

## State Hazard Mitigation Planning Outreach Report

The Mitigation Section of Washington Emergency Management sought input from a variety of organizations with an interest in hazard mitigation as part of the process to review and update the state's hazard mitigation plan. This outreach was in two steps.

First, the section conducted four workshops around the state in October 2006 to solicit comment and input from a variety of hazard mitigation stakeholders. These four workshops were conducted in October 2006 – Ellensburg (Oct. 10); Spokane (Oct. 11); Olympia (Oct. 13); and Mount Vernon (Oct. 24). Second, the section sent out questionnaires seeking comment from all those invited to the workshops but who were not able to attend.

The section sent email to about 800 individuals inviting them to participate in these workshops. Those invited represented a cross-section of organizations with an interest in hazard mitigation, including the following:

- Local emergency managers
- Indian tribes
- Local land use planners
- Local transportation departments
- Local public works departments
- Local schools
- Architects and engineers
- American Red Cross
- Business continuity planners
- Hazard experts from state and federal agencies
- State transportation officials, including those from state ferry system
- State four-year colleges and universities

In the four workshops, 26 individuals attended from the following organizations:

- Benton County Emergency Management
- Kittitas County Emergency Management / Sheriff's Office
- Washington State University
- Grant County Emergency Management
- City of Renton Fire Department / Emergency Management
- City of Centralia
- Alkai Consultants, Silverdale (environmental and geotechnical consultants)
- Clark (County) Regional Emergency Services Agency
- Washington Emergency Management Division
- FEMA Region 10
- Seattle Chapter of the American Red Cross
- Thurston County Emergency Management
- City of Bellevue Fire Department / Emergency Preparedness
- City of Seattle Emergency Management
- Starbucks Coffee Company, Seattle
- FM Global Insurance, Bellevue
- Island County Emergency Management
- City of Everett Fire Department / Emergency Management

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- San Juan County Emergency Management
- Whatcom County Sheriff / Emergency Management
- Emergency Services Coordinating Agency (NW King / SW Snohomish Counties)

Staff from the following organizations submitted completed questionnaires via email:

- Port of Anacortes
- Aspect Consulting, Bainbridge Island and Seattle (water, environmental and geotechnical consultants)
- The Boeing Company, International Security and Disaster Preparedness Unit, Seattle
- Bonneville Power Administration
- Columbia Geotechnical, Vancouver (geologic consulting)
- Port of Everett
- Ferry County Counseling Services
- Gallagher Risk Management Services, Bellevue (insurance company)
- Good Samaritan Hospital, Puyallup
- Hoh Indian Tribe
- King County Emergency Management, on behalf of the 37 jurisdictions that are part of the county's multi-jurisdiction hazard mitigation plan
- Klickitat County Emergency Management
- PACCAR Inc., Renton (heavy truck manufacturer)
- Pacific County Emergency Management
- Pacific Northwest National Laboratory, Richland
- Pickets Engineering, Kirkland
- Pierce County Emergency Management
- Port of Port Angeles
- Shannon & Wilson Inc., Seattle (geotechnical and environmental consultants)
- Snohomish County Risk Management / Emergency Management
- Spokane Chapter of the American Red Cross
- Spokane Indian Tribe
- City of Vancouver
- Virginia Mason Medical Center, Seattle

*Note: A couple of respondents indicated their responses represented their thoughts and concerns vis-à-vis their organizations, but did not represent the official views or positions of their organizations.*

An agenda for the workshops, and questionnaires and follow-up questions appear in Appendix A that follows this report. The questionnaires and follow-up questions were used to solicit input from those who responded via email and to start discussion with those who attended the workshops. The questionnaires were based on a survey on natural hazards, preparedness and mitigation taken in the State of Oregon several years ago. Follow-up questions asked of both workshop participants and email respondents solicited further discussion and comment.

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The following tables and notes summarize the responses and comments received from those who attended the workshops and responded via email.

### Questionnaire #1 – Natural Hazards

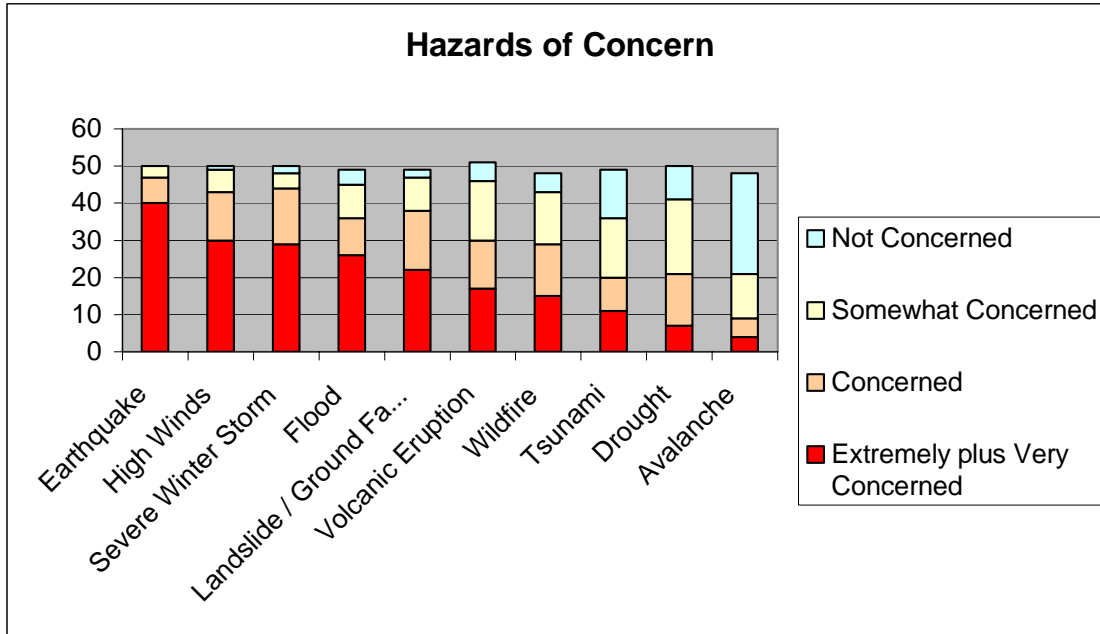
Hazard	Extremely Concerned	Very Concerned	Concerned	Somewhat Concerned	Not Concerned
Avalanche	0	4	5	12	27
Drought	3	4	14	20	9
Earthquake	25	15	7	3	0
Flood	10	16	10	9	4
High Winds	9	21	13	6	1
Landslide / Ground Failure	6	16	16	9	2
Severe Winter Storm	6	23	15	4	2
Tsunami	3	8	9	16	13
Volcanic Eruption	6	11	13	16	5
Wildfire	10	5	14	14	5
Other: Hazards each receiving one vote, in area of concern expressed	Terror/crime, Infrastructure and utility failure	Pandemic flu	Lightning, Heat/humidity, Accidents	Agricultural, Fishing, Sea level rise	

#### Observations

To provide a clearer picture of the level of concern for each natural hazard, responses from the extremely concerned and very concerned categories were combined (see graph below).

*Note: Not all respondents provided a response for each hazard listed.*

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Hazards in order of concern, starting with the hazard of greatest concern:

1. Earthquake
2. High Winds
3. Winter Storm
4. Flood
5. Landslide / Ground Failures
6. Volcanic Eruption
7. Wildfire
8. Tsunami
9. Drought
10. Avalanche

It generally appears those hazards which occur most frequently are of the greatest concern to workshop participants. Exceptions:

1. Earthquakes, which occur less frequently but result in significant damaging events about once every 30 years in Western Washington. The potential for much larger events (i.e., Cascadia Subduction Zone earthquake or Seattle Fault event) that would have a major impact on more of the state is considerable but they occur much less frequently.
2. Wildland fire, which occurs much more frequently and burns far more acreage in Eastern Washington; it appears the level of concern in this hazard is lower because the bulk of the workshop participants and email respondents were from Western Washington, while the bulk of the wildfires in recent years have been in Eastern Washington.
3. Volcanic Eruption, which occur much less frequently than most hazard events, but resulting lahars that could be very destructive to a significant number of urban areas and their infrastructure in river valleys below the state's five volcanoes.

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This order of concern is similar to one developed by the State Hazard Mitigation Advisory Team for the *2004 Washington State Enhanced Hazard Mitigation Plan*; the team suggested a focus on those hazards which produce the greatest impacts and occur at least once every generation (20-30 years). These hazards are – in no order of priority – earthquake, flood, severe storm (high winds and winter storm), and wildland fire.

Some of the comments received from workshop participants and email respondents on why certain hazards are of concern were response oriented or related rather than mitigation oriented. However, *a number of comments provide potential ideas or direction for mitigation strategy development; these items are highlighted in the text that follows.*

### Discussion comments

#### Hazards – Why Are You Concerned?

- Avalanche:
  - Closure of I-90
  - Impact those who use back country (i.e., snowmobiles, back packers)
- Drought:
  - Impact on irrigation / irrigated crops
  - Increase in noxious weeds
  - Increases fire potential
  - Impact on commerce / shipping using Columbia River
- Earthquake:
  - New information (e.g., Seattle Fault earthquake) highlights increased vulnerability
  - Inevitability of the next event
  - Impacts:
    - Damages complicate response
    - Transportation
    - Economic
  - Concerns:
    - Fire and life safety, w/ potential for major loss of life
    - Historic lack of awareness and preparedness for earthquake
    - Lack of community and business preparedness
    - Do we remember the last one (Nisqually)
    - Cascadia Subduction Zone – the time is right for another earthquake
    - Vancouver vulnerable to Portland Fault earthquake
    - Large west-side population at risk
    - Commercial / industrial / port areas located and significant growth taking place in areas of poor soils that perform badly in earthquakes
    - Ballard Locks and Alaska Way Viaduct (Seattle area), dams, transportation system (i.e., bridges)
    - Known fault lines mean potential is great for severe earthquake
    - Potential for tsunami that could destroy port facilities (Port of Anacortes)

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- Flood:
  - Hampers traffic control / flow on low-lying roads
  - Land use changes, continued development in floodplain is escalating our vulnerability
    - Flood protection systems in some areas adds to problems in others
    - Reduced natural flood capacity
    - It is hard to move people out of hazard areas
  - Not just a river problem
    - Urban flooding is a chronic nuisance vs. a life safety issue in Seattle; also impacts underground utilities (e.g., telephones, power)
    - Potential for coastal flooding for those that live along shorelines
    - Many small streams cause localized flooding due to poor draining soils (Vancouver)
  - Property damage in low-lying downtown areas (Pullman, Palouse, Colfax, Benton City given as examples in Spokane workshop)
  - An earthquake during flood season will generate multiple problems for responders
  - It is one of two hazards that would affect large numbers of people within the county (Snohomish)
  - Second highest frequency event in the county, with federal disaster declaration in 1996 related to rain-on-snow event (Klickitat)
  
- Landslide / Ground Failures:
  - Most people don't know that homeowners insurance does not cover landslides and other types of ground failures (*facilitator's note – the same is true for earthquake and floods*)
  - Causes damages to infrastructure that are costly to repair
  - Development on previously undesirable land is escalating
    - Settlement issues occurring at an increased rate
    - Requests increasing for development on hillsides/slopes for "view properties"
    - Increased vulnerability because of increased building on slopes
  - Poses the greatest potential for risk/damage in the near future along with earthquake (Vancouver)
  - Most landslides have been in conjunction with a flood event (Klickitat)
  
- Severe Weather (high winds, winter storms):
  - Many concerns expressed about these storm types are response oriented – road closures, limited supplies in county (including food stuffs in groceries), loss of power and heat, roof damage and falling objects such as trees
  - High Winds:
    - Generates a lot of debris requiring disposal, transportation problems and utility outages from downed trees
      - In combination with soil saturation from rain, leads to a lot of downed trees, power lines out, blocked roads

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- Often impacts seniors and other at-risk populations more heavily because many are home-bound or rely on medical treatments that could be disrupted
- A major windstorm or a severe winter storm heavily impacts first responders
- City of Everett is “ground zero” for the Puget Sound Convergence Zone that often brings severe weather to region
- Winter storms / high winds coming out of the Frasier River Valley in Canada often impacts Whatcom and San Juan counties
- Columbia Gorge routinely has high winds, frontal passage or thunderstorm downdrafts, micro bursts, and one recorded tornado
- Winter Storm:
  - Many of same issues as with high winds (see above)
  - Area is subject to periodic ice storms (Vancouver)
  - Rain-on-snow is our biggest winter storm threat, which would precipitate flooding, landslides, road wash outs, etc. Ice storms cause power outages as well (Klickitat)
- Tsunami:
  - A lot of indirect impact to communities away from those directly affected by tsunami – evacuees that need shelter and care, economy of the state, etc
  - Perception is that a tsunami will not happen here
  - Main concern is seiche in Puget Sound (City of Everett)
- Volcano:
  - Large lahars pose the greatest threat to tens of thousands of people in their paths
    - We have a high degree of vulnerability to both eruptive and non-eruptive volcanic hazards; a lahar would have great consequences such as loss of sewer, power, and water for much of the County, causing a cascade of issues throughout the region (Pierce)
    - Some areas lack evacuation routes
    - Eruption could cut off communities
  - Clark County:
    - Concerned that 20 percent of time ash fall may impact county and its infrastructure, transportation corridors and systems, electrical and communication systems
    - Dam operators will open floodgates in advance of eruption with resulting downstream impacts
  - Ash fall from Mt. St. Helens poses the greatest threat of damage; eruptions of Mt. Adams or Mt. Hood, which crossed the Columbia centuries ago pose lower threats (Klickitat)
  - Memories of Mount St. Helens – perception of what will happen here, especially at rush hour
  - Lessons to be learned from Japanese ash fall event (info to come from CRESA representative)

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- Ash will affect ability of first responders because of its abrasive properties and damage to communications, internal combustion engines, etc.
- Wildfire:
  - This is the most frequent hazard event requiring widespread response (e.g., mutual aid or state mobilization)
    - County (Kittitas, Klickitat) has seen a major increase in wildfires in recent years
  - Lot of potential in urban areas for an Oakland Hills type event, especially when coupled with drought
    - Some concern related to preserving tree canopies and natural habitat in an urban area could increase vulnerability
    - Significant potential for wildfire because of the number of people who live in wooded areas (Island County)
  - Concern because wildfire is causing property damage and potential for loss of life
  - Illegal burn barrels causing some of the wildland fires
  - Some areas have limited evacuation routes (perhaps only one)
  - Creates secondary impacts, such as erosion and landslides

### Other comments:

- We have received federal assistance for storm damage to local crops and impacts to the sockeye runs during the last 10 years.
- The performance of marine sites will be impacted as sea levels rise.
- We treat all hazards as threats. Some can be subsequent consequences of other threats. Power grid failure could occur due to maintenance issues or as the result of an earthquake. We do not want to be pigeon-holed into dealing with it as a “maybe” under an earthquake. We have begun a more asset-based approach which focuses on infrastructure and allows us to pursue measures that increase resiliency (Pierce County).
- With increasing financial capability and decreasing available land, more and more marginal sites are developed, sometimes without the full rigor of engineering analysis and construction that they should have. Increasing data and knowledge demonstrates that hazard events expected to occur with the lifetime of the structures threaten significant existing development.
- Portions of the village are less than 15 feet above sea level and nearly all is under the 50-foot level, which is the high side of tsunami waves. The tribe has no siren or warning system for those outdoors, on the beach or river. The tribe did obtain and install NOAA weather radios in all lower-elevation buildings. There is danger of earthquake from the fault along the continental shelf and Cascadia Subduction Zone. The 1946 Alaska earthquake produced a 10-foot wave at the reservation. An earthquake-generated landslide completely buried the Ozette Indian village, and portions of the Hoh village are in a similar topographic situation, although the nature of our vulnerability is unknown. We are under threat of seasonal river flooding; an earthen flood barrier surrounds the tribal center to protect it from frequent flooding. Most of the residences and community buildings are under threat of Hoh River channel migration and bank erosion. The reservation has second-growth timber that can reach high fire danger in dry seasons. The

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reservation has no fire protection, either wildland or structural, in place. High winds topple trees frequently and can cut off electrical power to the reservation for more than 24 hours; this happens more frequently in winter. The nearest hospital is 26 miles away in Forks, a 45-minute drive in dry weather; the highway to Forks closes at times due to falling trees, and severe winter ice storms make the trip longer and hazardous. Drought concerns include increased incidents of wildland fire and poor fishery spawning for future years. (Hoh Tribe, Clallam County)

- My concern about various hazards is a function of the potential impact on my family's safety and health, our economic viability and that of my local community.
- Risk to natural hazard events is simply part of life and one has to accept it. All areas have some hazard and you cannot reasonably eliminate all risk. You can take some measures to reasonably prepare. Natural disasters are not something we can control or stop, but the damage humans do to the environment can exacerbate the effects of natural disasters. I am extremely concerned about the human impacts.
- Terrorism from within the United States or outside the country is a much more likely disaster event and any regional plan for disaster mitigation should consider it.
- How are climate change and sea-level rise being addressed vis-à-vis meteorological and tsunami hazards?

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### Questionnaire #2 – Mitigation Strategies

Community-wide Strategies	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Not Sure
<b>A.</b> I support a regulatory approach to reducing risk.	5	26	7	4	1	0
<b>B.</b> I support a non-regulatory approach to reducing risk.	6	25	6	4	1	0
<b>C.</b> I support a mix of both regulatory and non-regulatory approaches to reducing risk.	26	17	1	0	0	0
<b>D.</b> I support policies to prohibit development in areas subject to natural hazards.	8	20	9	5	3	2
<b>E.</b> I support the use of tax dollars (federal, state and/or local) to compensate landowners for not developing in areas subject to natural hazards.	1	7	14	14	4	8
<b>F.</b> I support the use of local tax dollars to reduce risks and losses from natural disasters.	3	27	9	0	1	3
<b>G.</b> I support protecting historical and cultural structures.	9	20	2	3	1	1
<b>H.</b> I would be willing to make my home or business more disaster resistant.	18	18	0	0	1	1
<b>I.</b> I support steps to safeguard the local economy following a disaster event.	20	17	0	0	0	0
<b>J.</b> I support improving the disaster preparedness of local schools.	25	12	0	0	0	0
<b>K.</b> I support a local inventory of at-risk buildings and infrastructure.	15	19	2	0	0	0

#### Observations

Workshop and email respondents “strongly agreed” with three mitigation strategies proposed in the questionnaire (see above). The “strongly agreed” strategies are as follows (see chart below):

- A mix of regulatory and non-regulatory approaches to reducing risk (Strategy C).
- Improving the disaster preparedness of local schools (Strategy J).

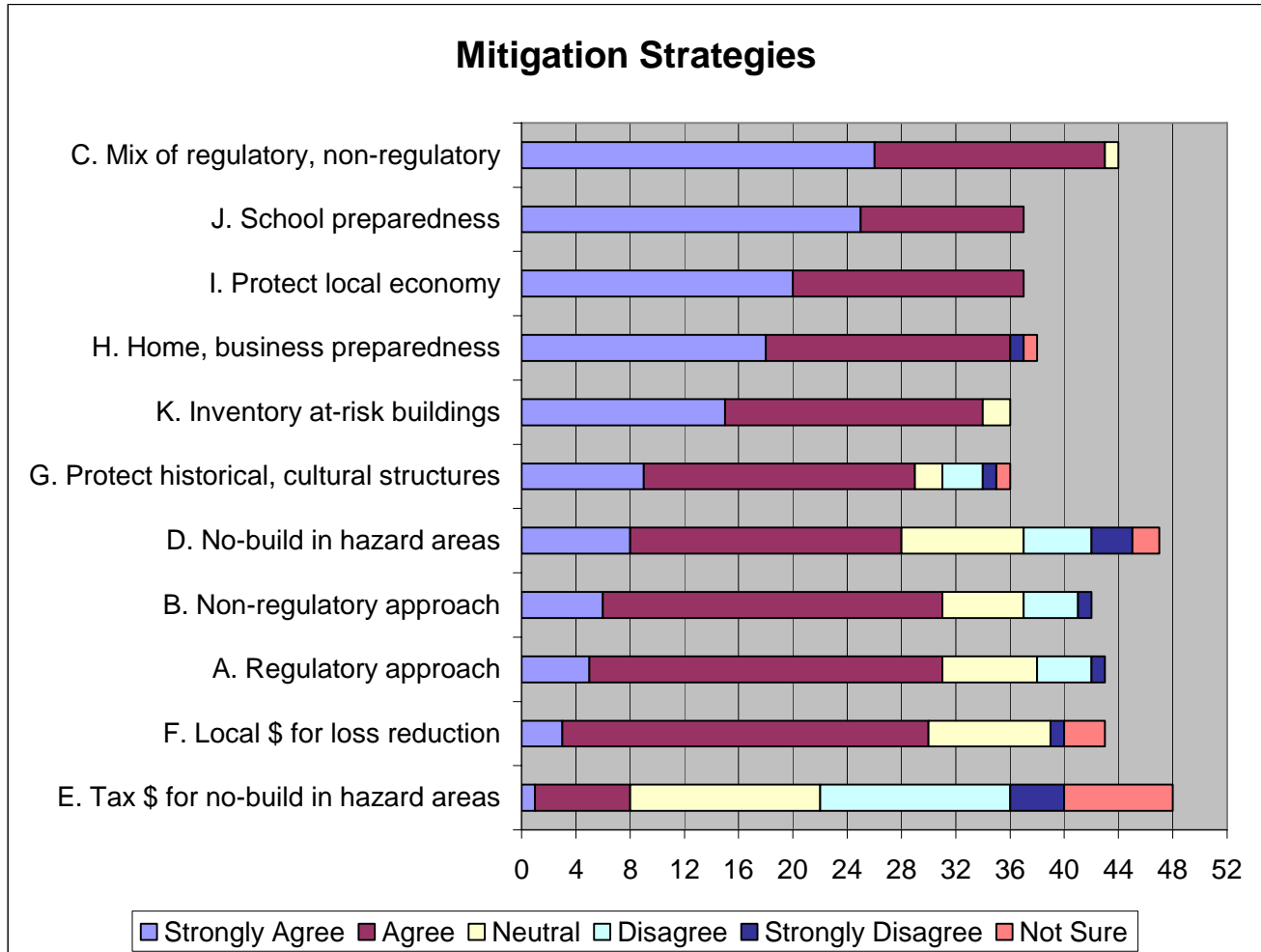
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- Taking steps to safeguard the local economy following a disaster event (Strategy I).

Two other strategies received strong support from nearly half of the workshop participants:

- Willingness to make home or business more disaster resilient (Strategy H).
- Preparing an inventory of at-risk buildings (Strategy K).

*Note: Not every one who completed a questionnaire by email expressed an opinion for every listed mitigation strategy*



Most of the workshops' participants and email respondents either strongly agreed or agreed to all but one of the mitigation strategies proposed in the questionnaire. The strategy with the least support proposed using tax dollars to compensate landowners for not building in areas subject to natural hazards (Strategy E). Most respondents either had a neutral opinion of the strategy or disagreed with it; some were not sure. Opposing comments received in the workshop discussions and via email showed that participants said such a strategy would promote "irresponsibility" and they did not want to "reward" a property owner for not developing in a hazard area because the landowner should know about the risks of building in such an area before purchasing the land.

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Along the same lines, there was general support for the strategy calling for policies to prohibit or restrict development in areas subject to natural hazards (Strategy D). Twenty-eight of 48 respondents either strongly agreed or agreed with the strategy. Comments received on this strategy included those that said government has to inform people where hazard areas are and should do a better job of educating those who want to build in hazard zones.

Additionally, a majority of respondents stated they supported using local tax dollars to reduce the risks and losses from natural disasters (Strategy F). In the workshop discussions, participants indicated this strategy could mean several things to them – increased local emergency management staff, public education, or efforts to strengthen the built environment (e.g., infrastructure).

The strategy recommending a non-regulatory approach to reducing risk (Strategy B) received slightly greater support than the one supporting a regulatory approach to reducing risk (Strategy A). The strategy that proposed a mix of regulatory and non-regulatory approaches (Strategy C) received far greater support than either Strategy A or Strategy B individually.

*Note: A number of comments below provide potential ideas or direction for mitigation strategy development; these items are **highlighted** in the text that follows.*

### Respondent Comments

#### Mitigation Strategies – Thoughts on strategies presented

- Strategy A – Regulatory approach to reducing risk
  - Supporting:
    - **Stop encouraging development in hazard areas**
    - Regulatory approaches work because they prevent the placement of infrastructure in hazard areas and/or require construction in a manner that would reduce hazard impact
  - Opposing:
    - Too many laws on the books now; if a new law is passed, get rid of others that relate to it
    - Having a policy looks good on paper, but usually does not end up as a practical working solution
  - Other comments:
    - Building Codes: People think building codes protect their economic investment, when they primarily provide for life-safety to allow people to escape from damaged structures
    - Regulations can conflict, leading someone to try to figure out which one(s) takes precedence
    - The challenge is to foster ownership in the mitigation action; regulations take away choice
    - Regulations spawn ballot initiatives to repeal them

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- Strategy B – Non-regulatory approach to reducing risk
  - Supporting:
    - Support incentives to encourage mitigation actions such as economic incentives such as tax breaks, cheaper insurance, cheaper building permits
    - I strongly agree with using a non-regulatory approach because public education applies to all members of the community.
    - Public education programs are essential for two reasons: 1) They promote personal preparedness. 2) They reduce the “expectation gap” between what citizens want and what government can deliver, and between what government / responders expect from the public (e.g., the public’s roles and responsibilities before, during and after a disaster)
  - Opposing:
    - None
  - Other comments:
    - None
- Strategy C – Mix of regulatory and non-regulatory approaches
  - Supporting:
    - Regulations are necessary to implement change, but citizens must become involved in ways that are not subject to regulation
    - Need both regulatory and non-regulatory approaches; regulation has limited impact
    - A mix of approaches is the best solution in terms of mitigation. A strictly regulatory approach will most likely end up in court. A mix likely will be more palatable to all affected parties and may reduce the potential for litigation related to regulations (Pacific County)
  - Opposing:
    - None
  - Other comments:
    - A non-regulatory approach to a costly necessity will not work without a clear economic incentive or a regulatory stick. For example, look to the lack of industries adopting environmental protection measures unless they are regulated and required to do so
- Strategy D – Policies to prohibit development in areas subject to natural hazards
  - Supporting:
    - People should not build in areas prone to landslides and flooding. Geology for a given area is known. Landslide-prone areas are going to slide, why build on them? Areas prone to flooding are going to flood, why develop them? Do you build to a 50-year, 100-year or 500-year event?
    - Perhaps revise language in the strategy to state that policies should “restrict” not “prohibit” development in areas subject to natural hazards
  - Opposing:
    - Dislike – not do-able. Need to take hazard impacts into account

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- Prohibiting development in tsunami zones would eliminate all marinas, terminals and ports in the Pacific Northwest
- Other comments:
  - If people knowingly build in hazard areas, they should not receive public assistance to repair/rebuild following a disaster. Currently there are no consequences for people developing in hazard areas, especially large developments
  - **Government needs to let people know where hazard areas are**, and let people build with that knowledge without providing them any future public assistance (such as after disaster) – a “build at your own risk” philosophy
  - This is a political issue
  - **Need to do a better job of educating people who want to develop / have developed in hazard zones**
  - Private development should bear all costs associated with their choice to develop in hazard areas. If developers choose to build in such areas, it should be done in a manner that will not cost public funds for mitigation or recovery after a disaster. The public has the right to require suitable mitigation before development is allowed
- Strategy E – Use tax dollars to compensate landowners for not developing hazard-prone areas
  - Supporting:
    - Need incentives “to do the right thing (mitigate)” (see Strategy B, above)
    - If correcting a long-term wrong, maybe OK; if preventing new development, then no
    - If benefit-cost analysis shows this is cost-effective, do it
    - **We should not allow people to build in hazard areas, but government cannot take away property rights without compensation**
  - Opposing:
    - Can promote irresponsibility
    - I don't like paying for other people's ignorance or to protect greed (when buildings in hazard zones are damaged)
    - If suitable mitigation is not or cannot be implemented by the landowner, that is not a public problem. As such, no compensation should be paid for not developing in a hazard area
    - Tax dollars should not pay for rewarding a landowner not to develop in a risk area. The landowner knew about the risks when he bought the land in the first place.
    - This sounds like a method for landowners to make money, even if they have no intention of building on their land
    - I do not believe in compensating land owners. There should be stipulations with land development and they should not be allowed to encroach on the water table and wildlife
    - Those developing in known disaster prone areas should take responsibility for future impacts on their property
  - Other comments:
    - Depends upon the circumstances / situation

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- Dependent on the political will of the community
- Should require disclosure of hazard areas
- Landowners can and should make responsible and informed choices on where to buy property and where to live. Responsibility comes with the privilege of land ownership. We cannot afford to pay landowners for restrictions that are for their safety, public safety, or community environmental protection. Land stewardship is a civic responsibility
- Strategy F – Use local tax dollars to reduce risks, losses from natural hazards
  - Supporting:
    - Public education – public does not recognize the impact hazards have on them personally
    - Use of local dollars demonstrates commitment to any proposed measure; however, this has to go hand in hand with strategy C. Use of federal funds to mitigate has proven to be effective, but in order achieve the greatest effectiveness, regulations must also be affected
    - We as local government have a responsibility to promote mitigation
  - Opposing:
    - None
  - Other comments:
    - What does this mean – Increasing local EM staff; better-built infrastructure; public education?
    - Tax dollars should go toward protecting public property and interests – not private property and private interests
- Strategy G – Protect historic and cultural structures
  - Supporting:
    - None
  - Opposing:
    - Government should not be spending public dollars on private buildings
    - Communities in Western Washington should not be carrying significant inventories of “historic” buildings that will be damaged or fail in a major earthquake
  - Other comments:
    - None
- Strategy H – Willing to make own home, business more disaster resistant
  - Supporting:
    - My home is retrofitted to a degree, and I am willing to consider doing more
    - It is important to practice what we preach. This helps ensure continuity of operations and should be encouraged for all government employees
  - Opposing:
    - None
  - Other comments:
    - None

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- Strategy I – Steps to safeguard local community following disaster event
  - Supporting:
    - Support public education such as continuity of operations for local businesses.
    - The more we can educate the business community on preparedness, the faster our economy will recover post-disaster
    - One of our most important efforts should be to safeguard our economy
    - Encourage continuity of operations planning by businesses and local jurisdictions (also continuity of government planning for governments)
    - An economy in shambles after a large earthquake could take decades to rebuild without precautions and assistance. Look at New Orleans for an example. We can't afford that risk
  - Opposing:
    - Tax dollars should go toward protecting public property and interests – not private property and private interests.
  - Other comments:
    - People need to know who is paying for disaster costs / rebuilding
    - A big concern is restoring municipal services (utilities, transportation systems) as quickly as possible
    - Business wants to know how fast they can send their staff back into a disaster area
    - Insurance – economic mitigation; can drive mitigation strategies to encourage policy holders to maintain their coverage
    - Let marketplace determine. Should encourage business to prepare for a disaster event; those that prepare well will survive and succeed post-disaster, and those that don't will not survive
    - This has to be considered further, especially at the state level. There are a variety of regulatory mechanisms and programs that need to be identified and analyzed. We have ideas on this in Pierce County and are working on an economic recovery strategy.
- Strategy J – Improve disaster preparedness of local schools
  - Supporting:
    - It is imperative to protect our schools and ensure they are prepared for an emergent situation and the only way is to teach, prepare and practice within the school system
    - We need to protect any place with a vulnerable population
    - Public education to include evacuation planning for schools
    - We need to start public education / preparedness message at the schools for kids to take home
      - Like increased emphasis on schools and public education in schools on preparedness – an avenue into home preparedness
      - You can't teach old dogs new tricks, but if you make children aware of the hazards and how to plan and respond, they will accept it as "just the way it is" instead of ignoring it like most adults will because it is new and inconvenient

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- Opposing:
  - None
- Other comments:
  - None
- Strategy K – Local inventory of at-risk buildings and infrastructure
  - Supporting:
    - Support only if it ties into and leads to mitigation actions
    - Inventory of at-risk populations that would need assistance such as evacuation in a hazard event.
      - Disabled
      - Those with serious medical conditions
      - Non-English speaking (Kittitas – Spanish, Asian, Deaf; Grant – Spanish, Ukrainian, Russian, Japanese)
  - Opposing:
    - Tax dollars should go toward protecting public property and interests, not private property and private interests
  - Other comments:
    - This will help with damage assessments. By cataloguing the information ahead of time, we can use it as a basis for preliminary assessments. But this is only the threat-based analysis side. We also must have an asset-based inventory to identify those assets upon which other functions and operations rely

Other comments on strategies (primarily from email respondents):

- **Some business sectors like healthcare need strong incentives to implement mitigation**
- All strategies support preparedness; as a response agency, preparedness is a primary concern
- We support disaster resistant communities. A balanced approach of regulation and public responsibility works best. Historic and cultural structures are not replaceable. Mitigation efforts supporting the recovery of the local economy have proven crucial to community recovery (Katrina, Northridge, Loma Prieta). School preparedness has always been the best way to educate the public long term. King County has long participated in the inventory of King County Government buildings, critical infrastructure and life lines.
- It takes the County as a whole – government, citizens, legislators etc. – to protect it from devastating effects of a disaster. It also is necessary for all to work together to be better prepared to help each other during a disaster and worth the investment now to mitigate disasters and their impacts to lives and economy later.
- I think when it comes to known hazards such as flooding; we really should not build in such areas unless there is some greater benefit from doing so. Otherwise, building in flood plains is silly, as we know that we will eventually have a major loss. When it comes to other hazards such as fire or earthquake, it is not as clear-cut. We know that wildland fires can happen anywhere we have wildland and forests; however, we cannot completely restrict building in wildland areas. Earthquake hazards areas are even less well defined and more oblique as we do not know exactly where known faults lie.

## State Hazard Mitigation Planning Outreach Report

- I think property owners should be informed of natural hazard risks so that they can make informed decisions depending on their comfort level of the risk. Proper design can reduce some risks to an acceptable level for development, but the risk should still belong to the property owner.
- Vancouver strongly agrees with approaching disaster mitigation through a mix of regulatory and non-regulatory methods. Vancouver has done an extensive project with UW on identifying hazards in our city. That work needs to be further to encourage disaster preparedness through education and voluntary mitigation of the existing built environment in both the public and private sectors. Vancouver has also completed a Critical Lands Ordinance that addresses mitigation to reduce the effects of flood and earthquake on the built environment.
- All strategies are applicable and should be applied when reasonable. Our biggest, most frequent event is wildfire. Should we stop building anywhere prone to wildfire (item D)? That would be our entire county. There are regulatory strategies to minimize risk; an example is the existing county ordinance banning open fires during the summer. Building codes could be implemented regarding house construction materials. An education program is underway regarding defensible space around homes. The entire county has similar risk of volcanic ash fall. (Should we prohibit) development downwind of Mt. St. Helens? Planning rules exist for new construction in flood plains. The Corps of Engineers found it cost-effective to buy people out of flood plains, and if they refused, no more flood damage money for them. And there is flood insurance. Should we move everybody out of Auburn and Puyallup; after all, these communities are in a flood plain. I agree that we should protect all assets (Item G), not just cultural (who decides that) or historical, but not at expense of loss of life or an unreasonable expense. (Klickitat)

### How to use limited mitigation dollars?

- Focus on specific strategies rather than specific hazards?
  - Specific strategies allow you to focus on implementation
  - Focus on strategies that are multi-hazard
  - Perhaps specific strategies for each hazard
- Use limited funds for the greater good – do the most good for the most people and most vulnerable locations
  - For example, reinforce the seawall in Seattle to protect heart of the local economy vs. protecting a few homes in rural floodplains
  - Allocate money to the highest risk, highest impact hazards
- Tie in with growth management planning (for critical areas regulations)
- Remove structures from high-risk areas
- Complete replacement / seismic retrofits to bridges, and retrofit public services (water, sewer) and public buildings
- Consider a focus on which hazard scenarios have the potential to impact most or all of the state
- We need better science / data on hazards and assessment of risks – location, extent, and probability
  - Need to answer the “so what” question

## State Hazard Mitigation Planning Outreach Report

- Lack of effective hazard study (due to cuts in DNR Geology Division) could cost thousands of lives and billions in costs in large disaster
- Public needs to better understand the hazard
- Developers need so they can pursue site-specific reviews for proposed projects
- Need regional mapping of hazards, sharing the information with cities and counties
- State Emergency Management:
  - Should act as a clearinghouse for information about hazards that local EM staffs can use to education local officials
  - Should identify gaps in best available science (a concept used in developing critical area regulations) and identify ways to fill them
- Design comprehensive all-hazard risk assessment model / tool so emergency managers can more clearly evaluate consequences
- Public education:
  - Take a proactive approach to mitigation. Learn why people do not mitigate, and identify barriers to mitigation. Encourage personal responsibility
  - For public officials – they don't get it
    - Need state to do outreach to communities and their leaders
    - Need to explain - "what's the benefit to me (and my community)?"
    - Where is the money? The carrot and stick approach (no HM plan = no HM money)
  - Individuals
    - People need to know what to expect in the event of a disaster
    - Identify simple things people can incorporate into their daily lives – how about encouraging them to camp in their backyard for a weekend (as if their home was damaged and they had to survive on their own)
  - Businesses
    - Disaster education
- Provide a balance of regulation and education (i.e., International Building Codes, Critical Area regulations, public education)
- Stronger buildings codes and enforcement, training of building inspectors and contractors perhaps tied to licensing renewal

### Strategies that you would like to see in your communities

- Focus on fire and life safety; that will benefit all hazards
- Actions to minimize the number of people requiring acute assistance through public preparedness, actions to protect schools, transportation, public services, and communication infrastructure
- Wildfire
  - Focus on wildfire mitigation (Benton County)
  - Firewise (it works, would like to see more of it in our community)
  - Focus on personal and home preparedness
- Earthquake
  - Tax breaks or other incentives to retrofit homes and schools (similar to Project Impact in Seattle)
  - New seismic code compliant buildings

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- Increased public education.
  - Need to change the perception that “it (the big disaster) won’t happen here.”
  - Increased emphasis on personal preparedness – at home, away from home (at office, at work, at school, at college dorms, etc.)
  - Promote being prepared reduces reliance on response organizations
  - Promote three days, three ways
  - Improve targeting vulnerable populations and business community
  - Incorporate disaster training into public school curriculum
- Regulations:
  - Strong zoning and building regulations to limit expansion or development in high-risk areas
  - Purchase greenbelts in landslide and other hazard areas to prevent development
  - Require minimal levels of preparedness for workplaces over 100 people, and provide tax credits to business that allow workers 20 hours a year for CERT training
- Promote cross-discipline and multi-hazard mitigation efforts
- Mitigation actions for schools – seismic retrofits, etc.
- Mitigation for public infrastructure – retrofit public services, public facilities, transportation corridors to assure continuity / restoration of essential services
- Promote resiliency of economic lifelines
- Measures that ensure continuity of government in areas highly dependent on vulnerable infrastructure, e.g., increase IT infrastructure capacity
- Identify funding sources for vulnerabilities identified in the state plan’s risk assessment for mitigation actions
- Provide case studies and best available practices to help encourage mitigation efforts

### Strategies that work in your communities

*Note: The responses below are from email respondents; many responses appear to be hoped-for strategies rather than actual strategies that have proven to be effective since few provided statements showing or describing success.*

- Public awareness / education
  - General awareness and disaster preparedness planning programs for individuals and businesses
  - Public outreach/education programs and dissemination of information through the Port website perform well in our community
  - Public education at the neighborhood level. Our PC NET program builds public education into neighborhood-building principles. This ensures individuals are prepared and the neighborhood is resilient. (Pierce)
  - Collaboration between system participants and public education
- Flood:
  - King County has been successful with flood mitigation and zoning criteria – flood-damaged properties have been systematically acquired and flood control measures improved

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- Structural flood control measures
- Repetitive loss buyouts
- Wildfire:
  - County-wide seasonal burn ban
  - Restriction on fireworks use
  - Community Wildfire Protection Planning
  - Inter-operability of fire agencies (mutual aide, radios, etc)
- Regulatory
  - Site-specific reviews once hazards are suspected
  - Critical area ordinances are a powerful tool at limiting exposure to hazards; they work well when they are stringent and adequately enforced
  - Environmental protection measures (when overlapping hazard areas) are effective because they limit or eliminate development with high degree of political backing
  - Enforcement of building codes and construction standards for public and private structures and utilities
  - Mitigation measures that are funded or that come with financial incentives
- Public infrastructure:
  - Aggressive tree trimming by power companies
  - Underground utilities
- Those that involve the community in the planning process
- Those that have templates available for individuals and businesses to follow
- Those that are easily done and not expensive to the taxpayer
- Instilling continuity of operations principles in both the public and private sectors

### Strategies that do not work in your communities

- We do not have a good system of analyzing what works and what does not. How do we tell the story for rare events? Do we even compare structural measures vs. public education vs. regulatory actions? How do we talk about human caused events (if the earthquake causes a chemical plant explosion or terrorist does, the only difference is one has an investigation attached to it – mitigation could still work for both threats)
- Public education:
  - No real way to gauge personal actions steps and personal preparedness within a community
  - Portraying and conveying the changing wildfire risk in western WA
  - How to prepare for ash fall.
  - Identifying vulnerable populations and targeting campaigns to them. We are starting to do this here, but it is very much a DSHS issue.
- Land-use / development:
  - Involvement of the City/County. The best recommendations are not used when they are not required simply because the design usually costs more than without mitigation. It seems most developers do not spend more than they are required by the bank or the jurisdictional agency
  - Cities follow minimum critical area requirements, which actually aren't that strong, or annexing areas so they can build to less stringent requirements

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- Until last year, flood maps were from 1978, which allowed a lot of building in flood areas
- Survey of at-risk buildings as there is no funding available to owners for seismic upgrades. Many building owners are income challenged. The surveys/reviews can identify structures that are substandard under the Uniform Code for the Abatement of Dangerous Buildings and when the City becomes aware of the conditions, it is required to assure that upgrades are done or the building is vacated and secured from entry
- Depending on local tax dollars to reduce risks and losses from natural disasters. Ferry County is the poorest county in our state. We do not have local tax dollars available to us

### Which organizations should the state work with on hazard mitigation initiatives?

- American Red Cross – sheltering
- Fire services / emergency medical services
- Local public works
- Local emergency managers
- DSHS – focus on at-risk populations
- Local mental health practitioners – assist with recovery, reduce trauma of first responders
- News media
- Hospitals
- Local planning departments, planners
- Environmental groups
- Local diking districts and surface water management groups
- Real estate agents – they need to disclose hazards on property
- Office of Superintendent of Public Instruction, local schools – public education → focus on kids
- CERT – place increased focus on local efforts
- Insurance industry
- Insurance Commissioner's Office
- Professional associations for architects / engineers / geologists, etc.
- Utilities
- Transportation agencies – state and local, to include ferries
- Health agencies – state and local health departments
- State Building Code Council
- Local building officials
- Builders associations
- Foundations / philanthropic organizations for funding
- Local business groups / Association of Washington Business
- Elected city/county officials – Association of Cities / Associations of Counties and County Officials
- Cascadia region Earthquake Workgroup and other earthquake study groups
- University of Washington

## State Hazard Mitigation Planning Outreach Report

### What should be the state mitigation priorities?

- Focus on life safety first
- Focus on those things the counties cannot do for themselves
- Help counties develop hazard mitigation plans – perhaps using a “circuit rider” approach; dedicate staff to help local communities assemble and develop plans
- Look for opportunities to effect change in statewide policy – work with policy makers on regulatory issues (note: workshop facilitators did not explore this point and probably should have to understand the context and direction of the comment)
- Coordinate between counties
- Develop standards for what is good mitigation – best practices, case studies on cost-benefit for mitigation actions, etc.
- Mitigation actions:
  - Promote all-hazards mitigation actions, finding and leveraging common ground between natural and human-caused hazards
  - School structural mitigation
  - Mitigate lifelines – transportation, communications, etc
  - Reduce the number of structures in hazard areas (i.e., flood, landslide prone areas)
  - Continue public and private sector infrastructure protection activities already in progress
  - Develop incentives to encourage mitigation
  - Focus on non-structural initiatives – they are inexpensive
- Public education:
  - Preparedness (3 days, 3 ways)
  - Ongoing campaigns for individuals to make disaster preparedness plans
  - Promote continuity planning
  - Promote social resiliency
  - Promote economic resiliency
  - Templates for public education and mass media messaging
- Focus on hazards:
  - Landslides, flooding, earthquakes
  - Support a federally sponsored Pacific Ocean buoy warning system for tsunamis
  - Focus on most prevalent hazards
  - Find a balance between events that occur less frequently but cause greater damage and those events that occur more frequently but generate fewer losses
- Make citizens, public sector part of the solution:
  - This is not Citizen Corps. It is a fundamental shift in how we do business. We must clearly define the public’s role and responsibility in our mission
  - This is not just an infrastructure function. It is a fundamental shift to developing a sustainable public-private interface
- Funding:
  - State and federal dollars are needed for hazard mitigation
  - It would be appropriate to expend money and effort on areas to get the greatest gain or prevent the greatest loss of life and property. That probably would make the Puget Sound area as the most likely priority. But there is a lot of

## State Hazard Mitigation Planning Outreach Report

money and response effort spent every year on wildfire the east of the Cascades. Half of the (mitigation) budget should be dedicated to population centers, and half spread around with the local folks deciding how best to spend it

- Build strong hazard research and education programs and fund them well enough to retain experienced personnel
- Develop standards of identification, analysis, and evaluation of risk
- Ensure that all-hazard mitigation priorities work to achieve emergency management goals and fulfill the state's vision

### What should be local mitigation priorities?

- Landslides, flooding, earthquake retrofit projects
- Focus on earthquake and tsunami
- Promote positions at agencies and municipalities that can promote public education and awareness and help develop sensible policy on hazards management
- Mitigate public infrastructure and buildings to provide for continuity of government and services
- Promote community building
- Expand public education and outreach programs to focus on government, tribal areas, businesses, neighborhoods, and individuals
- Acquire and position emergency equipment and train local staff to mimic the Department of Ecology program in locating oil spill equipment throughout the Puget Sound region

### Other comments

- Include hazardous materials in hazard mitigation plans – locals respond to more haz mat incidents than any other hazard event.
- Should we work toward reduced taxpayer losses through mitigation
- Encourage / develop peer-to-peer learning and mutual aid systems
- Look at systemic failures from Hurricane Katrina and make sure they don't happen here
- Disaster operations (not mitigation specific) – place alternate state EOC and supplies stockpiles/distribution center in Central Washington
- Public participation – especially businesses so that the economy can continue after a disaster event
- The DNR geologic hazards group is experiencing a leadership and funding crisis. Washington needs strong geologic leadership and the resources to rebuild the geologic hazards group and maintain their programs
- Due to our remote location and the poverty level of our residents, our greatest obstacle will be communication among first responders (law enforcement, fire, ambulance, hospitals and mental health) and in reaching residents of our community
- Do not confuse mitigation with prevention. Natural disasters will happen. So, how do we minimize the loss once it does? We could all leave now. That would be the ultimate mitigation and prevent all loss. Individuals need to have information about their vulnerability to hazards where they live and work; they can best assess the relative risk. Should people live in the Trout Lake Valley, which could be inundated by

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a lahar that has not happened in thousands of years? Or should they live in Orting and Sumner, where a lahar risk is higher because of the frequency of occurrence? Now that we know that people will live in these hazard areas, how do we mitigate?

### Observations

There is concern over building in hazard areas but a mixed opinion on how best to deal with the issue. There was more support apparent for incentives that would foster mitigation than for providing direct government funding to property owners to avoid building in hazard zones.

Rationale for supporting those specific mitigation strategies that received the strongest support:

- Strategy J – School preparedness: Schools need to be safe, and schools are seen as a natural place to begin public education efforts because kids take home the preparedness message.
- Strategy C – Mix of regulatory and non-regulatory approaches: Regulatory approaches have limited impact.
- Strategy I – Protect local economy: The faster the local economy recovers following a hazard event, the quicker all aspects of the community recover.

The following are themes that developed during this process; they are not listed in any priority order:

- Public education – increase it:
  - Many comments noted that additional public education is necessary to increase awareness of impact of hazards on individuals, families, businesses, etc., because the public does not recognize the impact hazards have on them personally. Suggestions include:
    - Focusing on personal preparedness both at home and away from home
    - Learning why people do not mitigate and change the mitigation message to address
    - Presenting simple / do-able mitigation actions to home and business owners
    - Changing the perception that “it (the big disaster) won’t happen here”
    - Providing continuity of operations training / information to business
    - Providing hazard science information in a way that people will better understand the threat and their vulnerability and that drives them to prepare / mitigate
    - Targeting vulnerable populations
  - Several participants agreed that public officials need better education on hazards and mitigation. Comments included:
    - Public officials “don’t get it” (the value of mitigation)
    - Public officials need to understand the benefit of hazard reduction efforts for their communities
    - Public officials need to be directed to funds for mitigation actions.

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- Participants noted that property owners' awareness of the hazards that may be on their property (e.g., the frequently flooded areas and geologically hazard areas which local critical area regulations are required to identify and regulate) needs to increase, and that those who build on hazard areas should not expect public assistance if their buildings are damaged by a hazard event. There currently exist no consequences for people who build in hazard areas, according to other comments. Property owners also need to know that building codes are for life safety (allowing people to get out of damaged buildings) not for protecting the economic investment in the building itself.
- Another suggestion is for the state to develop templates for public education and media messaging which local communities can use / implement.
- Helping communities: Several workshop participants said communities need help developing hazard mitigation plans and with mitigation actions and initiatives they cannot do themselves.
  - Planning help: Washington EMD has provided mitigation grant funds, computer software, and one-on-one technical assistance in the past, and continues technical assistance on an ongoing basis. One participant suggested a "circuit rider" approach used by other state agencies to reach out and help communities. One way might be for state staff to spend a concentrated period with communities to help them assemble information for their plan and help them write it.
  - Initiative help: While the workshop facilitators did not explore this explicitly, this can mean assistance in developing and writing mitigation grant funding applications
- Mitigation incentives: Several respondents suggested the state establish a set of economic incentives to encourage the implementation of mitigation measures. Such incentives mentioned included potential tax breaks, lower cost insurance and cheaper building permits. Such initiatives exist elsewhere in the country.
- No public funds for private buildings: Several participants commented that government should not be spending public funds on private buildings (see comment on Strategy G) and for repairing buildings in hazard zones that are damaged by hazard events (see comment Strategy D and E).
- Better information and maps on hazards and assessment of risks so the public and others better understands their vulnerability. This will help move the public to implement preparedness and hazard reduction strategies, and help local planners and developers make better decisions about building in hazard areas.
- Using limited funds:
  - Focus on developing mitigation strategies or priorities that are multi-hazard in their approach
  - Focus on non-structural mitigation measures and those that are inexpensive to implement

## State Hazard Mitigation Planning Outreach Report

- Make the State Emergency Management Division a clearinghouse for scientific hazard information that is understandable to the public and that will move them to implement hazard reduction strategies
- Mitigate schools, transportation and public services (e.g., water, sewer) infrastructure
- Public education
- Remove structures from hazard areas
  
- Mitigation priorities (in no particular order):
  - Focus strategies on life safety vs. specific hazards
  - Focus on strategies that are multi-hazard in their approach
  - Help communities that lack resources with mitigation planning and initiatives
  - Develop incentives (see discussions above) and best practice examples (i.e., Firewise) to encourage local mitigation
  - Public education
  - Mitigate schools, transportation and public services (e.g., water, sewer) infrastructure
  - Reduce the number of structures in hazard areas
  - Develop better / more understandable information on hazards

# **State Hazard Mitigation Planning Outreach Report**

## **Appendix A**

**Workshop Agenda**

**Questionnaires**

**Follow-up Questions**

## State Hazard Mitigation Planning Outreach Report

### *Hazard Mitigation Plan Workshop Agenda*

October 10, 2006 – Ellensburg  
October 11, 2006 – Spokane  
October 13, 2006 – Olympia  
October 24, 2006 – Mount Vernon  
9:00 a.m. – 12 noon

Welcome / Why We Are Here

What is Hazard Mitigation? Why plan?

What are the State's Natural Hazards of Concern?

Hazard Mitigation Strategies

Where Do We Go From Here?

#### Washington Emergency Management Division Staff

Chuck Hagerhjelm – Mitigation and Recovery Section Supervisor  
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EMD website: <http://emd.wa.gov>

# State Hazard Mitigation Planning Outreach Report

## Questionnaire #1 – Natural Hazards

Name of your organization:

How concerned are you about the following natural disasters affecting your community?  
(Place an X in the corresponding column for each hazard)

Natural Disasters	Extremely Concerned	Very Concerned	Concerned	Somewhat Concerned	Not Concerned
Avalanche					
Drought					
Earthquake					
Flood					
High Winds					
Landslide / Ground Failure					
Severe Winter Storm					
Tsunami					
Volcanic Eruption					
Wildfire					
Other:					
Other:					

Rationale for adding hazards above:

Why are you concerned or not concerned about particular hazard(s)? Please explain.

Other comments you would like to make:

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### Questionnaire #2 – Mitigation Strategies

A number of activities can reduce your community / organization risk from natural hazards. These activities can be both regulatory and non-regulatory. An example of a regulatory activity is a policy that limits or prohibits development in a known hazard area such as a floodplain. An example of a non-regulatory activity would be to develop a public education program to demonstrate steps citizens can take to make their homes safer from natural hazards.

*Place an X in the column that best represents your opinion of each of the following strategies to reduce the risk and loss associated with natural disasters.*

Community-wide Strategies	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Not Sure
L. I support a regulatory approach to reducing risk.						
M. I support a non-regulatory approach to reducing risk.						
N. I support a mix of both regulatory and non-regulatory approaches to reducing risk.						
O. I support policies to prohibit development in areas subject to natural hazards.						
P. I support the use of tax dollars (federal, state and/or local) to compensate landowners for not developing in areas subject to natural hazards.						
Q. I support the use of local tax dollars to reduce risks and losses from natural disasters.						
R. I support protecting historical and cultural structures.						
S. I would be willing to make my home or business more disaster resistant.						
T. I support steps to safeguard the local economy following a disaster event.						
U. I support improving the disaster preparedness of local schools.						
V. I support a local inventory of at-risk buildings and infrastructure.						

Please Return to Mark Stewart, [m.stewart@emd.wa.gov](mailto:m.stewart@emd.wa.gov), by November 1, 2006

## State Hazard Mitigation Planning Outreach Report

If you *Strongly Agree* with any of the strategies listed above, please explain why. Provide an explanation for each.

If you *Disagree* or *Strongly Disagree* with any of the strategies listed above, please explain why. Provide an explanation for each.

How should limited mitigation funding be used? On specific hazards (if so, please identify the hazard(s))? On specific strategies (if so, please identify the strategies)? In any other ways (please explain)?

Which mitigation strategies would you like to see implemented in your community or by your organization (please identify and explain why)?

Which mitigation strategies seems to work in your community or for your organization (please identify and explain why)?

Which mitigation strategies do not seem to work in your community or for your organization (please explain)?

Which groups should the state work with to reduce hazard losses (please identify)?

What should the state's mitigation priorities be?

## **State Hazard Mitigation Planning Outreach Report**

**For the state as a whole (please explain)?**

**For the local level (please explain)?**

**Anything else you would like the state to consider vis-à-vis hazard mitigation?**