3.0 MITIGATION PLANNING PROCESS

3.1 Multnomah County's 2006 Natural Hazards Mitigation Plan

Multnomah County's 2006 Natural Hazard Mitigation Plan was not the first mitigation effort Multnomah County had carried out to reduce risk and exposure to natural hazards. The County's previous efforts include:

- Post 1996 flood activities, including bank hardening and levy repair and upgrades
- Project Impact and other educational outreach programs
- Retrofits to bridges and overpasses
- Updates in building code to restrict development in floodplains and include requirements for seismic retrofits.

Community involvement was an important part of creating the 2006 Natural Hazard Mitigation Plan. Stakeholders provided input in a number of ways throughout the process including a Steering Committee to oversee the plan development process; stakeholder interviews to receive in-depth information about vulnerabilities and risk reduction activities; a stakeholder forum to identify community vulnerability issues and devise actions to address them; and posting of the draft Natural Hazard Mitigation Plan on the County's website for review and comment before the Plan was finalized. The Steering Committee met four times between November 2005 and March 2006.

The natural hazards addressed in the 2006 Multnomah County Natural Hazard Mitigation Plan include drought, earthquakes, floods, landslides/debris flows, volcanic events, wildfires, and severe weather. For each of these hazards, the Plan identified:

- The location of the hazard (What area is likely to be affected)
- The extent of the hazard at that location (How many people and how much infrastructure could be impacted by the hazard?)
- Previous occurrences of hazard events
- Risk, probability, and vulnerability estimates, and
- Previous mitigation efforts.

Map of areas most likely to experience a particular hazard were also included for most hazards.

The mission, goals, and action items highlighted in the 2006 Natural Hazard Mitigation Plan supported many of Multnomah County's other plans and programs, including the Comprehensive Plan, Capital Improvement Plan, and state building codes. Additionally, the goals and action items were aligned with the County's FY 2006 priority-based budgeting approach.

A mitigation project development and prioritization process (see below) was developed for prioritizing potential actions identified as part of the planning process as well as for actions/projects that will be identified in the future. Thirty-five action items were included in the 2006 Natural Hazard Mitigation Plan to address the Plan's five (5) goals: maintain a comprehensive, countywide risk assessment; reduce risk to people, property and environment; support a disaster resilient economy; promote public education, awareness, and understanding of risk; and develop and maintain collaborative partnerships and funding strategies for implementing the mitigation plan.

Project Sources Projects identified Projects identified Projects identified locally – residents, community organizations, county staff Hazard Mitigation Technical Advisory Committee (HMTAC) PROPOSED ACTION ITEM / PROJECT reviews proposed projects COMMITTEE REVIEW and items Incorporates County's plan STEP 1: Examine funding requirements PROJECT PRIORITIZATION PROCESS Flood Project Multi-hazard Wildfire STEP 2: Complete risk assessment evaluation STEP 3: Complete quantitative, qualitative, and cost-benefit analysis STEP 4: Hazard Mitigation Technical Advisory Committee recommendation for funding and implementation PROJECT FUNDING & IMPLEMENTATION

Figure 3.1
Mitigation Planning Process

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3.2 Multnomah County Hazards Mitigation Plan – 2012 Update

The 2012 update of the Multnomah County Natural Hazard Mitigation Plan began in June 2009 with the convening of the Hazard Mitigation Planning Committee. In January 2011 the name of the committee was changed to the Natural Hazard Mitigation Plan (NHMP) Committee. The mission of the Committee is:

To conduct a hazard analysis and steps in planning for hazard mitigation, response, and recovery. The method provides the jurisdiction with a sense of hazard priorities, or relative risk. The hazard analysis will not predict the occurrence of a particular hazard; only quantify the risk of one hazard compared with another. The analysis and planning will allow the group to determine where the risk is greatest.

The members of the committee are Multnomah County personnel and key stakeholders that possess the knowledge and understanding to be a subject matter contributor to the mitigation plan update. The committee includes representatives from each County Department with a significant role in hazard mitigation planning and/or disaster response and recovery. The members of the committee (April, 2011) are shown in Table 3.2 below.

The hazard mitigation planning effort also includes consultants under contract to Multnomah County beginning in January 2011. The consultants are Kenneth A. Goettel of Goettel & Associates Inc. and Sandra Davis of ECO Resource Group. These consultants have served as adjunct members of the Committee in addition to supporting Multnomah County staff during the 2012 Natural Hazard Mitigation Plan update process.

Table 3.2 NHMP Committee Members

Organization	Title	Participant
	Flood Preparedness Program	
Army Corps of Engineers	Manager	Les Miller
City of Gresham	Emergency Manager	Todd Felix
Facilities Management	Facilities Specialist	Mike McBride
MC Citizen Involvement		
Committee	CIC Member	Amy Anderson
MC Citizen Involvement		
Committee	CIC Member	Robb Wolfson
MC Emergency Management	Project Manager	Luis Hernandez
MC Emergency Management	Project Sponsor	Joe Partridge
MC GIS	GIS Analyst	Benjamin Harper
MC Land Use and		
Transportation	Senior Planner	Charles Beasley
MC Risk Management	Risk Manager	Marc Anderson
MC Transportation	Transportation Division Director	Kim Peoples
Multnomah County Drainage	District Engineer II	Byron Woltersdorf

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District #1		
Port of Portland	Emergency Planner	Kori Olson
Portland Office of Emergency	Planning and Mitigation Program	
Management (POEM)	Manager	Patty Rueter
Sauvie Island Drainage District	District Manager	Tim Couch
Oregon Emergency		
Management (State Oversight)	State Hazard Mitigation Specialist	Dennis Sigrist

Suggested improvements to the Multnomah County NHMP included:

- Update hazard, vulnerability and risk assessments with the latest data and more quantitative analysis/estimates
- Update, refocus, prioritize mitigation action items
 - Identify and prioritize specific actions to reduce risk, especially for high risk situations and critical facilities
 - Identify the best opportunities for FEMA and other mitigation grants
 - Make the action items more pragmatic/achievable
- Make the Plan understandable and accessible to the public and stakeholders

The major roles and responsibilities of the NHMP Committee, with technical support from the consultants, are to complete the 2012 update of the Multnomah County Natural Hazard Mitigation Plan, including:

- Provide Multnomah County specific data
- Identify critical facilities
- Provide synopses of historical disaster events
- Provide GIS maps and overlays of hazard areas with assessor's building data
- Provide thoughtful inputs into mitigation priorities and action items
- Provide detailed review comments on draft materials
- Meet FEMA's current requirements for mitigation plan approval
- Encourage and facilitate continued public involvement throughout the mitigation planning process
- Encourage and monitor the implementation of mitigation action items identified in the mitigation plan

After FEMA approval of the 2012 update of the Multnomah County Natural Hazard Mitigation Plan, the NHMP Committee's continuing role and responsibilities will include:

- Holding periodic meetings, at least annually, to review the Mitigation Plan and revise as necessary.
- Continuing to encourage and facilitate public involvement in the mitigation planning process.
- Continuing to encourage and monitor the implementation of mitigation action items identified in the mitigation plan.
- Initiating the FEMA-required 2016 update of the Multnomah County Natural Hazard Mitigation Plan by mid-2014.

The Multnomah County Natural Hazard Mitigation Plan NHMP Committee aggressively sought input from all County departments with a significant role in hazard mitigation and/or disaster response and recovery as well as from the broader community. Public participation is a key component of the mitigation planning process and offers citizens and stakeholders the opportunity to express their ideas and priorities for hazard mitigation activities.

The 2012 update of Multnomah County's Natural Hazard Mitigation Plan includes a seven phase public participation process:

- Developing the NHMP Committee composed of knowledgeable individuals from the County and the community and holding numerous committee meetings,
- Creating a Google website for communicating with and receiving input from the NHMP Committee, as well as posting information about the Multnomah County Natural Hazard Mitigation Plan update process on the County's website,
- Distributing a public questionnaire and posting it on the County's website to gather public opinions about known hazards, previous events and priorities,
- Providing information about the current hazard mitigation planning process to a broader list of stakeholders within the Multnomah County region with an interest in the County's hazard mitigation and disaster planning,
- Coordinating public outreach and education efforts with other hazard mitigation planning efforts within the region to the greatest extent possible,
- Conducting two public workshops to identify common concerns about hazards and to discuss specific goals and action items in the mitigation plan, and
- Ongoing public outreach activities to better educate the public about hazards, risks and mitigation priorities.

The following sections provide a synopsis of the major elements in the mitigation planning process. Supplemental documentation of the planning process is provided in Appendix 3.

3.2.1 Hazard Mitigation Planning Committee Meetings

For the 2012 update of Multnomah County Natural Hazard Mitigation Plan update process, the Hazard Mitigation Plan or the NHMP Committee met on the following dates:

- June 15, 2009
- July 20, 2009
- August 24, 2009
- September 24, 2009
- October 15, 2009
- November 19, 2009
- January 21, 2010
- February 18, 2010
- March 18, 2010
- April 15, 2010
- May 20, 2010
- June 17, 2010
- July 15, 2010
- January 18, 2011
- May 25, 2011
- August 10, 2011
- November 17, 2011

Agendas, meeting minutes/notes for the above meetings, are included in Appendix 3.

The gap between the July 15, 2010 and January 18, 2011 meetings corresponds to the time period when Multnomah County was going through the procurement process for consultant assistance.

The 2012 Multnomah County Natural Hazard Mitigation Plan addresses each of the natural hazards posing risk to the County, with emphasis on the hazards which pose the greatest risk (earthquakes and floods), moderate risk (wildland/urban interface fires and volcanic hazards), low-moderate risk (severe weather and landslides/mudslides).

The 2012 update of the Multnomah County Natural Hazard Mitigation Plan includes the following significant enhancements:

Updating the hazard information for each of the major natural hazards,

- Refining the vulnerability and risk assessments for each of the major natural hazards,
- Redefining and identifying critical facilities with more specificity,
- Refocusing and reprioritizing hazard mitigation goals, objectives, and action items to emphasize pragmatic, implementable measures that address the highest risk situations in Multnomah County and that will significantly reduce risk.
- Identifying specific mitigation projects with the best likelihood of garnering FEMA mitigation project grants for implementation, and
- Improving the usability and accessibility of the Multnomah County Natural Hazard Mitigation Plan by re-organizing the plan and providing more

3.2.2 Public Inputs and Questionnaires

Public inputs for the 2012 update of the Multnomah County Natural Hazard Mitigation Plan were solicited via the County's website, by the NHMP Committee and Multnomah County staff, and as part of presentations throughout the planning process.

The public notice about the public questionnaires, which was posted on the Multnomah County website on February 28, 2011, is shown on the following page.

Public inputs were also solicited via a survey questionnaire posted on Multnomah County's website within both English and Spanish. In addition, hard copies were available in libraries and other Multnomah County buildings frequented by the public. Copies of these questionnaires are included in Appendix 3.

The following sections provide synopses of the main trends in the responses.

90% of respondents were concerned about natural hazards, and approximately half of the survey respondents had experienced injury, damage or economic loss from a natural hazard. Of this half, the largest proportion experienced impacts from severe weather (snow, wind or ice) (92%) followed by floods (28%).

90% of all respondents were worried about future occurrences of disasters, with earthquakes, severe weather, floods and landslides being of most concern,. These hazards were also considered the greatest threats to family, homes and place of work over the next 20 years.

About two-thirds of the respondents considered the possible occurrence of natural hazards when they bought or moved into their home. Those who didn't consider the occurrence of a natural hazard threat for their home either didn't think it would affect them or it never occurred to them to consider the threat in their housing

decision. The main hazard considered in home selection was flooding, followed by severe weather and earthquakes.

Figure 3.2 Multnomah County Website Notice: Public Questionnaires for Mitigation Plan Update

Emergency Management seeks public input about natural hazards and community priorities

Monday, 2/28/11 - 2:16 pm



Jocelyn Augustino/FEMA Photo Library

Multnomah County is vulnerable to many different types of natural hazards, from earthquakes to landslides and floods. The county's Emergency Management staff are in the process of updating a plan for how to address the risk people, buildings and infrastructure face in the event of a disaster. Multnomah County's Natural Hazard Mitigation Plan was first adopted in 2006 and this year the plan is being updated to incorporate several important enhancements, including improving the usability and accessibility of the plan.

"Mitigation" is the term used for measures taken that reduce the potential for negative effects from future disasters, like physical damage, economic loss, and casualties. Mitigation planning attempts to find the middle ground between ignoring and overreacting to potential disaster events in a given area.

The 2011 revision of the Multnomah County Natural Hazard Mitigation Plan includes updating hazard information for major natural hazards, like earthquakes and floods; maintaining eligibility for FEMA mitigation grants; and prioritizing mitigation actions based on high risk situations identified in Multnomah County.

The plan update also aims to include community concerns about natural hazards and public preferences about how to reduce risk and loss from such disasters. Multnomah County has set up a short questionnaire in order to collect public input about priorities for the updated Natural Hazard Mitigation Plan. Questions touch on topics like past experience with natural hazards to perceived threat levels of different hazards over the next 20 years.

County residents are encouraged to share their thoughts about natural hazards by taking the online questionnaire.

The relative ranking of hazards for future threats and consideration when buying a home were generally very similar. However, earthquakes were seen as the greatest future threat, but ranked third in consideration when related to homes.

Table 3.2 Hazards: Future Threats and Consideration in Home Buying

Hazards seen as greatest future threat	Hazards considered when buying home
Earthquakes	Floods
Severe Weather	Severe weather
Floods	Earthquakes
Landslides	Landslides
Urban/Wildland Interface Fires	Urban/Wildland Interface Fires
Volcanic Events	Volcanic Events

The vast majority of respondents were interested in taking actions to protect their home, business or community from natural hazards. Given \$10,000 to make their home, business or community less vulnerable, most of the respondents focused on their home or community.

About half of them specifically mentioned earthquakes, and others mentioned floods, wildfire, and wind, but many spoke generally about solutions that would reduce vulnerability for "various" hazards. The following table lists some solutions proposed for reducing vulnerability:

Table 3.3
Suggested Actions to Reduce Risks

Imagine that someone gave you \$10,000 to make your home, business or community less vulnerable to natural hazards. What would you spend it on?			
Hazard	Physical changes	Preparation and Planning	Power Supply
Earthquake	 General retrofitting Structural analysis Bolt (tie down) house to foundation Reinforce foundation and chimney Reinforce foundation and chimney structure Soil stabilization around house Strengthen walls Geological study of static sheer stress potential Seismic remediation of all schools and hazmat tanks along Willamette River Coat windows to make them shatterproof Replace old windows Anchor bookcase to wall 	 Neighborhood outreach via neighborhood associations Food & water storage, other supplies Survival kit/preparedness Education re: shelter location, community plan Make a plan for living after the disaster. Stock up on food/water Preparedness supplies Insurance 	Consider eliminating natural gas for heat source
Fire	Fire resistant roofs to homes, outbuildings/barns	 Wildfire prevention/mitigation Clear trees from near house Water tanks for firefighting/ water storage capacity 	Developing community utility for power
Flood	Dike management and repair Additional drainage to street	Insurance	GeneratorFuel for Generator
Severe Weather	Prepare roof for snow loadSnow shovel attachment for truckReplace roof (wind)		Solar panels
Various	Shelter in place supplies at office	 Food and water storage for 	 Alternate

 Improve home driveway for easy access for emergency vehicles Community shelter supplied w/ food & water Restore creeks and natural forest, 	neighborhood • Emergency Response Leadership training for community members • Public information/training on how to form neighborhood support plans	heat source • Solar Power
Restricting human development	during disaster Provide home survival kits	

The highest ranking mitigation priorities to reduce loss of life, property damage, and economic loss from future disasters were:

- reducing deaths and injuries,
- reducing damage to hospitals, fire and police stations, and schools
- reducing damage to electric power, gas, water and sewer systems,
- preventing future development in high hazard areas,
- reducing damage to roads and bridges,

When asked how they felt in terms of agreement or disagreement with strategies to reduce risk and losses from natural disasters, there was generally strong agreement with the strategies. The highest percentage of respondents agreed or strongly agreed that they would be willing to invest \$500 to make their home more disaster resistant. However, the lowest percentage of agreement – and one where there was also the highest percentage of disagreement and neutrality – was for spending \$5,000 on mitigation for their home. These results suggest a cap on personal investment in mitigation. There was strong support to limit development in hazardous areas, and in using tax dollars to reduce risks and losses. Voluntary and non-regulatory approaches had lower percentages of agreement.

When asked to describe past experience with natural hazards while living in Multnomah County, approximately half the total respondents to the survey listed various experiences. Most respondents list one event, but 18 described two events and 4 described three 3 events that they had experienced. Most of the experiences were with severe weather and flooding, a few with earthquakes, several with fires, and done with volcanic eruption.

Overall, the public responses show considerable concordance with the hazard analyses and mitigation priorities presented in the subsequent chapters of this plan. However, there are also some discordances with hazard data which emphasize the importance of continuing education and outreach activities to better inform the public about natural hazards affecting Multnomah County.

3.2.3 Public Workshops

The NHMP Committee held two public workshops in September 2011 and November 2011 to present a draft version of the updated Multnomah County Natural Hazard Mitigation Plan and solicit inputs from the public and stakeholders. The first meeting was held in Troutdale in eastern Multnomah County on September 29th at the Springdale Job Corps site.. The second meeting was held in western Multnomah County on November 16th in Portland at the Linnton Community Center. The meeting sites in eastern and western Multnomah County were selected to maximize participation from residents in the unincorporated parts of the county.

The September 29th workshop was attended by 28 residents and representatives of local agencies, along with 6 Multnomah County staff and county's planning consultant. Local agencies who attended included the Northeast Multnomah County Neighborhood Association, Corbett Water, Multnomah County Fire District #14, Sauvie Island Drainage District and Sauvie Island Fire District.

Workshop activities included the following:

- Open house period with tables set up with hazard maps and other mitigation planning materials, with Multnomah County staff to answer questions,
- PowerPoint presentation outlining the basic elements of mitigation planning, review of hazards, and summary of mitigation priorities and action items.
- Question and answer period

The November 16th workshop was attended by 2 representatives of local agencies, Sauvie Island Drainage District and Sauvie Island Fire District, and by 5 Multnomah County staff. Workshop activities were similar to those summarized above.

Flyers for these two public workshops are included in on the following pages.

Figure 3.3 Public Workshop Flyer – September 29, 2011 Workshop

Make a Kit

Severe Weather

Get Involved

LIVING WITH NATURE:

A COMMUNITY DIALOGUE ABOUT NATURAL HAZARDS IN OUR BACKYARD

WHAT NATURAL HAZARDS DO YOU LIVE WITH?

Earthquake

WHAT CAN WE DO TO REDUCE THEIR IMPACTS?

Wildfire

HOW COULD NATURAL HAZARDS IMPACT THOSE YOU LOVE AND WHAT YOU RELY ON?

September 29, 2011



Springdale Job Corps 31224 E Historic Columbia River Hwy Troutdale, OR 97060

6:30 - 8:00pm

Refreshments provided





Landslides

Multnomah County Emergency Management welcomes you to a casual evening of learning about the natural hazards in our County and what impacts we can expect. We want to hear from you about the things that you think we can do to mitigate these impacts.

· Open house setting

Volcano

Floods

- Casual discussions facilitated by Multnomah County Emergency Response staff
- · High quality up to date natural hazard maps
- · Emergency supplies giveaways and raffle

Make a Plan

Be Informed



"Know your enemy and know yourself and you can fight a hundred battles without disaster."

- Sun Tzu

IF YOU REQUIRE ACCOMMODATIONS FOR ACCESS AND FUNCTIONAL NEEDS PLEASE CONTACT OUR OFFICE AT 503-988-6700

Figure 3.4 Public Workshop Flyer – November 16, 2011 Workshop

Make a Kit

Severe Weather

Get Involved

LIVING WITH NATURE:

A COMMUNITY DIALOGUE ABOUT NATURAL HAZARDS IN OUR BACKYARD

WHAT NATURAL HAZARDS DO YOU LIVE WITH?

Earthquake

WHAT CAN WE DO TO REDUCE THEIR IMPACTS?

Wildfire

HOW COULD NATURAL HAZARDS IMPACT THOSE YOU LOVE AND WHAT YOU RELY ON?

November 16, 2011



Linnton Community Center 10614 NW Saint Helens Rd Portland, OR 97231

6:30 - 8:00pm

Refreshments provided





Multnomah County Emergency Management welcomes the Skyline Ridge and Sauvie Island neighborhoods to a casual evening of learning about the natural hazards in our County and what impacts we can expect. We want to hear from you about the things we can do to mitigate these impacts to the unincorporated areas of the County.

· Open house setting

Volcano

Floods

- Casual discussions facilitated by Multnomah County Emergency Response staff
- High quality up to date natural hazard maps
- · Emergency supplies giveaways and raffle

Make a Plan

Be Informed



"Know your enemy and know yourself and you can fight a hundred battles without disaster."

- Sun Tzu

IF YOU REQUIRE ACCOMMODATIONS FOR ACCESS AND FUNCTIONAL NEEDS PLEASE CONTACT OUR OFFICE AT 503-988-6700

3.2.4 Stakeholder Interviews

Stakeholder interviews were conducted with the following key stakeholders to collect information regarding their knowledge of past disaster events, critical infrastructure and information needed to complete the 2012 update of the Multnomah County Natural Hazard Mitigation Plan:

- Mike McBride (Multnomah County Facilities Management),
- Chuck Beasley (Multnomah County Land Use and Transportation),
- Tim Couch (Sauvie island Drainage District),
- Byron Kori Olson and Donna Tyner (Port of Portland),
- Marc Anderson (Multnomah County Risk Management),
- Ben Harper (Multnomah County GIS),
- Byron Woltersdorf (Multnomah County Drainage District #1), and
- Les Miller (US Army Corps of Engineers).

3.2.5 Outreach Efforts for Other Stakeholders

The list of other public and private stakeholders to whom periodic notices about the 2012 update of the Multnomah County Natural Hazard Mitigation Plan and invitations to comment on draft materials or otherwise participate in the planning process is shown below.

Table 3.4
Stakeholder List for Mitigation Plan Notices

Names	Organization		
	County		
Amy Esnard	Multnomah County Geographical Information Systems (GIS)		
Kai Snyder	Multnomah County Geographical Information Systems (GIS)		
Tom Hansell	Multnomah County Roads and Bridges		
Garret R. Lang	Multnomah County Bridges/Amateur Radio Emergency Services (ARES)		
Tim Moore	Multnomah County Sheriff		
Chris Wirth	Vector Nuisance Control Manager (Environmental Health in Health Department)		
Kat West	Multnomah County Office of Sustainability		
Jon Schrotzberger	Multnomah County Facilities Program Manager		
Jim Spitzer	Multnomah County Health Department		
Mary Li	Health and Human Services		
Mike Oswald	Multnomah County Animal Services		

Chief Deputy Jason Gates	Multnomah County Sheriff's Office	
Captain Monte Reiser	Multnomah County Sheriff's Office	
Mike Pullen	Multnomah County Public Affairs	
Roy Iwai	Multnomah County Water Quality Program	
Adam Barber	Multnomah County Land Use and Transportation Planning, Senior Planner	
	Colleges	
Bryant Haley	Portland State University, Emergency Manager	
Robert Costanza, Ph.D	Portland State University	
Staci Huffaker	Risk Manager Mt Hood Community College	
Gary Granger	REED College	
, ,	Federal Agencies	
Roland Rose	Forest Service	
	State Agencies	
Geoffrey Bowyer	Oregon Department of Transportation	
Jon Johnson	Oregon Department of Transportation Rail	
Kevin Price	State Parks	
Chris Babcock	Oregon Department of Forestry	
Cindy Kolomechuk	Oregon Department of Forestry	
	K-12 schools	
Barbara Jorgenson	School Emergency Response/Recovery Alliance (SERRA)	
Don Hicks	Multnomah Education Service District	
Kari Skinner	Portland Public Schools	
Dennis Tune	Portland Public Schools-Security Director	
Chuck Cooper	Reynolds School District-Facilities Director	
Mary Larson	Parkrose School District-Business Director	
Rick Larson	Centennial School District-Business Director	
Brook MacNamara	Riverdale School District-Superintendent	
Dan McCue	David Douglas School District-Special Projects Director	
Randy Trani	Corbett School District-Superintendent	
Sam Olson	Sauvie Island School	
Terry Taylor	Gresham-Barlow School District-Facilities Director	
Cities		
Laureen Paulsen	Portland Office of Emergency Management	
Kathie Condon	City of Portland, Bureau of Emergency Communications	
Art Hendricks	Portland Parks and Recreation	
David Harrington	Portland Bureau of Transportation	
Steve Richards	Fairview	
Todd Felix	Gresham	
Allen Barry	Fairview	
Randy Jones	Wood Village	
Charlie Warren	Troutdale	

Mark Hardie	Maywood Park
	Special Districts
Mike McGuire	Tri-Met
Angie Brewer, Planner	Columbia River Gorge Commission
Jennifer Kaden	Columbia River Gorge Commission
Corky Collier	Columbia Corridor Association
Jane Vandyke	Columbia Slough Water Shed Council
Jean	East Multnomah County Soil and Water Conservation District
Dick Springer	West Multnomah County Soil and Water Conservation District
Steve Wise	Sandy River Basin Watershed Council-Executive Director
Matt Clark	Johnson Creek Watershed Council-Executive Director
	Tualatin River Watershed Council
Jerry Uba	METRO
Donna Tyner	Port of Portland, Risk Manager
	Business
Debbie Guerra	Pacific Power
Brock Nelson	Union Pacific Railroad
Andrew Johnson	Burlington Northern Santa Fe (BNSF) Railway Company
Robbie Roberts	NW Natural Gas
David Ford	Portland General Electric
Marilyn Nikolas	Continuity Planners
Andrew Frazier	Small Business Advisory Council
Heather Hoell	Alliance of Portland Business Association
	Corbett Water District
	Reliance Connects
	Community/Neighborhood Associations
Charles Ormby	Birds Hill
Lora Creswick	Sauvie
Miles Merwin	Skyline
Karen Garber	Skyline
Robert Leeb	Engelwood
Leslie Goss	Riverdale
Carnetta Boyd	Notheast Multnomah County Community Organization (NEMMCA)
Kay Finney	Notheast Multnomah County Community Organization (NEMMCA)
Bob Sallinger	Audubon Society
Liesl Wendt	211 Info
Ron Carley	Coalition for a Livable Future
Stephen Hatfiled	Forest Park Conservancy
Nicholas Brown	Metro Exposition and Recreation Commission
Eric Corliss	American Red Cross. OR trail chapter
	Corbett Safety Action Committee

John Klosterman	Oregon Food Bank		
Technical Experts			
Bill Burns	Dogami		
	Fire Districts		
Tom Layton	Multnomah County Rural Fire Protection District (MCRFPD) #14		
Scott Lewis	Gresham Fire Department		
Jim Klum	Portland Fire and Rescue		
Norvin Collins	Sauvie Island Fire Department		
CERTs			
Kathleen Reiter	Corbett Emergency Prep Coordinator		
Contractors			
Ken Goettel	Goettel & Associates Inc.		
Sandra Davis	ECO Resource Group		
State Oversight			
Dennis Sigrist	State Hazard Mitigation Specialist		