

**COMMENTS & RESPONSES:
DRAFT 2015 Oregon Natural Hazard Mitigation Plan – Posted April 2015**

#	COMMENTS	COMMENT	RESPONSE
1	Matt Laird Planning Director Lane County Dept. of Public Works Land Management Division Planning Program	If the plan is for Counties to amend their comprehensive plans to incorporate new rules for Natural Hazards, Please include funding to accomplish the task.	The Oregon NHMP does not require local governments to amend their comprehensive plans. In accordance with Statewide Planning Goal 7, as new hazard information becomes available, DLCD will determine if the new information requires a local response, and if it does, the affected local governments will need to evaluate it and determine how to use it. DLCD will provide guidance and assistance. Technical Assistance Grants may be available to support comprehensive plan amendments and local natural hazard mitigation planning.
2	Sallie Edmunds, River and Environmental Planning Manager Portland Bureau of Planning and Sustainability	We appreciate the recognition of the disproportionate impacts on vulnerable communities. We also support including the reduction of such disparities in the plan goals and mitigation actions. Also, the discussion of disabled persons on page 388, the reference to “invisibility” could be refined to improve sensitivity, and to clarify intent.	The word <i>invisibility</i> has been deleted and the paragraph restructured. This change will appear in the submittal draft.
3	Sallie Edmunds, River and Environmental Planning Manager Portland Bureau of Planning and Sustainability	Vulnerability assessment Dam Failure - The potential risk from dam failures warrants more attention in the plan, and potential consideration as a standalone hazard. The plan should assess risks associated with the more than 900 dams in the state, as well as risks associated with Columbia River dams. FEMA Region X requires local mitigation planning efforts to include dams in their risk assessments if they are potentially impacted from inundation for state listed high-hazard dams. This is also a requirement under the CRS program. While the plan does acknowledge dam safety in the flood section, it provides no risk or vulnerability information as it pertains to the dam failure hazard. This could be viewed as indication to local jurisdictions that they do not need to assess this risk, which could negatively impact CRS communities as they now have new requirements pertaining to dam safety. Additionally, while the plan recognizes the need to account for climate change, it misses the opportunity to address the impacts of climate change on dams. Dams are designed based on assumption that the design hydrograph will not significantly change. Climate change will significantly impact hydrographs in the Pacific Northwest, which will, among other factors impact how dams are operated. The potential for “spillway” events will increase, and while not technically a “failure”, this operational scenario could significantly impact downstream communities. The impacts of potential dam failures associated with major seismic events should be addressed as well.	The state is not required to include dam failure in its NHMP and has not previously done so. In response to a request from FEMA, we have included a brief discussion in the flood section and recognition that it is a secondary hazard to earthquake in that section. It is not recognized by the state as a natural hazard. Rather, it has been considered a human-caused hazard and is addressed in the Oregon Emergency Operations Plan.
4	Sallie Edmunds, River and Environmental Planning Manager Portland Bureau of Planning and Sustainability	Vulnerability assessment Flood Vulnerability. We are concerned that that no model (Hazus) was utilized to measure flood vulnerability. The flood risk assessments estimated flood hazard vulnerability by looking at insurance claims which we feel could lead to a significant understatement of flood risk. Nationally, less than 20% of buildings at risk are insured and that close to 30% of the policies in force are on properties located outside the SFHA. Since FEMA’s RiskMAP program is generating Hazus models for all communities that go through the RiskMAP update process, this modeling data is readily available. Although Hazus may have a reputation of overstating risk, it should be considered in addition to	<ul style="list-style-type: none"> • We agree that the flood risk assessment could be improved. Due to resource limitations, we could not complete a statewide Hazus run and do not have sufficient coverage to report local or regional results. With development and implementation of the new risk assessment model, this situation would improve over time. • To assess vulnerability to flooding we analyzed the extent of the special flood hazard area and the frequency of damaging floods by county – independent of the number of insurance claims – to develop a relative vulnerability score. We considered the number of flood insurance claims as additional evidence of a county’s or city’s vulnerability to flood.

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		<p>insurance data which may understate risk. The two information sources might be used to create a risk “range” that would be helpful, especially as we take into consideration potential impacts of climate change.</p> <p>In addition, the report should address the pending settlement between NOAA/National Marine Fisheries Service (NFMS) and FEMA, and potential for additional restrictions on floodplain development to ensure compliance with the Endangered Species Act. From this settlement is likely to emerge additional floodplain mapping requirements and regulations that will significantly affect National Floodplain Insurance Program communities.</p>	<ul style="list-style-type: none"> We did not include a discussion of the Endangered Species Act lawsuit because a final biological opinion is not yet available and any discussion of it would be based on speculation. We will certainly include an ESA discussion in the next update of the Plan, assuming that FEMA and NOAA-Fisheries have reached an agreement.
5	Sallie Edmunds, River and Environmental Planning Manager Portland Bureau of Planning and Sustainability	<p>Vulnerability assessment</p> <p>Alluvial Fan Flood Hazards - There is no mention of alluvial fan flooding in the flood hazard section. Is there no alluvial fan flooding in Oregon, especially in Eastern Oregon?</p>	<p>Alluvial fan flooding is currently addressed in the discussion of flash flooding. We will treat them separately in the submittal draft. The potential for this type of flooding in Oregon is unstudied and past events (if any) have been poorly documented.</p>
6	Sallie Edmunds, River and Environmental Planning Manager Portland Bureau of Planning and Sustainability	<p>Vulnerability assessment</p> <p>Community Rating System - We are surprised that the CRS is not addressed in the risk assessment portion of the plan, especially in the Repetitive Loss section. Addressing the CRS would be appropriate here.</p>	<p>The Community Rating System is addressed in each Regional Risk Assessment with repetitive loss data, and in the Mitigation Strategy sections on <i>Changes in Mitigation Action Priorities</i>, the <i>Mitigation Action Tables</i>, and the <i>State and Local Capability Assessments</i>. It is also addressed in the <i>Enhanced Plan</i> section on <i>Integration with Other Planning Initiatives</i>.</p>
7	Sallie Edmunds, River and Environmental Planning Manager Portland Bureau of Planning and Sustainability	<p>Region 2 Vulnerability assessment (Note: These comments may apply in other region assessment sections as well):</p> <p>Under the built environment heading, the plan discusses the age of housing stock but should also highlight the extent of unreinforced buildings, including schools and other public buildings, in local downtowns, mature neighborhoods, and historic districts.</p>	<p>The state has begun to develop such data for state-owned and –leased buildings and critical and essential facilities. The extent of unreinforced schools and public buildings that are not state-owned in downtowns, mature neighborhoods, and historic districts would more appropriately be addressed in local NHMPs. This is an area where local NHMP data could inform state mitigation priorities and actions in the next update. We would welcome that collaboration.</p>
8	Sallie Edmunds, River and Environmental Planning Manager Portland Bureau of Planning and Sustainability	<p>Region 2 Vulnerability assessment (Note: These comments may apply in other region assessment sections as well):</p> <p>As noted above, please address risks to Region 2 from potential failure of dams located in Oregon, and also on the Columbia River.</p>	<p>Please refer to the response to Comment #3.</p>
9	Sallie Edmunds, River and Environmental Planning Manager Portland Bureau of Planning and Sustainability	<p>Region 2 Vulnerability assessment (Note: These comments may apply in other region assessment sections as well):</p> <p>This section should discuss risks from potential failure of federal and non-federal levees.</p>	<p>Due to data constraints, we cannot provide an analysis of the risks from potential failure from federal or non-federal levees at the state or regional levels.</p>

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10	Sallie Edmunds, River and Environmental Planning Manager Portland Bureau of Planning and Sustainability	Region 2 Vulnerability assessment (Note: These comments may apply in other region assessment sections as well): In discussing the Critical Energy Infrastructure Hub, please reference potential loss human life and impacts from contamination of air, water and soil.	While these are important concerns, we do not have the data necessary to accurately address these impacts at this time. We will consider working on this for the next update.
11	Sallie Edmunds, River and Environmental Planning Manager Portland Bureau of Planning and Sustainability	Region 2 Vulnerability assessment (Note: These comments may apply in other region assessment sections as well): Discussion of wildfire risk trends should mention the impact of invasive plants on fuel loads.	This information is not available at this time. It is being included in the next wildfire risk assessment and we anticipate that it will be available for the next Oregon NHMP update.
12	Sallie Edmunds, River and Environmental Planning Manager Portland Bureau of Planning and Sustainability	Region 2 Vulnerability assessment (Note: These comments may apply in other region assessment sections as well): Please address potential impacts on fish and wildlife, as relates to specific hazards, and also as potentially exacerbated by climate change.	This is addressed to a certain degree by Priority Mitigation Action #26. We will consider addressing it further in the next update.
13	Sallie Edmunds, River and Environmental Planning Manager Portland Bureau of Planning and Sustainability	Mitigation Strategy Action # 29 Strengthen the existing Community Rating System (CRS) rating of at least five jurisdictions, with emphasis on coastal jurisdictions, during the life of each Oregon NHMP. We question the emphasis on coastal communities here when only 4 out of the 34 participating CRS communities in Oregon are Coastal. It will be important for inland communities to strengthen their programs as well. Also, we suggest that this action focus on targeting state uniform credits that all CRS communities in the State could benefit from. Having an action to enhance state uniform minimum credits under the CRS program would be a more comprehensive, cost-effective strategy that would yield statewide benefits.	<ul style="list-style-type: none"> • We agree that it is important for all communities, coastal and inland, to strengthen their CRS ratings. Coastal jurisdictions are emphasized due to the very high cost of flood insurance in “V” zones. • We agree with the suggestion to target this action on the state uniform minimum credit for CRS and will implement it accordingly. We are, in fact, currently reviewing Oregon’s statewide uniform minimum credit.
14	Sallie Edmunds, River and Environmental Planning Manager Portland Bureau of Planning and Sustainability	Mitigation Strategy We recommend elevating the priority assigned to action 41, Develop an incentive or subsidy program for retrofit of one and two family residences. This action has great potential to reduce loss of life and displacement of households after a severe earthquake. And as noted in the Enhanced Plan section success stories, the pilot retrofit program in Portland demonstrated a very high benefit/cost ratio. We also recommend elevating ongoing actions that involve funding or promoting seismic retrofits to schools, critical facilities, infrastructure, etc., and seeking federal funding to support state efforts.	Because the mitigation actions were prioritized through a systematic, multi-phase evaluation process based on statutory and FEMA-recommended criteria, their priority rankings will stand for this update. We will consider this suggestion when reviewing mitigation actions during the next update.

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15	Sallie Edmunds, River and Environmental Planning Manager Portland Bureau of Planning and Sustainability	Mitigation Strategy Add an action focused on mitigating hazard risks to the Critical Energy Infrastructure Hub in the Portland Harbor. Risks to the CEI Hub have the potential for loss of life, regional contamination, and disruption of local and regional economies. Such an action could be designed to complement and add value to Portland’s current NHMP update and focus on the CEI, which is being funded through a FEMA grant.	Mitigation Action #54 states: <i>Support and implement the actions in the February 2013 Oregon Resilience Plan and recommended in the Oregon Resilience Plan Task Force’s October 2014 report.</i> Implementation of this action would include mitigating hazard risks to the Critical Energy Infrastructure Hub in the Portland Harbor. This is a key issue, not only for the City of Portland, but for the entire state, and proposed legislation, if passed, would begin implementation. We invite the City of Portland to collaborate with the State at a later date to craft a mitigation action that would coordinate Oregon’s and the City of Portland’s NHMPs and address both state and local concerns.
16	Sallie Edmunds, River and Environmental Planning Manager Portland Bureau of Planning and Sustainability	Mitigation Strategy We support ongoing action 81 Continue to refine statewide identification and prioritization of the greatest risks from and communities most vulnerable to Oregon’s natural hazards. We recommend that this action explicitly call for attention to historically under-served and under-represented communities, recognizing that these communities often experience disproportionate adverse impacts from natural hazards. We also support strategies to use this information in prioritizing actions.	When the new risk assessment model is developed, the state should be able to identify the drivers of vulnerability, such as those you mention. Interrelationships between vulnerabilities and prioritization of vulnerabilities should also become clearer. Due to resource limitations the state is only able to identify place-based vulnerabilities and hazard-based vulnerabilities in separate analyses for this plan update.
17	Sallie Edmunds, River and Environmental Planning Manager Portland Bureau of Planning and Sustainability	Mitigation Strategy The Mitigation Strategy does not seem to include actions focused on mitigation of wildfire risk. Given increasing incidence of wildfire in the Pacific Northwest, combined with anticipated warmer drier summers, it seems important for the state to work proactively in support of local and regional wildfire mitigation efforts, especially those focusing on wildfire interface zones, watersheds that provide municipal drinking water sources, and ecologically sensitive areas.	The state is actively engaged in mitigating risk from wildfires. While not explicitly called out, wildfire is addressed by 20 of the Priority Mitigation Actions. The state’s continuous involvement in wildfire mitigation is clearer in the Ongoing Mitigation Actions, where ten actions – #98 and #137 through #145 – are specific to wildfire mitigation.
18	Sallie Edmunds, River and Environmental Planning Manager Portland Bureau of Planning and Sustainability	Mitigation Strategy Page 1258 should be updated. There are 34 communities participating in CRS as of April 1, 2015.	There are 28 active CRS communities, as noted in the plan. Six are listed by FEMA as CRS Class 10 and we chose not to count them as active.