

APPENDIX G: MEETING MINUTES

Subject	Mitigation Annual Exec Committee Meeting	Date	11/12/2014
Facilitator	BHS	Time	9:00 am – 12:00 pm
Location	BHS Joint Conference Room	Scribe	NA
Attendees	Ellen Berggren, Brett Holt, Bob Carter, Th Falk, Dr. Kris Carter, Troy Lindquist, Rol Courtney Thompson, Thomas Wuerzer, B Rylee, Mary Marsh, Marilyn Simunich, Ch Henry, Aly Bean, Eric Lindquist, Autumn Stephensen, Susan Cleverley, Mary Mott	b Littrell, Bec Bill Phillips, Ke ris Wendrow	ky Rose, Ryan Mc Daniel, eri Smith-Sigman, Jeff øski, Tim Frazier, Kevin

	Key Points Discussed		
No.	Topic	Highlights	
1.	1. Welcome and Introductions –		
	Mark Stephensen, IBHS		

2.	State Hazard Mitigation Plan	SHMP Mitigation Action Items and Progress
	Implementation - Progress Reports	Reports:
	Susan Cleverley (IBHS)	Data Sharing – County and statewide projects from mitigation plans have been identified. Counties and tribes have been provided a county specific disc to use when writing mitigation plans.
		Develop and deliver 2 workshops – Multiple NFIP Workshops have been held. NORFMA 2013 workshop brought together floodplain managers for training and tour of Arrowrock Dam; 2014 focused on flood insurance reform. Insurance agents participated. Non-structural Flood workshops to city and county officials.
		2010-06 Expand statewide flood awareness week – Silver Jackets addressed flood risk through PSAs, Governor's proclamations, Boise WaterShed Center Boy Scout Merit Badge event, agency booklet, etc.
		2010-11 Develop and publish a Firewise guide specific to I daho - Completed. A brochure is available online "Make Your Home Sweet Home A Firewise One" http://www.idahofirewisr.org/new-idaho-firewise-brochure
		%□- I daho Flood Risk Portfolio – Recently updated and published. Digitized county multihazard risk plan, seismic and fire have been added.

Key Points Discussed		
No.	No. Topic Highlights	



Data sharing, Hazard Portal – Kevin Henry/Tim Frazier (U of I)

Guberif 5% Education Initiative – Ivy Dickinson is the contact person. Public education outreach has been done through billboards, road signs, radio and television announcements, and published a Guberif coloring book which is available at www.idahofirewise.org.

West Mountain Corridor Mitigation Education Project – Valley County program is very successful. Funding has been secured.

Clear Creek – Harpster Face Project - Funding has been secured.

2013-14 Landslide Hwy 52 – Completed. ITD reported a canal was relined and slope stabilized.

Dr. Frazier is working with ten graduate students on projects funded by many different agencies. Today they will deliver to IBHS a statewide socioeconomic vulnerability assessment that covers flood, seismic and fire. The Idaho Hazard Risk Assessment Portal has a beginner and advanced mode.

Citizons can viow flood wildfire and carthouake



3.	Technical Working Groups Presentations – direction &	The Silver Jackets is the flood TWG and focuses on flood risk nationwide. They are very successful at securing
	accomplishments	project funding. There needs to be a team effort. Idaho
	Flood TWG- Ellen Berggren (USACE)	is one of the highest performing states. Recently held an annual administrators meeting to update leadership on team accomplishments: No Adverse Impact
	Dams/Levees/Canals TWG – John Falk	workshops, SHMP revision, Risk MAP activities, National Flood Safety Awareness Week, levee briefings, Boise River inundation mapping posted on NWS AHPS, South Fork Teton Floodplain mapping study, working on
	Seismic TWG - Bill Phillips (ID Geo Survey)	floodplain manager training DVD, and submitted proposal for post wildfire guide.
	Fire TWG - Tim Frazier (U of I)/ Thomas Wuerzer (BSU)	New TWG for dam, levee, canal coordination. Group focusing on gathering inventories for risk assessment.
		Provided Summary of 2014 Activities and events including Challis swarms (see attachment). 75,000 participated in the "Great Idaho Shakeout"

	Key Points Discussed		
No.	Topic	Highlights	
4.	How do we want to share successes? Elizabeth Duncan (IBHS)	Try to get on the news, use social media and identify what makes a good story. • Health and safety/new and important • WIIFM "What's in it for me?" – my street, my neighborhood, my money • WPATA "What people are talking about"	
5.	Updates – planning partners, corrections to SHMP, recent events - Group	 Foot and Mouth – threat of foreign animal disease in Southern Idaho CWPP & Wildfire integration Assessment of school buildings. Educate what needs to be done to address the hazard. Rangeland problems Social sciences – administration policy issues Use participant talent to train at the county/local level. Fire adaptive IGS Pandemic section update Educate public what Public Health Service does Work together on projects to build on little pieces 	
6.	2014 Threat and Hazard Identification and Risk Assessment (THIRA) – Autumn Roberts (IBHS)	SHMP is used in THIRA development. THIRA directs strategic planning in IBHS. Prioritization directs grant projects and funding.	
7.	Whitepaper on Authorities & gaps in SHMP – Scott Fennema (U of I) Participant comment	Made recommendations after reviewing the SHMP: Flooding – needs explanation of cooperative efforts Wildfire – Needs explanation of cooperative efforts and identification of hazard mitigation projects Earthquake – needs explanation of cooperative efforts Drought – needs to apply general format Apply standard format to all sections Hazard Planning Process Team should include a description of the planning process, including who was involved with a description of their role Mitigation Approach Review should include a review that includes a description of the method and an analysis of the effectiveness of the mitigation practices in use. Should have an appendix that identifies specific past event locations	



8.	Plan Review Recommendations – Brett Holt (FEMA)	State Hazard Mitigation Plan will need to be updated every five years instead of every three. Idaho is the most active state in Region X. Agencies are doing an excellent job working together. Recommends adding more detail to the IBHS Mitigation Action Table. (see attached handout)
9.	Evaluate Results & moving forward	Susan Cleverley will send a list of proposed projects to be evaluated and ranked with prioritization.

State of ID Hazard Mitigation Plan Executive Committee Meeting

19 November 2015 9:00 am – 12:00 pm Joint Conference Room Idaho Bureau of Homeland Security 4040 Guard St. Building 600 Boise, ID 83705

Attendees:

Kris Carter, Susan Cleverley, Mel Coulter, TimFrazier, Katie Gibble, Joann Gilpin, Craig Glazier, Carl Hayes, Todd Herrera, Brandon Hobbs, Chris Keith, Lee Liberty, Ryan McDaniel, Mary Mott, Alexander Petersen, Bill Phillips (via phone), Jen Pierce, Brad Richy, TomRitthaler, Knute Sandahl, Mark Stephensen, Autumn White

Key Points Discussed

Topic	Highlights
Welcome and Introductions - Brad Richy / Mark Stephensen, IBHS	
Technical Working Groups Presentations Flood - Brandon Hobbs, USACE	Silver Jackets is a coalition of federal and state agencies involved in post fire flood coordination. They share information, and provide "one stop" for local and state governments to obtain information and identify solutions to reduce flood hazards. Post wildfire flood risk assessments were done on several major 2015 ID wildfire burn areas. Three new interagency pilot projects were awarded FY16.



•	Flood Risk Workshop (2010-04)
---	-------------------------------

- Glenwood Gage Sign Improvements
- Boise River Balancer

Ongoing Actions:

- 2014-03 Rapid Deployment Gage Plan (Clearwater and Idaho Counties have requested gages from the cache)
- 2010-19 Lower Boise Feasibility Study (work is progressing and should have a TSP in the first quarter 2016)
- 2010-18 Inventory of flood hazards in ID (developed Flood Risk Map)
- 2014-01 Weather Ready Nation Ambassadors (developing a Post-Wildfire resource for communities
- So you're a Flood Manager (DVD is being developed)
- 2010-06 Expand Flood Awareness Week (Looks for ways to expand Silver Jacket outreach
- 2010-04 Deliver workshops every two years

• The annual fire season is a growing problem. It is longer due to climate change. Idaho alone has spent 67 million dollars this year. The prior high was 30 million.

- BLM funded an ID focused one stop shop fire website
- ID Rangeland Fire Association has five functioning associations and two more coming online.
- Mark explained the post disaster 2015 HMGP FMAG Pilot Grant. IBHS is currently gathering applications from eligible Counties and Tribes that have been federally declared FMAGs.
- Health and Welfare is working on being integrated into wildfire response.
- IDL and BLM are working with counties to keep their plans up to date.
- Valley and Idaho Counties have a signed MOU.
- Katie Gibble, BSU is working on a wildfire debris flow model. Her goal is for the results to be directly useable to those making decisions regarding fire in the Boise foothills.
- Elmore County Sage Brush Steppe Paradigm Project is a cohesive landscape project focused on the I84 corridor. It will be a 6-10 year project that has not been done before. USFS is looking to keep fires small and down on the valley floor.
- Earthquake hazard mapping is ongoing. Information is gathered from 40 years of records on the location of

Wildfire - Craig Glazier, FS/IDL

Seismic - Lee Liberty, BSU



Dam/Levee/Canal - Chris Keith, USBR	 historical earthquakes, smaller quakes that have occurred, and earthquake evidence from geologic data. Earthquakes are 1 of the top 3 hazards in Idaho. a medium event could be catastrophic. There is a need for additional monitoring equipment in the state. Kootenai County soil liquefaction and mapping was completed using Streamer. It was USGS funded for development and testing. It can simulate an earthquake. A liquefaction risk assessment has not been done in the Boise area. Mark attended the NESC joint meeting in November. He proposes coordination with the Idaho Fire Marshal and Div. of Building Safety for building sprinkler system access key standardization and seismic sensors for fire department garage doors. Mark was informed funding was awarded for Rapid Visual Screening of all EOP Centers. Funding date is unknown. The Challis swarm is ongoing. Small daily earthquakes are being monitored. Bill reported the two largest quakes in Idaho (2015) did not cause any damage. They were centered in Challis and Lake Pend Oreille. LIDAR is very important (now at BSU). There is a need for a
Human-Caused presentations: Cyber Security - Derek Meyer, ICS-CERT	 Dams, canals and levees are critical infrastructure that needs s to be protected. Canals and levees are not regulated by a single governing body. A proposal for two PSAs has been sent through the Silver Jackets. The announcements will focus on safety of critical infrastructure not drowning. Future projects include a new development/encroachment policy, assessments, easement mapping, and a canal safety program.
Pandemic - Kris Carter, Dept. of H&W	 ICS-CERT interacts with the public and government on a regular basis. They perform approximately 80 risk assessments per year at no cost. Their goal is to respond prior to a hacking incidence. Important to maintain manual systems as backup



	 Cyber criminals are getting smarter and more sophisticated. They use unsophisticated methods to hack into control systems. Cybersecurity training is offered at a facility in Idaho Falls. Scheduled training available on ICS-CERT calendar. IBHS will continue to reach out for help to update SHMP. Kris gave an overview on seasonal influenza, influenza as sociated mortality, antiviral resistance training, plague, West Nile and vaccine preventable viruses (measles, mumps, pertussis).
Drought - Mark Stephensen, IBHS	Mark will send information to group.
State Hazard Mitigation Plan Implementation Progress Report - Susan Cleverley, IBHS	Action Items are ongoing and documented in the State Hazard Mitigation Plan (SHMP). Submit to IBHS New action possibilities - Mitigation Action Implementation Worksheet attached Mitigation Action Progress Report Form - attached New Actions: Glenwood gage sign improvements Boise River Balancer Building sprinkler system access key standardization and seismic sensors for fire department garage doors Include Department of Health & Welfare in public safety (Dams/Levees/Canals)
SHMP Updates – TWG planning partners, corrections to SHMP, recent events	Susan will send information to the group. Submit to IBHS • 2015 recent events

Idaho State Hazard Mitigation Plan - http://www.bhs.idaho.gov/Pages/Plans/Mitigation/SHMP.aspx

State of ID Hazard Mitigation Plan Executive Committee Meeting

16 November 2016 9:00 am – 12:00 pm – Joint Conference Room Idaho Office of Emergency Management 4040 Guard St. Building 600 Boise, ID 83705

Attendees:

Sus an Cleverley, Tyre Holfeltz, Brett Holt, Troy Lindquist, Rob Littrell, Mary Marsh, Sarah McClendon, Ryan McDaniel, Mary Mott, Heidi Novich, Maureen O'Shea, Lorrie Pahl, Brad Richy, Ben Roeber, Kate Skaggs, Kelly Stone, Mary Whale

Via phone: Herb Bessey, Kelly Cox, Jerry Miller, Mel Coulter, Herb Bessey, Steve Wyrembelski

Key Points Discussed

Topic Topic Highlights Welcome and Introductions Brad Richy / Ben Roeber **Technical Working Groups Presentations** State of Idaho 2 Federal Declarations, FEMA DR-4246 Northern Idaho Windstormand DR-4252 Severe Winter Storms 1 State Declaration, FMAGHenry's Creek Fire Silver Jackets Maureen covered Silver Jacket highlights Flood - Maureen O'Shea, IDWR Main ongoing challenge is staff changes. Once trained floodplain managers seek employment elsewhere Digitized maps are very helpful. They will be posted online All counties in Idaho have a Community Wildfire Protection Plan (CWPP). Many are not used. It is now a requirement to update their CWPP Wildfire-Integration of CWPP with All-Hazards Mitigation Plans - Tyre Holfeltz, IDL



• IDL and IOEM signed an agreement that allows a CWPP to replace the wildfire chapter in Idaho State All-Hazard Mitigation Plan

- 6 County plans have been reviewed, 3 passed 3 failed and were sent back for revisions. Offers were made to all counties to integrate CWPP into their AHMP
- Brett Holt CWPP is a model. He is glad to see how well it is working. Highlights cohesive collaboration between agencies. He is soliciting other states to do the same. Brett may call on IOEM and IDL to explain the process
- Ryan McDaniels, Risk Map LiDAR assessment involves many partners. Over 4500 acres were assessed in Idaho
- Plans are located on the IOEM website and some county websites. IDL is considering adding them to their site

Seismic - Sarah McClendon, McClendon Engineering

Rapid Visual Screening assessment of 38 EOCs and critical facilities was completed in 13 eastern Idaho counties

- The project was supported by a 2015 FEMA National Earthquake Hazard Reduction (NEHRP) award
- The final score for each location was determined using ROVER software
- FEMA risk percentages ranged from 2 to 0.03
- Brett inquired if the report will be provided to the counties. The information could be used to update their county All Hazard Mitigation Plan
- If information is provided to FEMA, it could be included in HAZUS
- FEMA has training programs available to address retrofits
- USACE completes a fairly detailed periodic inspection of Idaho levees
- There are over 100 levee systems in Idaho
- They try to inspect and as sess 3/4 each year. Of 67 inspected this year, 15 were rated unacceptable
- Many have fallen in disrepair and no longer qualify under the Corps program
- An inspection report is provided to the project sponsor
- A findings letter has been sent to county commissioners and emergency managers
- Land developers and realtors don't want to know of risks as sociated with levees
- Upcoming tasks review all levees that have slipped through the cracks
- Sus an Cleverley inquired if the Corps has a dam/levee/canal infrastructure video message for the public.

Levee - Herb Bessey, USACE



	 National Levee Database (NLD) map of levees and summary of project rating: http://nld.usace.army.mil/ Power Point Presentation Safety Mission is maintaining public safety Gave an overview of Walla Walla District dams Each dam in the Walla Walla District has an Emergency Action Plan (EAP) including inundation maps
	 2018 tentatively planned - Dworshak DamTabletop Exercise Kelly Cox noted daminundation maps are shared with emergency management. They can be shared with the public but cannot be given a copy
Dam Safety - Steve Wyrembelski, USACE	
Review Strategy - State Hazard Mitigation Plan - Susan Cleverley, IOEM	 Action Implementation handout – please review, update and add new action(s). An IOEM form is available IOEM applied for a FEMA grant to update SHMP Tyre will contact Craig Foss regarding land acquisition and sales Sus an reviewed Actions and informed the group of current progress.
Enhanced Plan Requirements – Brett Holt, FEMA	Power Point Presentation included: • We need to document what we are doing not what we hope to do • Requirements • Process • Annual mitigation program consultation • 12 states in the country and 2 in our Region have an approved Enhanced Plan
Livestock Tracking - Heidi Novich, IOEM	 Cows are in every Idaho County There are over two million in the State Tracking is bringing Idaho into modern times



	 Brand inspectors can issue citations the, Department of Ag cannot. They share information with one another IOEM is considering adding Agri Terrorismchapter to the SHMP
Roundtable – 2016 Progress and 2017 Outlook- Group Discussion	 Tyre - funding was received from Western Fire Managers Produce Dam/Levee/Canal infrastructure video.
Adjourn	
Idaho State Hazard Mitigation Plan - http://www.bhs.idaho.gov/Pages/Plans/Mitigation/SHMP.aspx	

		Project Kick-Off with Sta	te Risk Assessment Team	
Location of Meeting:		Conference Call		
Date	of Meeting:	October 16, 2017		
	dees: san Cleverley Rob Flaner an McDaniel Carol Baumanr	Heather Apgar Alison Miskiman		
_	Agenda Summary: This meeting was held to kick-off the risk assessment update for the Idaho State Hazard Mitigation Plan (SHMP).			
Item No.	Description	١	Action item(s):	
1	Introductions – Tetra Tech team was introduced to the State			
2	 Schedule – The revised schedule was discussed and finalized as follows: Hazard Profiles – drafts due to State by November 15, 			
	2017			



	Vulnerability Assessment – drafts due to State by mid-	
	December and the distribution of the distribut	
	• Final deliverables due December 29, 2017 if not before	
	Rob Flaner will provide a status update on the risk	
	assessment to the State Hazard Mitigation Team on	
	November 15, 2017; draft hazard profiles	
3	Hazards of Concern -	State of Idaho
		Provide EMAP scenarios – Completed
	All hazards from the 2013 SHMP remain with the	10/16/17
	following re-grouping changes:	_0, _0,
	a. Flood now also includes Dam/Levee/Canal	Tetra Tech
	Failure	
	b. Severe Storm now includes lightning, wind and	Tetra Tech investigated the cost to
	tornado	purchase SHELDUS data for the State of
	Period of Events – Tetra Tech will maintain the historic	Idaho. It is >\$11,000. Tetra Tech will
	events from the 2013 SHMP and will update the	instead use the National Climatic Data
	previous events from 2012 through October 1, 2017	Center (NCDC) data.
	Tetra Tech to report information by County, not by	
	region as previously conducted in the 2013 SHMP	
	If feasible, Tetra Tech to purchase SHELDUS data to	
	support the risk assessment.	
	EMAP scenarios – we need hazard analysis to be	
	consistent with the EMAP scenarios	
-		
4	State Facilities and Critical Facilities	State of Idaho
4	State Facilities and Critical Facilities	Provide Tetra Tech with the state building
4	• Susan will obtain the state building database from a	Provide Tetra Tech with the state building and critical facility inventories
4	State Facilities and Critical Facilities Susan will obtain the state building database from a previously completed project	 Provide Tetra Tech with the state building and critical facility inventories Susan will discuss with Becky the best way
4	 State Facilities and Critical Facilities Susan will obtain the state building database from a previously completed project Critical facilities 	 Provide Tetra Tech with the state building and critical facility inventories Susan will discuss with Becky the best way to exchange the data (State set up FTP site,
4	 State Facilities and Critical Facilities Susan will obtain the state building database from a previously completed project Critical facilities HSIP Gold was used in the past 	 Provide Tetra Tech with the state building and critical facility inventories Susan will discuss with Becky the best way to exchange the data (State set up FTP site, or Tetra Tech set up a SharePoint site)
4	 State Facilities and Critical Facilities Susan will obtain the state building database from a previously completed project Critical facilities HSIP Gold was used in the past Tetra Tech analysts are PCII-trained 	 Provide Tetra Tech with the state building and critical facility inventories Susan will discuss with Becky the best way to exchange the data (State set up FTP site, or Tetra Tech set up a SharePoint site) Becky to assist with identifying changes in
4	 State Facilities and Critical Facilities Susan will obtain the state building database from a previously completed project Critical facilities HSIP Gold was used in the past Tetra Tech analysts are PCII-trained Susan to provide critical facility definition and 	 Provide Tetra Tech with the state building and critical facility inventories Susan will discuss with Becky the best way to exchange the data (State set up FTP site, or Tetra Tech set up a SharePoint site) Becky to assist with identifying changes in land use/development/demographics
4	 Susan will obtain the state building database from a previously completed project Critical facilities HSIP Gold was used in the past Tetra Tech analysts are PCII-trained Susan to provide critical facility definition and database 	 Provide Tetra Tech with the state building and critical facility inventories Susan will discuss with Becky the best way to exchange the data (State set up FTP site, or Tetra Tech set up a SharePoint site) Becky to assist with identifying changes in
4	 State Facilities and Critical Facilities Susan will obtain the state building database from a previously completed project Critical facilities HSIP Gold was used in the past Tetra Tech analysts are PCII-trained Susan to provide critical facility definition and 	 Provide Tetra Tech with the state building and critical facility inventories Susan will discuss with Becky the best way to exchange the data (State set up FTP site, or Tetra Tech set up a SharePoint site) Becky to assist with identifying changes in land use/development/demographics
45	 State Facilities and Critical Facilities Susan will obtain the state building database from a previously completed project Critical facilities HSIP Gold was used in the past Tetra Tech analysts are PCII-trained Susan to provide critical facility definition and database Changes in land use/development/demographic data – 	 Provide Tetra Tech with the state building and critical facility inventories Susan will discuss with Becky the best way to exchange the data (State set up FTP site, or Tetra Tech set up a SharePoint site) Becky to assist with identifying changes in land use/development/demographics
	 Susan will obtain the state building database from a previously completed project Critical facilities HSIP Gold was used in the past Tetra Tech analysts are PCII-trained Susan to provide critical facility definition and database Changes in land use/development/demographic data – Susan to check with Becky on what is available 	 Provide Tetra Tech with the state building and critical facility inventories Susan will discuss with Becky the best way to exchange the data (State set up FTP site, or Tetra Tech set up a SharePoint site) Becky to assist with identifying changes in land use/development/demographics (previous 5 years, and upcoming 5 years)
	 Susan will obtain the state building database from a previously completed project Critical facilities HSIP Gold was used in the past Tetra Tech analysts are PCII-trained Susan to provide critical facility definition and database Changes in land use/development/demographic data – Susan to check with Becky on what is available 	 Provide Tetra Tech with the state building and critical facility inventories Susan will discuss with Becky the best way to exchange the data (State set up FTP site, or Tetra Tech set up a SharePoint site) Becky to assist with identifying changes in land use/development/demographics (previous 5 years, and upcoming 5 years) State of Idaho Determine how to discuss climate change at
	 Susan will obtain the state building database from a previously completed project Critical facilities HSIP Gold was used in the past Tetra Tech analysts are PCII-trained Susan to provide critical facility definition and database Changes in land use/development/demographic data—Susan to check with Becky on what is available Climate Change 	 Provide Tetra Tech with the state building and critical facility inventories Susan will discuss with Becky the best way to exchange the data (State set up FTP site, or Tetra Tech set up a SharePoint site) Becky to assist with identifying changes in land use/development/demographics (previous 5 years, and upcoming 5 years) State of Idaho Determine how to discuss climate change at the meeting this week
	 Susan will obtain the state building database from a previously completed project Critical facilities HSIP Gold was used in the past Tetra Tech analysts are PCII-trained Susan to provide critical facility definition and database Changes in land use/development/demographic data—Susan to check with Becky on what is available Climate Change El Nino/La Nina 	 Provide Tetra Tech with the state building and critical facility inventories Susan will discuss with Becky the best way to exchange the data (State set up FTP site, or Tetra Tech set up a SharePoint site) Becky to assist with identifying changes in land use/development/demographics (previous 5 years, and upcoming 5 years) State of Idaho Determine how to discuss climate change at the meeting this week Becky to provide any available climate
	Susan will obtain the state building database from a previously completed project Critical facilities HSIP Gold was used in the past Tetra Tech analysts are PCII-trained Susan to provide critical facility definition and database Changes in land use/development/demographic data—Susan to check with Becky on what is available Climate Change El Nino/La Nina Idaho having more wildfires	 Provide Tetra Tech with the state building and critical facility inventories Susan will discuss with Becky the best way to exchange the data (State set up FTP site, or Tetra Tech set up a SharePoint site) Becky to assist with identifying changes in land use/development/demographics (previous 5 years, and upcoming 5 years) State of Idaho Determine how to discuss climate change at the meeting this week
	Susan will obtain the state building database from a previously completed project Critical facilities HSIP Gold was used in the past Tetra Tech analysts are PCII-trained Susan to provide critical facility definition and database Changes in land use/development/demographic data—Susan to check with Becky on what is available Climate Change El Nino/La Nina Idaho having more wildfires Susan will discuss with committee at 10/18 meeting	 Provide Tetra Tech with the state building and critical facility inventories Susan will discuss with Becky the best way to exchange the data (State set up FTP site, or Tetra Tech set up a SharePoint site) Becky to assist with identifying changes in land use/development/demographics (previous 5 years, and upcoming 5 years) State of Idaho Determine how to discuss climate change at the meeting this week Becky to provide any available climate
	Susan will obtain the state building database from a previously completed project Critical facilities HSIP Gold was used in the past Tetra Tech analysts are PCII-trained Susan to provide critical facility definition and database Changes in land use/development/demographic data—Susan to check with Becky on what is available Climate Change El Nino/La Nina Idaho having more wildfires Susan will discuss with committee at 10/18 meeting whether or not to include a stand-alone climate change	 Provide Tetra Tech with the state building and critical facility inventories Susan will discuss with Becky the best way to exchange the data (State set up FTP site, or Tetra Tech set up a SharePoint site) Becky to assist with identifying changes in land use/development/demographics (previous 5 years, and upcoming 5 years) State of Idaho Determine how to discuss climate change at the meeting this week Becky to provide any available climate change data to be used
	Susan will obtain the state building database from a previously completed project Critical facilities HSIP Gold was used in the past Tetra Tech analysts are PCII-trained Susan to provide critical facility definition and database Changes in land use/development/demographic data—Susan to check with Becky on what is available Climate Change El Nino/La Nina Idaho having more wildfires Susan will discuss with committee at 10/18 meeting whether or not to include a stand-alone climate change profile, or integrate into each hazard of concern section	 Provide Tetra Tech with the state building and critical facility inventories Susan will discuss with Becky the best way to exchange the data (State set up FTP site, or Tetra Tech set up a SharePoint site) Becky to assist with identifying changes in land use/development/demographics (previous 5 years, and upcoming 5 years) State of Idaho Determine how to discuss climate change at the meeting this week Becky to provide any available climate change data to be used Tetra Tech
	 Susan will obtain the state building database from a previously completed project Critical facilities HSIP Gold was used in the past Tetra Tech analysts are PCII-trained Susan to provide critical facility definition and database Changes in land use/development/demographic data—Susan to check with Becky on what is available Climate Change El Nino/La Nina Idaho having more wildfires Susan will discuss with committee at 10/18 meeting whether or not to include a stand-alone climate change profile, or integrate into each hazard of concern section (e.g., in probability of future occurrences subsection) 	 Provide Tetra Tech with the state building and critical facility inventories Susan will discuss with Becky the best way to exchange the data (State set up FTP site, or Tetra Tech set up a SharePoint site) Becky to assist with identifying changes in land use/development/demographics (previous 5 years, and upcoming 5 years) State of Idaho Determine how to discuss climate change at the meeting this week Becky to provide any available climate change data to be used Tetra Tech Conduct outreach to the Point of Contact
	 Susan will obtain the state building database from a previously completed project Critical facilities HSIP Gold was used in the past Tetra Tech analysts are PCII-trained Susan to provide critical facility definition and database Changes in land use/development/demographic data—Susan to check with Becky on what is available Climate Change El Nino/La Nina Idaho having more wildfires Susan will discuss with committee at 10/18 meeting whether or not to include a stand-alone climate change profile, or integrate into each hazard of concern section (e.g., in probability of future occurrences subsection) Susan recommended to check with Becky on climate 	 Provide Tetra Tech with the state building and critical facility inventories Susan will discuss with Becky the best way to exchange the data (State set up FTP site, or Tetra Tech set up a SharePoint site) Becky to assist with identifying changes in land use/development/demographics (previous 5 years, and upcoming 5 years) State of Idaho Determine how to discuss climate change at the meeting this week Becky to provide any available climate change data to be used Tetra Tech



6	Flood	State of Idaho
	 The flood scenarios were discussed. Tetra Tech to estimate potential losses for the 1-percent annual chance flood event; conduct an exposure analysis only for the 0.2-percent annual chance flood event Flood now includes dam/levee/canal failure IDWR – John Falk is POC for dam/levee/canals 	 Susan to provide POC contact information and inform POC that Tetra Tech will be reaching out Becky to provide a canal spatial layer
	(Carol)	Tetra Tech
	 He has a DB of dams with associated risk ranking (we have Gem and Ada County dams) Dams owned by federal entities have spatial inundation areas Exposure analysis will be conducted for 	Carol to reach back out to Ryan regarding availability of depth grids
	where spatial dam/levee inundation layers are available Task Working Group is focusing on the	
	vulnerability of the structures (identified as critical infrastructure) and their economic value, not so much the failure and associated inundation. This needs to be discussed (e.g, encroachment, trees/rodents). Tetra Tech to treat canals as critical infrastructure and evaluate linear miles of canal and where they intersect the floodplain and other spatially-delineated hazards (e.g., NEHRP soils, WUI, landslide areas).	
7	Wildfire	State of Idaho
	 Statewide exposure analysis Susan to provide POC (IDL) IDL is updating the Communities at Risk from Uncharacteristic Wildfire dataset 	 Susan to provide POC contact information Tetra Tech Conduct outreach to POC to collect best available data
8	Earthquake	State of Idaho
	 Tetra Tech included 4 Hazus earthquake scenarios in the proposal Susan to provide scenarios (one will be consistent with 	 Susan to provide POC contact information Tetra Tech Conduct outreach to POC to collect best
	 EMAP) Susan to provide POC (Zach) Bill Philips provided NEHRP soils in the past 	available data



9	Avalanche	State of Idaho
	 Qualitative analysis Susan to re-engage avalanche State POC; there is avalanche data available by region 	Susan to provide POC contact information Tetra Tech Conduct outrooch to POC to collect both
	, -	Conduct outreach to POC to collect best available data
10	 Qualitative analysis U of I is working with IDWR to update State Drought Plan Susan to engage 	State of Idaho Susan to provide POC contact information Tetra Tech Conduct outreach to POC to collect best available data
11	Landslide	State of Idaho
	Bill Phillips is the POC for landslide	Susan to provide POC contact information Tetra Tech
		 Conduct outreach to POC to collect best available data
12	Severe Storm	State of Idaho
	Now includes lightning, wind, tornado as wellSusan to identify POC	Susan to provide POC contact information Tetra Tech
		Conduct outreach to POC to collect best available data
13	Volcanic Eruption	State of Idaho
	 Lori attended a volcanic workshop — Susan to request information on updated information 	Susan to provide POC contact information Tetra Tech
		Conduct outreach to POC to collect best available data
14	Severe Storm	State of Idaho
	NREL has updated data for download according to Ryan	Susan to provide POC contact information Tetra Tech
		 Conduct outreach to POC to collect best available data Tetra Tech to download latest NREL data
15	Hazardous Materials	State of Idaho
	Susan to provide Tier II facilities (Wayne and Jeff)	Susan to provide POC contact information Tetra Tech
		Conduct outreach to POC to collect best available data



16	Civil Disturbances	State of Idaho
	Include discussion on preparation for the eclipse and potential for hazard	Susan to provide POC contact information Tetra Tech
		Conduct outreach to POC to collect best available data
17	Cyber Disruption	State of Idaho
	State has a new POC for cyber – Susan to reach out	Susan to provide POC contact information Tetra Tech
		Conduct outreach to POC to collect best available data
18	Pandemic	State of Idaho
	Chris Carter (State Epidemiologist) is the POC and can provide update on what to include compared to 2013	Susan to provide POC contact information Tetra Tech
	НМР	Conduct outreach to POC to collect best available data
19	Radiological	State of Idaho
	Carrie provides INL oversight and has noted updates to this section. Susan to provide contact information.	Susan to provide POC contact information Tetra Tech
		Conduct outreach to POC to collect best available data
20	Documents/Maps	State of Idaho
	 Tetra Tech to draft a map format template and provide to Susan and Becky for review State has been considering an update to the 2013 HMPs and would like to see a topographic base 	 Provide Microsoft Word version of the 2013 HMP Provide high resolution state seal Tetra Tech Develop map template for State review
		and approval

2018 State of ID



Hazard Mitigation Plan Kick-off Planning Meeting 28 August 2017 - 12:30pm-2:30 pm

Gowen Field - Bldg. 950 Main Conference Room

(East end of Bldg.)

Host: Idaho Office of Emergency Management



Attendees:	Susan Cleverley, Troy Lindquist, Lee Liberty, Brooke Jacobson; Kris Carter, Heidi Novich, Jerry Miller, Ryan McDaniel, Lorrie Pahl, Mary Mott, Ben Roeber, Lucille Webster, Mallory Wilson, Jeff Rylee Via Phone: Tyre Holfeltz
Topics	Highlights
1.Welcome and Introductions-	Lorrie Pahl, IOEM
2. Planning Team Discussion - Susan Cleverley, IOEM Who do we need on the planning team	Susan Cleverley asked are there any organizations not represented that anyone feels would add value to the group: ITD—Mel Coulter was the old representative however he has retired and Mallory Wilson stated ITD hasn't reach out with name of a new representative. IDWR BSU (Rob Latrell) an additional represented other than the one in attendance. Idaho Fish and Game (invited but unable to attend) Ryan McDaniel suggested Department of Agriculture and Jeff Reilly felt Dr. Martin would be an asset EDQ- Mark Dietrich (was not able to attend) Mallory suggested Department of Health and Welfare and Water Resources, and ISP PUC- Ryan will reach out to Elizabeth and peer team for contacts Jeff stated Idaho has a lot of open land for Federal use so maybe incorporating Forest Service and BLM Tyre-Stated that Andy Brunell would be a good person to work with from the Forest Service and that he had worked with him on the Eclipse. Ryan will reach out to Vaugh. Tyre suggested the Idaho Fire Chiefs Association. Knute(who was already invited to the meeting but unable to attend) Kris suggested AG area vet Cindy Geborek and will reach out to her. Brooke- Suggested Army Core of Engineer Kris- Parks and Rec Kris asked question about Evasive Species task force and Brooke will look into it. She also discussed Infectious Diseases and concerns about no coordinated mosquito abatement and long term management. Idea to work with Association of Counties (Theresa Maher) on this issue was floated. Then Jerry brought up question of Mines and issues with water. Suggested cross organizations of DEQ, EPA, State Dept. of Lands, Forest Service, and BLM. Discussed different teams and idea of re-organizing. Kris brought up Algae Blooms and how they are both human and animal hazards, as an example of issue with categorization.



Ben suggested a new group that handles broad groups instead of sub-categories, because of issues such as Power Outages how they affect every group. That we need to move from the silo effect. Further stated paint with a broader brush. Because overall goal is to identify special projects for Mitigation funds.

Kris mentioned breaking up Pandemic Category to biological and break it down to Human and Animal. Involve DOA, IDJ, NOAH, Idaho fish and game.

Lorrie will send out an email with the groups suggested and ask for any additional agencies that attendees may think of.

3. Discuss Timeline-Susan Cleverley, IOEM

Susan stated the process started over a year ago, and that we were just awarded. Gantt Chart handout show's timeline for project plan.

Complete application

PDM award

Hire contractor to perform risk assessment & vulnerability analysis—Point was brought up that there may be other organization currently having risk assessments done and we could tie into some of those. Ryan suggested Matt Dudley to discuss Preparedness. Kris will be doing this. Ryan also mentioned that ITD, FHWA, lands as well as several other groups are all doing risk assessments

Conduct Enhanced risk assessment

Mitigation Planner to facilitate technical advisory groups

Obtain input from public and technical advisory groups- Also asked for ideas on public outreach

Draft updated plan

SHMP Annual Maintenance Review

Publishing contract

Facilitate Public Meetings

Integrate public feedback/finalize draft

Finalize 2018 SHMP

Lorrie addressed the aggressive schedule due to the late award, and expressed the desire for enhanced plan and to incorporate multiple agencies. She requested that any ideas or suggestions be sent to her for possible incorporation.

4. Review goals -Lorrie Pahl, IOEM

Lorrie reviewed handout "Chapter 1 Hazard Summary and Mitigation Strategy. Which included:

Introduction- definition of Hazard Mitigation

Purpose- to set Mitigation goals, objectives and actions at the State level

2013 Mitigation Goals- 1. Save lives and reduce public exposure

- 2. Reduce or prevent damage to public and private property
- 3. Enhance coordination between Federal, State, regional, Tribal, and local agencies.
- 4. Reduce adverse environmental, natural resource, and economic impacts from natural, technological, and human caused hazards—This spurred a conversation on the threat types. Heidi suggested that instead of Civil unrest it be labeled terrorist threats. Also need



	to have more distinction between human and Animal hazards. Also that technological should be changed to cyber. Jerry questioned if radiological should be under Hazardous. Idea was submitted to put everything under Hazards and not to parse them out- Susan liked this idea and suggested calling it all Hazard Event and asked Heidi it would affect accreditation which she responded that it would not affect accreditation. 5. Enhance the vulnerability and risk assessments through the development and collection of data.
5. How State Plan rolled into EMAP accreditation- Heidi Novich, IOEM	Heidi spoke on EMAP accreditation. EMAP stands for Emergency Management Accreditation Program. Our accreditation is State wide. As part it is required that we have solid Hazard Mitigation Plan. Heidi states that in reviewing the EMAP, made us look at programs provided by IOEM to State based on Hazard. Ben stated that EMAP forced us out of the silo view and forced us to see some needs. The overall goal is to reduce cost and expedite recovery. Set strategic planning at State and local levels. Example was given that there has been 38 Million dollars since Jan 1., in public assistance damage. How much could have been prevented and/or reduced?
6. Enhanced Plan Requirements- Lorrie Pahl/Susan Cleverley, IOEM	Reviewed FEMA- Enhanced State Planning Requirements (slide handout). Slide 5 shows how much was given per disaster and the increase in funds with the enhancement. Lorrie shared example that DR-4313 had a PA assessment of damages of \$43 million and we only got about \$1 million. That the enhancement would bring in 5% more funds. Benasked attendees for varies groups and ideas since the funds are not IOEM. IOEM is not in the field so we need State and local partners to bring in ideas. Lorrie stated that one of the requirements is no single agency can be in charge of the funds. Therefore; want a wider web to bring other organizations in.
Roundtable - Group Discussion	In summary it was stated that this meeting is an opener with an aggressive timeline. First, annual meeting will be November 15th. The hope is to meet at least twice before that meeting. Ben suggested combining groups. Everyone was encouraged to review the documentation that was provided. Lorrie will forward copies to Tyre. Susan spoke on a public input survey, wants to know what they want to know from the public. Lorrie will tweak the survey and send it out and requested that any suggestions be sent to her. Discussion of using EOEP SharePoint for communication. Mallory will do a demo next meeting. Current EOEP share has been upgraded and will not be available until Sept. 9th. Mallory will make initial assignments to Mitigation teams and give assess for them to add any necessary support people.
Adjourn	Lorrie will send out a Doodle Poll to schedule next month's meeting.
2018 State of ID Hazard Mitigation	20 September 2017-10:00am-12:00 pm Gowen Field - Bldg. 600 Basement EOC Conference Room Host: Idaho Office of Emergency Management



Plan Planning Meeting Minutes	
Susan Cleverley, Br	Wilson, John Falk, Jerry Miller, Brooke Jacobson, Troy Lindquist, Rob Littrell, Tyre Holfeltz, andon Hobbs, Mary Marsh, Rob Mace, Jesse-Kay Cole, Tom Ritthaler, Ben Roeber, Mary Mott, rie Pahl and Lucille Webster
Welcome and Introductions	Lorrie Pahl, IOEM
EOPT Demonstration	Mallory Wilson-Provided a basic demo of EOPT explaining that it was originally developed for IOEM Emergency Ops training but has been helpful in IOEM mitigation planning. Site is still under maintenance but should be available soon. Details on site function were given stating that SharePoint allows for version history as well as restricting edits and allows one to place permissions to restrict access. Documents can be read only or checked out for editing. Susan Cleverley emphasized that edits can be approved or rejected. Mallory will work with Lorrie Pahl to determine those who need access and to assure they
	are set up properly.
Discuss Goals	Lorrie Pahl- Stated this is an aggressive time schedule due to the fact that the plan must be completed by November 1, 2018. This date includes all approvals including FEMA and promulgation. Reviewed handout Chapter 1 Hazard Summary and Mitigation Strategy. Page 1-2 2013 Mitigation Goals
	Mitigation goals are the overreaching targets stated in the plan that define the state's hazard mitigation strategy. The SHMP Executive Committee and Technical Advisory Groups reviewed and discussed the mitigation goals and have no additions or major changes to the 2013 SHMP goals. The State of Idaho's hazard mitigation goals are to:
	1. Save lives and reduce public exposure to risk from natural, technological, and human-caused hazard events.
	2. Reduce or prevent damage to public and private property from natural, technological, and human-caused hazard events.
	3. Enhance coordination between Federal, State, regional, Tribal, and local agencies and consistency of hazard impact reduction policy.
	4. Reduce adverse environmental, natural resource, and economic impacts from natural, technological, and human-caused hazard events.
	5. Enhance the vulnerability and risk assessments through the development and collection of data.
	Lorrie Pahl then asked if anyone had a strong point as to if these should change. No one objected to the current goals. The current goals will be carried over to 2018 update.
	Discussed combining some hazards.
	Lighting and Wind/Tornado under Severe Storms



Subject matter expert Troy Lindquist agreed this is a good idea. Susan Cleverley brought up point on mitigation and Ryan McDaniel stated the mitigation for all concerned would be basically the same and it was the consensus of the group that rolling Lighting and Wind/Tornados under Severe storm is the best overall solution. Combining Landslide and Avalanche Ryan McDaniel stated that they are identified by angle of repose but are mitigated completely differently. It was the consensus of the group to not combine these hazard and to leave them separate. Dam/Levee/Canal Failure under Flood Subject matter experts John Falk and Tom Ritthaler agreed that these events are usually flood related. It was the consensus of the group to make this change. Lorrie Pahl requested John and Tom's continued assistance on this Hazard. Hazard Sign-up Lorrie Pahl- Pointed out several large sign-up sheets around the room and request the attendees sign up under a hazard where they possess expertise and could be on an advisory committee. Risk Factor Exercise I have attached copies of Appendix D from the State of Idaho Hazard Mitigation Plan 2013 that explains the risk assessment categories with scoring criteria and weighted values. As well as a blank scoring sheet used. Rob Mace conducted. Reviewed Scoring sheet and explained weighted values. Asked if anyone has a valid reason to change the current weighted values for each Risk? No one had an objection. Wildfires- stated last year Wildfires were ranked number 1 and reviewed last year's values. Probability- Subject matter expert Tyre Holfeltz stated fire probability is a 100% regardless of environment. Impact-discussed if this was referring to effect on people or property. It was stated a large percentage of land in Idaho is federally owned and do fires in these areas impact Idaho? Subject matter expert Brooke Jacobson stated that fires in these areas effect timber cost and water sheds. Rob Littrell spoke on tourism revenue lost due to cancelled events because of poor air quality related to smoke from fires. Spatial- Rob Mace pointed out Idaho is a rather large state. It was stated that less acreage was damaged this year by fire. Mary Marsh pointed out the large impact area effected by smoke from fires. Warning time- Rob Mace pointed out in 2013 plan this was rated a 1. Brooke Jacobson felt this number was too low. Discussed warning times can be effected by how the fire was started. Tyre Holfeltz stated that recent studies shows 70% of all fires are human caused. Duration- How long does it last? Tyre stated average more than a week for a timber fire and 2-3 days for grass or brush fire. Ryan McDaniel asked for clarification on if measured

just on length of actual fire or is repair and recovery included. Susan Cleverley stated that

we don't weight floods on recovery time just in duration of event. Mallory Wilson

Idaho

Appendix G

suggested looking at size of fires and area effected, that most fires are 5 acres. Ryan McDaniel clarified with example Earthquake short but Pandemic would be long. Flood (which now included Dam/Levee/Canal Failure)

Probability- Subject matter expert Brandon Hobbs stated 100% probability of a flood somewhere in the state

Impact-Rob Mace reviewed that impact is in terms of injury, damage, or death. Mary Marsh stated she rated it a 3 because of critical infrastructures. Susan Cleverley spoke on the millions of dollars spend on flood damages last year.

Spatial Extent-Rob stated in 2013 plan flood was a 3 and Dam/Levee/Canal Failure received 1.5. Brandon Hobbs said 3 since all everything is included under flooding.

Warning Time - Rob stated previously Flooding was a 2 and Dams/Levee/Canal Failure was a 3. Tom Ritthaler stated canals have shorter warning time but dams there maybe warning signs but since they are rolled together he would give it a 3.

Duration- - Rob stated Flooding was a 2 and Dams/Levee/Canal Failure was a 3. Mary Marsh said she gave it a 4 because this year Boise had a flood that lasted longer than 100 days. Brandon Hobbs stated Canal or Flash floods are normally short but somewhere in the state a flood will last longer than a week.

Severe Storms (now include Lightning and Wind/Tornados)

Probability – Tom Lindquist said it should be 4 because there is a 100% chance there will be a severe storm.

Impact – Question was raised is there a level we are talking catastrophic due to severe storms? Troy Lindquist stated he has a hard time giving it a 4 because we don't have many severe storm deaths, but damage and hazards. John Falk spoke on traffic related deaths due to severe weather.

Spatial Extent-Something is going to happen somewhere. Troy Lindquist said that you can look at each individual event but it's not likely the entire state will be effected. Troy says it's a 2.

Warning time - Rob reviewed the criteria and said severe storm 1, lighting 4, and wind/tornado 4. Troy gave it a 3

Duration- There wasn't a lot of discussion but general consensus is that the event has a short duration.

Earthquake-

Probability - Rob Mace asked if the committee was considering seismic activity or only major events. Ben Roeber suggested look at past earthquakes that caused damage. Ryan McDaniel stated best to rate as moderate, ground shaking, and Cat. 5 or above.

Impact – Rob Mace stated there are not a lot of high rises in Idaho to be effected. Tyre pointed out majority of infrastructures in Idaho are more than 50 years old. Rob Mace pointed out anything more than a week is critical.

Spatial Extent – How much area is affected? Susan Cleverley pointed out a small quake impacted over half the state. Rob explained that in 2013 plan this hazard received a 2.

Warning time – Not a lot of discussion was given but felt it was fairly long considering all the normal warning signs.



Duration – How long does the hazard last. Not likely more than 6 hours. Tyre spoke about after shock. Rob said if you get larger earthquakes you often will have after shocks. Ryan McDaniels states earthquakes often trigger volcanic activity. Ben Roeber questioned how much damage can an after shock cause. Tyre states that if you have a cat 6 earthquake and then 6 hours later you have an after shock it could be catastrophic tumbling any teetering structures. Rob stated in 2013 duration rated 1 but if you consider after shocks, it may increase.

Landslide -

Probability – The 2013 ranking was a 2. Further stated we get landslides every year.

Impact - in 2013 plan rated it was a 2. Rob asked for insight on where these most likely occur? Ryan McDaniels stated Hwy 12 Elk City closed roads because of landslides. Brooke Jacobson further added the roads were closed for 6 weeks. Landslides have heaviest impact on transportation. Bonner's Ferry had 3 landslides that derailed trains. Landslides could cut off water supply. Ben Roeber mentioned the impact on utilities as well.

Spatial Extent – Previously was rated a 2. This was the only discussion on this point.

Warning time – Brooke Jacobson stated if we know there have been fires we can monitor area because of increased likelihood of landslides. Ryan McDaniel stated there is a landslide probability map. Susan Cleverley mentioned watching for leaning trees. Rob Mace stated in 2013 this was given a 1.

Duration – was not really discussed just but stated it is generally short.

Volcanic Eruptions -

Probability – Previously was rated 1. Mallory Wilson asked if Volcanos in other states that affect Idaho are to be considered. Lorrie Pahl spoke about volcanos in Washington and Oregon have a high probability. Brandon Hobbs said probability low but impact is high. Rob said rating it a 1 is most likely.

Impact – Rob spoke about 1980's Mt. St. Helens. Rob Littrell spoke on agricultural impact. Ben Roeber spoke on Transportation impact. Lorrie Pahl mentioned power outages. Rob Littrell said ash has crystals that affect power. Susan spoke about how Northern Idaho had ash warnings to stay indoors.

Spatial Extent – Mary Marsh said 3 because it would be regional.

Warning Time -1 is previous ranking. Rob said there is usually have some warning before a volcano erupts.

Duration – Mallory Wilson questioned of we are monitoring duration of event or clean-up. Brandon Hobbs said volcanos can continue to spew ash for days so that would be part of the official event.

Adjourn

Lorrie Pahl reminded everyone to sign-up for a team or teams.

Next meeting scheduled for October 19th to complete risk exercise.



2018 State of ID



Hazard Mitigation Plan Planning Meeting 19 October 2017-9:00am-11:00am Gowen Field - Bldg. 600 Basement Joint Conference Room

Host: Idaho Office of Emergency Management

Attendees: Aaron Blake, Susan Cleverley, Jesse Cole, Mark Dietrich, Brandon Hobbs, Troy Lindquist, Rob Mace, Mary Marsh, Ryan McDaniel, Jerry Miller, Mary Mott, Neal Murphy, Ben Roeber, Mallory Wilson, Tricia Hebdon, Jeff Rylee, Lorrie Pahl, and Lucille Webster

Via Phone:	Jeff Stidham, Tyre Holfeltz, Zach Lifton, and Jan Webster	
welcome and Introductions	Lorrie Pahl, IOEM	
Discuss Mitigation Project Presentations for November meeting	Lorrie Pahl solicited names for Presentations for the November 15 Annual Executive Committee meeting. Some suggestions where Jeff Rylee for Hazardous Materials, Ryan McDaniel for Risk Map, Kerri Martin for Radiological, Zach Lifton for Seismic and Bill Phillips for Landslides, and she will reach out to others as well.	
Public Outreach Discussion	Aaron Blake-explained that Public Outreach is required for the SHMP. He then stated the Boise Safety event is coming up and asked for suggestions of other events he could attend and do some kind of public outreach.	
	Jeff Stidham suggested Flood Awareness at the Capitol.	
	Mary Marsh suggest IEMA and Idaho Associations of Counties.	
	Ben Roeber suggested using Digital copy to get it out via social media and suggested that Director Brad Richy has a twitter account that would be useful.	
	Susan Cleverley suggested using Survey Monkey for the public surveys and to get feedback	
Hazard Sign-up	Lorrie Pahl- stated we need subject matter experts to sign-up for committees. Especially Avalanche, Civil Disturbance, and Volcanic Eruptions.	
Risk Factor Exercise Continuation	Rob Mace began Risk Factor Exercise, clarified that committee has decided not to roll Hazardous Materials and Radiological together, Lorrie stated that the regulations for each are too different, and Committee was in agreement. He summarized that we completed 6 Hazards during the last meeting. They are as follows: Flood/Dam/Levee/Canal Failure Wildfire	
	Earthquake	
	Landslide	
	Severe Storm/Lightning/Wind/Tornadoes	
	Volcanic Eruptions	



He then began with a brief review of Appendix D (Risk Assessment Categories and Criteria) (located on page D-13 of the 2013 State Hazard Mitigation Plan)

Began with Hazardous Materials – Probability: Jeff Rylee stated all hazards could include a Hazardous Material event. Mark Dietrich spoke about pipe lines are old and spilling is quite possible and that maps are outdates and in need of being updated. Jeff mentioned that all transportation routes in the state follow water. Jeff said pipes are monitored but due to the distance from the valves to shut them off in a situation, there is room for exposure. Rob stated Probability was a 2.5 in 2013 but stated with the new elements this may need to be higher. Jeff stated there are incidents every day. Not all are reported because they are small, but potential is always there. Mark said low probability with high impact. But looking at the age of the rail system and pipelines, probability is higher. Jeff further stated that since Idaho is the 5th fasted growing state, the probability increases. Neal Murphy said Idaho Transportation Department (ITD) gets calls every day and feels probability should be closer to a 4.

Impact-Ben Roeber agreed probability should be a 4 but questioned how to rate Impact considering daily being small but constant. Jeff stated that there are mitigation plans in place, so Probability is low but Impact would be high. Mark stated most spills occur in low population areas but some could be catastrophic. There are geographic plans to mitigate when in high population areas. Rob Mace emphasized that Impact is in relation to injuries and death. Asked for examples of significant events- asked Jeff and Mark directly what is the biggest trigger. Jeff said hazardous materials such as an incident in Canada involving chlorine, have resulted in mass evacuations. We have similar chemicals that pass through Idaho daily. Rob stated that biggest impact of something like that would be environmental, and Jeff countered that environmental affects people and pointed out that Sandpoint, ID has 3 major rails that could lead to catastrophic impact. Sand Point has as many as 12 unit trains a day carrying at least one million gallons of crude oil. Rob asked if anyone one phone had a comment, Jeff Stidham reiterated fact that damage is mostly environmental. Rob then stated last time it rated 2.5.

Spatial Extent-Rob stated that Idaho is large with various size counties and further stated he doesn't know of anything that would affect the entire state. Mark stated most are usually small and could re-route traffic, and worst case scenario would be airborne. Neal Murphy spoke about alternative routes are limited if an incident occurred on I-84. There wouldn't be an alternate route in many areas. Jeff related a time where there was a bomb possibility on I-55 that stopped traffic for 6 hours. There are other highways listed that don't have a way to re-route. Mark then retracted his statement that traffic could be rerouted and stated that traffic would be a huge factor. Rob stated last time it was rated 1.5.

Warning time: Jeff stated we know where things are and we have more than 1000 facilities with Hazardous Materials, as well as when they are coming through but not sure how a warning could be given. Susan stated you can send a message that it has occurred but not usually before it occurs. Jeff stated that when there was a flood, they notified those with hazardous materials. Jeff Stidham stated floods also don't offer much warning. Rob stated it was rated a 4 last time.

Duration: Rob asked Jeff and Mark. Mark stated that an initial hazard is usually short - a couple of hours but clean-up could last much longer. Immediate threats usually resolve in 24 hours. Last time it was rated a 3.



Next Hazard discussed was Radiological-Probability- Rob stated most are small and easily contained. Mark spoke about spent fuel containment out at INL in Idaho Falls being one of the biggest threats we have. Jeff spoke about cobalt 60 used in quality control, the quality is small but exposure would be deadly, as well as there are some medical companies that use radiation to kill bacteria. Mark stated access is limited and unless someone purposely opens it, probability is low. It is highly regulated and in small quantities. He also mentioned some universities have large sources and that one has a nuclear reactor. Susan said the construction of INL buildings provide additional layers of protection unlike those at Fukushima. Mark pointed out they have large quantities of spent fuel and the containment is old, and he's not sure it's up to earthquake standard. Rob said it last rated a 2. Jeff said last notable Radiological event occurred in 2004.

Impact: Last rated a 2, highly isolated and very controlled. Jeff said Idaho is the only state that had a man-made radiological incident.

Spatial Extent: Historically rated a 2. Mark says every radiological event will involve multiple jurisdictions. Aaron Blake asked for verification on Jurisdiction. Rob said he considered it as counties. INL would cover more than one county.

Duration: How long does it usually last- last rated a 4. Rob stated it will probably take some time. Mark says takes weeks. Aaron asked if this includes release and clean-up. Mark stated with Radiological the threat remains until clean up verifies threat is no longer present.

Pandemic- last rated a 2. Tricia used to work with public health issues. Rob stated whooping cough is the highest rated threat in Idaho. Rob stated that it's not just human but animal related as well. The 2005 flu pandemic resulted in GDP loss of 2.5 billion. Tricia Hebron mentioned plague in ground squirrels. Susan mentioned increased travel as a factor such as in the spread of the Ebola virus. Tricia Hebron stated these things are highly monitored.

Impact: Was rated a 3- Rob stated often hits hardest in the elderly and very young population. Most impact is in high population areas but does have devastating effect in rural areas because of lack of access to proper medical facilities. Jerry Miller spoke on effect of media on tourism and trade if there is rumor of pandemic. Tricia Hebron spoke on loss of ability to ship cattle if they are infected.

Spatial Extent: Rated 4 in 2013 plan, due to its ability to travel. Jeff mentioned if a large number of animals have to be destroyed, then there are issues because of the need to compost which has cascading affect, on those downwind of the area as well as possible issues with contaminating the ground water.

Warning Time: Tricia mentioned Brucellosis in wildlife, and the attempt to keep it from infecting livestock. USDA is testing everything that comes out of the contaminated area. USDA says most biologicals will have 24 hour warning except for something like Anthrax. 2013 rating was a 1.

Duration: Last rated a 4, doesn't go away quickly. Jeff spoke about the bird extermination a few years back due to pandemic. Also fact that wildlife poses an issue. It will take some time to capture, identify and clean-up.

Drought-Probability: Last time rated a 3. Troy Lindquist says drought is cyclical and says a 3 seems appropriate. Jeff Stidham agreed that droughts are quite common. Susan requested

Idaho

Appendix G

comments from Tyre Holfeltz, he stated there will be a drought somewhere in Idaho every year just depends on if it's a micro or a macro.

Impact: Rated a 3 in past. Jeff Stidham said USACE says drought effects state drinking water and crops. Troy Lindquist feels impact is mostly on property. Susan Cleverley says that this year's drought is occurring mostly in Northern Idaho. Mallory Wilson stated there is a northern county that has had a USDA drought declared recently.

Jerry Miller stated that shortened seasons have an impact on tourism.

Spatial Extent-Last year's rating was a 3. Jeff Stidham and Troy Lindquist both agree a 3 seems appropriate.

Warning Time-Last time it was given a 1, Everyone agreed that these occur overtime so there is at least 24 hours warning.

Duration – Last time it was given a 4, consensus of committee is that droughts usually last quite a while.

Energy Shortage: Last rated a 3, there was some discussion on what all this covered - was it Black outs and Brown outs, or ability to reroute energy that is sold outside of state. Susan suggested this be rolled into other categories since energy shortages are usually the result of another hazard. Rob suggested tabling discussion until a decision has been made on how this hazard will be categorized. Everyone was in agreement.

Cyber Disruptions: Probability- last rated a 3. Rob feels impact is higher. Further siting how Turkish hackers recently took down a local agency. Jeff Stidham stated something is constantly going on somewhere, rather it be small or large. Says a 2-3 is good. Rob pointed out that it doesn't have to be nefarious, could be accidental such as a farmer hitting some fiber optic cables, or it could be an issue with infrastructure. Ben spoke about impact on loss of communications. Rob discussed possible areas of mitigation such as creating backups, redundancies and other contingencies. Neal Murphy pointed out that probability is 100%, because there are so many variables at play. Weather, solar flares, man-made. He also talked about system updates and patches that stop work. Susan talked about how this has impacted hospitals in several counties.

Impact-Looked at shutdown of critical facilities - haven't had any that have lasted 30 days or more in the last year. Rated 2.5 last time.

Spatial Extent – Was rated a 4 in 2013 plan. Jeff Stidham stated that could have effect on entire state. Ben pointed out how much more we are connected electronically than in 2013.

 $Warning\ Time-Rated\ 4\ last\ time,\ because\ if\ we\ had\ warning\ we\ would\ try\ and\ prevent\ it.$

Duration- Rated 3 in 2013. Something like malware could be resolved in a day. Something such as infrastructure or damaged fiber optics may take a bit longer.

Stopped there due to end of meeting time.

Received email from Jeff Stidham (Disaster Response Manager, Walla Walla District US Army Corp of Engineers) with additional comments on hazards covered in Risk Exercise on 9/20/2017 taken directly from his email and listed below:

"1. Please sign me up for the following hazards: Flood, drought, wildfire, and earthquake. There are some hazards which cross over (e.g., landslides and avalanches can cause floods), but these are hazards related to or on the THIRA for Walla Walla District

Idaho

Appendix G

which my offices directly deals with. I can review the others for the cross overs as necessary.

2. Comments regarding the scoring sheet review follow. I don't ask for new discussions on these, only that they be considered for the final analysis:

Wildfire impacts: This can exacerbate and lead to an increased risk of flooding, landslides, and avalanches. I didn't see a score in the minutes, but I would rate it as between 2 and 3. Flooding:

Probability: I concur with 100%. Brandon is correct, it will flood sometime, somewhere in Idaho, every year. That may be "minor" flooding, but there could be significant impacts at the local level. That becomes a matter of perspective, even though this is a *state* hazard mitigation plan.

Impact: I rate this as 3.5. Flooding is very focused in terms of location (more on that below), but there are secondary and tertiary impacts to consider, especially concerning agriculture. Further, there are locations with a high potential for catastrophic events, now that the failure of dams, canals, and levees are rolled into flooding.

Spatial extent: I rate this as 3 to 3.5, because of the secondary and tertiary impacts. This relates to locations with the potential for catastrophic events, as those relate to economic or governmental hubs (e.g., Boise).

Warning time: I rate this as between 3 and 4, but closer to 4. Again, this is a matter of perspective. Most flooding has limited to NO warning – the conditions of increased flood risk can be announced (the WFOs do this regularly), or the conditions can be identified by others (such as unusual snow packs). But for many locations, they know there's a flood when the water comes out of the banks, or across the ground (e.g., areal flooding). Basins with river forecast points, dams, or both, can have more warning time, depending on the weather and risk assessment procedures. But those are the exception, not the rule. So, state wide, probably 3.5

Duration: In my experience, flooding in Idaho lasts a few days to a week, especially those driven by snow or rain. But longer is possible — there were multiple events this year where flooding duration was 1 to 4 weeks. Boise is one location, but parts of Blaine County (Big Wood River and tributaries in the Sun Valley area) had long durations. The Clearwater River was at flood levels for several weeks (thankfully with limited impacts). And so on. I rate this as between 2 and 3 at the state level, but some locations would be 4.

Severe storms: No comment.

Earthquakes: I suggest that the scope of earthquakes should be reviewed. The current SHMP looks only at quakes that occur in or near Idaho. There is at least one potential earthquake outside of Idaho that could impact the state, directly and indirectly. Specifically, Cascadia. The review in the minutes is valid, but should at least acknowledge that extreme events well outside the state are of concern, and that most of the impacts can be addressed through other hazards, through a specific contingency plan, or both.

Landslides: These can cause flooding as well, either by blocking a river, or by causing a wave in a reservoir.

Volcanic eruptions: No comment."

Adjourn Lorrie stated we will complete Civil Disturbances and Avalanches on the November 15 meeting. Also re-emphasized need for people to sign up for hazard teams. Susan asked, how do we want to address Climate Change, effects of El Nina or El Nino, future conditions? She feels it affects multiple hazards so instead of making it a chapter of its own, we include it in other chapters as a sub-heading. Possibility of doing same thing with Energy Shortage. Committee agreed on sub-headings within hazard chapters for both. Lorrie informed committee members they may be contacted by Tetra Tech because they have been contracted to complete our risk assessment and will be reaching out to individuals for additional information. She concluded asking for names of people who would like to present during the November meeting.

State of ID Hazard



Mitigation Plan Executive Committee Meeting 15 November 2017

9:00 am – 4:30 pm – Joint Conference Room Idaho Office of Emergency Management 4040 Guard St. Building 600 Boise, ID 83705

Webinar:

https://share.dhs.gov/r6ib2v8t4jt/

Conference Dial-in Number: (605) 468-8015

Participant Access Code: 203372#

Attendees: Lorrie Pahl, Susan Cleverley, Jeff Stidham, Kris Carter, Mark Dietrich, Elizabeth Duncan, Dean Ehlert, David Evetts, John Falk, Rob Flaner, Brandon Hobbs, Tyre Holfeltz, Zach Lifton, Troy Lindquist, Rob Littrell, Rob Mace, Ryan McDaniel, Jerry Miller, Mary Mott, Neal Murphy, Maureen O'Shea, Ben Roeber, Jerry Royster, Jeff Rylee, Brandon Wagner, Lucille Webster, Mallory Wilson, Liz Pesco, Rick Sego, Jonathan Olds, Brett Holt, Amanda Siot, Kelly Stone, Kate Skaggs

Via Phone: Chanel Tewalt

Welcome and Introductions

Lorrie Pahl – Began thanking everyone for attendance and proceeded with introductions. Ben Roeber recapped 2017 stating Idaho had 5 disasters right on top of six disasters still in progress from 2016. Ben hammered in the fact that mitigation is not a once in a year program, how recent events have helped bring mitigation to the forefront, and the governor's office and legislature see the importance of mitigation. Ben highlighted the need to work together with other departments in other state and federal agencies. He pointed out the recent EMAP accreditation and thanked everyone on behalf of Chief Deputy Brad Richy, who is deeply involved and encouraged the team to look for good mitigation projects.

Idaho

Appendix G

Mitigation Update – Enhanced Plan

Brett Holt, FEMA-Gave review of requirements for Enhanced Plan. Stated Oregon and Washington are enhanced in Region 10. Currently, there are 12 States that are enhanced. Brett further stated that every state is different; some have been enhanced but have lost it because they were not able to maintain the additional tasks that are required; and it takes about an extra 33% or work. However, the enhanced plan provides an additional 5% of funds above the current 15% that mitigation receives from funds for Federal disaster declarations. Based on recent funds the state would have received an additional \$350,000 if it was enhanced. He mentioned that this is not based on what Emergency Management is doing but on how the entire state is doing as a whole. The first need was to ask ourselves, "do we meet all the standard requirements?", because you cannot be enhanced unless you are meeting the standards. Handout "State Mitigation Plan Review Guide-2015" Section 4: Enhanced State Plan Requirements was used to explain what is required on pages 27-31.

- 4.1 Meet Required Standard Plan Elements
- 4.2 Integrated Planning
- 4.3 State Mitigation Capabilities
- 4.4 HMA Grants Management Performance

He used a PowerPoint presentation of the handout with additional details.

- 4.1 Meet Required Standard Plan Elements
- E1. Does the enhanced plan include all elements of the standard state mitigation plan? He mentioned that in the recent review with the Mitigation team current status was discussed and there are some points that were met and some that need work.
- 4.2 Integrated Planning

Stating that an integrated plan is not just one agency.

Demonstrate integration to the extent practicable with other state and/or regional planning initiatives and FEMA mitigation programs and initiatives.

Intent: To demonstrate realized integration with other planning initiatives and mitigation programs into ongoing state activities that achieve risk reduction and resilience.

- a. The Enhanced plan must demonstrate integration with other state and/or regional planning initiatives, including, at a minimum, the following sectors:
- 1. Emergency management;
- 2. Economic development;
- 3. Land use development;
- 4. Housing;
- 5. Health and social services;
- 6. Infrastructure; and
- 7. Natural and cultural resources.

Where integration with other state and/or regional planning initiatives representing these sectors is not practical, the plan must describe the limitations.

b. The Enhanced plan must demonstrate integration of FEMA mitigation programs and initiatives, including, if applicable, but not limited to: HMGP, PDM, FMA, NFIP, CRS, Risk

MAP, and the National Dam Safety Program, as well as FEMA programs that advance mitigation, such as Threat Hazard Identification and Risk Assessment, Emergency Management Performance Grant Program, and PA Categories C-G. Where integration with FEMA mitigation programs and initiatives is not practical, the plan must describe the limitations.

Special Consideration: In evaluating integration, consideration will be given to the inherent differences in governance and capabilities among states, crediting measurable progress towards integration of efforts.

He then stated that I daho has been consistent in having meetings such as this one using multiple agency specialists. Tyre asked what level of detail is required to demonstrate what would be needed. Brett stated show how the plan works with community planners, or show polices that help reduce risk unilaterally, or show how making choices around infrastructure programs help reduce risk, and the linkage between state planning and community. Have ongoing discussions, so you are not working in a silo.

Rob Littrell asked for examples from other states that are enhanced. Brett stated that Oregon's plan specifically shows how goal setting needs updated with other plans, such as land usage. Washington has a critical lands ordinance.

Rob Flaner of Tetra Tech cited an example of California AB 2140 how they have a program where if a community has critical linkage with a state mitigation plan, the state will pay 50% of the match or 12% of the 25% match FEMA requires. He also stated a good example of integration is Tyre's CWPP integrations with mitigation plans.

Integration with FEMA programs like risk map, showing dollars aren't just being celled but used across all programs.

Susan asked does EMAP accreditation help with that. Brett stated he's not familiar with this program, so Ben said that we are trying to show how programs drive the program. He and Mallory have had discussion on how THIRA helps in mitigation. Brett said this is part of the story that needs to be told. Ben said we don't always do a good job in capturing what is being done by other cities so we need to do better job capturing that. Brett agreed.

4.3 State Mitigation Capabilities

A State needs to show a commitment to support local mitigation planning by providing workshops and training, State planning grants, or coordinated capability development of local officials, including Emergency Management and Floodplain Management certifications.

A statewide program of hazard mitigation through the development of legislative initiatives, mitigation councils, formation of public/private partnerships, and/or other executive actions that promote hazard mitigation.

The State provides a portion of the non-Federal match for HMGP and/or other mitigation projects.

To the extent allowed by State law, the State requires or encourages local governments to use a current version of a nationally applicable model building code or Standard that addresses natural hazards as a basis for design and construction of State sponsored mitigation projects.



A comprehensive, multi-year plan to mitigate the risks posed to existing buildings that have been identified as necessary for post-disaster response and recovery operations. A comprehensive description of how the State integrates mitigation into its post-disaster recovery operations.

There is a variety of things that can be done. Again, back to the question of what other states are doing as an example of helping with funds. Some things you are doing such as training - make sure we capture those. What are we doing in terms of mitigation, policy wise, and mitigation wise? Susan says there have been other meetings for other departments and we need to do better and capturing what they are doing.

Rob Flaner spoke about conferences like NORFMA, and asked if that would be a good example. Brett commented that this is an excellent example and how this wasn't just flood plain administrators but other organizations were included.

E4. Does the Enhanced plan document capability to implement mitigation actions?

How does IOEM prioritize how funds are being used? This could vary by disaster. He then addressed Susan for input. Susan stated with local grants we have a ranking process when we review , but we need to upgrade the process at the state level

Brett stated this is one that some states have a problem with, showing how mitigation works. One example is loss avoidance studies; however these are very expensive. Other ways are to look at project and project successes. What are we doing now? Recognize successes. How can we capture these? Susan stated we have best practices written on mitigation projects, such as bridges or streambank stabilization that did not have flooding issues this year. We have not had a lot of state level construction projects. Brett stated that's fine as long as we get varying opinions. Tyre asked are there other enhanced states we can mirror for effectiveness, Brett said each state is different just need to make sure we describe in detail. He gave Oregon as an example, which is good at describing. Just show what you are doing and that it is working. Rob Flaner said every time a project is funded you do a mini loss avoidance study with a BCA (Benefit Cost Analysis). Susan asked if other state agencies have anything like this, and the answer is yes. We need to be more effective at capturing this. Brett emphasized the need to be consistent.

E5. Is the state effectively using existing mitigation programs to achieve mitigation goals? Make sure State is not leaving money on the table, are we getting applications? How effective are we at getting the word out? How are we integrating? Brad Wagner asked Susan if we are using the money, Susan said yes, but sometimes project dropout.

Brett stated that overall we are doing well but have room for improvement.

E6. With regard to HMA, is the state maintaining the capability to meet application timeframes and submitting complete project applications?

This includes use of time, complete applications submitted, quarterly reports, etc.

Once you decided to submit for an enhanced plan, Region X does not review it, but the application for an enhanced plan goes to a national review board, once it is approved it is monitored by Region X. Jeff Stidham asked who is on the National Board? Brett said it is a 6-member panel comprised of State Mitigation Chiefs and FEMA region heads. However, during the process Brett would be the coordinating body between State and National Panel.



The state can go for a standard plan and change to an enhanced plan at any time during the plan period.

Technical Working Group /Project Presentations HazMat / Bakken Oil Risk Map / Lidar Update HazMat Flood / NFIP

Break

Stream
Flood
Caribou Earthquake
Eclipse Success
Risk Assessment

10:00 am - 12:00 am

Mark Dietrich, DEQ- Presentation (Northern Idaho Crude Oil by Rail Update). Stated that crude oil by rail is new to the Northwest so we weren't prepared for it. Shared an example of an explosion in small town of Quebec. 67 cars derailed and exploded. Three railroads go through Sandpoint, which is a small town of about 7500 people. There is no way they are prepared without help from State and Federal agencies.

Another example is eleven cars from a 96-car Union Pacific train jumped the tracks west of the small city about 12:20 p.m., next to Rock Creek that feeds the Columbia River. Several rail cars caught on fire and at least one released oil. The train originated in New Town, North Dakota, and was moving crude extracted from the Bakken formation to the U.S. Oil & Refining Co. refinery in Tacoma. The accident closed a 23-mile stretch of Interstate 84 in both directions as a precaution and caused the evacuation of a community school and people in a quarter-mile radius. The cars derailed within about 20 feet from a city's sewage plant for the city of 440 people, east of Hood River. Residents were asked not to use bathrooms and other drains into the city's sewage lines.

Bakken oil is the type of oil most often transported in this area. It's a light oil and floats well, but only in calm water. The increase has been staggering, In 2013, US railroads

well, but only in calm water. The increase has been staggering. In 2013, US railroads moved 11 times more crude oil than all the oil moved by train from 2005 to 2009, the five-year period before oil train shipments began to increase from historical levels. Railroads are now moving roughly 57 times more oil annually than they were during the period from 2005 to 2009.

In 2013, railroads shipped an estimated 425,000 carloads of crude oil—that's roughly 815,000 barrels per day, about the same volume as would be moved by the controversial Keystone XL Pipeline. This increase in oil shipping called for a DOT Emergency Order that states "Trains carrying large amounts of crude oil from the Bakken region are required to notify State Emergency Response Commissions (SERCs) of their trains' operations through their states, if the trains are carrying more than 1 million gallons of Bakken crude, or about 35 tank cars. This notification must include estimated volumes of Bakken crude oil, frequency of anticipated train traffic, and the route the train is taking. The Emergency Order also requires that all Class III crude oil shipments be designated as Packing Group I or II, thereby requiring the use of a more robust tank car. Packing Group III, a lower risk designation, will not be accepted, until further notice.

DOT III Rail cars were discovered to have deficiencies so they have decided all cars carrying crude need to be upgraded to TC117 to reduce impact and fire protection. Jeff Rylee states the new cars are much safer. Mark Stated some of the new cars are on the rail now but not as many as the old ones.

Sandpoint, Idaho is a choke point for all the northern rail companies.

If there were to be a big spill similar to the July 26, 2010 Embridge Energy pipeline spill, near Marshall, Michigan, it would be catastrophic. This was the largest inland oil spill in history- over 840,000 gallons of tar sand oil into Talmage Creek. Heavy rains caused the river to overtop existing dams and carried oil at least 35 miles downstream. The spill was contained approximately 80 river miles from Lake Michigan. A spill of this magnitude



would not be as simple as dropping some boom. You would have to rebuild the river, the environmental damages are catastrophic, and it is said if you can get 10% of the spill up you've done a good job.

Mark emphasized the need for more Geographic response plans since a large number of rails are within a 1000 feet of a major water source.

Working with local regional managers to discuss booms and clean up in case of spill, Washington and Oregon have millions of dollars for these efforts; however, in Idaho most areas are volunteer fire department. Mark stated that Jeff Rylee has done a great job of getting funding for booms. Most of the big petroleum clean-up companies are not in Idaho but in Washington and Montana. It will take them awhile to respond to a spill, so we need to try and contain as much as possible within the first 12-24 hours. We are doing a lot of training and staging exercises up north. The oil companies are also stepping up and helping train as well. There was the suggestion of placing boom on trains that carry crude; however, Mark stated the issue is not having boom but having people with the knowledge of how to properly use it. Boom is not all standard, so it's easier to train people with their own product and equipment. There was some discussion on getting boom from agencies but are not currently using it. The issue again is training. However, they are working with local law enforcement and other state agencies to train. Question was raised on what the protocol is for a spill. Mark responded they will call 911 which will start off the process with State Communications, and they will contact the HazMat team and DEQ. Susan stated Jeff and Mark will help with the Hazardous Materials part of the SHMP.

Ryan McDaniel, IOEM-Presentation (Collaboration) Risk Mapping, Assessment and Planning (Risk MAP) is a program solely focused on mitigation, floodplain engineering and outreach. Risk MAP is a science, technology research and development program that helps communities identify, assess and reduce their risk to all hazards. Through Risk MAP, FEMA provides information to enhance local mitigation plans, improve community outreach and increase local resilience to natural hazards. As part of mapping risks, they can help identify areas subject to the behavior of common natural disasters.

One method is reliant upon LIDAR (Light Detection and Ranging) technology, in which millions of laser measurements are made from aircraft, producing a 3D map of the earth's surface as a "point cloud" and several derived products. This laser mapping tool provides a much clearer picture of all hazards, so we need as much LIDAR as possible. Some ways to do this involve partnering with local universities and government entities. Current LIDAR coverage is about 11.6% but we are not going to stop acquisition until we get 100% of Idaho, and will continue to work with local and other state agencies to get the funding needed and achieve our mutual goals.

Moving on to Dangerous Dirt, which is types of soil being studied in geologic mapping. There are 4 project areas proposed in Idaho at this time. 1) Weiser-Boise 2) Preston 3) Salmon 4) Elk City

Geo-Surficial research- We have an area in Idaho near the town of Spencer that has the highest concentration of Star Opal anywhere in the United States; there are petroleum products that are being located in the Payette area; and, highly productive phosphate



mines in SE Idaho. Risk MAP requests the USGS develop Shake maps to model scientifically accurate, and probable seismic events to show how the soil is moving during an earthquake. The risk assessment of these events are used in mitigation. We also work with sheet flow, or an AO flood zone. An example is how the city of Blackfoot wanted to develop a mitigation plan for storm water, which can also use mapping products such as flood zones and LiDAR to show best location for curbing, gutter, sidewalks, pipes and pumps.

We need to have planning and engineering continue to work together. They have different ways of evaluating the issue but give a more complete picture when they work together. Bridge construction and Risk MAP work together to say where to build the right size bridge that will pass the flood forecast for a given river. We need to get as effective with our communication as possible. Ryan asked Kelly from FEMA if she had anything to add. She said FEMA will meet with Ada and Canyon county to do some resilience training. They will have more data available soon.

Jeff Rylee, IOEM-Presentation (Hazardous Materials Idaho and its Risk/Exposure) Hazardous materials are everywhere. How will other hazards effect hazardous materials is the question. By some estimations we produce 1 brand new chemical every 3 minutes. They are found in manufacturing, retail, transportation, use, and disposal.

We have chemicals everywhere. We have all forms of transportation in Idaho, and all follow water so we have huge exposure. We have a port in Lewiston with barges that come up Columbia river. How many chemicals are out there?

Humans have made, found, or used over 50 million unique chemicals. EPA has more than 85,000 on its inventory of substances that fall under TSCA (Toxic Substance Control Act) this is where we ban chemicals. Total chemicals in commerce is about 7,700. The Chemical Abstracts Service (CAS) has registered over 100 million chemical substances.

Idaho is the 13th Largest State in US. Idaho touches 6 other states and a foreign county, and has the world's 1st nuclear power plant at INL. The 1953 prototype of "Nautilus" 1st nuclear sub- built and tested in Idaho desert. It is called the Gem State because there are 72 types of precious and semi-precious stones.

Through EPCRA, we know there are about 800-1000 facilities in Idaho with extremely hazardous substances. They must report yearly, and information is put on CD and given to Emergency managers. There isn't any single point of collection for all hazardous materials information.

We activate a state hazardous materials action plan almost every day. This allows us to get everyone we needed on a phone call at the same time and create that common operating picture.

In summary, there are hazardous materials everywhere and because of this, every kind of natural disaster can involve hazardous materials.

Maureen O'Shea, IDWR-Presentation (State of Idaho NFIP Status Report) State of Idaho had 4 federally declared flood disasters in 2017. 175 local flood plan administrators have the job to determine damage to structures. However, there is a high turnover rate, so Maureen went out with them to view sites they could get to, which is something they should be able to do themselves with disasters this size. They did not receive Individual Assistance. So if a structure is severely damaged, they are required to rebuild up to new

Idaho

Appendix G

code and standards. When FEMA comes on a disaster, you can ask them to help, so we asked FEMA to do insurance outreach. There are 224 claims from January to September. Repetitive Loss (RL) structures have not been evaluated since 1999, so FEMA went out and verified properties. Now the RL number has climbed from 27 to 58 because of what happened this past year. NFIP calls all areas communities. Some of these areas do not want to participate, and some chose not to participate in flood insurance, so they will not be eligible for flood related grants. There were only 224 claims - low number, which means one of two things. Either we are way under-insured (as of January 2017 – 6000 policies, but now have 8000 policies because of recent events), or we built right - above BFE and stayed dry. Had 2.8 billion paid out, the largest claim was for \$202,144.00, and 31 claims are still active, with an average payment of 12,597.78.

There are 984 claims since 1978 totaling \$8,478,451.00 with average claim of \$8,616.31 Cost of flood insurance premium is around 5 million dollars year.

Silver Jacket works closely with NFIP on projects:

Boise River/Glenwood Gauge Interpretative Sign

Strategic Floodplain Development Workshops

Idaho mini-NORFMA conference

Post Wildfire Response/Recovery Mitigation Guide

Digitalization of 28 counties paper FIMRS to shapefile online

"So you're a Floodplain Manager" video to YouTube

Boise River simulator video game in process

Idaho-NFIP has several tasks:

CAVs(community assistance visits) & CACs(community assistance contacts)

Conducted multiple trainings and workshop across state in 2017

Idaho is under threat from FEMA of Suspension from the NFIP

Idaho Code Title 46, Chapter 10, 46-1021 DEFINITIONS

(1) "Development" means any man-made change to improved or unimproved real estate, including, but not limited to, the construction of buildings, structures or accessory structures, or the construction of additions or substantial improvements to buildings, structures or accessory structures; the placement of mobile homes; mining, dredging, filling, grading, paving, excavation or drilling operations; and the deposition or extraction of materials; specifically including the construction of dikes, berms and levees.

The term "development" does not include the operation, cleaning, maintenance or repair of any ditch, canal, lateral, drain, diversion structure or other irrigation or drainage works that is performed or authorized by the owner thereof pursuant to lawful rights and obligations.

The argument is that irrigation laws supersede this, so irrigation does not require a permit. Jerry Royster asked why permits are needed. Maureen stated NFIP regulators are supposed to inspect before any digging is done, so without permits they would not be aware. Ryan asked what effect would being suspended have. He also stated that we would lose FEMA funds for flood mitigation, then asked about effect on mortgages. Maureen stated NFIP is cheaper, but if we lose it, flood insurance will be rolled to public



companies that charge a much higher rate. FEMA says putting tractors in ditches to remove silt is a man-made change and requires permitting. We are currently working with FEMA and other state organizations trying to develop guidelines to determine what needs to be permitted and what doesn't. We are working to create guidance. This all came about because of 2 complaints to FEMA last year: one where two 24" culverts were removed and replaced by one which changes the flood plain, and the second was a construction company not wanting to permit because they felt they were exempt. She spoke on how hazardous material discussions can help with education on the need for permitting even in small sheds, because if it's in a NFIP area it must be permitted, because they need to know what will be in that shed in case of a flood.

Jeff Stidham, USACE-Presentation- ("Prioritizing flood risk by Walla Walla District) How Corp deals with Flood risk planning. Must follow regulations. Most calls come after flooding, but takes time to get there. We need mitigation. Threats and/or hazards 1. Flooding, 2. Fire, 3. Inclement Weather 4. Water supply disruption, 5. Earthquake, 6. Sociological Hazards, 7. Chemical, Biological, Nuclear, and Radiological Events, 8. Natural Biological Hazards, 9. Volcanoes.

Flooding is number one, so they try to find flooding hot spots using research and prioritization. Then coordinate with USACE authorities. USACE operating authorities provide project driven funding to do the work.

USACE is a project funded agency: Congress authorizes and appropriates funds for USACE through these legislative actions:

Water Resource Development Act (WRDA)

Energy and Water Development Act

Natural Disaster and Emergency Response Activities and Appropriations

FEMA funded missions (based on interagency agreement)

Operations and Maintenance (O&M):

Conduct water resources studies and projects for navigation, flood and storm protection, ecosystem restoration, and an array of other purposes

Section 7 of the Flood Control Act of 1944 (Public Law 78-534, 33 U.S.C. 709)

Authorizes flood risk reduction and navigation regulations, and providing operational guidance for certain reservoir projects constructed or operated by other federal, non-Federal, or private agencies. ("Section 7 authority"), Engineer Regulation1110-2-240, Water Control Management

Flood Control and Coastal Emergencies (Public Law 84-99, 33 U.S.C. 701n)

Authorizes disaster preparedness, advance measures, emergency operations (disaster response and post-flood response), and rehabilitation of flood control works threatened or destroyed by floods. These are limited to actions to save lives and protect improved property.

Anti-Deficiency Act (Public Law 97–258, 96 U.S.C. 923)

Federal legislation enacted to prevent the incurring of obligations or the making of expenditures (outlays) in excess of amounts available in appropriations or funds.

Idaho

Appendix G

There are several areas of concern:

City of Eagle, Eagle Island - Eagle Island is site of historic flooding

Sunroc gravel pit – potential pit capture

Primary threats of hazards: Flooding of residential and business areas, damages to waste water treatment plan

Consequences: Possible flooding Flood stage at 7,500 CFS Glenwood Bridge (BIGI)

10,500 CFS / 12 ft. flooding of residential structures likely

Pit capture may realign channel, leading to flooding

Ketchum, Hailey, and Bellevue primary threats and hazards are: Flooding (2006, 2011, and 2017)

Consequences: Flooding of residences & business, infrastructure damages

There have been some changes to our flooding hot spots

Review and update locations:

Boise River (Eagle Island, pit capture)

Big Wood (Avalanche flooding, record snowpack)

Heise-Roberts reach, Snake River

Weiser River (Ice jam near Twin Bridges)

Lemhi County (Salmon River ice jam)

Nez Perce County (Clearwater River flows, areal flooding)

Walla Walla County (Mill Creek ice jam)

Pit capture flooding mechanism

New Locations:

Sprague, WA (areal flooding)

Connell, WA (areal flooding)

Cassia County, ID (Oakley Dam, Raft River at I-86)

Stanley, ID (snow melt flooding)

Snake River ice jam (Brownlee Dam to Nyssa, OR)

Areal flooding in Jerome, Minidoka, Cassia, Bingham, and Jefferson Counties, ID

Minidoka County, ID (dewatering mission)

Custer County (Big Lost flooding, Mackay Reservoir)

These changes require state level participation to make sure they are in the plans for future mitigation efforts.

Dave Evetts, USGS – Presentation "Flood Alert and Monitoring Network (FAMN)"-Idaho is not new to flooding. Extreme flooding in the past has led to multiple projects by USACE (Dams and levee systems near population centers), USBR (Dams, used for irrigation and flood control), and local and state programs (Flood inundation mapping, city zoning and planning) have tried to mitigate the effects of flooding on the population of Idaho. Still Idaho receives its fair amount of flooding. This year is no exception. With Idaho

Idaho

Appendix G

containing the headwaters of many major river systems, rivers in this state flow through high-energy environments and have limited flood controls on them. Flooding is still a very real and major concern. Taking a look at recent history...

230+ real-time stream gages

Over 30 peaks of record,

2010-2017

Many more came

close to peak during

2011-2012

18 peaks in 2017

10 gages with 80+

years of record

16 gages with 30+

years of record

There are multiple triggers that cause flooding in Idaho. Some of the most common are: ice jams, rain in burned areas, rain on snow and snowmelt

The USGS mission is to provide reliable, impartial, timely, and relevant water information to communities and emergency response agencies.

One way we accomplish this are through stream gaging, in which we monitor among other things, water surface elevation and flow. Some challenges with the current network are the data is static. Gages are not cost effective to move, and if you move them you lose historical data, flood areas can occur in areas not covered, and the arbitrary datums (Many of our gages in the current network are referenced to an arbitrary datum, established at the time of installation, not tied to any established global elevation such as mean sea level. As a result, these gages cannot easily be related to each other which can cause major issues when trying to understand the situation in an entire river basin involving multiple gages or when using a gage to monitor river elevations where local structures, such as bridges or levees, may be in jeopardy.

To better serve the public during flooding emergencies, a new network needs to be created. One that focusses on the needs of the emergency responders, giving them the information they need as quickly as possible, focusing on regions most prone to flooding, and using as many tools as possible to provide data as thoroughly and quickly as possible including new emerging technology such as LSPIV (large scale particle index velocity) and Webcams and mobile apps.

One of the biggest needs for a flood network is the ability to monitor reaches of concern quickly. This can be done using mobile gages called RDG (Rapid Deployment Gages) which can be installed and removed in about an hour, making the network more flexible and focused on the specific needs defined by an individual event. These gages would be tied into NAVD88 so it can be used in tandem with other gages - both RDG and permanent in the area. These can be used on 3 or 4 sites a year or as needed. Kris Carter asked how far above water can you put the gages. Evetts response was about 100 ft. but there are some gages as high as 300 feet, but those are more expensive. LSPIV takes video that track particles on the water surface. Once the mean velocity is known, multiply



by the know area of the cross section, and voila, you have discharge. The question was raised, can this technology be used in other areas such as wildfire and who would be decide where to place them? Dave stated it would be monitored by the Silver Jackets. Wagner stated a secondary use for the webcams would be to see ice jams.

Ultimately, through the creation of this network, USGS will be able to provide a much clearer view of flooding situations as they occur. The network would be adaptable to better serve the needs of those reliant on it, using all the available tools to better enable them to protect the many communities who rely on them during these emergency situations.

Susan asked how this would be funded. Corp through CAP program would provide 50% but has to have match on the State level, then the USGS could match another group. Susan then asked how many temporary gages they currently have. Only 2, but USGS would like 5. Ryan asked what the cost is for a county to purchase one. About \$12,000 for the equipment and \$800 month for maintenance.

Zach Lifton, Geological Survey – Zach Lifton, Geological Survey – Presentation-(Update of the Soda Springs/Sulphur Peak EQ Sequence) - Soda Springs Earthquake Sequence 9 foreshocks up to M4.1 in preceding 30 min

M5.3 main shock

>1900 locatable aftershocks:

26 > M4.0

UUSS and USGS deployed 8 temporary stations

Source fault is not clearly known

Idaho doesn't have its own seismic network so we piggyback on other resources such as University of Utah. We are unsure of the fault responsible, the activity is in a pretty dense cluster and doesn't go along any particular line. Events have occurred since September 2nd and are still happening but they are tapering off. The question most often asked is do these small quakes release enough energy to avoid a severe earthquake. No, not enough energy is released, a severe quake would be a magnitude 7, and these small earthquakes are not releasing enough energy to put us in the clear. But a large earthquake is not necessarily likely:

The USGS developed a "forecast" to estimate the probability of several outcomes:

Scenario #1 (most likely: 90-95% chance):

The sequence will continue to decay over the next month, which means there will be fewer earthquakes. Earthquakes above M3 may be felt by those in the area, and occasional spikes in activity may be accompanied by additional M4 or larger earthquakes, but with none larger than the M5.3 main shock. While all earthquake sequences decay over time, there are several other possible outcomes, which are listed next.

Scenario #2 (less likely than Scenario #1 but possible with 5-10% chance):

A similar sized or larger earthquake than the M5.3 main shock may occur. This situation is often referred to as a "doublet" when a similar sized earthquake follows the original earthquake that kicked off the sequence. Doublets have occurred in places around the world, but they are not very common.



Scenario #3 (the least likely scenario but still possible with less than 1% chance): A much larger earthquake than M5.3 could occur, up to and including the M7 range, in which case we would call what has happened prior to any larger earthquake a foreshock sequence. We have seen this happen in other places around the world, with the most notable being L'Aquila, Italy in 2009. It is important to understand that this is a highly unlikely scenario, but we cannot ignore the possibility of this occurring.

The earthquakes that are occurring as both strike-slip (side-by-side movement) and normal (up-down movement) event, so there may be more than one fault involved. Question was raised could it be magma moving? Zach responded not likely since moving magma has a unique seismic signature. This event has nothing to do with Yellowstone. The earthquake sequence is occurring very near the East Bear Lake fault and the West Bear Lake fault, and is likely associated with one of them. Jeff asked does it appear that we are having more earthquakes. Zach responded data doesn't show an increase in quakes, more than likely it's just increased media coverage, better detection, and people living in more active earthquake areas.

Elizabeth Duncan, IOEM – Presentation (Idaho Office of Emergency Management Public Information for the SHMP) - discussed some successes, such as the Eclipse, and how we effectively used communication. We have cultivated a social outreach Facebook page as well as a twitter account for IOEM with over 20k comments and shares on one of the eclipse hashtags. We have run public service announcements and plan on doing something like this for the AHMP update. We run these for free on local stations so they are a big bang for our buck. One of the tools we use to get information out is the PIER (Public Information Emergency Response) team. This team is a group of public information officers assigned to the team, should be one from every area, to collaborate. Team created a flyer that listed all those on the team and sent them to community leaders so they can reach out to them. Kris Carter commented that another advantage of this team is not only does it help get information out, but it is coordinated so everyone get the same information. PIER team can be used by any group that feels they have information that effects a large area. They have relationships with Federal agencies. Susan commented that each plan update requires public outreach, so we will reach out to Elizabeth for assistance.

Rob Flaner, Tetra Tech- (Tetra Tech is doing the risk assessment) helps update many plans and so they gather lots of information. We began project second week of October and have until end of December to complete assessment. One thing we do is modeling, and we are using a FEMA software called Hazus. Done on a statewide plan, state focuses on its facilities. State is important on how local plans are set up. Looking at Hazus for earthquake scenarios also, doing a lot of data collections, looking at flood scenarios, dam failures, landslides, wildfires, and canals. We need to geolocate all facilities, are using ICRMP (Idaho Counties Risk Management Program) data to fill in for any data not available through HSIP (Homeland Security Infrastructure Program), and have data down to about 8500 facilities that we will be analyzing. It is not possible to get every facility, but we will get as much as possible within the timeline. There are 44 counties in Idaho and not one is the same. State has agreed to use general FEMA standards for assessment.



Creating hazard profiles, which include damages, level of severity, dates, and duration. We would like input and help to validate what's in the profiles. (3 handouts Drought, Civil Disturbance and Flood). Amanda (FEMA) spoke about how she often sees a plan with a great risk assessment but it's not tied to the mitigation strategy. What type of information do you need to create that mitigation strategy? Rob said models are user specific so you can get the data you need. When you have a Hazus model, you have the base for loss reduction model. Amanda said to make the best use of the model to inform. While risk assessment is cool, it is not the most important part. Everyone was advised to send any data they have to Susan. Susan asked Mallory if it could be added to EOPT, who responded yes but the update hasn't been done and it could come anytime and mess up any information going into profiles. Brett commented that we need to make sure that we have a common source on information in the plan and we need to make sure we get complete data, for example climate change. FEMA guidelines don't say climate change. It says future events. It doesn't matter what we call it. We just need to be consistent in the data. Lorrie stated that we will be adding climate change as a sub-group for the hazards listed in the plan. In summary, SHMP update is on track, and we will be working with the technical groups to gather and verify information.

Group Hazard Breakout

Susan Cleverley, IOEM-

Flood Wildfire Seismic Human caused Flood Wildfire Earthquake Civil Disturbance Dam/Levee/ Drought Avalanche Cyber Disruption Canal Failure Lightning Landslide Hazardous Material

Severe Storm Wind/Tornado Volcanic Pandemic

Eruption Radiological

Everyone divided into groups within one of the above listed categories, and answered 3 questions.

How do you want to go about edits (have one point person or individually)

Determine future meetings for December through February

What kind of feedback to you want from public? So create a question that will have meaning and provide useful feedback.

Group 1 Flood-Ryan McDaniel, Maureen O'Shea, Jeff Stidham, Brandon Hobbs, David Falk, Jerry Royster and Lucille Webster

Determine how to edit and provide feedback for the plan section.

Decided wants 1 key person Brandon Hobbs to be point of contact for group.

Schedule for next meeting.

Brandon will be sending out a poll to determine best time to meet, possibly December 6th or 7th

Create a question for public survey.

Do you expect the government will help you if your home is flooded?

Do you expect the government to help you before, during or after the flood?

Group 2 Wildfire – Tyre Holfeltz, Liz Cresto, David Hoekema, and Lorrie Pahl



	Determine how to edit and provide feedback for the plan section. We plan on making individual comments dedits to the Word documents via the Web FORT.
	We plan on making individual comments/edits to the Word documents via the Web EOPT SharePoint. However, none of us currently have access to the Web EOPT. Can that be arranged? If not, we can easily make edits in track changes and combine to send to you.
	Schedule for next meeting.
	We are planning on meeting in person or via a conference call the first week of December. All of our offices are in downtown Boise, so it should be easy to facilitate a meeting. We will create a Doodle calendar survey to figure out the best day and time.
	Create a question for a public survey.
	a) Are state agencies responsive to your needs in relation to disasters?
	b) Does the state support your ability to prepare for a disaster?
	c) Is your city, county or community ready to respond and support you in the following events: Earthquake, flood, avalanche etc. with a numeric number associated with the preparedness level?
	Group 4-Human Caused – Jeff Rylee, Mark Dietrich, Rick Sego, Dean Ehlert, Kris Carter, and Susan Cleverley
	Determine how to edit and provide feedback for the plan section.
	Have a December 20th deadline for notes and edits for Hazmat. Department of Administration (Greg Zicaku) has already gathered a ton of information. Jeff Rylee and Mark Dietrich will handle Hazmat and Radiological. Rick Sego will handle civil disturbance.
	Schedule for next meeting.
	Will work individually
	Create a question for a public survey.
	Do you know how to get more information and how does it impact you?
	Have you looked at the plan and was it helpful?
Roundtable Discussion	Group
Risk Factor Exercise Completion	Rob Mace, IOEM – Began with Civil Disturbance-crime in Idaho- A threat with the apparent ability to perform harm or damage. Chapter 3 of 2013 plan, gave example of



Civil Disturbance Avalanche

Occupy Boise event. Most are attached to some socio-political event. There is little history in Idaho that shows a propensity for civil disturbance. Susan referenced the recent eclipse to show it's a safe event. Kris Carter inquired to the difference in a mass gathering and civil disturbance. She feels not all large gatherings are civil disturbances. Lorrie noted that you have to prepare for a civil disturbance whenever you have a large group. Example there is an increase in wildfires and issues with dams and levees because of encroachment. Low probability. An example of a recent event would be the occupation of the Wildlife refuge. Normally geared to government agencies, however recent attacks using trucks leave large group gatherings vulnerable. Last update it was rated a 2. There was some discussion on if it includes all large group gatherings or just those with intent to cause a disturbance. Susan stated that we will use criteria of intent for purpose of this exercise.

- 2- Impact-with based on intent as criteria. So maybe higher with this in mind. Previously rated a 1. Kris stated maybe a 2 because historically they have not been very long. Susan says there hasn't been an event historically that has caused a complete shutdown. Brandon Hobbs said may not shutdown roads but could result in multiple deaths. So feels impact is around a 2.5.
- 3 Spatial Extent Looking at area effecting entire cities and counties is not likely. Tyre says probably isolate to a single jurisdiction. Previously rated a 1.
- 4- Warning time- Rob Flaner said probably very little warning time. Rob Mace re-iterated that with intent your probably won't have any warning, so probably a 2.5.
- 5- Duration How long does it last. 1 = less than a week. Rob Flaner said again on spectrum either an active shooter or an occupation

Avalanche- 1- Probability -Rob deferred to Troy Lindquist who stated probability 100%. Last rated a 4.

- 2- Impact Rob Mace state in terms of injury and infrastructure. Lorrie stated not likely to shutdown roads. Mallory stated historically not severe. Kris added that there is potential of death or injury to back country skiers and snow mobilers. Rob Flaner added areas such as Kootenai county would argue impact was higher based on loss of income from avalanches. Last rated a 3.
- 3- Spatial Extent Rob Mace pointed out that road closures could affect multiple jurisdictions. Example was given of Hwy 21 shutdown. Rob Mace stated because of rural nature of many counties could be multiple jurisdictions affected. Last rated a 1. Rob Flaner added a 1 if taken case by case basis. Lorrie stated they are normally short delays.
- 4- Duration Less than 6 hours to more than a week. Rob asked if anyone know of any historical closures for avalanches. Kris stated over a week when Hwy 21 was closed, but they are usually easy to clean up. Last rated a 1. Kris stated again it's on a spectrum from small back county to a large one on highway.

Schedule next meeting / Adjourn

Lorrie Pahl, IOEM-Ended meeting thanking everyone in attendance and advised technical work groups to make sure they send their survey questions to Lorrie or Susan. Lucille asked that everyone give her the ranking sheets for the risk exercise.

No new meeting was scheduled at this time.



Idaho State Hazard Mitigation Plan - http://www.ioem.idaho.gov/Pages/Plans/Mitigation/SHMP.aspx

State of ID Hazard



Mitigation Plan Executive Committee Meeting Date: 3/8/18 Time: 12:00 – 4:00

Idaho Office of Emergency Management

4040 Guard St. Building 600

Joint Conference Room

Boise, ID 83705

Webinar: https://share.dhs.gov/rdpgco11ppic/ Conference Dial-in Number: (712) 432-1699

Participant Access Code: 925177#

Attendees: Kelsey Brown, Susan Cleverley, Dan Ehlert, Richard Gummersall, Brandon Hobbs, Tyre Holfeltz, Mary Marsh, Mary Mott, Neal Murphy, Lorrie Pahl, Jesse Pyne, Ben Roeber, Jeff Rylee, Maija Reed, and Lucille Webster Via Phone and Webinar: Kris Carter, Liz Cresto, Diego Curt, David Hoekema, Tricia Hebdon, Zach Lifton, Bill Phillips

THIRA Update Overview

Maija Reed: THIRA (Threat Hazard Identification and Risk Assessment) - THIRA is completed annually. It first identifies the top threats in Idaho, second gives them context, third take that context and applies it to FEMA's 32 core capabilities, Fourth creates list of results to identify gaps. THIRA evaluates the top natural, technological and man-made disasters they often switch these up to make sure we are not viewing hazards with tunnel vision often offering a different view to other hazards. THIRA works closely with mitigation to help identify hazards and allows counties to start looking at possible mitigation actions for their plan updates based on gap analysis of each hazard. Maija then invited the panel to review the most recent THIRA update.

Mitigation Update – Review Timeline for Draft/Edit Completion

Kelsey Brown: Gave a brief overview of the attached plan update timeline, pointing out key updates. Advised that in May the final draft is to be completed and then to be submitted to FEMA in June. She pointed out that she will be conducting technical working group meetings in April that they are scheduled or will be scheduled for that time frame, and then one on one contact with key subject matter experts to complete updates.

Hazard Consequence Analysis

Wildfire

Flood

Earthquake

Jesse Pyne: The exercise is intended to provide another way to assess the State's vulnerability to its hazards and was conducted as a group exercise. Participants were asked to individually rank the following systems on a scale from 0 (no consequences) to 5 (most severe consequences), separately evaluating both the short-term (0-6 month) and long-term (6+ months) consequences of the scenario.

Systems Evaluated:

The public

First responders

Edaho

Appendix G

Continuity of operations

Property, facilities, and infrastructure

Economic conditions

Public confidence in government

In addition to the ranking exercise, participants also discussed additional questions pertaining to the scenarios, including:

Would the season and timing of when the event occurred alter any of these consequences?

What other hazards could be triggered by this initial event?

Would any regional impacts result from this event?

Have any changes since the last plan update altered any of these consequences?

We started with wildfire: Prior evaluation stated at in the short-term consequences of this wildfire event, exercise participants felt that the most severe consequences would be felt by nearly all of the systems reviewed, with the exception of public confidence in the government. From a long-term standpoint, the four systems suffering the most severe consequences include the public, the built environment, the economy, and the environment. Overall, what stood out was that the short-term impacts of a large wildfire were closely identical to the long-term effects, except that long-term consequences were improved for the operational and responder systems.

Scenario chosen was: August: A 1910-type wildfire event in McCall occurring in August. Began with short-term effects on the public: Tyre felt severe, due to loss of homes, infrastructure.

Long term-severe due to economic, due to loss of tourism. A fire of this magnitude would destroy all of McCall and/or Cascade.

2. First Responders- Short term – the 1910 fire killed the largest number of first responders recorded. So short term would be severe. Tyre asked is this referring to local or federal response? Jessie stated probably local. Tyre then commented that it would be catastrophic

Long term: Liz mentioned may also impact how response is handled. Susan asked for speculation on length of fire, Tyre said not likely more than 2 to 3 weeks.

Feels low impact long term but severe impact short term, Jeff mentioned severe mental and psychological trauma to first responders, Tyre also thought of lost equipment and difficulty in replacing equipment in small rural fire department which could have long term impact on first responders. Liz mentioned cascading effects and Susan stated landslide and flooding are discussed in other sections. Jeff further stated that it could take up to a year to replace some equipment.

3. Continuity of operations- Short term- Tyre said continuity would be non-existent because EOC would be gone. Susan said local government would probably set up something. Jeff mentioned they would have to move due to fire so it would cause a disruption in continuity. Tyre mentioned a loss or reduction of communication. Dean asked how many counties have plans, Lorrie stated most but not sure if they all know how to use them. Brandon said that the plan would probably burn anyway. Susan said Federal resources would set up a mobile response with communication. Tyre said first 48

Idaho

Appendix G

hours would be fairly chaotic. Jessie stated that the state would probably set up temporary facilities. Panel felt short term would be about a 5. Long term would be a 1 because things tend to bounce back fairly quickly. Bill asked are they considering outside assistance and the group said yes. Jeff gave example of California fire were they have over 8500 responders.

4. Property, facilities, and infrastructure: Jessie stated everything would burn to short term is major.

Long term-Jeff said it's a major corridor and to replace parks and recreational areas could take 5 years or more. Mary Marsh spoke about funds and the time it would take to replace. Tyre mentioned most of the power poles are wooden so all that would have to be replaced.

- 5. Economic Conditions Everything destroyed and loss of businesses and residents. Tyre mentioned that most of the property is secondary or vacation rentals, so if not insured they probably wouldn't rebuild, resulting in a loss of about 50% of the economy, which would result in huge long term effects. Jeff also pointed out the loss of agricultural income.
- 6. Public confidence in government-Short term more than likely public would be supportive of emergency services.

Long term when funds and assistance don't arrive quickly then public opinion will turn. Tricia gave example of Puerto Rico. Jeff mentioned possibility of litigation groups so committee feels at least a 3.

Lorrie pointed out at this point that the answers do not have to be the same that each person needs to select their own answers.

7. Environmental – short term most say severe, Liz mentioned loss of habitat and misplaced animals, other issues with water and fish habitat, as well as smoke. Jeff mentioned release of hazardous materials

Long term – Still loss of habitat, having to feed them do to lack of grazing land, water quality issues from wash off, Jeff mentioned the possible discovery of underground oil and fuel tanks which could lead to long term contamination, Tyre said could be 60 years before natural forest to return. Appears only improvement would be air quality after 6 months. Tricia mentioned Loman fire that happened over 30 years ago and is just now starting to get trees. Wildlife will return fairly quickly but watershed could clear up in a few years unless there is hazardous materials. Tyre mentioned logging industry that would cause additional economic impact. Additional questions

Would the season and timing of when the event occurred alter any of these consequences? If occurred in winter would be less likely and less to burn.

What other hazards could be triggered by this initial event? Flooding, log jamming, flash flooding, release of hazardous materials, air quality over large area

Would any regional impacts result from this event? Reduction of transportation issues and air quality

Have any changes since the last plan update altered any of these consequences? Tyre said they have been working with fire services but a fire of this magnitude is difficult to



mitigate, Jeff said there are polices to fast attack and knock down structures to try and control the fire.

Flood was next: Scenario - Summer: A flood scenario involving the washout of a 25 foot section of the New York Canal in Boise. The event occurs in the summer at 10:00 PM. Previous findings were: The short-term consequences of this flood event, exercise participants felt that the most severe consequences would be felt by the public, first responders, the built environment, and the economy. From a long-term standpoint, the three systems suffering the most severe consequences (in decreasing order) include the economy, the built environment, and the public. Overall, what stands out is that the short-term impacts of this type of flood event are greater than for the long-term, with the exception of economic conditions.

Public – Short term: Brandon asked where this occurs makes a big difference, Jessie stated for purpose of exercise in a highly populated area. Canal has about 25,000 cfs during the summer. Brandon said that it would be localized to those directly affected. Immediate area, irrigation affected down the line. Liz feels there is a possibility of death for those hit by the initial impact. Brandon said amount of water would start out small but would spread and doesn't feel there would be death unless there were home with basements, because water would be dispersed over larger area so homes without basements would flood but not cause deaths. Brandon feels there are safety measures in place that someone would contact the water master and that the gate would be closed preventing additional water. Susan stated that she had heard the New York canal carries as much water as the Boise River, Brandon says it does and possibly more. David asked if there is a monitoring system, Brandon said yes but it probably wouldn't read it. Brandon feels short term would be moderate for all those with exception to those closest to the canal. But feels even long term would be low.

Long term-David asked how long it would take to repair, Brandon said about 2 weeks to repair. Lorrie asked if shutting off water would impact the river. Brandon said yes, but the USACE would reduce flows at Lucky Peak to compensate. Dean asked what would happened if we had a flood situation like last year, Brandon said that would lead to a catastrophic event.

First Responders – Short term: Minimal consequences little to no death, there would be lots of people and agencies involved but no serious consequences. Jeff said any structure could have hazardous materials. Liz said if homes get pushed off foundations could have gas leak. Long term should have no long term consequences.

Continuity of Operations – Jessie clarified this to mean the ability to assess the EOC, so local government could continue to operate. Panel feels it would have little to no impact to operations either short term or long term

Properties, facilities, and infrastructure – Short term effect on roads, homes, power, gas, and the canalitself.

Long term – Mold issues, insurance and rebuilding, and loss of irrigation

Economics – Agriculture, roads and transportation. Long term slightly higher because of agriculture. Tyre mentioned similar event in Logan where home around canal lost value. It was also mentioned that canals aren't monitored so most homes near them don't have flood insurance.



Public confidence – Short term people will be happy with quick response but less happy in the long term

Environment – won't be catastrophic. Kris Carter stated that were all that water ends up will be a breeding for mosquitos, and we have diseases such as West Nile that is carried by mosquitos. Discussion of displaced rodents that will end up in homes. Brandon feels it would move and most of the water will end up in Ridenbaugh canal. It was asked could it cause damage to Ridenbaugh canal. Brandon said it would probably be a slow intake so shouldn't cause any issues. Someone asked about private well, Brandon said only if they are shallow and not well encased. Long term-would be localized to damaged homes and older wells. Susan feels with agriculture and possible hazardous materials it should be rated higher.

Additional Questions:

Would the season and timing of when the event occurred alter any of these consequences? Brandon said spring with high run off and inability to reduce flows from Lucky Peak would lead to high flows through town that could lead to flooding like last year.

What other hazards could be triggered by this initial event? Cascading effects could damage Ridenbaugh canal.

Would any regional impacts result from this event? Mosquitos

Have any changes since the last plan update altered any of these consequences? Canal companies have been inventorying but not sure how to mitigate. Neal said an issue is burrowing animals, so feels possible mitigation would be to watch population of these animals and try to control it.

Next hazard Earthquake – Scenario - Fall: 6.9 Mw earthquake event in Pocatello, at 8:00 AM during the fall months. Last analysis felt the short-term consequences of this 6.9 Mw event, exercise participants felt that the most severe consequences would be felt by the public, first responders, the built environment, and the economy. The group felt that the public's confidence in the government would be barely impacted in the early day/months after the disaster would occur. From a long-term standpoint, a definite shift would be seen on the consequences to the various systems discussed, felt that equally moderate consequences would be felt by a majority of the systems, with the impacts to continuity of operations and the environment fairing a little better. Overall, it was determined that the short-term impacts of a large seismic event would be greater than the long-term effects.

Public: Short term catastrophic because of poorly constructed older buildings. Bill said Pocatello has potential for seismic triggered landslides. Long term- critical because of transportation, 2 hospitals, a major university, rail lines and other infrastructure that will be damaged or result in reduced access. Group feels a 5, because it will tax all surrounding, and will be difficult to get assistance. Long term – 3 or 4 range because there are 2 fire stations and the police station that will likely be destroyed.



First Responders: Short term very high because of difficulty getting access due to amount of destruction. Long term high as well due to loss of fire stations, police department and hospitals.

Continuity of Operations: Short term – will be high because of loss of structures. Long term – would be less with biggest loss to communications.

Properties, facilities, and Infrastructure: Short term – catastrophic both short and long term. Susan asked would it be severe because Challis wasn't completely destroyed. Bill said Pocatello would be a bigger risk, because of the phosphorus plants and major bridges. Long term - lots of clean up and it will take a long time to rebuild.

Economics: Short term—it's a service based community so impact would be huge, they are also on a major rail line and pipeline, loss of students, and loss of jobs. Long term would be severe as well and since most of downtown area is historic it probably would not be rebuilt.

Public Confidence: Short term – would be high due to presence of assistance and emergency response teams. Long term – it would lessen, similar to Puerto Rico but not as bad since state infrastructure would be back up and running.

Environment: Short term severe, Jeff mentioned the amount of hazardous materials from businesses, homes and the university that will be released. As well as gas lines and seepage into water supply. Liz stated contamination could be all the way down to American Falls if gas lines or something of that nature leaks. Brandon said the way its set up that is not likely and a slight chance at best. Long term would be high if American Falls dam was affected.

Additional Questions:

Would the season and timing of when the event occurred alter any of these consequences? If in winter could have issues with emergency shelters, not to mention aftershocks will cause people to have to evacuate buildings and people will have to be outside for extended periods of time. Also time of day considering you would have kids in transit to school and families separated as well as buildings collapsing with employees, requiring additional search and rescue.

What other hazards could be triggered by this initial event? Fires, landslides, as well as aftershocks.

Would any regional impacts result from this event? Impact to tribal lands.

Have any changes since the last plan update altered any of these consequences? Plan updates and lots of growth and development

Additional comments: Tyre said in other locations they run fire and earthquake scenarios together because they have a high probability of dual occurrence.

Began to review CHAPTER 1: HAZARD SUMMARY AND MITIGATION STRATEGY: Table 1.D: 2013 Mitigation Action Plan. Susan reviewed headings of each column and explained that the (+) was used as rating system. We then reviewed all of the prior mitigation actives and updated status and made any revisions necessary such as changing responsible agency, marking status as complete, ongoing, or remove. At the end of this process Susan explained that we need new ideas for 2018, she also referred to the email that Lorrie had sent out with attachment for ideas and suggestions to be added to the plan.



Tyre suggested integration of State wildfire review into state hazards. Neal suggested adding ITD's seismic bridge data and Susan suggested adding replace undersized bridges and culverts to plan similar to how some counties have this. Jeff stated adding a geologic response plans. Kris Carter had some suggestions but wants to run them by her colleagues before making them official. Such as creating a fund to pay for mosquito abatement until counties receive tax funds since most counties have to wait for tax funds to clear before they can start this process and which is often very late in the season. Also, housing for those with infectious diseases, such as trailers and other temporary housings since it is difficult to find contained facilities that will allow for long term housing. Another suggestion was having centralized rabies vaccinations since not all of state mandates rabies vaccinations allowing some to spread to other parts of state and wildlife population. Tyre mentioned rehabilitation or remediation of water sheds. Neal asked if we have any mitigations strategies in relation to the Hep A outbreak in homeless populations in California and other surrounding states. Kris said they have a plan but due to the limited supply of Hep A vaccine from CDC, and they have only offered it in some clinics to vaccinate homeless. Susan asked if this should be a statewide action. Kris said that possibly since it can be spread and is not a normal adult vaccine, but currently it is not statewide. Jeff mentioned issues with not having landfills that will take debris that has hazardous chemicals. Susan stated this could be a possible action that DEQ would take lead on. Bill suggested railroad corridor studies with multiple hazards. Tricia said health and public safety are looking into that as well. IGS would be interested in being involved as well. Jeff said most railroads do their own studies and inspections, so it would need to be a public/private partnership with the railroad.

Schedule Next Meeting Kelsey Brown- looking at May for next large group meeting, also want people to consider joining the review panel to review all plan chapters. Kelsey will be sending out a doodle poll to get this set up. Also reminded everyone that Kelsey may be contacting you individually to complete plan updates.

Adjourn

State of ID

Hazard

Meeting



Date: May 15, 2018

Time: 9:00am – 12:00 Joint Conference Room

Idaho Office of Emergency Management

4040 Guard St. Building 600

Boise, ID 83705

Webinar: https://stateofidahoweblic.centurylinkccc.com/CenturylinkWeb/BHS

Guests enter with Name and E-mail Address

Conference Line: 1-720-279-0026

Guest Passcode: 237992



Minutes

Attendees: Brandon Hobbs, Rick Sego, Tom Ritthaler, Troy Lindquist, Ben Roeber, Josh McIntosh, Kelsey Brown, Lorrie Pahl, Mary Mott, Susan Cleverley, Yang Lu, Lucille Webster

Via Phone: Tyre Holfeltz, Kris Carter, Neal Murphy

State Hazard Mitigation Plan Goals and Objectives Review Kelsey began with review of Chapter 1 HAZARD SUMMARY AND MITIGATION STRATEGY, Susan stated that we had agreed not to change these on the onset, however since there have been so many revision, it was decided that we would evaluate these to make sure they cover everything. A few things were reworded to better give the overall picture. The first sentence under 2018 Mitigation Goals, states "Mitigation goals are the overreaching targets stated in the Plan that define the State's hazard mitigation strategy." Brandon felt that the word overreaching should be changed to Overarching to better fit the true goal of mitigation. Susan stated that there had been some discussion about changing item 2 from the goals "Reduce or prevent damage to public and private property from natural, technological, and human-caused hazard events" changing from Technical to man made. The group felt it should remain and Tim stated that because they have several systems that are automated so there are technological hazards. This was the consensus of the group as a whole. Yang had a question about #6 "Enhance vulnerability and risk assessments through the development and collection of data." Yang felt that there needs to be some mention of analysis of the data developed and collected to be a more efficient statement, the group as a whole agreed. Kelsey asked on #3 "Enhance coordination between Federal, State, regional, Tribal, and local agencies and consistency of hazard impact reduction policy." If "local" covers private and non-private entities? Brandon suggested adding private entities and Rick suggested adding NGOs (Non-Government Organizations). Yang then stated that he felt that a goal of mitigation should be resiliency, there was some discussion if this would not fit more in the category or recovery. Ben stated that FEMA is pushing to show more resiliency in the plans and how it is a form of mitigation., Kris pointed out community resiliency is not a hazard specific but leads more to education. It was decided that resilience is a form of mitigation, and it should be incorporated in, so it was agreed to add it to the last bullet of the 2018 Mitigation Goals, Objectives, Actions, so that it now reads "Specific actions, appropriate at the State level, are established to facilitate greater hazard mitigation activity and enhance community resiliency. "It was then discussed that by placing it here it means that it is a future goal that can be pursued later so we don't need to change the plan to accommodate it. A copy

of the revised goals and objectives will be sent with these minutes. The group then moved on to Objectives and Susan felt that we need to add word analysis to #6, to go with changes made in goals #6 "Identify, analyze, and integrate existing data." Kelsey suggest adding impact to #7, so that it now reads "Develop common statewide datasets to enhance vulnerability, risk assessments, and impact." Then there was some discussion of #8 to determine how to best state what all mitigation covers, there was some back and forth on exactly how to word it when Kris suggested going with the most simplified form and that was readily accepted and changed to "Develop cost-effective and feasible mitigation grant projects." It was then asked if anyone has anything more to add, and it was agreed to table that and move on.

New Mitigation Action Item Review and Ranking

Kelsey reviewed Staplee Evaluation Criteria

The goal of each proposed mitigation action is life safety and/or reduction or prevention of damage from a hazard event. In order to determine the effectiveness in accomplishing this goal, evaluate each action using the criteria below which includes criteria utilizing the STAPLEE method. This method analyzes the Social, Technical, Administrative, Political, Legal, Economic and Environmental aspects of a project and is commonly used by public administration officials and planners for making planning decisions.

Ask the following STAPLEE criteria questions about each proposed mitigation action and strategies. Assign a score to each criterion as follows: (Definitely YES = 3, Maybe YES = 2, Probably NO = 1, Definitely NO = 0)

STAPLEE criteria:

- **Social**: Is the proposed strategy socially acceptable to the community?
- **Technical**: Will the proposed strategy work? Will it solve a problem independently?
- **Administrative**: Can the community implement the strategy? Is there someone to coordinate and lead the effort?
- **Political**: Is the strategy politically acceptable? Is there public support both to implement and to maintain the project?
- **Legal**: Is the community authorized to implement the proposed strategy? Is there a clear legal basis or precedent for this activity?
- Economic: What are the costs and benefits of this strategy? Does the cost seem
 reasonable for the size of the problem and the likely benefits? After
 implementation, will the benefits over time be more than the cost of the
 project?
- Environmental: Will the project have a positive impact on the environment?
- Will historic structures be saved or protected?

Idaho

Appendix G

• Could it be implemented quickly?

Mitigation Effectiveness:

Ask the following questions about each proposed mitigation action as it relates to life/safety and/or reduction or prevention of damages. Assign 5-10 additional points.

- Will the implemented action result in lives saved?
- Will the implemented action result in a reduction of disaster damages? She then provided a handout with each of the current mitigation actions and committee discussed each and ranked them based on the above listed criteria. Subject matter experts on each items provide addition insight on each of the criteria for that specific action. Kris stated that some of us may not have the technical knowledge to rate these actions, it was then decided to have a group discussion and have subject matter experts in that particular field answer questions about each action item.
 - 1. Create State Cyber Incident Response plan and integrate planning through TWG. Susan stated that Governor created a cyber task force and Kelsey added that there has been legislature passed to support this so it definitely has legal authority. Tyre asked how we were interpreting environment, Kelsey described it as your computer and networks, Kris spoke about how hackers can get into utilities and cause environmental harm, Kelsey advised for the purpose of this evaluation we are going to consider environment in relation to action discussed and this particular issue is about Incident response plan
 - 2. Develop a self-assessment template for mitigation of Cyber Security risks. Josh asked for clarification on question "Will historic structures be saved or protected?" It was explained for this particular action item it could mean stored historic data, that each of these should be view in relation to action item.
 - 3. Development of a Cyber Industry Control System for attack cycle understanding and penetration testing using artificial intelligence. There was some discussion on if we could roll 2 and 3 together, Yang stated no because one is more quantitative and the other is more qualitative.
 - 4. Display approved SHMP to public on story map (interactive web display platform). Kelsey mentioned a lot of states are going this route. Susan asked is the state ready for something like this, Ben stated he felt it is feasible and Kelsey said FEMA is pushing for projects like this, and community surveys show that public would like more information but the current plan format is overwhelming.
 - 5. Resiliency modeling for system interdependency (4 systems based on hazards). Yang explained that there are life essential functions such as power, water and transportation that need to be back up and running within 24 hours, and this project would layer those function to add priority. Susan asked about feasibility, Yang stated it could be done on university level and maps and models could be done, Susan then stated it would be different at the county level, Yang stated models can be done at any level they would just have to plug in the data and could provide color maps showing risk levels focusing on life line items. Ben stated these are the same things we test when we do fractured grid

- type exercises. The next item was crossed off due to it being covered by this action
- 6. Create all hazards publications for public education. Kelsey mentioned doing something like the current earthquake comic books. Ben asked who would be the target audience. That FEMA has targeted elementary age to raise awareness at an earlier age. He also mentioned that the key issue would be getting partnership to implement these programs. Susan mentioned targeting STEM schools and programs. Kris pointed out that we have a very technology based society and things that are web based would be more effective. There was some mention of video games and the current Silver Jacket project to create a video game. She then ask do we have the resources for a project like these, Susan responded that we have received grants for projects like this in the past and feel it is feasible.
- 7. Conduct engineering study to identify and replace undersized and damaged culverts and bridges throughout the state. This is an ongoing project by Department of Transportation. That there needs to be more funding and they work with LTAC to help in more rural communities to gauge need and public interest. Tyre asked about time line of such a project, Neal responded it depends on funding but they have engineers in each district who know the area and if it's not a heavy construction year projects could be completed rather quickly.
- 8. Update Idaho Multi-Hazard Risk Portfolio. It was stated that Robin receives funds for risk mapping thing like this from FEMA. There were some questions about the legal aspects and since FEMA provides the funds it has legal backing, Tyre then asked about economic benefit, Brandon said it will provide additional information and there is value in knowledge. Kris pointed out that allows those who live in flood areas to purchase insurance thus avoiding potential losses for home owners.
- 9. Flood Alert Monitor Network (FAMIN) Stream Gauge Sensor Project. USGS has gauges around state and would like to use portable gauges in other areas and create a public facing map with these results. The have legal authority and should be able to complete in a timely manner, they just need funding for project

The next projects are Silver Jacket projects

- Glenwood Bridge signage for public education and high water marks. This
 project has already started and maybe completed before plan update is
 complete.
- 11. High water marks post flood statewide. Three agencies provide this service NWS, USGS and USACE, so Troy stated there is often some confusion on whose budget should do what project. The benefit of this type of project is that it shows history of flooding which can be used for grant funding for raise elevation and relocation projects.
- 12. Boise River Balancer Game. Brandon said that the Army gaming department has finally received funds for this project so it is a go. This game is to show public the difficulty in managing a reservoir system.

- 13. FIRM digitization statewide. Part of the state was completed before so this would be a phase 2 project to digitize the rest of the state.
- 14. Resiliency Planning Assistance. This is a project to help complete Custer County plan, this would not do the plan but provide the data necessary to complete the plan, this was conducted in Colorado and the company that did it there would like to do a similar project here in Idaho.
- 15. Create statewide ice jam inventory. This project would create an inventory of area were ice jams have occurred, to help provide information for communities that are at risk. Brandon said that this would take 12-18 months and does not have any legal limitation.
- 16. Create household hazardous waste collection sites in rural counties without a program. This project was suggested by the HazMat/RadiologicalTWG (technical working group) and it was suggested to have mobile household waste collection for rural communities. There were some questions about sustainability but the overall idea was a good one to help reduce the amount that would contaminate the environment if there was a flood or fire. Ben stated there has been funding for projects like this in the past so it should be feasible.
- 17. Create program to go through all levels of educational institutions throughout the state and collect chemical / hazardous waste. There were some question on Universities and the legal ability to monitor them, but feels it could be beneficial at k-12 level and that it may be a stepping stone to making others aware of the hazards they have and could possibly lead to legislation or other programs.
- 18. Inventory landfills for hazardous waste disposal presence and capability. Some thought there should already be something like this but no one was aware of any such inventory that the state has access to this type of project could provide state and public with valuable information where to dispose of hazardous chemicals and especially after a disaster to know where to direct clean-up efforts.
- 19. Adult immunization clinics for vulnerable populations with limited access to healthcare (e.g., homeless persons, low-income healthcare workers). There are programs for children but nothing for vulnerable population adults, Kris stated would vaccinate for things like Influenza and Hep A and B to help prevent out breaks and that the cost is low relative to cost if they have to be hospitalized. As far as legal they have authority to protect public from health risk. They have had a couple of the clinics so this is feasible they just need the funds. That a project such as this also builds relationships with that community which would make it easier to get to them if there was a pandemic outbreak or something of that
- 20. Update human illness, hospitalization, and death estimates by county and Public Health District for various severities of pandemic influenza, and to update pandemic economic loss estimations based on previously developed models. Kris stated that she has become painfully aware of how out dated our records at least 10-12 years, project is feasible however quite cumbersome, Susan suggested using interns which Kris felt is a good idea but said that you get a better pool when you can interns which requires funding.

- 21. Fund local jurisdictions to hold meetings including local veterinarians to consider passage of rabies control ordinances requiring rabies vaccination of dogs, cats, and ferrets. Kris stated that there isn't a state requirement for vaccinations it is county based so there are some counties that do not require animal vaccinations which puts other communities at risk, and if there was to be a local species rabies out break it would be devastating to Idaho.
- 22. Purchase of mobile self-contained housing for Idaho Public Health Districts to borrow or use for isolation of infectious or exposed persons who do not require hospitalization and are not able to be isolated in other accommodations. Idaho does not have enough long term housing for those with infectious diseases and there aren't a lot of facilities willing to take these type of patients or have the proper set up to take them, they usually end up in hospitals taking up valuable space at a much higher cost, she would like to get maybe portable trailers or something like that.
- 23. Create a revolving loan fund for start-up mosquito abatement districts to use prior to receipt of tax money and prior to a disaster declaration. Most counties collect taxes to pay for mosquito abatement but often they don't have the funds at beginning of season to start abatement, this project proposes a fund that would loan the counties the funds to start abatement and then the funds would be returned once taxes are collected. The benefit would be that if there was a mosquito born epidemic this would help reduce the risk.
- 24. Complete and exercise Earthquake Clearinghouse and Communications Plan.
- 25. Idaho Earthquake Fact Sheet.
- 26. Exercise Rapid Visual Assessment Teams.
- 27. Shakecast computer modeling after an earthquake event to determine highest likelihood of infrastructure that is damaged from the epicenter.
- 28. Northern Idaho seismic assessment, outreach, and replacement to include: hazard analysis of rail shipping Crude Oil, Coal, and other Petroleum Products; property inventory and seismic inspection; update of building codes; earthquake awareness and education; development of multi-state groups, joint exercises between Washington/Idaho, and replacing/improving RR highway crossings, bridges, high risk areas.
- 29. Drills/training for major rail derailment/accident involving explosions, fires, spills.
- 30. Update state fault database from 2003 data, statewide fault mapping and paleo seismic trench study.
- 31. Create statewide landslide inventory.
- 32. Post wildfire soil study using ubiquitous sensors for understanding landslide / mudslide hazard.
- 33. Statewide hazard fuels reduction. Tyre said this is an ongoing project and that their biggest issue was capacity they often have more funding but not enough capacity to complete all the necessary projects. They have the legal authority, and the projects are economically sound. He also said every county in the state has been touched by this project.

We were unable to complete all of the projects due to time restraints so Kelsey advised attendees to complete and send results to her via email.

Hazard Consequence Analysis

Flood

Kelsey explained that we changed the Flood scenario because the previous scenario did not provide accurate results based on the fact that flood is one of the state's biggest hazards. New scenario is:

Spring thaw flooding and excess rain in Eastern Idaho saturates the ground and causes the Snake River to flood and the Palisades Dam to fill quickly. The group was then instructed to rate each system 0-5 with 0 = No Consequences 3 = Moderate Consequences and 5 = Severe Consequences,

give two scores for each system, one for short term (0-6 months after the event), and one for long term (6 months – 5 years after the event).

- 1. The Public Short term Brandon said probably a 5 because you would have people displaced and infrastructure would be lost, felt similar to 1997 type event. Long term would be a little less still around a 3 because of infrastructure that would have been lost and the hazardous material released.
- 2. First Responders- Short term most feel it would be a 5 because all hands on deck type of situation. Long term 5 also because if roads are down they will have to be diverted causing delays and then they would have to devote time to monitoring.
- 3. Continuity of Operations Short term most feel it would be moderate because some people would be displaced but most would be available to provided support. Long term low but there would still be some affect.
- 4. Property, facilities, and infrastructure High for both short and long term due to amount of damage, as well as hazardous materials released, and the amount of work to rebuilt as well as the affects downstream.
- 5. Economic Conditions Short term high. Tyre mentioned damage to agriculture and facilities near the river such as water treatment facilities. There is also a possible threat to electrical since a large portion of the power for this area comes from hydroelectric facilities near the river. As well as levies and their inability to handle flood waters of this magnitude. Long-term high as well. Ben stated that if it affects the dairy or agriculture industries it would be devastating in that area. Brandon added even industrial would be affected as well as a loss of businesses in area.
- 6. Public confidence in government. There were some mixed feelings some felt it would be good in the beginning with the immediate assistance and that long term people would become angry due to lack of fund, others felt that the initial response would be negative because they feel that state should have been aware of what could happening and stopped it, many feel this is truly due to lack of understanding on behind the scene efforts. Susan stated long term because the amount of time it takes to get funding from grant programs.



	7. The environment – Short term – High due to Hazardous Materials and at risk species. Long term – Not as high but still high due to fact it will take land time to recover.
	Additional Questions:
	1. Would the season and timing of when the event occurred alterany of these consequences?
	Many felt that it would not be as severe if it was during any other season because we would not have the rain or the additional snow pack to be affected.
	2. What other hazards could be triggered by this initial event? Other hazards that could be trigged could be landslides, Civil disturbances due to displaced and angry residents, as well as hazardous material contamination as mentioned.
	3. Would any regional impacts result from this event? There would be devastation to the economy of this region
	4. Have any changes since the last plan update altered any of these consequences? This type of scenario is too unpredictable however there are some action items to create an Ice jam inventory to see which communities are at a higher risk of this type of event.
	Kelsey asked everyone to complete the consequence analysis and give it to her and for those on the phone to email it to her.
State Hazard Mitigation Plan Draft Review Panel Nomination	Susan explained that we need a committee of 3-5 people to review the plan and provide comments before submission. She asked for volunteers, Tyre asked for time commitment, Susan stated that it could be done on your own time so a couple of hours but that there would be a review panel meeting in June. Ben volunteered to be on the panel as well as Josh. Ben also mentioned he will check with Mallory and Maija to see it they have time to review as well.
Schedule Next Meeting	Susan stated that the next meeting will not be until our annual November Executive Committee meeting, but for those who will be on the review panel they will meet in June around the 14-16 time.
Adjourn	Susan asked for any final comments before adjourning. Tyre asked are there any action items relating to social, economic, and political aspects? Susan stated there is the education fact sheet and some related to legislative issues. Tyre then stated that there will never be enough money or resources to mitigate everything so we need to add more education elements. Susan agreed and stated there are a lot of education opportunities within each of the action items. She also mentioned that these are just the new action items that there are still ongoing projects form previous plans that cover these issues. Tyre then asked are there any actions on types of codes or adopting codes. Ben stated that there are some were the state encourages counties to adopt unified building codes but they can't force them. Tyre then clarified that a copy of the updated documents will be sent and meeting was adjourned



Civil Disturbance TWG Minutes

7 May 2018 - 1:00pm - 3:00 pm

Gowen Field - Bldg. 600 IOEM Conf. Room-Upstairs

Host: Idaho Office of Emergency Management

Welcome and Introductions

Scott Hanson, Bret Kessinger, Jesus Guevara, Josh McIntosh, Kelsey Brown, Susan Cleverley, Lorrie Pahl, Mary Mott, Lucille Webster

State Hazard
Mitigation Plan
Overview and Intro
to Civil Disturbance
Hazard

 Review document

Kelsey Brown- opened meeting with brief explanation of what the plan entailed and what was required of the attendees. She explained that the plan is updated every 5 years and each section relates to a specific hazard that has been identified by state. Then subject matter experts such as those in attendance are invited to provide input on the content of each hazard. That the draft was a combination of what was provided by a contractor and the 2013 plan update combined. We then began reviewing the document there were several grammatical and structural changes made throughout. Bret felt that ANTIFA needed to be added to the list of groups that often trigger civil disturbance. That ANTIFA (Antifascist) is new group that has been the cause of civil disturbances around the country and that there are some elements of it here in Idaho. Some others were Environmental protection groups, Earth Liberation Groups, and Susan pointed out some of the biggest are anti-government groups here in Idaho. Bret agreed and said some of the strongest are located in the pan handle. On page 2 Bret suggested adding social media to Impromptu gatherings because it has almost replace word of mouth on spreading information quickly in the last few years. Need to get more information on Figure 2, date on source shows 2016 but supporting paragraph says 2018. Bret says there hasn't been anything overly violent occur in a while, but he is willing to provide a list of recent activity.

On page 5 there is a quote from Patch.com that states Idaho is the most hateful state in the nation, everyone feel this is not an accurate statement and feels it needs to be removed from the profile, and that Patch.com is not a credible source. There was some discussion of possibly asking the FBI for a list of hate groups in Idaho, but many felt this would work because most information from FBI would be for official eyes only and since this is a public document they probably couldn't provide us with anything useful. So Bret suggested Kelsey get with Conley from DHS, to see if they have any data that can be used. Kelsey will re-engage Conley when he returns since he is currently on TDY. It was agreed we will keep the Patch.com data in the profile until we can find some more credible data to replace it. Susan felt it was important



to point out fact that yes there are these groups in Idaho but there have been no serious disturbances related to them. Bret mentioned that Idaho tends to be a gathering spot for these type of groups, for example the Hammerhead rock festival with organizes rock groups for a hate group.

Kelsey asked it group felt that terrorism was a form of civil disturbance? Bret said there have been some civil disturbances as a result of terroristic threats, but suggested discussing this with Conley as well. Josh said he has a hard time using the word terrorism but Bret said there have been incidents that fit the description of terrorism. Jesus said that we need to make sure to separate the two and provide a clear definition of terrorism. The question was asked is there a section that talks about terrorism, it was stated that no there isn't a terrorism profile but cyber terrorism is addressed in the cyber profile. Kelsey will provide Bret with a copy of that since he does work with the group that handles that. Susan pointed out that a lot of the hate groups are not causing issues. It was suggested we define and provided specific incidents in Idaho, Susan said to make sure we keep it sort of broad don't want to give any of these groups encouragement. Bret said one of the big things they are dealing with right now is that they are inundated with school threats and they have to investigate all of them. Susan shared a story of a situation at the U of I that resulted in a death, group wasn't sure of motivation but said that it definitely created fear, this needs to be researched further to see if it meets terrorism criteria. It was also mentioned that there was a shooting at a courthouse in Latah that resulted in a death as well that could be added as examples. Susan said it need to be mentioned that not just hate groups that cause harm.

On page 6 need to verify if ranges of High, Medium and Low are still measurements used to rate disturbances. It was suggested to get with Conley to verify this as well. Also need to add something about terrorism being a high range item. Susan asked Jesus when the guard would be called in. Jesus said it takes a declaration from the Governor and usually 72 hours to mobilize the guard, and an act of Congress for all of the guard to be deployed. It usually only occurs when all local resources have been depleted. There are a few instances where local law enforcement work with military, such as during 9-11. There was a suggestion to add Ruby Ridge incident but several of the subject matter experts felt it was mostly exaggerated in the news and the actual event really never reach outside of that community. Bret mentioned there have been some mini-riots in downtown Boise but have only required state and local law enforcement, and are normally alcohol fueled and don't last long. Susan felt it would be good to mention under what circumstances the guard or federal agencies would get involved. I was stated only when local resources are depleted and usually the police commissioner makes a request to the governor who then request the guard for additional assistance.

Page 7 – Warning time we need to add 9-11 declaration, although the incident did not occur in Idaho it did result in a declaration and needs to be captured. Lorrie will get that information to Kelsey. Also looked at Figure 4 and determined that UVI stood for United Vision of Idaho a non-violent group for equal rights. Josh also pointed out that FEMA declaration for was for Valley and Boise county not Custer and he provided a photo showing the large number of people at that event, it was

suggested we check the Valley and Boise county plans for a photo that show the damage to add to the plan. Josh also mentioned that that area still hasn't fully recovered from that event. Lorrie will check Boise and Valley county plans for a picture and get that to Kelsey. Kelsey then went to next section and suggested adding something about how climate change can result in civil disturbance. The example that when there is a drought often times tempers flare and the normal neighborly dispute between two farmers could become more and officers are warned to be cautious in these situations. Also under secondary impacts it could be mentioned how natural hazards especially fires can lead to civil disturbances, such as looting of abandoned homes, traffic issues, and people not wanting to evacuate and causing delays. Josh agreed to do a write up on this section.

Mitigation Strategies – Need to add statue for terrorism, it is Federal 18-8103 The Terrorist Control Act.

Bret added some items to list of what fusion center provides.

- Relationship Charts
- Heat map tracking high frequency events in set areas
- Fusion Center Liaison Officer Program
- Open Source Intelligence Gathering

Under agency participation he added: Bannock County Sheriff's Office and Chubbuck Police Department

It was also suggested to add a paragraph about what the Fusion Center Liaison Officer Program does, and Bret will send that over to Kelsey, he will also address the not about Community relations. The fusion center works with DHS on "See something Say something" program, he also mentioned that Boise PD has a program that works with refugees that has an officer dedicated solely to this program, which has had great success.

There was some discussion on Community relations and the group provided a list of programs that involve the community, such as Crime stoppers, neighborhood watch, Tip lines, Crowd intervention training, and active shooter training now called ALERRT (Advanced Law Enforcement Rapid Response Training).

As far the on the guard side they offer active shooter training and anti-terrorism training.

BSU has ITAC which is Idaho Threat Awareness Conference as well.

Review Mitigation Strategies and Discuss Action Items

Kelsey Brown, IOEM



Determine Due Outs	Kelsey made grammatical corrections during the meeting but will run spelling and grammar check on document, as well as review references. Kelsey will also re-engage Conley when he returns to get additional information. Lorrie will provide information on 9-11 declaration, and review Boise and Valley county plans for a picture of damage caused by Rainbow Family Gathering Josh will write up a paragraph about how natural disasters can cause civil disturbances Bret agree to send write-up on fusion liaison program, list of civil disruptions in Idaho, as well as answer the comments located in the document
Discuss Next Meeting and Group Focus	This group will not be meeting again as a working group but Kelsey will reach out to individuals if additional information is needed. All attendees were invited to attend the Executive Committee meeting on May 15 th from 9-12 in the IOEM joint conference room downstairs to review the status of the Plan update.
Disruption Technical Working Group Meeting, State Hazard Mitigation Plan Update 2018	19 April 2018 - 10:00am-12:00 pm Gowen Field - Bldg. 600 IOEM Conf. Room- Upstairs Host: Idaho Office of Emergency Management Conference Dial-in Number: (605) 468-8015 Participant Access Code: 185275#
Minutes	
Attendees	Diego Curt, Chris Buckingham, Ben Roeber, Mallory Wilson, Josh McIntosh, Kelsey Brown, Mary Mott, and Lucille Webster Via Phone: David Matthews
Cyber Incident Response Coalition and Analysis Sharing (CIRCAS) Presentation	David Matthews, with Cyber Incident Response Coalition and Analysis Sharing (CIRCAS)-explained that CIRCAS is a collaboration to have a community get everyone involved for an event. In Washington, they created an Annex that allows the Governor to call the annex in case of an emergency. He stated that Idaho apparently has a similar program but he does not know what it is called or it falls under. There are some contacts in Idaho such as Troy Thompson with PNL or Jerry Cochran. CIRCAS helps determine blocks and gaps; the program began years ago while conducting an exercise on cyber security. They noticed everyone was talking and sharing information and realized the need to organize a group to facilitate this type of communication on a regular basis, therefore forming CIRCAS. There are currently 40 units that involve Federal, State, local agencies and businesses providing a good representation of the public and private sector. They trained everyone with ICS and NEMs standards and developed resources along with FEMA, creating an information and trust-sharing model. Kelsey asked if Idaho wanted to start something like this what would be the first step. David replied with; gather your resources on the state,



local and federal level. David offered to provide a list of local contacts that have expressed some interest in forming a group. Kelsey offered to send David a reminder message to send the list. Kelsey said she would be in contact with David if this is something that the state decides to look further into as well as with any additional questions that may come up.

State Cyber Incident Response Plan Hotwash

Diego Curt, Office of the CIO - Presented the attached Incident response plan. He felt the key to an effective response plan was to make sure it is a living document and not something that just gathers dust. He reviewed multiple plans and decided that NIST SP 800-53 had the best layout. He then reviewed the attached document focusing on how the document is adaptable to where you are in your response plan and how the document can grow with you. He also pointed out the need to know the law and proper channels when dealing with an incident. His plan lays it all out for ease of use. Kelsey and Mallory asked how the plan rolls up into response, preparedness and mitigation. Diego was not exactly sure but says it begins with reviewing incident response. He feels there is a way to tie it all together. Mallory said Lance helped create the Cyber Annex and would send it to Diego for review.

State Hazard Mitigation Plan Update Review and Timeline

Kelsey Brown went to second to last page of Cyber profile under mitigation rationale, asked what the group sees in Idaho's future, and pointed out recent cyber training was conducted by the state. Diego said the recent training was too vague and only focused on one point, which deals with the vulnerability of email. He also feels it is only once a year so not very affective. Diego feels there are other cyber threats such as malware that is far worse and there currently is not any training for that type of threat. Diego asked what the purpose of the plan is. Kelsey explained it is to list vulnerabilities and strategies to mitigate the risk. Diego said there are 3 core areas to focus on Confidentiality, Integrity, and Availability. He also feels the document needs to be more user friendly. Things like solar flares can be devastating and needs to be drilled down to one of the core areas, such as availability. There are groups that are currently targeting GPS systems and if they were to be successful, they could wreak havoc on our first responders. Diego feels that each threat needs to be broken down based on the 3 core areas of cyber security and what we can do to mitigate. He said we need to evaluate what each system has such as those that have personal information because attacks can be something like taking over routers and then running malbots to take over an entire system thus corrupting the confidentiality of the personal data. If they change anything that affects the integrity and if they decide to shut it down then the availability is affected. Many businesses spend a lot of money on the shiny front-end items when their back up systems are the most vital. Businesses need to be aware of how long their system can be down before it affects their business. If a business has a tape back-up system it can take days to get everything back up and running. Businesses need to be aware what is needed to maintain essential functions such as payroll and packaging systems, they need to know what they are addressing with each goal. Under cyber security training there needs to be awareness of things like phishing emails and have training and a way to test that training. Kelsey suggested Diego think about adding that as a mitigation action item. Diego agreed we need to run a phishing campaign to test our users, and



he mentioned how something as simple as email can hit on all 3 core areas. Review of State Legislature section mention the recent passing of House Bill 607. He suggested moving this closer to front of the document. Kelsey stated that she was going to add the 5 core NIST controls. Diego stated the most recent version now lists 6, but there are actually 20 controls. Diego says that everyone knows what they have in inventory but they do not do a good job at inventorying systems, we really do not know what or whom we have on our networks. He feels that a better audit of networking system would be a huge preventive measure. He shared the example of a company that passed all their inspections and screenings and later discovered there was someone on their network stealing data. Kelsey will add additional information and send the profile to Diego for review. Kelsey asked the group if under Education and Outreach if there is any additional information to include. Diego said any education would be good because no one prints job aids or phishing exercises. The State has a website but it needs to be updated. Diego will be working on adding more public awareness information. Mike Langrell currently sends out emails about cyber threats using MS ISAC. Under additional approaches, how can we leverage other resources? Diego said we need to help businesses stay in business by educating them on the importance of having a good back up system. How to reduce the risk of down time using backups during recovery. Kelsey asked for thoughts on CIRCAS. Mallory asked if this would be for mitigation or just a sharing of information and felt it would be more of a continuity aspect. Ben said this could be a potential mitigation project to gather a list of businesses. Kelsey suggested adding something under the mitigation section about the need for at least 6 core controls and a need for a preparedness plan that leads into COOP and THIRA. Kelsey agreed to put something together for review.

Review Cyber Mitigation Strategies and Discuss Action Items

To give some ideas as to programs or projects that could be useful in Idaho as well, Kelsey provided a handout showing cyber actions that other states have used.

Due Outs and Next Meeting Kelsey will send out action items sometime next week. It was agreed that the group would not need to meet again in relation to the mitigation plan. Malloy will send Diego the plan annex and feels that he would be helpful next fall with gap analysis.

Idaho State Hazard



January 24, 2018 12:00 – 2:00 pm MST 4040 Guard St. Building 600 IOEM Conference Room Boise, ID

Mitigation Plan
Dam, Canal, Levee



Technical Working Group	
Attendees: Rick Sego,	Kelsey Brown, Susan Cleverley, Lorrie Pahl, Mary Mott, and Lucille Webster
Review Updated Hazard Profiles for Plan Update	
EOPT Review	Kelsey Brown reviewed how to access EOPT, and explained how to locate a hazard profile on EOPT and how to check it in and out for editing. She also explained that Flood profile now combines Flood and Dam/Levee/Canal Failure. Go to the review tab and then click track changes to begin edit process. EOPT will have a Profile, Vulnerability Assessment and Mitigation Strategy for flood and all three will require review and revisions.
SHMP Edits	Began review of Flood profile. Rick stated that he was there to see if Brian Sauer needed to attend. Rick asked if there was a section on dams, there are 19 dams in Idaho. Susan said we are looking to possibly change the focus from Dam Failure to how we can mitigate failure to infrastructure. There has been some discussion about encroachment. Rick mentioned businesses are moving closer to canals and new subdivisions as well. He mentioned there are several privately owned canals. Susan mentioned that there had been a project submitted to the Silver Jackets to do a Governor's Service Announcement about canals, but it did not get funded. Kelsey suggested doing a Facebook live type announcement for the IOEM Facebook page and have others share it to get the word out and it would be free, and you can get statically data from number of shares and likes. Susan asked Rick if Reclamations has anything like that and he didn't feel that they do and that there needs to be more PSA's. Susan also asked if they have anything for dams. Rick says most people know basic dam safety but people don't have the same respect for canals. Some examples of how people have always swam and played in canals in Idaho and it's just normal for many. Took a look at the Dam section of the profile. The section says failure and Susan asked if there is a better word that would be more appropriate since there has only been 1 dam failure in Idaho and that was the Teton Dam. Kelsey pointed out that there isn't much about Canals in the profile. Rick informed the group that they were currently working on a damage assessment for the New York Canal. Rick stated there aren't a lot done in relation to canals and we are one of the first to do an ERP for canals. This could be something we may want to look into, and become the leader in canals and be the go to state for doing this. Susan said there is a Canal layer map from IDWR that can be added to the plan, but we need to look and see if there is any new information. Rick said he will get with Victoria Hoffm



to see if there are any city laws about canal encroachment. Susan said that Tom had stated they have a form for developers that speaks about encroachment. Kelsey asked but does that extend to the owner property once it has been purchased? There was some discussion about how California keeps their rivers that run down the middle of cities clean. Rick stated that Ada county has a weather forecast meeting that tells about potential floods and weather events, and asked if rest of state has anything like that, Susan said she had recently attended the ID Water Supply meeting and they handle that. Rick then stated that the Palisades reservoir is almost full. He then asked when the last time there was a tornado in Idaho. Susan said she believes it was in 2012 in Boise, but it only affected trees in a subdivision and are not usually severe in Idaho. She further stated that there are the occasional small ones along the snake river plain that twist irrigation pipes or throw a pump house, but most of this information would be listed under Severe Storms. Rick then asked the question how 1 inch of rain would effect a canal. He stated he needs to ask Brian but doesn't feel it would be significant it takes about 18 inches over 24 hours to affect a dam but it would affect a canal differently. Susan stated she doesn't see where it would affect structures. Rick said severe weather isn't even considered in relation to canals, only rain on snow events are even considered in relation, but feels weather should be considered. Rick further states that they only really look at run-off or landslides related from wildland fires. They have looked at scenarios of like a truck exploding and what impact canals and dams, but never how fast a dam can disappear, like in the 6 hours it took for the Teton dam. If a canal is full it would only take 1 hole, because beyond the initial structure is just soil, and he feels we probably need an emergency action plan and all they currently have is an emergency response plan. Rick feels Susan Marinelli (his regional counterpart) would have a worst case scenario. The group then took a look at the vulnerability assessment and Rick felt there wasn't much on impact, and added that there have been some studies done on how climate affects structures. Kelsey said that this is covered under secondary impact on hazard profile. Rick feels that run-off as well as its impact on dam/levees and canals needs to be discussed. Kelsey asked do we want to expand on this ourselves or send it back to Tetra Tech. Rick said we can expand but he feels we need to get with Brandon Hobbs and the US Army Corps of Engineers (USACE) for their response. Susan suggested have Rick get with Brian, Vicky and John Falk and review and updates, she also felt that getting an emergency action plan for canals would be a good new mitigation action in the plan. Kelsey then saved the notes and changes she made on the documents for Rick and his group to review. We then took a look at the mitigation strategy. Kelsey felt this document would be a good place to add information about laws and ordinances related to dams/levees/ and canals. The second sentence under the general mitigation approach is a bit large and needs something about canal flooding. NFIP doesn't cover canals so this would be a good place to discuss codes. The 1st sentence under general mitigation approaches talks about the Bureau of Reclamations authority to regulate encroachment, this statement needs to be strengthened and this would be a good place to add information about their emergency action plan. May also be a good place to mention the USACE levee registration program is in the National Levee Database that allows counties to add their own levee data.



Roundtable - Discuss Future Topics	There was some discussion about team Rubicon and Rick's involvement and the possible uses to assist with future projects, Susan suggested possibly adding it to Section 4 of the plan under programs and funding sources.
Discuss Next Meeting	Kelsey will send out a Doodle Poll to check availability for next meeting to beheld around February 20-23 rd .
Adjourn	

Flood/ Severe Storm



20 February 2018 - 1:00pm-3:00 pm

Gowen Field - Bldg. 600 IOEM Conf. Room-Upstairs

Host: Idaho Office of Emergency Management

Technical Working Group Meeting, State Hazard Mitigation Plan Update 2018

Attendees: Susan Cleverley, Brandon Hobbs, Mary Mott, Kelsey Brown, Lorrie Pahl, Lucille Webster, and

Troy Lindquist

Via Phone: Jeff Stidham, Brian Dale, and Maureen O'Shea

Review Flood Hazard Profile and Vulnerability Assessments. Discuss Mitigation Strategies.

Assign Edits.

Kelsey Brown began with Vulnerability Assessment for Flood. Susan quickly notices that the first bullet needs to be revised. Maureen said there are only 10-12 counties with digital maps, so panel agreed that just by adding "the" to show not all counties have Dfirms is a good way to clarify the statement. Brandon asked if other dams were listed because only sees references to Black Canyon and Lucky Peak Dams. Brandon feels there are other dams that should be mentioned such as Palisades, Millwood etc.., Jeff Stidham said any dam on the Snake river. Brandon stated the USACE has information on Federal dams. Susan asked Maureen to check table 1V. Riverine Flood Data Used for the 2018 plan update. Brandon stated that Bureau of Reclamation, USACE, and Northern Region will have more data on dams, Brandon feels there needs to be more information on dams that have a high hazard with populations below. It was suggested we turn this back over to Tetra Tech to complete. On page 3 there is an inundation map and the USACE doesn't feel this information should be in a public documents, so it is agreed to remove this map from the plan. The panel continued to review and on page 4 felt that paragraph put too much focus on Ada county and therefore it was agreed to remove the clause "the location of the State capital of Boise". There were a few more grammatical errors that were corrected. The Kelsey asked do we need to put more dam information. Brandon feels that we need to clarify why the two dams were chosen originally. Susan suggested maybe they used the two they felt had the greatest threat to state facilities. Brandon suggested if we don't include all dams at least include a paragraph with the number of dams and cost of damages. Corrected more grammar and wording errors on page 4. Paragraph on page 5 needs to be completely redone, Susan feels it could be simplified. Group then began to review of table 3V, Jeff said



we need to differentiate between flooding and dam failure. Brandon stated that need to revise the table so that it is in line with the overall summary of dam failure. Susan suggested having Tetra Tech sit in on the review to get better insight on why they chose certain data. Group then went back to paragraph on page 5 to state it will be summarized based on table 3V revisions. Table 2v needs to be based on state wide dams. There was some suggestions go get rid of table 3V all together and use table 2V after removing the two dam scenario and go more general with dam failure based on review of multiple dams. Susan suggested we contact John Falk to get more information on dam failure. Lorrie said this would provide a clearer picture. Brandon said there are thousands of dams but not all have critical failure. Keep table 4V just clarify it to give it more value. Page 18, 1st paragraph discusses canals and Brandon said debris is not the main cause of canal failure, so he suggested rewording the statement to make it more accurate. The panel then further stated canals can become a conduit and exacerbate flooding by transporting flood waters away from a river or flooding source to areas that may not have otherwise been affected. It is the group consensus that they remove all reference to Black Canyon and Lucky Peak dams and go with a generalized category of federal dams to give a more complete picture and get data that is more accurate on a state level. Jeff wanted to make sure it is mentioned somewhere that canals can cause floods, the panel felt this would probably best in the hazard profile. Branson feels table 5V doesn't provide accurate data to give a complete picture. Susan asked Maureen if she has anything to add about canals in relation to NFIP maps. Susan also stated we need to make sure we show the difference between FEMA and the USACE definition of canals. Maureen says they don't recognize it unless it protects a 1% event. Jeff said need to recognize canals are necessary infrastructure that could cause flooding. Panel feels we need to get more input from Tom Ritthaler and the Dam/levee/Canal Technical working group. Jeff and Brandon stated that floods can damage canals and canals cause floods needs to be addressed. Panel also noted that each figure and table in this section will need to be renumbered since panel feels some will need to be removed. The group moved to page 19, and Susan feels that the next to last sentence need to clarify between state and tribal. Table 6V, there was some discussion if the data was accurate, Susan suggested possibly removing the 1st column of this table, and Brandon suggested adding the word all to the 1st column to show it represents a total. Susan said we may want to check with ICRMP to see if they may want to mitigate some of these facilities since the value is so high in the 1% zone. Group also feels that notes located at the bottom of this chart need to be moved to the top to give a clearer picture of what the table shows. Susan asked what the acronym IMHRP stands for that is referenced on page 25. On that same page under Riverine Flood and Levee Failure they state that Kootenai Tribe and Madison county have the greatest percentage of area located within the SFHA, Susan asked Maureen if she felt this was correct and Maureen said that most tribes don't participate in NFIP so she isn't sure where they got this data. Maureen further stated that tribes are not mapped, Susan suggested panel remove references to tribe since we're not sure of accuracy of data. The group then reviewed the statement that Bonner county has the greatest levee area in the state based on FEMA's NFHU. Susan asked Brandon if he thought that the National Levee database would be a more reliable source to



reference, Brandon stated that they have lots of levees but most are not accredited so don't support in a 1% flood event. Jeff further stated that most levees don't provide protection, so it may be a good idea to add the comment "there are a large number of levees in Idaho not included due to the fact that they do not meet FEMA standards". Group moved on to page 27- Dam Failure, Brandon feels this is a good place to point out largest dams since data is available. Jeff said USACE takes state data so they probably shouldn't reference USACE as source of data or at least note that the data provided by USACE is from state inventory. Decided that we need to discuss more with John Falk. Again it was brought up that just referencing 2 dams does not provide sufficient information. Need to list more dams or at least the high risk dams. Brandon suggested getting the inundation maps from USACE and USBR to give to Becky to possibly create a more complete map. Table 9V either needs to be removed or list all federal dams to provide a fuller picture of the state. Need to have Tetra Tech use federal dams and add a comment that there are other dams but that only federal dams were used. On page 29 the numbers in the second half of the paragraph don't coincide with table 10V, need to rewrite this paragraph to fit with the table. Page 32 last 2 paragraphs need to include more comprehensive dam data. Delete table 12V and replace it with an overall view of Federal dam data. Page 36 is contradictory and needs to be re-written based on updated table using Federal dams. Group feels table that list state facilities and other table 12V need to be combined. Paragraph below this table needs to be corrected to clarify that the 9.9 million is for the entire state and not just Ada county. Susan suggested it would be easier if everything was together for example everything about dams was together and everything about canals was together and not spread out throughout. Lorrie agreed with this statement and feels it would make the plan easier to navigate and find specific data.

Determine Next Meeting

Kelsey Brown next meeting will be the big group meeting in March. Then we will have one more technical working group meeting in April. She then asked the group if they preferred beginning or end of the month. She further stated she will be doing one-on-one discussions with key subject matter experts in April and May. Group agreed that end of the month of April would be best. Kelsey will send out a doodle poll to set that up.

Adjourn

Meeting was adjourned Brandon agreed to review changes made by Jeff Stidham and get updated version back to Kelsey.

Flood Severe

Storm TWG 25 April 2018 - 10:00am-12:00 pm Gowen Field - Bldg. 600 IOEM

Host: Idaho Office of Emergency Management

Conference Dial-in Number:

(605) 468-8015

Participant Access Code: 925177#

For Webinar goto:

https://stateofidahoweblic.centurylinkccc.com/CenturylinkWeb/BHS

Meeting, State Hazard Mitigation Plan Update 2018



	Guests enter with Name and E-mail Address		
	Minutes		
Attendees:	Kelsey Brown, Susan Cleverley, Troy Lindquist, Mary Mott, Lucille Webster Via Phone: John Falk		
State Hazard Mitigation Plan Update Status: Individual Edits	Kelsey stated that Brandon Hobbs, Jeff Stidham, stated they will have their edits to her by the deadline of April 30 th . John Falk said he'd have his updates to her as well by the deadline. Troy Lindquist said he completed his edits this morning but has not sent them to Kelsey at this time but will do that soon. Susan provided and update on the dam inundation maps. Stating that Becky and Zack are working hard on the top ten dams and cutting out shape files and overlaying structures, they had to sign a non-disclosure agreement so will only provide Tetra Tech with the shape files for them to create report of the structures within the inundation zone. Kelsey said expecting to get that data back by the first or second week of May. Kelsey will then consolidate all the edits and create a final draft of the profile for final review.		
Review and Edit Mitigation Strategy for Flood and Severe Storms	Kelsey Brown, opened mitigation profile for Dam/Levee/Canal Failure for review. Susan noted that the statement "Historically, the greatest impact has been to the northern and north-central parts of the State, where communities are vulnerable to flooding from the many rivers, lakes, creeks, and canals in the area." That canals are not just an issue in Northern Idaho and so group decided to remove canals from the above statement. Susan then mentioned rain on snow events often cause river flooding so Kelsey will add a statement on rain on snow events being a cause of flooding. Adding statement that flooding caused by snow melt, rain, or rain on snow event. Susan also pointed out profile mentions flash flooding but doesn't have a lot on sheet flooding, and last year's floods were largely related to sheet flooding. John pointed out that even on flat ground flooding can occur when there is rapid snow melt or rain on snow events. Susan added that if the ground is frozen then the water has nowhere to go and can form lakes, this happened last year and the USACE came and pumped the water out. Under secondary hazards. Also under Mitigation Rationale Susan suggested the need for verification of statement "50 percent of all flash-flood fatalities are vehicle related, usually occurring when motorists attempt to drive through floodwaters." Troy said he can look into some statics to see if it is accurate, John suggested changing the statement to something more generic such as "up to or more than half of flash-flood fatalities are vehicle related". Susan mentioned fact that USACE is conducting a project to update the Levee database, Kelsey will add a blub from their pamphlet about this in this section of the plan. It was also stated that the last sentence under Dam/Canal/Levee Failure section is a bit too opinionated "Absent a comprehensive levee inventory and inspection program, any substantial mitigation of risk associated with levees/ levee systems is unlikely, and probably suggest changing it to "as more comprehensive levee		



was a good point and similarly with canals as well as issues with burrowing rodents and lack of maintenance. So decided to remove word design from following sentence, "Dam safety regulation of dam design and construction, although improving, remains imperfect, and the necessity for risk mitigation remains." However it was mentioned that the fact that maintenance and development need to be mentioned, so it was suggested to add a statement that points out some of the other factors that contribute to damage to these infrastructures systems such as: encroachment, burrowing rodents, and lack of maintenance. John felt if we get too specific the document could get quite lengthy because we would have to list all factors so it was suggested to just changing statement t "keeping people from flood plains" to possibly say damage may be mitigated by protecting life and property from flood waters through proper flood plain management. Kelsey pointed out fact that plan really doesn't mention flood control districts. It was then suggested by Susan to contact Mike Dimmick with Flood Control District 10 and Mark Zirschky from Pioneer Irrigation for a blurb on what is the function of irrigation districts, or looking at the verbiage of the recent Legislative grant providing grant funds to irrigation districts. Susan then asked Kelsey if she had received any updates on NFIP, Kelsey stated she hadn't but has made a note to contact Maureen for the requested updates. Table 3.3.1: Top Idaho Counties for Flood Insurance Policies, Susan said she sent the link to have this updated, we then discussed maps 3.3.V and 3.3.W and decided as a group if we have the table the maps would not be necessary. Kelsey will reach out to Maureen for updated repetitive loss information Table 3.3.K. It was suggested that Dam/Canal/Levee failure section be re-worded for better flow in some areas. Under Mapping/Analysis/Planning it was suggested Kelsey get with Robin Kiska and maybe show a list of risk map projects and edit this section for flow as well. John said as far as dams are concerned water management is important because release of water to protect integrity of dams can cause flooding downstream if there is already high water downstream. Kelsey felt this information is better under risk assessment and this section should focus more on mitigation. Susan mentioned releases are a form of a mitigation effort to protect dams and reduce flooding to a lesser extent. Susan pointed out that Boise flooded last year was result of releases but if it hadn't been released the results could have resulted in catastrophic flooding. John said construction of a flood control dam like Lucky Peak is a mitigation effort that does not prevent flooding but mitigates catastrophic flooding. It was suggested adding a statement under Dam/Levee/Canal Failure stating certain dams are constructed to mitigate catastrophic flooding but most release to prevent over topping which can cause some flooding downstream to a lesser extent.

Moved on to Severe Storms profile for review. Troy mentioned that he had added some comments in reference to lightning being second most deadly weather phenomena, said he had found some reports stating that it actually is 4th. Kelsey will review once she receives his edits. Kelsey then asked if Idaho has a lightning awareness week, Troy said yes and it coincides with National Lightning awareness week and is usually around last week of June. John mentioned that he had read something stating farmers and ranchers are most likely to be hit by lightning, but he was not sure and feels it would be good to verify the statement, so group agreed to edit statement to say "those engaged in outdoor recreation or work", to cover



everyone. Both John and Troy quickly googled lightning and Troy said it said that 60% of victims are engaged in outside recreational activity. John noted that report states lightning deaths hit a record low in 2017, group felt it was not relevant to this section and decided not to add that information, and focus more on mitigation. Troy said there is a lightning service website with statics and public service announcements www.weather.gov/safety/lightning. Kelsey will add link to website. Susan pointed out section makes it appear that there aren't programs and education related to lighting in Idaho when there are programs and things that need to be highlighted. Troy said there are lightning rods and grounding of structures to mitigate structural damage, monitoring systems to notify air traffic control if lightning is detected in vicinity, creation of fuel breaks to reduce fuels on lighting caused wildfires, monitoring of lightning in areas for potential mitigation efforts. He further stated as part of storm ready they have lightning education and weather spotter training to help with sporting events. There are efforts put in place that will cause complete evacuation of large sport facilities if lightning is detected to protect public safety. Troy mentioned another mitigation effort could be back-up generators for lightning caused power outages. We then moved on to Wind/Tornados – Troy said he found some additional references and updated statics for this section and Kelsey will integrate Troy's comments once she receives his edits. Susan will look up information on wind speed standard engineering, because after a wind related declaration structures must be built to the new standards. Under Information/Outreach & Public Education. National Weather service sends out high wind warning and advisories. ITD has wind advisory signs along high wind hazard transportation corridors, as well as reader boards for various hazard messages. Lakes and reservoir recreation areas susceptible to high winds receive wind advisories and warnings to protect those on the water. Red flag warnings by national weather service which are a combination of low humidity and high winds that increase fire risk. Susan mentioned highway closures due to blowing dusk in certain areas. John mentioned there have been several deaths related to accidents caused by dust storms. So it was suggested adding something about blowing dusk, highway closures, safety signs, living windbreaks, and agricultural practices (such as turning soil to reduce erosion from high winds).

Review Due Outs and Next Meeting

Kelsey will send out list of due outs, Troy will send his edits. It was decided that another TWG meeting was not necessary but that Kelsey will continue to collect edits and reach out to individuals on edits. The next meeting will be the Executive Committee meeting in May, and Lorrie will be sending out that meeting invite when she returns next week. Troy mentioned that he noticed there were a lot of redundancies in the document, Kelsey advised him to remove or add anything he feels will be most beneficial because each subject matter expert will have ownership in this document.

4 April 2018 - 10:00am-12:00 pm

Gowen Field - Bldg. 600 IOEM Conf. Room- Upstairs

Host: Idaho Office of Emergency Management



Haz/Mat Radiological Technical Working Group Meeting, State Hazard Mitigation Plan Update 2018

Minutes

Attendees

Mark Dietrich, Jeff Rylee, Lorrie Pahl, Mary Mott, Kelsey Brown, and Lucille Webster **Via Phone**: Dean Ehlert, Neil Flegel

Plan Update Review

Kelsey Brown explained that the highlighted paragraphs are updates from Tetra Tech and the base is from the 2013 plan update. We felt that Tetra Tech's analysis was a bit basic so we added the information from the 2013 plan. Mark felt the 2013 version was not correct and a lot of the data was from the internet and that their input was not used. Jeff asked who would be the target audience for the plan. Kelsey explained it is a public document. FEMA requires a plan update every 5 years. He then asked what has to be included in each chapter. Kelsey pointed out that each dark blue heading is a required category and it is located on the Navigation plane in EOPT. Jeff thinks that the HazMat chapter plays down the severity and does not give people a realistic view of the seriousness and number of hazardous materials around us daily. He said there are 3 main agencies that monitor Hazardous Materials and only 2 are mentioned in the plan.

D.O.T – Defines materials in transportation

EPA – looks at the environment

OSHA – monitors chemicals and the fact that people work with them.

1. Jeff thinks there should be a clear definition of each and states what each agency does. Mark says HazMat is not a simple subject and needs to have details to give a complete picture.

Review and Edit Hazardous Materials Hazard

It was pointed out that a statement on page 13 was completely inaccurate under Relationships to Other Hazards: "Hazardous material release events are generally a very small-scale event that would not influence or impact other hazards." A suggestion was made to remove the entire statement. Mark said there are facilities in Idaho that need to be mentioned. Jeff stated there are many sites that are not superfund sites and should be mentioned. Why focus on superfund sites? They are known and are currently being cleaned up. Mark said it would be better to add a paragraph stating there are superfund sites in Idaho. If we use the map do not base it on county location, just have a red dot for the superfund site. It gives a clearer picture and does not make the county look bad just because there is a site in the county. Jeff shared a story about how there was a highly



toxic substance spilled on Times Beach and how the government bought the entire town to clean it up. They said it cost more to remove the hazardous materials from homes than it did to clean up one of the most toxic chemicals known to man. It was agreed to add a statement under Relationship to Other Hazards, "HazMat is just a component of everyday life". Mark stated that he wants this document to be more useful and not just checking boxes. Jeff stated that the HazMat Plan is the only plan that is used on a daily basis. There is hazmat in your car including an explosive, so whenever there is a car accident hazmat is released. Under the FEMA Declaration section, they feel this is misleading because although there have not been any FEMA declarations there have been large HazMat events. Usually the responsible party pays so FEMA is not involved and EPA handles most incidents. Other disasters fall under FEMA declarations that have secondary effects of HazMat. Jeff has notes and may adjust this section. Jeff will also send Kelsey a list of businesses and chemicals. There are not any regulations requiring them to report. Government agencies do not report in Idaho. Kelsey said Section 1 needs to be re-worded. Jeff said Wayne would make comments on Tier 2. Figure 2. Tier II Facilities in Idaho, by County. Jeff also said the section needs comments on agriculture. In Transit HazMat, need to highlight the fact that almost all major highways and railroads run along a body of water. Mark volunteered to take lead on comments about In-transit section. Jeff offered to provide some stats. Mark will also send GIS map data to Becky to help her in creation of maps. The group feels Fig. 4 needs to highlight the rivers more. Fig. 5 needs a paragraph; the map does not include all the individual distribution lines or propane. Kelsey re-iterated that each dark blue heading needs to be discussed. The group thinks the Future Occurrences section needs to be re-worded, because current format appears to be misleading. The Climate Change Section is incorrect because change affects hazmat. Jeff stated that we use so many chemicals most people do not even pay attention. Even though we do not have an increase in facilities, we do have a large population group which leads to increased transit. Mark pointed out the increase of crude oil transit by rail and how current infrastructure design is not for this type of transit. He thinks that counties would like to know about derailments and pipeline leaks. Jeff said they keep stats. Mark agreed to add some language to the Transportation section about it. Mark says counties do not have the capability to respond to a large derailment of crude. Kelsey suggested adding it under the vulnerability assessment section of the hazard. Jeff said that this is full of inaccuracies. There are spills all the time. They are usually small but they do occur. Mark says they need to review the entire section more thoroughly since they were originally confused about the audience for this document and felt that their comments were not used in the previous plan update. Mark also mentioned they have two EPA inspectors who he thinks could add some additional insight and should review this section as well. Mark will send their contact information to Kelsey. She thinks it would work best under the General Mitigation Approaches section of the hazard. There is need to reword section due to some inaccuracies in the data. Mark and his group will work on adding some comments and Jeff will review and make additional comments after HazMat week, around first part of May. Kelsey will check with EOPT coordinator to make sure everyone in the group has access.

Review and Edit Radiological Hazard

Then began review of Radiological Section. Neil stated that the information bounces around and is full of repetition and incorrect information. It will be the 1st part of May before he can really get into the data as well. Neil pointed out on page 7; last sentence of top paragraph, this data is completely incorrect. He decided to do a quick reference check to see who SOEK's is and found this exact quote on their website. He discovered it was taken from some survivalist bloggers site, so there is not credibility to this statement at all. Mark stated there are only a few sites in Idaho that are of concern for radiological events and that this chapter needs to focus on those. Neil stated maybe a paragraph or two to explain local hazards, but suggests the data have a complete review since it only took him 5 minutes to discover that some of the data was invalid. He suggested it would be best if he reviewed the data and got comments from others instead of trying to go over each section during this meeting. He further stated that there is real time monitoring taking place by the state, an Emergency Action Plan, and the EOC and other agencies that provide support and equipment. They are not mentioned in this document. The group will review the document and make additions and corrections as needed. Lorrie reviewed the Mitigation Action Implementation worksheet. She explained that there are limited mitigation grant funds. In order for it to qualify for a mitigation grant, a project must be identified in the plan. She provided forms for ideas of new projects that should go into the plan. There were a few ideas thrown out for example, Mark suggested a program for household waste collection. Jeff suggested going to schools and inspecting chemicals since they often are not maintained.

Review Due Outs and Next Meeting

HazMat:

Mark to review HazMat section and provide comments to Jeff

Mark to look at updated/better maps for HazMat section and add in EPA coordinator info

Jeff to review HazMat and revise sections that need it (after HazMat week – end of April)

Radiological:

Mark, Dean, and Neil to review the entire section and provide updated edits. Neil to provide edits in early May.

I've asked for each of you to get EOPT access, here is the link for when you receive your user name and password (from Maija Reed): <u>EOPT Link</u>. If you prefer to use the attached, most updated documents rather than the EOPT, I'll gladly accept revisions via email. Please use track changes so that I can incorporate the edits.



Adjourn	There will be no more group meeting specifically for the plan update, other than the Mar 15, 2018 Executive Committee Meeting.
Seismic Technical Working Group	January 23, 2018 - 12:00-2:00 4040 Guard St. Building 600, Boise IOEM Conference Room (upstairs)
Mary Mott	ty, Zach Lifton, Richard Gummersall, Kelsey Brown, Susan Cleverley, Lucille Webster, and er, Beki McElvain, and Heidi Tremayne
Review NEHRP Project	Susan Cleverley began explaining that last year we received funding via FEMA and WSSPC to help fund billboards, banners, other publications, and the Wasatch Wobble exercise. These billboards and flyers helped get the word out, and this year we have EERI with Beki and Heidi on the phone to help create a clearinghouse and put together a flyer similar to Utah's Wasatch project.
Earthquake Update	Zach Lifton stated that the Soda Springs earthquake activity has tapered off significantly, in the last month. In the last few months nothing more over a 2.5. Zach displayed a graph showing the Soda Springs area activity and that has been attached to these minutes. USGS latest earthquake activity in Idaho only shows other activity in Challis area.
Upcoming Earthquake Exercise Discussion	Susan Cleverley says as part of the plan update Flood, Earthquake, and Wildfire consequence analysis need to be done. In 2019 there will be a full scale earthquake exercise that will include INL and military. IOEM mitigation has been tasked with coming up with the exercise scenario and would like the support of the Seismic Technical Working group to assist and would like to have it somewhere in SE Idaho. Zach pulled out a fault map to see the faults located in that area. Lee stated that Suzette Payne, INL, has several monitors out and would be an excellent source on which faults have potential to cause significant damage. Susan mentioned the area has lots of bedrock. Lee said there is some tilting in that area but feels Suzette would be best person to give advice on it. Susan stated she would like the group to come up with the scenario and then fine tune it with Suzette. Lee stated there isn't a way to map all the faults beneath the plain, so even though a fault isn't seen on the map doesn't mean it's not possible. It is feasible that something could occur under the plain. Susan stated that the plan mentions that there are lots of un-mapped faults. Zach clarified that they want to include INL in the scenario and began looking at faults near that area. He said there are 3 main faults that appear to dead end at border of the INL, but could continue. Zach feels that Beaver Head and Lemhi faults would be plausible for exercise. Zach offered to do some more research. Lee spoke about collaborating. Susan informed them that we have a short timeline and asked if a week was plausible to have some information. Zach felt he could have something in a week.



Heidi asked if there was a date set for the exercise at this time Susan said not yet but we are getting all the information together. Susan asked if there were any newer maps, Zach said not at this time but they are working on some. That they are using LiDAR in some areas to gather more information. Lee stated he knows of several faults that aren't mapped and Zach said he would love to get with him about those. Heidi asked about newest maps and Zach advised her to use USGS data because it would be the most current. Lee stated that Utah's Wasatch fault extends into Idaho, Heidi stated she had the Wasatch forecast flyer for Utah that clearly has the faults and wanted to know if Idaho has anything like that. Lee says Idaho has a much more complicated fault system and it would be difficult to create something like that. Zach further stated there are several faults in Idaho that don't have any data on them. Lee stated that Idaho doesn't receive as many federal dollars as some other areas that Idaho is high incident low risk, meaning that the damage would be minimal but the odds are high it will occur. Heidi said it sounds like there needs to be a separate meeting to discuss how we want to display faults in Idaho and what we like about the Utah Wasatch flyer and how to differentiate in Idaho. Lee suggest "Putting roots down", on IGS website as a source. He further stated that is was modeled after Utah's and hasn't been updated since 2011. Zach stated Bill Philips was the person who helped created Idaho's but that he will be retiring soon, Beki will review and make comments and get with Susan to schedule another meeting to discuss. Heidi wanted to know how the group sees its role with EERI.. Susan said that she wants to involve more people and will reach out again and see if she can get more involvement. Lee asked about a timeline, Heidi said funding lasts until July but she would like to be done by end of May. Susan suggested we do a couple of calls and some back and forth emails to complete project. Heidi said that sounds good but may want a couple of small group meetings. Lee asked for clarification on the products. Susan stated a Clearinghouse Plan and a fact sheet similar to Utah's Wasatch one. Susan wants to use the clearinghouse for the 2019 exercise. Lee asked what type of technical information is needed. Heidi asked who the target audience is and what critical parts are needed? She further stated they can gather some technical information, but wants to know what baseline data we want displayed. Susan said that the original plan was to just tag onto the data done for Utah's Wasatch fault up into Idaho. Lee mentioned that it would be good to work with some groups from Utah, and that there is a conference there in February that he and Zach are both attending that would be a good place to start. Susan has a point of contact in Utah Christopher Duross who has agreed to assist us. Lee suggested we contact Kris Pankow from the University of Utah, she is very active in understanding seismic activity in this region. He also feels Ivan Wong who spearheaded the Wasatch project would be very helpful, and that Mr. Wong will be in attendance at the February meeting. Heidi and Beki know Ivan and will lay the ground work for Lee to speak with him at the conference. Susan also asked Richard that since he has lots of insight on avalanche, feels free to add to the conversation.

EQ Clearinghouse Plan – EERI Beki/Heidi sent over an email with a word, pdf, and PowerPoint for our review. Susan asked them to let us know which slide so we could follow along. Heidi stated the

Appendix G

Presentation & Discussion

slides are just a general overview on launching a clearinghouse. Slide 1 was just cover page

Slide 2 Explains what EERI is

Slide 3 Explains EERI's mission – this is achieved by involving a variety of sources and prospective. Heidi when on to explain they have a small staff of only 7 people so they rely heavily on the efforts of volunteers and other groups.

Slide 4 Addresses the Clearinghouse Purpose to provide a place to coordinate activities. Added that this can be done physically and virtually. Heidi stated that in recent years they have been creating virtual clearinghouses for major US events.

Slide 5 – EERI's role which is to Coordinate, Collect, and Disseminate. The image on this slide is an example of how partnerships are essential.

Slide 6- Coordinate field investigations – Sign-in/out, share itineraries, identify gaps in coverage, and connect individuals and teams. This allows you to group those with similar focus and share data.

Slide 7 Show how to collect, share and archive data, and has a map overlay of findings. Heidi stated they recently launched a new virtual clearinghouse.

Slide 8 Examines how to disseminate findings. This allows information to be shared. She gave the example of a group of engineers discovered that the debris area wasn't large enough so they could advise the city to increase the radius and avoid injuries from falling debris.

Slide 9 Discusses how EERI helps to work with other partners to help improve information flow between reconnaissance and emergency response and other national partners.

Susan pointed out how easily Idaho could be overwhelmed in a major event and feels the clearinghouse would be beneficial. Heidi suggested having triggers for the clearinghouse to gauge the size of the event to determine the response. Having a clearinghouse plan helps things go more smoothly. EERI requires State support, so they need to know points of contact

Slide 10 Improving Coordination with emergency response- what protocols can be established, what information can be collected, and what is the best form of communication.

Slide 11 Provides link to California Clearinghouse website and more information on the South Napa Earthquake response. Both websites are maintained by EERI.

Susan stated that people were already in place when the Soda Springs earthquake before she even had knowledge of it, she feels this will be the case before a clearinghouse plan can be set up. Heidi said they had a unit set up within 3 hours of the Napa incident. Zach said that the USGS and University of Utah coordinated with Soda Springs but it would be nice to have a localized plan. Susan said the EOC wasn't activated but the Emergency Manager in the area provided information, but feels this plan will give more information. Susan thanked Heidi and Beki for the presentation and advised that a doodle poll will be sent out to set up a new meeting. Heidi said having a clearinghouse plan meeting before February meeting in Utah and one to review fact sheet after would be beneficial. She also asked that everyone review the



California documents and Susan advised everyone to email her any comments or suggestions after reviewing the documents. Group then pulled up Earthquake forecast for Wasatch Front Region of Intermountain West. Lee says map is a good idea but we don't have probability forecast for Idaho so suggest using color code from USGS map, and using a different set up matrix. Page 2 Lee and Zach feel they can create a similar map for Idaho using USGS tools. Susan asked if Lee and Zach and provide the maps or will EERI do this, Heidi said they have some technical support and can but it would be helpful if we could provide the maps. Heidi asked who the audience is. Susan said that Utah's was formatted for general public and that's how we want ours but wants it so that it is useful to the average citizen as well as a planner. Lee volunteered himself and Zach to get together and put this data together. There was some discussion on the geospatial area. Susan stated that the state is too large so we only want to include Southeastern Idaho and Lee suggested they include NE Idaho to Yellowstone. Zach feels there is enough data to complete this. Heidi said she can make whatever format work. Susan felt Borah peak may be a good place for the scenario. Lee and Zach said tools make it simple enough to complete. Heidi said Beki will touch base to set up follow-up calls. Some action items she mentioned were to reach out to Ivan Wong and make introductions before February meeting.

SHMP Edits

State Planner Kelsey Brown asked if everyone has access to EOPT. Zach stated when he attempted to log in, he got a request to state why he needed access. He responded but hasn't heard back. Kelsey will follow-up. She also discovered there was an issue with Richard's email and that he had corrected it on our sign-in sheet and Kelsey will resend him the information. Group will review Avalanche portion first. Kelsey demonstrated how to log in and then how to check out a document and how to check it back in. She advised when you check it back in there is a comment box. Please note what type of changes you made here. She then logged back in and demonstrated how to make changes to a document after you check it out. She went on to explain there is a hazard profile, vulnerability assessment and a mitigation strategy for each hazard that need to be reviewed and updated. Lee asked when the plan be released for public review and comment and suggested some groups on BSU's campus who could add some insight. Kelsey asked Lee for contact information for each of those groups and he will get her a list of emails. Zach asked for a timeline on revisions. Kelsey responded with we need all edits back by end of March, Susan stated to get as much as you can done by the next meeting.

Susan then asked Kelsey to talk about her public outreach efforts. She stated she had just attended a Safety fair and had given out several QR scan code surveys to be completed online. The PIER group will add the link to the survey on their social media platforms. Zach said he will add it to their website as well. Kelsey then concluded and advised group to contact her if they have any questions or issues.

Susan asked Richard for a summary on avalanches. He reported there have been 3 fatalities in the State so far this year, that current snow pack is only at 60%, that less snow is more hazardous, because the snow isn't as compact and sturdy and more likely to shift. Lee asked is there a human caused element to the plan because there is an impact related to population growth and other elements. Susan said we need to



keep track of this data. Richard said they currently only track fatalities, because many avalanches occur that they aren't even aware of because of the rural area. Lee spoke of some research they have been doing tracking avalanches and traffic for ITD remotely.

Susan then circled back to the Earthquake scenario and asked for suggestions on best time to have it. Lee suggested spring because it's the worst time for floods and other natural disaster in the area. Susan suggested winter because of the snow and ice. Zach asked if it would be better in the middle of the night or during the work day. Lee says people are less prepared for disasters at home, however most businesses prepare for them. Susan suggested maybe something that would affect transportation since INL busses their employees. Lee said one issue is Idaho's faults are not near any heavily populated areas and no major roads cross any faults as they all run parallel, there isn't any major infrastructure to be effected. Zach said northern Idaho has some rail systems that could be impacted in Sandpoint. There was mention of Craters of the Moon and how it erupted 2000 years ago and could be due to erupt again and that possibly could trigger some seismic activity. There was some discussion of how realistic we want to keep the scenario. Lee says Sawtooth fault would have the largest economic impact in Idaho because of its effect on Sun Valley. Boulder Front is a long fault with potential for a 7.0 or more magnitude earthquake, which could be connected to the Sawtooth fault. Lee says there is a theory that one fault can trigger another fault if it's loaded and ready. Susan said since they want to include the military and INL that Lemhi and Beaver Tail faults are the most likely. She also emphasized that we are only creating the scenario so we need to have magnitude of earthquake, location fault, and time of day, depth and season. Lee suggested he and Lee put together the maps for EERI factsheet then work on the faults for the scenario since the data will come from the same sources. Susan asked could this be done by end of next week. Susan will look into scenario facts and see what all is needed. Lee suggested looking to see if Utah or Nevada have conducted similar scenarios for ideas. Zach said that USGS has earthquake scenarios that have been used to create shake maps, but don't have a lot for Idaho. Lee suggested we come up with a scenario and see if Mark Peterson could run the scenario to generate a shake map. Lee and Zach will coordinate schedules.

Summary of task:

Lee and Zach will get together and create maps for fact sheet and review faults for the earthquake scenario

Lee, Zach, Richard, and Jerry will access EOPT and review the documents and make any changes, corrections or additions necessary.

Lee will send Kelsey a list of contact emails for the BSU consortiums

Heidi and Beki will reach out to Ivan and prepare him to meet with Lee at the February conference in Utah

Beki will reach out to Susan and schedule follow-up meeting

Lorrie will send out a doodle poll to set up next meeting

Susan will gather more information on what is need for the Earthquake Scenario

Seismic

Technical

11 April 2018 - 10:00am-12:00 pm

Gowen Field - Bldg. 600 IOEM Conf. Room-Upstairs

Host: Idaho Office of Emergency Management Webinar link: https://share.dhs.gov/rz97znfb1eid/

Conference Dial-in Number:

(605) 468-8015

Participant Access Code: 185275#

Working Group Meeting, State **Hazard Mitigation** Plan Update 2018

Meeting Minutes

Attendees: Susan Cleverley, Kelsey Brown, Mary Mott, Lucille Webster, and Jay Baker

Via Phone: Beki McElvain and Zach Lifton

EERI Presentation

Beki stated that she wants to get clarification on what is wanted from the clearinghouse. She stated that their goal was to coordinate data collection after an event. If this is correct, it will require some assistance from multiple agencies. On page 4 of the clearinghouse plan draft, Clearinghouse Management Team is based on California's model and recommends having IGS as chair and IOEM as co-chair. Some other partners within the state such as USGS and others each would have a point person for each team to make decisions on the clearinghouse plan during and after an event and during peace time planning exercises to keep the clearinghouse running and etc. Beki would like a good list of organizations to use. Susan said IGS is sort of lead right now for seismic activity, Susan deferred to Zach. Zach said it sounds good but he needs to know about the type of commitment would need to be allocated for this type of project because he may have to talk to their director before accepting that responsibility to make sure there isn't any paperwork that will need to be completed. He added that IGS does have some GIS data and staff that could be useful and add value for this project. He said that the current manager of that GIS group is retiring next month and they are in process of hiring his replacement so he will have to wait to see how the new manager wants to facilitate this. Zach said he would be happy to do it if it works within his current responsibilities. Susan stated she thinks it would help with his current responsibilities. Susan said that for other team players she was thinking Lee Liberty with BSU, the seismic TWG members and ITD since they have been talking about using Shake cast. She then asked Zachif he had any suggestions for people he has worked with. Zach agrees Lee and some people from USGS, and possibly some people from neighboring states, but thinks that maybe that would be if it were near the border. Susan said we do rely on them for most seismic events. Beki said that is good to know and another question on bottom of page 3 into 4 they talk about physical clearinghouse and a virtual clearinghouse, so since it was mentioned that you do have some GIS capabilities, would you be looking to manage a virtual clearinghouse. Zach said he is not sure. He will need to know who would manage it. He has some GIS knowledge but if it gets to be a lot of data then he would have to see if the GIS team could help. Susan suggested once a replacement for the GIS manager is



hired we can we can get them together with our GIS staff to see who would do that. Our GIS person is usually very busy during an event with the EOC but we would have to see about maybe bringing on someone to help. Zach says their GIS person usually is not any more busy during and event than normally. They are currently updating their website and he is aware that they will rely heavily on maps so they would be busy with the update. He will talk to the folks working on it to see if they could set aside a little space that is not active or publicly available and set it up so in case of an event it could easily be set up to run data. Susan said the IOEM GIS person has a GIS mapping tool accessible to WEBEOC called BEACON that could be linked. It would be a good place to connect. Zach said that he would defer that to the replacement. Susan said yes we want some virtual presence but mostly need physical because people naturally come. Beki agreed and added that having a virtual clearinghouse allows for those outside who want to have access to earthquake data would be able to log in and view. Beki said she would be happy to send their instructions for setting it up, it is something we normally don't share with public but it will help give you an idea of type of data they use and how the process is set up. Zach said that would be helpful. Zach said there are some groups that use existing social media platforms like Google Plus to share data. Beki asked, name some groups you feel would be good to reach out to and set up an agreement with. Zach stated the following: Montana Geological Survey, Utah Geologic Survey and University of Utah, Wyoming Geologic Survey, Nevada Geologic Survey, Dogami in Oregon, and Washington Geologic Survey. Beki felt it was a good list. Zach also mentioned that in a recent meeting there was discussion of maybe getting an agreement among neighboring states allowing them access during a seismic event. Zach said he would follow up on that and get back with Beki. On the bottom of page four, she asked if the list is a good list. Zach suggested possibly adding Idaho State University because it is in southeast Idaho and there would be a presence there and possibly INL (Idaho National Laboratory). Beki said she would add those but keep thinking about others. Beki stated that Susan suggested having this technical working group edit the document and asked Zach if he would be interested in doing it. He said yes and apologized for not having looked it over prior to this meeting but stated he would review the document. She said it will help clear up any questions such as what the role requirements would be for IGS and pointed out on page 7 some of those roles. He asked what is the usual lifespan these are activated. Beki stated that their last one was Napa and it was up in less than 24hours and open about a week, but usually last 3 or 4 days. Beki then asked if Susan wants to set up a sub-committee to edit it or just Beki, Susan and Zach. Zach feels maybe Lee should be added. Beki will send it out in Google format to Zach and Susan to begin edits. As far as EERI's role, they are happy to go through it and while going through the document to think about what they feel EERI's role should be. Beki then asked if they want to go through it more now or just have the group review and get back to her with any questions. The group felt it would be more helpful if they went through it themselves and then ask questions. Beki then began looking at the Fact Sheet and said it's just a mock up and wants to know if is it accurate, is it technically enough, is it not too technical, and just brief spots on context of it. It is mostly data from the risk document Susan sent her using data from the Mountain West and Central area because that was what is highlighted in the maps she was provided. Zach asked if the maps are sufficient and if



she needed any more data. Beki said it looks like there is a lot of Utah in the maps and wants to make sure she included everything we want. She also stated that Susan mentioned a few areas such as the 2016 Sandpoint, 2015 Challis, 2014 Driggs and 2001 Spokane Swarms. She asked if they are in the same area or if maybe another map is needed. Zach said Spokane and Sandpoint are up north, Driggs is near Wyoming so Driggs and Soda Springs may show up on the same map. She also asked since Susan mentioned swarms do we want to talk about those as well. Zach said he feels it would be relevant and she asked him to see if maybe we can get a map with some relevant swarms. Zach mentioned that in the Putting Down Roots presentation it shows fault zones. Zach says he has the original Adobe files. He is not sure if it is in GIS but will see what he has and will get those to Beki. Beki said that in acknowledgments she called the group the Idaho Seismic Technical Working Group. She asked if there is an acronym or an official name and how the group would like to be referenced. Group felt that was a question for Susan. Kelsey said we are an official group but as far as the 2018 plan update, she was sure that would work but will work with Susan on it. Beki will send the drafts out. Group felt it was going in the right direction. Beki asked how many people are in the Seismic working group, there are 15 on the sign in sheet. Kelsey asked Beki for a small blurb for Mitigation Plan on what the Clearinghouse is. Beki said she will get that too her no later than April 30th if not today. Susan returned and said that name Idaho Seismic Technical Working Group is an appropriate name for the group. Also advised Susan the group suggested adding a section on swarms and another map showing them. Susan said the Cascade swarm was recent but not as significant as the Challis swarm. Beki suggested she and Zach mention something about significant swarms. Zach said instead of a dot could use blobs to show areas where swarms occurred and then a brief paragraph about what swarms are. Zach also stated he noticed the document mentioned seismic zones and he can include them on a map. Susan stated that there has been recent earthquake activity in Sandpoint. Beki said we could mention the most recent, Soda Springs. Zach said Challis is also active. Beki said she would mention they are most active. She wants to keep it to 1 page front and back. She verified that she will send it in Google Docs to Susan, Lee, and Zach for editing and that Susan would be interested in participating. Susan is interested in adding in input. Beki then asked if there anyone else Susan would like added to email. Susan stated that she would like to re-engage Sarah McClellan. Beki will include Sarah in the email. Susan will call Sarah and try to get her re-engaged. Bekithen reviewed her assignment to send Kelsey a blurb on the Clearinghouse for the plan update, send Google doc to Susan, Zach, Lee, and Sarah for edits. Zach reminded her to send a copy of tutorial on how to set up the virtual clearinghouse.

NEHRP 2018/ WSSPC

Susan explained that IOEM applied for 2018 NEHRP funding through WSPPC to exercise the clearinghouse. The funds would be used to simulate a realistic event, setup a physical clearing house, provide travel expense assistance for participants from surrounding states, and building inspectors who have gone through A220 Rapid Visual Screening training to be able to go out into the field and then provide feedback. WSPPC has reached out to Susan for more information. Susan asked if Zach will be attending the Earthquake conference at the end of the month. He said no, has reach out to Rich Kellar and asked if there is a way to call in during the meeting. He will try to



	participate remotely. Susan then asked if he assigned someone to give his proxy vote. She not offered to vote for him. He accepted. She asked if he would let her know how he wants to vote. She informed him that the vote would be on the 4 policies. He will review them and send her an email with his votes.
State Hazard Mitigation Plan Update Review and Timeline	Kelsey Brown advised that updates are on track and final drafts should be complete by June.
Review and Edit Mitigation Strategy for Earthquake, Volcanoes, Landslides, Avalanche	Kelsey Brown advised that Rich has gotten back to her on Avalanche and that he says everything looks good there. She has received Zach's notes on Earthquake and have incorporated them. Zach stated he had problems accessing the landslide profile but has uploaded his edits to drop box. He feels it would be good to add something on the Boise Foothills issue. He said it addressed the panhandle and issues there and feels since there is so much development in the foothills its worth further explanation. He stated that he really did not add any comments, just general notes and he is willing to work with Kelsey on write-ups. Susan mentioned in the Background documents folder there is a story about a small mining town in Roosevelt that had a landslide that created a lake and it's now a tourist attraction where people can scuba dive and swim through the old saloon and other buildings. She thinks it would be an interesting story to add to the plan. Zach said he did not see anything that needed to be added to Volcanic section and that it is not a huge thing in Idaho. Susan suggested we reach out to Lee because she recalls him mentioning someone at BSU who has done a study on volcanos and maybe we could get contact information, have the person look at the final draft, and provide some additional insight. Zach said he knows there are several people there. One in particular is Brittany Brand. Kelsey said she would reach out to Lee about that. Kelsey moved to Mitigation Strategies and stated that these are from 2013 and she would like group to review them and see if anything, that needs to be updated or new that needs to be captured. She also mentioned that she received some action items from Bill. Susan suggested we pick Lorrie Pahls brain on to see if she has any ideas from the volcanic meeting she recently attended in Washington. Zach mentioned they are part of the Yellowstone Volcano Observatory, which is run by USGS and University of Utah. It is a consortium of agencies that meet to keep abreast of what is going on. Susan



program and Susan said teachers seemed to be happy with it. It was a state funded project that we may need to present to management in a better format to see if there is possible funding. Zach also mentioned a new funding source. Kelsey will re-word it that it was done in past and we are always seeking funding sources to do it in the future. Under regulatory, Susan pointed out that some counties have decided not to adopt the new regulatory codes that the state has recently adopted. Susan feels this is problematic and says there needs to be some outreach to determine why people are opting not to adopt the codes. The State adopted 2015 building codes. It is up to individual counties to adopt it; Susan feels Boise Building Department would be best to provide information on it. Susan said since Bill Hatch retired we have not really had any engagement. Kelsey has reached out to Mike Munger and Karen Frew. Susan suggested we do a face to face with them and let them know of some of the previous working relationships we have had with them, such as providing training for their inspectors. Susan suggested we could add the 2018 WSSPC policies that will be voted on at the upcoming conference. Susan will provide them to Kelsey after the conference. Kelsey asked if there are any additional comments. Zach stated he added some to the documents. Under landslide under regulatory that Boise does have some ordinances for building in the foothills, it is not statewide but it is the only regulation we know of. Susan questioned the statement about states right to step in if needed, unless it was added by ITD. Since most ordinances are at local level, Kelsey felt it would be good to add information on Boise foothill ordinance as an example so other counties can see and maybe give them some ideas. Susan also stated that Harrison had applied for funding to help mitigate some landslide hazards along with ITD to protect some residents. Zach asked if there is a list of local earthquake ordinances in the state. Susan said she was not sure if there is but feels it would be a good mitigation action. Zach said he would be interested in something like that, and Susan feels it would be good for counties to look at as they consider ordinances. Zach stated that they have recently applied for some research funding from ITD, to compile a list of landslide zones. Susan suggested we look into funding opportunities with ITD. Zach asked if there has been mention of creating an inventory of structures. How about a hazard inventory? Susan responded that Bill had been working on something similar. Zach will write up a blurb for Kelsey on ITD funding and send it to Kelsey. Zach also mentioned that he has added some comments to landslide profile. Kelsey will review those as well and reach out to Zach if she has any questions or a need for additional assistance.

Looked at action items sent over by Bill. After reviewing them, Zach feels they are good items. He suggested adding something about Landslide inventory they are currently seeking funds for, also updating the fault database, the last update was in 2003. We now have additional data and LiDAR. In the past, this data was updated in the USGS database but the person who use to do it has retired. USGS will not continue updating it unless additional funds become available. That leaves it up to the states to keep it updated. Kelsey agreed it would be an excellent item to add to the plan, emphasizing the fact that projects must be listed in plan in order to apply for mitigation grant funds. Kelsey will add it to the action section and Zach will review it to makes sure she covers everything he wants. She will then add his other comments and send it back to him for final review. It was agreed that we would not have any



	additional technical working group meeting. The next large group meeting will be in May somewhere between 14-16 th . Susan asked Jay Baker to share his experience with the seismic event in Apple, Idaho. Jay said there was a 4.2 earthquake and that his home was about 9 air miles from the epic center and his home rattled. Zach asked if it was part of the Sandpoint swarm. Jay felt it probably was. It was interesting how far away it was felt. Zach said he would check to see if there were other events that occurred around that time. He will send map to Beki. Jay said a couple more near Clark Fort and they were probably from that same swarm. Activity form the swarm can be found all the way to Montana.
USGS Earthquake Hazard Research Proposal Grants for 2019	We discussed the upcoming USGS Earthquake Hazard Research Grant and Zach stated that they are interested in putting a project in for this funding. They have a project for fault mapping and the paleo seismic trenches. They have a process that has to approve it first.
Review Due Outs and Next Meeting	Here are the mitigation follow up items from Seismic TWG meeting. A deadline if you need one is April 30, 2018.
	 Susan will provide an update from the 2018 WSSPC conference Beki will send a blurb on Clearinghouses as they pertain to Mitigation Zach will send a paragraph on the Yellowstone Volcano Observatory and the monitoring and research they are doing Zach will send a blurb on updating the State fault database and seeking funding opportunities for that Zach will send a blurb on the project/funding application to complete a statewide landslide survey through ITD Kelsey will look into the 2015 building codes and counties that have not adopted – and add a blurb into the earthquake section about that Kelsey will contact Lee Liberty for assistance in getting a volcanic subject matter expert to help in reviewing the volcanic eruption hazard Kelsey will make sure the Sandpoint swarm gets added into the earthquake events list Kelsey will add the merits of having a list of earthquake ordnances at the state level into the mitigation strategy Kelsey will research Boise Foothills development ordnance for landslide mitigation strategy Kelsey will compile all of the mitigation action items from the meeting that were new, and send them out for review
Wildfire – Drought – Lightning Technical Working Group	January 11, 2018 10:00am-12:00am 4040 Guard St. Building 600, Boise IOEM Conference Room (upstairs)

Appendix G

Attendees: Tyre Holfeltz, Liz Cresto, David Hoekema, Susan Cleverley, Kelsey Brown, Mary Mott, Mallory Wilson, Maija Reed, and Lorrie Pahl

Continue Discussion of Hazard Profiles from Contractor

After introductions Susan asked if Kelsey explained a little about what she has been doing. She stated that she went into system and review everything that Tetra Tech has been doing, and separated out profiles and vulnerability assessments, she also notice that they did not do which was include a copy of the mitigation strategy that was located at the end of the section and created a separate file of those pulled directly from the 2013 plan. So now there are 3 parts to each hazard. Tyre asked if we need to discuss mitigation strategies, it was agreed not during this meeting but next month, and that he will be in area twice next month. So he will email those date to her, then Lorrie asked that he send email to mitigation email instead of to one specific person since Kelsey will be in charge of that and want to make sure everyone is on the same page.

Lorrie stated that the last meeting the technical work group discussed drought and that this meeting will be use to focus mostly on wildfire. One first page Tyre said second sentence was a bit strange to him, Kelsey pulled up newest copy from H-drive because she didn't have access to EOPT, and that she will update EOPT as soon as she gets a chance. She then explained that the copy sent out in email was the newest version. Tyre has made a lot of changes and/or comments. Tyre says some of the wording was incomplete or didn't combine. Gave some examples and ask if possible to get definition of fuel expanded because it is any combustible material. The sequential sentence doesn't flow with beginning, seem to be distance from what is fuel, did a good job capturing natural but wildfire in not just a natural occurrence. Susan suggested possibly re-wording it to state fuel is any combustible material in the right environment and conditions can cause a fire. Susan said it appears they were trying to make is seem more scientific but not necessary. Tyre says that not all the facts are accurate. Mallory asked is it okay that they used the old plan as a reference source, it was agreed that it was okay not to have to repeat all the references.

Mallory says it is a good definition of fire but not how wildfire is a hazard. That she feels that a lot of the information is just fluff and could be condensed and Tyre stated having it more as to how fire is in Idaho. Susan said that each hazard usually has a definition of what the hazard is and then how it affects Idaho. But Susan said she was open for simplification but need to still provide detail. Mallory and Tyre feel that second paragraph is not necessary, Tyre said he will get the state fire guide and possibly borrow some data from that because it clearly states how fire affects Idaho.

Tyre says 3rd paragraph not sure where it came from but the data has been updated. That if they keep the paragraph it needs to be fact checked. Tyre also pointed out that fire brands and embers are the same thing but are just back to back several times. Says 1st paragraph of topography section is hard to read. Susan suggested listing type of events and which is most hazardous, needs to be quantified. Susan asked if group agrees with 4 types of fires, and consensus is yes but could use a bit of re-wording, Susan suggested combining first 2 bullets, Ground fire and surface fire are same thing but sub-terrain fires are completely different, and you can leave ladder fires off because once a fire leaves the ground it's a crown, maybe move ladder fires as a type



of fuel but as a type of fire. There was some discussion on descriptions were a bit different, there was a bit of discussion if those things were in Idaho. They discussed if sub-terrain fires occur in Idaho because it would require coal deposits, not sure this is in Idaho. Tyre stated it does occur in Utah which is a neighbor but need to verify. So it was agreed combine the main two and instead of saying 4 types of fires go with typical fires in Idaho and make it Idaho specific. Tyre says evaporated rates in profile are not correct, needs to have some fact checking done to verify. Why is there a sentence highlighted in Idaho, Susan suggested that maybe this is something that needs to be reviewed. Tyre asked is this relevant, Susan says yes since we need to roll up plan to include local plans as well, Tyre suggested moving that to introduction and not in a subsections. Liz said paragraph speaking on State parks doesn't really fit Idaho since we don't have lots of State parks, maybe range lands, forest, and residential neighborhoods. Tyre says every section needs to be re-written they are clunky and hard to read, that contains absolutes and we should avoid absolutes. David says needs an introduction sentence. Last two sentences are just a repeat to them. Says that shows fire as a good thing but we are addressing hazards so where the negative are sides of fire and need to be listed here. Don't need to talk about areas because fact is fire burns any were in Idaho. Susan says that this was done as an attempt to include changes made in fire plan. Tyre says it's true with have different types of vegetation. Susan suggested changing heading to vegetation areas in Idaho that are prone to Idaho. David said it's okay to keep locations but need to talk about types of vegetation as well as location like range land and forest. Then list hazards related to location and fuel source there. How people rely on water supply from forest system and lumber industry, the about those who rely on range system for cattle and farming. Tyre feels there is a real opportunity to strengthen what is in profile. David asked is there another location to describe economic impacts, Tyre said not in the profile but there are some limited detail provided in vulnerability statement. David said land cover map needs to be re-done. Tyre said a new map will be available in 2 weeks. Mallory says sentence under Wildland-Urban Interface (WUI) that states "In Idaho, only 14 percent of the WUI is developed", is important and needs to be indicated more clearly. Tyre said Idaho is the fasted growing state, and Mallory said that sentence would be great for a hazard plan but needs to be written more clearly. Tyre said the planning document describes that statement more and he will grab and drop it into the profile. Tyre said they have a new map for figure 3, this data is from 2002 and is not a good reflection of WUI, David said whatever map they put in here needs to have more description. Tyre said this map is not accurate if you are WUI you are at risk and there is no in between. Tyre asked about Firewise section and wants to know why it's in the plan. Susan said because there are 24 nationally recognized Firewise communities. Tyre said that if its and educational element needs its own section, Susan said that it's just to point out those communities that participate in the Firewise program. Mallory said mitigation strategy mentions this so would this be better if moved there and not in hazard profile. Group says bulleted section beneath Extent paragraph is listed 3 times so group believes it needs to be deleted and keep it on Table 1. David said the first and second paragraph of Extent speaks about management but it's to clear what type of management, and the first sentence of second paragraph needs some work, Tyre said the entire sections needs to be re-done. To show history and current fires. There was

some discussion if Extent and Location section are separate, there was some question of how this is done in other plans. David said that location and extent are different, location is where but extent shows impact. Kelsey said was all together in 2013 plan. Tyre said if we edit location to separate by forest and rangeland and then extent would be using the map that use fire regimes. David said we can use extent to tie the two location types. Lorrie stated what guide said about extent, to explain that it is different from impact. David said that if they focused on forest and rangeland as two types of risk throughout and speak on each separately in each section. Liz asked if we are keeping the FRC section, but feels it's hard to read, Tyre said it is good information but need to evaluate readability. Tyre said there also needs to be some fact checking and the statement in first paragraph beneath Table 1. Fire Regime Groups and Descriptions references National Wildfire Coordinating Group 2017 but this was done before this in 1994, so that needs to be corrected. Susan suggested adding comment about source of Table 2 in paragraph just above table 2. Tyre said there is and update to table 3 in 2016 so that needs to replace the current Table 3. Impact section, Tyre said there are serious redundancies under severity. Need to grab NWCG's dictionary's definition of wildfire severity, and wrap it into severity section, to make sure we capture the human impact. Under warning time section needs more of an introduction, and more of a definition of what warning time is, Mallory suggested we tie it back to how warning time was weighted during risk exercise. Susan said risk exercise information needs to be incorporated between vulnerability and impact section and add consequence assessment. Tyre feels secondary impact section needs more detail and he will gather some additional information he feels will add value, and doesn't feel this section doesn't reference any other sections. The past occurrence and losses section, make the 2016 statement in first paragraph into a chart. Under Probability of Future Hazard event, need something about WUI and the impact of population growth in Idaho. There are some fires that weren't mentioned on table 4 and some question of County affected and maybe break it out by federal and county declaration.

David feels there needs to be something about forest health for example the beetles and there was some discussion where this should be located, some suggested locations were under hazard definition or locations. David says it should also be mentioned under Climate change maybe mention something about grasses. Susan suggested listing something about most fires in Idaho not being due to drought but human caused to show why it's not pointed as climate change.

Discuss access to EOPT to Make updates to plan: Lorrie asked if anyone has had any issues accessing EOPT, and explained that if there are any issues to contact Susan, Lorrie or Kelsey. Tyre explained that he has not had time to access EOPT. David said he is having some issues accessing EOPT, and Mallory reviewed access and David said he was unable to check out files, and Mallory says it's probably a permissions issue and they will look into it.

Discuss next meeting	Group agreed February 2 nd 10-12 for follow-up meeting
Closing	Susan stated we will send out QR code with minutes and to have group add to website. Lorrie made a copy of Tyre's notes for Kelsey to make updates to the profile.

Wildfire/Drought Technical Working Group 2 February 2018 - 10:00am-12:00 pm

Gowen Field - Bldg. 600 IOEM Conf. Room-Upstairs

Host: Idaho Office of Emergency Management

Meeting, State Hazard Mitigation Plan Update 2018

Attendees

Brandon Hobbs, Susan Cleverley, Kelsey Brown, Troy Lindquist, Brooke Jacobson, Lucille Webster

Via Phone : Mark Solomon

EOPT Review

Kelsey explained how to access EOPT and explained there are 3 documents for each hazard: Hazard Profile, Vulnerability Assessment, and Mitigation Strategy. She then explained how to check documents out for edits on EOPT and explained that we need to maintain version control so that we do not duplicate work or miss any edits. She then demonstrated how to check the document back in and were to put your comments as to what types of edits or changes you made to the document and save it. She also advised everyone to make sure you save your changes as you go because sometimes the system will kick you out and you will be unable to save your changes. Kelsey advised group that they can add comments if it's a large section of data that needs to be updated or make edits if it's something smaller.

Review Lightning
Hazard Profile and
Vulnerability
Assessments in
Severe Storm
Hazard. Discuss
Mitigation Strategies.

Group began reviewing the Severe Storm hazard profile. Susan stated that she felt this section was a bit disjointed and that the Lightning section should be together for easier flow when reading. She suggested we send this back to Tetra Tech for revisions. Brandon asked was the previous update listed together and Susan said that Lightning was a separate hazard in the previous plan however, the group decided to combine it with Severe storm for the update because it is usually associated with a severe storm. There were several locations where the previous plan was cited and Susan doesn't feel this is the best way of doing it. Brandon stated that this add a step if someone wanted to look up the reference they would have to refer to the previous plan to get the original reference instead of having the direct source referenced instead of the plan. This is also a correction that will be sent back to Tetra Tech to make. Mark Solomon (via phone) asked where the section on rain on snow events was listed in the plan. Kelsey said it's not directly referenced and feels it should to be added under flood and severe storm under secondary impacts section. Mark said that 34% of Idaho Risk Management Program's budget was spent on rain on snow event damage to structures last year. (Rain on snow events are found in Flood, not Severe Storm.)

We then looked at the profile again and didn't see a map showing location affected by lightning, Brooke suggested checking with the National Interagency Fire Center (NIFC), Troy also suggested BLM as another good source for a map on lightning. Troy



volunteered to help get a map of lightning. The lightning portion under location heading needs to point out areas most prone to lightning in Idaho. Some of the areas mentioned were fire alley on interstate I-84 between Ada and Elmore counties down to Glenn's Ferry, this area gets thousands of strikes each year, the front between Salmon and Clearwater, in summer along ridgelines, more toward Nevada due to storms pushing into the state, and the Upper Snake Plain in Eastern Idaho. Troy volunteered to help create a density/climatology map of lightning. Also under the location section of severe storms in the lightning section, the group consensus was that the profile needs a map to point out areas most prone to lightning in Idaho. Susan mentioned the Paradigm Project which is designed to help reduce lightning induced wildfires, it was stated that the BLM can be used for references and to expand upon the wildfire hazard. Susan says we need to involve the BLM in our discussion. She also talked about a study conducted by Katie Gibble, a BSU student, on man vs lightning ignitions in Idaho. Susan further stated that her research states that this is the first year that human caused ignitions is greater than those caused by lightning strikes. There is a copy of the study on the H drive under background documents.

We then scrolled down to the extent heading and Kelsey asked does the lightning section adequately describe the extent? Troy said the heading of lighting doesn't fit the paragraph, because lightning does not determine severe storms. This paragraph doesn't show extent either. Troy said weather service doesn't have criteria for a scale of lightning extent. There isn't any established criteria until there is a fire, weather, or a red flag warnings. The extent of lightning depends upon severity of storm. Brooke suggested just having a couple of sentences on severity or a scale, and that location and extent are the same thing for lightning. Troy says we need a section for thunderstorms because lightning is a product of thunderstorms. Troy feels the severe storm profile needs to be rearranged. Kelsey said need to have Tetra Tech re-arrange with theme of storm types being winter/rain on ice events and summer/thunderstorms. There was some discussion on the effect of rain on snow events and how they affect infrastructure, Brandon said he will have USACE look into it, and Marksaid he will make sure he mentions it during flood technical working group discussion. Under secondary impacts this would be a good place to put the statement about how 30% of ICRMP reserve was spent on rain on snow events last year. Need more information in runoff secondary impacts as well as rain on snow. Group feels this is a good place for more input from USACE. Under severity the second sentence talks about types of fires started by lightning and Brooke feels they need to add grasslands to this sentence. Brandon thinks that the last sentence under severity should be moved to extent since it's the closest thing he has seen to extent in the profile, and wonders if there is some sort of scale to measure this? Lightning severity is typically assessed by property damage and safety. Troy said last sentence under warning time needs to be minutes and not hours. Brandon suggested breaking it out to point out difference between warnings and watch time. Susan said under secondary impact would be a good place to reference Katie Gibble's study on human vs lightning ignitions, she also said there was a good picture from a fire proofing project that could go here. Also under secondary impacts Susan suggested instead of saying energy shortage use energy disruption and the group agreed because the previous sentence talks about damaged communication towers and transmission cables. At this point Brooke stated she feels Katie's study



would fit better under wildfires than under severe storms. Under previous occurrences Troy feels it would be good to have a map here that focuses on Idaho, to go along with Figure 7, a blowout or an insert. Troy will see if he can help create something like this and Susan and/or Kelsey with check with Becky. Brandon wants to know if there is a definition of what a lightning event as it is referenced in this section as well as checking the source of this information because the sentence states, "According to NOAA's NCEI storm events database, Idaho experienced 59 lightning events", after some discussion the group feels this sentence could be in reference to the following sentence that states "Total property damage was estimated at over \$1.6 million". Which would define a lightning event would be one that caused monetary damages, Troy said or weather events that involving lightning that resulted in death or fire. Table 4 Lightning Events in the State of Idaho, 1993 to 2017, needs to be renamed Damage Caused by Lightning Events in the State of Idaho and remove anything that has no reference and/or damage reported.

Under probability of future hazard events it says "there have been 59 lightning strikes" this needs to be events to remain consistent with the rest of the profile. Group would like further clarification on this statement to make sure they mean event, or actual strike, or strike that caused damage? Susan feels that we need to state that it is a 100% probability of a lightning event in Idaho. Also some question about the statistic that we will probably 1 lightning strike a year also seems small so would like some further investigation into this statement. Moved down to review climate change section, Brooke asked is there anything that shows the possibility of an increase in lightning. Susan says she would rather have a quote from NOAA about this and Brandon said or a more recent NASA study. Need newer references for climate change data. Brandon said there are more recent official government reports on climate control that can be used. Group agreed this need to turn this back over to Tetra tech for updated sources.

Began reviewing the vulnerability assessment and it appears they only address lightning under the environmental impact section. Brandon says he feels it may require additional comments in other sections of the assessment. It appears that the vulnerability assessment focuses mostly on wind storms. Brandon says all the sources only reference wind. Susan said she's not sure the maps are even useful if they don't have layers with other hazards. Brandon said the narrative needs to show why they chose wind as the best way to represent the vulnerability of severe storms in Idaho. The 3rd paragraph doesn't show linkage between the other hazards. The information listed in the 4th paragraph is not correct because there were multiple damages in 2017 to multiple canals across multiple jurisdictions. The statement may be true if they are only talking about damages related to wind. Feel section where they discuss heavy snow would be best place to add rain on snow events. Some discussion on a map that would give a better picture, suggestion was to see if we could get a map of ICRMP facilities that were damaged. The group asked if there wasn't enough data what we need to see, some suggestions were to get a GIS map of road damage or hazard composite. The group wasn't sure what needs to be measured, Brooke suggested going to ITD and possibly getting a map of road closures related to severe storms. Group feels it may be best to go over the other hazards and come back to this one. Troy suggested Idaho Power as a possible source for maps as well. Table IV 2010 US Census Pop, Chart only



	shows wind power, which only shows 1% impact to Idaho residents, group consensus is that this is not provide a true assessment of the vulnerability for severe storms in Idaho. Troy suggested going to the NCEI database and track by storm for each county. Group also suggested that it might be best to look at it seasonally instead of focusing on one element like wind. Group feels this document needs to go back to Tetra Tech.
Determine Next Meeting	Kelsey Brown stated the next meeting will be a big group meeting with all the technical working groups. Group looked at calendar for possible April meeting times. Lucille will send out a doodle poll, please respond as soon as possible so we can get a date on the calendar.
Adjourn	Kelsey will be out of office until Feb. 20, 2018 so please send all emails and edits to the group email mitigation2017@imd.idaho.gov
Wildfire/Drought Technical Working Group Meeting, State Hazard Mitigation Plan Update 2018	4 April 2018 - 1:00pm-3:00 pm Gowen Field - Bldg. 600 IOEM Conf. Room- Upstairs Host: Idaho Office of Emergency Management Minutes:
Attendees	David Hoekema, Knute Sandahl, Lorrie Pahl, Kelsey Brown, Mary Mott and Lucille Webster Via phone: Tyre Holfeltz and Brooke Jacobson
Plan Update Review	Tyre began by stating he still doesn't have EOPT access, Kelsey explained that changes made in EOPT that highlighted sections are from Tetra Tech and base is from 2013 plan. Kelsey also advised that she has made some corrections to this section and Tyre will review them once he has access. We will only be looking at certain sections and looking to determine what is missing and needs to be added. We reviewed Mitigation section of Wildfire, Drought, and Lightning portion of Severe storms mitigation section. Tyre asked what level of detail is needed "a 100 foot view or more of an individual county view, group consensus something between. Knute suggested maybe looking at it in terms of partnerships such as Firewise with community protection programs. Lorrie pointed out not all communities use Firewise but it is available. Knute says there has been an increase in activity with RFPAs with help of IDL and other agencies, and these have a lot of impact and most have been mitigation type projects.
Review Mitigation Strategies for Wildfire, Drought, and Lightning Hazards	Began review with Wildfire Mitigation section. Tyre suggested changing the name of the Firewise section to Fire adaptation since it covers a broader scope, and with the current controversy surrounding the title. Knute wonders if changing term will cause some confusion since Firewise has become a buzz word. Tyre said maybe initially but in the long run it will be better. Tyre stated we need to update the Firewise section because the information is out dated because they no longer use the term "defensible space" it is now "home ignition zone". Tyre agreed to update this section. Brooke will



check to see if the Idaho Invasive Species Strategic Plan of 2012-2016 has been updated. Brooke asked do we need to add a section, Tyre said yes and that he will take lead on that and Knute will lead part discussing RFPA partnerships. Both Tyre and Knute agree that this would be a good place to locate the newly formed fire suppression group. Tyre then asked to we need to list mitigation fuel reduction techniques such as wood chipping and seeding, the group consensus feels this would be an excellent idea. Knute will write up a paragraph or two on fuels reduction and Tyre will contribute in that write up. Brooke asked is this would be good place for a map or high risk areas, Kelsey advised that a risk map is provided under the vulnerability section. Tyre asked if the comment box on the left "Creating a fire-adapted Community Island Park, Idaho" by Craig Glazier is necessary, Lorrie suggested we ask Susan Cleverley for her input on removing it, Tyre suggested if we don't remove it then it needs to be updated. Knute pointed out that under Community wildfire Protection section that it states there are 47 counties in Idaho, so this needs to be corrected to 44 and if they are where including tribes there are 4 tribes so the number would have been 48.

Moved on to Drought mitigation section, David said NOAA is working with the state on a drought warning system (Northwest drought early warning system), that information can be found on the Drought.gov website but if she is unable to find it he will send the link. He then said that under Weather Modification section need to go back to 1992 to get good data, since Idaho is a water rich state, it is not prepared. He then suggested maybe there needs to be a look at water sources for small communities. The biggest risk would be if people were cut off from water that we could probably transport water in but it would be very costly. Brooke mentioned the agricultural affect and not just in crops but especially on grazing. She mentioned in some areas they have programs to encourage farmers to plant cover crops for grazing in case of drought, this program is under the ICA (Idaho Cattle Association). Brooke agreed to write something up in relation to agriculture for this section. Kelsey suggested placing it after Information/Outreach and Public Education section. Tyre feels we need something to link drought to wildfire under mitigation strategies such as green strips and seeding. Knute also mentioned that drought is a catalyst to other events such as flooding and mudslides. Kelsey said this is discussed under vulnerability section but that mitigation actions should be listed in this section. Tyre said that landscape health could be listed in this area, and Kelsey said also a good place to mention projects like seeding and using green strips. There was some discussion on aquifer recharges and David agreed to write something up on state and individual projects.

Severe Storm only the section related to lightning was discussed. Tyre asked if there are any groups doing education on lightning? No one had any knowledge of anything related to lightning education in the state. He then asked about building codes or building in hazard zones. Knute will do some research to see if there are any particular codes. David asked how often is a building struck by lightning and burned to the ground, building often get struck but not common for them to burn down because of it. Knute also state there are no regulation on homes as far as lightning protection. He then suggested that the references used in this section be update and volunteered to look those up. Knute then asked does the state have equipment to detect lightning.



	Tyre said that the state uses NOAA detection ap and that it's fairly accurate and can detect within 5 feet.
Discuss Mitigation Action Items	Kelsey Brown reminded everyone that we have the Mitigation action worksheets and Lorrie state that for a project to be eligible for funding it has to be in the plan. Tyre asked action needs to be at the county, city or State level. Lorrie says it doesn't matter but some counties chose not to adopt the state plan so they wouldn't be eligible. Kelsey will send out a list of the current mitigation actions in the 2013 for wildfire.
Review Due Outs and Way Forward	Wildfire: Susan to check if creating a Fire-adapted Community blurb about Island Park is still needed, and if so, update.
	Tyre to update Firewise info to Fire Adapted and update paragraph. Brooke to check if there is an updated Idaho Invasive Species Strategic Plan 2012-2016.
	Knute to provide more information on Rangeland Fire Protection Associations.
	Knute to provide more information on fuels reduction.
	Tyre to provide more information on the Fire Suppression Response Committee.
	Drought: (also in comments in the attached documents)
	David to add more info on water source risk and going back to look at 1992 drought issues and possible mitigation items.
	David to provide more information on aquifer recharge programs and how they can be used.
	Brooke to provide more information on IDL/NRCS/ICA programs to encourage farmers to grow certain crops.
	Tyre to provide more information on BLM /Forest Service/IDL after fire seeding.
	Tyre to provide more information on IDL/Forest Service forest health improvements.
	Lightning: (also in comments in the attached documents)
	Knute to check building safety codes in NFPA-780 (Standard for the Installation of Lightning Protection Systems – 1997) to see when the update was.
	Knute to look up Idaho building safety codes to see if there is anything pertaining to lightning protection.
Adjourn	Next group meeting will be May 2018 Executive Committee meeting, and a doodle poll has been sent to get that scheduled.

1

IDAHO LANDS RESOURCE COORDINATING COUNCIL

Wednesday, February 21, 2018



Panhandle Health District 1 Conference Room, Hayden, ID

MEMBERS PRESENT:

Lisa Ailport, Idaho Chapter, American Planning Assoc.

Gerry Bates, Urban Forestry – At Large

Glen Burkhardt, Bureau of Land Management - Fire

Rita Chandler, National Forest System-Fire Management

Don Ebert, Idaho Association of Counties

Janet Funk, Idaho Tree Farm

Jeff Handel, Nez Perce Tribe (alternate)

Bob Howard, Idaho Emergency Managers Association

Brian Jorgenson, Green Industry Organizations/INLA

Ken Knoch, ILRCC Chair, City Foresters/Idaho Parks & Recreation Association

Tim Maguire, Urban Forestry Collaborative Groups / Bioregional Planning

Robyn Miller, Land Trust Organizations

Knute Sandahl, ILRCC Vice-chair, State Fire Marshal

Gordon Sanders, Idaho Forest Owners Association

Hannah Sanger, Urban Issues

Chris Schnepf, UI Extension Forestry (alternate)

Kirk Sehlmeyer, Natural Resources Conservation Service

Gregg Servheen, Idaho Dept. of Fish & Game

Janet Valle, USDA-FS, State & Private Forestry

Mallory Wilson, Idaho Office of Emergency Management

Mike Wolcott, Association of Consulting Foresters

Norris Boothe, Coeur d'Alene Tribe, Forestry

AGENCY STAFF & GUESTS PRESENT:



Ara Andrea, Bureau Chief, Forestry Assistance, IDL

Tom Eckberg, Forest Health Program Manager, IDL

Mary Fritz, Stewardship Program Manager, IDL

Tyre Holfeltz, Fire Prevention & Risk Mitigation Program Manager, IDL

Dave Stephenson, Urban Interface Program Manager, IDL

Jennifer Russell, Project Coordinator, IDL

Karen Sjoquist, Forest Legacy Program Coordinator, IDL

Mark Eliot, Fire Prevention Specialist, IDL

Suzie Jude, Forest Stewardship Program, IDL

Andrew Mock, Tech Services GIS Analyst, IDL

Welcome/Introductions

Chair Ken Knoch welcomed returning and new members and guests to the meeting. Members and staff introduced to the group. New members received Council binders. Please contact Mary Fritz or Suzie Jude if you need a Council binder.

Review of ILRCC purpose and expectations

Mary Fritz provided a background on the Council's formation from its prior advisory groups to its current joint membership configuration and activities. Providing program oversight, collaborative strategic planning, communication and coordination of funding among member constituencies are priorities for the Council. IDL serves as the secretary for the Council by organizing meetings and project visits, preparing agendas and meeting notes. Council members participate in the development of the Forest Action Plan and its implementation through review of State & Private Forestry competitive grants proposals and recommendations to the Idaho State Forester. Council members also provide oversight and serve on Council sub-committees including the Forest Legacy Program subcommittee and the Forest Action Plan Revision Core Group.

2

2018 Landscape Scale Restoration, Western State Fire Manager (WSFM) & Hazard Fuel Reduction (HFR) Grants

Tyre Holfeltz provided a statewide map handout showing the location of 2015-2019 WSFM and HFR project proposals. Grant funding for HFR projects takes place in the current federal fiscal year (FFY) and funding for WSFM takes place in the next FFY18. FFY17 (or CY18) HFR funded projects are located in Boundary, Bonner,

Appendix G

Valley and Teton County (new cooperator). FFY17 WSFM funded projects are the Fernan Lake project in Kootenai County, the Winchester Area project in Lewis County, and the South Victor project in Teton County. Late year, FS Washington Office provided funding for the Shoshone County project, located in Cataldo (originally slated for WSFM). In addition, excess returned funds from a past Bogus Basin project was approved for use on two other local projects. In total, nine projects were fully funded last year for a total of ~\$2.1M. No member questions.

Jen Russell summarized the three LSR projects submitted in 2017 for FFY18 competition. Of the three projects submitted, the Healthy Communities project did not score high enough for funding. The Forest Economics project scored number 7 and is within the funding range. The Firewise Parks project has been revised over time. Originally submitted as a proposal to develop master operating plans for all State parks, the project now focuses on developing Firewise parks. The proposal did not score high enough in the project ranking to receive funding, but additional work is taking place to increase its competitiveness. We will discuss additional ideas during the meeting today as part of the next round LSR project preproposal submissions.

Council questions:

Regarding the Healthy Communities project application, adding additional partners and better explaining health benefits of trees from a medical perspective may strengthen the proposal. These conversations are ongoing in Idaho. Dave Stephenson explained that a new synthesis of information about the health benefits from trees is under development that he will share with the Council.

2020 Forest Action Plan Revision – Next Steps

Tom provided a handout of FAP 2020 issues—threats/benefits, data collected to date, and a summary of the FAP 2020 revision process. The Farm Bill requires a full revision every ten years for states wanting to continue receiving USFS funding for Forestry Assistance programs. FAP has two components: 1) the statewide assessment of the forest resources, which identifies threat and benefit issues and Priority Landscape Areas (PLAs); and 2) resource strategies that address issues in the PLAs, focusing efforts for the most efficient use of limited resources. Currently, the Forest Assessment Core Team (FACT) is working on the assessment component.

Question: Are definitions of threats and benefits in urban areas evolving and part of the conversation? Yes, as data change, benefits and threats also change. Some threats identified in urban areas include air and water quality, WUI threats, and development and recreation pressure. There are economic costs associated with not addressing these threats.

Tom reviewed a schematic of the initial FAP geospatial assessment using statewide data. Many data sets are available but not all have statewide coverage—that's important for FAP. The process creates separate threat and benefit maps, combines them, and scores each subwatershed using a matrix. The matrix is skewed to the benefit issue side (that is, areas of high benefit but low risk are a higher priority for work than areas of low benefit but high risk). Areas masked out include wilderness areas as no management occurs, and non-urban areas without forests. Urban areas in southern Idaho are included as they are artificial environments with

Appendix G

irrigation, and have substantial benefit to the city. In 2015, we added a Special Landscape Area for sagesteppe habitat. While not the same as a PLA, the area is included due to its impact on fire. Tom briefly discussed other GIS assessment methods previously considered.

3

Question: How is a weighted overlay influenced by a particular group? It depends a lot on who is assigning the weights; this methodology works well for similar issues, but not so well with fairly different issues. For example, if a room full of air quality experts are weighting 7-8 key issues, they would likely weight air quality as most important. For this reason, in the original assessment, all threats and benefits were ranked equally. However, some sub-issues within a particular threat or benefit issue were weighted; for example, because Mountain Pine Beetle risk areas were considered the most serious pest problem in Idaho in 2010, we weighted this sub-issue higher than other forest health sub-issues. This works better as the subject matter experts are all familiar with forest health issues.

Within the 25 cells in the matrix, each represents a combination of threat level and benefit value. The lowest priority areas are those that are low threat and low benefit, and the highest priority areas are those with both high threat and high benefit.

The Forest Assessment Core Team has met three times prior to today's ILRCC meeting and recommends to the Council the threat/benefit matrix utilized for the 2010 FAP.

Additional Council discussion: Subject matter experts (SMEs) have been identified for each issue. How much the matrix is influenced by local sentiments depends upon the issue and if there is consensus or disparate views. Threats and benefits in urban areas will need to be looked at more closely as there is a lot more data about the health benefits, air quality, carbon sequestration, and hydrologic issues. There may or may not be statewide data with appropriate resolution available for some issues, but at the very least they should be touched on in the assessment narrative. Many states have chosen to separate urban from rural issues within the assessment and some issues can be difficult or impossible to model. Tom discussed how sage-steppe lands will be addressed as Special Landscape Areas; as these areas adjoin forested areas, there are additional considerations for juniper woodlands. The 2020 revision will consider other forested areas located within riparian areas previously masked out.

It was suggested that today's meeting be an opportunity for Council members to provide feedback about suggested issues in the FAP 2020 revision. The Council will defer initial decision making about data sources and modeling to the assessment core team, with a report to ILRCC at a later meeting.

Wildfire: Tom explained the renaming of "Risk to Communities and Ecosystems from Uncharacteristic Wildland Fire" to "Wildfire." The core team identified current uncharacteristic stand and climate conditions, availability of new data and modeling, and incorporating the restoration benefits of fire depending upon where in Idaho it takes place. Should climate be included as a sub-issue or separate from wildfire? Should the core group consider community wildfire plans and fire condition class as sub-issues? Modeling of wildfire is available, but it is also very complex.

Appendix G

Council discussion/questions: Can IDL simplify modeling to be understandable? Should the assessment continue to use 20-year average for fire vegetation condition class, or 10-year average? While modeling changed for fire condition class, it was more robust. Should we shorten the average interval in order to capture climate change effects, with the caveat some landscapes take a long time to rehabilitate?IDL's Wildfire Risk Model was discussed. This is different from LandFire data that covers western states. What are the inputs to IDL model? LandFire is 100 acres or larger vs IDL's model that includes smaller fires. What about the occurrence of fire? Modeling should reflect 10-year plan. What's driving climate to be included in wildfire? Primarily no statewide data available in 2010. Consider the difference between fire as a risk to communities and the benefits of fire for restoration. Also, consider fire data that shows departure from a resilient condition, change in fire regime, and change in housing density within WUI. WUI is defined (and incorporated into modifiable community wildfire protection plans) as "the interaction between developed and non-developed land and the infrastructure people rely upon for their existence." Post fire impact areas are identified by utilizing the ridgelines above WUIs as boundaries. Since the last assessment, the WUI layer has been redrawn for about 1/2 the state with input from local communities and counties, and are included in the IDL community fire risk map. What's driving the inclusion of climate conditions in wildfire threat issue for 2020? In 2010, there was no available statewide data. The challenge will be which climate model to use. It will be important to consider both the risk/threats and restoration opportunity/benefits derived from wildland fire in the 2020 revision assessment.

Forest Health: Tom explained this threat issue was renamed from "Relative Threats to Forest Health" to either "Forest Damage Agents" or "Forest Decline." Statewide Forest Inventory & Analysis (FIA) data is available for this issue at a (coarse) 240-meter resolution; 30-meters or less is our goal. IDL may be able to refine the FIA data. Forest stand conditions drive fire and bark beetles. There may be stand condition data available on industrial ownerships, but it is proprietary and not statewide coverage. LandFire has canopy coverage that might be useful. The core team recommends keeping climate change as a forest health sub-issue. In the 2010 assessment effort, Mountain Pine Beetle was the biggest threat and weighted heavily as a sub-issue; it's now a much lower threat and recommended to be weighted equal to the other forest health sub-issues. Other forest pest and disease sub-issues included Balsam Wooly Adelgid, White Pine Blister Rust, Tussock Moth, noxious weeds, and climate change (Rehfeldt et al, data). Should the 2020 revision keep climate change as sub-issue or treat as a stand-alone? There are more data sets available now for climate change with future projections to 2080.

Council discussion/questions: What about root disease as a forest health sub-issue? There is a root disease model, but no statewide coverage—it stops at Salmon River. To facilitate future policy-making decisions though, the root disease sub-issue should be included in the assessment narrative. IDL has aerial detection survey data on beetle infestations going back to 1997. Subject matter experts will look as these issues and dig down into data and models to extrapolate additional insights. Can specific percentage of forest species composition be used as proxy to extrapolate root disease statewide? FIA data includes individual species data, density and other information to help inform this issue. The Council recommends keeping Forest Health as threat issue.

G-102

Edaho

Appendix G

Development & Recreation: Originally entitled "Potential Loss of Canopy to Development, Urbanization and Recreation" it incorporated canopy loss due to land use or zoning impacts, urbanization, and gateways to recreation where pressure would be greatest. This threat also needs to address urban tree canopies and look at the benefit side of canopies and recreation in terms of the economics.

Council discussion/questions: Roadway development/widening take out significant numbers of urban trees. This particular loss of urban trees is being mapped in 10-12 communities and could be utilized in a model. Population density may also be a proxy for negative pressures to canopy. Housing density can focus on 'fringe' canopy loss. Is it possible to capture non-motorized recreation impacts in modeling? There is data for snowmobiles and ATVs, but what about bikes and pedestrians? Consider changes in land ownership from a single large ownership parcel to multiple smaller ownerships. The fracturing of forest acres may be attributed to older landowners disposing of assets, but it affects long-term management. The challenge of utilizing county parcel information is that not all counties may have this available. The American Farmland Trust has methodology for annual assessment of farmland under threat to urbanization or change that might translate to privately-owned forestlands. All Trails and Straba.com websites have tracking data on recreational hiking trail use. Also, the Idaho State Tax Commission should be able to provide data about how many acres are in a particular timber category from year to year and inform trends over time. Is soil erosion part of the threat to canopy loss? This could be a potential sub-issue.

Following the morning break, Tyre requested that during the discussion about remaining FAP benefit issues, those members wanting to discuss data sets and modeling, please contact the core team issue leads. This will allow Council members sufficient time to provide recommendations (thumbs-up, -down or neutral) on specific issue inclusion, or not, in the ongoing revision work by the core team.

There was concern expressed about this suggested Council decision-making process because the council is a large and diverse group taking in a lot of complex information; many do not feel comfortable making recommendations about which issues to include or exclude and want to defer this decision making to the core team. The discussion so far has been beneficial in terms of sharing information.

As background, the 2010 FAP was overseen by a large stakeholder group. ILRCC serves in this capacity for the 2020 revision. The first stakeholder group met often and participated in an iterative process with the core team. The challenge now is ILRCC only meets twice a year. The requested role for the council today is to approve which key issues the core group will include in the revision moving forward, followed by GIS analysis/modeling. Some members are more comfortable deferring to the core team in determining key issues and then coming back to the council for more in-depth discussion and recommendations. Some members are comfortable with providing approval of key issues, but may need to discuss and understand underlying sub-issues in order to provide input.

Sustainable Forest-Based Markets: The core team recommends keeping this issue. Travel time to mills for timber and biomass utilization were the focus of 2010 FAP. Biomass is still an important issue, but not as much as in 2010. Consolidation of mills over the last 10 years has changed distance to mills making travel times much longer. The UI Policy Analysis Group has completed a study for IDL and data from that study will

Appendix G

inform this issue. Additional sub-issues to consider include carbon as part of forest economics or as standalone, hunting, fishing, wildlife, small-scale mills, urban wood, and non-traditional wood products (greenery, post and poles, juniper wood products).

Council discussion/questions: If a valuable timber stand is far from a mill, it remains a valuable timber stand as a natural resource. It is valuable because it is isolated. This issue relates primarily to stumpage value of timber and the correlation to mill location. Because a timber stand is far from a mill, it is more expensive to go get it in the context of traditional timber harvesting. What other opportunities are there for money? Thumbs up to include this issue in FAP 2020.

Water Quality and Quantity: The core team recommends keeping this issue. It looks at the benefits to water quality and quantity from forest canopy. Previously, this issue looked at 303(d) impaired streams, water supplies, TMDLs, and impervious surfaces. For the revision, the core team is considering additional areas and issues as sub-issues not included in prior assessment. More data available on forest infrastructure (culverts and fish passage), Forests to Faucets data, and USGS data. Suggest sub-issues include flood reduction, analysis of impacts of flooding in urban areas and watersheds, and loss of riparian shading effects on water temperature. Suggested data sets: Norwest on outdoor stream temperature projections, and climate shield from Rocky Mountain Research Center. Thumbs up to include in FAP 2020.

Air Quality: The FAP core group recommends keeping this issue. Carbon sequestration identified as a very important sub-issue for air quality. Carbon markets would help inform this sub-issue. There are urban benefits from cooling impervious surfaces and reducing smog. Past and current data sets include DEQ non-attainment areas, smoke impact areas, imperious surfaces, FIA, LandFire, and tree canopy for 25 Idaho cities.

Comments: Keep climate change and sequestration as separate issue as it is believed this will evolve very quickly over next couple of years. If not kept separate, there is concern about not being able to react to evolving research and data. Thumps up to include in FAP 2020.

Wildlife/Biodiversity: The Assessment Core Group recommends keeping this issue and incorporating the State Wildlife Action Plan (SWAP) into FAP 2020. The Idaho Dept. of Fish & Game and the Nature Conservancy were heavily involved in 2010 assessment and will be again. SWAP also addresses sage-grouse. Thumps up to include in FAP 2020.

Climate: This is a suggested new stand-alone threat issue. Related sub-issues include forest damage agents, beneficial managed wildfire, water quantity and quality, snowpack. There is recent climate projection modeling available from USFS for Idaho forests through year 2080 for temperature, snow and water.

Comments: There is concern about the potential to double count climate if a stand-alone issue and in modeling for climate specific sub-issues related to other threat and/or benefit issues. Some suggest climate as a stand-alone issue is difficult to address in a political sense, whereas it may be more acceptable if climate is a sub-issue to another issue. If used as sub-issue, explain how climate projections are used in the narrative. It might be possible to use climate projections as a final weighting factor in places where things are changing in significant ways for temperature, snow, and water; looking at the climate projection model and how it is built

Appendix G

will inform this. To what extent are we looking at how current resource conditions have been impacted by past climate or alternatively looking ahead to anticipate future conditions from climate impacts? Is this reactive or anticipatory exercise? It might help to focus on future climate. For example, planting trees appropriate to future predicted climate. Is it a prioritization of where we do work? Maybe look at climate as a strategy? Climate is a risk and an opportunity. Can we do the same proactive or reactive work with the data under a different issue like water quality and quantity? Norwest stream data will help with the benefit side of resilience. Can it be a strategy rather than a threat or benefit? Yes. Generally, it's strategic to limit the use of data to not dilute other data or double count. In Idaho, some dispute if climate change exists or not; suggest using hard and fast data that is indisputable showing trends in Idaho. Does this data exist? Keep as strategy and change name to climate adaptation.

Recreation/Connecting People to Forests: This is a suggested new stand-alone benefit issue. Recreation in the forest is a benefit and some communities rely on this income. This could be sub-issue in Sustainable Forest-Based Markets issue or standalone. Data now available to model and inform this issue. Thumbs up to include this as a stand-alone benefit in FAP 2020.

All council members are invited to participate on the FAP assessment core team. Please contact Tom Eckberg if interested. The core group meets again prior to June's ILRCC meeting where they will report progress on the revision.

Forest Health Update

Tom reports IDL has a new Forest Health Specialist, Erika Eidson. Currently, IDL is engaged in MCH pheromone application to keep Douglas-fir beetles out of scorched trees following 2015 fires in Clearwater Valley and Riggins vicinity. In addition, a MCH project in Kamiah treated 400 acres in 2016 and 2017 in areas near fires, and in Eastern Idaho, a 2018 MCH project will treat 250 acres. Drought weakened trees were susceptible to bark beetles due to low precipitation during 2015, 2016 and 2017 growing seasons causing pine engraver to move in. Also, IDL is seeing issues with pine engraver movement to adjacent trees that were next to slash piles—don't winter log pine! Western pine beetle gets going during drought within susceptible dense stands. Fir engraver has scattered mortality during dry years with scattered impacts near Coeur d'Alene; more expected in 2018. Idaho Western Spruce Budworm in Southern Idaho. Douglas-fir Tussock Moth (DFTM) defoliation is on track for 2020 in Idaho. Defoliation in Southern Idaho expected on the Sawtooth and Boise NFs and in the Owyhees. DFTM is probably peaking. IDL Forest Health has fact sheets for the usual suspects (insects/defoliators, diseases, bark beetles) that include management recommendations. Fact sheets are available on the IDL Forest Health website.

Forest Legacy Update

Karen Sjoquist provided a fact sheet and maps and presented background information on the Forest Legacy Program. Since the last ILRCC meeting, Karen has worked with two landowners to close eight conservation easements (CEs) covering about 5,400 acres (Hall Mountain CE—317 acres; Hancock Timber Resource Group & the Nature Conservancy CE—2,520 acres). Karen is currently working on building additional CEs to the Hall Mountain project and another north of Bonners Ferry in the Cabinet/Purcell Mountain corridor. There are

Appendix G

also two project applications IDL is awaiting federal program ranking and if funded, would be granted in 2019. The FLP subcommittee roster was reviewed. Karen requests a nomination from ILRCC to replace a vacancy left by Frank Gariglio, now retired from NRCS. Karen requests any council members interested in serving on the FLP subcommittee contact her.

2019 WSFM & HFR Pre-Proposals

Western States Fire Manager's (WSFM) grants: Tyre provided a map of year 2019 project preproposals. The Idaho Parks preproposal will move from Landscape Scale Restoration (LSR) to WSFM application. The Idaho Firewise Committee is putting together an application to support the planning and development of County Wildfire Protection Plan (CWPP) updates by Idaho counties. A 2019 application by the Idaho Dept. of Parks and Recreation would expand previous work near Boise that includes chipping and open space management. The 2019 Squaw Creek SWCD will not be submitted at this time in order to consolidate work by many entities. The work within the 2019 Adams County pre-proposal focuses on the Meadow Creek area (located on private forest ownership) and updates their CWPP. The 2019 CPTPA pre-proposal will complete their work on constructing a continuous firebreak in Clearwater County. IDL will accept additional applications until June 2018. Only four applications will move forward to WSFM competition at this time. Applications cannot include maintenance.

HFR: There is a 2018 pre-proposal in Bonneville County by Palisades Reservoir for a continuation of fuel break work. There is a continuation of (fuel break) work on the West Side project in Boundary County.

Comments: Council members expressed disappointment that pre-proposals lack pertinent information. Tyre will be working with applicants to further develop applications. Is this time well spent? Yes, Tyre goes through a process of negotiating the on-the-ground work that will occur, which is influenced by many variables. One additional application would be good, but not necessary.

Tyre summarized his application review process: Initial pre-proposal announcement, webinar for applicants about process, pre-proposals received, recommendations from ILRCC, Tyre continues to work on applications with the applicants, submission of application for national review, application approved or not, followed by funding.

2019 LSR Project Pre-Proposals

Jen provided background information about ILRCC review and solicited member input on the five LSR preproposals. Please email any written comments to Jen on pre-proposals.

Firewise Parks – Tyre will separate the active hazard mitigation work from the LSR demonstration project and submit as WSFM grant. Leverage of adjacent project work will be important in this pre-proposal of 10 park areas.

Comments: Proposed activities will take out reduced hazard fuel loads and fuel breaks. Asking for less funding or reallocating? Reallocating to other areas such as education or to increase the number of parks, to do more with additional funding. Clarify "plans" mean CWPPs at the county or community level. Will pulling

Appendix G

mitigation work from LSR application diminish the proposal? This will build turnkey projects for other states; Idaho serves as the flagship to other state agencies and/or states. This idea should be strengthened in the narrative. How will the Firewise idea be marketed to others? Through storytelling of Idaho Firewise parks. Definitely build this idea into the application. The proposal will speak to sustainability. As far as education, is work on the ground part of that education through pruning, planting, etc., or is it a media type of education? Each park has an official day of workshops and opportunities for the community come and learn about Firewise. Leverage is adjacent work within the last three years. Will there be mitigation work for state parks to become Firewise? Yes. It is important to recognize a piece of the application will be a WSFM project, but the underlying message will remain. Concurrent to Firewise education, hazard fuel reductions will take place. Is anything built in for ongoing maintenance for kiosks? Upkeep and maintenance of state buildings are already in the state budget and are the responsibility of the entity requesting LSR funding. What is exportable to other states? Does this speak to demand in other states? This needs to be more clearly defined and articulated in the deliverables. Is there an opportunity to partner with another state? There are no other programs like this in any other states. Any state agency with buildings can be a Firewise building.

Eastern Idaho Shade Tree project—this is an extension of a funded LSR project where Idaho Power has facilitated a shade tree planting project to reduce energy consumption. There is a desire to have similar efforts around the state and communities in Eastern Idaho. The overarching themes will need to be addressed. Comments: Like that the project is being developed outside of Idaho Power. If Rocky Mountain Power were involved, it would cover entire south Idaho. Tim Solomon would be a good contact. What about partners like Lowe's and Home Depot donating trees or shovels? Dave clarified Idaho Power previously used ratepayer funds and cost benefit analysis to determine it is a cost saving effort for them. The local nursery and landscape association participates by providing trees. Idaho Power previously examined programs in other parts of the country to couple a few ideas together for a successful effort. Kudos to Patti Best at Idaho Power for her good efforts. Is this a model program and looking to see if it will work the second time around? The initial funding was with 2012 American Recovery and Reinvestment Act (ARRA). Avista Utilities has a similar program. Master Gardeners are not listed as partners, but as collaborators. Why is project length 2 years and not 3? Jen will follow up. The length of a proposed project does not factor into its score.

Teton River Restoration—this is a standalone project application born out of some of the partnerships developed as part of the applicant's first LSR project. The leverage from the City of Driggs is the purchase of an 80-acre flagship parcel for Teton River recreation access for boaters and fishing. They are working with the cattle growers association to determine their needs. They will restore riparian forest as functional for water quality and fish habitat. Collaboration with cattle association is good. If there is erosion and rehab is needed, could this be considered a forest activity? No stream alteration permit will be needed with this project; no need for special DEQ funding. Is spring runoff with peak flows present within project area? It is on Teton Creek proper that has water year-round; the main stability issue is cattle grazing impacts. Will the project area be considered forestland after the work finishes? It is most likely that the project area will remain classified as agricultural. Some concern as the FPA Shade Rule applies to forestland. Similar project was done by Merrill Beyler. Trout Unlimited is part of another partner. A created riparian forest will need to establish vegetation (grasses, forbs and trees) and then protection from cattle with fencing. The historical forest in this area is

Appendix G

aspen and cottonwood. The project aligns with the Forest Action Plan to improve water quality. Russian Olive as an invasive is not a problem in this area.

Cove Road—the impetus to start this project was the Nez-Clearwater National Forests' End of the World (EOTW) project. This area has not had a LSR project and this will be an opportunity to develop partnerships. Tyre reports the EOTW project (3,000 acres of categorical exclusion) was objected to and eventually ended up in the Governor's Office. The Courts decided that NEPA was sufficient and the project could proceed. It's anticipated that a Record of Decision will be signed in January 2019.

Comments: How much is IDL involved the Clearwater Basin Collaborative (CBC)? Some indirect involvement through Eileen Rowan with the SCD. The project area is adjacent to Good Neighbor Authority (GNA) project work. Should it include thinning and site preparation? It makes sense to keep it in the future project pile for now and wait for the litigation to settle. It's a good project with good people, but ILRCC support for it might tip the scale. The scale of the work proposed is outstanding and will have a meaningful effect. Things are starting to move in the CBC and many groups are working together to collaborate on project work. Could private landowners seek out EQIP funding assistance? Where will seed source come from to grow seedlings? How will they stop sediment delivery? This isn't documented. On map, priority place 1 and 2, is not clear. Very rough application with a lot thrown into it. Could it be more than one project?

Lewis County, Clearwater Complex Restoration-- This is a mirror to Idaho County LSR project for same 2015 fire.

Comments: More important project than Cove Road. Is this project located on very steep ground? No. A recent Tools for Engaging Landowners Effectively (TELE) workshop trained many more partners in this community to target and engage landowners. The SCD will take the lead on this effort. Concern expressed about using high elevation pine and larch seed source on low elevation locations. There is same elevation, appropriately sourced Douglas-fir seed available. Add narrative to locate appropriate seed source for these areas? This is a separate project due to time delay locating seed source and growing seedlings. There's an opportunity to develop projects around this issue. There is an explosion of demand for seedlings and LSR funds must be used within 4 years. SCDs don't have the ability to purchase seeds and wait to be reimbursed beyond a few weeks or months. It was suggested that Jen talk to IFOA seedling project folks for potential partnership. This project is about planning and planting trees and funding on the partner side for weed control. Is there critical habitat restoration in this area? There are listed fish and Farm Bill funding is used on private lands for this restoration work. Erosion due to fire effects is a big problem on Highway 12.

It was recommended to move forward the following as full proposals to WFLC: Firewise Parks, Eastern Idaho Shade Tree, and Lewis County Clearwater Complex Restoration, and to reconsider Cove Road and Teton River in the future.

Treasure Valley Forest Carbon Effort

Tim Maguire reports The Nature Conservancy (TNC) proposed this project. Many ILRCC member organizations are partners within this project. The assessment helps us better understand how the current community

Idaho

Appendix G

forest mitigates regional carbon impacts and how future investments in tree planting, care and recycling can sustain more resilient natural resources and economies with the region. Climate trends indicate its changing. The number of days above 80 degrees in Treasure Valley are increasing. The existing canopy stores 1.4 million metric tons of CO2 valued at \$29 million.

The group, City Forest Credits, links urban tree owners with carbon credit buyers. Rural trees are less valuable than urban trees (\$5 vs \$20). Idaho companies are buying these credits. Tim provided a City of Boise worksheet example for the Releaf Program. Releaf Boise is a volunteer tree planting program started 30 years ago, with 100 trees/year purchased by the City of Boise and given away to be planted in public rights of way. Eighty percent of the value (forest credits) occurs by year 6 and benefits continue exponentially over time. MOUs are needed for trees planted as part of shade tree planting program and this may not be a good fit for this project. This is a better fit for community tree planting in places like Julia Davis Park. The next step is to demo a project where City Forest Credits will a link buyer for credits.

http://www.tvcanopy.net/forest-carbon/

https://www.nature.org/ourinitieative/regions/northamerica/unitedstates/id

http://www.cityforestcredits.org

Meeting feedback, wrap up, next meeting

Ara reported on all the hard work by Tyre Holfeltz to initiate and update long overdue CWPPs statewide (41-42 counties). Karen Sjoquist has been responsible for bringing on between 36-37,000 acres under the Forest Legacy Program. Tom Eckberg, along with a small group of partners, has completed 400 acres of MCH pouch treatments. Jen is moving forward with many great project proposals.

Ken provided kudos to IDL staff for work to put together grants and meetings.

Jeff Handel commented about the need to form a subcommittee to address Fire Plan Working Group prior grant work. Tyre explained the history of how this used to work. More funding is available now due to size of applications (up to \$300K) and more acres are being treated. Some concern voiced about the need for more applications to access all available grant funds. This is a long term process by cooperators to get up to speed and make partnerships happen. Tyre would appreciate any ideas how to do this grant work better. In addition, the formation of the Idaho Fire Response Committee (IFRC) is complete. Administratively, an email will go out with the IFRC charter that address fire response. Tyre will remain the point of contact and liaison for this group. The first IFRC technical group will meet in early March 2018 and will include NFS Fire, BLM, IDL, and anyone who does anything for fire response in Idaho. Feedback to ILRCC from IFRC will take place on project work done under LSR, WSFM and HFR grants.

Regarding FAP 2020, should sage-steppe remain as special landscape area? Comments: If subcommittee is making recommendations, advise in advance of the ILRCC meeting. More time may be needed to have discussions if recommendations/feedback are needed, or alternately advise if information is only being funneled to the group. Once data is modeled, more feedback and meaningful conversation by ILRCC members

Idaho

Appendix G

and staff will take place. If necessary, consider having an additional Fall 2018 meeting to discuss FAP progress. Ara requested if Council members have data that they feel should be included in the revision, to pass it along to your Subject Matter Expert or Suzie Jude, even if it doesn't necessarily apply to identified threat and benefit issues. Please read discussions in the meeting notes of FAP 2020 core group meetings and provide your feedback.

Suggestions:

- Summarize the previous meeting at the beginning of each ILRCC meeting, and use this as a kickoff of what has happened with issues since last meeting.
- Provide a list of meeting benefits to and accomplishments for Fire, Urban and Stewardship programs. Post to ILRCC webpage and to respective constituencies.
- Share the Idaho Fact Sheet and Accomplishments with Council members. This is on the website but can be sent out separately to Council members. There is too much information to sort through on the IDL website.
- Circulate the IDL Annual Report.
- Add links on the member page for these items.

The next ILRCC meeting will take place in Idaho Falls, on Wednesday, June 20, 2018, with the meeting location TBD. A field tour on Tuesday, June 19, will view urban projects in Idaho Falls, riparian restoration in Driggs, and hazard mitigation projects in between.

Meeting adjourned 3:45 pm Minutes respectfully submitted by Suzie Jude

List of follow-up items:

• Dave Stephenson provided the following link to information on new synthesis of information about health benefits of trees to humans. Urban Nature for Human Health and Well-Being: Vibrant Cities Lab: Resources for Urban Forestry, Trees, and Green Infrastructure

Public Outreach Meeting

Date: Monday April 30, 2018

Attendees: Kelsey Brown, Lorrie Pahl, Janice Witherspoon, Aaron Blake, Mary Mott, and Lucille Webster

Purpose: Review current public outreach efforts, survey results, and possible future public outreach projects.

Review of Survey and results: Janice provided a handout of the current survey results demonstrating the results of each section, it appears that 83 people have taken the survey since January.

Idaho

Appendix G

Kelsey pointed out one of the areas of improvement FEMA suggested in their review of the 2013 plan was more public input. Kelsey then asked Janice if there was a way to get a screen shot of some of the responses, Janice said yes but that the responses vary, so Kelsey has decided to schedule some time to sit with Janice and review and pick some select responses to add to the plan.

Kelsey then asked if Janice could create a QR code linking to the draft plan for public review, and have questions on each section to get feedback.

It was suggested to send it to the AFO's and Emergency Mangers to get out to the communities. Janice suggested adding it to IOEM Facebook page since it gets the most traffic and other social media platforms.

Mary suggested maybe setting something up at the Village since it has a large amount of people.

Kelsey asked Aaron if he has any upcoming events that it would be feasible to display the plan, she also mentioned that Susan would like to have public comments in the plan to send in our original draft to FEMA. Janice suggested setting it as hot topic so it would be first item on page. Janice will work with Elizabeth to get this done.

Aaron doesn't feel that a printed copy of plan would be very affective so some handouts with QR code would be most useful, and maybe have a print copy in case someone wants to browse. Aaron has an event the end of June in Salmon.

Kelsey suggested reaching out to Brett and Amanda at FEMA to see if we could submit the draft without public comment and send it later so we have more time to gather information. It was suggested to send them what we have and add more as it comes available.

Kelsey then asked Aaron and Janice to review plan for content and errors, they both agreed to take a look.

Some suggestions on other public outreach were:

Work with YMCA and maybe put some copies of the QR code up for public view and look at any community events they may have that will give us access to large amount of population to complete survey and/or getting on their website and social media platforms.

Checking out local fairs and maybe even Silverwood amusement park up north to set up a booth to get public input.

Contacting chamber of commerce and see about possibly getting on their website. Ada County, Janice mentioned Elizabeth had looked into it before for the state but didn't feel it was viable option, Janice will speak with her to get more information. Kelsey said she will check with AFO's and EM up north to see if any of them have access. It was suggested to contact Mike Neelon with Latah County. It was also suggested to check with University of Idaho for events that we could set up a table. Kelsey will get with Janice by May 17th to decide how to lay the survey out.



Appendix G

Some possible questions would be "Do you see anything that is missing from the plan?" Is there anything you would like to see in the plan?" It was also suggested that we make sure the questions point out that this in reference to the Mitigation plan and does not deal with Response or recovery.

Kelsey will get with Janice on survey questions and how to incorporate them into the plan. Lorrie will send out an email to all the Northern Emergency Mangers asking about actives in their communities.

That was also mention of Mountain Home Air show on June 2^{nd} and 3^{rd} , we also need to check to see if there are any other events on the base.



Mitigation Annual Exec Co			T = -	
lame	Title	Agency	Phone	E-mail
V - V O + 6	State NFIP	MAIN	207 110-	Keri Syman @
Keri K. Smith-Sigm	an Coordinator	TOWK	287-4928	idur, idaho, dor
				unstephensano des. ids
Mark Stephenson	SHMO	IBHS	422-5726	
	18KS mit.			manott. ConTRAC
MARY MOTI	ASSISTANT	IRHS		18110 0-13
7/00/4		IDHW	+	IBAS GOV
KARIS CARRIER	EPIDEMIOLOGI EIELD OF PUL	40	334-46	y carter k16 dhu
		1		idaho gov
Jeff Rylee	1BHS- HAZMAT	1816	422-572	4 1 011 110 11
JETT MY 100	10115 spec 100	1000	11 3/2	ey/ee@bhs.idahio,god
T. C.	4	1.711		
Tim frazier	Assistent Professor	UIdaho	182-186-9.	AT tfraziere gidahied
		11.00		
KEUN HENRY	RESEARCH ASSISTANT	U of I DAHO	775-772-008	3 Kheny Duidaho odu
A				
Algans			1 2 7	
		-		
			2 2	
		-	-	
		-		
		 	+	
	1	1		



Name	Title	Agency	Phone	E-mail	
Mary Marsh		BHS			
Susa Cleverley		BHS			
Thus Wending !:		852			
Brott Hold		FEMA	L		
Bob CARTER		BIBC			
Thomas Ritheler		BPBC			
Scott Fennema		ひらま			
Kris Garter		IDHW			
Tray Lindquist	-	NWS			/
Jelf Ryles		1316			
Bill Phillips		±65		phillip 6	wichalw ed
Marlina	James		DA		
Flew Bergaven		USACE	_		
Rob Liffrell		Boise Stat	e		
JOHN FAIK		IDWR			
FYAN M'DANIER		IBHS			
Bedy Rose		BHS			
Cartney Thompson		VofI		-	
My Burn		VI			
Thomas Vuere		BSalcRI	2		
ERIC LIMBONS	+	ISU/ PP R			



2015 SHMP Executive Committee Invitees

Name	Title	Agency	Phone	E-mail	Signature
Berggren, Ellen	Project Manager/District Outreach Coordinator	USACE	208-345-2065	Ellen.M.Berggren@usace.army.mil	4
Bessey, Herb		USACE	509-527-7144	Herb.G.Bessey@usace.army.mil	
Carter, Bob	Project Manager	Boise Project Board of Control	208-344-1141	bcarter@boiseproject.org	
Carter, Kris	Epidemiologist	IDHW	208-334-5939	carterk1@dhw.idaho.gov	Hir / Jah
Claycomb, David	Resources Bureau Chief	IDPR	208-514-2410	David.Claycomb@idpr.idaho.gov	
Cleverley, Susan	Senior Mitigation Planner	IBHS	208-258-6545	scleverley@bhs.idaho.gov	Suma Chanabus
Coulter, Mel	Emergency Program Manager	ITD	208-334-8414	Mel.Coulter@itd.idaho.gov	My Courter -
Cox, Kelly	Mitigation Div. Rep & COOP-ERG Operations Officer	FEMA	425-487-4698	Kelly.Cox2@fema.dhs.gov	
Dietrich, Mark		DEQ		Mark.Dietrich@deq.idaho.gov	
Elam, Matt	Utilities Analyst	IPUC	208-334-0363	matt.elam@puc.idaho.gov	
Eavenson, Jim	Lieutenant, Acting Captain	ISP	208-884-7048	james.eavenson@isp.idaho.gov	
Falk, John	PE, Dam Safety	IDWR	208-287-4927	John.Falk@idwr.idaho.gov	
Ferriter, Amy		Idaho Dept. of AG		Amy.Ferriter@agri.idaho.gov	
Frazier, Tim	-Geologist Gaggrapher	U of I Dept. of Geography	208-885-6238	tfrazier@uidaho.edu	51
Gibble, Katie	MS Student - Geology	Boise State University		katiegibble@boisestate.edu	Med
Gillerman, Virginia, Ph.D.	Associate research Geologist	Idaho Geological Survey	208-332-4420	vgillerm@uidaho.edu	
Glazier, Craig	National Fire Plan Coordinator for Idaho	Forest Service	208-666-8646	cglazier@fs.fed.us	GRM-







2016 SHMP Executive Committee Invitees

Name	Title	Agency	Phone	E-mail	Signature
Berggren, Ellen	Project Manager/District Outreach Coordinator	USACE	208-345-2065	Ellen.M.Berggren@usace.army.mil	
Bessey, Herb		USACE	509-527-7144	Herb.G.Bessey@usace.army.mil	phone-11)
Carter, Bob	Project Manager	Boise Project Board of Control	208-344-1141	bcarter@boiseproject.org	
Carter, Kris	Epidemiologist	IDHW	208-334-5939	carterk1@dhw.idaho.gov	
Claycomb, David	Resources Bureau Chief	IDPR	208-514-2410	David.Claycomb@idpr.idaho.gov	
Cleverley, Susan	Mitigation Section Chief, SHMO	Idaho Office of Emergency Management	208-258-6545	scleverley@imd.idaho.gov	Swe Merila
Coulter, Mel	Emergency Program Manager	ITD	208-334-8414	Mel.Coulter@itd.idaho.gov	1
Cox, Kelly	Mitigation Div. Rep & COOP-ERG Operations Officer	FEMA	425-487-4698	Kelly.Cox2@fema.dhs.gov	phone-un
Dietrich, Mark		DEQ		Mark.Dietrich@deq.idaho.gov	
Elam, Matt	Utilities Analyst	IPUC	208-334-0363	matt.elam@puc.idaho.gov	
Eavenson, Jim	Lieutenant, Acting Captain	ISP	208-884-7048	james.eavenson@isp.idaho.gov	
Falk, John	PE, Dam Safety	IDWR	208-287-4927	John.Falk@idwr.idaho.gov	
Ferriter, Amy		Idaho Dept. of AG		Amy.Ferriter@agri.idaho.gov	
Frazier, Tim	Geologist	U of I Dept. of Geography	208-885-6238	tfrazier@uidaho.edu	
Gibble, Katie	MS Student - Geology	Boise State University		katiegibble@boisestate.edu	
Gilpin, Joann					
Gillerman, Virginia, Ph.D.	Associate research Geologist	Idaho Geological Survey	208-332-4420	vgillerm@uidaho.edu	



Name	Title	Agency	Planning Team or Stakeholder?	Phone	E-mail 5	Signature
Carter, Kris	Epidemiologist	IDHW	danna	208-334-5939	enis, carter 30 N	U. Mer
Cleverley, Susan	Mitigation Section Chief, SHMO	IOEM	,	208-258-6545	scleverley@imd.idaho.gov	Sura Cleve, Co
Falk, John	PE, Dam Safety	IDWR		208-287-4927	John,Falk@idwr.idaho.gov	
Liberty, Lee	Research Professor	BSU CGISS/Geosciences		208-426-1166	liberty@boisestate.edu	Lee M Chilo
Lindquist, Troy	Senior Service Hydrologist	NOAA		208-334-9538	troy.lindquist@neaa.gov	hun Harland
Littrell, Rob	Emergency Management Planner/Analyst	BSU		208-426-3638	roblitrell@boise.tate.edu	
McDaniel, Ryan	RiskMAP Program Manager	IOEM		208-258-6593	rmodaniel@imd.idaho.gov	Eun
Miller, Jerry		Idaho Dept. of Commerce	268-07	2 98-334-26 50	jerry.miller@commerce.idaho.gov	la
Mott, Mary	Mitigation Admin Assistant	IOEM		208-258-6521	mmott@contractor.bhs.idaho.gov	Mary Trott
Pahl, Lorrie	Mitigation Planner	IOEM		208-258-6508	loahl@imd.idaho.gov	Parie Pan
Meuleman, Bobbi-Jo		Department of Commerce			Bobbi- Jo.Meuleman@cc-mmerce.idaho.gov	
Roeber, Ben	Preparedness and Protection Branch Chief	IOEM		208-258-6544	broeber@imd.idaho.gov	3-1
Jacobson, Brooke		Idaho State Department of Agriculture			brooke jacobson@isda.idaho.gov	Bythe
Sandahl, Knute	State Fire Marshal	Department of Insurance, Office of the State Fire Marshall		208-334-4375	knute.sandahl@dbiidaho.gov	
Holfeltz, Tyre		IDL		208-666-8653	tholfeltz@idl.idaho.gov	



2018 State Hazard Mitigation Plan Kick-Off Meeting

Name	Title	Agency	Phone	E-mail	Signature
Webster, Lucille	Mitigation Admin Assistant	IOEM		lwebster@contractor.imd.idaho.gov	duelle wer
Novich, Heidi		IOEM		hnovich@imd.idaho.gov	Heidi Novich
Maffey, Mike		Idaho Fish & Game	208-334-3730	Mike.maffey@idfg.idaho.gov	
Webster, Jan		BSU		JanWebster@boisestate.edu	
Wilan, Mally	local docal	1301			Maly wilon
jellrylee	Joen -	۵			Mahy wilen
- 1					MM 2 1
					,



Name	Title	Agency	Phone	E-mail	Signature
Bessey, Herb		USACE	509-527-7144	Herb.G.Bessey@usace.armv.mil	
Carter, Bob	Project Manager	Boise Project Board of Control	208-344-1141	bcarter@boiseproject.org	
Carter, Kris	Epidemiologist	IDHW	208-334-5939	carterk1@dhw.idaho.gov	
Claycomb, David	Resources Bureau Chief	IDPR	208-514-2410	David.Claycomb@idpr.idaho.gov	
Cleverley, Susan	Mitigation Section Chief, SHMO	Idaho Office of Emergency Management	208-258-6545	scleverley@imd.idaho.gov	Lucan Cleverly
Dietrich, Mark		DEQ		Mark.Dietrich@deq.idaho.sov	/
Elam, Matt	Utilities Analyst	IPUC	208-334-0363	matt.elam@puc.idaho.gov	
Eavenson, Jim	Lieutenant, Acting Captain	ISP	208-884-7048	james.eavenson@isp.idaho.gov	
Falk, John	PE, Dam Safety	IDWR	208-287-4927	John.Falk@idwr.idaho.gov	Shitat
Ferriter, Amy		Idaho Dept. of AG		Amy.Ferriter@agri.idaho.gov	
Hatch, Bill		IDBS	208-332-7121	bill.hatch@dbs.idaho.gov	
Hayes, Carl		Pioneer Irrigation District	208-459-3617	carl@pioneerirrigation.com	
Glazier, Craig	National Fire Plan Coordinator for Idaho	Forest Service	208-666-8646	c glazi er@fs.fed.us	
Hobbs, Brandon		USACE		Brandon.W.Hobbs@usace.army.mil	
Holfeltz, Tyre		IDL	208-166-5633	tholfeltz@idl.idaho.gov	ENO Shortest
Jacobson, Brooke		Idaho State Department of Agriculture		Brooke.jacobson@isda.idaho.gov	Brollper



Name	Title	Agency	Phone	E-mail	Signature
Juker, Pamm	(drought)	Idaho Dept. of Agriculture		pjuker@agri.idaho.gov	
Keith, Chris		Bureau of Reclamation	208-383-2269	ckeith@usbr.gov	
Kolden, Crystal	Assistant Professor of Geography and Certified Fire Ecologist	U of I Dept. of Geography	208 885-6018	ckolden@uidaho.edu	
Liberty, Lee	Research Professor	BSU CGISS/Geosciences	208-426-1166	lliberty@boisestate.edu	
Lifton, Zach	Geologic Hazards Geologist	Idaho Geological Survey	208-364-4099	zlifton@uidaho.edu	
Lindquist, Eric	Director, Public Policy Center Associate Professor, Dept. of Public Policy and Administration	Boise State University	208-426-3770	eridindquist@boisestate.edu	
Lindquist, Troy	Senior Service Hydrologist	NOAA	208-334-9538	troy.lindquist@noaa.gov	rug Staw
Littrell, Rob	Emergency Management Planner/Analyst	BSU	208-426-3638	roblittrell@boisestate.edu	plase
Maffey, Mike		Idaho Fish and game		Mike.maffey@idfg.idaho.gcv	
Marsh, Mary	Public-Private Partnerships Section Chief	IBHS	208-258-6520	mmarsh@imd.idaho.gov	May Marsh
Matthews, Kerrie		IDWR		Kerri.Matthews@idwr.idaho.gov	. () . (-
McClendon, Sarah	Principal Structural Engineer	McClendon Engineering, Inc.	208 342-2919	sarah@mcclendonengineering.com	
McDaniel, Ryan	RiskMAP Program Manager	Idaho Office of Emergency Management	208-258-6593	rmcdaniel@imd.idaho.gov	374
Miller, Jerry		Idaho Dept. of Commerce	208-334-2650 x2143	jerry.miller@commerce.idaho.gov	1 1 MV

G-120



Name	Title	Agency	Phone	E-mail	Signature
Mott, Mary	Mitigation Admin Assistant	Idaho Office of Emergency Management	208-258-6521	mmott@contractor.bhs.idaho.gov	Mary Thoo
Meuleman, Bobbi-Jo		Department of Commerce		Babbi- jo.meuleman@commerce.idaho.gov	Mary Thot
Myslivy, Jennifer	Fire Prevention and Mitigation	Bureau of Land Management	208-373-3963	jmyslivy@blm.gov	
Maureen O'Shea					
Pahl, Lorrie	Mitigation Planner	Idaho Office of Emergency Management	208-258-6508	lpahl@imd.idaho.gov	Arrie El
Phillips, Bill	Research Geologist	IGS	208-885-8928	phillips@uidaho.edu	
Pierce , Jen		Boise State University		jenpierce@boisestate.edu	
Pietras, Bob		IDL		bpietras@idl.idaho.gov	
Ritthaler, Tom	-Project Manager Inchae nent	Boise Project Board of Control	208-344-1141	tritthaler@boiseproject.org	Notes
Roeber, Ben	Preparedness and Protection Branch Chief	Idaho Office of Emergency Management	208-258-6544	broeber@imd.idaho.gov	B-V
Royster, Jerry					J ,
Rylee, Jeff	HazMat Operations	Idaho Office of Emergency Management	208-258-6524	jrylee@imd.idaho.gov	
Sandahl, Knute	State Fire Marshal	Department of Insurance, Office of the State Fire Marshall	208-334-4375	knute.sandahl@doi.idaho.gov	
Sandoval, Bruce		USDA		Bruce.sandoval@d.usda.gov	
Sauer, Brian					



Name	Title	Agency	Phone	E-mail	Signature
Sego, Rick		Bureau of		rsego@usbr.gov	
		Reclamation			
Semanko, Norm	Director	Idaho Water Users	208-344-6690	norm@iwua.org	
		Association			
Stidham, Jeff		USACE	509-527-7145	Jeffery.L.Stidham@usace.army.mil	
Suter, Tatton		USACE		Tatton.L.Suter@usace.army.mil	
Webster, Jan		BSU		janwebster@boisestate.edu	
Wilson, Mallory	Plans Section Chief	Idaho Office of		mwilson@imd.idaho.gov	Hale bin
		Emergency			Maly bis
		Management			U
Wood, Molly		USGS		mswood@usgs.gov	
Wyrembelski,	Dam Safety Program	USACE – Walla Walla	509-527-7626	steven.a.wyrembelski@usace.army.	
Steve	Manager	District		mil	
Zirschky, Mark	District Superintendent	Pioneer Irrigation	208-459-3617	Mark@pioneerirrigation.com	
Cole, Jesse	14E Project mgs	10 GM			gonble
	,				



Name	Title	Agency	Phone	E-mail	Signature
Aaron, Blake	Courseling Programmes Courselington	Idaho Office of Emergency Management	208-258-6522	ablake@imd.idaho.gov	a ple
Bessey, Herb	Levee Safety Program Manager	USACE	509-527-7144	Herb.G.Bessey@usace.army.mil	
Bogdanowitz, Val	Chief of Readiness	USACE	509-527-7041	val.p.bogdanowitz@usace.army.mil	
Cannon, Richard		USACE		richard.e.cannon@usace.army.mil	
Carter, Bob	Project Manager	Boise Project Board of Control	208-344-1141	bcarter@boiseproject.org	
Carter, Kris	Epidemiologist	IDHW	208-334-5939	carterk1@dhw.idaho.gov	
Cleverley, Susan	Mitigation Section Chief, SHMO	Idaho Office of Emergency Management	208-258-6545	scleverley@imd.idaho.gov	Susen Clevely
Cole, Jesse-Kay	Training and Exercise Logram Manager DYD(LE+	Idaho Office of Emergency Management	208-258-6588	jcole@imd.idaho.gov	Susan Cavuly Chisse Will
Dietrich, Mark	Technical Services Division Administrator	DEQ	(208) 373-0204	Mark.Dietrich@deq.idaho.gov	in attendence
Ehlert, Dean	State Response Program Manager	DEQ	(208) 373-0416	dean.ehlert@deq.idaho.gov	
Falk, John	PE, Dam Safety	IDWR	208-287-4927	John.Falk@idwr.idaho.gov	
Hayes, Carl		Pioneer Irrigation District	208-459-3617	carl@pioneerirrigation.com	ULI
Hobbs, Brandon		USACE	238-453-4463	Brandon.W.Hobbs@usace.army.mil	Birtin W Hills
Holfeltz, Tyre		IDL		tholfeltz@idl.idaho.gov	on phone
Hosch-Hebdon, Tricia	IDFG	Wildlife Health Forensic Lab Manager	208-939-9171	Tricia.hebdon@idfg.idaho.go=	
Glazier, Craig	National Fire Plan Coordinator for Idaho	Forest Service	208-666-8646	cglazier@fs.fed.us	



Name	Title	Agency	Phone	E-mail	Signature
Jacobson, Brooke		Idaho State Department of Agriculture		Brooke.jacobson@isda.idaho.gov	
Juker, Pamm	(drought)	Idaho Dept. of Agriculture		pjuker@agri.idaho.gov	
Keith, Chris		Bureau of Reclamation	208-383-2269	ckeith@usbr.gov	
Kolden, Crystal	Assistant Professor of Geography and Certified Fire Ecologist	U of I Dept. of Geography	208 885-6018	ckolden@uidaho.edu	
Liberty, Lee	Research Professor	BSU CGISS/Geosciences	208-426-1166	lliberty@boisestate.edu	
Lifton, Zach	Geologic Hazards Geologist	Idaho Geological Survey	208-364-4099	zlifton@uidaho.edu	on phone
Lindquist, Eric	Director, Public Policy Center Associate Professor, Dept. of Public Policy and Administration	Boise State University	208-426-3770	ericlindquist@boisestate.edu	
Lindquist, Troy	Senior Service Hydrologist	NOAA	208-334-9538	troy.lindquist@noaa.gov	long Jangues
Littrell, Rob	Emergency Management Planner/Analyst	BSU	208-426-3638	roblittrell@boisestate.edu	
Mace, Rob	Training & Exercise Section Chief	Idaho Office of Emergency Management	208-258-6509	rmace@imd.idaho.gov	Poti Men
Maffey, Mike		Idaho Fish and game		Mike.maffey@idfg.idaho.gov	
Marsh, Mary	Public-Private Partnerships Section Chief	IBHS	208-258-6520	mmarsh@imd.idaho.gov	Mary Marsh
McClendon,	Principal Structural	McClendon	208 342-2919	sarah@mcclendonengineering.com	0.0
Sarah	Engineer	Engineering, Inc.	200 250 5552	1 1101 1111	
McDaniel, Ryan	RiskMAP Program Manager	Idaho Office of Emergency Management	208-258-6593	rmcdaniel@imd.idaho.gov	Q15



Name	Title	Agency	Phone	E-mail	Signature
Miller, Jerry		Idaho Dept. of	208-334-2650	jerry.miller@commerce.idahc.gov	many mot
		Commerce	x2143		WANG TO
Mott, Mary	Mitigation	Idaho Office of	208-258-6521	mmott@contractor.bhs.idahc.gov	/
	Admin Assistant	Emergency			n in to
		Management			4nary 4note
Meuleman,		Department of		Bobbi-	1
Bobbi-Jo		Commerce		jo.meuleman@commerce.idaho.gov	
Meyer, Kirk		Pioneer Irrigation		kirk@pioneerirrigation.com	
Murphy, Neal	Emergency Services Coordinator	ITD		neal.murphy@itd.idaho.gov	Namyset
Myslivy, Jennifer	Fire Prevention and	Bureau of Land	208-373-3963	imyslivy@blm.gov	1
	Mitigation	Management			,
O'Shea, Maureen			×	maureen.oshea@idwr.idaho.gov	
Pahl, Lorrie	Mitigation Planner	Idaho Office of Emergency	208-258-6508	lpahl@imd.idaho.gov	
		Management			
Phillips, Bill	Research Geologist	IGS	208-885-8928	phillips@uidaho.edu	
Pierce , Jen		Boise State University		jenpierce@boisestate.edu	
Pietras, Bob		IDL		bpietras@idl.idaho.gov	
Ritthaler, Tom	Project Manager	Boise Project Board of Control	208-344-1141	tritthaler@boiseproject.org	
Roeber, Ben	Preparedness and Protection Branch Chief	Idaho Office of Emergency Management	208-258-6544	broeber@imd.idaho.gov	Bur
Royster, Jerry	Management Analyst	HUD	(208) 334- 1514	Jerry.Royster@hud.gov	



Name	Title	Agency	Phone	E-mail	Signature
Sandahl, Knute	State Fire Marshal	Department of Insurance, Office of the State Fire Marshall	208-334- 4375	knute.sandahl@doi.idaho.gov	
Sandoval, Bruce		USDA		Bruce.sandoval@d.usda.gov	
Sauer, Brian				bsauer@usbr.gov	
Sego, Rick		Bureau of Reclamation		rsego@usbr.gov	
Semanko, Norm	Director	Idaho Water Users Association	208-344-6690	norm@iwua.org	
Stidham, Jeff		USACE	509-527-7145	Jeffery.L.Stidham@usace.army.mil	in Phone
Suter, Tatton		USACE		Tatton.L.Suter@usace.army.mil	
Webster, Jan		BSU		janwebster@boisestate.edu	on phone
Webster, Lucille	Plans/ Mitigations Program Assistant	Idaho Office Of Emergency Management	208-258-6581	lwebster@contractor.imd.idaho.gov	
Wilson, Mallory	Plans Section Chief	Idaho Office of Emergency Management	208-258-6592	mwilson@imd.idaho.gov	Mallo Wilon
Wood, Molly	Center for Aquatic Resource Studies	USGS	407-865-6725	mswood@usgs.gov	
Wyrembelski, Steve	Dam Safety Program Manager	USACE – Walla Walla District	509-527-7626	steven.a.wyrembelski@usace.army. mil	
Zirschky, Mark	District Superintendent	Pioneer Irrigation	208-459-3617	Mark@pioneerirrigation.com	
telodon, Tricia	Health Lab Manager	Idaho Fish &	208-608-	tricia. heldon@ idfg.idaho)



Name	Title	Agency	Phone	E-mail	Signature
Jeff Rylie	HM/Sper Toms	10EM		July COEn. idahs. por	W2
/					



Name	Title	Agency	Phone	E-mail	Signature
Bessey, Herb	Levee Safety Program Manager	USACE	509-527-7144	Herb.G.Bessey@usace.army.mil	
Blake, Aaron	Community Preparedness Coordinator	Idaho Office of Emergency Management	208-258-6522	ablake@imd.idaho.gov	
Bogdanowitz, Val	Chief of Readiness	USACE	509-527-7041	val.p.bogdanowitz@usace.army.mil	
Cannon, Richard		USACE		richard.e.cannon@usace.army.mil	
Carter, Bob	Project Manager	Boise Project Board of Control	208-344-1141	bcarter@boiseproject.org	
Carter, Kris	Epidemiologist	IDHW	208-334-5939	carterk1@dhw.idaho.gov	Hutt Cata
Cleverley, Susan	Mitigation Section Chief, SHMO	Idaho Office of Emergency Management	208-258-6545	scleverley@imd.idaho.gov	Swan Clevely
Cole, Jesse-Kay	Training and Exercise Program Manager	Idaho Office of Emergency Management	208-258-6588	jcole@imd.idaho.gov	
Cresto, Liz		IDWR	17	Liz.Cresto@idwr.idaho.gov	Liz Cresto
Dietrich, Mark	Technical Services Division Administrator	DEQ	(208) 373-0204	Mark.Dietrich@deq.idaho.gov	1120
Duncan, Elizabeth	Public Affairs Officer	IOEM	208-258-6595	eduncan@imd.idaho.gov	Elizapeth Duxon
Ehlert, Dean	State Response Program Manager	DEQ	(208) 373-0416	dean.ehlert@deq.idaho.gov	0-611
Evetts, David			- 17	devetts@usgs.gov	W. John
Falk, John	PE, Dam Safety	IDWR	208-287-4927	John.Falk@idwr.idaho.gov	A Company
Flaner, Rob	Tetra Tech Lead HMP Planner	Tetra Tech	208-939-4391	rob.flaner@tetratech.com	,
Hayes, Carl		Pioneer Irrigation District	208-459-3617	carl@pioneerirrigation.com	1.111
Hobbs, Brandon		USACE		Brandon.W.Hobbs@usace.army.mil	Brule Wille



		Anneu	Phone	E-mail	Signature
Name	Title	Agency			A.101.
Hoekema, David		IDWR		david.hoekema@idwr.idaho.gov	And Ale
Holfeltz, Tyre		IDL		tholfeltz@idl.idaho.gov	Sy Stolff
				brettholt@fema.dhs.gov	10
Holt, Brett	FEMA	on me or lib	208-939-9171	Tricia.hebdon@idfg.idaho.gov	
Hosch-Hebdon, Tricia	I IUFO	Wildlife Health Forensic Lab Manager			
Glazier, Craig	National Fire Plan Coordinator for Idaho	Forest Service	208-666-8646	cglazier@fs.fed.us	
Jacobson, Brooke	Coordinator for idano	Idaho State Department of Agriculture		Brooke.jacobson@isda.idaho.gcv	
Juker, Pamm	(drought)	Idaho Dept. of Agriculture		pjuker@agri.idaho.gov	
Keith, Chris		Bureau of Reclamation	208-383-2269	ckeith@usbr.gov	
Kiefer, Sharon	Deputy Director	Idaho Dept. of Fish and Game	4.071	sharon.kiefer@idfg.idaho.gov	
Kolden, Crystal	Assistant Professor of Geography and Certified Fire Ecologist	U of I Dept. of Geography	208:885-6018		
Liberty, Lee	Research Professor	BSU CGISS/Geosciences	208-426-1166		1 /24
Lifton, Zach	Geologic Hazards Geologist	Idaho Geological Survey	208-364-4099		Say Il
Lindquist, Eric	Director, Public Policy Center Associate Professor, Dept. of Public Policy and Administration	Boise State University	208-426-3770		t tal
Lindquist, Troy	Senior Service Hydrologist	NOAA	208-334-9538	troy.lindquist@noaa.gov	dry Lug



Name	Title	Agency	Phone	E-mail	Signature
Littrell, Rob	Emergency Management Planner/Analyst	BSU	208-426-3638	roblittrell@boisestate.edu	y de
Luna, Theresa	Executive Administrative Officer	IOEM	208-258-6540	tluna@imd.idaho.gov	
Mace, Rob	Training & Exercise Section Chief	Idaho Office of Emergency Management	208-258-6509	rmace@imd.idaho.gov	Com
Marsh, Mary	Public-Private Partnerships Section Chief	IBHS	208-258-6520	mmarsh@imd.idaho.gov	
McClendon, Sarah	Principal Structural Engineer	McClendon Engineering, Inc.	208 342-2919	sarah@mcclendonengineering.com	
McDaniel, Ryan	RiskMAP Program Manager	Idaho Office of Emergency Management	208-258-6593	rmcdaniel@imd.idaho.gov	4
Miller, Jerry		Idaho Dept. of Commerce	208-334-2650 x2143	jerry.miller@commerce.idaho.gov	lap la
Mott, Mary	Mitigation Admin Assistant	Idaho Office of Emergency Management	208-258-6521	mmott@contractor.bhs.idaho.gov	Mary Moto
Meuleman, Bobbi-Jo	Chief Operations Officer	Department of Commerce	208-780-5181	Bobbi- jo.meuleman@commerce.idano.gov	
Meyer, Kirk		Pioneer Irrigation		kirk@pioneerirrigation.com	
Murphy, Neal	Emergency Services Coordinator	ITD		neal.murphy@itd.idaho.gov	NPMA
Myslivy, Jennifer	Fire Prevention and Mitigation	Bureau of Land Management	208-373-3963	imyslivy@blm.gov	10.2
O'Shea, Maureen	State NFIP. Coordinate	BUR	208	maureen.oshea@idwr.idaho.gov	Mil .



Name	Title	Agency	Phone	E-mail	Signature
Suter, Tatton		USACE		Tatton.L.Suter@usace.army.mil	,
Wagner, Brad	safety officer	-IDL	208-46-869	bwagner@idl.idaho.gov	Reflense
Webster, Jan		BSU		janwebster@boisestate.edu	-
Webster, Lucille	Plans/ Mitigations Program Assistant	Idaho Office Of Emergency Management	208-258-6581	lwebster@contractor.imd.idaho.gov	Lede W_
Wilson, Mallory	Plans Section Chief	Idaho Office of Emergency Management	20/8-258-6592	mwilson@imd.idaho.gov	May ho
Wood, Molly	Center for Aquatic Resource Studies	USGS	407-865-6725	mswood@usgs.gov	1
Wyrembelski, Steve	Dam Safety Program Manager	USACE – Walla Walla District	509-527-7626	steven.a.wyrembelski@usace.army. mil	
Zirschky, Mark	District Superintendent	Pioneer Irrigation	208-459-3617	Mark@pioneerirrigation.com	
Stok, Amanda	Fema	Rma	425.487-	amanda-Sickyo Fara, dh	NV
Story Kally	FEMA	FEMP	485-487-	Kelly, Stace Ferra disgo	
Rob France	FEMA TECH		201 939.4991	Rob. France & FIFA RUE	141
Jano Hay Ol	FEMA	FEMIA	242 705 1392	Jane than Old Forta das	ol/



Name	Title	Agency	Phone	E-mail	Signature
Pahl, Lorrie	Mitigation Planner	Idaho Office of Emergency Management	208-258-6508	lpahl@imd.idaho.gov	Jones John
Phillips, Bill	Research Geologist	IGS	208-885-8928	phillips@uidaho.edu	
Pierce , Jen		Boise State University		jenpierce@boisestate.edu	
Pietras, Bob		IDL		bpietras@idl.idaho.gov	
Richy, Brad	Director	IOEM	208-422-3001	brichy@imd.idaho.gov	
Ritthaler, Tom	Project Manager	Boise Project Board of Control	208-344-1141	tritthaler@boiseproject.org	
Roeber, Ben	Preparedness and Protection Branch Chief	Idaho Office of Emergency Management	208-258-6544	broeber@imd.idaho.gov	by
Royster, Jerry	Management Analyst	HUD	(208) 334- 1514	Jerry.Royster@hud.gov	Luy Loyster
Rylee, Jeff	Hazardous Materials	IOEM	1	jrylee@imd.idaho.gov	18
Sandahl, Knute	State Fire Marshal	Department of Insurance, Office of the State Fire Marshall	208-334- 4375	knute.sandahl@doi.idaho.gov	
Sandoval, Bruce	2 2 2	USDA		Bruce.sandoval@d.usda.gov	
Sauer, Brian	1	Bureau of Reclamation	208.383.2282	bsauer@usbr.gov	
Sego, Rick		Bureau of Reclamation		rsego@usbr.gov	RID
Semanko, Norm	Director	Idaho Water Users Association	208-344-6690	norm@iwua.org	11/
Stidham, Jeff		USACE	509-527-7145	Jeffery.L.Stidham@usace.army.mil	11/1-



Name	Title	Agency	Phone	E-mail	Signature
Bessey, Herb	Levee Safety Program Manager	USACE	509-527-7144	Herb.G.Bessey@usace.army.mil	
Brown, Kelsey	Mitigation Planner	IOEM	208-258-6552	kbrown@imd.idaho.gov	KelseyStrown
Carter, Bob	Project Manager	Boise Project Board of Control	208-344-1141	bcarter@boiseproject.org	
Carter, Kris	Epidemiologist	IDHW	208-334-5939	carterk1@dhw.idaho.gov	via Phone
Cleverley, Susan	Mitigation Section Chief, SHMO	Idaho Office of Emergency Management	208-258-6545	scleverley@imd.idaho.gov	Via Phone Susan Clivuly Via Phone
Cresto, Liz	Hydrology Section Manager	IDWR	208-287-4833	Liz.Cresto@idwr.idaho.gov	via Phone
Dale,Brian	Senior Management Analyst	HUD	208 334-1338	brian.dale@hud.gov	
Diego, Curt Cunt, Die an	Deputy Chief Cybersecurity Officer	Department of Administration	208-334-2307	diego.curt@cio.idaho.gov	via phony
Dietrich, Mark	Technical Services Division Administrator	DEQ	(208) 373-0204	Mark.Dietrich@deq.idaho.gov	
Ehlert, Dean	State Response Program Manager	DEQ	(208) 373-0416	dean.ehlert@deq.idaho.gov	In White
Falk, John	PE, Dam Safety	IDWR	208-287-4927	John.Falk@idwr.idaho.gov	
Frew, Jan	Director of Public Works	Dept of Admin State Facilities	208 332-1912	jan.frew@adm.idaho.gov	
Glazier, Craig	National Fire Plan Coordinator for Idaho	Forest Service	208-666-8646	cglazier@fs.fed.us	
Gummersall, David Rich	OHV education coordinator	IDPR	208-514-2414	Richard.Gummersall@idpr.idaho.gov	0 0
Hobbs, Brandon	Project Manager/Idaho Outreach Coordinator	USACE	208.433.4463	Brandon.W.Hobbs@usace.army.mil	Briles W Gent



Name	Title	Agency	Phone	E-mail	Signature
Hoekema, David	Hydrologist	IDWR	208-287-4830	david.hoekema@idwr.idaho.gov	Via Phone
Holfeltz, Tyre	Community Fire Program Manager	IDL	208-666-8653	tholfeltz@idl.idaho.gov	Tyo Holly
Hosch-Hebdon, Tricia	Wildlife Health Forensic Lab Manager	Idaho Fish & Game	208-939-9171	Tricia.hebdon@idfg.idaho.gov	Via phone Tyo Hoffe Via Phone
Jacobson, Brooke	Range Management Specialist	Idaho State Department of Agriculture	208-332-8561	Brooke.jacobson@isda.idaho.gov	
Kolden, Crystal	Assistant Professor of Geography and Certified Fire Ecologist	U of I Dept. of Geography	208 885-6018	ckolden@uidaho.edu	
Hulburt, W. Kord	P.E.	USBR	208-383-2271	whulburt@usbr.gov	
Liberty, Lee	Research Professor	BSU CGISS/Geoscience	208-426-1166	lliberty@boisestate.edu	
Lifton, Zach	Geologic Hazards Geologist	Idaho Geological Survey	208-364-4099	zlifton@uidaho.edu	via Phone
Lindquist, Troy	Senior Service Hydrologist	NOAA	208-334-9538	troy.lindquist@noaa.gov	
Marsh, Mary	Public-Private Partnerships Section Chief	IBHS	208-258-6520	mmarsh@imd.idaho.gov	Mary March
Martin, Kerry	INL Oversight Program Regional Manager	DEQ	208-528-2650	kerry.martin@deq.idaho.gov	90
McClendon, Sarah	Principal Structural Engineer	McClendon Engineering, Inc.	208 342-2919	sarah@mcclendonengineering.com	
Miller, Jerry	Economic Development Specialist	Idaho Dept. of Commerce	208-334-2650 x2143	jerry.miller@commerce.idaho.gov	
Mott, Mary	Mitigation Admin Assistant	Idaho Office of Emergency Management	208-258-6521	mmott@contractor.bhs.idaho.gov	mary mote



Name	Title	Agency	Phone	E-mail	Signature
Munger, Mike	Security Analyst-Idaho Office of School Safety and Security	Idaho Division of Building Safety	208-407-6716	mike.munger@dbs.idaho.gov	
Murphy, Neal	Emergency Services Coordinator	ITD	208 334-8414	neal.murphy@itd.idaho.gov	NPMy]
Myslivy, Jennifer	Fire Prevention and Mitigation	Bureau of Land Management	208-373-3963	jmyslivy@blm.gov	
O'Shea, Maureen	State NFIP Coordinator	IDWR	208-287-4928	maureen.oshea@idwr.idaho.gov	
Pahl, Lorrie	Mitigation Planner	Idaho Office of Emergency Management	208-258-6508	lpahl@imd.idaho.gov	Jorrie Pena
Phillips, Bill	Research Geologist	IGS	(208) 885-8928	phillips@uidaho.edu	via Phony
Pierce , Jen	Associate Professor Department of Geosciences	Boise State University	208-426-5380	jenpierce@boisestate.edu	
Pyne, Jesse-Kay	Training and Exercise Program Manager	Idaho Office of Emergency Management	208-258-6588	jpyne@imd.idaho.gov	guse Prome
Reed, Maija	Emergency Planner	Idaho Office Of Emergency Management	208-258-6541	mreed@imd.idaho.gov	
Ritthaler, Tom	Project Manager	Boise Project Board of Control	208-344-1141	tritthaler@boiseproject.org	
Roeber, Ben	Preparedness and Protection Branch Chief	Idaho Office of Emergency Management	208-258-6544	broeber@imd.idaho.gov	3~~
Rylee, Jeff	Haz Mat/Special Teams Operations	IOEM	208-422-5724	jrylee@imd.idaho.gov	May D. Rola
Sandahl, Knute	State Fire Marshal	Department of Insurance, Office of the State Fire Marshall	208- 334-4375	knute.sandahl@doi.idaho.gov	



Name	Title	Agency	Phone	E-mail	Signature
Sauer, Brian	Water Operations	Bureau of	208.383.2282	bsauer@usbr.gov	
-	Manager	Reclamation			
Sego, Rick		Bureau of Reclamation		rsego@usbr.gov	
Solomon, Mark	Assoc. Director	IWRRI U of I / IDWR	208-885-0311	msolomon@uidaho.edu	
Stidham, Jeff	FED NWW EOC Operations Section Chief	USACE	509-527-7145	Jeffery.L.Stidham@usace.army.mil	
Suter, Tatton	Plan Formulator/Project Manager/Outreach Coordinator	USACE	208-433-4466	Tatton.L.Suter@usace.army.mil	
Weak, Jeff	Director	Information Security	208-854-3019	jeff.weak@gov.idaho.gov	
Webster, Lucille	Plans/ Mitigations Program Assistant	Idaho Office Of Emergency Management	208-258-6581	lwebster@contractor.imd.idaho.gov	Sull we
Zickau, Greg		Department of Administration	208-332-1875	greg.zickau@cio.idaho.gov	
Zirschky, Mark	District Superintendent	Pioneer Irrigation	208-459-3617	Mark@pioneerirrigation.com	



Name	Title	Agency	Phone	E-mail	Signature
Bessey, Herb	Levee Safety Program Manager	USACE	509-527-7144	Herb.G.Bessey@usace.army.mil	
Brown, Kelsey	Mitigation Planner	IOEM	208-258-6552	kbrown@imd.idaho.gov	LABrown
Carter, Bob	Project Manager	Boise Project Board of Control	208-344-1141	bcarter@boiseproject.org	
Carter, Kris	Epidemiologist	IDHW	208-334-5939	carterk1@dhw.idaho.gov	Via Phonu
Cleverley, Susan	Mitigation Section Chief, SHMO	Idaho Office of Emergency Management	208-258-6545	scleverley@imd.idaho.gov	Susan Clevely
Cresto, Liz	Hydrology Section Manager	IDWR	208-287-4833	Liz.Cresto@idwr.idaho.gov	
Dale,Brian	Senior Management Analyst	HUD	208-334-1338	brian.dale@hud.gov	
Diego, Curt	Deputy Chief Cybersecurity Officer	Department of Administration	208-334-2307	diego.curt@cio.idaho.gov	
Dietrich, Mark	Technical Services Division Administrator	DEQ	(208) 373-0204	Mark.Dietrich@deq.idaho.gov	
Ehlert, Dean	State Response Program Manager	DEQ	(208) 373-0416	dean.ehlert@deq.idaho.gov	
Evetts, Dave	Assistant Director for Hydrologic Data	USGS	208-387-1316	devetts@usgs.gov	
Falk, John	PE, Dam Safety	IDWR	208-287-4927	John.Falk@idwr.idaho.gov	
Flegel, Neil	INL Oversight Program Senior health Physicist	DEQ	208-528-2600	Neil.flegel@deq.idaho.gov	
Frew, Jan	Director of Public Works	Dept. of Admin State Facilities	208 332-1912	jan.frew@adm.idaho.gov	
Gummersall, Richard	OHV education coordinator	IDPR	208-514-2414	Richard.Gummersall@idpr.idaho.gov	



Name	Title	Agency	Phone	E-mail	Signature
Hammond, Alex	Civil Engineer	USACE (Northern Idaho)	509-527-7549	Alex.J.Hammond@usace.army.mil	
Hobbs, Brandon	Project Manager/Idaho Outreach Coordinator	USACE	208.433.4463	Brandon.W.Hobbs@usace.army.mil	Buler Wille
Hoekema, David	Hydrologist	IDWR	208-287-4830	david.hoekema@idwr.idaho.gov	
Holfeltz, Tyre	Community Fire Program Manager	IDL	208-666-8653	tholfeltz@idl.idaho.gov	Via Phony
Hosch-Hebdon, Tricia	Wildlife Health Forensic Lab Manager	Idaho Fish & Game	208-939-9171	Tricia.hebdon@idfg.idaho.gov	
Hurlburt, Kord	Civil Engineer, Middle Snake Field Office, Boise	USBR	208-383-2271	khurlburt@usbr.gov	
Jacobson, Brooke	Range Management Specialist	Idaho State Department of Agriculture	208-332-8561	Brooke.jacobson@isda.idaho.gov	
Kisaka, Robin	Risk Map Program Manager	IOEM	208-258-6593	rkiska.imd.idaho.gov	
Kolden, Crystal	Assistant Professor of Geography and Certified Fire Ecologist	U of I Dept. of Geography	208 885-6018	ckolden@uidaho.edu	
Larson, Jeff "Doc"	CEO	Quantum Star Technologies	208-651-2776	doc.larson@quantumstar.tech	
Liberty, Lee	Research Professor	BSU CGISS/Geoscience s	208-426-1166	lliberty@boisestate.edu	
Lifton, Zach	Geologic Hazards Geologist	Idaho Geological Survey	208-364-4099	zlifton@uidaho.edu	
Lindquist, Troy	Senior Service Hydrologist	NOAA	208-334-9538	troy.lindquist@noaa.gov	troy Lugar



Name	Title	Agency	Phone	E-mail	Signature
Ritthaler, Tom	Project Manager	Boise Project Board of Control	208-344-1141	tritthaler@boiseproject.org	Mon
Roeber, Ben	Preparedness and Protection Branch Chief	Idaho Office of Emergency Management	208-258-6544	broeber@imd.idaho.gov	Sn
Rose, Becky	GIS Section Chief	Idaho Office of Emergency Management	208-258-6547	brose@imd.idaho.gov	
Rylee, Jeff	Haz Mat/Special Teams Operations	Idaho Office of Emergency Management	208-422-5724	jrylee@imd.idaho.gov	
Sandahl, Knute	State Fire Marshal	Department of Insurance, Office of the State Fire Marshall	208- 334-4375	knute.sandahl@doi.idaho.gov	
Sauer, Brian	Water Operations Manager	Bureau of Reclamation	208.383.2282	bsauer@usbr.gov	
Scott, Shawn	Commander	IDNG, 224th Cyber Operations Squadron	208-422-6023	shawn.h.scott1.mil@mail.mil	
Sego, Rick	Emergency Management Specialist	Bureau of Reclamation		rsego@usbr.gov	Rha
Solomon, Mark	Assoc. Director	IWRRI U of I / IDWR	208-885-0311	msolomon@uidaho.edu	
Stidham, Jeff	FED NWW EOC Operations Section Chief	USACE	509-527-7145	Jeffery.L.Stidham@usace.army.mil	
Suter, Tatton	Plan Formulator/Project Manager/Outreach Coordinator	USACE	208-433-4466	Tatton.L.Suter@usace.army.mil	
Syphert, Russ	EIS Threat Intelligence	Micron	208-492-5006	rsyphert@micron.com	



Name	Title	Agency	Phone	E-mail	Signature
Lu, Yang, Ph.D.	Assistant Professor, College of Engineering	Boise State University	208-426-3783	yanglufrank@boisestate.edu	1.1.
Martin, Kerry	INL Oversight Program Regional Manager	DEQ	208-528-2650	kerry.martin@deq.idaho.gov	
McClendon, Sarah	Principal Structural Engineer	McClendon Engineering, Inc.	208 342-2919	sarah@mcclendonengineering.com	
Miller, Jerry	Economic Development Specialist	Idaho Dept. of Commerce	208-334-2650 x2143	jerry.miller@commerce.idaho.gov	
Mott, Mary	Mitigation Admin Assistant	Idaho Office of Emergency Management	208-258-6521	mmott@contractor.bhs.idaho.gov	Mary Mott
Munger, Mike	Security Analyst-Idaho Office of School Safety and Security	Idaho Division of Building Safety	208-407-6716	mike.munger@dbs.idaho.gov	
Murphy, Neal	Emergency Services Coordinator	ITD	208 334-8414	neal.murphy@itd.idaho.gov	Via Phone
Myslivy, Jennifer	Fire Prevention and Mitigation	Bureau of Land Management	208-373-3963	jmyslivy@blm.gov	
O'Shea, Maureen	State NFIP Coordinator	IDWR	208-287-4928	maureen.oshea@idwr.idaho.gov	
Pahl, Lorrie	Mitigation Planner	Idaho Office of Emergency Management	208-258-6508	lpahl@imd.idaho.gov	Jerue Parl
Phillips, Bill	Research Geologist	IGS	(208) 885-8928	phillips@uidaho.edu	
Pierce , Jen	Associate Professor Department of Geosciences	Boise State University	208-426-5380	jenpierce@boisestate.edu	
Pyne, Jesse-Kay	Training and Exercise Program Manager	Idaho Office of Emergency Management	208-258-6588	jpyne@imd.idaho.gov	



Name	Title	Agency	Phone	E-mail	Signature
Weak, Jeff	Director	Information Security	208-854-3019	jeff.weak@gov.idaho.gov	
Webster, Lucille	Plans/ Mitigations Program Assistant	Idaho Office Of Emergency Management	208-258-6581	lwebster@contractor.imd.idaho.g	Incile les
Wilson, Mallory	Plans Section Chief	Idaho Office Of Emergency Management	208-258-6592	mwilson@imd.idaho.gov	
Zickau, Greg	Chief Technical Officer	Department of Administration	208-332-1875	greg.zickau@cio.idaho.gov	
Zirschky, Mark	District Superintendent	Pioneer Irrigation	208-459-3617	Mark@pioneerirrigation.com	
Josh M. Tatiush	CIKR	TOEM			No



Civil Disturbance Technical Working Group 5/7/18

Name	Title	Agency	Phone	E-mail	Signature
Tim Hom	Lieutenant Commercial Vehicle Safety	Idaho State Police	[208] 884-7222	tim.horn@isp.idaho.gov	
Scott Hanson		Idaho State Police	208-884-7220	scott.hanson@isp.idaho.gov	Salywan
Bret Kessinger	Information Systems/Information Technology	Idaho State Police	208-884-7000	bret.kessinger@isp.idaho.gov	1 Sheer
Phillip Mills	Commander of Security Forces	Military	208-422-5889	philip.a.mills.mil@mail.mil	
Ben Roeber	Preparedness and Protection Branch Chief	Idaho Office Of Emergency Management	208-258-6544	broeber@imd.idaho.gov	
Mallory Wilson	Plans Section Chief	Idaho Office Of Emergency Management	208-258-6592	mwilson@imd.idaho.gov	
Josh McIntosh	Critical Infrastructure	Idaho Office Of Emergency Management	208-258-6542	jmcintosh@imd.idaho.gov	My
Kelsey Brown	Mitigation Planner	Idaho Office Of Emergency Management	208-258-6552	Kbrown@imd.idaho.gov	tonoun
Susan Cleverley	Mitigation Section Chief	Idaho Office of Emergency Management	208-258-6545	scleverley@imd.idaho.gov	Susan Clevely
Lorrie Pahl	Mitigation Planner	Idaho Office of Emergency Management	208-258-6508	lpahl@imd.idaho.gov	Janie Pall
Mary Mott	Mitigation Program Assistant	Idaho Office of Emergency Management	208-258-6521	mmott@contractor.imd.idaho.gov	Mary Mot
Lucille Webster	Mitigation Program Assistant	Idaho Office of Emergency Management	208-258-6581	lwebster@contractor.imd.idaho.gov	Model D
Jesus Gunna	BH*sts Ato	Flykt Chief	306 484-3733	Jests, greace 10 mil ozen a	1 8



Cyber Disruption Technical Working Group 2/19/18 incorrect date should be

4/19/2018

Name	Title	Agency	Phone	4/19/2018 E-mail	Signature
Curt, Diego	Deputy Chief Cybersecurity Officer	Department of Administration	208-334-2307	Diego.curt@cio.idaho.gov	Da
Russell Syphert	EIS Threat Intelligence	Micron	208-492-5006	rsyphert@micron.com	
Jeremy Thomas	Deputy Chief Information Security Officer	INL	208-526-4435	jeremy.thomas@inl.gov	
David Matthews		CIRCAS	206-272-0580	drmatthewsusa@gmail.com	Via Phon
Mallory Wilson	Plans Section Chief	Idaho Office Of Emergency Management	208-258-6592	mwilson@imd.idaho.gov	M.W.Jon
Ben Roeber	Preparedness and Protection Branch Chief	Idaho Office Of Emergency Management	208-258-6544	broeber@imd.idaho.gov	Br
Josh McIntosh	Critical Infrastructure	Idaho Office Of Emergency Management	208-258-6542	jmcintosh@imd.idaho.gov	MA
Kelsey Brown	Mitigation Planner	Idaho Office Of Emergency Management	208-258-6552	Kbrown@imd.idaho.gov	
Susan Cleverley	Mitigation Section Chief	Idaho Office of Emergency Management	208-258-6545	scleverley@imd.idaho.gov	
Lorrie Pahl	Mitigation Planner	Idaho Office of Emergency Management	208-258-6508	lpahl@imd.idaho.gov	
Lucille Webster	Mitigation Program Assistant	Idaho Office of Emergency Management	208-258-6581	lwebster@contractor.imd.idaho.gov	Luil Was
Mary Mott	Mitigation Program Assistant	Idaho Office of Emergency Management	208-258-6521	mmott@contractor.imd.idaho.gov	
Duckman	75				A
gris Buckinghom	IT Pays tems Analy, T IMD	IMD	309	Bukingliam @ IMD Halo	allei!



Dam/Levee/Canal Technical Working Group 1/24/18

Name	Title	Agency	Phone	E-mail	Signature
Stidham, Jeff		USACE	509-527-7145	Jeffery.L.Stidham@usace.army.mil	
Hobbs, Brandon		USACE		Brandon.W.Hobbs@usace.army.mil	
Lindquist, Eric	Director, Public Policy Center Associate Professor, Dept. of Public Policy and Administration	Boise State University	208-426-3770	ericlindquist@boisestate.edu	
Falk, John	PE, Dam Safety	IDWR	208-287-4927	John.Falk@idwr.idaho.gov	
Dietrich, Mark	Technical Services Division Administrator	DEQ	(208) 373-0204	Mark.Dietrich@deq.idaho.gov	
Semanko, Norm	Director	Idaho Water Users Association	208-344-6690	norm@iwua.org	
Ritthaler, Tom	Project Manager	Boise Project Board of Control	208-344-1141	tritthaler@boiseproject.org	
Keith, Chris		Bureau of Reclamation	208-383-2269	ckeith@usbr.gov	
Evetts, David				devetts@usgs.gov	
Hayes, Carl		Pioneer Irrigation District	208-459-3617	carl@pioneerirrigation.com	
Sego, Rick	Emergency Mant Space	Bureau of Reclamation		rsego@usbr.gov	Rela
Kelsey Brown	Mitigation Planner	Idaho Office Of Emergency Management	208-258-6552	Kbrown@imd.idaho.gov	Relsent Brown
Susan Cleverley	Mitigation Section Chief	Idaho Office of Emergency Management	208-258-6545	scleverley@imd.idaho.gov	hisan Chruly
Lorrie Pahl	Mitigation Planner	Idaho Office of Emergency Management	208-258-6508	lpahl@imd.idaho.gov	Sprie Rehl
Lucille Webster	Mitigation Program Assistant	Idaho Office of Emergency Management	208-258-6581	lwebster@contractor.imd.idaho.gov	Sprie Parl



Dam/Levee/Canal Technical Working Group 1/24/18

Name	Title	Agency	Phone	E-mail	Signature
Mary Mott	Mitigation Program Assistant	Idaho Office of Emergency Management	208-258-6521	mmott@contractor.imd.idaho.gov	Mary most
Add buan Su	Ur	Bureau			



Dam/Levee/Canal Technical Working Group 2/20/18

Name	Title	Agency	Phone	E-mail	Signature
Stidham, Jeff	FED NWW EOC Operations Section Chief	USACE	509-527-7145	Jeffery.L.Stidham@usace.army.mil	on Phone
Hobbs, Brandon	Project Manager/Idaho Outreach Coordinator	USACE	208.433.4463	Brandon.W.Hobbs@usace.army.mil	Bundon WAll
Herb Bessey	Levee Safety Program Manager	USACE	509-527-7144	Herb.G.Bessey@usace.army.mil	
Falk, John	PE, Dam Safety	IDWR	208-287-4927	John.Falk@idwr.idaho.gov	*
Bob Carter	Project Manager	Boise Project Board of Control	208-344-1141	bcarter@boiseproject.org	
Troy Lindquist	Senior Service Hydrologist	NOAA	208-334-9538	troy.lindquist@noaa.gov	Troy Luper
Mark Zirschky	District Superintendent	Pioneer Irrigation	208-459-3617	Mark@pioneerirrigation.com	
Brian Dale	Sr. Management Analyst	HUD	208-334-1514	Brian.Dale@hud.gov	on thone
Sego, Rick		Bureau of Reclamation		rsego@usbr.gov	
Kelsey Brown	Mitigation Planner	Idaho Office Of Emergency Management	208-258-6552	Kbrown@imd.idaho.gov	KPBrown
Susan Cleverley	Mitigation Section Chief	Idaho Office of Emergency Management	208-258-6545	scleverley@imd.idaho.gov	Susan Clevelley
Lorrie Pahl	Mitigation Planner	Idaho Office of Emergency Management	208-258-6508	lpahl@imd.idaho.gov	Jorie Fahl
Lucille Webster	Mitigation Program Assistant	Idaho Office of Emergency Management	208-258-6581	lwebster@contractor.imd.idaho.gov	Mary Mott
Mary Mott	Mitigation Program Assistant	Idaho Office of Emergency Management	208-258-6521	mmott@contractor.imd.idaho.gov	Lunth Wales
Mureen deluc	4		,		on phone



Flood/Severe Storm Technical Working Group 2/25/18

Name	Title	Agency	Phone	E-mail	Signature
Jeff Stidham		USACE	509-527-7145	Jeffery.L.Stidham@usace.army.mil	
Herb Bessey	Levee Safety Program Manager	USACE	509-527-7144	herb.g.bessey@usace.army.mil	
Bob Carter	Project Manager	Boise Project Board of Control	208-344-1141	bcarter@boiseproject.org	
Brandon Hobbs	Project Manager/Idaho Outreach Coordinator	USACE	208-433-4463	Brandon.W.Hobbs@usace.army.mil	
Lindquist, Troy	Senior Service Hydrologist	NOAA	208-334-9538	troy.lindquist@noaa.gov	DN THE PHONE
Falk, John	PE, Dam Safety	IDWR	208-287-4927	John.Falk@idwr.idaho.gov	ON THE PHONE
Brian, Dale	Sr. Management Analyst	HUD	208-334-1514	brian.dale@hud.gov	
Hammonds, Alex	Civil Engineer	USACE (Northern Idaho)	509-527-7549	alex.j.hammond@usace.army.mil	
Zirschky, Mark	District Superintendent	Pioneer Irrigation	208-459-3617	mark@pioneerirrigation.com	
Solomon, Mark	Assoc. Director	IWRRI U of I / IDWR	208-885-0311	msolomon@uidaho.edu	
Sauer, Brian	Water Operations Manager	Bureau of Reclamation	208.383.2282	<u>bsauer@usbr.gov</u>	
Suter, Tatton	Plan Formulator/Project Manager/Outreach Coordinator	USACE	208-433-4466	tatton.l.suter@usace.army.mil	
Murphy, Neal	Emergency Services Coordinator	ITD	208 334-8414	neal.murphy@itd.idaho.gov	
Evetts, David	Assistant Director for Hydrologic Data	USGS	208-387-1316	devetts@usgs.gov	
Sego, Rick	Emergency Management Specialist	Bureau of Reclamation		rsego@usbr.gov	
O'Shea, Maureen	NFIP State Coordinator	NFIP	208-287-4928	maureen.oshea@idwr.idaho.gov	
Wilson, Mallory	Plans Section Chief	Idaho Office of Emergency Management	208-258-6592	mwilson@imd.idaho.gov	
Flaner, Rob	Contractor	Tetra Tech	208-939-4391	Rob.Flaner@tetratech.com	



Flood/Severe Storm Technical Working Group 2/25/18

Name	Title	Agency	Phone	E-mail	Signature
Brown, Kelsey	Mitigation Planner	Idaho Office Of Emergency Management	208-258-6552	Kbrown@imd.idaho.gov	Keroun
Cleverley, Susan	Mitigation Section Chief	Idaho Office of Emergency Management	208-258-6545	scleverley@imd.idaho.gov	Susar Cliverly
Pahl, Lorrie	Mitigation Planner	Idaho Office of Emergency Management	208-258-6508	lpahl@imd.idaho.gov	
Webster, Lucille	Mitigation Program Assistant	Idaho Office of Emergency Management	208-258-6581	lwebster@contractor.imd.idaho.gov	Lucile lesse
Mott, Mary	Mitigation Program Assistant	Idaho Office of Emergency Management	208-258-6521	mmott@contractor.imd.idaho.gov	Lucle Lese Mary Moss
					J
					,



HazMat & Radiological TWC Sign-in April 4, 2018

Name	Title	Agency	Phone	E-mail	Signature
Dietrich, Mark	Technical Services Division Administrator	DEQ	208-373-0204	Mark.Dietrich@deq.idaho.gov	Martin
Ehlert, Dean	State Response Program Manager	DEQ	208 373-0416	dean.ehlert@deq.idaho.gov	on physic
Martin, Kerrie	INL Oversight Program Regional Manager	DEQ	208-528-2650	Kerry.martin@deq.idaho.gov	
Rylee, Jeff	Haz Mat/Special Teams Operations	IOEM	208-422-5724	jrylee@imd.idaho.gov	May 2. Role
Harris, Wayne	HazMat Cost Recovery Coordinator	IOEM	208-258-6549	wharris@imd.idaho.gov	700
Flaner, Rob	Contractor	Tetra Tech	(208) 939-4391	Rob.Flaner@tetratech.com	
Cleverley, Susan	Mitigation Section Chief	IOEM	208-258-6545	scleverley@imd.idaho.gov	
Pahl, Lorrie	Mitigation Planner	IOEM	208-258-6508	lpahl@imd.idaho.gov	Forrie Pell
Mott, Mary	Mitigation Admin Assistant	IOEM	208-258-6521	mmott@contractor.imd.idaho.gov	man Mall
Brown, Kelsey	Mitigation Planner	IOEM	208-258-6552	kbrown@imd.idaho.gov	KfBreun
McIntosh, Josh	Critical Infrastructure	IOEM		jmcintosh@imd.idaho.gov	
Webster, Lucille	Mitigation Admin Assistant	IOEM	208-258-6581	lwebster@contractor.imd.idaho.gov	L. wee
Flager, Neal		DEQ			On Prong



Seismic Technical Working Group 1/23/18

Name	Title	Agency	Phone	E-mail	Signature
Tricia Hebron	Wildlife Health Forensic Lab Manager	IDFG	208-939-9171	Tricia.hebdon@idfg.idaho.gov	
Lee Liberty	Research Professor	BSU CGISS/Geosciences	208-426-1166	lliberty@boisestate.edu	Le M Why
Jerry Miller		Commerce	208-287-0780	jerry.miller@commerce.idaho.gov	Via Phore
Mike Munger	Idaho Division of Building Safety	Idaho Division of Building Safety	208-407-6716	mike.munger@dbs.idaho.gov	
Zach Lifton	Geologic Hazards Geologist	Idaho Geological Survey	208-364-4099	zlifton@uidaho.edu	3wh tife
Sarah McClendon	Principal Structural Engineer	McClendon Engineering, Inc.	208 342-2919	sarah@mcclendonengineering.com	
Rich Gummersall	OHV Education Coordinator	Idaho Department of Parks and Recreation	208-514-2414	rich gummersall@idpr.idaho.gov	20
Kelsey Brown	Mitigation Planner	Idaho Office Of Emergency Management	208-258-6552	Kbrown@imd.idaho.gov	Lebeyolbroun
Susan Cleverley	Mitigation Section Chief	Idaho Office of Emergency Management	208-258-6545	scleverley@imd.idaho.gov	Sugar Charles
Lorrie Pahl	Mitigation Planner	Idaho Office of Emergency Management	208-258-6508	lpahl@imd.idaho.gov	
Lucille Webster	Mitigation Program Assistant	Idaho Office of Emergency Management	208-258-6581	lwebster@contractor.imd.idaho.gov	Luilele
Mary Mott	Mitigation Program Assistant	Idaho Office of Emergency Management	208-258-6521	mmott@contractor.imd.idaho.gov	Luile W Mary Mott
Beki McElvain	Program Manager	Earthquake Engineering Research Institute	510-451-0905 x15	bmcelvain@eeri.org	via Phone
Heidi Tremayne	Executive Director	Earthquake Engineering Research Institute	510-451-0905 x14	heidi@eeri.org	via Phone



Seismic Technical Working Group 4/11/18

Name	Title	Agency	Phone	E-mail	Signature
William Phillips	Research Geologist	Idaho Geological Survey	(208) 885-8928	phillips@uidaho.edu	
Lee Liberty	Research Professor	BSU CGISS/Geosciences	208-426-1166	lliberty@boisestate.edu	
Jerry Miller		Commerce	208-287-0780	jerry.miller@commerce.idaho.gov	
Mike Munger	Idaho Division of Building Safety	Idaho Division of Building Safety	208-407-6716	mike.munger@dbs.idaho.gov	
Zach Lifton	Geologic Hazards Geologist	Idaho Geological Survey	208-364-4099	zlifton@uidaho.edu	on Phone
Sarah McClendon	Principal Structural Engineer	McClendon Engineering, Inc.	208 342-2919	sarah@mcclendonengineering.com	
Richard Gummersall	OHV Education Coordinator	Idaho Department of Parks and Recreation	208-514-2414	richard.gummersall@idpr.idaho.gov	
Neal Murphy	Emergency Services Coordinator	ITD	208 334-8414	neal.murphy@itd.idaho.gov	
Kelsey Brown	Mitigation Planner	Idaho Office Of Emergency Management	208-258-6552	Kbrown@imd.idaho.gov	Kibroun
Susan Cleverley	Mitigation Section Chief	Idaho Office of Emergency Management	208-258-6545	scleverley@imd.idaho.gov	Lusan Clevely
Lorrie Pahl	Mitigation Planner	Idaho Office of Emergency Management	208-258-6508	lpahl@imd.idaho.gov	V
Lucille Webster	Mitigation Program Assistant	Idaho Office of Emergency Management	208-258-6581	lwebster@contractor.imd.idaho.gov	Juste he
Mary Mott	Mitigation Program Assistant	Idaho Office of Emergency Management	208-258-6521	mmott@contractor.imd.idaho.gov	Mary Most
Beki McElvain	Program Manager	Earthquake Engineering Research Institute	510-451-0905 x15	bmcelvain@eeri.org	on phone
Heidi Tremayne	Executive Director	Earthquake Engineering Research Institute	510-451-0905 x14	heidi@eeri.org	



Wildfire - Drought Technical Working Group 12/15/17

Name	Title	Agency	Phone	E-mail	Signature
Eric Lindquist	Director, Public Policy Center Associate Professor, Dept. of Public Policy and Administration	Boise State University	208-426-3770	ericlindquist@boisestate.edu	
Knute Sandahl	State Fire Marshal	Department of Insurance, Office of the State Fire Marshall	208-334-4 375 4370	knute.sandahl@doi.idaho.gov	Huto C Sushell
Jennifer Myslivy	Fire Prevention and Mitigation	Bureau of Land Management	208-373-3963	imyslivy@blm.gov	
Jen Pierce		Boise State University		jenpierce@boisestate.edu	
Kevin Conran		BLM		kconran@blm.gov	
Tyre Holfeltz		IDL		tholfeltz@idl.idaho.gov	
Susan Cleverley	Mitigation Section Chief	Idaho Office of Emergency Management	208-258-6545	scleverley@imd.idaho.gov	Susan Oleverly
Lorrie Pahl	Mitigation Planner	Idaho Office of Emergency Management	208-258-6508	lpahl@imd.idaho.gov	Arierahl
Lucille Webster	Mitigation Program Assistant	Idaho Office of Emergency Management		(Lucelline
Liz Cresto	Hydrology Section Manager	IDWR	768-287-4833	liz. Cresto@dwr. idaho.gou	· Liz Cresto
David Hockerna	Manage - Hydrologist	IDWR	714-697-3203	Liz. Crest @dwr. idaho.gov david hoekema@idwr.idaho.gov	Gard Hirle



Lightning - Wildfire Technical Working Group 2/2/18

Name	Title	Agency	Phone	E-mail	Signature
Knute Sandahl	State Fire Marshal	Department of Insurance, Office of the State Fire Marshall	208-334-4375	knute.sandahl@doi.idaho.gov	
Jennifer Myslivy	Fire Prevention and Mitigation	Bureau of Land Management	208-373-3963	jmyslivy@blm.gov	
Jen Pierce		Boise State University		jenpierce@boisestate.edu	
Tyre Holfeltz		IDL		tholfeltz@idl.idaho.gov	
Mark Solomon	Assoc. Director	IWRRI U of I / IDWR	208-885-0311	msolomon@uidaho.edu	via Phone
Liz Cresto	Hydrology Section Manager	IDWR	208-287-4833	liz.cresto@idwr.idaho.gov	
David Hoekema	Hydrologist	IDWR	714-697-3203	David.hoekema@idwr.idaho.gov	
Chrystal Kolden	Assistant Professor of Geography and Certified Fire Ecologist	U of I Dept. of Geography	208 885-6018	ckolden@uidaho.edu	
Troy Lindquist	Senior Service Hydrologist	NOAA	208-334-9538	troy.lindquist@noaa.gov	Trong Light
Tricia Hosch-Hebdon	Wildlife Health Forensic Lab Manager	IDFG	208-939-9171	Tricia.hebdon@idfg.idaho.gov	
Brandon Hobbs	Project Manager/Idaho Outreach Coordinator	USACE	208.433.4463	Brandon.W.Hobbs@usace.army.mil	Bulse, Wall
Brad Wagner	Safety Officer	IDL	208-666-8693	bwagner@idl.idaho.gov	
Susan Cleverley	Mitigation Section Chief	Idaho Office of Emergency Management	208-258-6545	scleverley@imd.idaho.gov	
Lorrie Pahl	Mitigation Planner	Idaho Office of Emergency Management	208-258-6508	<u>Ipahl@imd.idaho.gov</u>	
Kelsey Brown	Mitigation Planner	Idaho Office of Emergency Management	208-258-6552	kbrown@imd.idaho.gov	Kirbraun



Lightning - Wildfire Technical Working Group 2/2/18

Mary Mott	Mitigation Program Assistant	Idaho Office of Emergency Management	208-258-6521	mmott@contractor.imd.idaho.gov	
Lucille Webster	Mitigation Program Assistant	Idaho Office of Emergency Management	208-258-6581	lwebster@contractor.imd.idaho.gov	Suchhur
Broskelautran	Range Program Manager	Idaho State Dept. of Agriculture	208-332-85	brooks jacdsone 15da. idaho:gov	Brolfee







Public Information Emergency Response Team (PIER)

THURSDAY JANUARY 18, 2018

Please sign in

NAME	AGENCY
kelsey Brown	IDEM Mitigation
Ben Roebel	IDEM
Anderse Alds	100m
FISHLIEX SMITE	(NI
Nature TVUC	Namas Chala Di Strice
Sur B. Hadreer	Govis office
That of Take	ING
Aarbn Blake	FOEM
Polom Worr	Attorney General's Office
pallene Corrogas	Latier
Diane Blume	Admin
Marta Tambluni	IDHW
Matt Frans	1 P4 C
Nick Stout	110
70.00	IC



SHMP Review Committee Comments

A review panel was assembled to review the contents of the plan using the Plan Review Tool Summary, to ensure all requirements have been met. This panel consist of several individuals in different departments who were assembled to provide varying opinions on context to ensure all requirements were met. A copy of the sign in sheet and the notes that were taken during this meeting are also included below.

STATE MITIGATION PLAN REVIEW TOOL

This section is organized as follows:

- 1. Plan Review Tool Summary
- 2. Standard State Mitigation Plan Regulation Checklist
- 3. Enhanced State Mitigation Plan Regulation Checklist
- 4. Strengths and Opportunities for Improvement

FEMA uses the State Mitigation Plan Review Tool ("**Plan Review Tool**") to document how the state mitigation plan meets the regulation. If plan requirements are not met, FEMA informs the state of the changes it needs to make in each of the Required Revisions sections.

The "Strengths and Opportunities for Improvement" summary offers FEMA an opportunity to provide more comprehensive feedback to the state.

INSTRUCTIONS: The Regulation Checklist must be completed by FEMA. The FEMA Plan Approver must reference the *State Mitigation Plan Review Guide* when completing the *Plan Review Tool*. The purpose of the Checklist is to identify the location of relevant or applicable content in the Plan by Element/sub-element and to determine if each requirement has been 'Met' or 'Not Met.'

Idaho

Appendix G

The "Required Revisions" summary at the bottom of each Element must be completed by FEMA to provide a clear explanation of the revisions that are required for plan approval. Required revisions must be explained for each plan sub-element that is 'Not Met.' Sub-elements should be referenced in each summary by using the appropriate number, where applicable. Requirements for each Element and sub-element are described in detail in the State Mitigation Plan Review Guide.

FEMA will provide a narrative summary of the review findings that includes a discussion of "Strengths and Opportunities for Improvement" as a means to offer more comprehensive feedback to the state to acknowledge where the plan exceeds minimum requirements as well as provide suggestions for improvements. FEMA will describe the strengths that are demonstrated and highlight examples of best practices.

FEMA may provide suggestions for improvement as part of the *Plan Review Tool* or in a separate document. FEMA's suggestions for improvement are not required to be made for plan approval.

Required revisions from the Regulation Checklist are not documented in the "Strengths and Opportunities for Improvement" section.



1. Plan Review Tool Summary

State:	Title and	Date of Plan:	Date of Submission:
State Point of Contact (Na	State Point of Contact (Name / Title):		
Agency:			
Phone Number:		E-Mail:	
		l .	
Date Received in FEMA Re	egion:		
FEMA Reviewer (Planning – Name / Title):			Date:
FEMA Reviewer (HMA – N	Date:		
FEMA Reviewer (Name / Title):			Date:
FEMA Reviewer (Name / Title):			Date:
FEMA Approver (Name / Title):			Date:
Plan Status (Not Approved, Approvable Pending Adoption, Approved):			oved): Date:



SUMMARY	YES	NO
STANDARD STATE MITIGATION PLAN		
Does the plan meet the standard state mitigation plan requirements?		
REPETITIVE LOSS STRATEGY		
Does the plan include a Repetitive Loss Strategy? [see S6 / RL1; S8 / RL2; S9 /		
RL3; S10 / RL4; S13 / RL5; and S15 / RL6]		
ENHANCED STATE MITIGATION PLAN		
Does the plan meet the enhanced state mitigation plan requirements?		



2. Standard State Mitigation Plan Regulation Checklist

REGULATION CHECKLIST – STANDARD PLAN	Locatio n	M / NM*
STANDARD (S) STATE MITIGATION PLAN Planning Process	_	
S1. Does the plan describe the planning process used to develop the plan? [44		
CFR §§201.4(b) and (c)(1)]		
S2. Does the plan describe how the state coordinated with other agencies and		
stakeholders? [44 CFR §§201.4(b) and (c)(1)]		
Required Revisions:		
Hazard Identification and Risk Assessment	1	
S3. Does the risk assessment include an overview of the type and location of		
all natural hazards that can affect the state? [44 CFR §201.4(c)(2)(i)]		
S4. Does the risk assessment provide an overview of the probabilities of		
future hazard events? [44 CFR §201.4(c)(2)(i)]		
S5. Does the risk assessment address the vulnerability of state assets located		
in hazard areas and estimate the potential dollar losses to these assets? [44		
S6. Does the risk assessment include an overview and analysis of the		
vulnerability of jurisdictions to the identified hazards and the potential losses to vulnerable structures? [44 CFR §§201.4(c)(2)(ii) and 201.4(c)(2)(iii)]		
S7. Was the risk assessment revised to reflect changes in development? [44		
Required Revisions:		
	_	
Mitigation Strategy and Priorities S8. Does the mitigation strategy include goals to reduce / avoid long-term		
30. Does the miligation strategy include goals to reduce / avoid long-term		
vulnerabilities from the identified hazards? [44 CFR §201.4(c)(3)(i)]		
S9. Does the plan prioritize mitigation actions to reduce vulnerabilities		_
identified in the risk assessment? [44 CFR §§201.4(c)(3)(iii) and (iv)]		



S10. Does the plan identify current and potential sources of funding to	
implement mitigation actions and activities? [44 CFR §201.4(c)(3)(iv)]	
S11. Was the plan updated to reflect changes in development, progress in	
statewide mitigation efforts, and changes in priorities? [44 CFR §201.4(d)]	
Required Revisions:	
State Mitigation Capabilities	
S12. Does the plan discuss the evaluation of the state's hazard management	
policies, programs, capabilities, and funding sources to mitigate the hazards identified in the risk assessment? [44 CFR §201.4(c)(3)(ii)]	
Day to J.D. Calara	
Required Revisions:	
Required Revisions:	



REGULATION CHECKLIST – STANDARD PLAN	Location in Plan	M / NM*
Local Coordination and Mitigation Capabilities	III I IGII	
S13. Does the plan generally describe and analyze the effectiveness of local		
and tribal, as applicable, mitigation policies, programs, and capabilities? [44		
CFR §201.4(c)(3)(ii)]		
S14. Does the plan describe the process to support the development of		
approvable local and tribal, as applicable, mitigation plans? [44 CFR		
§§201.3(c)(5) and 201.4(c)(4)(i)]		
S15. Does the plan describe the criteria for prioritizing funding? [44 CFR		
§201.4(c)(4)(iii)]		
S16. Does the plan describe the process and timeframe to review, coordinate		
and link local and tribal, as applicable, mitigation plans with the state mitigation plan? [44 CFR §§201.3(c)(6), 201.4(c)(2)(ii), 201.4(c)(3)(iii), and		
201.4(c)(4)(ii)]		
Required Revisions:		
Plan Review, Evaluation, and Implementation		
S17. Is there a description of the method and schedule for keeping the plan		
current? [44 CFR §§201.4(c)(5)(i) and 201.4(d)]		
S18. Does the plan describe the systems for monitoring implementation and		
reviewing progress? [44 CFR §§201.4(c)(5)(ii) and 201.4(c)(5)(iii)]		
Required Revisions:		
Adoption and Assurances		
S19. Did the state provide documentation that the plan has been formally		
adopted? [44 CFR §201.4(c)(6)]		
S20. Did the state provide assurances? [44 CFR §201.4(c)(7)]		
Required Revisions:		
Repetitive Loss (RL) Strategy		



RL1. Did Element S6 (risk assessment) address RL and SRL properties? [44	
CFR §§201.4(c)(2)(ii), 201.4(c)(2)(iii), and 201.4(c)(3)(v)]	
RL2. Did Element S8 (mitigation goals) address RL and SRL properties? [44	
CFR §§201.4(c)(3)(i) and 201.4(c)(3)(v)]	
RL3. Did Element S9 (mitigation actions) address RL and SRL properties?	
[44 CFR §§201.4(c)(3)(iii) and 201.4(c)(3)(v)]	
RL4. Did Element S10 (funding sources) address RL and SRL properties? [44	
CFR §§201.4(c)(3)(iv) and 201.4(c)(3)(v)]	
RL5. Did Element S13 (local and tribal, as applicable, capabilities) address	
RL and SRL properties? [44 CFR §§201.4(c)(3)(ii) and 201.4(c)(3)(v)]	
RL6. Did Element S15 (prioritizing funding) address RL and SRL properties?	
[44 CFR §§201.4(c)(4)(iii) and 201.4(c)(3)(v)]	
Required Revisions:	



3. Enhanced State Mitigation Plan Regulation Checklist

REGULATION CHECKLIST – ENHANCED PLAN	Location	M/NM*
ENHANCED (E) STATE MITIGATION PLAN		
Meet Standard State Mitigation Plan Elements		
E1. Does the Enhanced plan include all elements of the standard state		
mitigation plan? [44 CFR §201.5(b)]		
Required Revisions:		
Integrated Planning	1	
E2. Does the plan demonstrate integration to the extent practicable with other		
state and/or regional planning initiatives and FEMA mitigation programs and initiatives? [44 CFR $\S 201.5(b)(1)$]		
Required Revisions:		
State Mitigation Capabilities		
E3. Does the state demonstrate commitment to a comprehensive mitigation		
program?[44 CFR §201.5(b)(4)]		
E4. Does the enhanced plan document capability to implement mitigation		
actions? [44 CFR §§201.5(b)(2)(i), 201.5(b)(2)(ii), and 201.5(b)(2)(iv)]		
E5. Is the state effectively using existing mitigation programs to achieve		
mitigation goals? [44 CFR §201.5(b)(3)]		
Required Revisions:		
HMA Grants Management Performance		
E6. With regard to HMA, is the state maintaining the capability to meet		
application timeframes and submitting complete project applications? [44		
CFR §201.5(b)(2)(iii)(A)]		



E7. With regard to HMA, is the state maintaining the capability to prepare and	
submit accurate environmental reviews and benefit-cost analyses? [44 CFR	
§201.5(b)(2)(iii)(B)]	
E8. With regard to HMA, is the state maintaining the capability to submit	
complete and accurate quarterly progress and financial reports on time? [44	
CFR §201.5(b)(2)(iii)(C)]	
E9. With regard to HMA, is the state maintaining the capability to complete	
HMA projects within established performance periods, including financial reconciliation? [44 CFR §201.5(b)(2)(iii)(D)]	
Required Revisions:	

. Strengths and Opportunities for Improvement

STRENGTHS AND OPPORTUNITIES FOR IMPROVEMENT

INSTRUCTIONS: The purpose of the "Strengths and Opportunities for Improvement" section is

for FEMA to provide more comprehensive feedback on the state mitigation plan to help the state advance mitigation planning. The intended audience is the state staff responsible for the mitigation plan update. FEMA will address the following topics:

- 1. Plan strengths, including specific sections in the plan that are above and beyond the minimum requirements; and
- 2. Suggestions for future improvements.

FEMA will provide feedback and include examples of best practices, when possible, as part of the *Plan Review Tool*, or, if necessary, as a separate document. The state mitigation plan elements are included below in italics for reference but should be deleted as the narrative summary is completed. FEMA is not required to provide feedback for each element.

Idaho

Appendix G

Describe the mitigation plan strengths, including areas that may exceed minimum requirements.

- Planning process
- Hazard identification and risk assessment
- Mitigation strategy
- State mitigation capabilities
- Local and tribal, as applicable, coordination and mitigation capabilities
- Plan review, evaluation, and implementation

Describe areas for future improvements to the mitigation plan.

- Planning process
- Hazard identification and risk assessment
- Mitigation strategy
- State mitigation capabilities
- Local and tribal, as applicable, coordination and mitigation capabilities
- Plan review, evaluation, and implementation



The	The Subject 2018 State of Idaho Mitigation Plan Upda			Date	06/12/2018	
Facil	itator	IOEM Mitigation	Time 9:30a – 1:45p			
Loca	ntion	IOEM Conference Room	1			
Atte	ndees	Ben Roeber, Mallory Wi Webster, Mary Mott	lson, Mary Marsh,	, Cherylyn I	Murphy, Kelsey Brown, Lucille	
		Key	Points Discusse	ed		
No.		Topic		Hig	hlights	
1.	Welcome and Introductions – Kelsey Brown - IOEM					
2.	Overview of Review Process – Kelsey Brown		 Kelsey explained the review process and asked participants to share any suggestion they may have regarding the process as this is the first time for all participating in the review of a SHMP update Ben add process comments including why it is done 			
3.	Record Keeper Nomination • Ben and Mary Mott were selected as recorders of the review			vere selected as recorders of the		
4.	State Hazard	d Mitigation Plan Review	Mitigation Plan Identify lo each eler Determin	Review Too ocation of re ment and sul aed if the req	elevant or applicable content for	
5.	Review Next	t Meeting ts, Date and Time	Review comple necessary	te, follow-u	p meeting will not be	
6.			•			
7.			•			
8.						



9.	

State Mitigation Plan Review Tool Notes

Additional revision notes - see Comments in Plan

06-12-18

2. Standard (S) State Mitigation Plan

Planning Process

S.1 Chapter 1 Pages 14-17

Required Revisions: Chapter 1, Page 24 add verbiage to November 15, 2017 paragraph (see

comment in Plan)

Chapter 5 Pages 1-14

Required Revisions: If Enhanced is not submitted to FEMA 7/15 beef up Chapter 1 and

Appendix G

Appendix G pages 24-32

S.2 Appendix G pages 14-22

Required Revisions: add agencies that were invited but did not participate

Hazard Identification and Risk Assessment

S.3 Chapter 3.0 pages 1-22 (Also include hazard specific chapter 4)

S.4 Required Revisions: Address per hazard and include in table of contents page

number Chapter 4?

S.5 Required Revisions: Address per hazard and include in table of contents Chapter 4?

S.6 Required Revisions: Address per hazard and include in table of contents Chapter 4?

S.7 Chapter 2 Pages 6-11

Mitigation Strategy and Priorities

S.8 Chapter 1 Pages 31-49



Chapter 3 UNKNOWN PAGES

S.9 Chapter 1 pages 31, 50-55

Chapter 3.1 Pages 1-6

S.10 Chapter 1 Pages 34-49

Chapter 4 Pages 49-107

S.11 Chapter 1 Pages 39-42

Required Revisions: Add better narratives to status (E.G. instead of ongoing give a better

description of what is going on with the project – assigned to Susan

Not Met

State Mitigation Capabilities

S.12 Chapter 4 pages 3-38

(B) Chapter 4 Pages 39-42

(C) Chapter 4 Page 108

Required Revisions: Ben will revise page 39 challenges paragraph

Not Met

Local Coordination and Mitigation Capabilities

S.13 Chapter 4 Pages 46-49

Required Revisions: Need to list each Hazard

- S.14 Chapter 4 Pages 43-45
- S.15 Chapter 4 Pages 45-46
- S.16 Chapter 4 Pages 43-44

Required Revisions:

- (A) Need to comment include processing time frame
- (B) Need to expand time line and link to State (move from Appendix D to Chapter 4 page 11-15



Not Met

Plan Review, Evaluation, and Implementation

S.17 Appendix D Pages 11-15

S.18 Appendix D Pages 11-15

Required Revisions: Add Executive Meeting Minutes 2014-2017

Adoption and Assurances

S.19 Appendix B Pages 1-7

S.20 Appendix B Pages 8-11

Repetitive Loss (RL) Strategy N/A

3. Enhanced (E) State Mitigation Plan

Meet Standard State Mitigation Elements

E1. Not Met

Integrated Planning

E2. Not Met

Required Revisions: Chapter 5 complete info (see Plan comments)

State Mitigation Capabilities

E3. Not Met

Required Revisions: Chapter 5 complete info (see Plan comments)

HMA Grants Management Performance

E6. – E9. Not Met

Required Revisions: Susan to complete section

2018 SHMP Review Panel Meeting 6-12-2018

Name	Title	Agency	Phone	E-mail	Signature
Brown, Kelsey	Mitigation Planner	IOEM	208-258-6552	kbrown@imd.idaho.gov	YSBrown
Marsh, Mary	Public Private Partnership		208-258-6520	mmarsh@imd.idaho.gov	Mary Marsh
Mott, Mary	Mitigation	IOEM	208-258-6521	mmott@contractor.bhs.idaho.gov	A contract
	Admin Assistant				91/ary Thote
Murphy, Cherylyn	Program Coordinator	IOEM	208-258-6538	cmurphy@imd.idaho.gov	ca murcher
Reed, Maija	Emergency Planner	IOEM	208-258-6541	mreed@imd.idaho.gov	
Roeber, Ben	Preparedness and Protection Branch Chief	IOEM	208-258-6544	broeber@imd.idaho.gov	Bun
Webster, Lucille	Plans/ Mitigations Program Assistant	IOEM	208-258-6581	lwebster@contractor.imd.idaho.gov	La 14 60
Wilson, Mallory	Plans Section Chief	IOEM	208-258-6592	mwilson@imd.idaho.gov	Mallors Lila
					0





Flood, Dam, Levee, Canal **Technical Working Group** Meeting

July 15, 2020 1:00 - 2:30 pm

Virtual Webex Meeting

Attendees: Alexis Clark, Susan Cleverley, John Falk, Rob Flaner, Tyre Holfeltz, Kyle McCormick, Mary Mott, Neal Murphy,

Canal Encroachment Video Janice Witherspoon	Janice provided an update on the canal encroachment video. A videographer was contracted, and Janice appreciated the script edits provided by the group. Please contact her if you would like to be presenter or know a good candidate. She anticipates the video will be ready for group review in about a month.
High-Hazard Dam Review John Falk, IDWR	John provided basic information and eligibility requirements. The HHDP Grant Program FY19 provided \$10 million to be divided between states and territories Dam Safety Programs. Only non-federal dams were eligible. Other qualifications: ff the dam failed to meet minimum dam safety standards and if the dam poses an unacceptable risk to the public. The Idaho Department of Water Resources Dam Safety Program applied for and was awarded \$311,000 to perform a risk analysis for 9 dams.
Updates to the HHPD section Rob Flaner, Tetra Tech	Rob Flaner, TetraTech contractor, presented risk/vulnerability analyses for each of the nine HHPD dams and their inundation zones by county. Tables included state facilities, general building stock, critical infrastructure, and population. Rob will move the dam/levee/canal information from the flood chapter in the SHMP to a new chapter and include the tables in the Appendices. The group suggested summarizing the tables in a chart, add the influx of population for tourism, impacts of ice jams, and transportation vulnerability to I-84 and State Highway 95 from dam inundation. Rob will provide the chapter narrative for review. IOEM will research each of the local mitigation
	plans for increased tourism information. Please review and provide comments by 7/27/20.
HHDP Mitigation Plan Requirements Susan Cleverley, IOEM	The update to the State of Idaho Hazard Mitigation Plan HHPD requirements were briefly discussed including current and new actions. Please complete the group survey at https://www.surveymonkey.com/r/F5BZR8D of mitigation actions by 7/27/20. The chosen actions will require ranking and prioritization via the Staplee Method previously used in the plan. A Staplee form is attached and needs return by month end.
	The group reviewed the goals and had no suggestions for edits. Kyle agreed that the goals were broad and covered HHPD dams. After the meeting, he recommended in addition to adding State and Federal policies and programs and capabilities it may be beneficial to review each local HMP where the 9 dams in the risk assessment are located for local capabilities and polices, or generally discuss what is available at the local level that helps implement mitigation actions such as floodplain regulations, grant writers, etc.



Flood, Dam, Levee, Canal Technical Working Group Meeting

July 28, 2020 1:00 – 2:30 pm

Virtual Webex Meeting

Attendees: Alexis Clark, Susan Cleverley, Mike Dimmick, Rob Flaner, Brandon Hobbs, Tyre Holfeltz, Troy Lindquist, Kyle McCormick, Mary Mott, Maureen O'Shea, Lorrie Pahl, Traci Stewart

Review Updates to the HHPD section Rob Flaner, Tetra Tech Rob Flaner, TetraTech contractor, summarized revisions made to HHPD chapter. It will be a standalone chapter. A lot of data was extracted back out of the Flood chapter due to the dam/levee/canal incorporation in 2018.

Tyre pointed out values in the general building stock table seemed very low. Rob will verify the figures and resend the chapter. The figures were verified and the charts corrected.

HHDP Mitigation Plan Requirements Susan Cleverley, IOEM As confirmed by Kyle, IOEM is reviewing each local HMP where the 9 dams in the risk assessment are located for local capabilities and polices, challenges and opportunities to implement mitigation actions to reduce risk to the dams for HHPD requirement 6. IOEM will add the remaining HHPD requirements to the chapter and send to the group for review and comment by 8/7//2020.

If you haven't, please complete the group survey at https://www.surveymonkey.com/r/F5BZR8D of mitigation actions by 7/31/2020. IOEM will send survey results to the group. The chosen actions will require ranking and prioritization via the Staplee Method previously used in the plan. A Staplee form is attached and needs return by 8/7/2020.