SR 530 Landslide Commission Meeting

Monday, October 13, 2014; 5:00 – 8:00 p.m.
The Everett Community Center, Port Gardner Rooms A&B
3900 Broadway, Everett, WA 98201
Phone: (425) 385-4019

Meeting Summary

Welcome and Meeting Overview

Kathy Lombardo, Executive Director, opened the meeting and reviewed the purpose of the research groups. The purpose of the Commission meeting is to focus on preliminary recommendations from each group, to add additional preliminary recommendations that had not been discussed at the October 2 Commission meeting and to begin the process of developing priorities.

Kathy commented that it is important to come up with top recommendations that will positively impact future emergency response efforts. It is critical to identify time sensitive recommendations that can be considered by the State Legislature in 2015. It is also important to note a number of response agencies are developing or have developed after action reports that may already include operational changes. To that end the Commission will leverage recommendations that may already be emerging. Kathy has met with over 40 people and shared a few key themes:

- An horrific event with bold, brazen and heroic actions taken
- Identify innovations that significantly improve understanding and actions during the first 24, 48, 72 hours of an event. We are in one of the best states for providing innovative solutions to pressing problems.
- Quickly improve techniques and operations to significantly improve situational awareness in the first 24 hours and be prepared to deploy the most appropriate expertise within the various emergency response systems.
- Command and control - Define and clearly understand roles and responsibilities and lines of authority prior to an incident and make the transitions seamless.
- Communications were challenged technologically, between and among response agencies and within communities.
- It’s tough to control Mother Nature, and we need to better understand and plan accordingly.
- Trusted relationships must be developed across jurisdictions, emergency response agencies (Search and Rescue, SARs; Incident Management Teams, IMTs; 1st Responders, elected officials, Urban Search and Rescue, USARSSs; etc.) before disasters happen.
- Capture innovation and understand the local skills and assets.

For more information about the SR 530 Landslide Commission, including the times and places of future meetings, please see our website at: http://www.bit.ly/sr530commission
The Commission confirmed the September 30th Meeting Summary and made one small edit on the October 2 Meeting Summary.

Research Group Update – Emergency Management

Presentation - John Erickson, Lead of the Emergency Management Research Group (group)

John reviewed the list of issues that were brought forward at the October 2 Commission meeting by the group. (See October 2 SR 530 Landslide Commission Meeting Summary.) The following additional comments were made:

- **Fatality Management** - Recommend understanding airlines’ procedures to see how they prepare and manage family assistance centers following a crash. Development of a single missing persons form shared with agencies that ‘need to know’ is critical for families so that they don’t have to repeat the same information multiple times.

- **Standardization of Information** - Consider developing a pre-registration for volunteer corps and engage existing human services case managers in organizing and applying their skills for developing robust information systems during emergencies.

- **Communications** – Review Bill Shrier’s draft recommendations to the State and consider leveraging the draft recommendations as a part of the Commission recommendations – further work to be done here.

- **RCW 38.52** – A discussion about how emergency management is organized and operationalized in Washington State will likely be recommended. This discussion could include streamlining RCW 38.52, the Fire Mobilization Plan as well as how best to fund emergency response preparedness and response.

Commission Comments and Discussion

1. Discussion focused on how to best prioritize the recommendations – several approaches were recommended, as follows:

2. A set of categories:
   - Ongoing organizational continuous improvement - – already implemented as course of doing business through continuous improvement within organizations
   - Leverage others’ recommendations - where to best use the voice of the Commission to elevate recommendations already ‘in process’
   - Game changers – recommendations that if leveraged within the Legislature or conducted across sectors (public, private, tribal) could significantly improve the approach to emergency response across the state.

3. A set of questions:

   Which recommendations require changes in laws and who is responsible? What recommendations require no new funding and which could be implemented immediately, no change required.
4. A criteria matrix:
   
   - Game changers – easy
   - Game changers - hard
   - Best practices - easy
   - Best practices – hard

The Commission decided that it was premature to prioritize the preliminary recommendations at this time. Many felt that all of the recommendations were needed in order to fulfill the changes needed. The Commission will consider priorities after vetting recommendations with a panel of experts during the October 20\textsuperscript{th} meeting.

**Research Group Update – Geologic Hazards and Land Use Planning**

**Presentation** - Bill Trimm & Wendy Gerstel, Co-leads of the Geologic Hazards and Land Use Planning Research Group (group)

The criteria for the group’s recommendations is to keep people out of harm’s way and offer informed choices to those already residing in high risk locations.

The recommendations were refined from the recommendations presented by the group at the October 2 Commission meeting. Recommendations 13-17 may not be recommendations, but may be called “standards of practice”. Preliminary recommendations follow:

1. **Identify and map the highest priority landslide risk areas (including but not limited to deep-seated landslides, debris flows, debris avalanches, and potential run-out zones).**
   
   This will require producing base-line geologic maps at a scale of 1:24K or better. Priority mapping areas will focus on highly populated areas and commerce and transportation corridors. Derivative mapping products should include landslide hazard and risk susceptibility maps.

2. **Establish a statewide Geographic Information System (GIS) that is accessible to the public. Recommended GIS layers include high resolution LiDAR, soils, geologic mapping (at 1:24k scale or better), steep slopes, water well logs, mapped landslides, run-out zones, parcel maps.**
   
   Mapping needs to be generated in such a manner that will inform title companies, financing institutions, purchasers and sellers of potential risks and include such disclosures on the Seller’s Disclosure Form 17.

   **Commentary:**
   Most counties have a GIS system, and it would be useful to merge/link these systems together into a statewide clearinghouse where the information is readily accessible. It would be helpful to identify where this has been already been done elsewhere.
3. Public Education and Outreach: Workshops, videos, Public TV programs, and public school education programs could be developed by and specific to local community issues to raise awareness of geologic hazards and risks from landslides, debris flows, and flooding, (also include here volcanic eruption, earthquake, etc.?) Improve public education of earth science in K-12 system.

4. Require that each county have a licensed geologist on staff qualified and experienced to address geologic hazards and to respond to threats perceived by the public to threaten public safety.
   Commentary: The licensed geologist could also serve a region and not just a county.

5. Develop protocol for community residents to bring to the attention of designated [county] geologist(s) any concerns regarding observed indications of pending geologic hazards. Upon review by county geologist, mitigation would either be addressed locally or concerns would be advanced by the county geologist to the state geologic survey (DNR). Based on mapping products outlined in #1, establish (with state resources input as necessary?) county-managed monitoring protocol and early-warning systems.

6. All geologists likely to be involved with or on call to respond to geologic hazard emergencies must receive Incident Command System training. Designate a technical information officer to be primary contact (for press and other information dissemination) on major hazard events.

7. Update the Critical Areas section of the Growth Management Act (GMA) (RCW 36.70A.170) and WACs (365.190.120(4) to require the use of up-to-date geologic mapping, at 1:24k-scale or better. Updates will be based on a statewide mapping program, to classify lands as geological hazards and designate such lands in local comprehensive plans and critical area regulations to reduce impacts to human life and property. Counties and cities to include geological hazards mapping concurrent with GMA/development regulations update schedule.

8. Require proponents of new land development activities to conduct on-site risk assessment studies within designated geologic hazard areas as part of development permit application. (Note: See #17 below.)

9. Provide public notification information of hazard and risk assessment to public pursuant to mapping.
10. Create a Hazard Identification Institute with strong and clear partnerships among government, academic, private, and non-profit institutions to collaborate and provide statewide resources and expertise to identify natural hazard issues, funding sources, and mitigation measures. Mitigation may include mapping, community outreach and education, applied research, monitoring, planning, etc. Institutional objectives must support the building of community resilience.

Commentary:
An institute can help to better align agencies and efforts throughout the state. It would provide a place where people of different agencies can work together. It could help support and oversee mapping efforts. Its broad focus could be on community and statewide resilience to disasters.

11. Review lessons learned from the 530 event as documented in emergency response debriefings from various agencies so as not to inappropriately extrapolate to other events. Geologic conditions and landslide processes may vary significantly from one area to another. Inappropriately transferring interpretations from one site to another could put victims and responders at great risk, highlighting the need to provide on-call geological expertise early on to provide event-specific information and “situational awareness”.

12. Require an independent review of the effects of forest practices on land sliding, and the role of public safety in decision-making.

Commentary: It may be useful to have an independent party, for example the National Research Council, analyze what factors influenced the landslide.

13. Encourage the Use of Regulatory Schemes That Could Reduce Landslide Hazards While Retaining Property Values
- Transfer development rights from unstable areas to more developable lands
- Permit construction only if certain engineering mitigation measures are performed
- Conducting land-banking programs in which a government agency purchases land and resells it with deed restrictions on the type and density of development
- Low-density zoning resulting in greater buffers and fewer people potentially in harm’s way

14. Encourage Establishing of Slope-Density Regulations
Some jurisdictions have adopted slope-density regulations, which establish maximum densities for various degrees of steepness. This presumes that landslide hazard is directly related to slope steepness, which is not necessarily the case. However, many planners like the slope-density ordinance as a relatively simple means of advancing both
open-space and landslide-reduction goals. Slope-density regulations can specify minimum parcel sizes or overall density.

15. Eliminate Obstacles Impeding Enforcement of Landslide Reduction Regulations
Even in jurisdictions having regulation aimed at landslide reduction, lack of adequate enforcement is a problem. Possible reasons include: (1) political pressure on local officials to approve questionable developments in potentially unstable areas; (2) local officials who are apathetic about landslide hazards; (3) higher priority given to conflicting environmental and social considerations; (4) the belief that landslides can be prevented by better engineering and, therefore, are not an important consideration in land use decision-making (5) local officials’ fear of being subjected to “unlawful condemnation” claims.

16. Encourage the Adoption of Grading Ordinances
Another approach for reducing landslide hazards to new developments, which combines land use planning and engineering techniques, is to require detailed site analysis and construction monitoring. This process is usually controlled by a grading ordinance, which is typically part of the building code.

A grading ordinance would require developers to obtain grading permits and provide engineering or geologic reports for proposed building sites. Because implementing grading ordinances depends upon a high degree of professional discretion in preparing and evaluating geologic and engineering reports the ordinances are generally accompanied by professional licensing procedures or peer review boards.

17. Educate Real Estate Professionals on the Perils of Landslides
• Form 17 is a required seller disclosure statement that potentially covers the disclosure of any landslide hazard (if known to the seller).
• Propose to the Real Estate Commission that an introduction to landslides and other natural disasters be included in their “Core” curriculum that real estate licensees must take every two years.

DISCUSSION ON CRITERIA
The Commission discussed ways to approach the development of criteria to be used to prioritize recommendations. Ideas included: (refer also to ideas expressed earlier in the meeting)
• Group recommendations around a set of vectors: cost and difficulty
• Create a spreadsheet of the recommendations and show where additional funding may be needed
• Differentiate between short term and long term recommendations
• Consider recommendations that fall within “best practices” to be short term
• Consider what might get traction with the State Legislature
• Organize recommendations by what must be accomplished first before other recommendations can be implemented
• Interweave the two research groups’ set of recommendations together or leave as two separate groups of recommendations
• For each recommendation suggest or identify the responsible party for implementation or leading the effort

The Commission decided to listen to the feedback from the two panels at the October 20th meeting prior to agreeing on priorities. The Commission began to identify possible panelists. Panelists will be provided the summary preliminary recommendations. The groups were still in the process of selecting the panelists to invite for the 10/20 meeting, because some of their initial choices could not attend.

Other interested parties will be invited as members of the audience to listen and provide panel specific feedback during public comment.

Timeline and Draft Report Discussion
The discussion about the timeline and draft report was postponed until the October 20th meeting.

Public Comments
Gordon Ness - Summary of comments:
Gordon Ness expressed enthusiasm about suggesting the State Legislature update the Growth Management Act. He stated that his county council recently passed an ordinance that reduced the requirements for tree preservation on almost every parcel of land. He maintained that the county is setting itself up for future losses. He commented that if tree removal was directly tied to geologic hazards in the Growth Management Act then it could provide political cover for county councils to support tree preservation. He encouraged the Commission to identify the major issues and to then explain why they are important.

Kevin Ashe – Summary of comments:
Kevin Ashe encouraged the Commission to include one or two members of the private sector on the panels, especially loggers and local contractors that worked in the landslide debris. He said that he feels this sector is missing from the Commission’s discussions. He commented that there might be different insights from these people.

Peter Selvig – Summary of comments:
Peter Selvig commented that educating responders on the delegation of authority is needed. Incident Command System training can be very helpful. He suggested that there are numerous methods for communication and collecting information including family phone trees, personal...
identification cards and collecting personal information through the use of thumb drives. He encouraged hazard mapping especially where the largest impacts might occur. There are environmentally and culturally sensitive areas in Washington and these need to be mapped. It may be best to have the information available on a need to know basis.

**Final Matters, Wrap-up, Adjourn**

Kathy thanked the research groups for their great preliminary recommendations.

<table>
<thead>
<tr>
<th>Upcoming SR 530 Commission Meeting Dates</th>
<th>Location</th>
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<tbody>
<tr>
<td>• October 20th, 5-8 p.m.</td>
<td>• Everett Community Center</td>
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<td>• November 4th, 5-8 p.m.</td>
<td>• Everett Community Center</td>
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<tr>
<td>• December 2nd, 5-8 p.m.</td>
<td>• Everett Community Center</td>
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### Attachment 1

**Meeting Attendees**

<table>
<thead>
<tr>
<th>Name</th>
<th>Title and Affiliation</th>
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<tbody>
<tr>
<td>Kathy Lombardo</td>
<td>Executive Director</td>
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<tr>
<td>Joann Boggs</td>
<td>Pend Oreille County Emergency Management Director, current Chair Washington state Emergency Management Association</td>
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<tr>
<td>Hon. Jill Boudreau</td>
<td>Mayor, Mount Vernon</td>
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<tr>
<td>Paul Chiles</td>
<td>Owner/ President, Chiles &amp; Co Real Estate</td>
</tr>
<tr>
<td>John Erickson</td>
<td>Former Director of Emergency Preparedness, Department of Health</td>
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<tr>
<td>Wendy Gerstel</td>
<td>Principle, Qwg Applied Geology</td>
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<tr>
<td>David Montgomery</td>
<td>Director, UW Geomorphological Research Group</td>
</tr>
<tr>
<td>Renee Radcliff-Sinclair</td>
<td>Former Representative, Current Strategic Initiatives for Western United States for Apple Inc.</td>
</tr>
<tr>
<td>Lee Shipman</td>
<td>Emergency Management Director, Shoalwater Bay Tribe</td>
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<tr>
<td>Steve Strachan</td>
<td>Chief, Bremerton Police Department</td>
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<tr>
<td>Diane Sugimura</td>
<td>Director, Seattle Dept. of Planning and Development</td>
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<tr>
<td>Bill Trimm</td>
<td>County Planner/Land Use Expert, Member, Snohomish County Planning Advisory Council representing Mountlake Terrace</td>
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<tr>
<td>Mike Gaffney</td>
<td>Ruckelshaus Center</td>
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<tr>
<td>Amanda Murphy</td>
<td>Ruckelshaus Center</td>
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<tr>
<td>John Snyder</td>
<td>Ruckelshaus Center</td>
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<tr>
<td>Phyllis Shulman</td>
<td>Ruckelshaus Center</td>
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# SR 530 Landslide Commission Meeting Sign-In Sheet

**Meeting Date & Time:** October 13, 2014, 5:00pm – 8:00pm  
**Location:** The Everett Community Center, 3900 Broadway, Everett, WA 98201

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
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<tbody>
<tr>
<td>Bill Schrier</td>
<td>Chair, NESC</td>
<td>State OCN</td>
<td>206 255 21560</td>
<td><a href="mailto:bill@schrier.org">bill@schrier.org</a></td>
</tr>
<tr>
<td>Jonathan Olds</td>
<td></td>
<td></td>
<td>625 602 6172</td>
<td>jonathan <a href="mailto:olds@gmail.com">olds@gmail.com</a></td>
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<tr>
<td>Kevin Ashe</td>
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<td>206 430 1168</td>
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<tr>
<td>Patric Silva</td>
<td></td>
<td></td>
<td>425 754 5271</td>
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<tr>
<td>Willy Harper</td>
<td>Chief, Harper</td>
<td>Snohomish Fire #25</td>
<td>360-340-4580</td>
<td><a href="mailto:ch37@osofire.com">ch37@osofire.com</a></td>
</tr>
<tr>
<td>Dan Smith, Fire Chief</td>
<td>Chair,</td>
<td>WA St. Fire</td>
<td>206 255 21560</td>
<td><a href="mailto:smith@nkfe.org">smith@nkfe.org</a></td>
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<tr>
<td>Brian McMahon</td>
<td>Assl. Fire, Chief</td>
<td>Mukilteo Fire</td>
<td>263 8152</td>
<td></td>
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<tr>
<td>P. Esparza</td>
<td>Proj, Asst</td>
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Welcome to the SR 530 Landslide Commission Meeting. Public comment is encouraged and appreciated. If you wish to speak, please sign-in and provide the agenda item topic you wish to speak about to the Commission.

A total of 15 minutes will be provided for public comment, starting at 8:45pm. Please limit comments to 3 minutes per person. No speaker may convey or donate his or her time to another speaker. In an effort to be respectful of everyone's time, Commission members will not be able to engage in a dialogue with individual members of the audience and no immediate action will be taken on any public comment issue.

<table>
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<tr>
<th>Name</th>
<th>Address/Phone/Email (Optional)</th>
<th>Representing Self/Business</th>
<th>Agenda Item/Topic</th>
<th>Wish to Provide Written Comment?</th>
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<tbody>
<tr>
<td>Gordon Ness</td>
<td><a href="mailto:glnness@comcast.net">glnness@comcast.net</a></td>
<td>SELF</td>
<td></td>
<td>NO</td>
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<tr>
<td>Kevin Ahe</td>
<td></td>
<td>SELF</td>
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<tr>
<td>Park Salvig</td>
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<td>IMS</td>
<td>YES</td>
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SR 530 LANDSLIDE COMMISSION MEETING
MEDIA SIGN-IN SHEET

Meeting Date & Time: October 13, 2014, 5:00pm – 8:00pm
Location: The Everett Community Center, 3900 Broadway, Everett, WA 98201

Welcome to the SR 530 Landslide Commission Meeting. If you are a member of the media please sign in.

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