Lane Preparedness Coalition Standing Sub-committee: Natural Hazards Mitigation

Sub-committee Purpose:
Implement the Eugene/Springfield Multi-Jurisdictional Natural Hazards Mitigation Plan and support regular updates of the Plan.

Guiding Document:
The Eugene/Springfield Multi-Jurisdictional Natural Hazards Mitigation Plan is located online here: http://www.eugene-or.gov/DocumentCenter/view/20573

Deliverable:
The Subcommittee will provide the LPC Steering Committee with an annual progress report, beginning in the Fall of 2016.

Summary of Priority Mitigation Actions:

	Action Name	Mitigation Action
Dam Failure	Dam Safety Evacuation	See Multi Hazard: Evacuation
	Dam Safety Notification	Once evacuation routes are established, A) develop and install robust notification system(s); and B) create a community awareness campaign to increase awareness of dam risks among all residents and specifically i) transient student population, and ii) non-English speaking residents.
	Inundation Maps For Planning	Seek digital versions of inundation maps from Army Corps of Engineers. Seek permission to add inundation maps as a layer within local jurisdiction GIS programs.
	Dam Seismic Assessment	Obtain details of the most recent dam seismic assessments for the dams upstream of Eugene/Springfield.
Earthquake	**Local Transportation Infrastructure Seismic Evaluation**	**Over the next 5 years, A) utilize accepted Oregon Department of Transportation methodology, as-built drawings and physical inspections to evaluate Eugene and Springfield bridges (both vehicular and pedestrian) for seismic vulnerability, and record results centrally; B) Develop a prioritized list of bridges (cross-referenced with critical travel corridors) to be retrofitted or replaced; C) Seek funding to implement retrofitting and replacement.**
	Seismic Evaluation of Critical Facilities	**Over the next 5 years, A) Develop a prioritized list of critical facilities, consistent with the critical infrastructure and key resources developed by the Federal Emergency Management Agency, such as the Eugene Airport, the Eugene/Springfield Metropolitan Wastewater Management Commission Water Pollution Control Facility , the underground wastewater**

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		and stormwater collection and conveyance systems, and regional 9-1-1 and radio communication systems, to be inspected for seismic vulnerability; B) Develop a prioritization of facilities to be evaluated for seismic stability; C) Utilizing building and infrastructure construction drawings and individual inspections, evaluate these facilities for seismic vulnerability and record the inspection results centrally; and 4) Develop a prioritized list of facilities/services to be retrofitted, relocated, or replaced.
	Seismic Evaluation of Non-Critical Facilities (FEMA 154)	Develop a seismic rapid visual screening program for public buildings and begin implementing screening to inform local mitigation, response, continuity of operations and recovery planning efforts.
	Non-Structural Seismic Evaluation (FEMA E74)	Develop a program to systematically assess and retrofit non-structural components of public facilities.
	Home Seismic Retrofits	Explore the possibility of developing a home seismic upgrade/retrofit program for Eugene/Springfield. Consider a marketing program, incentives, loans, rebates or other support options.
Flood	**Flood Maps**	**Actively seek FEMA updates to the Eugene/Springfield floodplain maps.**
	Flood Control Levee Certification and Maintenance	**Seek and maintain certification of levees and other flood control structures within Eugene and Springfield.**
	Flood Insurance Study	Continue to support FEMA in updating the flood insurance study in selected areas, including Amazon and Cedar Creeks and the McKenzie River.
	Repetitive Loss Records	Ensure that the accurate locations of repetitive loss properties have been registered with FEMA.
	Explore Flood Mitigation Actions with Property Owners (upon request)	Provide flood risk literature for outreach. Send annual mailer to residents living within the 100 year floodplain describing actions property owners can take to protect themselves from flooding.

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	Maintain Frequent Stormwater Flooding Location Inventory	Maintain inventory of locations in the Eugene/Springfield Metro area subject to frequent urban stormwater (not riverine) flooding.
	Upgrade Culverts	For locations with repetitive flooding and significant damages or road closures, determine and implement mitigation measures such as upsizing culverts or storm water drainage ditches.
	NFIP Compliance	Continue compliance with the National Flood Insurance Program (NFIP) through enforcement of local floodplain ordinances.
HazMat	HazMat Locations	Ensure that first responders have readily-available, site-specific knowledge of hazardous chemical inventories in the Eugene/Springfield Metro Area.
	HazMat Preparedness	Enhance emergency planning, emergency response training and equipment to address hazardous materials incidents.
Landslide	Landslide Mapping	Update regional landslide risk maps using available LiDAR data.
	Landslide Planning	Use available data to determine areas and buildings at risk to landslides and propose comprehensive and land use policies accordingly.
Multi-Hazard	Emergency Fuel Distribution Plan	Once the fossil fuel sector assessment is completed, develop a Eugene/Springfield emergency fuel distribution plan that considers A) the likely local fuel available during specific scenarios (earthquake, winter storm, mass evacuation); B) the needs for transportation fuels and natural gas (including backup generators) of both public *and* private (hospital, communications, others) essential systems as well as those of neighboring communities supplied by the Eugene Kinder Morgan / Williams Pipeline fuel terminal; and C) the existing on-site fuel storage and operation capacity of those critical services.
	Community Recovery Planning	Develop appropriate and necessary community recovery plans.

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	Local Electricity Generation	1) Develop a plan to improve control of EWEB electric generation in the event of a regional outage (for example: given a regional outage, develop ability to direct locally generated power to critical facilities such as water treatment plants and hospitals). 2) Encourage small scale local electricity generation that can be operated independently of the regional and/or local grid in the event of a local or regional power outage (for example: install local (non-fossil fuel) electricity generation in support of critical facilities so they can operate during an outage).
	Downed Power Lines	**Over the next five years, 1) identify critical transportation corridors (including primary emergency, evacuation, and access routes) and electric distribution routes; 2) develop a list of key backbone transmission and distribution routes that serve critical customers and enable efficient restoration to the broader distribution system; 3) develop a long-term plan to underground, relocate, or "harden" key electric distribution lines along critical corridors (including feasibility assessment and prioritization);** **4) seek funds and opportunities to relocate power poles and power lines, or harden existing facilities, where feasible and appropriate, to reduce interruption to the transportation system and to reduce risk of outages from severe winter storms or earthquakes.**
	Credentials	Explore a strategy to facilitate credentialing of non-traditional partners during an emergency hazard event.
	Broadcast Radio Communications	Review existing communication tools between Emergency Managers and radio stations. If none yet exist, develop a low-tech, direct communication line between staff at Bicoastal Media (1120 KPNW, the radio station that has been heavily hardened with FEMA dollars) and Eugene/Springfield and Lane County Emergency Managers.
	Continuity of Operations Plans	**1) Identify priority work groups and facilities in need of continuity of operations plans.** **2) Develop continuity of operations plans for the top priority work groups or facilities.**

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	Staffing for Critical Systems	Review policies, procedures and plans from other public agencies with high seismic vulnerability. Research their strategies to ensure staff availability following a significant hazard event. Assess options to apply these strategies in Eugene/Springfield to ensure the availability of critical staff following a significant hazard event.
	Local Food Availability	Work with coalition of food suppliers to consider options to address these food supply concerns. Consider developing common messaging and marketing strategies to increase awareness of the need for individuals to store adequate emergency food and water supplies.
	Water Source	EWEB is actively seeking to develop alternate sources of drinking water. EWEB's Strategic Plan and Water Capital Improvement Plan call for alternate sources to be developed over the next ten years. EWEB has been issued a conditional permit on the Willamette River and has obtained a groundwater use permit. EWEB is assessing interest of potential partners, and will develop at least one additional water supply by 2022. The cities of Eugene and Springfield support EWEB's purchase of property, construction of infrastructure and financing of this project.
	Evacuation	Develop a community evacuation plan to address multiple hazards. Develop routes, notification system and community awareness plan. Work with Lane County to coordinate routes and evacuation plans.
	Fossil Fuel Sector Assessment	**Develop a list of critical information needs pertaining to the regional fuel transmission and distribution system. Develop a plan to acquire the necessary information to A) better understand the factors that could disrupt the regional fossil fuel supply and B) ensure essential emergency functions can be sustained.**
	Water Storage	Explore options to increase drinking water storage in public buildings including A) essential facilities (if needed) and B) potential public sheltering facilities.
	Vulnerable Populations	Compare relevant NHMP hazard risk maps with the relevant vulnerable population maps developed for the Lane Livability Consortium. Prioritize map combinations to provide results most informative to the mitigation actions within the NHMP.
	Lane Preparedness	Continue to support/develop public and private sector partnerships to foster hazard mitigation activities.

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	Coalition	
	Community Education and Outreach	Maintain and continue to deliver existing education programs aimed at mitigating the risk posed by hazards. Provide information about the NHMP and collect feedback on the NHMP from audiences and interested parties.
	72 Hour Kits	Continue to encourage community members and city employees to prepare and maintain 72 hour kits.
Wildfire	Springfield Wildfire Plan	Eugene/Springfield Fire/EMS continue development of a Springfield-specific wildfire hazard plan that is consistent with mutual and automatic response agreements for the region. This plan will include A) threshold events that require evacuation notification; B) fire management plans that include all county wide fire resources until they are exhausted; and C) a requirement for escalation to State conflagration response. The plan will include coordination with aerial suppression resources and hourly costs for suppression aircraft during initial stages of an incident.
	Wildfire Risk and Building Codes	**1) Over the next 5 years, utilize the Oregon Department of Forestry's Criteria (OAR Chapter 629, Division 44) to develop a "Fire Hazard Zone" map of the areas of high fire danger in the Eugene/Springfield area.** **2) Cities of Eugene and Springfield adopt the "Fire Hazard Zone" map.** **3) Implement increased building code requirements for construction/repair in the identified high fire risk areas.**
Winter Storm	**Downed Power Lines**	**See Downed Power Lines under Multi-Hazard**
	Tree Trimming	Continue tree trimming efforts especially for transmission lines and trunk distribution lines.
	Property Owner Education	Continue to educate private property owners about dangers of vegetation near distribution lines and service drops.
	Backup Power	Encourage critical facilities in the Eugene/Springfield Metro Area to have backup power and emergency operations plans to deal with power outages.
	Undergrounding Utilities in New Developments	Continue policy requiring new developments to locate power lines underground.

Sub-committee Membership

The sub-committee will ideally consist of not less than 4 and no more than 20 members. The goal is to have at least one representative each for the following sectors:

- Utility (Electric\Water\Gas?\Stormwater?\Wastewater?)
- Health Care (Hospital)
- Public Health
- Education (4J, UO)
- LPC wishes to have NGO representation, is this appropriate to NHMP?
- Is there a path for the private sector to engage at the subcommittee level?

Chair

The sub-committee Chair is selected from those individuals assigned to prepare reports submitted to the State and Federal government or assigned to update the Natural Hazard Mitigation Plan.

Project Team Oversight

From time to time project teams may be convened to address priority mitigation actions. Such project teams will submit deliverables to the Natural Hazard Mitigation Plan Subcommittee for review. Once approved by the subcommittee, the deliverables will be submitted to the Lane Preparedness Committee Steering Committee for final approval before release to the general public.

Sub-committee Meetings

The Subcommittee will meet quarterly.