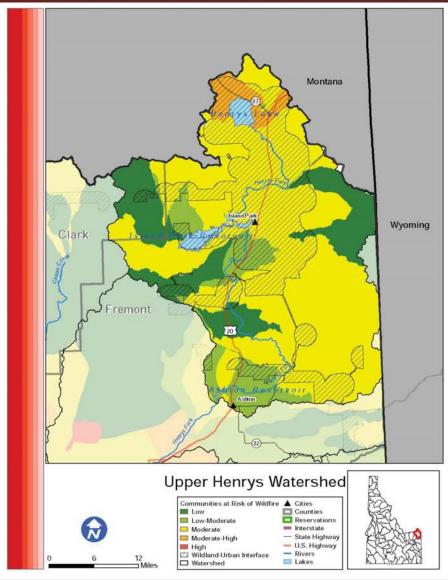
NFIP Statistics (2014)	
NFIP Policies	9
Total Coverage	\$2,136,200
Total Premiums	\$13,122
# Claims	0
Paid Claims	\$0

# 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, 1,450 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, 67% 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
- •0 out of the 2 counties in the Upper Henrys watershed identified wildfire as their number two hazard.
- •0 out of the 2 counties in the Upper Henrys watershed identified wildfire as their number three 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

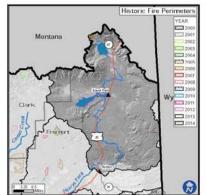
# Cities

Ashton, Island Park, Warm River

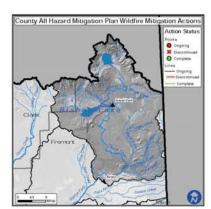
Subbasin Metrics		
Area (sq. miles)	1,111	
Population (2010)	2,845	
Miles of Stream	1,769	
Miles of Canal	84	
Min. Elevation (ft)	5,148	
Max. Elevation (ft)	10,407	
Structures in WUI	4,111	
Historic Fire Events	52	
Acres Burned (1995-)	1,450	

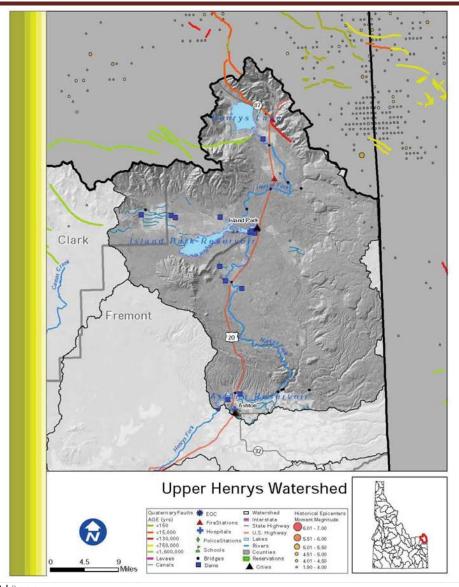
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	12%	
Federal	78%	
Reservation/BIA	0%	
State	7%	
Out of Idaho	2%	

Watershed Fire Risk	
Risk Level %Watershed A	
Low	17.6%
Low-Moderate	11.1%
Moderate	67%
Moderate-High	4.4%
High	0%



Total wildfire mitigation actions: 25





# **Upper Henry's**

# Risk Rank: H

#### Introduction

Areas of concentrated population within the Upper Henrys 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 disturbances.

There are 6 essential facilities within 25 miles of a quaternary fault.

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

# **Counties and Tribes**

Clark, Fremont

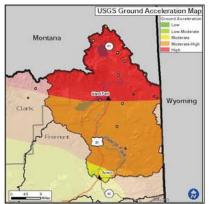
#### Cities

Ashton, Island Park, Warm River

Subbasin Metrics			
Area (sq. miles)	1	1,111	
Population (2010)		2,845	
Miles of Stream		1,769	
Miles of Canal	84		
Min. Elevation (ft)	į.	5,148	
Max. Elevation (ft)	10,407		
Est. Facilities Near Fault		6	
% Watershed w/in 25 Miles of Fault		91%	

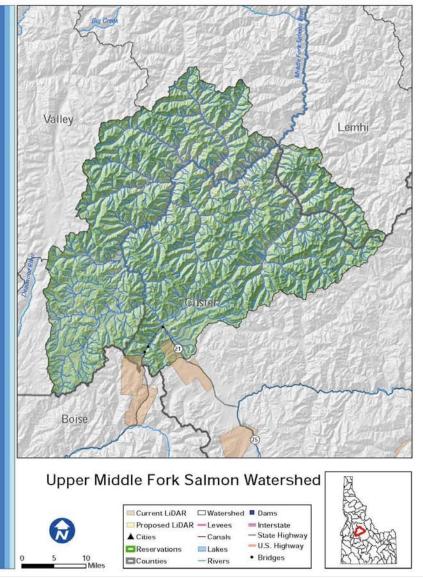
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	12%	
Federal	78%	
Reservation/BIA	0%	
State	7%	
Out of Idaho	2%	

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	2%
Moderate-High	57%
High	41%



Total seismic mitigation actions: 12





# **Upper Middle Fork Salmon**

# Risk Rank: L

#### ntroduction

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 0 high or significant hazard dams 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 4 counties in the Upper Middle Fork Salmon watershed identified flood as their number one hazard.
- •1 out of the 4 counties in the Upper Middle Fork Salmon watershed identified flood as their number two hazard.
- •1 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

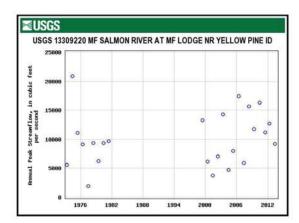
Cities

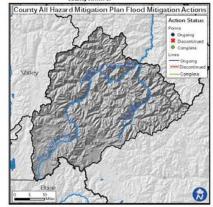
Subbasin Metrics	
Area (sq. miles)	1,494
Population (2010)	5
Miles of Stream	3,183
Miles of Canal	1
Min. Elevation (ft)	4,012
Max. Elevation (ft)	10,305
Dams of Concern	0
Pon at Flood Risk	0

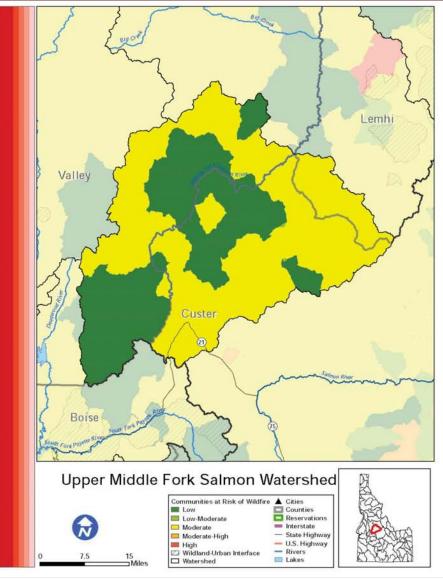
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	0%
Federal	99%
Reservation/BIA	0%
State	0%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	ŚO

# Total flood mitigation actions: 47







# Upper Middle Fork Salmon

# Risk Rank: L

# Introduction

The Upper Middle Fork Salmon watershed is home to 5 people and ther is no Wildland Urban Interface. There are no concentrated areas of population within the watershed.

# What is the risk?

Since 2000, 486,351 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 38.7% low risk, 0.1% low-moderate risk, 61.3% 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.

• 0 out of the 4 counties in the Upper Middle Fork Salmon watershed identified wildfire as their number two hazard.

•0 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

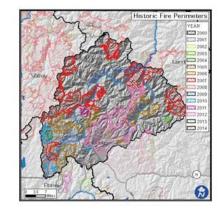
Boise, Custer, Lemhi, Valley

Cities

Subbasin Metrics		
Area (sq. miles)	1,494	
Population (2010)	5	
Miles of Stream	3,183	
Miles of Canal	1	
Min. Elevation (ft)	4,012	
Max. Elevation (ft)	10,305	
Structures in WUI	0	
Historic Fire Events	179	
Acres Burned (1995-)	486,351	

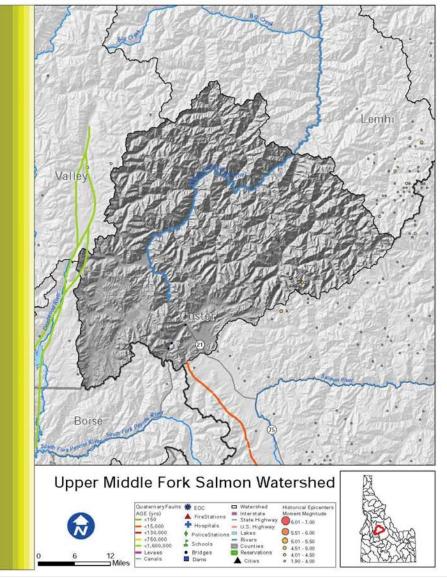
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	0%	
Federal	99%	
Reservation/BIA	0%	
State	0%	
Out of Idaho	0%	

Watershed Fire Risk		
Risk Level	%Watershed Are	
Low	38.7%	
Low-Moderate	0.1%	
Moderate	61.3%	
Moderate-High	0%	
High	0%	



Total wildfire mitigation actions:





# **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			
Area (sq. miles)			1,494
Population (2010)			5
Miles of Stream			3,183
Miles of Canal			1
Min. Elevation (ft)	į.		4,012
Max. Elevation (ft)	10,305		
Est. Facilities Near Fault		0	
% Watershed w/in 25 M	les of	Fault	50%

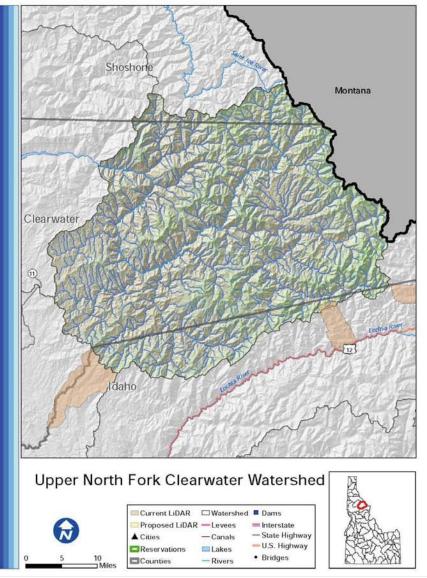
Subbasin Ownership	
Owner Type % Subbasin Are	
Private	0%
Federal	99%
Reservation/BIA	0%
State	0%
Out of Idaho	0%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	0%
Moderate-High	100%
High	0%



Total seismic mitigation actions: 56





# **Upper North Fork Clearwater**

# Risk Rank: L

#### ntroduction

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. Bankful discharge of the Clearwater River is 16,300 cfs. According to county AHMPs, there have been 9 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.
- •1 out of the 3 counties in the Upper North Fork Clearwater watershed identified flood as their number
- •1 out of the 3 counties in the Upper North Fork Clearwater watershed identified flood as their number three hazard.

# LIDAR data availability

UDAR availability within the Upper North Fork Clearwater watershed is as follows:
-Shotgun Creek (2009)

#### Conclusion

The lack of residents and private property of the Upper North Fork Clearwater makes it a low flood risk watershed.

# **Countles and Tribes**

Clearwater, Idaho, Shoshone

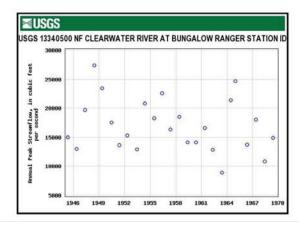
Cities

Subbasin Metrics	
Area (sq. miles)	1,300
Population (2010)	0
Miles of Stream	3,080
Miles of Canal	0
Min. Elevation (ft)	1,673
Max. Elevation (ft)	7,851
Dams of Concern	0
Pop. at Flood Risk	0

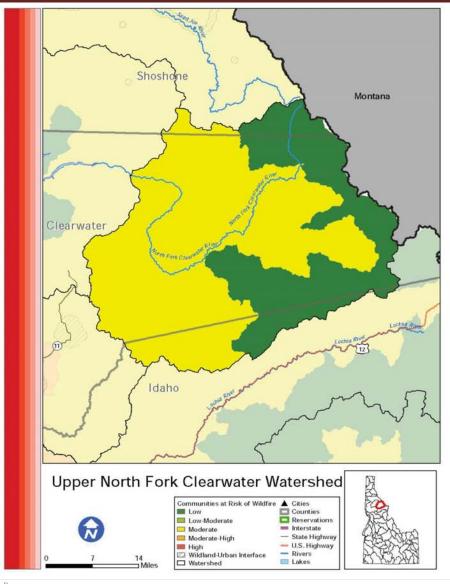
Subbasin Ownership	
Owner Type % Subbasin Area	
Private	4%
Federal	95%
Reservation/BIA	0%
State	1%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	ŚO

# Total flood mitigation actions: 124







# **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 339 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Upper North Fork Clearwater watershed has 32% low risk, 0% low-moderate risk, 68% 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

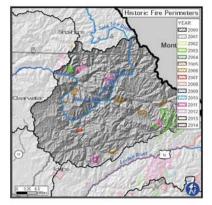
Clearwater, Idaho, Shoshone

Cities

Subbasin Metrics	
Area (sq. miles)	1,300
Population (2010)	0
Miles of Stream	3,080
Miles of Canal	0
Min. Elevation (ft)	1,673
Max. Elevation (ft)	7,851
Structures in WUI	No WUI
Historic Fire Events	339
Acres Burned (1995-)	26,379

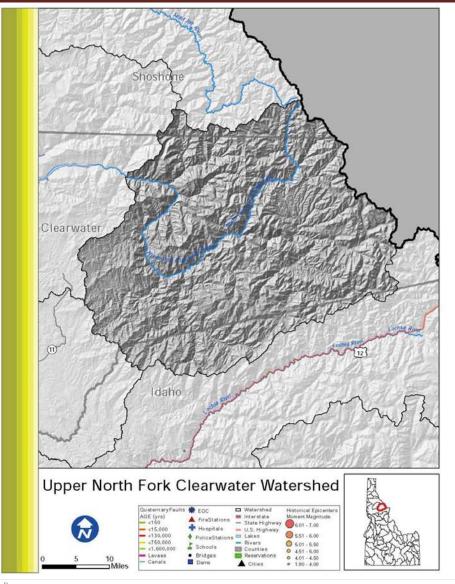
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	4%
Federal	95%
Reservation/BIA	0%
State	1%
Out of Idaho	0%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	32%
Low-Moderate	0%
Moderate	68%
Moderate-High	0%
High	0%



Total wildfire mitigation actions:





# **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

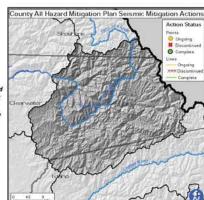
Subbasin Metrics		
Area (sq. miles)		1,300
Population (2010)		0
Miles of Stream		3,080
Miles of Canal		0
Min. Elevation (ft)		1,673
Max. Elevation (ft)		7,851
Est. Facilities Near F	ault	0
% Watershed w/in 25 M	lles of Fault	0%

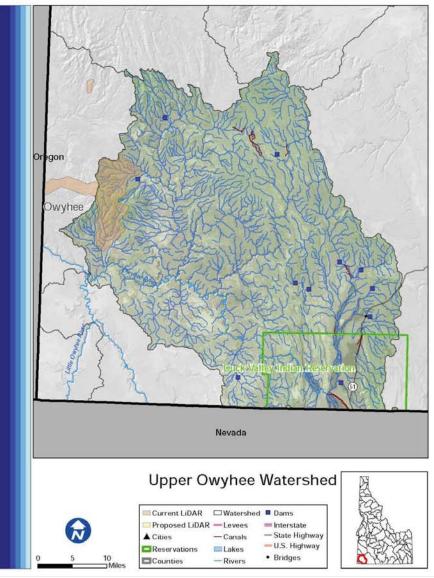
Subbasin Ownership	
Owner Type % Subbasin Are	
Private	4%
Federal	95%
Reservation/BIA	0%
State	1%
Out of Idaho	0%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	89%
Low-Moderate	11%
Moderate	0%
Moderate-High	0%
High	0%



Total seismic mitigation actions: 27





# **Upper Owyhee**

# 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 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 Upper Owyhee watershed identified flood as their number one hazard.
- •0 out of the 1 county in the Upper Owyhee watershed identified flood as their number two hazard.
- •0 out 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)

-Juniper Mtn. Transect (2008)

#### 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

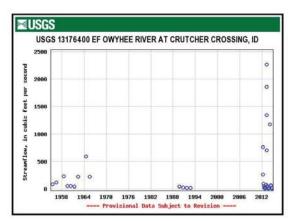
Cities

Subbasin Metrics	
Area (sq. miles)	2,167
Population (2010)	381
Miles of Stream	3,352
Miles of Canal	53
Min. Elevation (ft)	4,236
Max. Elevation (ft)	9,098
Dams of Concern	4
Pop. at Flood Risk	20

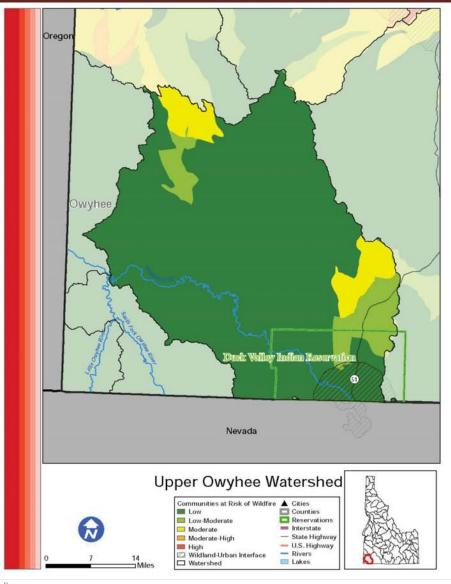
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	5%
Federal	55%
Reservation/BIA	9%
State	5%
Out of Idaho	26%

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	\$0

# Total flood mitigation actions: 28







# **Upper Owyhee**

# Risk Rank: L

# Introduction

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, 6.7% 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 Upper Owyhee watershed identified wildfire as their number one hazard.
- •0 out of the 1 county in the Upper Owyhee watershed identified wildfire as their number two hazard.
- ullet 0 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**

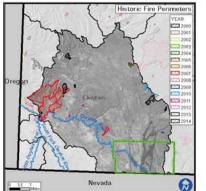
Owyhee; Duck Valley

Cities

Subbasin Metrics	
Area (sq. miles)	2,167
Population (2010)	381
Miles of Stream	3,352
Miles of Canal	53
Min. Elevation (ft)	4,236
Max. Elevation (ft)	9,098
Structures in WUI	0
Historic Fire Events	68
Acres Burned (1995-)	81,231

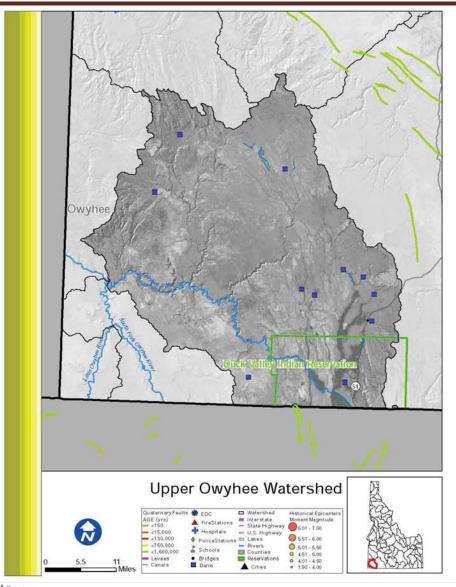
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	5%
Federal	55%
Reservation/BIA	9%
State	5%
Out of Idaho	26%

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	85.3%
Low-Moderate	7.9%
Moderate	6.7%
Moderate-High	0%
High	0%



Total wildfire mitigation actions: 10





# **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

Subbasin Metrics		
Area (sq. miles)		2,167
Population (2010)		381
Miles of Stream		3,352
Miles of Canal		53
Min. Elevation (ft)	Ţ	4,236
Max. Elevation (ft)		9,098
Est. Facilities Near Fault (		0
% Watershed w/in 25 Miles of Fault 0		0%

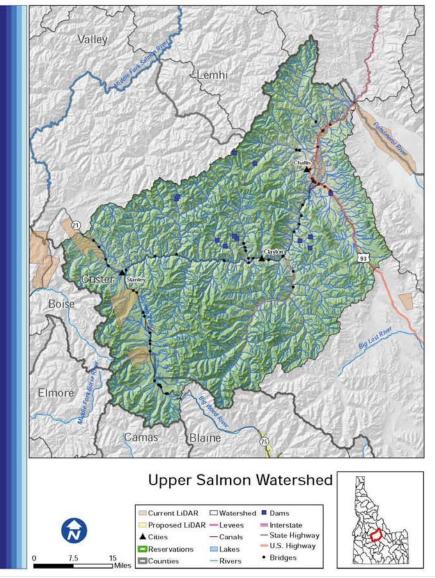
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	5%
Federal	55%
Reservation/ BIA	9%
State	5%
Out of Idaho	26%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	100%
Low-Moderate	0%
Moderate	0%
Moderate-High	0%
High	0%



# Total seismic mitigation actions: 3





# **Upper Salmon**

# Risk Rank: M

#### ntroduction

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 302 are at risk of flooding. The watershed is 90% 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 AHMPs, 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.

- •0 out of the 6 counties in the Upper Salmon watershed identified flood as their number one hazard.
- •0 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 (2005)
- -Sawtooth South -Pettit Lake (2005)
- -Small portion of Pahsimeroi 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**

Blaine, Boise, Camas, Custer, Elmore, Lemhi

#### Cities

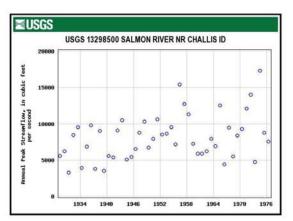
Challis, Clayton, Stanley

Subbasin Metrics	
Area (sq. miles)	2,427
Population (2010)	2,856
Miles of Stream	5,654
Miles of Canal	58
Min. Elevation (ft)	4,636
Max. Elevation (ft)	11,739
Dams of Concern	5
Pop. at Flood Risk	302

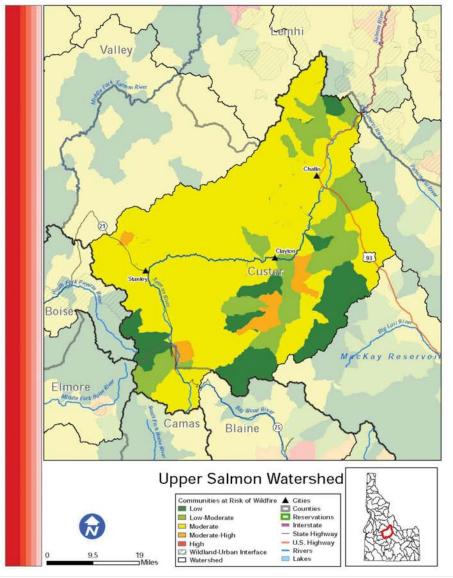
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	5%
Federal	94%
Reservation/BIA	0%
State	2%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	36
Total Coverage	\$6,471,200
Total Premiums	\$19,150
# Claims	0
Paid Claims	ŚO

# Total flood mitigation actions: 111







# Upper Salmon

#### Risk Rank: M

#### Introduction

The Upper Salmon watershed is home to 2,856 people and there is no 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 (2010), the Upper Salmon watershed has 13.7% low risk, 15.9% 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 the 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

O out of the 6 counties in the Upper Salmon watershed identified wildfire as their number two azard.

•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 90% federally managed. The overall risk is low.

#### **Counties and Tribes**

Blaine, Boise, Camas, Custer, Elmore, Lemhi

#### Cities

Challis, Clayton, Stanley

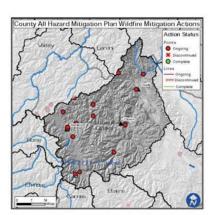
Subbasin Metrics	
Area (sq. miles)	2,427
Population (2010)	2,856
Miles of Stream	5,654
Miles of Canal	58
Min. Elevation (ft)	4,636
Max. Elevation (ft)	11,739
Structures in WUI	No WUI
Historic Fire Events	176
Acres Burned (1995-)	179,015

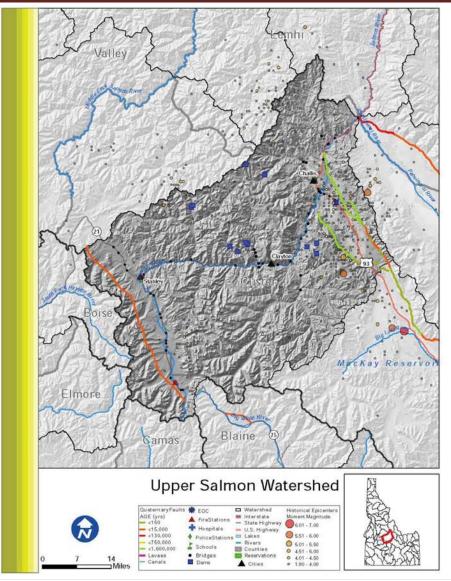
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	5%	
Federal	94%	
Reservation/BIA	0%	
State	2%	
Out of Idaho	0%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	13.7%
Low-Moderate	15.9%
Moderate	66.8%
Moderate-High	3.7%
High	0%



# Total wildfire mitigation actions:





# **Upper Salmon**

#### Risk Rank: H

#### Introduction

Areas of concentrated population within the Upper Salmon watershed boundaries are Challis, Clayton and Stanley.

## 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 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

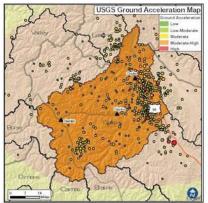
#### Cities

Challis, Clayton, Stanley

Subbasin Metrics			
Area (sq. miles)			2,427
Population (2010)			2,856
Miles of Stream			5,654
Miles of Canal			58
Min. Elevation (ft)	į.		4,636
Max. Elevation (ft)			11,739
Est. Facilities Near Fault 10		10	
% Watershed w/in 25 M	lles of	Fault	97%

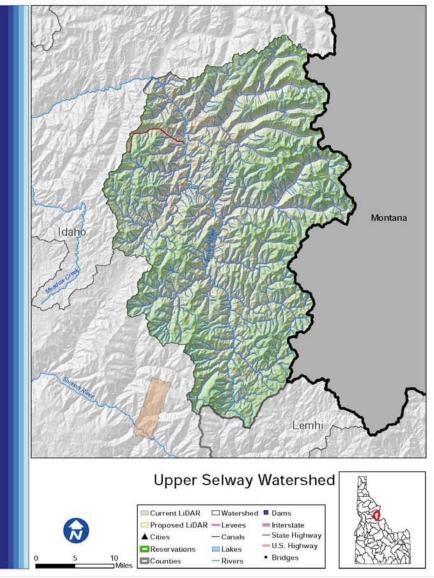
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	5%
Federal	94%
Reservation/BIA	0%
State	2%
Out of Idaho	0%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	0%
Moderate	0%
Moderate-High	100%
High	0%



Total seismic mitigation actions: 70





# **Upper Selway**

#### Risk Rank: L

#### 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 2 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 premiums 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.
- •1 out of the 2 counties in the Upper Selway watershed identified flood as their number two hazard.
- •0 out of the 2 counties in the Upper Selway watershed identified flood as their number three 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

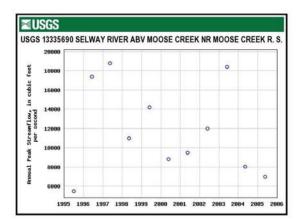
Cities

Subbasin Metrics	
Area (sq. miles)	1,030
Population (2010)	.0
Miles of Stream	2,131
Miles of Canal	0
Min. Elevation (ft)	2,188
Max. Elevation (ft)	9,301
Dams of Concern	0
Pop. at Flood Risk	0.

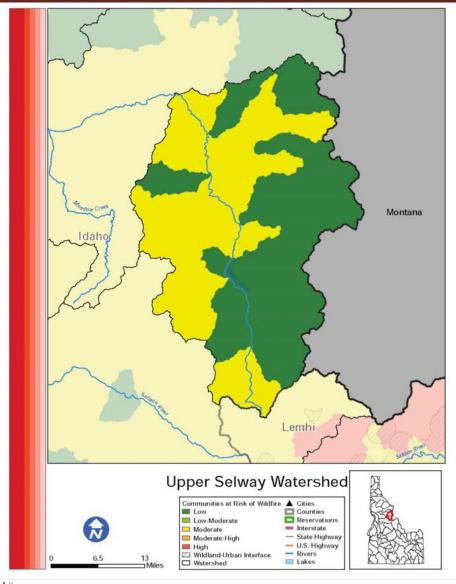
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	0%
Federal	100%
Reservation/BIA	0%
State	0%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	0
Total Coverage	\$0
Total Premiums	\$0
# Claims	0
Paid Claims	ŚO

## Total flood mitigation actions: 18







# Upper Selway

#### 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**

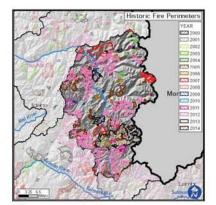
Idaho, Lemhi

Cities

Subbasin Metrics		
Area (sq. miles)	1,030	
Population (2010)	0	
Miles of Stream	2,131	
Miles of Canal	0	
Min. Elevation (ft)	2,188	
Max. Elevation (ft)	9,301	
Structures in WUI	No WU	
Historic Fire Events	250	
Acres Burned (1995-)	354,312	

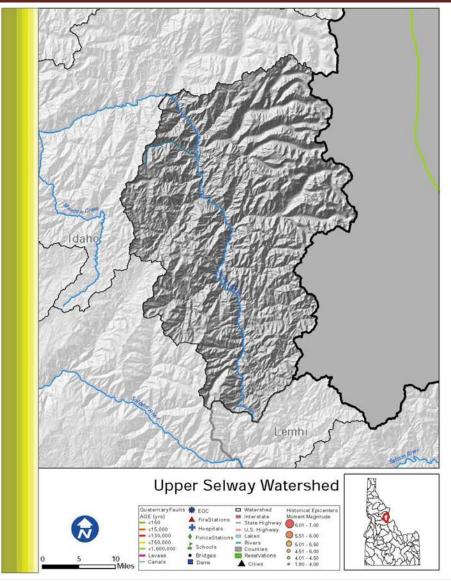
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	0%	
Federal	100%	
Reservation/BIA	0%	
State	0%	
Out of Idaho	0%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	51.7%
Low-Moderate	0%
Moderate	48.3%
Moderate-High	0%
High	0%



Total wildfire mitigation actions:





# **Upper Selway**

#### 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

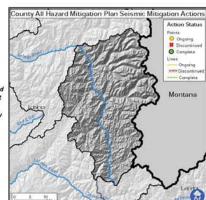
Subbasin	Mad	nies	
	IVIE	rics	
Area (sq. miles)			1,030
Population (2010)			0
Miles of Stream	l		2,131
Miles of Canal			0
Min. Elevation (ft)	Į.		2,188
Max. Elevation (ft)			9,301
Est. Facilities Near Fault			0
% Watershed w/in 25 M	les of I	ault	0%

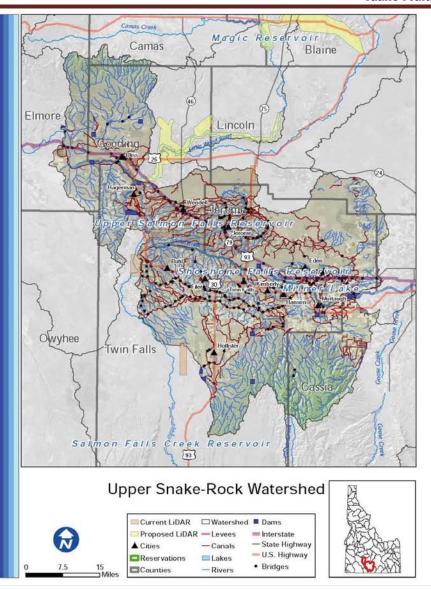
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	0%	
Federal	100%	
Reservation/BIA	0%	
State	0%	
Out of Idaho	0%	

Ground Acceleration		
Accel. Amoun	%Watershed Are	
Low	73%	
Low-Moderate	27%	
Moderate	0%	
Moderate-High	0%	
High	0%	



Total seismic mitigation actions: 17





## Upper Snake-Rock

#### Risk Rank: H

#### Introduction

Areas of concentrated population within the Upper Snake-Rock watershed boundaries are Bliss, Buhl, Eden, Filer, Hagerman, Hansen, Hazelton, Hollister, Jerome, Kimberly, Murtaugh, Twin Falls and Wendell. There are 107,887 total people who live within the watershed, of which 2,217 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 AHMPs, with 57 significant flood events reported in recent history within the watershed. There are 11 communities participating in the NFIP with 77 policies contributing to \$66,109 of premiums paid in exchange for \$15,217,600 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

#### LiDAR data availability

LIDAR availability within the Upper Snake Rock watershed is as follows:

-Salmon Falls (2005, 2010)

- -Box Canyon (2006)
- -Hollister (2010, 2011)
- -ITD, District 4 US 93 (2013)

#### Conclusion

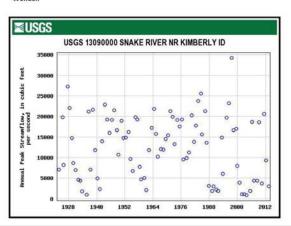
Despite the relatively few residents or properties that exist within the incised Snake River Canyon, the large portion of private ownership and presence of 14 hazardous dams place the Upper Snake-Rock watershed into the high flood risk category.

## Counties and Tribes

Camas, Cassia, Elmore, Gooding, Jerome, Lincoln, Minidoka, Owyhee, Twin Falls

#### Cities

Bliss, Buhl, Eden, Filer, Hagerman, Hansen, Hazelton, Hollister, Jerome, Kimberly, Murtaugh, Twin Falls, Wendell



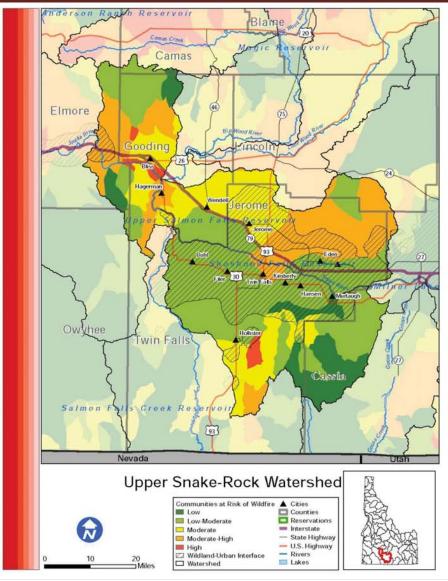
Subbasin Metrics		
Area (sq. miles)	2,488	
Population (2010)	107,887	
Miles of Stream	2,700	
Miles of Canal	1,217	
Min. Elevation (ft)	2,500	
Max. Elevation (ft)	8,002	
Dams of Concern	14	
Pop. at Flood Risk	2,217	

Subbasin Ownership	
Owner Type	% Subbasin Area
Private	52%
Federal	45%
Reservation/BIA	0%
State	3%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	77
Total Coverage	\$15,217,600
Total Premiums	\$66,109
# Claims	8
Paid Claims	\$14,425

### Total flood mitigation actions: 124





## **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, Buhl, Eden, Filer, Hagerman, Hansen, Hazelton, Hollister, Jerome, Kimberly, Murtaugh, 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 27,069 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 (2010), the Upper Snake-Rock watershed has 9.2% low risk, 45.2% low-moderate risk, 20.5% moderate risk, 13.4% moderate-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

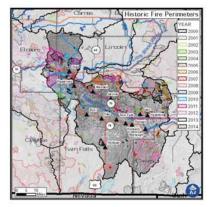
#### Cities

Bliss, Buhl, Eden, Filer, Hagerman, Hansen, Hazelton, Hollister, Jerome, Kimberly, Murtaugh, Twin Falls, Wendell

Subbasin Metrics		
Area (sq. miles)	2,488	
Population (2010)	107,887	
Miles of Stream	2,700	
Miles of Canal	1,217	
Min. Elevation (ft)	2,500	
Max. Elevation (ft)	8,002	
Structures in WUI	27,069	
Historic Fire Events	552	
Acres Burned (1995-)	565,939	

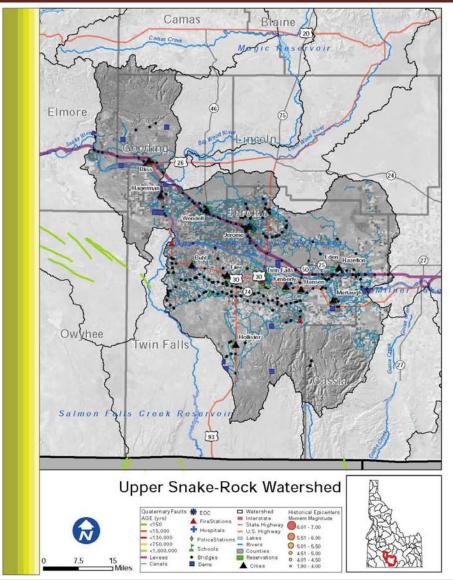
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	52%	
Federal	45%	
Reservation/BIA	0%	
State	3%	
Out of Idaho	0%	

Watershed Fire Risk		
Risk Level	%Watershed Are	
Low	9.2%	
Low-Moderate	45.2%	
Moderate	20.5%	
Moderate-High	13.4%	
High	1.6%	



# Total wildfire mitigation actions:





# Upper Snake-Rock

#### Risk Rank: M

#### Introduction

Areas of concentrated population within the Upper Snake-Rock watershed boundaries are Bliss, Buhl, Eden, Filer, Hagerman, Hansen, Hazelton, 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

#### Citie

Bliss, Buhl, Eden, Filer, Hagerman, Hansen, Hazelton, Hollister, Jerome, Kimberly, Murtaugh, Twin Falls, Wendell

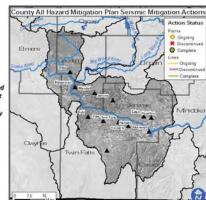
Subbasin Metrics		
Area (sq. miles)		2,488
Population (2010)	1	07,887
Miles of Stream		2,700
Miles of Canal		1,217
Min. Elevation (ft)		2,500
Max. Elevation (ft)		8,002
Est. Facilities Near F	ault	0
% Watershed w/in 25 Miles of Fault 09		0%

Subbasin Ownership	
Owner Type	% Subbasin Area
Private	52%
Federal	45%
Reservation/BIA	0%
State	3%
Out of Idaho	0%

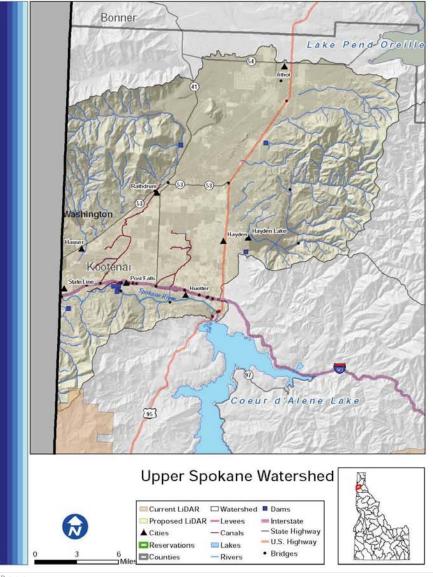
Ground	Acceleration
Accel. Amoun	%Watershed Are
Low	92%
Low-Moderate	8%
Moderate	0%
Moderate-High	0%
High	0%



Total seismic mitigation actions: 42



1,608



## **Upper Spokane**

#### Risk Rank: H

#### ntroduction

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, Huetter, Post Falls, Rathdrum and State Line. There are 99,092 total people who live within the watershed, of which 1,608 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 AHMP, 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 193 policies contributing to \$152,278 of premiums paid in exchange for \$49,083,500 of coverage.

- •0 out of the 1 county in the Upper Spokane watershed identified flood as their number one hazard.
- •0 out of the 1 county in the Upper Spokane watershed identified flood as their number two hazard.
- •1 out of the 1 county 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 (2005)

#### Conclusion

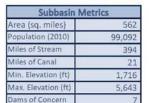
Due to the high population, variable flows of the Spokane River, large amount of private property and presence of moderate hazard dams, the Upper Spokane is considered a high risk watershed.

#### Counties and Tribes

Kootenai

#### Cities

Athol, Coeur d'Alene, Dalton Gardens, Hauser, Hayden Lake, Hayden, Huetter, Post Falls, Rathdrum, State Line

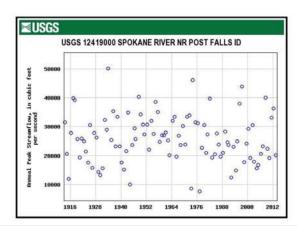


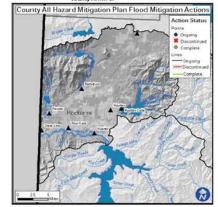
Subbasin Ownership			
Owner Type	% Subbasin Area		
Private	50%		
Federal	9%		
Reservation/BIA	0%		
State	5%		
Out of Idaho	37%		

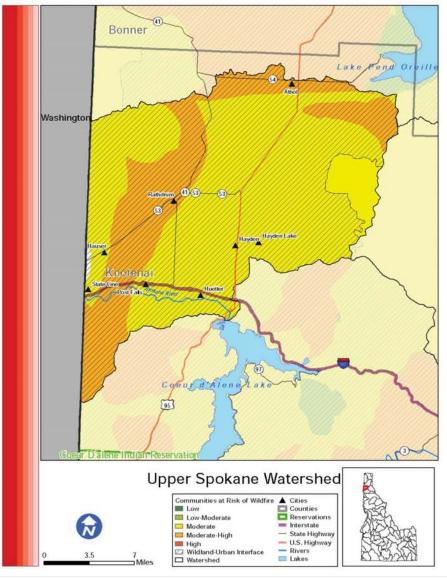
Pop. at Flood Risk

NFIP Statistics (2014)				
NFIP Policies	193			
Total Coverage	\$49,083,500			
Total Premiums	\$152,278			
# Claims	8			
Paid Claims	\$80,744			

## Total flood mitigation actions: 22







## **Upper Spokane**

#### Risk Rank: H

#### Introduction

The Upper Spokane watershed is home to 99,092 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, 71.4% moderate risk, 28.6% 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

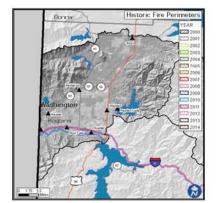
#### Cities

Athol, Coeur d'Alene, Dalton Gardens, Hauser, Hayden Lake, Hayden, Huetter, Post Falls, Rathdrum, State Line

Subbasin Metrics				
Area (sq. miles)	562			
Population (2010)	99,092			
Miles of Stream	394			
Miles of Canal	21			
Min. Elevation (ft)	1,716			
Max. Elevation (ft)	5,643			
Structures in WUI	14,123			
Historic Fire Events	20			
Acres Burned (1995-)	50			

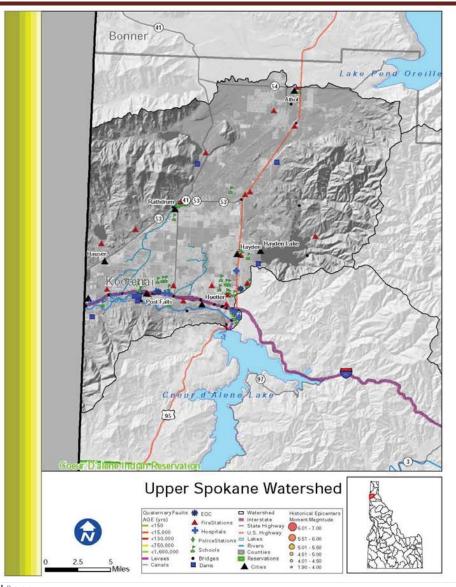
Subbasin Ownership				
Owner Type	% Subbasin Area			
Private	50%			
Federal	9%			
Reservation/BIA	0%			
State	5%			
Out of Idaho	37%			

Watershed Fire Risk		
Risk Level	%Watershed Are	
Low	0%	
Low-Moderate	0%	
Moderate	71.4%	
Moderate-High	28.6%	
High	0%	



# Total wildfire mitigation actions:





#### 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

Athol, Coeur d'Alene, Dalton Gardens, Hauser, Hayden Lake, Hayden, Huetter, Post Falls, Rathdrum, State Line

J	p	p	e	r	S	p	0	k	a	n	e	
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Subbasin	Met	trics		
Area (sq. miles)			562	
Population (2010)		99,092		
Miles of Stream	394			
Miles of Canal	21			
Min. Elevation (ft)	Ĵ		1,716	
Max. Elevation (ft)			5,643	
Est. Facilities Near F	ault		0	
% Watershed w/in 25 Miles of Fault 0			0%	

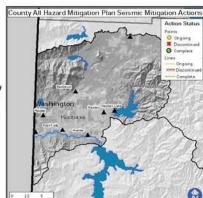
Subbasin Ownership			
Owner Type	% Subbasin Area		
Private	50%		
Federal	9%		
Reservation/ BIA	0%		
State	5%		
Out of Idaho	37%		

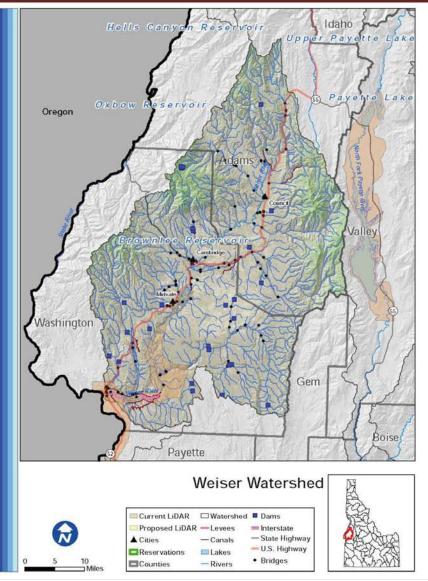
Ground Acceleration			
Accel. Amoun	%Watershed Are		
Low	69%		
Low-Moderate	31%		
Moderate	0%		
Moderate-High	0%		
High	0%		



Total seismic mitigation actions:

3





## Weiser

#### Risk Rank: H

#### ntroduction

Areas of concentrated population within the watershed boundaries are Council, Cambridge, Midvale and Weiser. There are 6,771 total people who live within the watershed, of which 1,055 are at risk of flooding. Half of the watershed is privately owned.

#### What is the rick

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 AHMP, 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 Gem 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 hazardous.

### **Countles and Tribes**

Adams, Gem, Valley, Washington

#### Cities

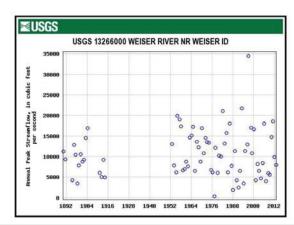
Cambridge, Council, Midvale, Weiser

Subbasin Metrics		
Area (sq. miles)	1,683	
Population (2010)	6,771	
Miles of Stream	3,932	
Miles of Canal	243	
Min. Elevation (ft)	2,093	
Max. Elevation (ft)	8,114	
Dams of Concern	18	
Pop. at Flood Risk	1,055	

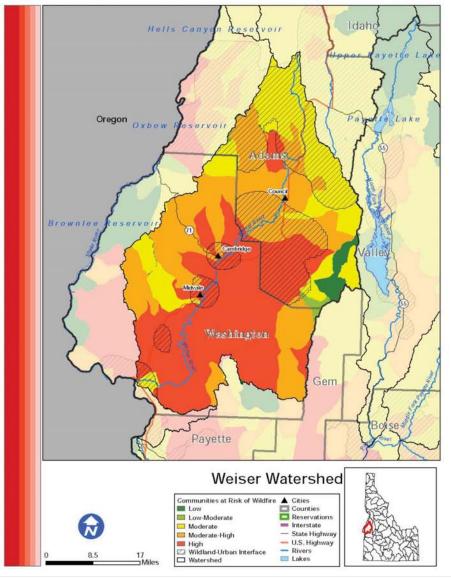
Subbasin Ownership			
Owner Type	% Subbasin Area		
Private	51%		
Federal	43%		
Reservation/BIA	0%		
State	6%		
Out of Idaho	0%		

NFIP Statistics (2014)			
NFIP Policies	64		
Total Coverage	\$9,096,200		
Total Premiums	\$65,482		
# Claims	12		
Paid Claims	\$355,039		

## Total flood mitigation actions: 58







## 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, Midvale 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, 64,104 acres have burned during 156 individual wildfire events. Based on data from the Idaho Forest Action Plan (2010), the Weiser watershed has 2% low risk, 0.7% low-moderate risk, 21% moderate risk, 34.9% 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.
- •0 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

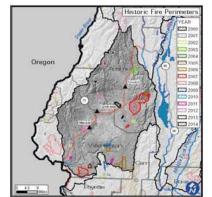
Cities

Cambridge, Council, Midvale, Weiser

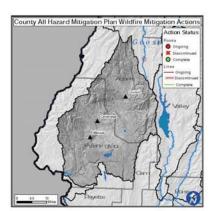
Subbasin Metrics		
Area (sq. miles)	1,683	
Population (2010)	6,771	
Miles of Stream	3,932	
Miles of Canal	243	
Min. Elevation (ft)	2,093	
Max. Elevation (ft)	8,114	
Structures in WUI	1,757	
Historic Fire Events	156	
Acres Burned (1995-)	64,104	

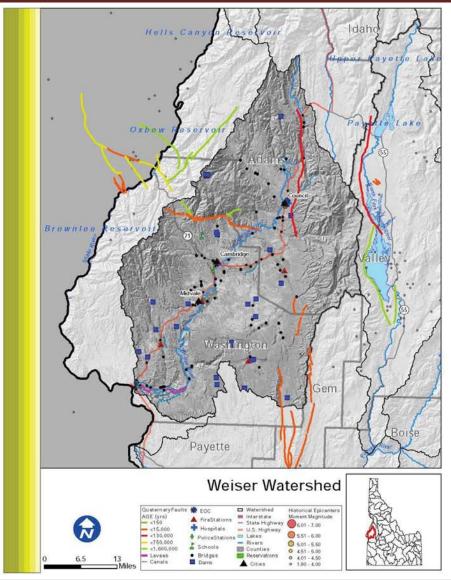
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	51%	
Federal	43%	
Reservation/BIA	0%	
State	6%	
Out of Idaho	0%	

Watershed Fire Risk	
Risk Level	%Watershed Are
Low	2%
Low-Moderate	0.7%
Moderate	21%
Moderate-High	34.9%
High	41.4%



# Total wildfire mitigation actions:





## 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

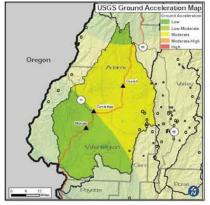
#### Cities

Cambridge, Council, Midvale, Weiser

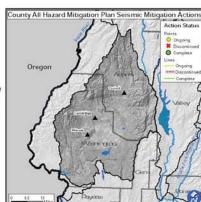
Subbasin Metrics			
Area (sq. miles)			1,683
Population (2010)			6,771
Miles of Stream			3,932
Miles of Canal			243
Min. Elevation (ft)	į.		2,093
Max. Elevation (ft)			8,114
Est. Facilities Near Fault			16
% Watershed w/in 25 Miles of Fault		100%	

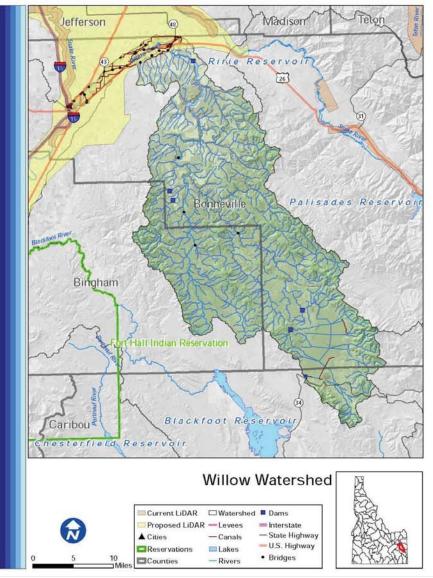
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	51%
Federal	43%
Reservation/BIA	0%
State	6%
Out of Idaho	0%

Ground Acceleration	
Accel. Amoun	%Watershed Are
Low	0%
Low-Moderate	46%
Moderate	54%
Moderate-High	0%
High	0%



## Total seismic mitigation actions: 22





## Willow

#### Risk Rank: M

#### ntroduction

There are 6,290 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 dam 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 AHMPs, 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.
- •0 out of the 4 counties in the Willow watershed identified flood as their number two 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 Weiser watershed is as follows:

-Payette River and Gem Valley (2011)

-Weiser River Basin (2011)

#### Conclusion

The Willow watershed's relatively low population 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

Bingham, Bonneville, Caribou, Jefferson

#### Cities

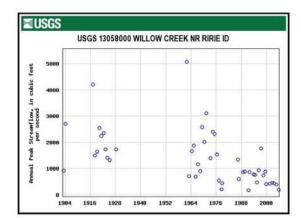
Idaho Falls, Ririe

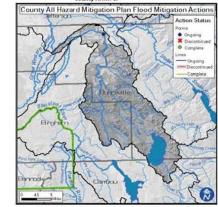
Subbasin Metrics	
Area (sq. miles)	647
Population (2010)	6,290
Miles of Stream	1,437
Miles of Canal	69
Min. Elevation (ft)	4,692
Max. Elevation (ft)	9,777
Dams of Concern	1
Pop. at Flood Risk	128

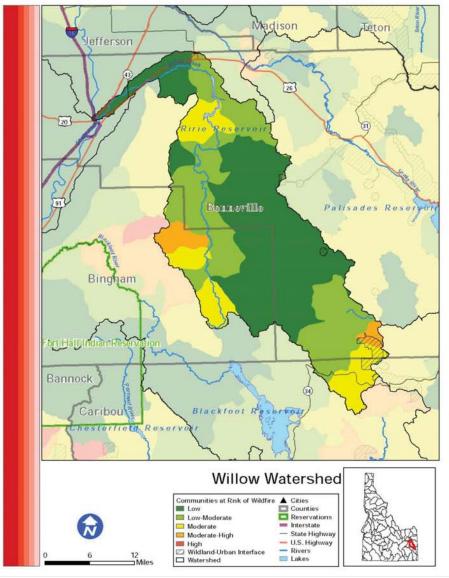
Subbasin Ownership	
Owner Type	% Subbasin Area
Private	62%
Federal	15%
Reservation/BIA	1%
State	23%
Out of Idaho	0%

NFIP Statistics (2014)	
NFIP Policies	3
Total Coverage	\$700,000
Total Premiums	\$1,150
# Claims	1
Paid Claims	\$35,049

### Total flood mitigation actions: 35







## Willow

#### Risk Rank: M

#### 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 Ririe.

#### 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 arces 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 relativey 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

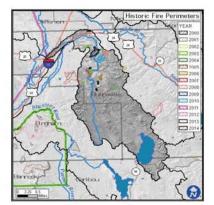
#### Cities

Idaho Falls, Ririe

Subbasin Metrics	
Area (sq. miles)	647
Population (2010)	6,290
Miles of Stream	1,437
Miles of Canal	69
Min. Elevation (ft)	4,692
Max. Elevation (ft)	9,777
Structures in WUI	27
Historic Fire Events	42
Acres Burned (1995-)	10,407

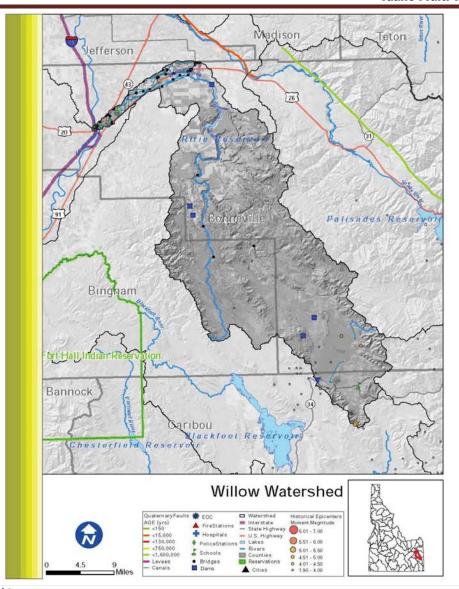
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	62%	
Federal	15%	
Reservation/BIA	1%	
State	23%	
Out of Idaho	0%	

Watershed Fire Risk		
Risk Level	%Watershed Are	
Low	47.5%	
Low-Moderate	34%	
Moderate	14.5%	
Moderate-High	4%	
High	0%	



# Total wildfire mitigation actions:





## Willow

#### Risk Rank: H

#### Introduction

Areas of concentrated population within the Willow Watershed boundaries are Idaho Falls and Ririe.

## 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

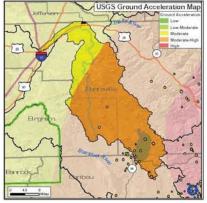
#### Cition

Idaho Falls, Ririe

Subbasin	Metrics	
Area (sq. miles)		647
Population (2010)		6,290
Miles of Stream		1,437
Miles of Canal		69
Min. Elevation (ft)	Ţ	4,692
Max. Elevation (ft)		9,777
Est. Facilities Near F	ault	5
% Watershed w/in 25 Mi	les of Fault	73%

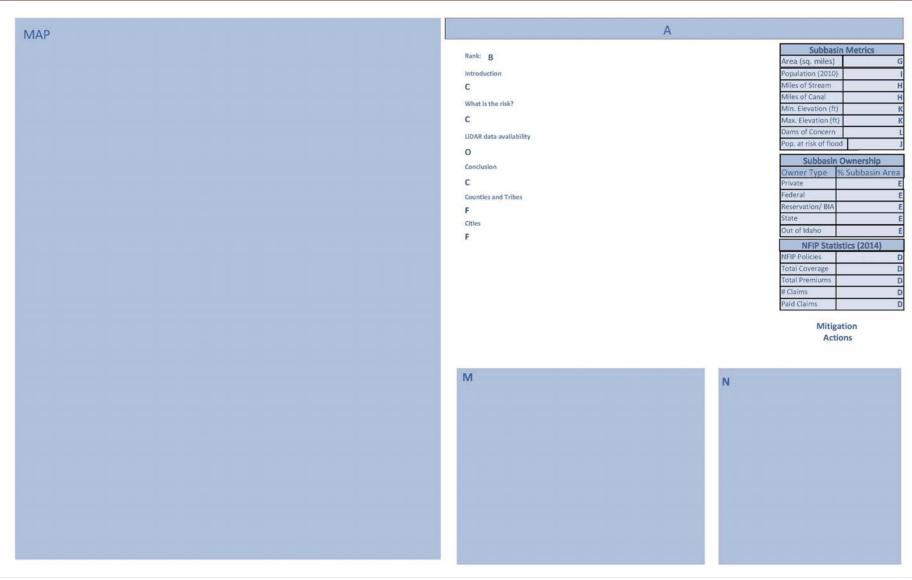
Subbasin Ownership		
Owner Type	% Subbasin Area	
Private	62%	
Federal	15%	
Reservation/ BIA	1%	
State	23%	
Out of Idaho	0%	

Ground Acceleration		
Accel. Amoun	%Watershed Are	
Low	0%	
Low-Moderate	0%	
Moderate	20%	
Moderate-High	80%	
High	0%	



## Total seismic mitigation actions: 34





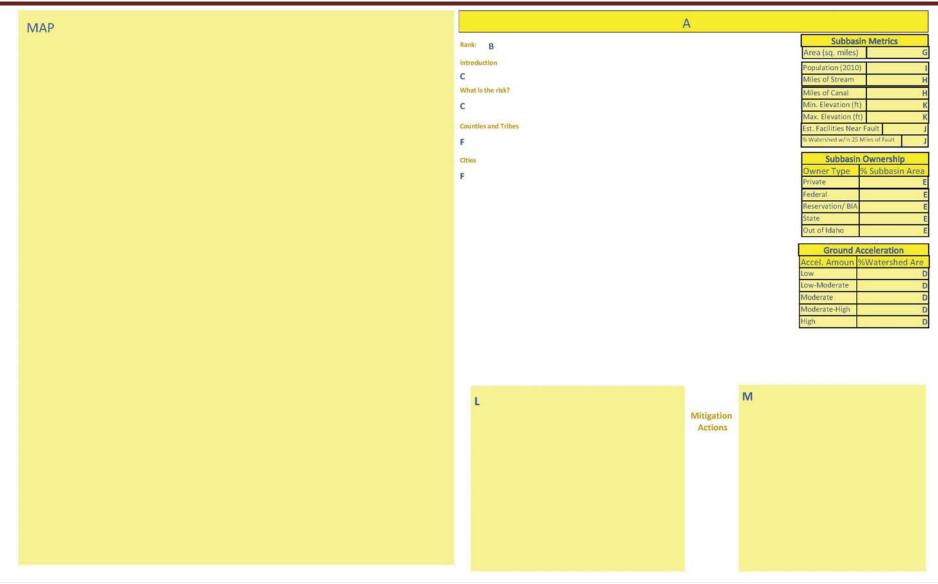
# FLOOD REFERENCES

Reference ID	Reference Description
A	Watershed Name associated with 8 <sup>th</sup> field hydrologic units (HUC-8) ranked for flood risk.
В	Risk category determined by equation table with inputs and weights developed by IBHS and participating
	technical advisory groups (2014).
C	Idaho Bureau of Homeland Security (2014). Communication and personal knowledge from staff and technical
	advisory groups.
D	National Flood Insurance Program statistics retrieved from FEMA (2014).
Е	Derived from Land Management dataset. IDWR.
F	Idaho Administrative Shapefiles retrieved internally at IBHS (2014).
G	GIS Area of HUC-8 watersheds rank in the report.
Н	Derived from High Resolution NHD clipped by HUC 8 boundaries.
I	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.
J	Idaho Bureau of Homeland Security (2014). Developed using existing Q3 and DFIRM data (FEMA 2014),
	State Floodplain data from State Hazard Mitigation Plan (IBHS), and Census Block Groups (2010).
K	Derived from USGS National Elevation Dataset 10 m tiles (1/3 arc-second).
L	Dam Hazard Map package retrieved from IDWR.
M	U.S. Geological Survey (2014). Annual peak streamflow. Retrieved from
	http://nwis.waterdata.usgs.gov/nwis/peak/
N	Flood Hazard Mitigation Projects retrieved internally at IBHS (2014).
O	Current Idaho LiDAR Boundaries dataset retrieved from Idaho LiDAR Consortium (2014).
Mitigation	Completed, discontinued, and ongoing county mitigation actions related to flood. Dataset obtained from most
Actions	recently updated County All-Hazard Mitigation Plans (2008-2015). GIS spatial join run between point and line
	specific actions and county-wide actions.



# FIRE REFERENCES

Reference ID	Reference Description
A	Watershed Name associated with 8 <sup>th</sup> field hydrologic units (HUC-8) ranked for wildfire risk.
В	Risk category determined by equation table with inputs and weights developed by IBHS and participating technical advisory groups (2014).
С	Idaho Bureau of Homeland Security (2014). Communication and personal knowledge from staff and technical advisory groups.
D	Relative Risk to Communities and Ecosystems from Uncharacteristic Wildfires dataset (2010). Clipped by HUC-8 watershed boundaries.
Е	Derived from Land Management dataset. IDWR.
F	Idaho Administrative Shapefiles retrieved internally at IBHS (2014).
G	GIS Area of HUC-8 watersheds rank in the report.
Н	Derived from High Resolution NHD clipped by HUC 8 boundaries.
I	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.
J	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).
K	Derived from USGS National Elevation Dataset 10 m tiles (1/3 arc-second).
L	Fire Hazard Mitigation Projects retrieved internally at IBHS (2014).
Mitigation Actions	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.



# **SEISMIC REFERENCES**

Reference ID	Reference Description
A	Watershed Name associated with 8 <sup>th</sup> field hydrologic units (HUC-8) ranked for seismic risk.
В	Risk category determined by equation table with inputs and weights developed by IBHS and participating technical advisory groups (2014).
С	Idaho Bureau of Homeland Security (2014). Communication and personal knowledge from staff and technical advisory groups.
D	United States Geological Survey Peak Ground Acceleration (2014). Clipped by HUC-8 watershed boundaries.
Е	Derived from Land Management dataset. IDWR.
F	Idaho Administrative Shapefiles retrieved internally at IBHS (2014).
G	GIS Area of HUC-8 watersheds rank in the report.
Н	Derived from High Resolution NHD clipped by HUC 8 boundaries.
I	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.
J	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.
K	Derived from USGS National Elevation Dataset 10 m tiles (1/3 arc-second).
L	United States Geological Survey Peak Ground Acceleration Maps (2014). Clipped by HUC-8 watershed boundaries.
M	Seismic Hazard Mitigation Projects retrieved internally at IBHS (2014).
Mitigation Actions	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.

## Idaho Multi-Hazard Risk Portfolio

#### Glossary of Select Terms:

Boise State University (BSU)

Bureau Land Management (BLM)

Bureau of Indian Affiars (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.

Definitions courtesy of Merriam-Webster <a href="http://www.merriam-webster.com">http://www.merriam-webster.com</a> and context. For more information, FEMA publishes a complete registry of Facts, Acronyms and Terms (FAAT) at

http://www.fema.gov/pdf/plan/prepare/faatlist07 09.pdf