



### APPENDIX A: REFERENCES

- Abromovich, Ron. Idaho Water Supply Specialist for Idaho Natural Resources Conservation Service (NRCS), USDA. 2010. Personal Communication with Martha DoByns of Michael Baker Jr. August 25, 2010.
- Cascades Volcano Observatory. 1997a. Major Cascade Range Volcanoes in Washington, Oregon, and Northern California. Graphic by Lyn Topinka. Accessed from the internet: [http://vulcan.wr.usgs.gov/Volcanoes/Cascades/Maps/map\\_cascades\\_locationmap.html](http://vulcan.wr.usgs.gov/Volcanoes/Cascades/Maps/map_cascades_locationmap.html).
- Christiansen, Robert L., Jacob B. Lowenstern, Robert B. Smith, Henry Heasler, Lisa A. Morgan, Manuel Nathenson, Larry G. Mastin, L. J. Patrick Muffler, and Joel E. Robinson. Preliminary Assessment of Volcanic and Hydrothermal Hazards in Yellowstone National Park and Vicinity. U.S. Geological Survey Open-file Report 2007-1071, 94 p.
- Clynne, Michael A., Robert L. Christiansen, C. Dan Miller, Peter H. Stauffer, and James W. Hendley, II. 2001. Volcano Hazards of the Lassen Volcanic National Park Area, California. U.S. Geological Survey Fact Sheet 022-00.
- Dzurisin, Dan, Peter H. Stauffer, and James W. Hendley, II. 1997. Living With Volcanic Risk in the Cascades. U.S. Geological Survey Fact Sheet 165-97.
- Hazards & Vulnerability Research Institute (2009). The Spatial Hazard Events and Losses Database for the United States, Version 7.0 [Online Database]. Columbia, SC: University of South Carolina. Available from the internet: <http://www.sheldus.org>.
- Idaho Department of Water Resources, Planning and Technical Services Division. 2001. Idaho Drought Plan with Federal Water-Related Drought Response Programs. Revised May 2001. Accessed July 28, 2010, from the internet: <http://www.idwr.idaho.gov/News/drought/PDFs/Drought%20Plan.pdf>.
- Idaho Department of Water Resources. 2010a. "Drought Documents Listings." Retrieved by Debbie Gibson of IDWR and conveyed in personal communication with Martha DoByns of Michael Baker Jr. August 30, 2010.
- Idaho Department of Water Resources. 2010b. "Idaho Drought Emergency Declarations." Accessed February 16, 2013, from the internet: <http://www.idwr.idaho.gov/News/drought/drought.htm>.
- Idaho Department of Water Resources. 2012. "Idaho Flood and Seismic Risk Portfolio."



- Idaho Natural Resources Conservation Service. 2010. "Surface Water Supply Index Explanation." Accessed August 31, 2010, from the internet: <http://www.id.nrcs.usda.gov/snow/watersupply/swsi/intro.html>.
- King, P.B., and Beikman, H.M. 1974. Geologic map of the United States (exclusive of Alaska and Hawaii), U.S. Geological Survey, scale 1:2,500,000, 2 sheets.
- National Climatic Data Center, U.S. Department of Commerce. 2010. Search of Storm Events Database for Drought Events in Idaho since 1950 conducted on July 28, 2010, via the internet: <http://www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwevent~storms>.
- National Climatic Data Center, NOAA. 2010. Storm Events for Idaho. Search conducted for snow/ice events between 1992 and June 30, 2010, via the internet: <http://www4.ncdc.noaa.gov/cgi-win/wwcgi.dll?wwevent~storms>.
- National Drought Mitigation Center. 2010. "U.S. Drought Monitor: Idaho" for August 3, produced by Brad Rippey of the USDA. Accessed August 6, 2010, from the internet: [http://www.drought.unl.edu/dm/DM\\_state.htm?ID,W](http://www.drought.unl.edu/dm/DM_state.htm?ID,W).
- National Drought Mitigation Center. 2006. "What is drought?" Website updated in 2006 and accessed July 28, 2010: <http://drought.unl.edu/whatis>.
- National Weather Service, Climate Prediction Center. 2010. "U.S. Seasonal Drought Outlook" for August 5, 2010, to October 2010. Accessed August 6, 2010, from the internet: [http://www.cpc.noaa.gov/products/expert\\_assessment/season\\_drought.gif](http://www.cpc.noaa.gov/products/expert_assessment/season_drought.gif).
- National Weather Service. 2001. Winter Storms: The Deceptive Killers. A Preparedness Guide. Brochure published in December 2001 and available on the internet: <http://www.nws.noaa.gov/om/brochures/winterstorm.pdf>.
- Radbruch-Hall, D.H., R.B. Colton, W.E. Davies, Ivo Lucchitta, B.A. Skipp, and D.J. Varnes. 1982. Landslide Overview Map of the Conterminous United States, Geological Survey Professional Paper 1183, U.S. Geological Survey, Washington.
- Havens, Scott, et al. Interim Report. Real Time Snow Slope Stability Modeling of Direct Action Avalanches.
- Tilling, Robert I., Lyn Topinka, and Donald A. Swanson. 1990. Eruptions of Mount St. Helens: Past, Present, and Future. U.S. Geological Survey Special Interest Publication, 56p.
- United States Geological Survey. 1997b. Mount St. Helens, Washington May 18, 1980, Ash Fallout Distribution within the U.S. Graphic by Lyn Topinka. Accessed via the internet: [http://vulcan.wr.usgs.gov/Volcanoes/MSH/Maps/may18\\_ashmap.html](http://vulcan.wr.usgs.gov/Volcanoes/MSH/Maps/may18_ashmap.html).



# Appendix A

United States Geological Survey, Volcanic Hazards Program. 2010. VHP Photo Glossary: VEI. Website accessed July 28, 2010: <http://volcanoes.usgs.gov/images/pglossary/vei.php>.

Wright, Thomas L. and Thomas C. Pierson. 1992. Living with Volcanoes. U.S. Geological Survey Circular 1073, 57p.

Yellowstone Volcano Observatory. 2010. Protocols for Geologic Hazards Response by the Yellowstone Volcano Observatory. U.S. Geological Survey Circular 1351, 18 p. Available on the internet: <http://pubs.usgs.gov/circ/1351/>.

Western Regional Climate Center, Desert Research Institute. "Historical Climate Information: Climate of Idaho." Accessed via the internet: <http://www.wrcc.dri.edu/CLIMATEDATA.html>

Idaho Historical Hazard Event References		
Hazard	Source	Details
<b>Avalanche</b>	SHELDUS	Source: National Climatic Data Center, Asheville, NC, "Storm Data and Unusual Weather Phenomena". Every natural hazard event with more than \$50,000 in losses (1990-1995) and every fatal event were manually entered into the database. Between 1960 and 1989 and since 1995 all loss-causing events (no thresholding) were manually entered into the database. [Most Current Data Available 3/30/2010]
<b>Avalanche</b>	Avalanche.org	U.S. Avalanche accidents database ( <a href="http://www.avalanche.org">www.avalanche.org</a> ). [Most Current Data Available 12/29/2010]
<b>Avalanche</b>	NOAA - NCDC	All loss-causing events from the Storm Events Database ( <a href="http://www.ncdc.noaa.gov/stormevents/ftp.jsp">http://www.ncdc.noaa.gov/stormevents/ftp.jsp</a> ). [Most Current Data Available 1/27/2011]
<b>Avalanche</b>	LOCAL	Source: "20 avalanches shut down section of Highway 21", KTVB, 1/22/2012, ( <a href="http://www.ktvb.com/news/137868483.html">http://www.ktvb.com/news/137868483.html</a> ).
<b>Dam / Levee / Canal Failure</b>	2007 SHMP	Idaho's 2007 State Hazard Mitigation Plan



Idaho Historical Hazard Event References		
Hazard	Source	Details
<b>Dam / Levee / Canal Failure</b>	ID BHS	Information provided by Idaho's Bureau of Homeland Security. [Most Current Data Available 9/1/2010]
<b>Dam / Levee / Canal Failure</b>	Flood TWG	Historical events provided by Flood Technical Working Group. [Most Current Data Available 9/21/2012]
<b>Drought</b>	SHELDUS	Source: National Climatic Data Center, Asheville, NC, "Storm Data and Unusual Weather Phenomena". Every natural hazard event with more than \$50,000 in losses (1990-1995) and every fatal event were manually entered into the database. Between 1960 and 1989 and since 1995 all loss-causing events (no thresholding) were manually entered into the database. [Most Current Data Available 10/1/1992]
<b>Drought</b>	IDWR	Information provided by Idaho's Department of Water Resources [Most Current Data Available 2/16/2013]
<b>Earthquake</b>	USGS	USGS: Geographic Grid Search Earthquakes=3254, Latitude: 50.000N - 41.000N, Longitude: 110.000W - 118.000W, Catalog Used: PDE, Data Selection: Historical & Preliminary Data. Source: <a href="http://earthquake.usgs.gov/earthquakes/eqarchives/epic/epic_rect.php">http://earthquake.usgs.gov/earthquakes/eqarchives/epic/epic_rect.php</a> [Most Current Data Available 9/5/2012]
<b>Earthquake</b>	LOCAL	Source: "Mystery earthquake near McCall puzzles scientists, technicians", KTVB, 5/17/2012, ( <a href="http://www.ktvb.com/news/Myster-quake-near-McCall-puzzles-scientists-151925345.html">http://www.ktvb.com/news/Myster-quake-near-McCall-puzzles-scientists-151925345.html</a> )
<b>Earthquake</b>	LOCAL	Source: "3.6 magnitude earthquake hits southern Idaho", HJNews, 7/25/2011, ( <a href="http://news.hjnews.com/news/article_c6250fba-b73d-11e0-8a05-001cc4c03286.html">http://news.hjnews.com/news/article_c6250fba-b73d-11e0-8a05-001cc4c03286.html</a> )
<b>Earthquake</b>	LOCAL	Source: "3.0 earthquake hits Challis", Idaho Press-Tribune, 7/25/2012, ( <a href="http://www.idahopress.com/news/state/earthquake-hits-challis/article_6a6e86a2-d68a-11e1-a6d9-001a4bcf887a.html">http://www.idahopress.com/news/state/earthquake-hits-challis/article_6a6e86a2-d68a-11e1-a6d9-001a4bcf887a.html</a> )



Idaho Historical Hazard Event References		
Hazard	Source	Details
<b>Federal Declarations</b>	FEMA	<a href="http://www.fema.gov/disasters">http://www.fema.gov/disasters</a> [Most Current Data Available 9/18/2012]
<b>Flood</b>	2007 SHMP	Idaho's 2007 State Hazard Mitigation Plan
<b>Flood</b>	SHELDUS	Source: National Climatic Data Center, Asheville, NC, "Storm Data and Unusual Weather Phenomena". Every natural hazard event with more than \$50,000 in losses (1990-1995) and every fatal event were manually entered into the database. Between 1960 and 1989 and since 1995 all loss-causing events (no thresholding) were manually entered into the database. [Most Current Data Available 8/1/2011]
<b>Flood</b>	NOAA - NCDC	All loss-causing events from the Storm Events Database ( <a href="http://www.ncdc.noaa.gov/stormevents/ftp.jsp">http://www.ncdc.noaa.gov/stormevents/ftp.jsp</a> ). [Most Current Data Available 8/1/2011 - no additional data to add]
<b>Flood</b>	LOCAL	Source: "Southern Idaho counties battle flooding", Idaho Statesman, 3/19/2012, ( <a href="http://www.idahostatesman.com/2012/03/19/2041653/southern-idaho-battles-flooding.html">http://www.idahostatesman.com/2012/03/19/2041653/southern-idaho-battles-flooding.html</a> )
<b>Flood</b>	LOCAL	Source: "Governor Otter declares flood emergency in Idaho", KREM, 5/27/2011, ( <a href="http://www.krem.com/news/Governor-Otter-declares-flood-emergency-in-Idaho-122733234.html">http://www.krem.com/news/Governor-Otter-declares-flood-emergency-in-Idaho-122733234.html</a> )
<b>Flood</b>	LOCAL	Source: "Farmers in N. Idaho dealing with flooding", The Spokesman-Review, 7/16/2012, ( <a href="http://www.spokesman.com/stories/2012/jul/16/farmers-n-idaho-dealing-flooding/">http://www.spokesman.com/stories/2012/jul/16/farmers-n-idaho-dealing-flooding/</a> )
<b>Flood</b>	LOCAL	Source: "N. Idaho residents deal with record rain, flooding", KXLY, 6/27/2012, ( <a href="http://www.kxly.com/news/north-idaho-news/N-Idaho-residents-deal-with-record-rain-flooding/-/101230/15323856/-/3dp13tz/-/index.html">http://www.kxly.com/news/north-idaho-news/N-Idaho-residents-deal-with-record-rain-flooding/-/101230/15323856/-/3dp13tz/-/index.html</a> )



Idaho Historical Hazard Event References		
Hazard	Source	Details
<b>HAZMAT</b>	PHMSA	Pipeline and Hazardous Materials Safety Administration ( <a href="https://hazmatonline.phmsa.dot.gov">https://hazmatonline.phmsa.dot.gov</a> ). [Most Current Data Available 6/15/2012]
<b>HMA</b>	ID BHS	Information provided by Idaho's Bureau of Homeland Security AND Idaho's Department of Water Resources. [Most Current Data Available 10/29/2012]
<b>Landslide</b>	SHELDUS	Source: National Climatic Data Center, Asheville, NC, "Storm Data and Unusual Weather Phenomena". Every natural hazard event with more than \$50,000 in losses (1990-1995) and every fatal event were manually entered into the database. Between 1960 and 1989 and since 1995 all loss-causing events (no thresholding) were manually entered into the database. Supplementary information was received from Highland, L.M., R.L. Schuster and M.L. Johnson: "Significant Landslide Events in the United States". Report. USGS National Landslide Information Center. [Most Current Data Available 1/15/2006]
<b>Landslide</b>	FEMA	Source: Federal Emergency Management Agency, Washington, DC, "Declared Disasters" Every Federally Declared landslide on file was manually entered into the database. ( <a href="http://www.fema.gov/disasters">http://www.fema.gov/disasters</a> ) [Most Current Data Available 9/13/2012]
<b>Landslide</b>	NOAA - NCDC	All loss-causing events from the Storm Events Database ( <a href="http://www.ncdc.noaa.gov/stormevents/ftp.jsp">http://www.ncdc.noaa.gov/stormevents/ftp.jsp</a> ). [Most Current Data Available 4/27/2011]
<b>Landslide</b>	2007 SHMP	Idaho's 2007 State Hazard Mitigation Plan
<b>Landslide</b>	LOCAL	Source: "Wet weather causes landslides, flooding in North Idaho", NWCN, 3/31/2011, ( <a href="http://www.nwcn.com/news/119012619.html">http://www.nwcn.com/news/119012619.html</a> )
<b>Landslide</b>	LOCAL	Source: "Bonner and Idaho Counties added to state disaster declaration", KIVITV, 4/4/2012, ( <a href="http://www.kivitv.com/news/local/146114715.html">http://www.kivitv.com/news/local/146114715.html</a> )



Idaho Historical Hazard Event References		
Hazard	Source	Details
Landslide	LOCAL	Source: "Landslides block two North Idaho highways", KREM, 4/5/2011, ( <a href="http://www.krem.com/home/North-Idaho-rock-and-land-slides-blocking-highways-119272194.html">http://www.krem.com/home/North-Idaho-rock-and-land-slides-blocking-highways-119272194.html</a> )
Lightning	SHELDUS	Source: National Climatic Data Center, Asheville, NC, "Storm Data and Unusual Weather Phenomena". Every natural hazard event with more than \$50,000 in losses (1990-1995) and every fatal event were manually entered into the database. Between 1960 and 1989 and since 1995 all loss-causing events (no thresholding) were manually entered into the database. [Most Current Data Available 8/10/2010]
Severe Storm	SHELDUS	Source: National Climatic Data Center, Asheville, NC, "Storm Data and Unusual Weather Phenomena". Every natural hazard event with more than \$50,000 in losses (1990-1995) and every fatal event were manually entered into the database. Between 1960 and 1989 and since 1995 all loss-causing events (no thresholding) were manually entered into the database. [Most Current Data Available 11/16/2010]
Severe Storm	2007 SHMP	Idaho's 2007 State Hazard Mitigation Plan
Severe Storm	NOAA - NCDC	All loss-causing events from the Storm Events Database ( <a href="http://www.ncdc.noaa.gov/stormevents/ftp.jsp">http://www.ncdc.noaa.gov/stormevents/ftp.jsp</a> ). [Most Current Data Available 11/30/2011]
Severe Storm	LOCAL	Source: "Severe Storm Passes through Southern Idaho", Times News, 9/2/2012, ( <a href="http://magicvalley.com/news/local/severe-storm-passes-through-southern-idaho/article_5fa15619-509e-5394-8b31-d6845b0a7ac1.html">http://magicvalley.com/news/local/severe-storm-passes-through-southern-idaho/article_5fa15619-509e-5394-8b31-d6845b0a7ac1.html</a> )
Severe Storm	LOCAL	Source: "Severe weather moves into eastern Wash., northern Idaho for second day", KREM, 7/15/2012, ( <a href="http://www.krem.com/weather/severe-weather/Flash-flood-watch-in-effect-for-eastern-Wash-northern-Idaho-counties-162512556.html">http://www.krem.com/weather/severe-weather/Flash-flood-watch-in-effect-for-eastern-Wash-northern-Idaho-counties-162512556.html</a> )
Severe Storm	LOCAL	Source: "Thunderstorms roll through North Idaho Tuesday afternoon" NWCN, 4/24/2012, ( <a href="http://www.nwcn.com/news/washington/148807705.html">http://www.nwcn.com/news/washington/148807705.html</a> )



Idaho Historical Hazard Event References		
Hazard	Source	Details
<b>Severe Storm</b>	LOCAL	Source: "Severe Weather Hits Eastern Idaho", KPVI, 8/10/2012, ( <a href="http://www.kpvi.com/mostpopular/story/Severe-Weather-Hits-Eastern-Idaho/p11vT-EnKEG0AMNe8ED9tg.cspcx">http://www.kpvi.com/mostpopular/story/Severe-Weather-Hits-Eastern-Idaho/p11vT-EnKEG0AMNe8ED9tg.cspcx</a> )
<b>Severe Storm</b>	LOCAL	Source: "Southeast Idaho in middle of winter storm", Idaho State Journal, 2/21/2012, ( <a href="http://www.idahostatejournal.com/news/local/article_8d6934d2-5ca9-11e1-a63f-001871e3ce6c.html">http://www.idahostatejournal.com/news/local/article_8d6934d2-5ca9-11e1-a63f-001871e3ce6c.html</a> )
<b>State Declarations</b>	ID BHS	Provided by the BHS Recovery Section [Most Current Data Available 9/24/2012]
<b>Tornado</b>	2007 SHMP	Idaho's 2007 State Hazard Mitigation Plan
<b>Tornado</b>	The Tornado Project	Details for events that caused death or injury were obtained from The Tornado Project.
<b>Tornado</b>	LOCAL	Source: "Tornado reported northwest of Fairfield, Idaho", KLEWTV, 6/6/2011, ( <a href="http://www.klewtv.com/news/local/123271813.html">http://www.klewtv.com/news/local/123271813.html</a> )
<b>Tornado</b>	LOCAL	Source: "Rare tornado confirmed in northern Idaho", KTVB, 10/8/2010, ( <a href="http://www.ktvb.com/news/Funnel-cloud-in-Lewis-County-prompts-tornado-warning-104581819.html">http://www.ktvb.com/news/Funnel-cloud-in-Lewis-County-prompts-tornado-warning-104581819.html</a> )
<b>Tornado</b>	SHELDUS	Source: a) National Climatic Data Center, Asheville, NC, "Storm Data and Unusual Weather Phenomena". Every natural hazard event with more than \$50,000 in losses (1990-1995) and every fatal event were manually entered into the database. Between 1960 and 1989 and since 1995 all loss-causing events (no thresholding) were manually entered into the database. b) Supplementary information was received from the Storm Prediction Center, Norman, OK (1960-1995) at <a href="http://www.spc.noaa.gov/archive/index.html">http://www.spc.noaa.gov/archive/index.html</a> . [Most Current Data Available 10/7/2010]



Idaho Historical Hazard Event References		
Hazard	Source	Details
<b>Tornado</b>	NOAA - NCDC	Storm Events Database ( <a href="http://www.ncdc.noaa.gov/stormevents/ftp.jsp">http://www.ncdc.noaa.gov/stormevents/ftp.jsp</a> ). [Most Current Data Available 6/23/2011]
<b>Volcano</b>	2007 SHMP	Idaho's 2007 State Hazard Mitigation Plan
<b>Volcano</b>	LOCAL	Source: "Geologists: Volcano near Bend still a threat", NWCN, 11/7/2010, ( <a href="http://www.nwcn.com/news/oregon/Geologists-Volcano-near-Bend-still-a-threat-106852794.html">http://www.nwcn.com/news/oregon/Geologists-Volcano-near-Bend-still-a-threat-106852794.html</a> ).
<b>Wildfire</b>	SHELDUS	a) National Climatic Data Center, Asheville, NC, "Storm Data and Unusual Weather Phenomena". Every natural hazard event with more than \$50,000 in losses (1990-1995) and every fatal event were manually entered into the database. Between 1960 and 1989 and since 1995 all loss-causing events (no thresholding) were manually entered into the database. b) Supplementary data was received from The U.S. Fire Administration at < <a href="http://www.usfa.fema.gov/inside-usfa/nfdc-data.cfm">http://www.usfa.fema.gov/inside-usfa/nfdc-data.cfm</a> >. [Most Current Data Available 8/21/2010]
<b>Wildfire</b>	NOAA - NCDC	All loss-causing events from the Storm Events Database ( <a href="http://www.ncdc.noaa.gov/stormevents/ftp.jsp">http://www.ncdc.noaa.gov/stormevents/ftp.jsp</a> ). [Most Current Data Available 9/29/2011]
<b>Wildfire</b>	LOCAL	Source: "Massive wildfire drives hundreds from homes in Idaho", MSNBC, 9/9/2012, ( <a href="http://www.msnbc.msn.com/id/48964966/ns/us_news/t/massive-wildfire-drives-hundreds-homes-idaho/#.UGS7dK7c-xQ">http://www.msnbc.msn.com/id/48964966/ns/us_news/t/massive-wildfire-drives-hundreds-homes-idaho/#.UGS7dK7c-xQ</a> )
<b>Wildfire</b>	LOCAL	Source: "Idaho town emptied as state's worst wildfire nears", US news, 8/19/2012, ( <a href="http://usnews.nbcnews.com/_news/2012/08/19/13362938-idaho-town-emptied-as-states-worst-wildfire-nears?lite">http://usnews.nbcnews.com/_news/2012/08/19/13362938-idaho-town-emptied-as-states-worst-wildfire-nears?lite</a> )
<b>Wildfire</b>	LOCAL	Source: "Massive Idaho wildfire advances 4 miles into Montana", Missoulian, 8/31/2012, ( <a href="http://missoulian.com/news/local/massive-idaho-wildfire-advances-miles-into-montana/article_c066cbc4-f31c-11e1-b51f-0019bb2963f4.html">http://missoulian.com/news/local/massive-idaho-wildfire-advances-miles-into-montana/article_c066cbc4-f31c-11e1-b51f-0019bb2963f4.html</a> )



Idaho Historical Hazard Event References		
Hazard	Source	Details
Wildfire	LOCAL	Source: "Idaho's Mustang Complex Wildfire Drives Hundreds From Homes", Huffington Post, 9/9/2012, ( <a href="http://www.huffingtonpost.com/2012/09/09/idaho-mustang-complex-wildfire_n_1869383.html">http://www.huffingtonpost.com/2012/09/09/idaho-mustang-complex-wildfire_n_1869383.html</a> )
Wildfire	LOCAL	Source: "Idaho wildfire evacuations ordered; Wash. residents go home", USA Today, 8/18/2007, ( <a href="http://www.usatoday.com/weather/wildfires/story/2012-08-18/washington-california-idaho-wildfires/57131786/1">http://www.usatoday.com/weather/wildfires/story/2012-08-18/washington-california-idaho-wildfires/57131786/1</a> )
Wind	SHELDUS	Source: a) National Climatic Data Center, Asheville, NC, "Storm Data and Unusual Weather Phenomena". Every natural hazard event with more than \$50,000 in losses (1990-1995) and every fatal event were manually entered into the database. Between 1960 and 1989 and since 1995 all loss-causing events (no thresholding) were manually entered into the database. b) Supplementary information was received from the Storm Prediction Center, Norman, OK Source: a) National Climatic Data Center, Asheville, NC, "Storm Data and Unusual Weather Phenomena". Every natural hazard event with more than \$50,000 in losses (1990-1995) and every fatal event were manually entered into the database. Between 1960 and 1989 and since 1995 all loss-causing events (no thresholding) were manually entered into the database. b) Supplementary information was received from the Storm Prediction Center, Norman, OK (1960-1995) at < <a href="http://www.spc.noaa.gov/archive/index.html">http://www.spc.noaa.gov/archive/index.html</a> >. [Most Current Data Available 11/16/2010]
Wind	NOAA - NCDC	All loss-causing events from the Storm Events Database ( <a href="http://www.ncdc.noaa.gov/stormevents/ftp.jsp">http://www.ncdc.noaa.gov/stormevents/ftp.jsp</a> ). [Most Current Data Available 8/28/2011]
Wind	LOCAL	Source: "Wind storm wreaks havoc across valley, KTVB, 2/25/2012, ( <a href="http://www.ktvb.com/weather/news/Wind--140442203.html">http://www.ktvb.com/weather/news/Wind--140442203.html</a> )
Wind	LOCAL	Source: "Wind Leaves Downed Trees and Damaged Equipment in its Wake", Times-News, 6/6/2012, ( <a href="http://m.magicvalley.com/news/local/wind-leaves-downed-trees-and-damaged-equipment-in-its-wake/article_e82bffb4-af9a-11e1-ae3-0019bb2963f4.html">http://m.magicvalley.com/news/local/wind-leaves-downed-trees-and-damaged-equipment-in-its-wake/article_e82bffb4-af9a-11e1-ae3-0019bb2963f4.html</a> )



## Appendix A

### Idaho Historical Hazard Event References

Hazard	Source	Details
<b>Wind</b>	LOCAL	Source: "Storm winds blowing through Treasure Valley bring large amount of dust from the Owyhees", Idaho Statesman, 8/5/2012, ( <a href="http://www.idahostatesman.com/2012/08/05/2218309/weather-service-warns-of-scattered.html">http://www.idahostatesman.com/2012/08/05/2218309/weather-service-warns-of-scattered.html</a> )
<b>Severe Storm</b>	ID BHS	Source: "FEMA Region X Daily Situational Awareness Report" 25 January 2013
<b>Wildfire</b>	NIFC	Source: "National Interagency Fire Center" ( <a href="http://www.nifc.gov/">http://www.nifc.gov/</a> ). [Most Current Data Available 9/10/2012]



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## APPENDIX B: AUTHORITIES, ASSURANCES, AND ADOPTION

### AUTHORITIES

The authority to adopt the 2010 Idaho State Hazard Mitigation Plan (SHMP) is provided in Idaho Code, Title 46, Chapter 10. Other related authorities include:

#### Federal

- Public Law 93-288, as amended, *Robert T. Stafford Disaster Relief and Emergency Assistance Act*
- Public Law 93-234, as amended, *Flood Disaster Protection Act of 1973*
- FEMA Regulations at 44 CFR 9, *Floodplain Management*
- FEMA Regulations at 44 CFR 10, *National Environmental Policy Act*
- FEMA Regulations at 44 CFR 13, *Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments*
- FEMA Regulations at 44 CFR 206, Subparts M and N
- Executive Order 11988, *Floodplain Management*
- Executive Order 11990, *Protection of Wetlands*
- Executive Order 12612, *Federalism*
- Executive Order 12699, *Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction*
- *Hazard Mitigation Assistance Unified Guidance*

#### State

- Idaho Code 4610 et seq., *Disaster Preparedness Act of 1975, as amended*
- *Governor's Executive Order 2006-10*

### ASSURANCES AND COMPLIANCE WITH FEDERAL AND STATE REGULATIONS

The Idaho SHMP meets the standard requirements of Section 409 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988, 42 United States Code Sections 5121 and following (commonly referred to as the Stafford Act - Public Law 93-288).

This plan is also intended to meet the requirements of Section 322 of the Stafford Act, which require that States, as a condition of receiving Federal disaster mitigation funds, have a mitigation plan in place that describes the planning process for identifying hazards, risk and vulnerabilities; identifies and prioritizes mitigation actions; encourages the development of local mitigation; and provides technical support for these efforts. In addition, the Act requires local and Tribal governments to have mitigation plans as a condition of receiving disaster mitigation funds.



Federal regulations at 44 CFR 201.4(c)(7) indicate that the SHMP must include assurances that the State will comply with all applicable Federal statutes and regulations in effect with respect to the periods for which it receives grant funding, in compliance with CFR 13.11(c). The State will amend its plan whenever necessary to reflect change in State or Federal laws and statutes, as required in CFR 13.11(d).

Through the development and enforcement of this plan, the State of Idaho will comply with all provisions in 44 CFR 13, as well as Subchapter B – Insurance and Mitigation, Subchapter D – Disaster Assistance, and Subchapter F – Preparedness. Additionally, the assurances listed below are provided as documentation that the State or any subsequent sub-grantee (recipients) that receive Federal grant funds will comply with all applicable Federal statutes and regulations. The State will amend the plan whenever necessary to reflect changes in Federal statutes and regulations or material changes in State law, organization, policy or State agency operations. BHS continuously monitors proposed and pending State bills that may impact the Plan.

To the extent the following provisions apply to the award of assistance:

- 1) Recipient possesses legal authority to enter into agreements and to execute the proposed programs;
- 2) Recipient’s governing body has duly adopted or passed as an official act a resolution, motion or similar action authorizing the execution of hazard mitigation agreements, including all understandings and assurances contained therein, and directing and authorizing the Recipient's chief administrative officer or designee to act in connection with any application and to provide such additional information as may be required;
- 3) No member of or delegate to the Congress of the United States, and no Resident Commissioner, shall be admitted to any share or part of any agreement or to any benefit to arise from the same. No member, officer, or employee of the Recipient or its designees or agents, no member of the governing body of the locality in which the program is situated, and no other public official of such locality or localities who exercises any functions or responsibilities with respect to the program during his tenure or for one year thereafter, shall have any interest direct or indirect, in any contract or subcontract, or the proceeds thereof, for work to be performed in connection with the program assisted under this plan. The Recipient shall incorporate or cause to be incorporated, in all such contracts or subcontracts, a provision prohibiting such interest pursuant to the purpose state above;
- 4) Recipient will comply with:
  - i) Contract Work Hours and Safety Standards Act of 1962, 40 USC 327 et seq., requiring that mechanics and laborers (including watchmen and guards) employed on federally assisted contracts be paid wages of not less than one and one-half times their basic wage rates for all hours worked in excess of forty hours in a work week; and
  - ii) Federal Fair Labor Standards Act, 29 USC Section 201 et seq., requiring that covered employees be paid at least the minimum prescribed wage, and also that they be paid one and one-half times their basic wage rates for all hours worked in excess of the prescribed work-week.



- 5) Recipient will comply with:
  - i) Title VI of the Civil Rights Act of 1964 (P.L. 88-352), and the regulations issued pursuant thereto, which provides that no person in the United States shall on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Recipient receives Federal financial assistance and will immediately take any measures necessary to effectuate this assurance. If any real property or structure thereon is provided or improved with the aid of Federal financial assistance extended to the Recipient, this assurance shall obligate the Recipient, or in the case of any transfer of such property, any transferee, for the period during which the real property or structure is used for a purpose for which the Federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits;
  - ii) Any prohibition against discrimination on the basis of age under the Age Discrimination Act of 1975, as amended (42 U.S.C.: 6101-6107), which prohibits discrimination on the basis of age or with respect to otherwise qualified handicapped individuals as provided in Section 504 of the Rehabilitation Act of 1973;
  - iii) Executive Order 11246 as amended by Executive Orders 11375 and 12086, and the regulations issued pursuant thereto, which provide that no person shall be discriminated against on the basis of race, color, religion, sex or national origin in all phases of employment during the performance of Federal or federally assisted construction contracts; affirmative action to insure fair treatment in employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff/termination, rates of pay or other forms of compensation; and election for training and apprenticeship;
- 6) The Recipient agrees to comply with the Americans With Disabilities Act (Public Law 101-336, 42 USC Section 12101 et seq.), where applicable, which prohibits discrimination by public and private entities on the basis of disability in the areas of employment, public accommodations, transportation, State and local government services, and in telecommunications;
- 7) Recipient will comply with Title IX of the Education Amendments of 1972, as amended (20 USC: 1681-1683 and 1685-1686), which prohibits discrimination on the basis of sex;
- 8) Recipient will comply with the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, (42 USC 4521-45-94) relating to nondiscrimination on the basis of alcohol abuse or alcoholism;
- 9) Recipient will comply with 523 and 527 of the Public Health Service Act of 1912 (42 USC 290 dd-3 and 290 ee-3), as amended, relating to confidentiality of alcohol and drug abuse patient records;
- 10) Recipient will comply with Title VIII of the Civil Rights Act of 1968, 42 USC 2000c and 42 3601-3619, as amended, relating to non-discrimination in the sale, rental, or financing of housing, and Title VI of the Civil Rights Act of 1964 (P.L. 88-352), which prohibits discrimination on the basis of race, color or nation origin;
- 11) Recipient will comply with the Intergovernmental Personnel Act of 1970, 42USC 4728-4763;



- 12) Recipient will comply with the Rehabilitation Act of 1973, Section 504, 29 USC 794, regarding non-discrimination;
- 13) Recipient will establish safeguards to prohibit employees from using positions for a purpose that is, or gives the appearance of, being motivated by a desire for private gain for themselves or others, particularly those with whom they have family, business, or other ties pursuant to Section 112.313 and Section 112.3135, FS;
- 14) Recipient will comply with the Anti-Kickback Act of 1986, 41 USC Section 51 which outlaws and prescribes penalties for "kickbacks" of wages in federally financed or assisted construction activities;
- 15) Recipient will comply with the Hatch Act (18 USC 594, 598, 600-605), which limits the political activities of employees;
- 16) Recipient will comply with the flood insurance purchase and other requirements of the Flood Disaster Protection Act of 1973 as amended, 42 USC 4002-4107, including requirements regarding the purchase of flood insurance in communities where such insurance is available as a condition for the receipt of any Federal financial assistance for construction or acquisition purposes for use in any area having special flood hazards. The phrase "Federal financial assistance" includes any form of loan, grant, guaranty, insurance payment, rebate, subsidy, disaster assistance loan or grant, or any other form of direct or indirect Federal assistance;
- 17) Recipient will require every building or facility (other than a privately owned residential structure) designed, constructed, or altered with funds provided under a grant agreement to comply with the "Uniform Federal Accessibility Standards," (AS) which is Appendix A to 41 CFR Section 101-19.6 for general type buildings and Appendix A to 24 CFR 40 for residential structures. The Recipient will be responsible for conducting inspections to ensure compliance with these specifications by the contractor;
- 18) Recipient will, in connection with its performance of environmental assessments under the National Environmental Policy Act of 1969, comply with Section 106 of the National Historic Preservation Act of 1966 (USC 470), Executive Order 11593, 24 CFR 800, and the Preservation of Archaeological and Historical Data Act of 1966 (16 USC 469a-1, et seq.) by:
  - i) Consulting with SHPO to identify properties listed in or eligible for inclusion in the *National Register* of Historic Places that are subject to adverse effects (see 36 CFR Section 800.8) by the proposed activity; and
  - ii) Complying with all requirements established by the State to avoid or mitigate adverse effects upon such properties.
  - iii) Notifying FEMA and the State if any project may affect a historic property. When any of Recipient's projects funded under a grant agreement may affect a historic property, as defined in 36 CFR 800. (2)(e), FEMA may require Recipient to review the eligible scope of work in consultation with SHPO and suggest methods of repair or construction that will conform with the recommended approaches set out in the Secretary of Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings 1992 (Standards), the Secretary of the Interior's Guidelines for Archeological Documentation (Guidelines) (48 Federal Register 44734- 37), or any other applicable Secretary of



- Interior standards. If FEMA determines that the eligible scope of work will not conform with the Standards, Recipient agrees to participate in consultations to develop, and, after execution by all parties, to abide by, a written agreement that establishes mitigation and recondition measures, including but not limited to, impacts to archeological sites, and the salvage, storage, and reuse of any significant architectural features that may otherwise be demolished.
- iv) Notifying FEMA and the State if any project funded under a grant agreement will involve ground disturbing activities, including, but not limited to: subsurface disturbance; removal of trees; excavation for footings and foundations; and installation of utilities (such as water, sewer, storm drains, electrical, gas, leach lines and septic tanks) except where these activities are restricted solely to areas previously disturbed by the installation, replacement or maintenance of such utilities. FEMA will request the SHPO's opinion on the potential that archeological properties may be present and be affected by such activities. The SHPO will advise Recipient on any feasible steps to be accomplished to avoid any *National Register* eligible archeological property or will make recommendations for the development of a treatment plan for the recovery of archeological data from the property. If Recipient is unable to avoid the archeological property, it will develop, in consultation with the SHPO, a treatment plan consistent with the Guidelines and take into account the Advisory Council on Historic Preservation (Council) publication "Treatment of Archeological Properties". Recipient shall forward information regarding the treatment plan to FEMA, the SHPO and the Council for review. If the SHPO and the Council do not object within 15 calendar days of receipt of the treatment plan, FEMA may direct Recipient to implement the treatment plan. If either the Council or the SHPO object, Recipient shall not proceed with the project until the objection is resolved.
- v) Notifying the State and FEMA as soon as practicable: (a) of any changes in the approved scope of work for a *National Register* eligible or listed property; (b) of all changes to a project that may result in a supplemental DSR or modify an HMGP project for a *National Register* eligible or listed property; (c) if it appears that a project funded under a grant agreement will affect a previously unidentified property that may be eligible for inclusion in the *National Register* or affect a known historic property in an unanticipated manner. Recipient acknowledges that FEMA may require Recipient to stop construction in the vicinity of the discovery of a previously unidentified property that may be eligible for inclusion in the *National Register* or upon learning that construction may affect a known historic property in an unanticipated manner. Recipient further acknowledges that FEMA may require Recipient to take all reasonable measures to avoid or minimize harm to such property until FEMA concludes consultation with the SHPO. Recipient also acknowledges that FEMA will require, and Recipient shall comply with, modifications to the project scope of work necessary to implement recommendations to address the project and the property.



- vi) Acknowledging that, unless FEMA specifically stipulates otherwise, it shall not receive funding for projects when, with intent to avoid the requirements of the PA or the NHPA, Recipient intentionally and significantly adversely affects a historic property, or having the legal power to prevent it, allowed such significant adverse effect to occur.
- 19) Recipient will assist the awarding agency in assuring compliance with the National Historic Preservation Act of 1966, as amended, 16 U.S.C. 270;
- 20) Recipient will assist the awarding agency in assuring compliance with the Preservation of Archeological and Historical Preservation Act of 1966, 16 U.S.C. 469a, et seq;
- 21) Recipient will comply with the requirements of Titles II and III of the Uniform Relocation Assistance and Property Acquisition Policies Act of 1970, 42 U.S.C. 4621-4638, which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally assisted programs;
- 22) Recipient will assure project consistency with the approved State program developed under the Coastal Zone Management Act of 1972, 16 U.S.C. 1451-1464; and
- 23) With respect to demolition activities, recipient will:
  - i) Create and make available documentation sufficient to demonstrate that the Recipient and its demolition contractor have sufficient manpower and equipment to comply with the obligations as outlined in a grant agreement.
  - ii) Return the property to its natural state as though no improvements had ever been contained thereon.
  - iii) Furnish documentation of all qualified personnel, licenses and all equipment necessary to inspect buildings located in Recipient's jurisdiction to detect the presence of asbestos and lead in accordance with requirements of the U.S. Environmental Protection Agency, State of Idaho, and the County Health Agency.
  - iv) Provide documentation of the inspection results for each structure to
  - v) indicate:
    - i. Safety Hazards Present
    - ii. Health Hazards Present
    - iii. Hazardous Materials Present
  - vi) Provide supervision over contractors or employees employed by Recipient to remove asbestos and lead from demolished or otherwise applicable structures.
  - vii) Leave the demolished site clean, level and free of debris.
  - viii) Notify the department promptly of any unusual existing condition which hampers the contractors work.
  - ix) Obtain all required permits.
  - x) Provide addresses and marked maps for each site where water wells and septic tanks are to be closed, along with the number of wells and septic tanks located on each site. Provide documentation of closures.



- xi) Comply with mandatory standards and policies relating to energy efficiency that are contained in the State energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Public Law 94-163).
  - xii) Comply with all applicable standards, orders, or requirements issued under Section 112 and 306 of the Clean Air Act (42 U.S.C. 1857 (h), Section 508 of the Clean Water Act (33 U.S. 1368), Executive Order 11738, and the U.S. Environmental Protection Agency regulations (40 CFR 15 and 61). This clause shall be added to any subcontracts.
  - xiii) Provide documentation of public notices for demolition activities.
- 24) Recipient will comply with Lead-Based Paint Poison Prevention Act (42 U.S.C.: 4821 et seq.), which prohibits the use of lead based paint in construction of rehabilitation or residential structures;
  - 25) Recipient will comply with the Energy Policy and Conservation Act (P.L. 94- 163; 42 U.S.C. 6201-6422), and the provisions of the State Energy Conservation Plan adopted pursuant thereto;
  - 26) Recipient will comply with the Laboratory Animal Welfare Act of 1966, 7 U.S.C. 2131-2159, pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by an award of assistance under this agreement;
  - 27) Recipient will comply with the Clean Air Act of 1955, as amended, 42 U.S.C. 7401-7642;
  - 28) Recipient will comply with the Clean Water Act of 1977, as amended, 42 U.S.C. 7419-7626;
  - 29) Recipient will comply with the Endangered Species Act of 1973, 16 U.S.C. 1531-1544;
  - 30) Recipient will comply with environmental standards which may be prescribed pursuant to the National Environmental Policy Act of 1969, 42 U.S.C. 4321- 4347;
  - 31) Recipient will comply with the environmental standards that may be prescribed pursuant to the Safe Drinking Water Act of 1974, 42 U.S.C. 300f-300j, regarding the protection of underground water sources;
  - 32) Recipient will comply with the Wild and Scenic Rivers Act of 1968, 16 U.S.C. 1271-1287, related to protecting components or potential components of the national wild and scenic rivers system;
  - 33) Recipient will comply with the following Executive Orders: EO 11514 (NEPA); EO 11738 (violating facilities); EO 11988 (Floodplain Management); EO 11990 (Wetlands); and EO 12898 (Environmental Justice);
  - 34) Recipient will comply with the Coastal Barrier Resources Act of 1977, 16 U.S.C. 3510;
  - 35) Recipient will comply with the Fish and Wildlife Coordination Act of 1958; 16 U.S.C. 661-666.



ADOPTION



C.L. "BUTCH" OTTER  
GOVERNOR

**STATE OF IDAHO  
BUREAU OF HOMELAND SECURITY**  
4040 W. GUARD STREET, BLDG. 600  
BOISE, IDAHO 83705-5004



Maj Gen GARY L. SAYLER  
ADJUTANT GENERAL

Col BRAD RICHY  
DIRECTOR

State of Idaho Hazard Mitigation Plan

Statement of Adoption

Pursuant to 44 CFR 201.4, for Idaho to continue to be eligible for Federal disaster assistance and hazard mitigation funding, the State of Idaho Bureau of Homeland Security (BHS) is required to update the State of Idaho Hazard Mitigation Plan (SHMP) every three years. The SHMP was initially approved by FEMA and published by the BHS in November 2004 and was last updated November 2, 2010.

The SHMP is a comprehensive description of the State's commitment to reduce or eliminate the impacts of events caused by natural and human-caused hazards. It is a federal requirement under the Disaster Mitigation Act of 2000 for the State of Idaho to have a current SHMP to receive federal funds for disaster recovery and hazard mitigation. The SHMP is coordinated and maintained by the BHS, and is the culmination of input and recommendations from numerous stakeholders from local, state and federal government agencies, private sector organizations, and residents of Idaho.

The authority to adopt the 2013 SHMP is provided in Title 46, Chapter 10, Idaho Code. In adopting the SHMP, the State of Idaho agrees to comply with all applicable state and federal statutes and regulations, as stipulated in previously documented assurances, and to continue to maintain and update the plan as federal regulations require. The SHMP has been updated to reflect emerging hazard conditions and risks, new or revised state and federal laws, and programs and capabilities, as well as a more robust mitigation strategy.

The Director of the Bureau of Homeland Security recommends this State of Idaho Hazard Mitigation Plan be promulgated.

  
Major General Gary L. Saylor  
Adjutant General, Idaho Military Division

Date 9 JAN 2014

  
C.L. Butch Otter  
Governor, State of Idaho

Date 1/14/14



C.L. "BUTCH" OTTER  
GOVERNOR

**STATE OF IDAHO  
BUREAU OF HOMELAND SECURITY**

4040 W. GUARD STREET, BLDG. 600  
BOISE, IDAHO 83705-5004

Maj Gen GARY L. SAYLER  
ADJUTANT GENERAL



Col BRAD RICHY  
DIRECTOR

State of Idaho Hazard Mitigation Plan

Statement of Adoption

In order for Idaho to continue to be eligible for Federal disaster assistance and hazard mitigation funding, the State of Idaho Bureau of Homeland Security (BHS) is required to update the State of Idaho Hazard Mitigation Plan (SHMP) every three years. The SHMP was initially approved by FEMA and published by BHS in 2004 and was last updated in November 2, 2010.

The SHMP is a comprehensive description of the State's commitment to reduce or eliminate the impacts of events caused by natural and human-caused hazards and is a federal requirement under the Disaster Mitigation Act of 2000 for the State of Idaho to receive federal funds for disaster recovery and hazard mitigation. The SHMP is coordinated and maintained by the BHS, but is the culmination of input and recommendations from numerous stakeholders from local, state, and federal government agencies, private sector organizations and residents of Idaho.

In adopting the SHMP, the State of Idaho agrees to comply with all applicable state and federal statutes and regulations, as stipulated in previously documented assurances and will continue to update the plan as federal regulations require. The SHMP has been updated to reflect emerging hazard conditions and risks, new or revised state and federal laws, programs, and capabilities; and a new mitigation strategy.

The 2013 Idaho State Hazard Mitigation Plan is hereby adopted.

Brad Richy, Colonel  
Director, Idaho Bureau of Homeland Security

30 Oct 2013

Date



U.S. Department of Homeland Security  
Region X  
130 228th Street, SW  
Bothell, WA 98021-9796



FEMA

November 1, 2013

Colonel Brad Richy  
Director, Idaho Bureau of Homeland Security  
Military Division  
4040 Guard Street, Building 600  
Boise, Idaho 83705-5004

Dear Colonel Richy:

Congratulations, the U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) is pleased to inform you that we have approved the 2013 update to the *State of Idaho Hazard Mitigation Plan* as a Standard State Plan, in accordance with 44 CFR Part 201. The State of Idaho continues to be eligible for Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) non-emergency programs through October 31, 2016. To continue eligibility, the plan must be reviewed, revised as appropriate and re-submitted for approval within three years from the date of this letter.

As a result of the Disaster Mitigation Act of 2000, States and Tribes are required to develop and maintain hazard mitigation plans compliant with FEMA standards as a condition for receiving non-emergency Stafford Act assistance. For local entities that conduct their emergency management activities and programs through the State, a FEMA-approved local or Tribal plan is required for hazard mitigation project grant eligibility. Applicable Stafford Act assistance includes Public Assistance (Categories C-G), Fire Management Assistance, Hazard Mitigation Grant Program (HMGP), and Pre-Disaster Mitigation grants.

FEMA's approval of your updated plan as a Standard State Plan provides the State of Idaho continued availability of various Stafford Act programs. All requests for assistance, however, will be evaluated individually according to the specific eligibility and other requirements of the particular programs. For example, a mitigation action identified in the approved plan may or may not meet the eligibility requirements for HMGP funding. FEMA's program specialists are available to answer any questions regarding specific program requirements and eligibility.

We look forward to continuing a productive relationship between FEMA Region X and the State of Idaho. Please contact our Regional Mitigation Planning Manager, Kristen Meyers, at (425) 487-4543, or our Mitigation Division Director, Mark Carey, at (425) 487-4687 with any questions or for further assistance.

Sincerely,

Kenneth D. Murphy  
Regional Administrator

RECEIVED

NOV 06 2013

MLN/SC/MS

cc: Mark Stephensen, Idaho Bureau of Homeland Security

BH:bb

www.fema.gov



## APPENDIX C: SUMMARY OF UPDATES AND PAST PLAN INFORMATION

### SUMMARY OF 2013 UPDATES

For the 2013 SHMP update, the Idaho Bureau of Homeland Security (BHS) wanted to continue to build off of the strengths of the 2010 Plan, while also focusing new approaches and attention to specific areas of the planning process:

- BHS expanded on the use of technical working groups, adding a 4<sup>th</sup> focused on human-caused hazards. Also, the rosters of the three existing groups (wildfires, floods, and earthquakes) were expanded to include representation from additional agencies and organizations throughout Idaho. In addition to the major hazard that each group focused on in 2010, the 2013 technical working groups also took ownership of additional hazards, to ensure that all hazards assessed in the Plan fell under the care of a specific working group.
- Another area of the planning process that BHS worked to improve upon was public stakeholder participation. In an attempt to improve and increase public interaction, BHS conducted a number of innovative outreach activities. Also, presentations and forums with the public were aligned with existing events. This led to dramatically increased public participation in the Plan update. Additional details have been documented in Appendix D.
- A final top focus of the 2013 Plan update dealt with improving the existing risk assessments that were conducted in 2010. To better refine the vulnerability and loss estimations, BHS worked closely with a number of State and Federal agencies to collect the latest and most accurate hazard, structure, and infrastructure data in a geospatial format. This allowed for the incorporation of both improved and additional geospatial analysis throughout the risk assessment portion of the Plan. Additional information is detailed in Section 3.1.

Table C-1 on the following page provides an overview to major changes between the 2010 and 2013 Plan, as they relate to 44CFR planning requirements.



**Table C-1: Summary of Changes Between 2013 & 2010 Versions of the Idaho SHMP**

44 CFR Requirement	2010 Plan	2013 Plan
<i>§201.4(a)</i> : States must have an approved Standard State Mitigation Plans meeting the requirements of this section as a condition of receiving non-emergency Stafford Act assistance and FEMA mitigation grants.	The 2010 Plan received FEMA approval, pending State adoption on 10/22/2010. The formal FEMA approval occurred on 11/1/2010.	The 2013 Plan received FEMA approval on 11/1/2013.
<i>§201.4(b)</i> : The mitigation planning process should include coordination with other State agencies, appropriate Federal agencies, interested groups, and be integrated to the extent possible with other ongoing State planning efforts as well as other FEMA mitigation programs and initiatives.	The 2010 Plan leveraged the help of three Technical Working Groups (TWG) which were made up of a number of State, Federal, and local stakeholders.	Based on the success of the TWGs, the 2013 Plan continued to make use of these groups for plan updates and review. An additional TWG was added and additional participants were invited and participated in all of the TWGs.
<i>§201.4(c)(1)</i> : [The plan must include...] Description of the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how other agencies participated.	The 2010 planning process included the abovementioned TWGs. In addition, a statewide ‘road show’ was conducted to present and share the updated plan with various stakeholders across the State.	In addition to the expanded TWGs mentioned above, numerous public presentations were conducted at conferences and events across the State. These resulted in greatly increased public participation throughout the Plan update process.
<i>§201.4(c)(2)(i)</i> : [The risk assessment shall include...] An overview of the type and location of all natural hazards that can affect the State, including information on previous occurrences of hazard events, as well as the probability of future hazard events, using maps where appropriate;	In 2010, the risk assessment portion of the Plan was entirely re-organized to include all required elements. All natural hazards (and one human-caused) that affect the State were profiled. Historical events and future probabilities were assessed and mapped when appropriate.	The 2013 Plan built off of the 2010 risk assessment effort. Historical information and associated maps and event probabilities were updated throughout. In addition, several newly-profiled human-caused hazards were added to the Plan.
<i>§201.4(c)(2)(ii)</i> : [The risk assessment shall include...] An overview and analysis of the State’s vulnerability to the hazards described in this paragraph (c)(2), based on estimates provided in	The 2010 hazard vulnerability assessments utilized the best available data at that time. Geospatial analysis was conducted for those hazards able to be assessed in that	The 2013 Plan incorporated updated and additional vulnerability assessments and estimations based upon improved geospatial data sets. All updated local plans were



**Table C-1: Summary of Changes Between 2013 & 2010 Versions of the Idaho SHMP**

44 CFR Requirement	2010 Plan	2013 Plan
<p>local risk assessments as well as the State risk assessment. The State shall describe vulnerability in terms of the jurisdictions most threatened by the identified hazards, and most vulnerable to damage and loss associated with hazard events. State owned or operated critical facilities located in the identified hazard areas shall also be addressed;</p>	<p>manner. All local plans were reviewed and applicable information was ‘rolled up’ into a master database for use at the State level. Maps presenting the results of the assessments were produced when applicable. A partial collection of State facilities was available for geospatial assessments.</p>	<p>again reviewed and any applicable vulnerability information was incorporated at the State level. The State’s on-going project for collecting State facility information into a geodatabase was not yet ready for use as part of the 2013 update, but a geodatabase of local jurisdictional facilities was utilized for additional vulnerability assessments.</p>
<p><i>§201.4(c)(2)(iii)</i>: [The risk assessment shall include...] An overview and analysis of potential losses to the identified vulnerable structures, based on estimates provided in local risk assessments as well as the State risk assessment. The State shall estimate the potential dollar losses to State owned or operated buildings, infrastructure, and critical facilities located in the identified hazard areas.</p>	<p>In 2010 loss estimations utilized the best available data at that time. The Hazus tool was utilized to analyze the hazards of flood and earthquake. No additional loss analysis was possible due to data limitations.</p>	<p>The 2013 Plan greatly improved upon the existing loss estimations and allowed for new and additional analysis to be conducted. The latest version of Hazus was used, along with local Level 2 data inputs, to re-assess the flood and seismic loss estimations. The local jurisdictional facility information allowed for improved loss analysis for a number of hazards.</p>
<p><i>§201.4(c)(3)(i)</i>: [A mitigation strategy...shall include...] A description of State goals to guide the selection of activities to mitigate and reduce potential losses.</p>	<p>The 2007 goals were reviewed and an updated set of 2010 goals were defined for use in developing the State’s mitigation strategy.</p>	<p>The 2010 goals were reviewed and determined to still be current for use in updating the State’s mitigation strategy.</p>
<p><i>§201.4(c)(3)(ii)</i>: [A mitigation strategy...shall include...] A discussion of the State’s pre and post-disaster hazard management policies, programs, and capabilities to mitigate the hazards in the area, including: an evaluation of State laws, regulations, policies, and programs related to hazard mitigation as well as to development in hazard-prone</p>	<p>The 2010 mitigation strategy included a thorough review and documentation of all of the State’s hazard mitigation and land development related management policies, programs, funding, and capabilities. As part of the local plan data roll-up, local strategies were also assessed and incorporated into the</p>	<p>The 2013 update reviewed all information pertaining to the State’s policies, programs, and capabilities and updated where necessary. Local strategies were similarly updated as occurred in 2010.</p>



**Table C-1: Summary of Changes Between 2013 & 2010 Versions of the Idaho SHMP**

44 CFR Requirement	2010 Plan	2013 Plan
areas; a discussion of State funding capabilities for hazard mitigation projects; and a general description and analysis of the effectiveness of local mitigation policies, programs, and capabilities.	State Plan.	
<i>§201.4(c)(3)(iii)</i> : [A mitigation strategy...shall include...] An identification, evaluation, and prioritization of cost-effective, environmentally sound, and technically feasible mitigation actions and activities the State is considering and an explanation of how each activity contributes to the overall mitigation strategy. This section should be linked to local plans, where specific local actions and projects are identified.	The 2010 objectives and action were defined and updated as part of the mitigation strategy review. All stated criteria were reviewed and scored for each action, which were then directly tied back to the State’s goals. Local action and projects were also reviewed and tied into the State strategy.	The 2010 objectives and actions were reviewed as part of the 2013 update and new actions were assessed and included. Local mitigation strategies were similarly reviewed as they were in 2010.
<i>§201.4(c)(3)(iv)</i> : [A mitigation strategy...shall include...] Identification of current and potential sources of Federal, State, local, or private funding to implement mitigation activities.	An exhaustive list of potential mitigation project funding was compiled as part of the 2010 update.	The 2013 update reviewed and updated information relating to possible mitigation activity funding.
<i>§201.4(c)(4)(i)</i> : [The plan must include...A section on the Coordination of Local Mitigation Planning that includes...] A description of the State process to support, through funding and technical assistance, the development of local mitigation plans.	The 2010 Plan reviewed and documented the State support processes as they related to local mitigation planning.	The 2013 Plan revisited the local mitigation planning processes as they relate to the State and updates were accordingly made to the Plan.
<i>§201.4(c)(4)(ii)</i> : [The plan must include...A section on the Coordination of Local Mitigation Planning that includes...] A description of the State process and timeframe by which the local plans will be reviewed, coordinated, and linked to the State Mitigation Plan.	The State’s local hazard mitigation planning assistance process was reviewed and documented as part of the 2010 update.	In 2013, the State again reviewed its local mitigation planning assistance process and updated the Plan accordingly.



**Table C-1: Summary of Changes Between 2013 & 2010 Versions of the Idaho SHMP**

44 CFR Requirement	2010 Plan	2013 Plan
<i>§201.4(c)(4)(iii)</i> : [The plan must include...A section on the Coordination of Local Mitigation Planning that includes...] Criteria for prioritizing communities and local jurisdictions that would receive planning and project grants under available funding programs, which should include consideration for communities with the highest risks, repetitive loss properties, and most intense development pressures.	The 2010 plan documented the State’s local assistance prioritization process, which includes details concerning the criteria utilized. This includes areas of present and future development, in addition to repetitive loss properties.	As part of the 2013 update, the local assistance prioritization process was reviewed and updated as warranted.
<i>§201.4(c)(5)(i)</i> : [The plan must include...A Plan Maintenance Process that includes...] An established method and schedule for monitoring, evaluating, and updating the plan.	Plan maintenance of the 2010 updated document was discussed and documented in the Plan.	The Plan maintenance process was reviewed as part of the 2013 update and remains documented in the Plan.
<i>§201.4(c)(5)(ii)</i> : [The plan must include...A Plan Maintenance Process that includes...] A system for monitoring implementation of mitigation measures and project closeouts.	The 2010 Plan defined the State’s system for monitoring implementation and closeout of the State’s mitigation projects.	The 2013 Plan will continue to monitor mitigation projects as was defined in the 2010 update.
<i>§201.4(c)(5)(iii)</i> : [The plan must include...A Plan Maintenance Process that includes...] A system for reviewing progress on achieving goals as well as activities and projects identified in the Mitigation Strategy.	The 2010 Plan defined the State’s system for reviewing and reporting the progress of the State’s mitigation projects.	The 2013 Plan will continue to review mitigation projects as was defined in the 2010 update.
<i>§201.4(c)(6)</i> : The plan must be formally adopted by the State prior to submittal to us for final review and approval.	The State adopted the Plan on 11/1/2010.	The State adopted the Plan on 10/30/2013.
<i>§201.4(c)(7)</i> : The plan must include assurances that the State will comply with all applicable Federal statutes and regulations in effect with respect to the periods for which it receives grant funding, in compliance with 44 CFR 13.11(c) of	The 2010 Plan included an Appendix which contains the assurances and compliance with Federal regulations.	The 2013 Plan reviewed and renewed the assurances and compliance with Federal regulations.



**Table C-1: Summary of Changes Between 2013 & 2010 Versions of the Idaho SHMP**

44 CFR Requirement	2010 Plan	2013 Plan
this chapter.		
<p><i>§201.4(d)</i>: Plan must be reviewed and revised to reflect changes in development, progress in statewide mitigation efforts, and changes in priorities and resubmitted for approval to the appropriate Regional Administrator every three years.</p>	<p>The 2010 Plan was the first update to the State’s original 2007 State Hazard Mitigation Plan.</p>	<p>The 2013 Plan is the second update to the State’s original 2007 State Hazard Mitigation Plan.</p>

**SUMMARY OF 2010 UPDATES**

For the 2010 SHMP update, the BHS took a step back from the current plan to see how it could be enhanced through reorganization as well as through the addition of more information and updated data. A new approach for updating the Plan in 2010 included the use of technical working groups to improve how the plan addresses Idaho’s top three hazards (wildfires, floods, and earthquakes). Each of the technical working groups reviewed the 2007 Plan and, from their expert perspective, provided feedback on how to improve it. Details regarding the meetings and coordination that took place in order to develop and achieve the update goals are provided in Appendix D. The following section provides detail on the differences between the 2007 Plan and the 2010 Plan that resulted from this planning process.

Because of the reorganization of the Plan, it would be difficult to describe how each section of the plan was reviewed separately. In summary, the technical working groups reviewed the entire Plan, focusing on information in Chapters 2, 3, or 4, as appropriate for their areas of expertise. Information that was in those chapters in the 2007 Plan was consolidated into Chapter 3 in the 2010 Plan. Many decisions concerning Chapters 2, 3, or 4 from the 2007 Plan affected other sections of the Plan, such as the new HAZUS analysis and the review of mitigation actions. The BHS updated sections related to mitigation programs and capabilities based on how the program operated in the past, improvements that should be made, and the potential for change.

Table C-2 below indicates whether or not each section of the 2007 SHMP was revised as part of the update process.



**Table C-2: Summary of Differences Between Past Versions of the Idaho SHMP**

2007 Section Name	Section(s) in 2010 SHMP where similar information is found	Changes in Updated Section(s)
<b>Adoption signature pages.</b>	Appendix B: Authorities, Assurances, and Adoption	<ul style="list-style-type: none"> <li>Materials related to plan adoption were moved from the front of the document to new appendix.</li> </ul>
<b>Chapter 1: Executive Summary</b>	Executive Summary, Chapter 1: Hazard Summary and Mitigation Strategy, Chapter 2: State of Idaho Profile, and Appendix C: Summary of Updates and 2007 Plan Information	<ul style="list-style-type: none"> <li>Executive Summary section was reorganized to summarize the Plan and no longer contains information that is not detailed in elsewhere in the SHMP.</li> <li>Idaho profile information was placed in a separate chapter (Chapter 2) and expanded to include a review of natural environment, land use, development trends, critical infrastructure, and State facilities.</li> <li>A summary of updates was moved to a new appendix.</li> </ul>
<b>Chapters 2-5: Flood, Wildland Fire, Earthquake, and Other Hazards</b>	Chapter 3: Hazards in Idaho <sup>1</sup> , and Appendix G: Mitigation Action Plan and Prioritization	<ul style="list-style-type: none"> <li>All hazard Risk Assessments were grouped into a single chapter.</li> <li>“Wildland Fire” now called “Wildfire.”</li> <li>“Dam/Levee Failure” hazard added.</li> <li>Standardization of subsections for each hazard.</li> <li>Roll-up of information from local plans.</li> <li>HAZUS-MH4 analyses included.</li> <li>Detailed consequence analysis for top three hazards.</li> <li>Preliminary database shell for State facilities/infrastructure.</li> <li>Recommended Mitigation Actions removed and included as Appendix G.</li> </ul>
<b>Chapter 6: Planning Process</b>	Chapter 1: Hazard Summary and Mitigation Strategy Chapter 4: Policies, Programs, and Capabilities and Appendix D: Planning Process and Maintenance	<ul style="list-style-type: none"> <li>Capability assessment and funding program information was placed in a separate section (Chapter 4).</li> <li>Descriptions of programs were extracted and included in new chapter (Chapter 4)</li> <li>Mitigation Actions portion was extracted and included with new chapter (Chapter 1)</li> </ul>
<b>Appendix 1.1: State of</b>	Appendix G: Mitigation	<ul style="list-style-type: none"> <li>Moved section to front of Plan. Includes</li> </ul>



**Table C-2: Summary of Differences Between Past Versions of the Idaho SHMP**

2007 Section Name	Section(s) in 2010 SHMP where similar information is found	Changes in Updated Section(s)
<b>Idaho Mitigation Actions</b>	Action Plan and Prioritization	<ul style="list-style-type: none"> <li>summary of mitigation actions for 2007-2010.</li> <li>Significantly changed nature and quantity of mitigation actions, focusing them on items that are within the State’s span of control.</li> <li>Updated mitigation goals and objectives.</li> </ul>
<b>Appendix 2.1: State of Idaho Stream Gauges</b>	--	<ul style="list-style-type: none"> <li>Not included in the 2010 update.</li> </ul>
<b>Appendix 3.1: Review of Community Wildfire Protection Plans</b>	--	<ul style="list-style-type: none"> <li>Not included in the 2010 update.</li> </ul>
<b>Appendix 3.2: Hazardous Fuels Treatment and Planning Funding</b>	--	<ul style="list-style-type: none"> <li>Not included in the 2010 update.</li> </ul>
<b>Appendix 3.3: National Fire Plan Progress</b>	--	<ul style="list-style-type: none"> <li>Not included in the 2010 update.</li> </ul>
--	Appendix A: References	<ul style="list-style-type: none"> <li>Full citations for references included in Appendix A.</li> </ul>
--	Appendix B: Authorities, Assurances, and Adoption	<ul style="list-style-type: none"> <li>Moved from beginning of document to Appendix B.</li> </ul>
--	Appendix C: Summary of Updates and 2007 Plan Information	<ul style="list-style-type: none"> <li>New assessment conducted for this Plan.</li> </ul>
--	Appendix E: Enhanced Plan Capability Assessment	<ul style="list-style-type: none"> <li>New assessment conducted for this Plan.</li> </ul>
--	Appendix F: HAZUS Capability Assessment	<ul style="list-style-type: none"> <li>New analysis conducted for this Plan.</li> </ul>

**Notes:** <sup>1</sup> Updates are detailed at the beginning of Chapter 3; "--" indicates that this section was not included in the other version of the SHMP.



## APPENDIX D: PLANNING PROCESS & PLAN MAINTENANCE

### PLANNING PROCESS

#### Introduction

Development of the 2013 State Plan Update has involved coordination between the Idaho Bureau of Homeland Security (BHS); local, State, and Federal agencies; and the public in order to address and incorporate: 1) new FEMA requirements for Plan updates, 2) updated data on hazard events and mitigation efforts in Idaho, and 3) diverse and changing concerns reflected in the local plans of the 47 counties and Tribal governments that comprise the State. This update required a multilayered planning process that employed a variety of forums and techniques. The following sections detail the planning process in the years since 2010; describe who were involved, key decisions and milestones, and the integration of other planning programs.

#### The Planning Team

##### *Planning Executive Committee*

BHS used a Planning Executive Committee comprising BHS and other agency representatives to assist BHS in the SHMP Update. This committee included the following individuals from different agencies:

- Bill Hatch, Idaho Division of Building Safety, State Building Safety Specialist
- Bill Phillips, Idaho Geological Survey, Research Geologist
- David Jackson, BHS, Critical Infrastructure Protection Program Manager
- Mark Stephensen, BHS, State Hazard Mitigation Officer
- Mary McGown, Idaho Department of Water Resources (IDWR), State Floodplain Coordinator
- Craig Glazier, Idaho Department of Lands, Forest Fire Manager
- Marilyn Simunich, Idaho Department of Agriculture, DVM Section Manager
- Ryan McDaniel, IDWR
- Bill Reese, Idaho State Police
- Mark Larson, Idaho Department of Insurance, State Fire Marshall
- Troy Lindquist, NOAA
- Chris Wendrowski, Boise School District, Facilities & Operations Administrator
- Jeff Rylee, BHS, HazMAT Operations
- Mary Marsh, BHS, Public-Private Partnerships Section Chief
- Krista Anderson, BHS, Mitigation Program Assistant
- Susan Cleverley, BHS, Senior Mitigation Planner
- Pat Lucas, BHS, Preparedness and Protection Branch Chief
- Charles Butrick, Business Consulting Services, LLC, Coordinator
- Angie Parra, Idaho National Guard
- Michael Garner, Michael Baker Corporation, Contractor



The Executive Committee participated in several exercises which are detailed in the following section. The Executive Committee provided overall guidance and direction on the 2013 Plan update

### *Technical Working Groups*

Technical Working Groups (TWGs) were used to provide expertise and detail beyond the scope of the Planning Executive Committee. Five groups were utilized as part of the 2013 Plan update: three whose primary focus was on the top three hazards in the State (flood, wildfire, and earthquake); a fourth that addressed the newly profiled human-caused hazards; and a fifth that focused on data needs for the risk assessment. The working groups assisted in updating the risk assessment and formulating mitigation strategies for their hazards. The working groups will also champion the implementation of the mitigation strategies after the Plan is adopted (see “Plan Maintenance” at the end of this appendix).

For the three key hazards, Idaho already benefitted from organized, multi-agency groups that could fill the role of technical working groups in the Idaho SHMP update effort. The pre-existing groups already had track records for maintaining a regular meeting schedule and could focus their attention on their topics of expertise and not have to grapple with edits to the entire SHMP. The technical working group concept also allowed proper coordination and integration with other statewide planning efforts (Idaho Implementation Strategy for National Fire Plan, Silver Jackets Implementation Plan), because members were involved in both efforts.

**For Flood**, BHS turned to the Idaho Silver Jackets Team, which is the State-level implementation of the USACE’s National Flood Risk Management Program (NFRMP). The Idaho chapter of the Silver Jackets was established by a USACE charter in the summer of 2009 (NFRMP, 2009). The group holds meetings at least on a quarterly basis, but it has met nearly every month in the year since its charter. Meeting minutes are posted publically at <http://www.nfrmp.us/state/factIdaho.cfm>. As described in their charter, the group’s vision is to “serve as a catalyst in developing comprehensive and sustainable solutions to flood hazard issues, including mitigation planning, flood hazard mapping, risk reduction activities, and response and recovery planning.” As explained in a USACE news release (USACE, 2010), “Silver Jackets team members with different areas of expertise provide one-stop information to State and local government to help them identify solutions to flood hazards. In addition, Silver Jackets educate the public about flood risks, so communities can better understand flood-related problems and assistance programs.” This allows for integration with FEMA’s mitigation programs and initiatives.

Membership in the Idaho Silver Jackets varies based on available resources and team focus; however, the core member agencies involved at all times include USACE, FEMA, IDWR, BHS, and National Oceanic Atmospheric Administration National Weather Service (NOAA/NWS). Those individuals that participated directly as part of the 2013 Plan update included:

- Tim Page, Boise Project Board of Control
- Tracy Schwarz, Ellen Berggren, US Army Corps of Engineers
- Mary McGown, John Falk, Idaho Department of Water Resources
- Ryan McDaniel, IDWR and FEMA



- Bryan Smith, Idaho Department of Transportation
- Jerry Miller, Idaho Department of Commerce
- Rob Sampson, US Department of Agriculture – Natural Resource Conservation Service
- Molly Wood, US Geological Survey
- Troy Lindquist, National Oceanic and Atmospheric Administration
- Mark Stephensen, Krista Anderson, Susan Cleverly, Lisa Bowen, BHS

**For Wildfire**, the working group consisted of a pre-existing team that already focused on the hazard of wildfire in the State: the Idaho Lands Resource Coordinating Council (ILRCC). This council was recently formed from three existing advisory groups within the Idaho Department of Lands (IDL). The Idaho State Plan Working Group (ISPWG), formed in 2002, had previously assisted with Plan updates and is charged with assisting counties and tribes with their local Wildfire Protection Plans and their associated local working groups, disseminating information, and providing oversight to facilitate the implementation of the National Fire Plan in Idaho.

Group members participating as part of the 2013 Plan update included:

- Craig Glazier, Idaho National Fire Plan Coordinator
- Mark Larson, Idaho State Fire Marshal
- Pamm Juker, Marilyn Simunich, Idaho Department of Agriculture
- Kevin S. Knauth, Bureau of Land Management
- Susan Cleverly, Heidi Novich, Krista Anderson, Mark Stephensen, BHS

**For Earthquake**, another pre-existing group was used by BHS as the technical working group: the Seismic Advisory Committee. The Idaho Seismic Advisory Committee is a multidiscipline, interagency group that has been meeting since September 2007. In early 2010, the Committee incorporated the SHMP update as part of its on-going agenda. The Seismic Advisory Committee was organized by BHS to develop and implement statewide earthquake preparedness and mitigation efforts. It is composed of members representing Idaho's local, State and Federal agencies, professional engineers, and universities.

Membership that participated in the 2013 Plan update included the following people:

- Bill Phillips, Idaho Geological Survey
- Bill Hatch, Idaho Division of Building Safety
- Scott Sanderson, Super Value (Albertsons)
- Chris Wendrowski, Boise School District
- David Claycomb, Idaho Parks and Recreation
- Susan Cleverly, Mark Stephensen, Krista Anderson, BHS



**For Human-Caused**, no pre-existing group was able to be leveraged to participate in the Plan update. Therefore, a diverse group representing a number of agencies and organizations was selected to assist BHS with the first-time profiling of the various human-caused hazards.

Membership that participated in the Human-caused technical working group included:

- Matt Elam, Idaho Public Utilities Commission
- Tim Frazier, University of Idaho’s Department of Geography
- Randy Valley, Idaho Department of Corrections
- Jim Eavenson, Idaho State Police
- Rob Littrell, Boise State University
- Mary Whale, VA Hospital
- Dave Jackson, Jeff Rylee, Robert Feeley, Krista Anderson, Mark Stephensen, Mary Marsh, Susan Cleverley, BHS

**For Data**, BHS reached out to some of the State’s subject matter experts to participate in this working group. Members represented a number of agencies and organizations to expedite and streamline the data acquisition process.

Membership that participated in the Data technical working group included:

- Bill Phillips, Idaho Geological Survey
- Chris Keith, Bureau of Reclamation
- Ryan McDaniel, IDWR
- Dave Jackson, Mark Stephensen, Susan Cleverly, Becky Rose, BHS

As part of the 2013 update process, BHS also assigned secondary hazards to each working group to ensure all hazards addressed in the Plan had an associated lead working group. Table D.1 below summarizes those hazards assigned to each working group.

TABLE D.1: Technical Working Group Hazard Assignments			
Flood	Wildfire	Seismic	Human-caused
Flood	Wildfire	Earthquake	Civil Disturbance
Dam/Levee/Canal	Drought	Avalanche	Cyber Disruption
Failure	Lightning	Landslide	Hazardous Materials
Severe Storms	Wind/Tornados	Volcanic Eruptions	Pandemic
			Radiological

### *Participating Consultants*

In the summer of 2012, BHS hired a consulting firm, Michael Baker Jr., Inc. (Baker) to assist with other aspects of the Plan update process. Baker assisted BHS in the initial Plan update in 2010 and as part of the 2013 update assisted with the following tasks: updates and enhancements to the risk assessment;

performing all mapping and analysis, drafting the updated Plan; participating in committee, working group, and public meetings; integrating comments; and finalizing the Plan.

In the fall of 2012, BHS hired an additional consultant, Charles Butrick of Business Consulting Services, LLC to help coordinate meetings and facilitate the technical advisory groups as well as plan and execute public outreach and education events regarding not only the 2013 update to the plan, but also individual mitigation activities that every citizen of Idaho could use to protect their families and property from the identified hazards within the plan.

### The Planning Process

One major area that BHS chose to focus improvements on as part of the 2013 Plan update involved both the overall planning process and the associated public outreach. Detailed below is the process that BHS followed. All Planning Team meetings are first detailed on the following pages. Next, the Public Meetings are documented. Following that list are summaries of major additional steps, activities, highlights, and exercises that were part of the planning process.

### Project Kick-Off Meeting

A Kick-Off Meeting to organize the Planning Team for the 2013 SHMP update was held July 19, 2012. A summary of the 2010 Plan was first presented. This was followed by a review of the update process to be followed as part of the 2013 update. During a working lunch, presentations were given addressing the New York Canal

flooding impacts from encroachment and Valley County Fire Working Group’s Mobile Risk Assessment. Attendees were then divided up into Technical Working Groups according to expertise and assigned those hazards that they would focus on as part of the Plan update. To finish the day, training was provided to the group pertaining to utilizing BHS’s on-line SharePoint tool for Plan updates and edits.



Source: BHS

Attendees are included below in Table D.2:



**TABLE D.2 – Kick-Off Meeting Participants**

<b>Last Name</b>	<b>First</b>	<b>Title</b>	<b>Firm/Agency</b>
<b>Anderson</b>	Krista	Mitigation/CIKR Prog. Asst.	BHS
<b>Bonilla</b>	Juan	Fire Chief	Donnelly Fire Department
<b>Bowen</b>	Lisa	EOPT Specialist	BHS
<b>Cleverley</b>	Susan	Sr. Mitigation Planner	BHS
<b>Deveau</b>	Paul J.	Project Manager	Boise Project Board of Control
<b>Eavenson</b>	Jim	Lieutenant, Acting Captain	ISP
<b>Elam</b>	Matt	Utilities Analyst	Idaho Public Utilities Comm.
<b>Feeley</b>	Robert	Public Information Officer	BHS
<b>Frazier</b>	Tim	Geologist	U of I Dept. of Geography
<b>Garner</b>	Michael	Technical Manager	Michael Baker Jr., Inc.
<b>Hoffman</b>	Vicki	Ops. and Maint. Mgr.	Bureau of Reclamation
<b>Jackson</b>	David	CIKR Program Mgr.	BHS
<b>Johanek</b>	Kimberly	Professor of Sociology	BSU
<b>Johnson</b>	Stephanie		Cabin Creek Enterprises
<b>Larson</b>	Mark	State Fire Marshall	DOI/ State Fire Marshall's Ofc.
<b>Lindquist</b>	Troy		NOAA
<b>Littrell</b>	Rob	Emergency Program	BSU
<b>McDaniel</b>	Ryan		FEMA - IDWR



**TABLE D.2 – Kick-Off Meeting Participants**

Last Name	First	Title	Firm/Agency
McGown	Mary	State Floodplain Coordinator	IDWR
Potsma	Ken		Cabin Creek Enterprises
Schwarz	Tracy	Walla Walla Dist. Flood Risk Mgr.	USACE
Simunich	Marilyn	DVM Section Manager	ID Dept. of Ag.
Smith	Bryan	Emergency Program Manager	IDOT
Stephensen	Mark	SHMO	BHS
Valley	Randy	Operations Manager	IDOC
Wendrowski	Chris	Facilities & Ops. Administrator	Boise School District
Whale	Mary	Head of Radiology	VA Hospital
Marsh	Mary	PPP	BHS

***Planning Executive Committee Meetings***

The Executive Committee played an integral role in the 2013 Plan update. In addition to assisting BHS throughout the entire planning process and being called upon both collectively and individually as needed, members also served on some of the Technical Working Groups. The following meeting was held specifically for the Executive Committee:

**November 27, 2012: Mitigation Strategy and 2013 Planning Process Review**

The Executive Committee convened for an afternoon to wrap up the 2013 Plan Update process. The committee conducted a final review and update to the 2013 Mitigation Strategy and associated Actions. Following this, the committee walked through any remaining data or Plan needs. To conclude things, the group spent some time to step back and discuss how the 2013 Planning Process worked out and suggestions for future revisions and additional actions for the group. Minutes are included in Appendix G.



### ***Flood Technical Working Group Meetings***

The Flood TWG assisted with updates to numerous hazard profiles within the Plan. In addition they ensured that the State's mitigation strategy was updated and aligned with the State's vision for the next three years. The following meetings were held by the Flood TWG:

#### **September 6, 2012: Risk Factor Exercise**

The Flood TWG met to collectively work through a Risk Factor Exercise, which generated good discussions specific to the hazards assigned to the group. Perceived assessments of the various hazards resulted in a hazard ranking that helped focus the group as they moved through the update process. Additional details concerning the Risk Factor Exercise are highlighted later on in this Appendix and Minutes are included in Appendix G.

#### **October 11, 2012: Status Updates and Consequence Analysis Exercise**

The Flood TWG met for a final time to review and address a number of topics. Outreach activities were discussed as well as a review of the group's edits to the Plan sections. The group also worked through a Consequence Analysis Exercise. Additional details concerning this exercise can be found in Chapter 3, under the Vulnerability Analysis and Loss Estimation subsection for the Flood hazard. The Agenda is included in Appendix G.

### ***Seismic Technical Working Group Meetings***

The Seismic TWG was tasked with updates to numerous hazard profiles within the Plan. They also reviewed those applicable sections of the State's mitigation strategy to ensure it was updated and remains aligned with the State's vision going forward. The following meetings were held by the Seismic TWG:

#### **August 15, 2012: Risk Factor Exercise**

The Seismic TWG met to collectively work through a Risk Factor Exercise, which generated lengthy discussions specific to the hazards assigned to the group. Perceived assessments of the various hazards resulted in a hazard ranking that helped focus the group as they moved through the update process. Additional details concerning the Risk Factor Exercise are highlighted later on in this Appendix and Minutes are included in Appendix G.

#### **September 9, 2012: Status Updates and Data Discussion**

The Seismic TWG met to address a number of items. The Risk Factor Exercise was revisited to update some of the results. In addition, the team reviewed the available data sets to be used in the risk assessment and Hazus analysis. Minutes are included in Appendix G.

#### **October 24, 2012: Status Updates, Consequence Analysis Exercise, Action Review**



The Seismic TWG met to review and address a number of topics. Outreach activities were discussed as well as a review and addition to some of the Mitigation Strategy actions. The group also worked through a Consequence Analysis Exercise. Additional details concerning this exercise can be found in Chapter 3, under the Vulnerability Analysis and Loss Estimation subsection for the Earthquake hazard. Minutes are included in Appendix G.

### **February 7, 2013: Status Updates and Hazus and Data Discussion**

The Seismic TWG met for a final time to discuss a range of items, including future outreach efforts and planning for the soon to be underway Hazus analysis. The results of the local plan roll-up data were also presented. The group also discussed its final edits to those Plan sections they were updating. Minutes are included in Appendix G.

### ***Wildfire Technical Working Group Meetings***

The Wildfire TWG worked on updates to four hazard profiles within the Plan. The group also was responsible for ensuring that the State's mitigation strategy was updated and aligned with the latest results from the risk and vulnerability assessment. The following meetings were held by the Seismic TWG:

#### **August 14, 2012: Risk Factor Exercise**

The Wildfire TWG met to collectively work through a Risk Factor Exercise, which generated many discussions specific to the hazards assigned to the group. Perceived assessments of the various hazards resulted in a hazard ranking that helped focus the group as they moved through the update process. Additional details concerning the Risk Factor Exercise are highlighted later on in this Appendix and Minutes are included in Appendix G.

#### **September 20, 2012: Status Updates and Consequence Analysis Exercise**

The Wildfire TWG met to review and address a number of topics. Outreach activities were discussed as well as a review and addition to some of the Mitigation Strategy actions. The group also worked through a Consequence Analysis Exercise. Additional details concerning this exercise can be found in Chapter 3, under the Vulnerability Analysis and Loss Estimation subsection for the Wildfire hazard. Minutes are included in Appendix G.

#### **October 25, 2012: Status Updates and Action Review**

The Wildfire TWG met for a final time to discuss a range of items, including future outreach efforts and updates and additions to those Mitigation Actions that fall to this group. The group also discussed its final edits to those Plan sections they were updating. Minutes are included in Appendix G.



### ***Human-Caused Technical Working Group Meetings***

The Human-caused TWG worked on updates to four hazard profiles within the Plan. The group also was responsible for ensuring that the State's mitigation strategy was updated and aligned with the latest results from the risk and vulnerability assessment. The following meetings were held by the Seismic TWG:

#### **September 14, 2012: Risk Factor Exercise**

The Human-Caused TWG met to collectively work through a Risk Factor Exercise, which generated many discussions specific to the hazards assigned to the group. Perceived assessments of the various hazards resulted in a hazard ranking that helped focus the group as they moved through the update process. Additional details concerning the Risk Factor Exercise are highlighted later on in this Appendix and Minutes are included in Appendix G.

#### **November 7, 2012: Status Updates and Action Review**

The Human-Caused TWG met for a final time to discuss a range of items, including future outreach efforts and updates and additions to those Mitigation Actions that fall to this group. The group also discussed its final edits to those Plan sections they were updating. The Agenda is included in Appendix G.

### ***Data Technical Working Group Meetings***

The Data TWG assisted in the acquisition and brainstorming of possible data sets that could be utilized as part of the Risk Assessment portion of the Plan update. The group assisted BHS throughout the entire planning process and was called upon both collectively and individually as needed throughout the Plan update. The following meeting was held by the Data TWG:

#### **September 13, 2012: Risk Assessment Data Review**

The Data TWG met to collectively talk through all known tabular and geospatial data sets that could possibly be utilized as part of the Risk and Vulnerability Assessment. Numerous data sets were identified and assignments were made on delivering and reviewing activities. Minutes are included in Appendix G.

### ***Public Outreach Activities***

BHS performed a broad assortment of Public Outreach activities as part of the 2013 Plan update. Events are outlined below. All of the Planning Team members were kept informed of these activities and a number of those members also helped to participate and support these events. Minutes from a meeting devoted to the Public Outreach and project website are included in Appendix G.

In order to reach a large demographic of Idaho citizens, BHS participated in three events across the state that were attended as part of other events. This method provided a large and varied exposure of the State's effort in updating the SHMP and at the same time BHS was able to gain valuable feedback from



Idaho stakeholders. At each of these events, revisions of the plan were available for review as well as other information on mitigation planning resources. BHS also utilized these events as a way to collect surveys from the public via a written form or utilizing an online survey tool at each event.

### **March 25-26, 2012: Idaho Forest Owners Conference and Exposition**

BHS was invited to attend and staff an informational booth at the Idaho Forest Owners Annual Conference. The event took place in Moscow, ID, located in the northern panhandle of the State. BHS decided to focus its messaging towards the hazards of wildfire and lightning. In addition, possible mitigation actions specific to wildfire were presented. The survey results and additional information can be found later on in this Appendix.

### **April 23-24, 2012: Safety Fest of the Great Northwest Conference**

BHS was invited to attend and staff an informational booth at the Safety Fest of the Great Northwest Annual Conference. The event took place in Fort Hall, ID, located on the eastern side of the State near Pocatello. BHS decided to focus its messaging towards the hazards of flood and earthquake. The survey results and additional information can be found later on in this Appendix.

### **June 29, 2012: Discovery Center of Idaho's Disaster Days**

BHS joined with the Discovery Center of Idaho to provide support for a day-long Disaster Days event focused on the hazards that face the State as well as possible mitigation actions to address those hazards. The event took place at the Discovery Center in Boise. A number of members of the various planning committees each participated. Presentations were interactive in nature, to better appeal to the audience which included children and their parents. The survey results and additional information can be found later on in this Appendix.

### ***Local Mitigation Plan Roll-Up***

In 2010, BHS conducted a review of all local hazard mitigation plans. Key information from these plans was then compiled into a database to allow for further analysis and mapping. This same database was leveraged again as part of the 2013 update. Any newly approved local plans since the 2010 roll-up were reviewed for the following information, which focused on the:

risk assessment (what were the top hazards identified in local plans, what were the estimated losses and vulnerability) and mitigation strategy (what were the categories of mitigation strategies, and what, if any statements were made regarding local capability). This information was then analyzed and utilized by the planning team as part of the update process. Additional details are included in Chapter 3, under the Local Hazard Mitigation Plan Estimations subsection for each hazard. Addition information can be found in Chapter 4, under the Local Mitigation Plan Capability Assessment subsection.



### ***Risk Assessment Update and Review***

The risk assessment update included several steps: review and confirmation of major hazards; update and collection of hazard profile information; data search and incorporation of any risk and vulnerability assessments that had been completed since 2010; Level 2 Hazus runs for flood and earthquake; and enhanced vulnerability assessments utilizing updated local facility inventories. Additional details are included in Chapter 3.

Upon completion of the update, the technical working groups were provided the results of the risk and vulnerability assessments. The TWGs were able to provide comment and were then able to utilize the results as they worked towards updates to the hazard profiles and resulting mitigation strategy sections of the Plan.

### **Risk Factor Exercise**

The Risk Factor (RF) exercise was collectively done by the technical working groups as part of their working group meetings. The RF approach combines historical data, local knowledge, and consensus opinions to produce numerical values that allow identified hazards to be ranked against one another (the higher the RF value, the greater the hazard risk). RF values are obtained by assigning varying degrees of risk to five categories for each hazard: probability, impact, spatial extent, warning time, and duration. Each degree of risk is assigned a value ranging from 1 to 4 and a weighting factor for each category. To calculate the RF value for a given hazard, the assigned risk value for each category is multiplied by the weighting factor. The sum of all five categories equals the final RF value, as demonstrated in the example equation below:

$$\text{RF Value} = [(\text{Probability} \times .30) + (\text{Impact} \times .30) + (\text{Spatial Extent} \times .20) + (\text{Warning Time} \times .10) + (\text{Duration} \times .10)]$$

The criteria utilized as part of the RF exercise are summarized below in Table D.3.



TABLE D.3		DEGREE OF RISK			Weight Value
Risk Assessment Category	Level	Criteria	Index		
<b>PROBABILITY</b> <i>What is the likelihood of a hazard event occurring in a given year?</i>	UNLIKELY	LESS THAN 1% ANNUAL PROBABILITY	1	30%	
	POSSIBLE	BETWEEN 1 & 10% ANNUAL PROBABILITY	2		
	LIKELY	BETWEEN 10 & 100% ANNUAL PROBABILITY	3		
	HIGHLY LIKELY	100% ANNUAL PROBABILITY	4		
<b>IMPACT</b> <i>In terms of injuries, damage, or death, would you anticipate impacts to be minor, limited, critical, or catastrophic when a significant hazard event occurs?</i>	MINOR	VERY FEW INJURIES, IF ANY. ONLY MINOR PROPERTY DAMAGE & MINIMAL DISRUPTION ON QUALITY OF LIFE. TEMPORARY SHUTDOWN OF CRITICAL FACILITIES.	1	30%	
	LIMITED	MINOR INJURIES ONLY. MORE THAN 10% OF PROPERTY IN AFFECTED AREA DAMAGED OR DESTROYED. COMPLETE SHUTDOWN OF CRITICAL FACILITIES FOR MORE THAN ONE DAY.	2		
	CRITICAL	MULTIPLE DEATHS/INJURIES POSSIBLE. MORE THAN 25% OF PROPERTY IN AFFECTED AREA DAMAGED OR DESTROYED. COMPLETE SHUTDOWN OF CRITICAL FACILITIES FOR MORE THAN ONE WEEK.	3		
	CATASTROPHIC	HIGH NUMBER OF DEATHS/INJURIES POSSIBLE. MORE THAN 50% OF PROPERTY IN AFFECTED AREA DAMAGED OR DESTROYED. COMPLETE SHUTDOWN OF CRITICAL FACILITIES FOR 30 DAYS OR MORE.	4		
<b>SPATIAL EXTENT</b> <i>How large of an area could be impacted by a hazard event? Are impacts localized or regional?</i>	NEGLIGIBLE	Single Jurisdiction	1	20%	
	SMALL	Multiple Jurisdictions	2		
	MODERATE	Entire Region of State	3		
	LARGE	Entire State	4		
<b>WARNING TIME</b> <i>Is there usually some lead time associated with the hazard event? Have warning measures been implemented?</i>	MORE THAN 24 HRS	SELF DEFINED	1	10%	
	12 TO 24 HRS	SELF DEFINED	2		
	6 TO 12 HRS	SELF DEFINED	3		
	LESS THAN 6 HRS	SELF DEFINED	4		
<b>DURATION</b> <i>How long does the hazard event usually last?</i>	LESS THAN 6 HRS	SELF DEFINED	1	10%	
	LESS THAN 24 HRS	SELF DEFINED	2		
	LESS THAN 1 WEEK	SELF DEFINED	3		
	MORE THAN 1 WEEK	SELF DEFINED	4		



As part of the RF exercise, significant events were defined as damaging events in populated areas (when applicable). Each TWG performed this exercise for only those hazards that the group was assigned. The results of the exercise are presented below in Figures D.4 and D.5.

Rank	Hazard	Probability		Impact		Spatial Extent		Warning Time		Duration		RF Value
1	Wildfire	4	1.2	3	0.9	3	0.6	1	0.1	4	0.4	3.2
2	Cyber Disruptions	3	0.9	2.5	0.75	4	0.8	4	0.4	3	0.3	3.15
3	Flood	4	1.2	2	0.6	3	0.6	2	0.2	3.5	0.35	2.95
4	Drought	3	0.9	3	0.9	3	0.6	1	0.1	4	0.4	2.9
5	Severe Storms	4	1.2	3	0.9	2	0.4	1	0.1	2	0.2	2.8
6	Pandemic	2	0.6	3	0.9	4	0.8	1	0.1	4	0.4	2.8
7	Energy Shortages	3	0.9	2	0.6	3	0.6	4	0.4	2	0.2	2.7
8	Lightning	4	1.2	2	0.6	2	0.4	4	0.4	1	0.1	2.7
9	Dam/Levee/Canal Failure	3.5	1.05	2.5	0.75	1.5	0.3	3	0.3	2.5	0.25	2.65
10	Avalanche	4	1.2	3	0.9	1	0.2	1	0.1	1	0.1	2.5
11	Hazardous Materials	2.5	0.75	2.5	0.75	1.5	0.3	4	0.4	3	0.3	2.5
12	Landslide	4	1.2	2	0.6	2	0.4	1	0.1	1	0.1	2.4
13	Wind/Tornadoes	4	1.2	1	0.3	1	0.2	4	0.4	1	0.1	2.2
14	Earthquake	1	0.3	3	0.9	2	0.4	4	0.4	1	0.1	2.1
15	Volcanic Eruptions	1	0.3	3	0.9	2	0.4	1	0.1	4	0.4	2.1
16	Radiological	1	0.3	2	0.6	2	0.4	4	0.4	4	0.4	2.1
17	Civil Disturbances	2	0.6	1	0.3	1	0.2	1	0.1	2	0.2	1.4

**Figure D.4: Risk Factor Exercise Results**

The overall results were a bit surprising to the TWGs in some ways and rather expected in others. The end RF Values placed some of the major hazards facing the State, such as wildfire, flood, and drought, high on the scale. This was expected and matches the data and results that resulted from the risk and vulnerability assessments. But earthquake, one of the State’s top 3 hazards, placed near the bottom of the rankings. The human-caused hazards fell all across the board, with cyber disruptions coming in near the top.

The discussions generated by the exercise proved to be more beneficial to the groups than the resulting end values. Most of the TWGs chose to revisit the exercise multiple times over the course of the Plan update. Lessons learned from the activity pointed out the fact that this type of exercise presents the particular group’s perception of each hazard. It is difficult to equate a worst-case scenario across all of the varying types of hazards faced by the State, especially when comparing natural versus human-caused/technological hazards. The large size of Idaho also makes it a challenge when defining the spatial extent of a hazard.

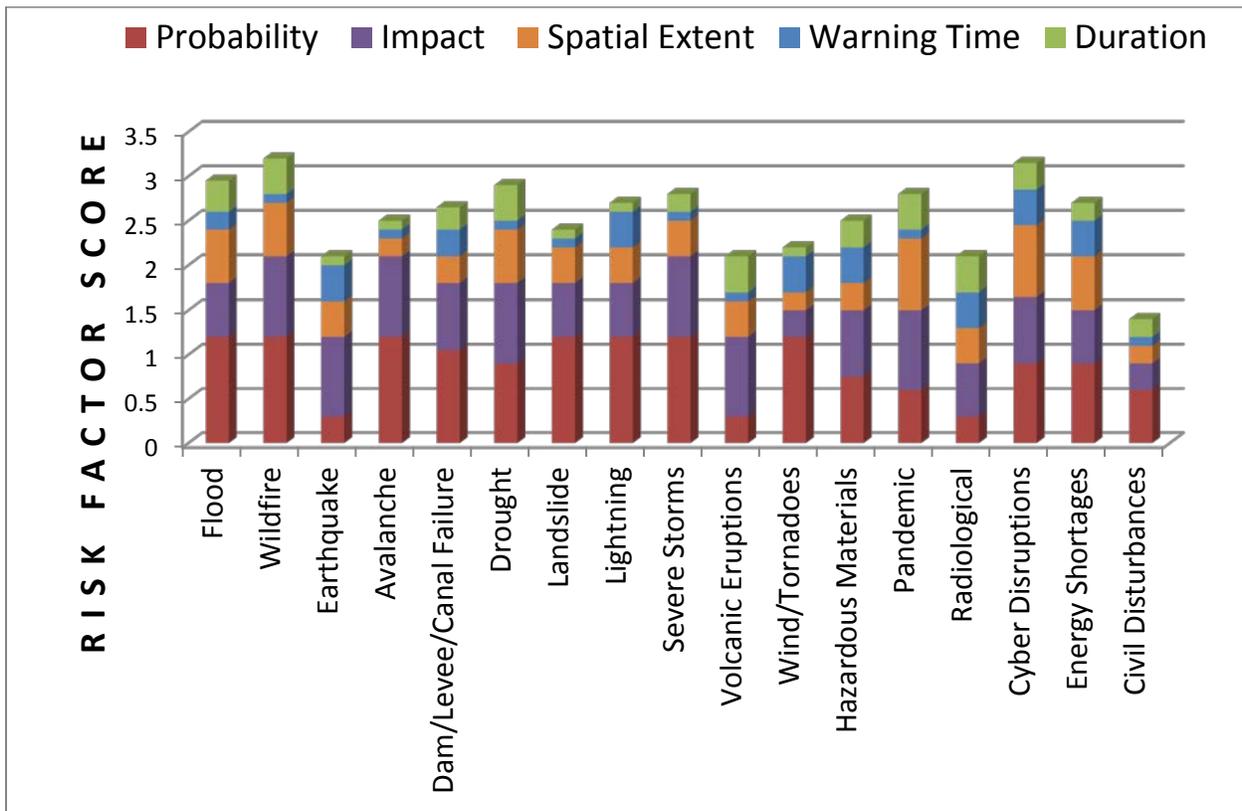


Figure D.5: Risk Factor Exercise Results

### Consequence Analysis Exercise

The Consequence Analysis Exercise was performed by the technical working groups and focused on three scenario events – one each for flood, earthquake and wildfire, the three major hazards identified in the plan. The results of these exercises can be found in Chapter 3, under the Vulnerability Analysis and Loss Estimation subsection for each hazard.

### Mitigation Strategy Update

Throughout the planning process, both BHS and the planning teams reviewed and updated the Plan’s mitigation strategy. The planning teams reviewed the 2010 Mitigation Strategy Goals and Objectives and made updates and edits as agreed upon. Overall the Goals were mainly left as they were defined in 2010. One Objective from 2010 was eliminated and another was added as part of the 2013 update.

The next steps included reviewing and updating the status of those Actions included in the 2010 Plan. Of the 24 total actions included as part of the 2010 Plan, seven (30%) were documented as completed. 13 of those 2010 Actions will continue as part of the 2013 Plan and one was revised. In addition, 14 new actions were identified as part of the 2013 Plan update. Additional details can be found in Chapter 1 of



this Plan. Ultimately this Action Plan includes 28 actions. The planning teams believed that measurable progress, if not successful attainment, could be made on these actions in the next three years.

For the 2013 Mitigation Action Plan, those new actions that were developed again focused on actions that were SMART – Specific, Measurable, Attainable, Realistic, and Timely. To evaluate these actions, three factors were identified – cost-effectiveness, technical feasibility, and environmental soundness. Each factor was given a ranking of 1 to 3 “plusses”. There are no negative scores, because each action was fully discussed and revised during the meeting, before it was officially considered to be included. Thus, it was felt that all of the actions had positive benefits. One way the group prioritized projects was to add up all of the plusses for each action. These were tallied and included in the action plan. During the planning period, the “prioritization” using the plusses will help guide those responsible for implementing the action, as well as those responsible for monitoring the plan’s implementation. Because the focus of this update was to identify actions that were SMART, the prioritization does not preclude efforts to complete the identified actions; rather, it is useful in determining how each action might be weak (e.g., not cost effective) and inform those responsible for implementing potential issues.

The Executive Committee felt that the 2013 Mitigation Strategy reflects the actions and projects identified in local plans in the goals and objectives of the 2013 State Plan. An analysis of the local actions is discussed above in the Local Plan Roll-Up subsection. It should also be noted that each action ties back to at least one goal and one objective.

### ***Idaho Forest Owners Conference and Exposition***

Held in Moscow, ID on March 25&26<sup>th</sup> 2012, the IFOA is an alliance of forest owners dedicated to the management, use, and protection of private forest resources in Idaho.

Attended by approximately 225 landowners and land managers from Idaho, this conference provided an opportunity to interface directly with stakeholders that own private lands often bordering public lands within the state. In addition to the “trade show” style of exhibit, BHS was also able to participate in a public display at the Palouse Mall also in Moscow. It is estimated that 200-300 people visited the various displays. BHS staffed a table with information and was able to interact one on one with the public to answer questions.



Source: BHS

### *Safety Fest of the Great Northwest Conference*

The Safety Fest of the Great Northwest was held in Fort Hall on April 23&24<sup>th</sup>, 2013. It is sponsored by the Local Highway Assistance Council whose mission is to assist the Cities, Counties and Highway Districts in dealing with the day to day issues of managing and operating the local highway system throughout the state of Idaho.

Safety Fest enjoyed participation of about 500 transportation industry professionals with the sole purpose of expanding their knowledge of risk mitigation. This conference was held on the Tribal lands of the Shoshone-Bannock Tribe in Eastern Idaho. As with the IFOA conference, BHS was able to directly interact with the public and share the Idaho SHMP revision and illicit input on the plan as well as collect survey information.



Source: BHS

### *Discovery Center of Idaho's Disaster Days*

On June 29<sup>th</sup>, 2013, the Discovery Center of Idaho (DCI) held its Disaster Days event. The Discovery Center of Idaho's mission is to inspire lifelong interest and learning in science, technology, engineering, and math.

This event was produced by BHS in cooperation with DCI with a twofold goal. 1) Bring the general public's awareness to the SHMP revision, and 2) engage multiple agencies to provide education to the public on Disaster Preparedness.

Presenters included

- Boise City Fire Department with a HAZMAT display.
- Idaho Bureau of Homeland Security teaching about soil liquefaction during an earthquake as well as the SHMP revision.
- National Weather Service demonstrating how floods occur and how the NWS helps predict severe and dangerous weather.
- Idaho Department of Water Resources showed how to use flood mapping tools and had information about Dam safety.
- Idaho Firewise educating about wild fire safety.
- U.S. Army Corps of Engineers demonstrating how levees and dams are used to prevent flooding.
- American Red Cross showed how to create a 72 hour preparedness kit
- Boise Project Board of Control provided education on Canal Safety.
- Idaho National Guard 101st WMD CST provided an interactive demonstration of hand held instruments that are able to detect chemical, biological, and nuclear hazards.



Source: BHS

In all, 248 families participated and learned valuable information from the experts in each field. This event was covered by local and regional media. Additional information can be found at the links below:

- <http://www.ktvb.com/news/Kids-learn-about-preparedness-at-Disaster-Days-213713241.html>
- <http://www.survivalhelpcenter.com>
- <http://www.boiseweekly.com/boise/discovery-center-teams-up-with-disaster-organizations-for-demos/Content?oid=2886870>
- <http://www.nwcn.com/home/213723101.html>



Source: BHS

### Additional Public Outreach and Social Media

BHS in collaboration with its contractor, Charles Butrick – Business Consulting Services, made additional efforts through the Plan update process. This included social media via BHS Facebook and Twitter accounts and the BHS website.

Additional public outreach included attendance at a Boy Scout merit badge event and other community organization meetings in order to engage the public in the revision process of the SHMP.

Another outreach effort involved the use of public surveys throughout the Planning Process. This survey provided valuable information as to the public's perception

on hazard risks, hazards education, public preparedness, citizens' priorities, as well as a place for general comments regarding what else they would like to see the state doing to mitigate risk in Idaho. In all, BHS received back 94 public surveys that will be used to help guide future revisions and planning efforts.

**2013 State Hazard Mitigation Plan Survey**

Welcome to the 2013 State Hazard Mitigation Plan Survey. The purpose of this survey is to help us in updating the plan and to help us understand how we can better protect Idaho from natural hazards. Your input is very important to us. Thank you for your time and input.

Community: \_\_\_\_\_

- Since 2008 has your community experienced a disaster?
  - Yes
  - No
  - Not Sure
- If Yes, please indicate which type of disaster? (please list date and event on back of survey)
  - Flood
  - Earthquake
  - Wildfire
  - Landslide
  - Dike/Lake Failure
  - Avalanche
  - Drought
  - Lightning
  - Severe Storm
  - Wind/Tornado
  - Volcanic Eruption
  - Hazardous Materials
- Please indicate which hazards you feel pose the most risk to your community and rank the top 3 items
  - Flood
  - Earthquake
  - Wildfire
  - Landslide
  - Dike/Lake Failure
  - Avalanche
  - Drought
  - Lightning
  - Severe Storm
  - Wind/Tornado
  - Volcanic Eruption
  - Hazardous Materials
- In these ongoing public awareness education in your community to help individuals and/or businesses to inform citizens about hazards and the ways to protect themselves and their property. Examples include: Outreach program, school education, library materials, etc.
  - Yes
  - No
  - Not Sure
- In your community, which of the following activities have taken place (check all)?
  - Preparedness
  - Property Protection
  - Emergency Services
  - Plan for meeting vulnerable groups (children, refugees, elderly, handicapped, non-English speaking)
  - Public Education/Awareness
  - Natural Resource Protection
  - Structural Projects
- Which of the following preparedness activities have you done in your household?
  - Attended meetings or received information on disasters and emergency preparedness
  - Talked with members in your household about how to do in case of a disaster or emergency
  - Developed a Household Family Emergency Plan in case of a disaster
  - Prepared a "Go Home Kit" (Shoes, extra cash, food, water, blankets, or other supplies)
  - Received four full or partial voluntary hazard warnings (TV, radio)
  - Communicated your Household Family Emergency Plan to family outside of your area
  - Donated your home fire disaster (sewer/water lines, purchased flood insurance, Service landscaping, etc.)

6. Natural hazards can have a significant impact on a community. For planning for these events can help lessen the impact. The following statements will help determine citizen priorities for planning. Please tick in how important each item is to you.

Statements	Very Important	Somewhat Important	Neutral	Not Very Important	Not Important
A. Protecting private property	<input type="checkbox"/>				
B. Protecting critical facilities (transportation services, hospitals, fire stations, etc.)	<input type="checkbox"/>				
C. Encouraging development in hazard areas	<input type="checkbox"/>				
D. Encouraging the restoration of natural features (streams, wetlands, etc.)	<input type="checkbox"/>				
E. Protecting historical and cultural landmarks	<input type="checkbox"/>				
F. Promoting cooperation among public agencies, citizens, non-profit organizations, and businesses	<input type="checkbox"/>				
G. Protecting and reducing damage to utilities	<input type="checkbox"/>				
H. Strengthening emergency services (police, fire ambulances)	<input type="checkbox"/>				

7. In your opinion, what could the State of Idaho do to help your community reduce or eliminate risk of future based damages in your community?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

8. Additional Comments:

\_\_\_\_\_

\_\_\_\_\_

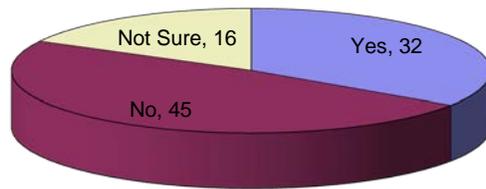
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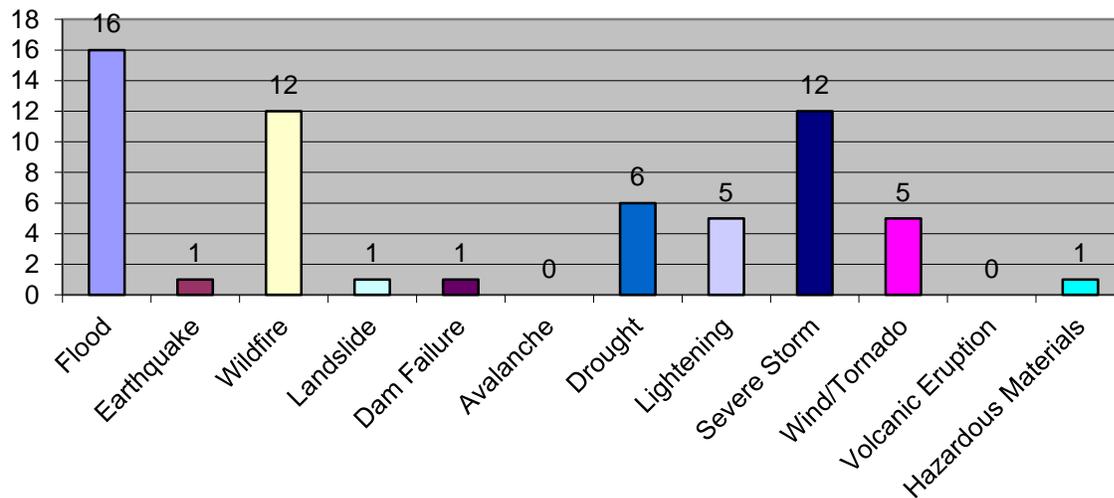
Questions and the associated responses from the survey are detailed below:

1) *Since 2009 has your community experienced a disaster?*



1a) *If Yes, please indicate which type of disaster(s).*

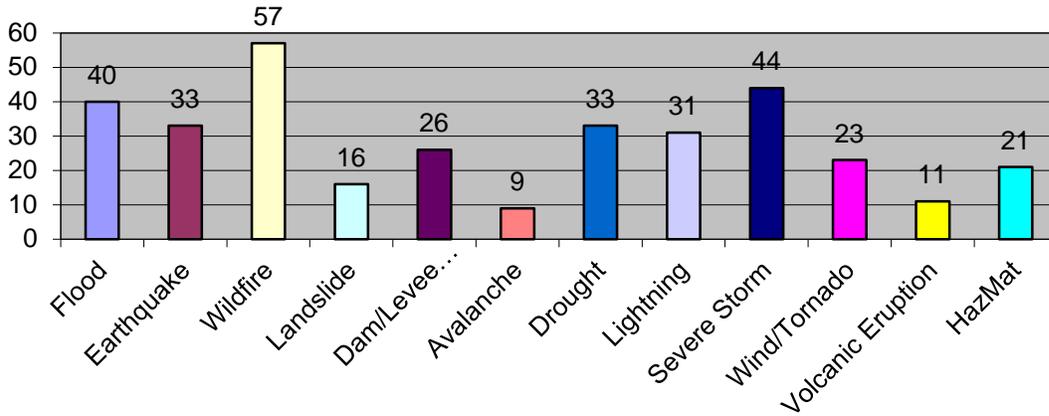
1a) Please Indicate type of disaster(s) experienced



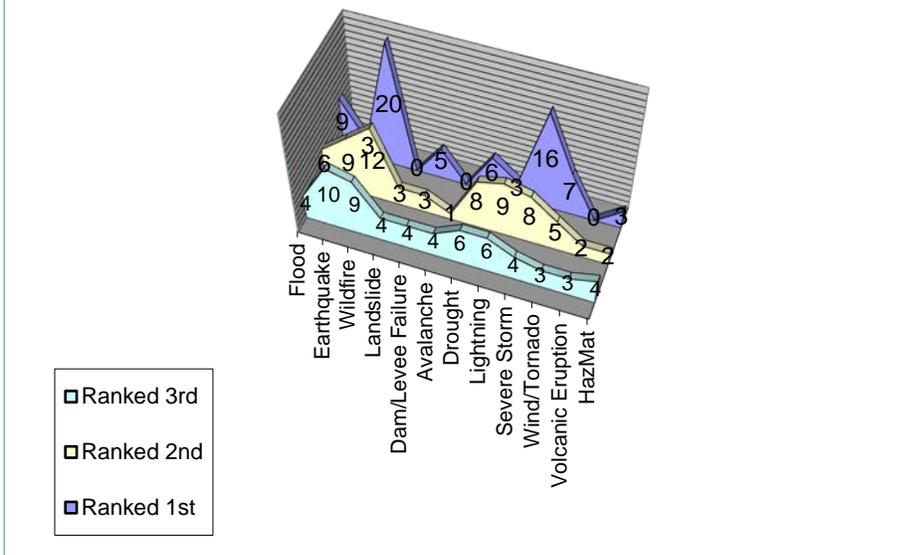


2) Please indicate which hazards you feel pose a threat in your community, and rank the top 3 threats.

## 2) Which Hazards do you feel pose a threat in your community

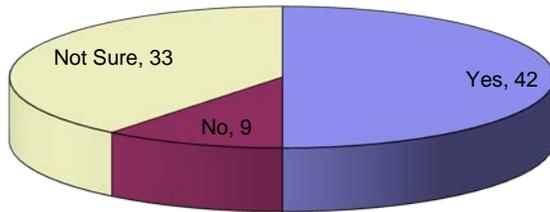


## 2) Ranking of Top 3 Threats



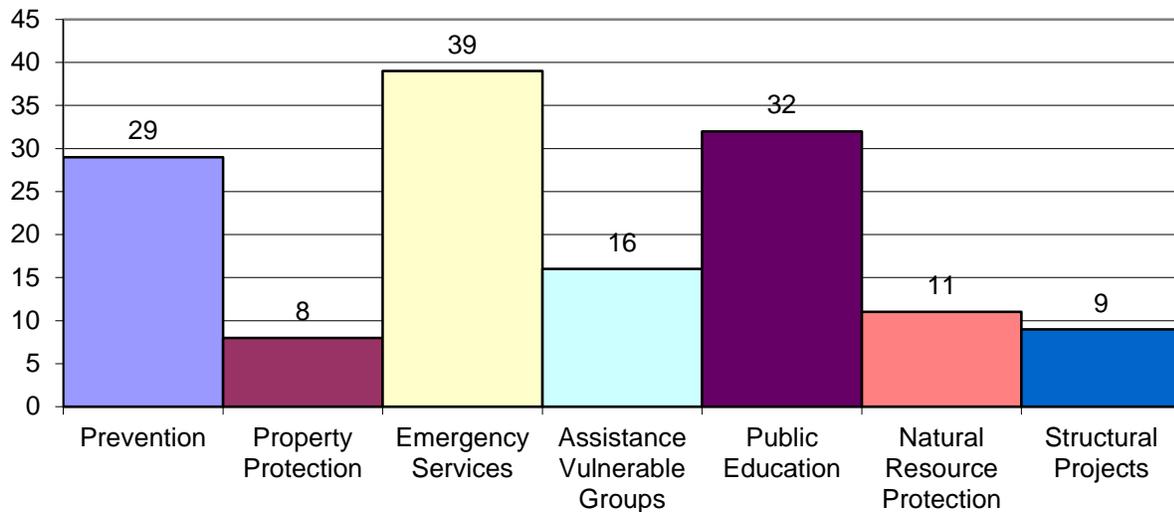


3) *Is there ongoing public awareness/education in your community to help individuals and/or businesses to inform citizens about hazards and the ways to protect themselves and their property?*



4) *In your community, which of the following activities have taken place to reduce risk?*

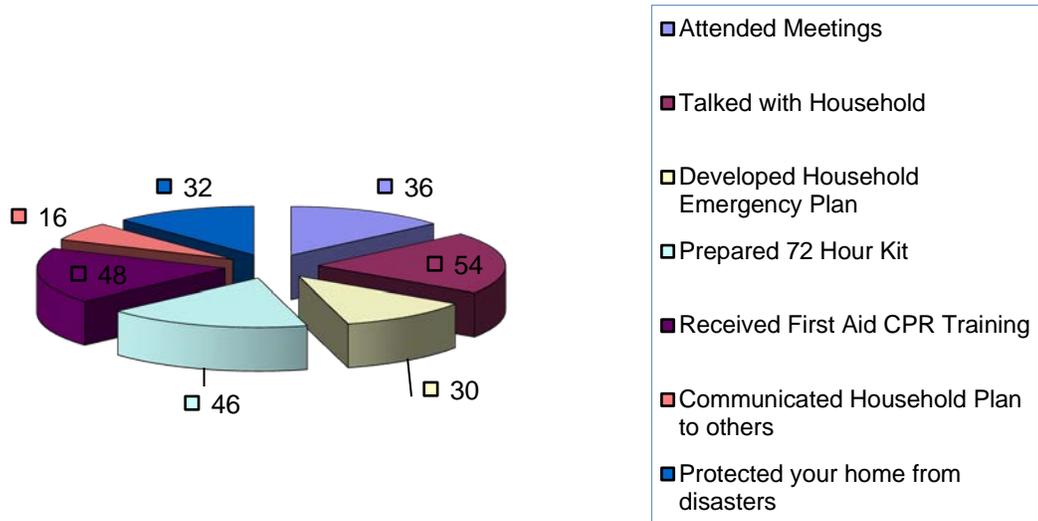
#### 4) Which Activities have taken place to reduce risk?





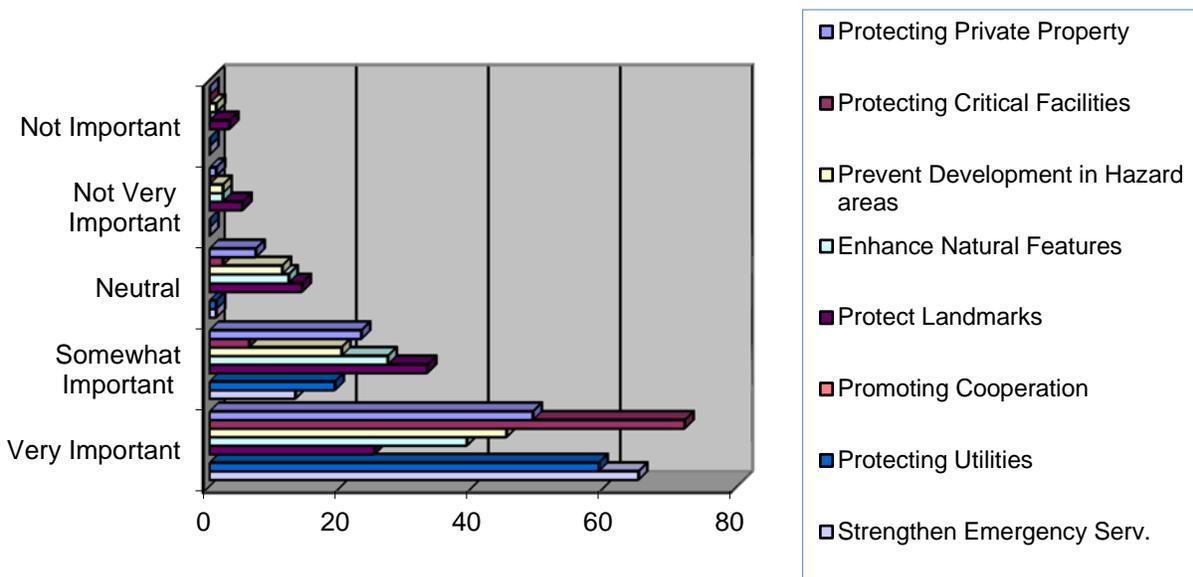
5) Which of the following preparedness activities have you done in your household?

5) Which activities have you done to prepare your household?



6) Natural hazards can have a significant impact on a community, but planning for these events can help lessen the impacts. The following statements will help determine citizen priorities for planning. Please tell us how important each one is to you.

6) Statements of Importance





In your opinion, what could the State of Idaho do to help your community reduce or eliminate risk of future hazard damages in your community?

- Opinions regarding actions that the public felt the State could do to help mitigate hazards varied from respondent to respondent. Hazard and mitigation education and outreach were the two main themes throughout most of the comments.

#### Additional Comments:

- Additional comments entailed a number of varying responses. Most could be summarized as saying that the public is in support of increased education, training, and messaging concerning all aspects of emergency management. BHS is encouraged by these responses and will continue to look for ways to expand and enhance public outreach activities across the State.

#### ***University of Idaho Data Collaboration***

In collaboration with the University of Idaho's Department of Geography, BHS is working to better share and leverage the enhanced GIS data sets that were produced as part of the Plan's risk assessment and overall update. With the data provided by BHS, the University plans to produce multiple hazard layers with structure and socioeconomic data that will provide a heightened view of risks to vulnerable populations. The north Idaho region has been completed as a pilot, and a report summarizing the socioeconomic overlay analyses is included at the end of this section. The remaining regions statewide are anticipated within the next year. This information will be included as a future Plan appendix when available.

#### ***BHS GIS Enterprise Projects and Data Collection***

Newly developed applications allow local jurisdictions to collect Preliminary Damage Assessment (PDA) and Local Critical Asset (CIKR) data in the field, view their secured data in a real-time online map, edit, and download the data through the BHS Data Management Interface. Mobile applications for data collection were loaded onto the Juniper Mesa Rugged handheld device each county/tribe received as part of the 2009 EMPG opt-in GIS project. The project provided a statewide capability that gave all participants access to an enterprise GIS system. The ability to collect, catalog, manage, and share information in real time has greatly enhanced regional collaboration and information sharing between the counties and BHS.

#### ***Preparation and Review of the Draft Plan***

The draft plan incorporated the aforementioned results of meetings, analyses, surveys, and other information. Draft Plan sections were posted on the BHS website at <http://www.bhs.idaho.gov/Pages/Plans/Mitigation/SHMP.aspx> for public and other stakeholder comment via an online Survey Monkey survey link. Outreach efforts to inform the public of the draft Plan posting included postings on the BHS Facebook site, in addition to hundreds of fliers that were distributed at all of the public outreach activities documented earlier in this Appendix. Over the course of the comment survey, BHS received 11 comments that filled 10 pages of text. It should be noted that



in 2010 BHS only received a single comment submission. After the comment period closed, the planning team reviewed the results and incorporated them, as applicable, into the Plan document.

### ***Preparation and Adoption of Final Plan***

The final draft was prepared after receipt of FEMA Region X approval pending adoption and was promulgated October 30, 2013.

## **PLAN MAINTENANCE AND UPDATE PROCESSES**

### **Plan Maintenance**

Section 201.4(c) requires that the SHMP be reviewed, revised, and submitted for approval to the Regional Administrator of FEMA every three years. The regulations require a plan maintenance process that includes an established method and schedule for monitoring, evaluating, and updating the plan. The Idaho Bureau of Homeland Security – Mitigation Section is the agency primarily responsible for the plan maintenance, but it will utilize the review and comments from other entities as part of the maintenance process.

The Idaho SHMP is a living document and will be reviewed and potentially updated constantly. The plan will be revised if the conditions under which the plan was developed change, such as new or revised State policies, a major disaster, or the availability of funding. This section describes how the SHMP will be monitored, evaluated, and updated.

The SHMP Executive Committee will meet annually in the fall to evaluate the SHMP. Minutes from the 2011 and 2012 meetings are included at the very end of Appendix G. The Executive Committee will evaluate the Plan based on the following criteria:

- How much progress has been made on mitigation actions and projects
- Implementation problems (technical, political, legal, and financial)
- Relevancy of goals, objectives, and actions and whether they need to be discontinued or changed
- Level of involvement by the public and other agencies
- Accuracy and precision of the risk assessments, availability of new data, and whether such data needs to be reflected in the plan immediately

After each major disaster in Idaho declared by the President, the BHS Mitigation Section will incorporate an action for the disaster in the Mitigation Strategy, to evaluate and assess whether the SHMP addresses the reality resulting from the disaster (i.e., does the risk assessment need updated, are the goals/objectives/actions are still relevant). This evaluation will be provided to the Executive Committee.

### **Plan Update**

Every three years, as required by 44 CFR 201.4, the State Hazard Mitigation Officer (SHMO) is responsible for submitting the revised SHMP to the FEMA Regional Administrator and for facilitating the



adoption of the plan by the State. The SHMO uses the FEMA Standard State Hazard Mitigation Plan Review Crosswalk as a tool for updates, and submits the revised Plan with the completed crosswalk to FEMA.

BHS will revise the Plan more frequently if the conditions under which the Plan was developed materially change through new or revised State policy, a major disaster, or availability of funding. Future updates of the SHMP will involve the technical working groups and their recommendations.

The method to update the Plan is for planning committee members to utilize the on-line planning tool to edit sections as changes are needed. Recommended updates will be vetted through the Executive Committee and technical working groups (as applicable). Recommended updates will then be provided to the BHS Mitigation Section for consideration. Upon acceptance, the BHS Mitigation Section will develop the draft updates, circulate draft updates for review to the Executive Committee and technical working groups, incorporate review comments, provide the public with an opportunity to review and comment, and forward the draft plan for final State approval.

**Local Plan Coordination and Linkage.** As part of the SHMP update, local plans will be assessed, focusing on three areas: risk assessment, mitigation strategy, and local capability. As part of this and previous updates, a database “rolling-up” local plan data was developed and the local plan data are analyzed to ensure that the State mitigation goals and objectives are compatible with local actions and to undertake a comparative analysis of the State risk assessment versus local risk assessments. This data will be updated and incorporated into the 2016 SHMP.

**Socioeconomic Overlay Analyses.** A project to show spatial hazard layers with socioeconomic data is ongoing with the University of Idaho. A summary of this project describing the analyses follows with a county sample.

### **Purpose of Socioeconomic Overlay Analyses**

Many hazard vulnerability analyses focus only on the exposure and physical extent of a community to a hazard even though there are other socioeconomic factors that can influence a community’s vulnerability. Gaining a complete understanding of societal vulnerability involves examining the physical and socioeconomic factors that influence the degree to which an individual, community, or system is threatened and is often expressed as a function of an object’s or system’s exposure, sensitivity, and adaptive capacity to a hazard (Turner et al., 2003; Frazier et al., 2010). The distribution of sensitivity within a community will not be uniform throughout; certain populations, infrastructure, and areas will experience more vulnerability to certain hazards than others in the community (Morrow, 1999; Wu et al., 2002; Cutter, 2006).

This study examines the influence of these socioeconomic factors on the county’s vulnerability to fire, earthquake, landslide, and the 100- and 500-year flood hazards (other hazards may be included in the future as data is available). Socioeconomic overlay analyses have been used in storm surge, hurricane, and tsunami studies in Washington, Oregon, and Florida. The results of the GIS-based socioeconomic analysis are summarized by hazard type (fire risk, landslide risk, earthquake risk, and 100 & 500 year flood risk) for all five counties (Benewah, Bonner, Boundary, Kootenai, and Shoshone) within BHS Region



1. The data types used for the GIS analysis focuses around three main community characteristics: 1) land-cover, 2) population, and 3) critical and essential facilities (Wood et al., 2007; Frazier et al., 2010).

The earthquake and landslide risk layers were classified using the predetermined classes from USGS, who are the creators of those data layers. Because the fire risk extents are probabilistic in nature and extend across the entire county, they were classified into classes that represent level of probability of occurrence for that hazard. These classes were then overlaid with land-cover, census data, and InfoUSA business and facilities data. Fire classes are based on those identified by the Western Wildfire Risk Assessment conducted on behalf of the Council of Western State Foresters and the Western Forestry Leadership Coalition. Class 1 indicates a 0% to 70% probability of occurrence (Low); class 2 is a 70% to 92.5% probability of occurrence (Moderate); and class 3 is a 92.5% to 100% probability of occurrence (High).

### **Types of Socioeconomic Data**

#### **Land Cover**

Based on the spatial overlay of National Land Cover Database (NLCD) 2001 land-cover data with the hazard extent data, the distribution of land-cover types (by area) within the three different hazard types was determined for the entire county. For the purposes of this study, certain NLCD land-cover types were aggregated into different categories: 1) developed areas of open space; 2) developed areas of low intensity; 3) developed areas of medium intensity; 4) developed areas of high intensity; 5) cultivated crops and pasture and hay classes were grouped into the Agriculture land-cover type; and 6) Mining and Quarries.

Determining the percentage of developed areas and agriculture land cover types can help in determining how socioeconomic patterns of development may influence a county's vulnerability to hazards. Developed areas are where the majority of the population in a county is located. Agricultural areas are historically known as areas where potential development will occur in the future. Therefore, this type of analysis determines the exposure and sensitivity of development in the present and the possible exposure and sensitivity of development in the future (Wood et al., 2007).

#### **Population Data (Census Data)**

##### **Residential Populations**

For the residential population analysis, 2010 Census data was used to determine the sensitivity and exposure of several social populations. In particular, this study focused on the total population and included age, race, median age, female population, single mother houses, number of households, housing capital, and tenancy.

While the number of total residents within the hazard zone is important to consider, studies have suggested that demographic characteristics can affect an individual's sensitivity to a hazard event (Morrow, 1999). One demographic that can affect an individual's sensitivity is age. Younger and elderly



populations often require special assistance when evacuating hazardous areas. Younger populations, defined here as 5 years of age or younger, often need more assistance and direction when evacuating. Younger populations also do not have the same understanding about hazardous situations as older populations, and thus often do not know how to react. Older populations, defined as over 65 years in age, often require more assistance during evacuations due to possible mobility and health issues. These populations may also need to be evacuated to facilities with specific medical equipment or other special needs facilities.

Gender can also influence an individual's sensitivity to hazard events. Research suggests that women, in general, tend to be more likely to respond to and be prepared for hazard warnings but are more likely to suffer from posttraumatic stress due to hazard events (Wood et al., 2007). Women are also more likely to be single parents and often have lower incomes, which can make recovering from a hazard event more difficult (Morrow, 1999; Wood et al., 2007).

Tenancy is another socioeconomic factor that can affect an individual's sensitivity and exposure to hazards. Certain studies have shown that renters have less of a tendency to prepare for hazard events than homeowners. This behavior could be due to renters having lower incomes, fewer resources to recover, or a lack of concern for a property they do not personally own and care for. Homeowners are more likely to want to protect and preserve what they do own (Wood et al., 2000).

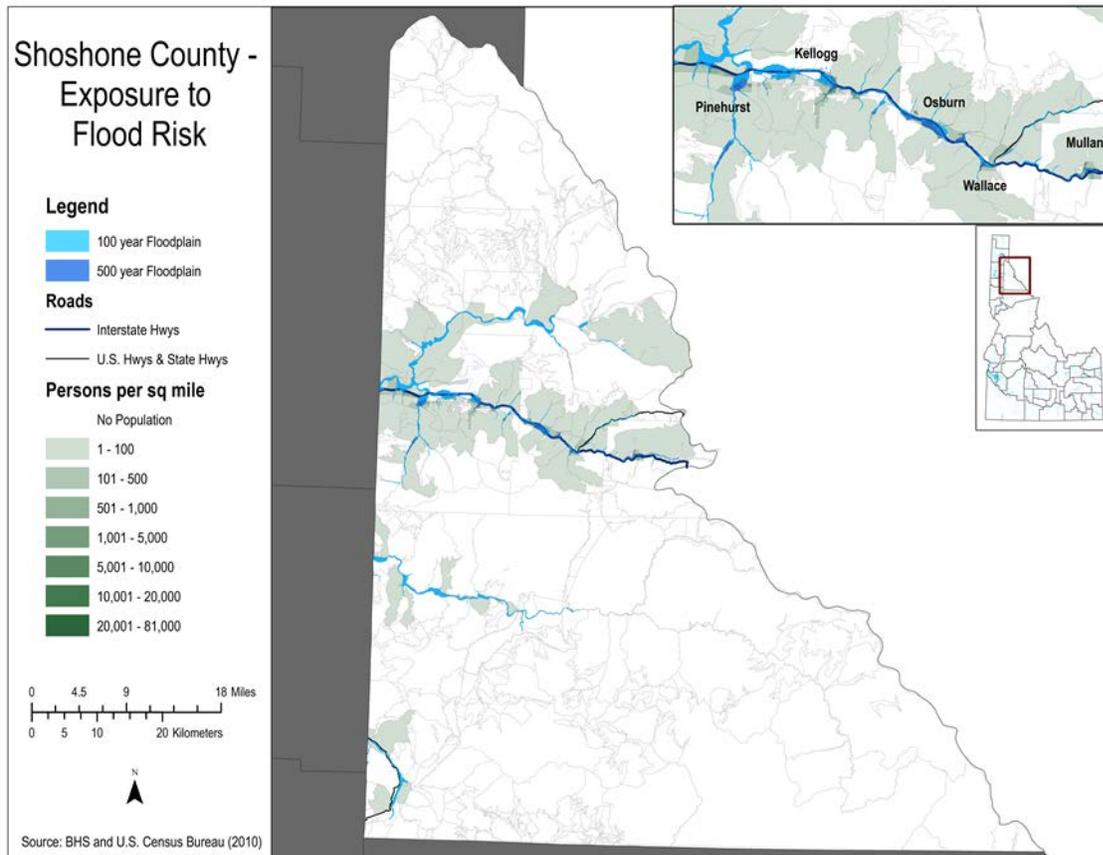


Figure 1: 100 and 500-year flooding extent overlaid with population density in Shoshone County, ID

## Businesses and Critical Facilities (InfoUSA data)

### Economic Assets

When discussing short term and long term recovery, the tax parcel base is often utilized as a monetary way to fund recovery after hazard events. For this reason, understanding the percentage of the tax parcel base within the hazard extents can help gage the resilience of a community or county and its ability to recover from these hazards (Wood et al., 2007; Frazier et al., 2010). For the counties within BHS region 1, tax parcel data was not readily available; so this information will be included in future analyses as data becomes accessible.

The sensitivity and exposure of businesses and employees is also important for understanding the sensitivity of economic assets within the hazard extents (Wood et al., 2007; Frazier et al., 2010). Understanding the percentage of employees that are in hazard zones can be used to determine potential economic fragility, while sales volume can be used to determine how much revenue might be lost if normal business is interrupted by a hazard event (Wood et al., 2007; Frazier et al., 2010). High percentages of employees in the hazard extents can signify an area that might suffer economic fragility should a hazard occur. For example, if a fire were to wipe out most of the businesses in the area, a high level of unemployment could occur overnight. As a result of these lost or damaged businesses, sales in that area would decrease because people are forced to shop elsewhere and a number of people could become unemployed. Therefore, understanding how hazards might affect the business and employee

base can help identify communities or areas that might have economic recovery issues (Wood et al., 2007; Frazier et al., 2010).

### Dependent Population Facilities

Dependent population facilities include medical facilities, emergency services facilities, adult residential care centers, schools, child day care centers, correctional facilities, and religious organizations. These populations are important to take into account because moving these populations can often be difficult, as they require specific needs when evacuated from hazardous areas (Wood et al., 2007; Frazier et al., 2010). Elderly and child populations take more time to move because they require more assistance to do so. In addition, if emergency service facilities are in hazardous areas, then they are more likely to be incapacitated in a hazard event. As a result, there would be fewer emergency services available to people in need and less backup for those within those facilities themselves.

### Critical and Essential Facilities

Critical and essential facilities are facilities that help keep the health, safety, and economy of the population intact. If these types of facilities are threatened or damaged by a hazard event, long-term recovery can often be delayed because the basic facilities that drive the economy, safety, and health of the community may no longer be available. Critical facilities include medical services, police and fire services, utilities, and emergency services. Essential facilities include banks, grocery stores, gas stations, and legislative bodies.

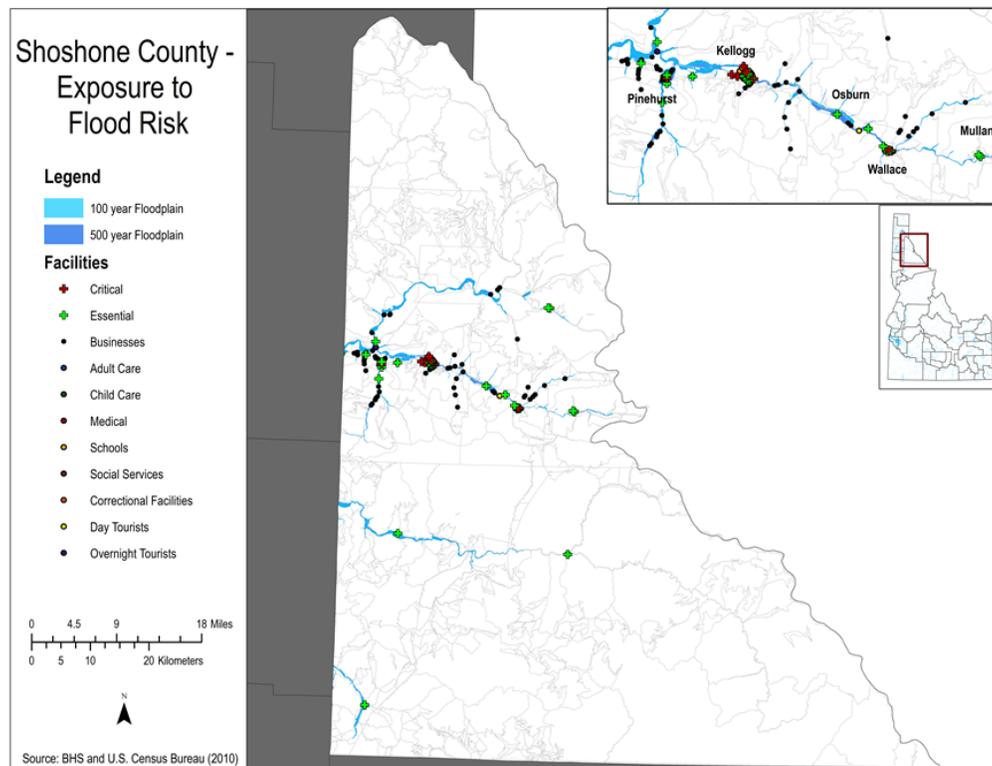


Figure 2: 100 and 500-year flooding extent overlaid with critical and essential facilities, dependent population facilities, and businesses in Shoshone County, ID



### References

- Cutter, S., & Emrich, C. (2006). Moral Hazard, Social Catastrophe: The Changing Face of Vulnerability along the Hurricane Coasts. *The Annals of the American Academy of Political and Social Science*, 604, 1, 102-112.
- Frazier, T. G., Wood, N., Yarnal, B., & Bauer, D. H. (2010). Influence of potential sea level rise on societal vulnerability to hurricane storm-surge hazards, Sarasota County, Florida. *Applied Geography*, 30(4), 490-505. doi: 10.1016/j.apgeog.2010.05.005
- Morrow, B. H. (1999). Identifying and mapping community vulnerability. *Disasters*, 23, 1, 1-18.
- Wood, N., Church, A., Frazier, T., & Yarnal, B. (2007). Variations in community exposure and sensitivity to tsunami hazards in the State of Hawai`i: U.S. Geological Survey Scientific Investigation Report 2007-5208, 42 p. [<http://pubs.usgs.gov/sir/2007/5208/>]
- Wu, S.-Y., Yarnal, B. M., & Fisher, A. (2002). Vulnerability of coastal communities to sea-level rise: A case study of Cape May County, New Jersey, USA. Emmitsburg, MD: National Emergency Training Center.



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### APPENDIX E: THIRA

The Threat and Hazard Identification and Risk Assessment (THIRA) is a tool that allows the State to understand its threats and hazards and how the impacts may vary according to the time of occurrence, season, location, and other factors. This knowledge can then help the State to establish informed and defensible capability targets. The THIRA is updated and reviewed yearly.

Idaho's THIRA is UNCLASSIFIED FOR OFFICIAL USE ONLY (U/FOUO). It contains information that may be exempt from public release under the Freedom of Information Act (5 U.S.C. 552). It is to be controlled, stored, handled, transmitted, distributed, and disposed of in accordance with Idaho BHS policy relating to FOUO information and is not to be released to the public or other personnel who do not have a valid "need-to-know" without prior approval of an authorized Idaho Bureau of Homeland Security Official. Below is the introduction of the State's 2013 THIRA:

The 2013 Idaho THIRA was created by a working group according to the process outlined in Comprehensive Preparedness Guide (CPG) 201. The Idaho 2013 THIRA Working Group met a total of 11 times over four months and consisted of subject matter experts from the Idaho Bureau of Homeland Security, Idaho Transportation Department, St Luke's Hospital, Department of Agriculture, and the Department of Health and Welfare. The working group participants selected the following four scenarios to guide the THIRA process: Northern Idaho wildfires with wildland urban interface, Southern Idaho intentional foreign animal disease outbreak, Eastern Idaho flooding with Palisades Dam release, and Eastern Idaho 7.0 earthquake.

The working group used the four scenarios to identify estimated impacts and desired outcomes for 31 core capabilities as identified in the National Preparedness Goal (NPG). Using that data, all hazard capability targets were created for each core capability. This information was then presented to local and tribal jurisdictions in a series of six workshops. During the workshops, jurisdictions were able to provide feedback on the THIRA outcomes and identify local priorities and resource needs. Local input and the capability targets were then used to inform gap analysis and prioritization efforts at BHS for grant funding and programs at the state and sub-grantee levels.

During the development of the 2013 THIRA, the working group identified additional areas for consideration and improvements to be implemented in the 2014 THIRA cycle. The State of Idaho has fully embraced the THIRA process, and has developed a strategic implementation plan to ensure the THIRA is used to the fullest extent within the preparedness cycle. The Idaho THIRA will be used to inform budgets, prioritization of effort, and focus of programs to ensure whole community perspective as Idaho and local jurisdictions increase capability and community resiliency.



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## APPENDIX F: BHS STAFFING

Mark Stephensen, CFM  
State Hazard Mitigation Officer, Mitigation Section Chief  
(208) 422-5726  
(208) 258-6544 VOIP  
[mstephensen@bhs.idaho.gov](mailto:mstephensen@bhs.idaho.gov)

Susan Cleverley  
Senior Mitigation Planner  
(208) 422-6576  
(208) 258-6545 VOIP  
[scleverley@bhs.idaho.gov](mailto:scleverley@bhs.idaho.gov)

Heidi Novich  
Critical Infrastructure Protection Specialist,  
Mitigation Planner, NIMS, & Fusion Center Liaison  
(208) 422-3015  
[hnovich@bhs.idaho.gov](mailto:hnovich@bhs.idaho.gov)

Katie Ross  
Mitigation Program Administrative Assistant  
(208) 422-6692  
[kross@bhs.idaho.gov](mailto:kross@bhs.idaho.gov)





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## APPENDIX G: MEETING MINUTES



## SHMP Revision Kickoff July 2012

MINUTES                      07/19/2012                      09:00-15:30                      BHS JOINT CONFERENCE ROOM

MEETING CALLED BY	Susan Cleverley, Senior Mitigation Planner
TYPE OF MEETING	State Hazard Mitigation Plan (SHMP) Revision - Collaborate Key Stakeholders
FACILITATOR	Susan Cleverley
ATTENDEES	Krista Anderson, Juan Bonilla, Lisa Bowen, Susan Cleverley, Jim Eavenson, Matt Elam, Robert Feeley, Tim Frazier, Mike Garner, Vicki Hoffman, David Jackson, Kimberley Johaneck, Steph Johnson, Chris Keith, Mark Larson, Rob Littrell, Pat Lucas, Mary Marsh, Ryan McDaniel, Mark McGown, Becky Rose, Tim Page, Ken Postma, Tracy Schwarz, Bryan Smith, Mark Stephensen, Randy Valley, Chris Wendrowski, Mary Whale

### Agenda topics

ORIENTATION AND INTRODUCTIONS                      SUSAN CLEVERLEY

DISCUSSION	Mary Marsh, <a href="mailto:mmarsh@bhs.idaho.gov">mmarsh@bhs.idaho.gov</a> (208) 422-5723 Introduction to the Private-Sector and Public-Private Partnerships
	What happens during disaster? Medical-RX issues, Emergency Room is bogged down. (For more of Mary's presentation or request for additional information, please contact Mary direct)
CONCLUSION	Need for additional partnerships. Concern(s) there is no private sector in the EOC.

REVIEW OF TECHNICAL WORKING GROUPS  
OBJECTIVES (FLOOD, SEISMIC, FIRE, HUMAN-CAUSED)                      SUSAN CLEVERLEY

DISCUSSION	Committees, Risk Assessment, Mapping, CFR Requirements, Multi-agency coordination, Plan Content, Risk Assessment, Critical Infrastructure, Potential Losses, Mitigation Strategy Blueprint, State's goals
	<ul style="list-style-type: none"> <li>• Coordination with other agencies – federal, state, local, and private sector</li> <li>• Plan content – must include description of planning process, who was involved, risk assessment and how it was decided, overview of statewide risks, strategy, prioritize such strategy and risk assessments</li> <li>• Risk assessment – type and location of hazards, history and probability of future events</li> <li>• Overview and analysis of state's hazards – descriptions of vulnerabilities, damage, and losses</li> <li>• Critical infrastructure</li> <li>• Potential losses – based on risk assessments – Fiscal people involved</li> <li>• Mitigation strategy blueprint – identifying risk loss             <ul style="list-style-type: none"> <li>◦ State goals – mitigate potential losses</li> </ul> </li> <li>• Discussion of the states post/pre areas, including evacuations, regulations, state laws, state funding, general description, capabilities</li> <li>• Cost-effective and feasible activities and how it relates to the mitigation plan</li> <li>• Approved state mitigation plan, reduce repetitive loss properties</li> </ul>



	<ul style="list-style-type: none"> <li>Description of state process and funding, timeframe of review, criteria for prioritization</li> <li>Establishment and method for monitoring plan, projects, and closeouts, plan adoption process, final review and approval</li> <li>Assurances the state's compliance, and funding processes, state amending the plan as necessary to remain compliant</li> <li>Review and updates to plan every three years – state must review its plan during disaster</li> </ul>
CONCLUSION	<ul style="list-style-type: none"> <li>Susan – we have an FEMA approved plan. Think about what has happened since it was last approved             <ul style="list-style-type: none"> <li>Tornado touched down in Boise (example)</li> </ul> </li> </ul>
WHERE WE LEFT OFF –UPDATES TO REVISION	
MICHAEL GARNER	
DISCUSSION	<p>Overview, 2010 Kick-off meeting, Risk Map Update</p> <ul style="list-style-type: none"> <li>Coming in without a plan             <ul style="list-style-type: none"> <li>Gather data, resources</li> <li>Hold meetings</li> <li>Risk assessments</li> <li>Maps, technologies</li> <li>Compile plan itself                 <ul style="list-style-type: none"> <li>Mitigation actions, objectives</li> <li>Monitoring moving forward</li> </ul> </li> <li>Overview                 <ul style="list-style-type: none"> <li>Kick-off meeting – 2010</li> <li>Local plans rollups – database and spreadsheets</li> <li>Risk assessment update</li> <li>Capability analysis</li> <li>Mitigation strategy update</li> <li>Preparations of draft plan</li> <li>Public and stakeholder outreach</li> <li>Preparations and adoption of plan</li> <li>Hazus CDMS Database Design</li> </ul> </li> </ul> </li> <li>Method for reaching out to community             <ul style="list-style-type: none"> <li>Abbreviated and inadequate</li> </ul> </li> <li>Collaborate with external partners, to educate the public (revenue challenges) make timeline public and request collaboration (Mary – interesting social-science to assist with this) timing is everything, disaster changes perceptions of the public – (i.e. wildfires in Pocatello) challenges to get local government involved, public through a model, typing in where you live. Do you live in a floodplain? (See Crash's AAR)             <ul style="list-style-type: none"> <li>Educate vulnerabilities of land (floodplain, etc.)</li> </ul> </li> <li>Mike Garner – continued...             <ul style="list-style-type: none"> <li>Better time frame to complete this revision – due November 2013</li> <li>Risk assessment update – GIS, good mapping (visuals make a better plan) HAZUS results</li> <li>Make "happy maps"</li> <li>Consequence analysis – walk through 3 scenarios                 <ul style="list-style-type: none"> <li>New York Canal, etc. and rank how the group thought it would affect the public</li> <li>Map out the results</li> <li>What are the locals thinking?</li> <li>Level II vs. Level I (what is the difference?)</li> <li>Historical data updates</li> <li>Hazards – flood, EQ, fire (three main hazards)</li> </ul> </li> <li>Capability Analysis                 <ul style="list-style-type: none"> <li>Enhanced Plan? (Meet FEMA criteria) 15% funds, vs. 20% if enhanced</li> </ul> </li> </ul> </li> </ul>
CONCLUSION	Mitigation Strategy Update (Nuts and Bolts) Identify goals, Action items, Assign to responsible entity, Planning, Maintenance, Good ideas, preparation of draft plan, Response and Recovery
NEW YORK CANAL	
TIM PAGE	
DISCUSSION	Boise Project Board of Control - New York Canal Presentation – <a href="mailto:tpage@boiseproject.org">tpage@boiseproject.org</a>



- New York Canal – 104 years old
  - 2800 cfs previously – now reduced to 2450 cfs now
  - Water ordering occurs daily by Watermaster
  - Collaboration with water districts
  - Automation New York Canal and other – easier and quicker reaction time
  - MC-1 Head of the NYC (real time figures)
  - Head gates are automated
  - Limit take 23 miles from the head through Kuna and into Lake Lowell
  - New grants to update maintenance
  - Hubbard Reservoir
  - Facility – largest canals in the SOI – about 15 miles through Boise, urbanized
    - Daily task to protect this canal
  - Canal crosses at Gowen – City of Boise was required to place a metal conduit and concrete encasement around it.
  - Tightening restrictions
  - Kuna sewage line broke
  - Encroachments
  - Pollution in surface water
  - Litigation issues due to lack of education to public (structures, property on easements)

MOBILE RISK ASSESSMENT

JUAN BONILLA

DISCUSSION Valley County Mobile (Hand Held) Risk Assessment Presentation

- Title III funding – criteria
  - Applying funding with four data collectors (hand-held unit)
  - Whole county will be done by September
  - Gives picture, GPS of driveway, and assessment, rates, fuel tanks, access ways, water sources
  - Asper grant – 3790 GPS handheld
  - Droids are all on Verizon and 3G
  - Structure – Triage
  - Ryan – Untaxed funding not on the assessment
  - Assessment includes special needs population
  - Campgrounds are also included, with lot numbers and pictures
  - Prevention program gave community free addressing
  - All the same shape file – any agency can view it
  - Ryan to collaborate with Valley County – LIDAR
  - Platform dropbox to use everything with Google Earth
  - You can reduce insurance rates, through this technology, by using firehouses and ETA response times

EOPT Training – Lisa Bowen, EOPT Specialist, [lbowen@bhs.idaho.gov](mailto:lbowen@bhs.idaho.gov) (208) 422-3331

- CONCLUSION Breakout Groups (See attached breakout group notes), Suggestions
- More time to have individual/group discussions
  - Enjoyed the presentations
  - Needed better direction/ request on breakout sessions
  - Include breakout sessions, focus points on agenda
  - Additional Input on Academia

SPECIAL NOTES Be sure to keep notes each time your workgroup meets. Please update BHS with updates or changes to your schedules.

Fire Working Group

Update wildfire, lightning storms, drought, and wind/tornado events from 2009-present (coordinate with NOAA and institutional knowledge)

Conduct an assessment of communities outside of fire districts or volunteer homeowner associations

Discussion item - Should the State have a requirement for providing state assistance when local resources are depleted given that fire districts do not all have formal agreements for mutual aid?

Proposed EOPT timeline:

September 2012 - Mark Larson, Dept. of Insurance, State Fire Marshall  
 October 1-15, 2012 - Susan Cleverley, BHS  
 August 16-30, 2012 - Marilyn Simunich, Dept. of Agriculture  
 October 15-30, 2012 - Craig Glazier, IDL  
 August 1-14, 2012 - Kevin Knauth, BLM



	<p>Mark Larson was going to contact a few other folks. Meet next via video or teleconference.</p> <p style="text-align: center;">Human-Caused Working Group</p> <p>The general consensus was to focus efforts on incorporating a section on pandemic disease outbreak and cyber security / cyber threats. Additionally, consider elements to strengthen the hazardous materials risk assessment and critical infrastructure assessment. The group felt that the hazards/threats were to different to lump into one category and each requires additional technical expertise.</p> <p>1. Pandemic Disease Outbreak Impacting Humans</p> <ul style="list-style-type: none"> <li>a. IDHW is currently working on Pandemic risk Assessment as driven by their HHS grants</li> <li>b. Their public health risk assessment is due by June 30, 2012</li> <li>c. BHS needs to engage IDHW in hazard mitigation planning process to incorporate this assessment with the State Mitigation Plan.</li> <li>d. Dr. Frazier is working with IDHW to complete the Pandemic Risk Assessment</li> <li>e. Add IDHW Public Health Preparedness group to mitigation planning team</li> </ul> <p>2. Hazardous Materials</p> <ul style="list-style-type: none"> <li>a. What do we know about Hazmat in Port of Lewiston? – Rylee?</li> <li>b. Use State Communications Incident Reports and Tier II data – State Comm and Jarod?</li> <li>c. Review Hazmat Commodity Flow Studies – Rylee?</li> <li>d. Jim Evanston from ISP provided notes back during annual maintenance meeting – were these incorporated into plan revision?</li> </ul> <p>3. Cyber Security / Cyber Threats</p> <ul style="list-style-type: none"> <li>a. Need additional expertise</li> <li>b. Need to include Pam Stratton – Dept. of Admin</li> </ul> <p>4. Critical Infrastructure</p> <ul style="list-style-type: none"> <li>a. Keep in plan as component for each hazard group</li> <li>b. Focus on Cyber, energy, transportation, water/wastewater/food and agriculture</li> </ul> <p style="text-align: center;">Seismic</p> <p>Goals</p> <ul style="list-style-type: none"> <li>1. Partnerships with USGS <ul style="list-style-type: none"> <li>a. Develop stronger capability</li> <li>b. Monitoring stations/ equipment</li> <li>c. Additional research to establish potential grant/funding</li> </ul> </li> <li>2. Responsibility to educate the public <ul style="list-style-type: none"> <li>a. Enhance system/tools (i.e., shakeout)</li> <li>b. Earthquake preparedness</li> <li>c. Liquefaction maps (including EQ, seismic (2010-10 in current SHMP)</li> </ul> </li> <li>3. Ripple effect <ul style="list-style-type: none"> <li>a. Teach one for every ten</li> </ul> </li> </ul> <p>Accomplishments</p> <ul style="list-style-type: none"> <li>1. Accomplished EQ booklet teaching segments (2010-09 in current SHMP)</li> <li>2. Boise School District Retrofits</li> </ul> <p>Challenges</p> <ul style="list-style-type: none"> <li>1. Lack of monitoring prevents efficient risk assessment</li> </ul> <p style="text-align: center;">Flood</p> <p>"We agreed that we need to develop a calendar for the sub group. We would like to individually review the goals and action table, then target Sept. 6 to meet as a group at IBHS (if IBHS staff is available) and discuss the review and steps forward. We would like to do a Doodle poll to determine if morning or afternoon is better.</p> <p>We identified other potential flood group members by specialty, not name. Corps of Engineers. A planner from a city or county. Possibly ACHD or another highway district. Possibly someone from another irrigation district. Possibly someone from dam safety. There was no geographic diversity in the group that met in July and we discussed whether that was important."</p>
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# Appendix G

LAST NAME	FIRST NAME	TITLE/ POSITION	AGENCY	PHONE	EMAIL ADDRESS	Signature	Executive Committee VOLUNTEER
Anderson	Krista	Mitigation/CIKR Prog. Asst	BHS	(208) 422-6692	klAnderson@bhs.idaho.gov		Yes / No
Bonilla	Juan	Fire Chief	Donnelly Fire Department	(208) 325-8619	dfc@frontiernet.net		Yes / No
Bowen	Lisa	EOPT Specialist	BHS	(208) 422-3331	lbowen@bhs.idaho.gov		Yes / No
Cleverley	Susan	Sr. Mitigation Planner	BHS	(208) 422-6476	scleverley@bhs.idaho.gov		Yes / No
Cope	Robert		ILRCC		cowdoc75@hotmail.com		Yes / No
Deveau	Paul J.	Project Manager	Boise Project Board of Control	(208) 344-1141	pdeveau@boiseproject.org		Yes / No
Dietrich	Mark		DEQ		Mark.Dietrich@deq.idaho.gov		Yes / No
Eavenson	Jim	Lieutenant, Acting Captain	ISP	(208) 884-7048	james.eavenson@isp.idaho.gov		Yes / No
Elam	Matt	Utilities Analyst	Idaho Public Utilities Comm.	(208) 334-0363	matt.elam@puc.idaho.gov		Yes / No
Feeley	Robert	Public Information Officer	BHS	(208) 422-3033	rfeeley@bhs.idaho.gov		Yes / No
Frazier	Tim	Geologist	U of I Dept. of Geography	(208) 885-6238	tfrazier@uidaho.edu		Yes / No
Garrner	Michael	GIS Manager	Michael Baker	(303) 710-9498	mgarrner@mbakercorp.com		Yes / No
Glazier	Craig				craig.glazier@idl.idaho.gov		
Hoffman	Vicki	Ops. and Maint. Mgr.	Bureau of Reclamation	(208) 383-2266	vhoffman@usbr.gov		Yes / No
Jackson	David	CIKR Program Mgr.	BHS	(208) 422-3047	djackson@bhs.idaho.gov		Yes / No



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Johanek	Kimberly	Professor of Sociology	BSU			kimberlyjohanek@boisestate.edu		Yes / No
Knauth	Kevin S.	Fire and Fuels Planner	BLM	(208) 373-3856		kevin_knauth@blm.gov		Yes / No
Larson	Mark	State Fire Marshall	DOI/ State Fire Marshall's Ofc.	(208) 334-4370		mark.larson@doi.idaho.gov		Yes / No
Lindquist	Troy	<i>Hydrobiologist</i>	NOAA	<i>334</i> <del>(208) 334-4538</del>		troy.lindquist@noaa.gov		Yes / No
Littrell	Rob	Emergency Program	BSU	<i>208-426-3658</i>		roblittrell@boisestate.edu		Yes / No
Lucas	Pat	Preparedness and Protection Branch Chief	BHS	(208) 422-3025		plucas@bhs.idaho.gov		Yes / No
McDaniel	Ryan		FEMA - IDWR	(208-287-4926)		Ryan.McDaniel@IDWR.Idaho.gov		Yes / No
McGown	Mary	State Floodplain Coordinator	IDWR	(208) 287-4928		Mary.McGown@idwr.idaho.gov		Yes / No
Reggear	Bob		ILRCC	(208) 476-7364		rt@cpcinternel.com		Yes / No
Rose	Becky	GIS Manager	BHS	(208) 422-5747		brose@bhs.idaho.gov		Yes / No
Rylee	Jeff	Hazmat Operations	BHS	(208) 422-5724		jrylee@bhs.idaho.gov		Yes / No
Sampson	Rob	ID Conservation Engineer	USDA-NRCS	(208) 378-5727		rob.sampson@id.usda.gov		Yes / No
Schwarz	Tracy	Walla Walla Dist. Flood Risk Mgr.	USACE			Tracy.Schwarz@usace.army.mil	<i>VA</i> <i>TELECONF.</i>	Yes / No
Smith	Bryan	Emergency Program Manager	IDOT	(208) 334-8414		Bryan.Smith@id.idaho.gov		Yes / No
Stephensen	Mark	SHMO	BHS	(208) 422-3040		mstephensen@bhs.idaho.gov		Yes / No



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Valley	Randy	Operations Manager	IDOC	(208) 658-2150	rvalley@idoc.idaho.gov	<i>[Signature]</i>	Yes / No
Wendrowski	Chris	Facilities & Ops. Administrator	Boise School District	(208) 854-6760	chris.wendrowski@boiseschools.org	<i>[Signature]</i>	Yes / No
Whale	Mary	Head of Radiology	VA Hospital	(208) 422-1350	mary.whale@med.va.gov	<i>[Signature]</i>	Yes / No
Wood	Molly		USGS		mwood@usgs.gov		Yes / No
Page	Tina	BPRC			tpage@boiseparc.org	<i>[Signature]</i>	Yes / No
Keith	Chris	Reclamation BOR	Engineer	208-383-2869	ckeith@usbr.gov	<i>[Signature]</i>	Yes / No
Marsh	Mary	PPP	BHS			<i>[Signature]</i>	Yes / No
Johnson	Debra	Public Work	Valley Co	208 945 1173			Yes / No
Postma	Ken	Archie Creek	Valley Co	208 235 3328			Yes / No



**Idaho SHMP Executive Committee Meeting Minutes**

<b>Subject</b>	<b>State of Idaho Hazard Mitigation Plan</b>	<b>Date</b>	<b>27 NOV 2012</b>
<b>Facilitator</b>	Idaho Bureau of Homeland Security (BHS) Susan Cleverley, Senior Mitigation Planner	<b>Time</b>	13:00 – 16:30
<b>Location</b>	IDAHO BUREAU OF HOMELAND SECURITY	<b>Scribe</b>	Krista Anderson
<b>Attendees</b>	Krista Anderson, Charles Butrick, Susan Cleverley, Michael Garner, Craig Glazier, Bill Hatch, David Jackson, Mark Larson, Troy Lindquist, Pat Lucas, Mary Marsh, Ryan McDaniel, Mary McGown, Angie Parra, Bill Phillips (via teleconference) Jeff Rylee, Bill Reese, Marilyn Simunich, Mark Stephensen, Chris Wendrowski		

Key Points Discussed		
No.	Topic	Highlights
1.	Introductions	
2.	Brief review of last year’s SHMP Nov meeting minutes	
3.	44 CFR 201.4	
4.	Goals & Actions, Local Strategies, Risk Factor, Analysis & Disaster Events	<p>Michael – Goal, Objectives, Actions</p> <p>-Review actions from 2010</p> <p>Plans actions (24 and some added for 2013)</p> <p>9 actions to discuss in this meeting (see spreadsheet)</p> <p>#1 – Establish communication and procedures with State Dept. of Ag. Related to purchasing land buildings and natural hazards protection - not accomplished yet, and keep on list (deferred) (req Dept. of Ag. to write its own related to this)</p> <p>#2 – recruit participation for hazard working groups from ISDO, Risk Mgmt., and IRD – Ongoing and completed</p> <p>#3 – create working group to oversee data sharing, database construction and maintenance (HAZUS input datasets) – In process/ ongoing (working with IDWR) Need for database constructions? Refer to code...67.5745 &amp;</p> <p>#4 – In order to improve analysis of flood, landslide, seismic and wildfire hazards, obtain new or compile existing LIDAR data for populated areas of Idaho. – Ongoing (98 established, per Ryan) they are being found all the time. LIDAR data is so useful</p> <p>#5 – develop and maintain statewide inventory of State and county facilities and infrastructure with an isolated server – Ongoing ICRMP &amp; BHS</p> <p>#6 – Structural and non-structural retrofits for county EOCs for multiple hazards (floodplain, high and extreme seismic areas, WUI) – Deferred (is this tied to legislation and building code?) Should there be standards on the books? RVA could be used to establish a minimal benchmark, and would it be compared to current building code? Some EOCs are housed in buildings that were built in 1920s. (i.e. Blaine County Courthouse) Would PS be able to have the authority to request RVA in such buildings?</p> <p>Yes, no and maybe (technically PS is charged to do inspections, but only by</p>



Key Points Discussed		
No.	Topic	Highlights
		<p>invitations – ultimately, PS has no authority... to retrofit – answer is really NO. PS is heading to re-negotiations with industrial commission. It will take legislation to give authority annually, the same as treatment with school buildings (if hazards are identified)</p> <p>Change task to “working with the industrial commission, develop legislation to annually inspect structural and non-structural retrofits for county EOCs for multiple hazards...create a process... we need to have identified targets clearly defined (Mark Larson)</p> <p>Propose an additional task to annually inspect EOCs (encouraging definition of urgency)</p> <p>Adding “defining creative process to identify critical infrastructures and facilities and perform a risk assessment on the critical infrastructures and facilities (Budget???)</p> <p>#7 – 9 Removed VIP action items</p> <p>Added Economic damage model – canned data “create a repository and clearing house for risk assessment data” engage is more risk modeling. i.e. CAMEO...there is multiple tools... potential for numerous hazards – ESF response enhancement... the keeper of the data would be Dept. of Admin (warehouse) all agencies would be involved... portability of information is critical (Pat Lucas) ITRMC are actual keepers... per statute 67.5745c (3) NEED TO CITE</p>
5.	Possible funding	NEHRP
6.	PowerPoint “SHMP”	Planning Process, Risk Assessment, Mitigation Strategy, Plan Maintenance, Draft Plan Update, Approval & Adoption
7.	EOPT Tool	The tool is helping with document sharing and editing TA working groups
8.	Risk Assessments	Historical event research, converting data and map data
9.	Local Plan Roll-up	44 total local plans, outlining wildfire, flood, seismic, a request to use IDTM for maps
10.	Project geodatabase/ HAZUS	Improved data from IDWR, input into HAZUS, GIS has submitted applications (s), Bill Phillips – Pocatello soils data has been delivered to BHS as well as up on IGS website, Boise metro area has also been completed, Right now individual sites are listed, but Bill is going to attempt to place sites in one location on the site
11.	Risk Factor Exercise	Scenarios to determine ranking and final results – wildfire, Flood, EQ (currently at the bottom of the list, but state wants to focus on it as one of the top three) Bill Phillips recommends the catalog as useful to compile data for risk assessment, incorporating discussion into SHMP
12.	Consequence Analysis Exercise	6.9M EQ @ Soda Springs, Boise NY Canal washout, 1910 fire
13.	Review of 2010 goals, objectives, and actions	
14.	Local Mitigation Strategy	
15.	Local Exercise	State recommendations to the local jurisdictions, FEMA initiated scenarios and hazards, ranked with prioritization (19)



Key Points Discussed		
No.	Topic	Highlights
		It was decided by committee to rank the action items by high, medium, low risk
15.	Public Outreach	Education, what makes sense? Public survey (Lewiston Preparedness Fair - 33 surveys returned) Outreach this round – Idaho Discovery Center – new displays mid-June and run entire season. They request participation from subject matter experts, need to provide them with education message and they will provide the content.
14.	Review of 2010 Public outreach	3 public meetings and only 4 responses, Mary Marsh recommended talking to Preparedness rep from BHS, Heidi Novich, and to Pat Lucas about presentations at the State House for newly elected officials
12.	Suggestions	<p>Chris – have more frequent meetings, and more public education</p> <p>Mary Marsh – invite private sector</p> <p>Mark Stephensen – talk to leadership and thank supervisors for being able to attend</p> <p>Mary McGown – attack public perception of risk and use social science data to achieve this by helping the counties</p> <p>Krista – Review stakeholders and expand committee to include additional experts (H &amp; W, refugees, professors, social, churches, FEMA, other states, Joe citizen...) communication enhancement</p> <p>Bill Reese – public perspective and perception – this is not an easy issue</p> <p>Ryan – public policy with fiscal policy – JFAC attendance – how much is at stake</p> <p>Craig – Potential changes for the future – this is a living document and there will be ongoing changes to enhance it</p> <p>Mark Larson – enhance the executive meeting experience. More people at the table</p> <p>Troy – add a more comprehensive group of people to the group</p> <p>David Jackson – important to keep in mind, the purpose for the executive committee - We tend to get down into the weeds a little too much. Convey to risk while changing the culture</p> <p>Bill Hatch – PS administrator’s full support. Where is the money to do such tasks and ideas? Providing information costs money. Going to the legislature is effective when we provide facts with data, and potential hazards and risks – ultimately death, within their jurisdiction. Increase meetings to at least bi-annually. Include politicians</p> <p>Jeff Reilly – I like the EOPT. I am making changes within the risk assessment portion of the SHMP. We do not mitigate public</p>



Key Points Discussed		
No.	Topic	Highlights
		<p>perspective. We need to convey, through environmental education, out to all levels. Start with schoolchildren, all the way out. In our training, the planning and zoning committees, who make the decisions to change the communities – ultimately, get to the politicians, which is not popular. We do not enforce the codes, we do have. New codes will not be helpful if they are not enforced. We all know that recent disasters could have been mitigated before they occurred. We need to identify how.</p> <p>Charles – Good feedback. Bringing awareness to the public is a big challenge.</p> <p>Marilyn – From AG point of view, we are first in potatoes and fish, but 3 in dairy, nationally. Work through land grant assistance in rural education. Hit the urban population differently. Critical infrastructure is a system, not just a building. (Susan) AG is under human-caused section.</p> <p>Susan – Handy to have the EOPT on line. We will keep the document on line and will post the draft as a whole document, so you can comment. We will check out the document, so there will be no more editing at the end of January. We will retain the plan in sections, during the year, and make comments, or add events. We would like it to be a living document. For now, we will meet with the executive committee same time next year, but I hope that you participate with Discovery Center.</p> <p>David requests to meet prior to the executive meeting, so we can re-align prior to submitting the plan to FEMA.</p> <p>September is disaster planning awareness month.</p> <p>Mike – we can leave the plan in the EOPT longer if need be. We can delay the final product a little longer.</p> <p>Susan – we will go ahead and let everyone comment through DEC. I will then let Michael know of such comments. Please have editing done by the end of DEC. By the end of FEB, final draft will hopefully be complete.</p> <p>Director is Brad Richy – he expresses appreciation for your time and input.</p>

Action Plan			
No.	Action Item(s)	Owner	Target Date
1.	Submit hazmat data to Michael Garner	Jeff Rylee	December
2.	Drought sidebars under fire TA working group	Marilyn Simunich	December
3.			
4.			



# Appendix G

LAST NAME	FIRST NAME	TITLE/ POSITION	AGENCY	PHONE	EMAIL ADDRESS	Signature
Anderson	Krista	Mitigation/CIKR Prog. Asst	BHS	(208) 422-6692	<a href="mailto:Kanderson@bhs.idaho.gov">Kanderson@bhs.idaho.gov</a>	
Berggren	Eileen	Proj. Mgr/ District Outreach Coord.	USACE	(208) 345-2065	<a href="mailto:Eileen.M.Berggren@usace.army.mil">Eileen.M.Berggren@usace.army.mil</a>	
Bowen	Lisa	EOP/ Specialist	BHS	(208) 422-3391	<a href="mailto:lbowen@bhs.idaho.gov">lbowen@bhs.idaho.gov</a>	
Butrick	Charles	Coordinator	Business Consulting Services, LLC	(208) 871-4163	<a href="mailto:charles@bccidaho.com">charles@bccidaho.com</a>	
Cleverley	Susan	Sr. Mitigation Planner	BHS	(208) 422-6476	<a href="mailto:scleverley@bhs.idaho.gov">scleverley@bhs.idaho.gov</a>	
Dietrich	Mark	Technical Services Division Administrator	DEQ	(208) 272-0204	<a href="mailto:Mark.Dietrich@deq.idaho.gov">Mark.Dietrich@deq.idaho.gov</a>	
Eavenson	Jim	Lieutenant, Acting Captain	ISP	(208) 884-7048	<a href="mailto:james.eavenson@isp.idaho.gov">james.eavenson@isp.idaho.gov</a>	
Elam	Matt	Utilities Analyst	Idaho Public Utilities Comm.	(208) 334-0363	<a href="mailto:matt.elam@puc.idaho.gov">matt.elam@puc.idaho.gov</a>	
Frazier	Tim	Geologist	U of I Dept. of Geography	(208) 885-6238	<a href="mailto:tfrazier@uidaho.edu">tfrazier@uidaho.edu</a>	
Garner	Michael	GIS Manager	Michael Baker	(303) 710-9498	<a href="mailto:mgarner@mbakercorp.com">mgarner@mbakercorp.com</a>	
Glazier	Craig	Forest Fire Manager	US Forest Service		<a href="mailto:cglazier@fs.fed.us">cglazier@fs.fed.us</a>	
Hall	Dave	Plans Section Chief	BHS	(208) 422-3013	<a href="mailto:dhall@bhs.idaho.gov">dhall@bhs.idaho.gov</a>	
Hatch	Bill	Public Information Officer	Idaho Division of Bldg. Safety	(208) 332-7121	<a href="mailto:bill.hatch@bds.idaho.gov">bill.hatch@bds.idaho.gov</a>	
Hoffman	Vicki	Ops. and Maint. Mgr.	Bureau of Reclamation	(208) 383-2266	<a href="mailto:vhoffman@usbr.gov">vhoffman@usbr.gov</a>	
Jackson	David	CIKR Program Mgr.	BHS	(208) 422-3047	<a href="mailto:djackson@bhs.idaho.gov">djackson@bhs.idaho.gov</a>	
Larson	Mark	State Fire Marshal	DOI/ State Fire Marshalls O/c.	(208) 334-4370	<a href="mailto:mark.larson@doi.idaho.gov">mark.larson@doi.idaho.gov</a>	
Lindquist	Troy	Senior Service Hydrologist	NOAA	(208) 334-9538	<a href="mailto:troy.lindquist@noaa.gov">troy.lindquist@noaa.gov</a>	
Littrell	Rob	Emergency Management Planner/Analyst	BSU	(208) 426-3638	<a href="mailto:roblittrell@boisestate.edu">roblittrell@boisestate.edu</a>	



# Appendix G

Lucas	Pat	Preparedness and Protection Branch Chief	BHS	(208) 422-3025	plucas@bhs.idaho.gov	<i>Pat Lucas</i>
McDaniel	Ryan	Cooperating Technical Partner Coordinator	FEMA - IDWR	(208-287-4926	Ryan.McDaniel@IDWR.Idaho.gov	X
McGown	Mary	State Floodplain Coordinator	IDWR	(208) 287-4928	Mary.McGown@idwr.idaho.gov	Mary McGown
Miller	Jerry	Economic Development Specialist	Idaho Dept. of Commerce	(208) 334-2650, 2143	jerry.miller@commerce.idaho.gov	
Page	Tim	Project Manager	Boise Project Board of Control	(208) 344-1141	tpage@boiseproject.org	
Phillips	Bill	Research Geologist	Idaho Geo. Survey	(208) 885-8928	billphillips@uidaho.edu	VIA TELECONFERENCE
Richy	Brad	Director	BHS	(208) 422-3040	brichy@bhs.idaho.gov	
Rylee	Jeff	Hazmat Operations	BHS	(208) 422-5724	jrylee@bhs.idaho.gov	<i>Jeff Rylee</i>
Sampson	Rob	ID Conservation Engineer	USDA-NRCS	(208) 378-5727	rob.sampson@id.usda.gov	
Schwarz	Tracy	Walla Walla Dist. Flood Risk Mgr.	USACE		Tracy.Schwarz@usace.army.mil	
Simunich	Marilyn	DVA Section Manager	ID. Dept of Ag.	(208) 322-8560	marilyn.simunich@agri.idaho.gov	<i>Marilyn Simunich</i>
Smith	Bryan	Emergency Program Manager	IDOT	(208) 334-8414	Bryan.Smith@id.idaho.gov	
Stephensen	Mark	State Hazard Mitigation Officer	BHS	(208) 422-3040	mstephensen@bhs.idaho.gov	<i>Mark Stephensen</i>
Wendrowski	Chris	Facilities & Ops. Administrator	Boise School District	(208) 854-6760	chris.wendrowski@boiseschools.org	<i>Chris Wendrowski</i>
Whale	Mary	Head of Radiology	VA Hospital	(208) 422-1350	mary.whale@med.va.gov	
Marsh	Mary	BHS		384335733	mmarsch@bhs.idaho.gov	Mary Marsh
Reese	Bill	ISD		208-884-7220	william.reese@isp.idaho.gov	Bill Reese
<del>Ann</del> <del>Pam</del>	Angela	P.E.		208-870-9495	angie@usid.com	Angela P.E.

LAMAR MICHAE MICHAE TAKEN INC. 770.514.1105 MCGOWN@MAGNACONCORP.COM  
 MARSH MARY BHS  
 REESE BILL ISD  
 ANN ANGELA P.E. 208-870-9495 angie@usid.com  
 PAM



## SHMP Flood Technical Advisory Group Meeting

9/6/12 9:00 a.m.

### Attendees:

Mary McGown	State Floodplain Coordinator	Idaho Department of Water Resources	<a href="mailto:Mary.McGown@idwr.idaho.gov">Mary.McGown@idwr.idaho.gov</a>
Ryan McDaniel		FEMA-Idaho Department of Water Resources	<a href="mailto:Ryan.McDaniel@IDWR.Idaho.gov">Ryan.McDaniel@IDWR.Idaho.gov</a>
Jerry Miller		Idaho Dept. of Commerce	<a href="mailto:jerry.miller@commerce.idaho.gov">jerry.miller@commerce.idaho.gov</a>
Lisa Bowen	Idaho Bureau of Homeland Security	208-422-3331	<a href="mailto:lbowen@bhs.idaho.gov">lbowen@bhs.idaho.gov</a>
Troy Lindquist		NOAA	<a href="mailto:troy.lindquist@noaa.gov">troy.lindquist@noaa.gov</a>
Chris Keith		Bureau of Reclamation	<a href="mailto:ckeith@usbr.gov">ckeith@usbr.gov</a>
Charles Butrick	Coordinator	Business Consulting Services	<a href="mailto:charles@bcsidaho.com">charles@bcsidaho.com</a>
Susan Cleverley	Idaho Bureau of Homeland Security	208-422-6476	<a href="mailto:scleverley@bhs.idaho.gov">scleverley@bhs.idaho.gov</a>

Susan Cleverley briefly discussed the SHMP Technical Advisory Groups tasks and use of the EOPT. Mike Garner, Michael Baker Corp, led the group via teleconference in an exercise to rank risk factors of probability, impact, spatial extent, warning time, and duration for the following hazards: flood, dams, canals, and severe storms. Since the US Army Corps of Engineers was unable to participate, the group decided levee risks tied into riverine flooding for this exercise, and we needed to address gathering missing levee data as a potential action item. Handouts included a hazard ranking table, Risk Factor Criteria, SHMP TA Groups and tasks, the 2010 SHMP Action table, and a CD of resources. Group discussion brought out the differences in riverine and flash flooding, as well as dam, levee, and canal failures. Severe storms were limited to precipitation events.

The group decided to meet again the week of October 9th at BHS. A Doodle poll will be sent to determine date and time.



# Appendix G

Training for using the EOPT system, an on-line Share Point database, was conducted by Lisa Bowen. The EOPT is the tool groups will utilize to checkout, update, and check-in assigned SHMP sections by October 31, 2012.

The economic impacts of hazards were also mentioned. The risk factor results are shown below:

	Hazard	Probability	Impact	Spatial Extent	Warning Time	Duration	RF Factor
1	Flood	4	1.2	2	0.6	3	2.95
2	Wildfire	4	0	3	0	3.5	0
3	Earthquake	1	0	2	0	4	0
4	Avalanche	4	0	1	0	1	0
5	Dam	3	0.9	3	0.9	2	2.7
	Levee	4	0	2	0	3	0
6	Canal Failure	4	1.2	2	0.6	1	2.6
	Drought	3	0	3	0	4	0
7	Hazardous Materials	4	0	2	0	1	0
8	Landslide	4	0	2	0	1	0
9	Lightning	4	0	2	0	1	0
10	Severe Storms	4	1.2	3	0.9	2	2.8
11	Volcanic Eruptions	1	0	2	0	4	0
12	Wind/Tornadoes	4	0	1	0	1	0

Results from Technical Advisory Committee Exercises

	Hazard	Probability	Impact	Spatial Extent	Warning Time	Duration	RF Factor
1	Flood	4	1.2	2	0.6	3	2.95
2	Wildfire	4	1.2	3	0.9	4	3.2
3	Earthquake	1	0.3	3	0.9	4	2.1
4	Avalanche	4	1.2	3	0.9	1	2.5
5	Dam/Levee/Canal Failure	3.5	1.05	2.5	0.75	1.5	2.65
6	Drought	3	0.9	3	0.6	4	2.9
7	Hazardous Materials	4	0	2	0	1	0
8	Landslide	4	1.2	2	0.6	1	2.4
9	Lightning	4	1.2	2	0.6	1	2.7
10	Severe Storms	4	1.2	3	0.9	2	2.8
11	Volcanic Eruptions	1	0.3	3	0.9	4	2.1
12	Wind/Tornadoes	4	1.2	1	0.3	1	2.2
RF Weighting Scheme		0.3	0.3	0.2	0.1	0.1	

To see how differing Weighting Schemes would affect the RF Factor, modify the RF Weighting Scheme values below in Row 31 (ensuring they sum to 1)

	Hazard	Probability	Impact	Spatial Extent	Warning Time	Duration	RF Factor
1	Flood	4	0.8	2	0.4	3	3
2	Wildfire	4	0.8	3	0.6	4	3.2
3	Earthquake	1	0.2	3	0.6	4	2
4	Avalanche	4	0.8	3	0.6	1	2
5	Dam/Levee/Canal Failure	3.5	0.7	2.5	0.5	1.5	2.45
6	Drought	3	0.6	3	0.6	4	3
7	Hazardous Materials	4	0	2	0	1	0
8	Landslide	4	0.8	2	0.4	1	2.1
9	Lightning	4	0.8	2	0.4	1	2.4
10	Severe Storms	4	0.8	3	0.6	2	2.5
11	Volcanic Eruptions	1	0.2	3	0.6	4	2.3
12	Wind/Tornadoes	4	0.8	1	0.2	1	1.9
RF Weighting Scheme		0.2	0.2	0.3	0.1	0.2	1



 		<p><b>11 October 2012</b>  <b>10:00 am – 11:30 am</b>  <b>BHS Conference Room</b>  <b>Idaho Bureau of Homeland Security</b>  <b>4040 Guard St. Building 600</b>  <b>Boise, ID 83705</b></p>
<b>Attendees:</b>		
<b>Agenda</b>		
Welcome and Introductions		Charles Butrick
Review minutes		Susan Cleverley
Planning process and requirements		Susan Cleverley
Consequence Analysis & Disaster Events		Mike Garner
Round Table Discussion – Hazard descriptions, EOPT, SHMP format and content, etc.		Group
<b>Additional Information</b>		
Idaho State Hazard Mitigation Plan - <a href="http://www.bhs.idaho.gov/Pages/Plans/Mitigation/SHMP.aspx">http://www.bhs.idaho.gov/Pages/Plans/Mitigation/SHMP.aspx</a>		



## Meeting Minutes

<b>Subject</b>	<b>SHMP Seismic TA Working Group</b>	<b>Date</b>	<b>08/15/2012</b>
<b>Facilitator</b>	BHS	<b>Time</b>	3:00-4:30
<b>Location</b>	BHS - 600	<b>Scribe</b>	NA
<b>Attendees</b>	Krista Anderson, David Claycomb, Susan Cleverley, Bill Hatch, Mark Stephensen, Chris Wendrowski		

Key Points Discussed		
No.	Topic	Highlights
1.	Welcome and Introductions	
2.	SHMP Risk Factor Criteria and Analysis	Earthquake, Avalanche, Landslide, Volcanic Eruptions – Criteria was limited for hazards
3.	Round Table Discussions	School Site Planning project, Cost, Assistance with interns vs. Credentialed experts to cut costs.
4.	Future Meeting Discussions	FEMA National EQ Hazards – NEHRP 2011, BHS Exercise, Unreinforced masonry in Idaho, Public Education
5.	Next Meeting scheduled -	19 Sept 2012 – 3:00-4:30



# Appendix G

15 August 2012 - State Hazard Mitigation Plan Revision - Seismic TA Working Group Sign-in Sheet

Name	Title	Email	Phone
Krista Anderson	Mitigation Program Asst	klanderson@bhs.idaho.gov	(208) 422-6692
David Claybomb	<i>Rec. Program</i> Senior Mitigation Planner	<i>David Claybomb</i> sclaverley@bhs.idaho.gov	<i>574-2910</i> (208) 422-6476
Susan Cleverley	Senior Mitigation Planner	sclaverley@bhs.idaho.gov	(208) 422-6476
Bill Hatch	PIO	billhatch@bds.idaho.gov	(208) 332-7121
Bill Phillips	Research Geologist	phillips@uidaho.edu	(208) 885-8928
Mark Stephensen	State Hazard Mitigation Officer	mstephensen@bhs.idaho.gov	(208) 422-5726
Chris Wendrowski	Facilities and Ops Manager, Boise School District	chris.wendrowski@boiseschools.org	(208) 854-6760



**Meeting Minutes**

<b>Subject</b>	<b>SHMP Seismic TA Working Group</b>	<b>Date</b>	<b>09/19/2012</b>
<b>Facilitator</b>	BHS	<b>Time</b>	3:00-4:30
<b>Location</b>	BHS - 600	<b>Scribe</b>	NA
<b>Attendees</b>	Krista Anderson, Charles Butrick, Susan Cleverley, Bill Phillips (teleconference) Chris Wendrowski		

Key Points Discussed		
No.	Topic	Highlights
1.	Welcome and Introductions	
2.	Review of agenda items	Earthquake and Seismic activity and ranking within other hazards. (Relatively Low)
3.	Round Table Discussions	USGS Data, Qualitive Exercise, Shakemap, Blaine County grant funding for schools and potential county pilot liquefaction projects, Survey implementation, Building codes, Rapid Visual Training (Oct 2), unreinforced masonry around the state and seismic strengthening awareness, Boise Discovery Center (and other potential project options) NEHRP
4.	Future Meeting Discussions	FEMA National EQ Hazards – Consequence Analysis Exercise
5.	Next Meeting scheduled -	24 Oct 2012 – 3:00-4:30



## Meeting Minutes

<b>Subject</b>	<b>SHMP Seismic TA Working Group</b>	<b>Date</b>	<b>10/24/2012</b>
<b>Facilitator</b>	BHS	<b>Time</b>	3:00-4:30
<b>Location</b>	BHS - 600	<b>Scribe</b>	NA
<b>Attendees</b>	Pat Lucas, Heidi Novich, Charles Butrick, Susan Cleverley, with Bill Phillips and Mike Garner via teleconference		

Key Points Discussed		
No.	Topic	Highlights
1.	Welcome and Introductions	
2.	Review of 9/19/12 Meeting Minutes	Earthquake and Seismic activity and ranking within other hazards. (Relatively Low), USGS Data, Qualitive Exercise, Shakemap, Blaine County grant funding for schools and potential county pilot liquefaction projects, Survey implementation, Building codes, Rapid Visual Training (Oct 2), unreinforced masonry around the state and seismic strengthening awareness, Boise Discovery Center (and other potential project options) NEHRP
3.	The Great Idaho Shakeout	Heidi reviewed Shakeout and results of 10/18/12 exercise which far exceeded last year's number of participants.
4.	Public Outreach	Charles is working with the Discovery Center of Idaho to plan hazard displays and presentations this summer in relation to the SHMP revision. He would like feedback on
5.	SHMP status and proposed action item	Susan provided an update where we are in the planning process and proposed a new SHMP action item: publishing and distributing a school seismic non-structural checklist. Heidi already has funding available she is willing to contribute. The group needs to provide feedback on publication and any other known checklists.
6.	Exercise and Discussions	Mike Garner led the group in a Consequence Analysis Exercise for the scenario of a 6.9 earthquake in Pocatello. Bill Phillips informed the group that the liquefaction for Pocatello came in low. Discussion also brought up transportation and hazardous material considerations, economic and business factors, as well as potential tribal and cultural issues.
7.	Next Meeting	Only as requested by Seismic TA Group



## Meeting Minutes

<b>Subject</b>	<b>Follow-up Seismic TA Working Group</b>	<b>Date</b>	<b>7 FEB 13</b>
<b>Facilitator</b>	Susan Cleverley	<b>Time</b>	13:00-14:00
<b>Location</b>	BHS AAG Military Conference Room	<b>Scribe</b>	Krista
<b>Attendees</b>	Krista Anderson, Charles Butrick, David Claycomb, Susan Cleverley, Bill Hatch, and Mike Garner and Bill Phillips via telephone conference		

Key Points Discussed		
No.	Topic	Highlights
1.	Mike Garner compiled status slides	Included current HAZUS Level II existing data. Four outlined analysis jurisdictions are: Idaho Falls, Boise, Pocatello, and Teton.
2.	Delaying final draft to include more efficient and specified data – replacement costs on critical infrastructure (Hospitals, PD, Fire, EMS buildings)	Draft letters have gone to BHS Director, Col. Richy for county assessors and ICRMP, asking for further data, to include in HAZUS II assessment re-run. This will give us better loss estimate data, rather than gestimated old data.
3.	Division of Building Safety has completed Salmon's first pass through assessment	
4.	USGS Shake Maps	This data includes soils, magnitude, depth, and locations. Idaho has a multitude of these shake Maps available.
5.	Data reported statewide vs. specific region or even local counties...	Data can be extracted and transferred from the overall reported statewide data.
6.	Sun Valley mapping	Project in this area to be completed by the end of Summer 2013.
7.	Review / revision of last assessment	Every hazard is unique and poses a need to re-assess. As is, there is no absolute.
8.	Assessment results – To leave the blue column or not to leave the blue column?	Initial conversation was to hide blue column results from the plan. Per request of David Claycomb, leaving it in would show just how close some of the hazards truly are.
9.	Delaying the draft a few weeks	Compiling additional data, such as the results to Division of Building Safety ATC-20 assessments and critical infrastructure replacement cost data will give a more accurate result.
10.	Hazards – Lightening vs. EQ	Lightening has high likelihood and EQ has low likelihood – next revision, review weightings more carefully to come up with a more realistic result. Susan suggests next time, exercising all assessments together, instead of breaking them up.
11.	Slide – Soda Springs	The scenario we used was Pocatello, not Soda Springs
12.	Local Plan roll-up exercise	Extracted top three hazards: Flood, Fire, EQ
13.	Raw Data Slides	Trends, impacts by hazard. Jurisdictions included Bannock,



Key Points Discussed		
No.	Topic	Highlights
		Franklin, Oneida, Canyon, Shoshone-Bannock Tribe, Ada, Caribou, and Teton. Franklin is one of the shakiest places in Idaho. However, Franklin reported highest at 600 million – concern of outcome, leaving lack of trust to HAZUS data results.
14.	Top hazards to be listed in SHMP	Cyber is very different from all other hazards. Does not particularly have loss of life. Leave in flood, EQ, and wildfire, adding language in Executive Summary, "significant loss of life"
15	Public Outreach	Charles needs input from technical working groups, to include and organize content. Discovery Center will run for a few months. Eastern Idaho possibilities at Idaho Falls Museum (with same criteria). Northern Idaho – no set venues yet. Follow-up on Sandpoint and Wallace locations. Survey monkey is moving along and potential to go ahead and post on BHS website now. A catalog list is being created for associated links. Mitigation webpage revisions are ongoing.

Action Plan			
No.	Action Item(s)	Owner	Target Date
1.	Forward Historical Shake Maps to group	Mike Garner	N/A
2.	Correct slide from Soda Springs to Pocatello	Mike Garner	N/A
3.	Public Outreach follow-up on Sandpoint and Wallace locations	Charles Butrick	N/A
4.	Survey Monkey – add another section to include email address	Charles Butrick	N/A
5.	Technical Advisory Groups need to answer question: What message do we want to convey to the public?	Charles Butrick	N/A



## SHMP Fire Technical Advisory Group Meeting

8/14/12 9:00 a.m.

### Attendees:

<b>Heidi Novich</b>	Idaho Bureau of Homeland Security	208-422-3015	<a href="mailto:hnovich@bhs.idaho.gov">hnovich@bhs.idaho.gov</a>
<b>Craig Glazier</b>	Forest Service		<a href="mailto:cglazier@fs.fed.us">cglazier@fs.fed.us</a>
<b>David Claycomb</b>	Idaho Dept. of Parks and Recreation		<a href="mailto:David.Claycomb@idpr.idaho.gov">David.Claycomb@idpr.idaho.gov</a>
<b>Lisa Bowen</b>	Idaho Bureau of Homeland Security	208-422-3331	<a href="mailto:lbowen@bhs.idaho.gov">lbowen@bhs.idaho.gov</a>
<b>Mark Larson</b>	Department of Insurance, Office of the State Fire Marshall	208-334-4370	<a href="mailto:mark.larson@doi.idaho.gov">mark.larson@doi.idaho.gov</a>
<b>Pamm Juker</b>	Idaho Dept. of Agriculture	208-332-8671 or 921-3679	<a href="mailto:piuker@agri.idaho.gov">piuker@agri.idaho.gov</a>
<b>Kevin S. Knauth</b>	Bureau of Land Management	208-373-3856	<a href="mailto:kevin_knauth@blm.gov">kevin_knauth@blm.gov</a>
<b>Krista Anderson</b>	Idaho Bureau of Homeland Security	208-422-6692	<a href="mailto:klanderson@bhs.idaho.gov">klanderson@bhs.idaho.gov</a>
<b>Mark Stephenson</b>	Idaho Bureau of Homeland Security	208-422-5726	<a href="mailto:mstephensen@bhs.idaho.gov">mstephensen@bhs.idaho.gov</a>
<b>Susan Cleverley</b>	Idaho Bureau of Homeland Security	208-422-6476	<a href="mailto:scleverley@bhs.idaho.gov">scleverley@bhs.idaho.gov</a>

Mike Garner, Michael Baker Corp, lead the group via teleconference in an exercise to rank risk factors of probability, impact, spatial extent, warning time, and duration for the following hazards: wildfire, drought, lightning, and wind/tornadoes. Exercise handouts included a hazard ranking table and Risk Factor Criteria. Group discussion brought out the differences in urban, forest, and rangeland fires such as the percentage of fires human caused versus lightning. The economic impacts of hazards, especially drought, were emphasized. The group didn't see a need to change the weighting percentages, and the risk factor results are shown below:



Results from Technical Advisory Committee Exercises

	Hazard	Probability	Impact	Spatial Extent	Warning Time	Duration	RF Factor					
1	Flood	0	0	0	0	0	0					
2	Wildfire	4	1.2	3	0.9	3	0.6	1	0.1	4	0.4	3.2
3	Earthquake	0	0	0	0	0	0	0	0	0	0	
4	Avalanche	0	0	0	0	0	0	0	0	0	0	
5	Dam/Levee/Canal Failure	0	0	0	0	0	0	0	0	0	0	
6	Drought	3	0.9	3	0.9	3	0.6	1	0.1	4	0.4	2.9
7	Hazardous Materials	0	0	0	0	0	0	0	0	0	0	
8	Landslide	0	0	0	0	0	0	0	0	0	0	
9	Lightning	4	1.2	2	0.6	2	0.4	4	0.4	1	0.1	2.7
10	Severe Storms	0	0	0	0	0	0	0	0	0	0	
11	Volcanic Eruptions	0	0	0	0	0	0	0	0	0	0	
12	Wind/Tornadoes	4	1.2	1	0.3	1	0.2	4	0.1	0.4	0.1	2.2
RF Weighting Scheme		0.3	0.3	0.2	0.2	0.1	0.1					

To see how differing Weighting Schemes would affect the RF Factor, modify the RF Weighting Scheme values below in Row 31 (ensuing they sum to 1)

	Hazard	Probability	Impact	Spatial Extent	Warning Time	Duration	RF Factor					
1	Flood	0	0	0	0	0	0					
2	Wildfire	4	0.8	3	0.6	3	0.9	1	0.1	4	0.8	3.2
3	Earthquake	0	0	0	0	0	0	0	0	0	0	
4	Avalanche	0	0	0	0	0	0	0	0	0	0	
5	Dam/Levee/Canal Failure	0	0	0	0	0	0	0	0	0	0	
6	Drought	3	0.6	3	0.6	3	0.9	1	0.1	4	0.8	3
7	Hazardous Materials	0	0	0	0	0	0	0	0	0	0	
8	Landslide	0	0	0	0	0	0	0	0	0	0	
9	Lightning	4	0.8	2	0.4	2	0.6	4	0.4	1	0.2	2.4
10	Severe Storms	0	0	0	0	0	0	0	0	0	0	
11	Volcanic Eruptions	0	0	0	0	0	0	0	0	0	0	
12	Wind/Tornadoes	4	0.8	1	0.2	1	0.3	4	0.1	0.4	0.2	1.9
RF Weighting Scheme		0.2	0.2	0.3	0.1	0.2	1					

The State Hazard Mitigation Plan (SHMP), goals and objectives, actions with handout of SHMP 2010 Mitigation Action Plan table, CD of resources, and handout listing SHMP Technical Advisory Groups and tasks were briefly discussed. The group decided to meet again in September at BHS. A Doodle poll will be sent to determine date and time.

Training for using the EOPT system, an on-line Share Point database, was conducted by Lisa Bowen. The EOPT is the tool groups will utilize to checkout, update, and check-in assigned SHMP sections by October 31, 2012.



<b>Idaho State Hazard Mitigation Plan Update</b>			<b>20 September 2012</b> 2:00 pm – 3:30 pm BHS Conference Room Idaho Bureau of Homeland Security 4040 Guard St. Building 600 Boise, ID 83705
<b>Attendees:</b>			
<b>Agenda</b>			
Welcome and Introductions			Charles Butrick
Review minutes			Susan Cleverley
Planning process and requirements			Susan Cleverley
Consequence Analysis & Disaster Events			Mike Garner
Round Table Discussion – Hazard descriptions, EOPT, SHMP format and content, etc.			Group
<b>Additional Information</b>			
Idaho State Hazard Mitigation Plan - <a href="http://www.bhs.idaho.gov/Pages/Plans/Mitigation/SHMP.aspx">http://www.bhs.idaho.gov/Pages/Plans/Mitigation/SHMP.aspx</a>			



## Meeting Minutes

<b>Subject</b>	<b>SHMP Fire TA Working Group</b>	<b>Date</b>	<b>10/25/2012</b>
<b>Facilitator</b>	BHS	<b>Time</b>	2:00-3:30
<b>Location</b>	BHS - 600	<b>Scribe</b>	NA
<b>Attendees</b>	Heidi Novich, Craig Glazier, Charles Butrick, Susan Cleverley, Mark Stephensen, Krista Anderson, and Mike Garner via teleconference		

Key Points Discussed		
No.	Topic	Highlights
1.	Welcome and Introductions	
2.	Review of 9/20/12 Meeting Minutes	The Fire TA meeting covered Hazard events, Consequence Analysis Exercise, and wildfire ranking within other hazards. (High)
3.	Public Outreach	Charles is working with the Discovery Center of Idaho to plan hazard displays and presentations this summer in relation to the SHMP revision. He would like feedback on what message we want the public to take away and the availability of group members to assist or present at the summer exhibit.
4.	SHMP status	Susan provided an update of where we are in the planning process and future draft stages.
5.	Mitigation Action Plan	Mike Garner led the group in a discussion of action items listed in the SHMP and whether they were complete, ongoing, etc. We added new actions supporting SHMP goals and objectives for fire, Pamm Juker will get back to us on actions for drought, and Craig Glazier will look into other ILRCC projects.
6.	Coordination of other plans with SHMP	Copies of the new Fire Plan from Mark Larson were provided to the group. Craig will send a link to the Idaho Forest Plan.
7.	Future tasks	EOPT edits are due next week. The Executive Committee will be meeting 11/27/12 at 1:00 pm.



## SHMP Manmade Technical Advisory Group Meeting

9/14/12 9:00 a.m.

### Attendees:

<b>Mary Whale</b>	Head of Radiology	VA Hospital	<a href="mailto:mary.whale@med.va.gov">mary.whale@med.va.gov</a>
<b>Mary Marsh</b>	Public-Private Partnerships Section Chief	Idaho Bureau of Homeland Security	<a href="mailto:mmarsh@bhs.idaho.gov">mmarsh@bhs.idaho.gov</a>
<b>Matt Elam</b>	Utilities Analyst	Idaho Public Utilities Commission	<a href="mailto:matt.elam@puc.idaho.gov">matt.elam@puc.idaho.gov</a>
<b>Mark Stephensen</b>	Mitigation Section Chief, State Hazard Mitigation Officer	Idaho Bureau of Homeland Security	<a href="mailto:mstephensen@bhs.idaho.gov">mstephensen@bhs.idaho.gov</a>
<b>David Jackson</b>	Critical Infrastructure Protection Program Manager	Idaho Bureau of Homeland Security	<a href="mailto:djackson@bhs.idaho.gov">djackson@bhs.idaho.gov</a>
<b>Tim Frazier</b>	Geologist	U of I Dept. of Geography	<a href="mailto:tfrazier@uidaho.edu">tfrazier@uidaho.edu</a>
<b>Jeff Rylee</b>	HazMat Operations	Idaho Bureau of Homeland Security	<a href="mailto:jrylee@bhs.idaho.gov">jrylee@bhs.idaho.gov</a>
<b>Jim Eavenson</b>	Lieutenant, Acting Captain	Idaho State Police	<a href="mailto:james.eavenson@isp.idaho.gov">james.eavenson@isp.idaho.gov</a>
<b>Charles Butrick</b>	Coordinator	Business Consulting Services	<a href="mailto:charles@bcsidaho.com">charles@bcsidaho.com</a>
<b>Mike Garner</b>	Contractor, GIS Manager	Michael Baker Corp.	<a href="mailto:mgarner@mbakercorp.com">mgarner@mbakercorp.com</a>
<b>Susan Cleverley</b>	Senior Mitigation Planner	Idaho Bureau of Homeland Security	<a href="mailto:scleverley@bhs.idaho.gov">scleverley@bhs.idaho.gov</a>

Charles Butrick welcomed the group and did introductions. Susan Cleverley briefly discussed the SHMP Technical Advisory Groups tasks and handouts. Handouts included a hazard ranking table, Risk Factor Criteria, SHMP TA Groups and tasks, the 2010 SHMP Action table, Strategic National Risk Assessment, and a CD of resources. David Jackson described the Strategic National Risk Assessment and the upcoming state assessment. Information from the State Hazard Mitigation Plan revision will be used in the assessment.

Mike Garner, Michael Baker Corp, led the group via teleconference in an exercise to rank risk factors of probability, impact, spatial extent, warning time, and duration for the following hazards: hazardous materials (fixed and transportation), pandemic, radiological, cyber disruptions, energy shortages, and civil disturbances. Group discussion focused on scenarios in populated areas and brought out the differences in scenarios and decided to break out fixed locations from transportation of hazardous materials. The economic impacts of hazards were also mentioned.

The group decided to meet again Tuesday, October 2<sup>nd</sup> at 2:00 p.m. at BHS. Mike described a consequence analysis exercise that will be conducted at the next meeting. Susan reminded the group to



use the on-line EOPT system to edit the State Hazard Mitigation Plan. The EOPT is the tool groups will utilize to checkout, update, and check-in assigned SHMP sections by October 31, 2012.

The risk factor results are shown below:

Hazard	Probability	Impact	Spatial Extent	Warning Time	Duration	RF Factor					
1 Flood	0	0	0	0	0	0					
2 Wildfire	0	0	0	0	0	0					
3 Earthquake	0	0	0	0	0	0					
4 Avalanche	0	0	0	0	0	0					
5 Dam/Levee/Canal Failure	0	0	0	0	0	0					
6 Drought	0	0	0	0	0	0					
7 Landslide	0	0	0	0	0	0					
8 Lightning	0	0	0	0	0	0					
9 Severe Storms	0	0	0	0	0	0					
10 Volcanic Eruptions	0	0	0	0	0	0					
11 Wind / Tornado	0	0	0	0	0	0					
12 Hazardous Materials Summary	2.5	0.75	2.5	0.75	1.5	0.3	4	0.4	3	0.3	2.5
Fixed Location	1	0.3	3	0.9	1	0.2	4	0.4	3	0.3	2.1
Transportation	4	3.2	2	0.6	2	0.4	4	0.4	1	0.3	2.9
18 Pandemic	2	0.6	3	0.9	4	0.8	1	0.1	4	0.4	2.8
14 Radiological	1	0.3	2	0.6	2	0.4	4	0.4	4	0.4	2.1
15 Cyber Disruptions	3	0.9	2.5	0.75	4	0.8	4	0.4	3	0.3	3.15
16 Energy Shortages	3	0.9	2	0.6	3	0.6	4	0.4	2	0.2	2.7
17 Civil Disturbances	2	0.6	1	0.3	1	0.2	1	0.1	2	0.2	1.4
RF Weighting Scheme	0.3	0.3	0.2	0.2	0.1	0.1					

Rank	Hazard	Probability	Impact	Spatial Extent	Warning Time	Duration	RF Factor					
1	Wildfire	4	1.2	3	0.9	3	0.6	1	0.1	4	0.4	3.2
2	Cyber Disruptions	3	0.9	2.5	0.75	4	0.8	4	0.4	3	0.3	3.15
3	Flood	4	1.2	2	0.6	3	0.6	2	0.2	3.5	0.35	2.95
4	Drought	3	0.9	3	0.9	3	0.6	1	0.1	4	0.4	2.9
5	Severe Storms	4	1.2	3	0.9	2	0.4	1	0.1	2	0.2	2.8
6	Pandemic	2	0.6	3	0.9	4	0.8	1	0.1	4	0.4	2.8
7	Energy Shortages	3	0.9	2	0.6	3	0.6	4	0.4	2	0.2	2.7
8	Lightning	4	1.2	2	0.6	2	0.4	4	0.4	1	0.1	2.7
9	Dam/Levee/Canal Failure	3.5	1.05	2.5	0.75	1.5	0.3	3	0.3	2.5	0.25	2.65
10	Avalanche	4	1.2	3	0.9	1	0.2	1	0.1	1	0.1	2.5
11	Hazardous Materials	2.5	0.75	2.5	0.75	1.5	0.3	4	0.4	3	0.3	2.5
12	Landslide	4	1.2	2	0.6	2	0.4	1	0.1	1	0.1	2.4
13	Wind/Tornadoes	4	1.2	1	0.3	1	0.2	4	0.4	1	0.1	2.2
14	Earthquake	1	0.3	3	0.9	2	0.4	4	0.4	1	0.1	2.1
15	Volcanic Eruptions	1	0.3	3	0.9	2	0.4	1	0.1	4	0.4	2.1
16	Radiological	1	0.3	2	0.6	2	0.4	4	0.4	4	0.4	2.1
17	Civil Disturbances	2	0.6	1	0.3	1	0.2	1	0.1	2	0.2	1.4



<b>Idaho State Hazard Mitigation Plan Update</b>			<b>7 November 2012</b> <b>2:00 pm – 3:30 pm</b> <b>BHS Conference Room</b> <b>Idaho Bureau of Homeland Security</b> <b>4040 Guard St. Building 600</b> <b>Boise, ID 83705</b>
<b>Attendees:</b>			
Krista Anderson, Mary Whale, Charles Butrick, Tim Frazier, Jeff Rylee, Marilyn Simunich, Jim Eavenson, Rob Littrell, Randy Valley, Matt Elam, Mary Marsh, Susan Cleverley, Mark Stephensen, Robert Feeley, David Jackson, Matt Elam			
<b>Agenda</b>			
Welcome and Introductions		Susan Cleverley	
Review of Group Tasks and SHMP progress		Susan Cleverley	
EOPT-SHMP Manmade edits		Group Discussion	
Action Items review		Mike Garner	
Public Outreach		Susan Cleverley	
<b>Additional Information</b>			
Idaho State Hazard Mitigation Plan - <a href="http://www.bhs.idaho.gov/Pages/Plans/Mitigation/SHMP.aspx">http://www.bhs.idaho.gov/Pages/Plans/Mitigation/SHMP.aspx</a>			



## SHMP Data Technical Advisory Group Teleconference

9/13/12 2:00 p.m.

### Participants:

<b>Bill Phillips</b>	Research Geologist	Idaho Geological Survey	<a href="mailto:phillips@uidaho.edu">phillips@uidaho.edu</a>
<b>David Jackson</b>	Critical Infrastructure Protection Program Manager	Idaho Bureau of Homeland Security	<a href="mailto:djackson@bhs.idaho.gov">djackson@bhs.idaho.gov</a>
<b>Mark Stephensen</b>	SHMO, Mitigation Section Chief	Idaho Bureau of Homeland Security	<a href="mailto:mstephensen@bhs.idaho.gov">mstephensen@bhs.idaho.gov</a>
<b>Mike Garner</b>	Contractor	Michael Baker Corp.	<a href="mailto:MGarner@mbakercorp.com">MGarner@mbakercorp.com</a>
<b>Chris Keith</b>		Bureau of Reclamation	<a href="mailto:ckeith@usbr.gov">ckeith@usbr.gov</a>
<b>Charles Butrick</b>	Coordinator	Business Consulting Services	<a href="mailto:charles@bcsidaho.com">charles@bcsidaho.com</a>
<b>Susan Cleverley</b>	Senior Mitigation Planner	Idaho Bureau of Homeland Security	<a href="mailto:scleverley@bhs.idaho.gov">scleverley@bhs.idaho.gov</a>

Susan Cleverley pointed out that the Loss Estimation Summary table on pages 70-71 of the State Hazard Mitigation Plan (SHMP) should be used for other hazards in the plan and not just flooding. How to handle sensitive information such as data on dams or canals was raised. David Jackson commented on UFOU and classified data available during federal disasters and recommended HSIP Freedom Data that may be used for risk assessments. He will follow up with Ryan McDaniel to verify if IDWR is using the HSIP Freedom Data. Mark Stephensen suggested having a detachable annex to the SHMP for data that may not be open source. Bill Phillips relayed that the data on the IGS website is available to all.

Mike Garner will provide the ftp site for uploading data. Susan gave a hard disk to Ryan McDaniel to upload data who will pass it on to Becky Rose. David Jackson raised the need for standard scenarios. Bill Phillips brought up the issue of Meta data validity and the necessity to document in the SHMP the sources of data. Mike Garner clarified that Meta data will not be generated but existing data gathered for the HAZUS runs. He will provide a spreadsheet documenting data sources.

Chris Keith confirmed that data on dams was available but Bureau of Reclamation’s data point of contact recently retired, and he will follow up with his replacement. Susan will follow up with Becky Rose and the Forest Service and Bureau of Land Management contacts for fire data sets. Charles Butrick suggested using a standardized format or template to facilitate data accessibility. Mark agreed this



## Appendix G

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should be a new SHMP action item. Mike suggested that the state share data with local planning groups to raise the level of data consistency.



## Meeting Minutes

<b>Subject</b>	<b>SHMP Public Outreach and Website</b>	<b>Date</b>	<b>14 JAN 12</b>
<b>Facilitator</b>	Susan Cleverley	<b>Time</b>	13:30-14:30
<b>Location</b>	EOC Conference Room	<b>Scribe</b>	Krista
<b>Attendees</b>	Krista Anderson, Charles Buttrick, Susan Cleverley, Robert Feeley, Heidi Novich, Mark Stephensen		

Key Points Discussed		
No.	Topic	Highlights
1.	BHS general website	Different webpages of "How to", private-public, and Mitigation
2.	Mitigation – What do we want?	Charles is requesting additional direction and clarification on the Mitigation SHMP website and public outreach – per Mark, the audience will be specific to Emergency Managers under the Mitigation Section of the BHS website with the general public materials under the How You Can Prepare Section.
3.	Direct Links to outside sources	Charles and Heidi will work together to share materials and compile onto the BHS website
4.	SHMP timeline	Updates for draft (human-caused) by end of January. By February, submit the survey via survey monkey – Robert will share account information with Charles
5.	To do a Media Press Release, or not to	Press release will be utilized when draft plan is complete, and will include additional information, including events, and how to respond
6.	Obtaining public feedback – survey/ Social Media	Face Book will be utilized to encourage participation of survey
7.	Discovery Center	Mitigation presentation to take place in June 2013. Charles suggested using "take home"cards to hand out with resources of where to go for link of survey and additional resources (outside web links)

Action Plan			
No.	Action Item(s)	Owner	Target Date
1.	Recurring meetings every month to discuss updates and benchmarks	Attendees	Monthly
2.	Robert to submit Survey Monkey account information to Charles	Robert	N/A set
3.	Charles and Heidi to collaborate and share resources for BHS Website (and pages)	Heidi/ Charles	N/A set
4.	Post survey on Face Book	Heidi/ Robert	N/A set
5.	Identify what target audience Mitigation is seeking	Mark	N/A set



# Appendix G

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Action Plan			
No.	Action Item(s)	Owner	Target Date
6.	<a href="#">Survey to be added to BHS Homepage</a>	Robert	N/A set



STATE OF IDAHO
Military Division
BUREAU OF HOMELAND SECURITY

4040 Guard Street, Bldg. 600
Boise, ID 83705-5004
Ph: (208) 422-3040
Fax: (208) 422-3044

MEMORANDUM

TO: Mark L. Stephensen, Susan Cleverley, David Jackson, Ryan McDaniel, Bill Hatch, Bryan Smith, Craig Glazier, Dr. Marilyn M. Simunich, Jim McNall, Bill Phillips, Lt. James Eavenson, Professor Tim Frazier

DATE: November, 2011

SUBJECT: Annual State Hazard Mitigation Plan Evaluation - Meeting Minutes

Introductions/ Representation

- BHS - Mark Stephensen, Susan Cleverley, Dave Jackson, Krista Anderson
ICRMP - Jim McNall
IDTD - Bryan Smith
Idaho Dept. of Agriculture - Dr. Marilyn Simunich
U of I - Tim Frasier - Professor
Idaho Geological Survey - Bill Phillips
ISP - Jim Eavenson
Division of Building Safety - Bill Hatch
IDWR - Ryan McDaniel
Craig Glazier - Federal Land Bureau

2010 Plan Review/ 2013 Tentative Plan - Mark Stephensen

- Dire need to keep agencies collaborated (Before disasters hit)
Existing: Flood, Fire, Earthquake
New: Man-made (Intentional, Non-intentional)
THIRA (Threat Hazard Assessment)
Key of this plan is to protect Life, Property, and Structures
Necessity to have Projects listed in the Plan
FEMA does not recognize as a hazard if it is not listed in the Plan
Examples up north, 5 Flood Projects, 30 total, "only 1 road had been damaged" (Advertent or not aware)
Less expensive to repair than to replace after a disaster
Problems with funding/ Existing (Federal Law Stafford Act, Congress' role)
Collaboration with all County Plans
Roll-up into State Plan
Identify Hazards within each County
Define Risk Assessment
Technical Level and greater Scientific Aspect
Comparison to what other states are doing in Mitigation



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- Examples of collaboration: Ponderosa State Park, U of I, and Private Citizen for Fuel Reduction, Updates to Park and Education to Children
- Adams/ Washington counties MHMP
  - Collaboration with multiple parties – joined
- State Plan Revision – every 3 years (making attempts to change to 5 years, FEMA not currently interested in implementing changes)
- County Plan Revisions – every 5 years
- Assess all county plans for Library of Projects
- Michael Baker – Contracted Technical Writer

➤ **Challenges**

- Public – “If you plan for a disaster, it will happen”
- Difficulty with Tribes (5 state recognized)
- Who is responsible?
  - Flooding is 5-8x’s more likely, yet people purchase fire insurance
- Funding
  - Back to what FEMA recognizes and is it listed in the Plan)
  - Not just funding through FEMA
  - Often an approved project, but funds run out
    - Blaine Co. Courthouse
    - ICRMP Project (Try again?)

➤ **What is the Process?**

- BHS will take ideas and create specifics for plan
- Submit to Contracted technical writer (Michael Baker Co. – last plan)
- Submit to FEMA for approval (45-day statutory requirement)
- Approval (Tentative)
- Signing Official (Governor)
- Director
  - Written assurance we will follow-through

➤ **Concerns**

- Tim – Shoshone Hazard Mitigation Project with grad students revealed the county did not have expertise to review contractor’s plan input
- Dave – Paradigm shift for public to embrace the idea of Risk Reduction
- Ryan – Policy Level (taking it up a notch)
  - Establish consistency at the Political Level
- Jim – Communication



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- Getting the “right” people at the “right” table
    - Counties and Cities are not sensitive to the effects and direct needs of each other (most destruction occurs in the city)
    - Diversity
  - Marilyn – Overlaps and Gaps
  - Bill H. – State Code
    - Portion of the I Code (Unique) is not adopted by SOL.
  - Mark – Some counties have one person wearing multiple hats
  - Bill P. – “I am not trespassing, I am a geologist”
- **Review if Current Projects – Mark Stephensen**
  - See attached
- **Pre-disaster Mitigation (PDM) – How is it funded? (Dave)**
  - FEMA divides the “kitty” amongst the states who apply
- **Threat Hazard Idaho Risk Assessment (THIRA) – Dave**
  - Policy is dramatically changing
  - Grant Guidance
    - States were ill-prepared
    - FEMA has seen 3:1 reasonable return
- **Man-Made Hazards - Dave**
  - Examples of Man-made disasters
    - Bridge Collapse
    - Terrorism
    - Biological Impacts
    - Any threat to sustain life
  - Other Issues – all Present a Risk
    - Security Fences
    - Hacking (Technology)
    - Foreign National
    - Anti- Tech Hackers
    - High school kids
- **What is the difference between Mitigation and Avoidance? – Jim McNall**
  - Dave – Look at these vulnerabilities in short-term
    - Significant relationship with land
    - Use of Mgmt. and zoning – Strategic thought



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- Tim – Risk and Exposure Future Communities
  - Hard reality – something like Water Treatment Facility needs to be placed where the people are...
  - Use smart planning (think ahead)
- Jim – Hometown meetings
  - Usually the “unwanted” people on the other side of the table
  - Strategy to reaching positive people is to go where there are (in another meeting on other topics)
- **Increasing Dis-Interest of taking BHS Funds**
  - Lack of reimbursement rate (12.7% vs. 47% from Board of Education)
  - Susan explained indirect costs approved at Federal Level
    - will work with Bill in strategies
  - Technical Advisory Groups
    - Seismic
    - AmeriCorps
      - Attempt to complete 5 plans instead of 1 plan
    - University wants to own data
- **Strategies**
  - Risks – Rankings
    - Quantitative vs. Qualitative (Ryan)
      - “Day One Project” what if...
    - “Could we have built or planned this differently?” (Jim)
    - Focus Groups
    - Bridges are a Problem! (Dave)
    -
- **Agency Round Robin - What keeps you up at Night?**
  - Ryan/ IDWR – Creating order in GIS System
    - 386’s in Old Dept.
    - GIS system will become dominant
  - Bill P./ Idaho Geological Survey – If the internet dies, we wouldn’t know of a disaster
    - Much more likely we would have a border EQ
  - Bill H./ Division of Building Safety – What is going to destroy our building
    - Response time
      - ATC – 20 Quick Assessment response protocol
    - We are small in numbers
    - Electronic permits – when system goes down, we will be severely back-logged
  - Dave/ BHS CI-KR – Inner-Connectivity
    - We don’t understand what we don’t know yet
    - System failure



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- Animal Issue
- Jim Eavenson/ ISP – Ability to respond as a Dept.
  - Only 160 total troopers
  - SARS/ Flu Epidemic
    - Troopers would be at home carrying for their families first
  - No SWAT, due to budget cuts
- Tim Frazier/ U of I - Hazard related work
  - Preparation for community
    - House payments
    - Inexperienced people wanting money, who are not qualified
  - Socio-Economic Impact (not currently a priority)
  - Response Time
    - Penn State has a nuclear reactor on campus and 40,000 students most-likely do not have a vehicle to evacuate.
    - U of I would most likely be the same scenario
    -
- Marilyn Simunich/ Dept. of Agriculture – Lack of plan for response to epidemic effecting our agriculture
  - Foot/Mouth Disease
  - HSGP
  - Animal Mortality
    - No plan to rid mass carcasses
    - Environmental issues
      - Enough Carbon?
      - Rocky Soil, cannot bury
  - Smuggling livestock over our state borders
    - No secure or reliable tracking system in place
    - TSA - infected materials (buying and selling)
- Bryan/ IDTD - Cross training
  - Up to date list of experts
  - Each district needs liaison for each expert/ specialty area
  - Logistics
  - Advisors for ICS
    - Reimbursement – coding
  - Training
- Craig Glazier/ FLB for ID Dept. Lands – Large Fires WL Interface within 24-36 hours
  - Most fire are volunteers
  - Unknown what is out there (Homes, Structures, Etc.)
  - Teams to manage fires



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- Needed skilled work-force and Resources
- Jim McNall/ ICRMP – No power in Boise
  - We are not equipped to handle a big EQ
  - Maps
  - Interested in the amount of Insurance
  - Disaster that goes beyond one community
  - Personal Coordination
  - Response in the first 30 minutes
  - Firestorm
- Susan Cleverley/ BHS – Influx of surrounding state’s evacuees - don’t have the capacity to respond.
  - Broadband communications not fully utilized or functional
  - Our location on a military base, and being next to the airport – lockdown will decrease response time
  - IT communications during COOP situation
  - Voice-over IP phones need exercised
  - Petroleum tanks near a hospital
- Mark Stephensen/ BHS – Outside states significantly effected
  - Refugees from other states coming into Idaho (exhaust resources)
  - Public perception that the government will respond
  - Civil Peace
- Krista Anderson/ BHS – Generalized Ideas
  - Training up “future generations” ie: cross-training
  - Chickens in the backyard – Piggybacking on Marilyn’s concerns
  - Utilizing University Students as a voice and gathering ideas, building volunteer network
    - Training and Education
  - Cost-efficient communication ideas
    - Bulletin to share expert/specific updates without being time reducing
    - Work-group meetings to brainstorm needs for increasing mitigation strategies
- **Break-out Sessions**
  - Man-Made (See attachment)
    - Data in Hazmat Table not necessarily accurate
    - Not many critical Resources
    - Differentiate between Hospital and Facility vs. Bank/Grocery store facility
    - Creating Synergy between BHS & other agencies
      - Projects



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- Planning
    - Hazmat
    - Facilities?
  - Sector Specific
  - Mitigation Issues
    - Food and Ag Processors
  - Lack of Socioeconomic Impact
  - Level One Hazus Assessment is weak
- Flood (See attached Objectives/ Strategies)
    - Maps are not specific enough to be relevant
  - Fire
    - Re-evaluate Policy to Fire-specific Response
    - What Worked:
      - Defensible space project
      - Local Plans rolled into State Plan
      - Relationship between Fire-working Group and BHS
        - Coordination between counties and Local AHMP's
    - Needs:
      - Update Stats
      - Replace 1910
        - Fire w/cohesive strategy for WL Fire Mgmt.
      - Update fire history from 2000
      - Include Fire Wise write-up and Certified Community
      - Update statewide analysis
      - Address volunteer establishment
        - Rangeland WF Assoc.
      - Encourage adoption of Building Codes
      - Increase Public Education and Awareness
      - Spend more time studying plan – How it is used before we update
  - Seismic (See attached)
    - Works:
      - 2010-09 Produce LQ Mapping
      - 2010-10 Teaching Section
    - Projects to Add:
      - Investigate the Sawtooth Fault w/geologic studies
        - Goal G-6, Objective 2
          - Challenges: difficulty trenching in Nat'l Rec Area (Blaine and Custer counties)
          - Ideas: having counties work-through



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- Hazus (2010-21)
  - Levees and canals – LQ
- LIDAR
  - MH Approach
- ID Seismic Risk Portfolio
- Inner-agency Data Share
- Increase participation w/Yellowstone Volcano Observatory
- Corrections
  - 2010-09 Add “NEHRP Class” after Produce...
  - 2008-08 Remove “Congressional Earmark, and Add “Funding FEMA/ BHS/ Other agencies”
- Explanations of Process/ Funding/ Awards/ PDM/ HMGP
- Executive Committee (Oversite of Revision) Volunteers
  - Tim
  - Ryan
- Next Plan Evaluation Date – November 2012
  - Looking to hire contractor for next go-around
- PDM Grant Application in Dec 2011

Krista Anderson  
Mitigation Program Assistant  
Idaho Bureau of Homeland Security



**Idaho SHMP Executive Committee Meeting Minutes**

<b>Subject</b>	<b>State of Idaho Hazard Mitigation Plan</b>	<b>Date</b>	<b>27 NOV 2012</b>
<b>Facilitator</b>	Idaho Bureau of Homeland Security (BHS) Susan Cleverley, Senior Mitigation Planner	<b>Time</b>	13:00 – 16:30
<b>Location</b>	IDAHO BUREAU OF HOMELAND SECURITY	<b>Scribe</b>	Krista Anderson
<b>Attendees</b>	Krista Anderson, Charles Butrick, Susan Cleverley, Michael Garner, Craig Glazier, Bill Hatch, David Jackson, Mark Larson, Troy Lindquist, Pat Lucas, Mary Marsh, Ryan McDaniel, Mary McGown, Angie Parra, Bill Phillips (via teleconference) Jeff Rylee, Bill Reese, Marilyn Simunich, Mark Stephensen, Chris Wendrowski		

Key Points Discussed		
No.	Topic	Highlights
1.	Introductions	
2.	Brief review of last year’s SHMP Nov meeting minutes	
3.	44 CFR 201.4	
4.	Goals & Actions, Local Strategies, Risk Factor, Analysis & Disaster Events	<p>Michael – Goal, Objectives, Actions</p> <p>-Review actions from 2010</p> <p>Plans actions (24 and some added for 2013)</p> <p>9 actions to discuss in this meeting (see spreadsheet)</p> <p>#1 – Establish communication and procedures with State Dept. of Ag. Related to purchasing land buildings and natural hazards protection - not accomplished yet, and keep on list (deferred) (req Dept. of Ag. to write its own related to this)</p> <p>#2 – recruit participation for hazard working groups from ISDO, Risk Mgmt., and IRD – Ongoing and completed</p> <p>#3 – create working group to oversee data sharing, database construction and maintenance (HAZUS input datasets) – In process/ ongoing (working with IDWR) Need for database constructions? Refer to code...67.5745 &amp;</p> <p>#4 – In order to improve analysis of flood, landslide, seismic and wildfire hazards, obtain new or compile existing LIDAR data for populated areas of Idaho. – Ongoing (98 established, per Ryan) they are being found all the time. LIDAR data is so useful</p> <p>#5 – develop and maintain statewide inventory of State and county facilities and infrastructure with an isolated server – Ongoing ICRMP &amp; BHS</p> <p>#6 – Structural and non-structural retrofits for county EOCs for multiple hazards (floodplain, high and extreme seismic areas, WUI) – Deferred (is this tied to legislation and building code?) Should there be standards on the books? RVA could be used to establish a minimal benchmark, and would it be compared to current building code? Some EOCs are housed in buildings that were built in 1920s. (i.e. Blaine County Courthouse) Would PS be able to have the authority to request RVA in such buildings?</p> <p>Yes, no and maybe (technically PS is charged to do inspections, but only by</p>



Key Points Discussed		
No.	Topic	Highlights
		<p>invitations – ultimately, PS has no authority... to retrofit – answer is really NO. PS is heading to re-negotiations with industrial commission. It will take legislation to give authority annually, the same as treatment with school buildings (if hazards are identified)</p> <p>Change task to “working with the industrial commission, develop legislation to annually inspect structural and non-structural retrofits for county EOCs for multiple hazards...create a process... we need to have identified targets clearly defined (Mark Larson)</p> <p>Propose an additional task to annually inspect EOCs (encouraging definition of urgency)</p> <p>Adding “defining creative process to identify critical infrastructures and facilities and perform a risk assessment on the critical infrastructures and facilities (Budget???)</p> <p>#7 – 9 Removed VIP action items</p> <p>Added Economic damage model – canned data “create a repository and clearing house for risk assessment data” engage is more risk modeling. i.e. CAMEO...there is multiple tools... potential for numerous hazards – ESF response enhancement... the keeper of the data would be Dept. of Admin (warehouse) all agencies would be involved... portability of information is critical (Pat Lucas) ITRMC are actual keepers... per statute 67.5745c (3) NEED TO CITE</p>
5.	Possible funding	NEHRP
6.	PowerPoint “SHMP”	Planning Process, Risk Assessment, Mitigation Strategy, Plan Maintenance, Draft Plan Update, Approval & Adoption
7.	EOPT Tool	The tool is helping with document sharing and editing TA working groups
8.	Risk Assessments	Historical event research, converting data and map data
9.	Local Plan Roll-up	44 total local plans, outlining wildfire, flood, seismic, a request to use IDTM for maps
10.	Project geodatabase/ HAZUS	Improved data from IDWR, input into HAZUS, GIS has submitted applications (s), Bill Phillips – Pocatello soils data has been delivered to BHS as well as up on IGS website, Boise metro area has also been completed, Right now individual sites are listed, but Bill is going to attempt to place sites in one location on the site
11.	Risk Factor Exercise	Scenarios to determine ranking and final results – wildfire, Flood, EQ (currently at the bottom of the list, but state wants to focus on it as one of the top three) Bill Phillips recommends the catalog as useful to compile data for risk assessment, incorporating discussion into SHMP
12.	Consequence Analysis Exercise	6.9M EQ @ Soda Springs, Boise NY Canal washout, 1910 fire
13.	Review of 2010 goals, objectives, and actions	
14.	Local Mitigation Strategy	
15.	Local Exercise	State recommendations to the local jurisdictions, FEMA initiated scenarios and hazards, ranked with prioritization (19)



Key Points Discussed		
No.	Topic	Highlights
		It was decided by committee to rank the action items by high, medium, low risk
15.	Public Outreach	Education, what makes sense? Public survey (Lewiston Preparedness Fair - 33 surveys returned) Outreach this round – Idaho Discovery Center – new displays mid-June and run entire season. They request participation from subject matter experts, need to provide them with education message and they will provide the content.
14.	Review of 2010 Public outreach	3 public meetings and only 4 responses, Mary Marsh recommended talking to Preparedness rep from BHS, Heidi Novich, and to Pat Lucas about presentations at the State House for newly elected officials
12.	Suggestions	<p>Chris – have more frequent meetings, and more public education</p> <p>Mary Marsh – invite private sector</p> <p>Mark Stephensen – talk to leadership and thank supervisors for being able to attend</p> <p>Mary McGown – attack public perception of risk and use social science data to achieve this by helping the counties</p> <p>Krista – Review stakeholders and expand committee to include additional experts (H &amp; W, refugees, professors, social, churches, FEMA, other states, Joe citizen...) communication enhancement</p> <p>Bill Reese – public perspective and perception – this is not an easy issue</p> <p>Ryan – public policy with fiscal policy – JFAC attendance – how much is at stake</p> <p>Craig – Potential changes for the future – this is a living document and there will be ongoing changes to enhance it</p> <p>Mark Larson – enhance the executive meeting experience. More people at the table</p> <p>Troy – add a more comprehensive group of people to the group</p> <p>David Jackson – important to keep in mind, the purpose for the executive committee - We tend to get down into the weeds a little too much. Convey to risk while changing the culture</p> <p>Bill Hatch – PS administrator’s full support. Where is the money to do such tasks and ideas? Providing information costs money. Going to the legislature is effective when we provide facts with data, and potential hazards and risks – ultimately death, within their jurisdiction. Increase meetings to at least bi-annually. Include politicians</p> <p>Jeff Reilly – I like the EOPT. I am making changes within the risk assessment portion of the SHMP. We do not mitigate public</p>



Key Points Discussed		
No.	Topic	Highlights
		<p>perspective. We need to convey, through environmental education, out to all levels. Start with schoolchildren, all the way out. In our training, the planning and zoning committees, who make the decisions to change the communities – ultimately, get to the politicians, which is not popular. We do not enforce the codes, we do have. New codes will not be helpful if they are not enforced. We all know that recent disasters could have been mitigated before they occurred. We need to identify how.</p> <p>Charles – Good feedback. Bringing awareness to the public is a big challenge.</p> <p>Marilyn – From AG point of view, we are first in potatoes and fish, but 3 in dairy, nationally. Work through land grant assistance in rural education. Hit the urban population differently. Critical infrastructure is a system, not just a building. (Susan) AG is under human-caused section.</p> <p>Susan – Handy to have the EOPT on line. We will keep the document on line and will post the draft as a whole document, so you can comment. We will check out the document, so there will be no more editing at the end of January. We will retain the plan in sections, during the year, and make comments, or add events. We would like it to be a living document. For now, we will meet with the executive committee same time next year, but I hope that you participate with Discovery Center.</p> <p>David requests to meet prior to the executive meeting, so we can re-align prior to submitting the plan to FEMA.</p> <p>September is disaster planning awareness month.</p> <p>Mike – we can leave the plan in the EOPT longer if need be. We can delay the final product a little longer.</p> <p>Susan – we will go ahead and let everyone comment through DEC. I will then let Michael know of such comments. Please have editing done by the end of DEC. By the end of FEB, final draft will hopefully be complete.</p> <p>Director is Brad Richy – he expresses appreciation for your time and input.</p>

Action Plan			
No.	Action Item(s)	Owner	Target Date
1.	Submit hazmat data to Michael Garner	Jeff Rylee	December
2.	Drought sidebars under fire TA working group	Marilyn Simunich	December
3.			
4.			