Idaho Post-Earthquake Clearinghouse Operations Plan

Idaho Geological Survey
Idaho Office of Emergency Management
Earthquake Engineering Research Institute
Seismic Technical Working Group
January 11, 2019
Revised April 21, 2020

Version 3.0

Table of Contents

A. INTRODUCTION, PURPOSE, AND OBJECTIVES	1
OPERATIONSClearinghouse Management Team	2
Emergency Operation CenterField Operations & ManagementFacility	3
STAFF	4
Roles	4
Media	
Equipment	6
ACTIVATION & CALL DOWN PROCEDURES	
Call Down Procedure	
Criteria for Activation	
Supplemental Shaking Activation Metrics Deactivation Procedures	
Re-activation Procedures	
Timing	
Location and Notification	
WEBSITE, DATA MANAGEMENT, AND REPORTS	9
FUNDING	10
APPENDIX A: TRAINING, EXERCISES, & PRACTICE	xii
APPENDIX B: ABBREVIATIONS	
APPENDIX C: CHECK-IN/CHECK-OUT FORM	
APPENDIX D: POTENTIAL (EXISTING) FIELD LOCATIONS	xv
APPENDIX E: ACTIVATION TIMELINE	
APPENDIX F: EQUIPMENT	
APPENDIX G: CALL DOWN CONTACT LIST	
APPENDIX H: MANAGEMENT AND OPERATIONS CHECKLISTS	xx
APPENDIX I: LESSONS LEARNED	xxii

A. INTRODUCTION, PURPOSE, AND OBJECTIVES

An earthquake disaster in Idaho will attract a large number of earthquake professionals with the intent to learn lessons and lend assistance through post-earthquake reconnaissance. Reconnaissance is a rapid survey of the affected area that documents initial observations such as damage from ground motion and liquefaction and assesses the need for additional research. Post-earthquake investigations are done for the purpose of improving the science and practice of earthquake engineering and earthquake hazard reduction by researchers and practitioners alike. These reconnaissance teams consist of earthquake risk mitigation experts who investigate earthquake impacts depending on the earthquake magnitude, location, extent of impacts on the built environment, funding constraints, and many other factors. Reconnaissance teams make a rapid, general damage survey of the affected area, documents initial important observations from the particular earthquake, and assesses the need for follow-up areas of research. Observations and findings from these teams support emergency response and recovery activities in the short term and improve the understanding of natural hazards and how to mitigate their impacts in the long term.

This Clearinghouse Operations Plan provides deployment criteria and guidelines for establishing and operating a physical Clearinghouse that organizes post-earthquake reconnaissance efforts. It includes instructions for coordinating post-earthquake reconnaissance efforts, maximizing information sharing and availability, and better using the talents of those present immediately after a significant seismic event in Idaho.

In the event of a damaging earthquake, State and Federal disaster response agencies, and the engineering and scientific communities from academia and professional practice will use the physical Clearinghouse as a meeting point and collection site for coordinating and sharing information on ground failure, structural damage, lifeline impacts, and other consequences of a significant earthquake. These professionals have a wide range of knowledge and experience, and their observations in the field will add substantially to the information available to officials managing response and recovery operations. Their deployment should be coordinated using this Clearinghouse Operations Plan so that their presence benefits rather than burdens local officials in affected cities and counties. Additionally, this Plan will facilitate a forum for the daily sharing of information gathered by all observers, and allow for the capture of valuable and perishable data that might otherwise be lost to both the government and research communities.

This Clearinghouse Operations Plan provides instructions for establishing a *physical clearinghouse* and a supplemental *virtual clearinghouse*, along with information on the key partners needed to achieve the success of a coordinated post-earthquake reconnaissance response. The Plan outlines the Operations, Staffing, Activation and Call-Down Procedures, Relationship to Emergency Operation Center, Website and Data Management, and Funding for the Idaho Clearinghouse. The Plan is adapted from the *California Post-Earthquake Information Clearinghouse* draft plan and *Model Clearinghouse Plans* from WSSPC. It includes sections taken from these plans with little modification.

OPERATIONS

The *physical clearinghouse* is a field site intended to facilitate exchange of critical information from field investigations, and to promote its use by technical specialists and emergency managers during response and recovery from damaging earthquakes. The physical clearinghouse will provide a single point of contact for easy exchange of information among researchers, emergency managers, and practitioners. It will direct information to the State Emergency Operations Center (EOC). It will accommodate investigators from other states and countries, and provide a contact for media to use in gathering more in-depth information on damages and their implications.

The *virtual clearinghouse* is a web presence that will make possible the documentation and dissemination of findings and observations. A record of field observations will be displayed in the virtual Clearinghouse. Agencies responsible for mapping of geologic, geotechnical, and engineering effects of the earthquake will use their internal GIS capabilities to document effects, and make them available at the Clearinghouse as necessary. A state GIS capability may be available to the Clearinghouse through Idaho Geological Survey, Idaho Office of Emergency Management, and the Federal Emergency Management Agency (FEMA), but FEMA personnel will not necessarily be located at the Clearinghouse.

Clearinghouse Management Team

Representatives from four core groups who make up the *Idaho Clearinghouse Management Team* manage the Idaho Clearinghouse Operation Plan:

- The Idaho Geological Survey (IGS) Clearinghouse Chair
- Idaho Office of Emergency Management (IOEM) Clearinghouse Co-Chair
- U.S. Geological Survey (USGS)
- Earthquake Engineering Research Institute (EERI)

The Clearinghouse Management Team will meet at least once per year to maintain strong working relationships among participating agencies and institutions and to continue to improve operational preparedness through desktop and field exercises, training, and organizing practice activities. See APPENDIX A for field exercises, training, and practice activities.

Additional organizations that will be active in, and may support the work of the Clearinghouse are:

- Boise State University (BSU)
- Federal Emergency Management Agency, Region X (FEMA X)
- Idaho Division of Building Safety (IDBS)
- Structural Engineers Association of Idaho (SEAI)
- Western States Seismic Policy Council (WSSPC)
- Idaho Transportation Department (ITD)
- Neighboring states' Geological Surveys:
 - Washington Geological Survey (WGS)
 - o Oregon Department of Geology and Mineral Industries (DOGAMI)

- Nevada Bureau of Mines and Geology (NBMG)
- o Utah Geological Survey (UGS)
- Wyoming State Geological Survey (WSGS)
- o Montana Bureau of Mines and Geology (MBMG)

See APPENDIX B for a complete list of abbreviations.

Emergency Operation Center

The Clearinghouse will supplement the intelligence gathering and damage assessment activities of the Emergency Operation Center (EOC). The Clearinghouse will hold reconnaissance briefings with frequency determined by the Management Team, during which researchers and field observers will report their observations of damages or impacts in the affected area. The EOC will have a liaison present at the clearinghouse and each briefing to gather information. Alternatively, at least one member of the Clearinghouse Management Team will have access to, and training for, WebEOC. This information will be provided to the EOC as appropriate and also be summarized in a written report by the IGS and USGS (geologic and geotechnical aspects); and EERI and SEAI/IDBS (engineering aspects). The report will be made available to the EOC preferably via WebEOC and posted on the IGS/Clearinghouse websites.

The Joint Field Office (JFO), FEMA's primary location of activity during a federal declaration, has a different role from the immediate information-gathering efforts of the EOC and the Clearinghouse organizations. The JFO is more concerned with disaster recovery activities, and is typically not activated immediately. The Clearinghouse will typically be enacted before the JFO, and may cease action shortly after the JFO is set up. Thus, the relationship between the Clearinghouse to the JFO will be dependent on what information gathering and dissemination needs remain at the time of JFO activation. The FEMA liaison at the Clearinghouse will represent the JFO, and where overlap occurs, the Clearinghouse may use JFO's GIS capabilities or the clearinghouse location may be repurposed to serve as the JFO.

Field Operations & Management

The Clearinghouse will channel researchers and observers toward the specific damaged areas where their expertise will be most valuable. Arrangements for access into secured areas will be facilitated by the Clearinghouse through provision of letters of passage, badges, and contacts with local governments. All researchers requesting letters of passage will sign in at the physical clearinghouse, and be asked to observe certain protocols with respect to local emergency managers and residents. The Clearinghouse will not supply credentials, but EERI will identify and provide credentials to out-of-state EERI representatives that are available to assist. When the physical Clearinghouse is activated following a significant earthquake in the state, its broader principal functions are to:

- Coordinate the field investigations of earth scientists, engineers, and other participating researchers
- Facilitate the sharing of observations through regular meetings and through the Clearinghouse website
- Notify disaster responders of any crucial observations or results.

The specific functions of the physical Clearinghouse include the following, to be directed by staff as outlined in the *Field Operations* section of this document:

- Collect and verify perishable reconnaissance information
- Convey that information to the EOC
- Serve as the "check-in" and "check-out" point for all researchers who arrive at the scene (See APPENDIX C for check-in/check-out form).
- Provide updated damage information to all investigators, through daily briefings and reports
- Track where investigators are in the damaged area
- Introduce methodology into what is frequently haphazard by arranging for investigators to cover areas not yet sufficiently reported on.

Facility

The size of the Clearinghouse will be event-specific; the needs of the operation will govern the dimensions. In general, the following are necessary:

- Open office space
- Wall space for maps and other documents
- Work stations for a minimum of three people
- Conference room accommodating up to 50 people
- Parking
- Accessible to airport and damaged areas

This facility will ideally be in a state or local government building. For nearby earthquakes, the IGS offices in Moscow or Boise can be used if they are not damaged or inaccessible. Generally, the preferred location for IGS operations and the Clearinghouse is a location as near to the epicenter of the earthquake as possible while providing both safety and accessibility.

See APPENDIX D for a list of potential Clearinghouse sites, including existing field stations.

STAFF

The physical clearinghouse will be operated by the Clearinghouse Director and representatives from the *Clearinghouse Management Team* (as described in this section). Additional staff will be needed, depending on the size of the earthquake and level of damage and geologic effects. An assignment of a permanent director and early assessment of staff needs will be made by the management team, and if necessary a formal request will be made in WebEOC for staff. Potential sources of staff assistance are IOEM, BSU, SEAI, FEMA, EERI, USGS, and WSSPC. Radio communications with those in the field will be provided by individual agencies and participants. The Clearinghouse will not provide communications assistance.

Roles

Clearinghouse staff will be flexible in terms of numbers and duties, the following positions will be designated by the *Clearinghouse Management Team* (or Clearinghouse Chair if Management

Team cannot assemble): 1) Clearinghouse Director, 2) One member of each agency on the Clearinghouse Management Team should be represented at the physical clearinghouse site, and 3) a designated Media Coordinator. These positions should be filled by IGS employees who get the Clearinghouse up and running. However, once the management team assembles, they will designate a Clearinghouse Director to lead that specific earthquake response and identify additional staff as needed.

The Clearinghouse Director's Role

- Supervising field operations from the Clearinghouse
- Provide a technical contact for visiting professionals in the field
- Administratively oversee all Clearinghouse operations
- Conduct briefings at the Clearinghouse field site or via phone or video conference
- Oversee Clearinghouse logistics and office operations, including:
 - o Acquiring equipment and making it operational
 - o Providing assistance to Clearinghouse users
 - Coordinating activities
 - o Overseeing establishment of a website and link with the EOC
 - o Supervising Clearinghouse staff
 - o Ensuring that information is appropriately disseminated

The Management Team's Role

- Support Clearinghouse Director
- Coordinate with supporting organizations
- Track field reconnaissance team
- Create briefing reports
- Provide safety messages and situation updates
- Request resources

Additional Clearinghouse Roles

Additional roles are established at the discretion of the Clearinghouse Director and Management Team representatives depending on the scale of the event. Additionally, visiting emergency-management members from other states may provide staff.

See Activation Timeline in APPENDIX E.

Media

The IOEM Public Information Officer (PIO) or activated Joint Information Center (JIC) Lead PIO will assign an ESF 15 (PIER Team) member to liaise with the Clearinghouse Management Team to gather information, and data that would be provided to media following an earthquake. The assigned PIO will be working in the Information Gathering Unit of the JIC (while activated), and will coordinate all messaging with the Clearinghouse Director. All information regarding the data

collected by the Clearinghouse Team following an earthquake will be approved before release by the Clearinghouse Director, and the EOC Manager.

While the JIC plan is an all-hazards plan, this particular type of disaster requires an addendum to the plan. The PIO assigned to the Clearinghouse following an earthquake will:

- Attend briefings
- Coordinate with JIC and be designated as the "point person" for media inquiries

Following the nightly briefings, the JIC lead PIO will assign an ESF 15/PIO PIER team member to speak with media.

Equipment

Some equipment may be supplied by IOEM or IGS, or purchased or leased in a federally declared disaster. Critical equipment should be readily available in the Clearinghouse facility, and should be housed with IOEM or IGS in a 'Go Kit' for use in case of an earthquake.

See APPENDIX F for a list of 'Go Kit' supplies and organization tips.

ACTIVATION & CALL DOWN PROCEDURES

Call Down Procedure

Any member of the *Clearinghouse Management Team* may initiate a call-down. A call down consists of a call, text, or email to all supporting Clearinghouse group partners. An updated call down contact list is available in APPENDIX G.

Criteria for Activation

The Clearinghouse will be put into operation at the discretion of the *Clearinghouse Management Team (IGS, USGS, EERI, IOEM)*. Generally, the following will trigger activation:

- When a damaging earthquake that has a magnitude of 6.0 or above strikes an urban area. A magnitude 5.0 to 6.0 earthquake can be used as a training opportunity;
- Upon recommendation of the *Clearinghouse Management Team*, even when the above magnitude threshold is not exceeded, but damage is significant;
- When a remote, less densely populated area, is struck by an earthquake large enough to damage structures and lifelines;
- When a Federal Disaster is declared. A federal disaster declaration is not necessary to activate the Clearinghouse, but the Clearinghouse will always be activated when there is a federal disaster declaration;
- When extensive geologic and ground failure reconnaissance is warranted. In cases of relatively small or rural earthquakes where emergency response activities are limited, the Clearinghouse may still be activated mainly to coordinate geoscience activities;
- When an EOC is activated in response to an Idaho earthquake.

A virtual Clearinghouse may be established for earthquakes in any of these cases, at the discretion

of the Management Team, that do not justify field-based operations. Virtual Clearinghouses may also serve as a substitute for physical Clearinghouses when field deployment is not possible, for example during extreme weather or a disease pandemic. In some cases, it is likely that a combination of physical and virtual services may be established.

Supplemental Shaking Activation Metrics

- USGS Pager Alert Level and Color yellow, orange, or red, is issued. Clearinghouse should coordinate field reconnaissance to list of Selected Cities Exposed at earthquake.usgs.gov/earthquakes/pager/
- Shakemap at earthquake.usgs.gov/earthquakes/shakemap/ with colors orange or red
- Stations at <u>strongmotioncenter.org/</u> with recorded shaking greater than both PGA 20% g and PGV 20cm/sec
- DYFI MMI maps at <u>earthquake.usgs.gov/earthquakes/dyfi/</u> with colors orange or red in sparsely instrumented regions.
- ShakeCast, which provides notifications of potential strong shaking or damage, is not a public interface but access can be given or coordinated through ITD.

Deactivation Procedures

The physical Clearinghouse will be deactivated by the Management Team when perishable reconnaissance data has been collected and investigators have left the field, monitoring stations are in place, and aftershocks are being captured.

A virtual Clearinghouse will remain active inasmuch as it will be available as an online archive of earthquake data. Documentation and data from the virtual Clearinghouse will be made available to IOEM for recovery and to update the Earthquake Chapter of the State of Idaho Hazard Mitigation Plan.

Re-activation Procedures

The Clearinghouse can be re-activated if significant aftershocks occur which would warrant further investigation or monitoring.

	FUNCTIO	N														
ORGANIZATION	Managing & Coordinating Field Operations	Media	Policy Issues	EOC Liaison	Communications	GIS	Geologic Effects	Seismic Monitoring	Overflights	Tracking	Risk Evaluation	Hazard Evaluation	Site Inspections	Support Staffing	Logistics	Possible Funding
IGS	•	•	•			•	•		•	•		•	•	•	•	
IOEM	•	•	•	•	•	•					•	•		•	•	•
EERI	•	•					•			•	•			•		
USGS	•	•	•			•	•	•	•	•		•		•		
BSU							•	•								•
FEMA X					•	•					•			•		
WSSPC			•											•		
IDBS											•		•			
SEAI											•		•			
ITD									•		•		•			
WGS						•	•	•								
DOGAMI						•	•	•								
NBMG						•	•	•								
UGS						•	•	•								
WSGS						•	•	•								
MBMG						•	•	•								

Figure 1. Possible Clearinghouse functions and organizational responsibilities

A conference call will be scheduled to discuss preliminary earthquake information and whether or not the Clearinghouse will activate. The time, number, passcode for the call will be shared to all participants. If necessary, the management group will assign a team to set up the Clearinghouse, and provide periodic updates as needed. Other research institutions, professional organizations, and out-of-state agencies may take part in the Clearinghouse activities. The Clearinghouse Management Team, based on location and any other factors specific to the earthquake, will determine their participation. See supplemental materials for a Mutual Aid/Commitment Agreement Form. Figure 1 indicates the functions of the Clearinghouse, and particular roles for each of the Clearinghouse organizations.

Timing

The physical Clearinghouse should be operating by the time the first reconnaissance organization or agency arrives on the scene. It is critical to get the Clearinghouse operational within 24-36 hours of the earthquake. The duration of Clearinghouse operation is dependent on the magnitude of the damage and extent of the response and early recovery periods and will be determined by the Director. Clearinghouse operations can be reduced when the need for reconnaissance decreases. Termination will occur after most perishable damage information has been gathered and detailed studies begin.

Location and Notification

The Clearinghouse should be located in a seismically safe facility as close to the affected area as possible, while still providing space for collaboration and all necessary support services. It should be located such that it affords access to the state or local EOC, although physical proximity may not be as important as electronic connectivity.

For contact and intelligence sharing with safety assessment personnel, the Clearinghouse is ideally located in close proximity to the EOC, which may be a field (local) EOC for earthquakes remote from the State Capitol (as outlined in the Idaho Emergency Operations Plan). Though it will not be located *in* the EOC, the Clearinghouse should be situated so that traffic and communication between it and the EOC is relatively easy to accomplish. The space should have electricity and reliable internet or cell phone service, and be able to support phones, printers/copiers, and working and display space. A meeting room large enough for convening a group of up to 50 people is necessary. Lastly, the Clearinghouse location should be close enough to the affected area to permit relatively easy access.

IGS will notify the *Clearinghouse Management Team* and partners of the Clearinghouse location as soon as it is established. EERI will post Clearinghouse information on their website and forward the information to EERI members and partner states.

WEBSITE, DATA MANAGEMENT, AND REPORTS

A virtual Clearinghouse website will be established to make Clearinghouse reports, databases, and maps generally available. Links will be established to/from the appropriate *Clearinghouse Management Team* (IGS, IOEM, EERI, USGS) and associated partner websites. The Clearinghouse Staff Coordinator will oversee establishment of the website, which will be maintained by the IGS and made available through the IGS website.

The Clearinghouse will facilitate uniform data collection and management by providing EERI's paper data sheets, access to EERI's data collection smartphone app, and establishing social media tags for geoscience and engineering data collection. Appropriate agencies or groups will be responsible for compiling databases, maps, and reports; the Clearinghouse will facilitate activities where possible. Responsibility for compiling geoscience (geologic, seismology, and

geotechnical engineering) maps and databases will be with the IGS and USGS; compilation of structural engineering/architectural maps and databases will be with EERI and SEAI/IDBS. Databases may be compiled at the Clearinghouse or at a facility of the responsible group. Clearinghouse staff and student volunteers can aid in database compilation. GIS hardware will likely not be available at the Clearinghouse, so GIS map compilations will be done at agency home offices, or the JFO.

FUNDING

During Clearinghouse activation, the accounting of costs for operations will be the responsibility of each participating organization. Because the Clearinghouse has a response function, it may be possible to cover some of its costs in a presidentially declared disaster. Facility rental, per diem for some investigators, and other eligible charges could be recouped. This possibility will be determined after the disaster scope is known and appreciated. Federal reimbursement should not be counted on, but it should not be ruled out.

In disasters with no federal declaration, costs will be smaller; arrangements will be based on the understanding that the organizations would have undertaken many of the Clearinghouse tasks, and funded them, irrespective of Clearinghouse activation. Therefore, each organization will bear the costs it would do in its normal post-earthquake investigations.

IDAHO CLEARINGHOUSE PARTERSHIP AGREEMENT

This agreement is an informal way for a partnering organization to recognize that they've read and understood the clearinghouse plan and will attempt to help in the event of a clearinghouse activation. Organizations which require a more formal agreement should use the MOU provided in the supplemental materials.

	(Organization Name) has read the Idaho support the clearinghouse to the best of its ability this support will depend on the details of the
earthquake event at hand and the capacity of _ (Organization Name) at the time that the need	arises.
	_ Representative Signature
	_ Representative Name
	_ Representative Job Title
	Date

APPENDIX A: TRAINING, EXERCISES, & PRACTICE

Exercises (including activities such as call-down, website activation, data staging, information sharing, or mock-briefing)

- Annual state exercises
- National exercises National Guard, FEMA,
- National/State ShakeOut
- Scenario-based exercises Idaho or Wyoming scenarios by FEMA/USGS
- Cross-border opportunities with Utah & Wyoming

Training for Clearinghouse participants

- EERI Reconnaissance workshops, link to training clearinghouse
- SW workers training (for Clearinghouse participants)
- Safety presentation/training
- WebEOC training

Best Practice sharing activities

- Coordination with other clearinghouse management groups from other states (conference call)
- Information sharing at conferences, meetings, etc.
- Participation in WSSPC monthly Clearinghouse conference calls

APPENDIX B: ABBREVIATIONS

BSU - Boise State University

DOGAMI – Oregon Department of Geology and Mineral Industries

EERI - Earthquake Engineering Research Institute

EOC – Emergency Operations Center

FEMA - Federal Emergency Management Agency

GIS – Geographic Information Systems

IDBS - Idaho Division of Building Safety

IGS - The Idaho Geological Survey

ITD- Idaho Transportation Department

IOEM - Idaho Office of Emergency Management

JFO – Joint Field Office

MBMG – Montana Bureau of Mines and Geology

NBMG – Nevada Bureau of Mines and Geology

SEAI - Structural Engineers Association of Idaho

UGS – Utah Geological Survey

UGS – Utah Geological Survey

USGS - U.S. Geological Survey

WGS – Washington Geological Survey

WSSPC - Western States Seismic Policy Council

WSGS – Wyoming Geological Survey

APPENDIX C: CHECK-IN/CHECK-OUT FORM

Example online form:

https://docs.google.com/forms/d/e/1FAIpQLSe3RRorBGx6c6u2iYbMX1HNh5gFQEvgqsnQTMt4MXKT0_TlnA/viewform

Reconna	Reconnaissance Volunteer Check-in								
Name	Affiliation/ Organization	Professional Field	Home City, State	Email	Mobile Phone	Date	Time in	Time Out	Planned itinerary (please note if you do not plan to return to the Clearinghouse at the end of the day)

Excel spreadsheet version of this table provided in "Supplemental Materials" folder.

APPENDIX D: POTENTIAL (EXISTING) FIELD LOCATIONS

Providing physical space for the Idaho Earthquake Clearinghouse, ideally including electricity, internet or cell phone service, bathrooms, open office space, wall space for maps and other documents, work stations for a minimum of three people, conference room accommodating up to 50 people, parking, and easy access to airport and damaged areas, if possible.

- 1. ITD maintenance yards (Neal Murphy, ITD Emergency Planner, <u>208-334-8414</u>, Neal.Murphy@itd.idaho.gov)
- 2. County Emergency Coordinators (list here: https://ioem.idaho.gov/Pages/AboutUs/Contact/CountyCoordinators.aspx)
- 3. University of Idaho Ag Extension County Offices (http://www.extension.uidaho.edu/find.aspx)
- 4. Idaho State University's Lost River Field Station (<u>5930 Bartlett Point Rd, Mackay, ID</u> <u>83251</u>; Michele Hughes, 208-282-3365, hughmich@isu.edu)
- 5. University of Idaho's McCall Outdoor Science School (MOSS, <u>1800 University Ln</u>, <u>McCall, ID 83638, 208-885-1080, mccall@uidaho.edu)</u>
- 6. County fairgrounds
- 7. Public school facilities
- 8. Public libraries

Other potential site types to consider:

- Universities
- Utility field stations
- Government/agency buildings (IGS, BLM, IDL offices, etc.)
- Engineering Consulting firm facilities

APPENDIX E: ACTIVATION TIMELINE

Clearinghouse Activation depends on circumstances specific to each earthquake. The below timeline is intended to guide the process of activating and deactivating a Physical Clearinghouse in the hours and days following an earthquake in Idaho.

Event + Time	Action			
< 1 Hours	Clearinghouse Management notified of EQ			
< 2 Hours	Follow Clearinghouse call-down procedures; schedule			
	conference call			
1 - 5 Hours	Conference call with Management Team: Decide whether to			
	launch Clearinghouse			
3 - 6 Hours	Identify and obtain Clearinghouse location			
2 - 10 Hours	EERI launch Virtual Clearinghouse			
12-48 Hours	Physical clearinghouse location operational			
	Briefing			
	 Summary of day's findings and activities published 			
	 Conference calls with other agencies as needed 			
	Check-in with EOC			
	Join USGS Coordination calls			
3 - 7 Days	Deactivate Clearinghouse (this could vary depending on			
	circumstances)			

M6.0 Napa, California Physical Clearinghouse Example:

August 24, 2014

- 3:20 AM: Earthquake
- 4:11 AM: Clearinghouse Management notified of EQ
- **5:00 AM:** Following Clearinghouse call-down procedures, conference call scheduled for 7:00 AM
- 7:00 AM: Clearinghouse activated during call
- 10:00 AM: Physical Clearinghouse location provided by Caltrans near central Napa (w/ satellite communications truck)
- 2:00 PM: EERI Virtual Clearinghouse website live
- **3:00 PM:** Physical clearinghouse location operational

August 26, 2014

8:00 PM: Physical clearinghouse location deactivated

APPENDIX F: EQUIPMENT

'Go Kit' Supplies (example supplies list provided by CalOES and the California Clearinghouse) Additional supplies may be necessary depending on the unique situations and circumstances of the earthquake.

Item Description	Quantity /Kit	Item Description (cont.)	Quantity /Kit
Telephone Extension Cord	1	Blue Painters Tape	6
Power Strip	5	Name Badge Labels	200
Thunderbolt to HDMI Adapter	2	Black Pens	60
Thunderbolt to VGA Adapter	2	Bungee Cords	24
Headlamps	10	Scissors	4
Bluetooth Headset	2	Duct Tape	1
Multi USB Charging Cord	2	Printer Cartridges	1 set
Polycom Conference Phone	1	Notepad - 5x8	12
Portable Charger	3	Easel	1
Walkie Talkies	10	Measuring Tape	1
Revolabs Speaker	1	Name Tag Holder	100
Lantern	4	Scotch Tape	6
External Hard Drive	1	Sharpies, fine	12
Extension Cord (25ft)	5	Sharpies, large	12
First Aid Kit	1	Level	1
Toilet Paper	12 rolls	Clipboards	10
Dust Mask	30	Copy Paper	3 reams
Disposable Gloves	100	Hard hats	12
Iodine Tablets	2	Printer	1
Insect Repellent	2	Pop-up	1
Dust Respirator	8	Post-it Wall Pad	2
Yellow Safety Vests	30	Folding Hand Truck	1
Work Gloves	5	Laptop Lock	5
Optoma Projector	1	CD-R	50

APPENDIX G: CALL DOWN CONTACT LIST

PARTNERS	REPRESENTATIVE	CONTACT
Idaho Geological Survey (IGS)	Zach Lifton, Geologic Hazards Geologist	208-364-4099, <u>zlifton@uidaho.edu</u>
Idaho Office of Emergency Management (IOEM)	Susan Cleverley, Mitigation Section Chief	208-258-6545, scleverley@imd.idaho.gov
U.S. Geological Survey (USGS)	Ryan Gold, Geologic Hazards Science Center	541-778-0244 rgold@usgs.gov
U.S. Geological Survey (USGS)	Brian Sherrod, Earthquake Science Center	253-653-8358 bsherrod@usgs.gov
Earthquake Engineering Research Institute (EERI)	Heidi Tremayne, Executive Director	Office: 510-451-0905 Mobile: 510-912-6702 heidi@eeri.org
Earthquake Engineering Research Institute (EERI)	Maggie Ortiz-Millan Program Manager	Office: 510-451-0905 Mobile: 209-819-9317 maggie@eeri.org
Federal Emergency Management Agency, Region X (FEMA X)	Amanda Siok, FEMA Region X	425-487-4626 amanda.siok@fema.dhs.gov
Boise State University	Lee Liberty, Research Professor	208-426-1166, <u>lliberty@boisestate.edu</u>
Idaho Division of Building Safety (IDBS)	Mike Munger	208-407-6716, mike.munger@dbs.idaho.gov
Structural Engineers Association of Idaho (SEAI)	Sarah McClendon, Principal Structural Engineer	208 342-2919, sarah@mcclendonengineering.com
Western States Seismic Policy Council (WSSPC)	Matthew Wall, Executive Director	916-444-6816 ext. 101, mwall@wsspc.org
Utah Division of Emergency Management (UDEM)	Bob Carey, Bureau Chief	bcarey@utah.gov
Idaho Transportation Department (ITD)	Neal Murphy	(208) 334-8414 neal.murphy@itd.idaho.gov
Washington Geological Survey (WGS)	Corina Forson	360-902-1455; 360-791-0647 corina.forson@dnr.wa.gov
Oregon Department of Geology and Mineral Industries (DOGAMI)	Bill Burns	971-277-0062 bill.burns@oregon.gov
Nevada Bureau of Mines and Geology (NBMG)	Rich Koehler	775-682-8763 rkoehler@unr.edu
Utah Geological Survey (UGS)	Steve Bowman	801-537-3304 stevebowman@utah.gov
Wyoming Geological Survey (WSGS)	Seth Wittke	307-766-2286 seth.wittke@wyo.gov

Montana Bureau of Mines and Geology	Mike Stickney	406-496-4332
(MBMG)		mstickney@mtech.edu

APPENDIX H: MANAGEMENT AND OPERATIONS CHECKLISTS

Clearinghouse Management Checklist

Event Location	Date	Time
EOC Activated	Date	Time
Action	Date/Time	Initials
Clearinghouse Management notified of EQ		
Source:		
Call Down procedures implemented w. conference call scheduled		
Conference call info:		
Conference call held w. Clearinghouse decision made		
Decision result:		
Physical Clearinghouse location identified		
Location:		
Physical Clearinghouse location acquired		
Location Owner:		
Physical Clearinghouse is Operational:		
Refer to Clearinghouse Operations Checklist		
Coordinate with EERI re: Launching Virtual Clearinghouse		
Virtual Clearinghouse launched		
JIC and Outreach process established		
Coordination with EOC		
Logistics/Resource coordination with EOC established		
Finance and Accounting Processes confirmed as established		
After Action Review		
Clearinghouse Demobilized		
Clearinghouse Plan Written and Provided to EOC		
Governor's Emergency Declaration	Date	Time
		1

Clearinghouse Operations Checklist

Clearinghouse location:

Event Location	Date	Time
Physical Clearinghouse Operational	Date	Time
Action	Date/Time	Initials
"Go Kit" Acquired and Confirmed as Functional		
Personnel Check-in and Accountability Process Implemented		
Personnel Lodging Acquired/Confirmed		
Transportation Resources Acquired/Confirmed		
Communication Established with the EOC		
Schedule established for Information and Reports exchange		
Website and Data Management Processes Implemented		
Initial Reconnaissance Team dispatched		
Remote accountability process established and implemented		
Logistical Request/Support system in place		
Site Safety Processes Identified and Established		
Produce and share products: reports, maps, fact sheets, etc.		
Clearinghouse Demobilized		
Clearinghouse Plan Written and Provided to EOC/Management		

APPENDIX I: LESSONS LEARNED

daho Clearinghouse, Event, Date		
	Strengths	
Areas for improvement	Corrective Action	POC
, , , , , , , , , , , , , , , , , , ,		
Particip	pants/Organizations	