

## ANNEX E – 2017 NHMP Mitigation Actions

- The actions identified in the 2017 plan are listed here for reference. In cases where actions have been continued, that has been noted in the 2023 actions tables. In cases where these actions have moved forward, it is captured in the mitigation activities section for each Jurisdiction/District.

No.	Hazard	Mitigation Action	Jurisdictions
1	ALL HAZARDS	<b>Leverage existing hazard mitigation public outreach methods to develop a Hazard Mitigation Outreach Strategy for the Planning Area. The strategy will be culturally appropriate, and inclusive of traditionally underserved and underrepresented populations, and access and functional needs.</b>	Fairview, Gresham, Wood Village
<b>Action Status</b>		Fairview, Gresham, and Wood Village have developed individual ongoing outreach actions that are scaled to their available resources and targeted to specific communities. Wood Village has included natural hazard related articles in its newsletter and has added staff who speak languages other than English. Fairview is planning to develop more outreach at city events and provide resources in languages other than English. Gresham is planning to develop an outreach toolkit and direct programs with local community-based organizations to ensure that outreach efforts are most helpful to communities with barriers to resilience and government services.	
2	ALL HAZARDS	<b>Share hazard mitigation information to encourage integration into other planning mechanisms, such as comprehensive plans (i.e., Statewide Land Use Goal 7: Areas Subject to Natural Hazards) and development code updates.</b>	Fairview, Multnomah County, Troutdale
<b>Action Status</b>		Multnomah County continues to explore the possibility of upgrading or adding additional zoning overlays to meet increased concern about hazards. Troutdale added wildfire risk reduction considerations to its Accessory Dwelling Unit code.	
3	ALL HAZARDS	<b>Enhance the list of plans, policies and codes for each jurisdiction that address hazards in the Hazard Mitigation Plan.</b>	Fairview, Gresham, Multnomah County
<b>Action Status</b>		These lists have been largely maintained in this updated volume, but some new plans and processes have been added and existing plans and processes have been updated to consider ongoing or new opportunities for integration with mitigation. Gresham plans to update environmental overlays and floodplain code to reflect newer federal guidelines intended to ensure Endangered Species Act considerations are included in floodplain management decisions.	

4	ALL HAZARDS	<p><b>Work cross-jurisdiction with the Portland Metro Region's Urban Area Security Initiative's (UASI) Regional Disaster Preparedness Organization (RDPO) to develop a Post-Disaster Recovery Plan for the region. This project has been approved by the RDPO to receive UASI 2016 grant funding.</b></p>	<p>Fairview, Multnomah County, Troutdale</p>
<b>Action Status</b>	<p>The RDPO regional recovery framework was completed in 2019. Multnomah County is in a queue to develop a countywide plan, with a completion date not yet known. Multnomah County action 2 continues a focus on aligning the NHMP with the future Recovery Plan.</p>		
5	ALL HAZARDS	<p><b>Integrate hazard risk assessments with jurisdiction/agency continuity of operations requirements to identify mitigation priorities; e.g., facilities that house critical functions and are at risk should be prioritized for mitigation/retrofit/alternative projects within each agency's Capital Improvements Program. Consideration should be given to life safety vs. habitable vs. operational. Document what has already been mitigated and make info easily accessible. The list of mitigation needs can also be used after a disaster to include mitigation during recovery/repair activities.</b></p>	<p>Fairview, Multnomah County, Troutdale</p>
<b>Action Status</b>	<p>Continuity of Operations Planning is being revised in Multnomah County and will use revised risk assessment information. Troutdale is achieving continuity planning through their Public Works Resilience Plan.</p>		
6	ALL HAZARDS	<p><b>Explore and document in the plan how hazard mitigation is integrated into the early design process for public facility and infrastructure projects. Explore opportunities to show co-benefits of sustainable and resilient building practices.</b></p>	<p>Fairview, Multnomah County, Troutdale, Wood Village</p>
<b>Action Status</b>	<p>Some major facility projects, such as the new Multnomah County courthouse, Wood Village City Hall, and Fairview Public Works building integrated improved seismic resilience into design. Hazard mitigation is being considered during design processes, at least to the level of current state land use and building codes, which themselves have seen increased hazard resilience elements.</p>		
7	ALL HAZARDS	<p><b>Develop Community Executive Summaries that explain the relevant portions of the Hazard Mitigation Plan to elected officials and members of specific communities. Provide annual progress report updates to the Community Summaries.</b></p>	<p>Fairview</p>
<b>Action Status</b>	<p>Specific strategies for coordinating hazard mitigation with elected officials have not been continued as priority actions, but updated mitigation strategies were considered in light of city priorities and budgets and coordination within city departments is ongoing.</p>		
8	ALL HAZARDS	<p><b>Collaborate and coordinate across the Planning Area to support applications to FEMA Hazard Mitigation Assistance grants and Oregon Seismic Rehabilitation Grant Program annually.</b></p>	<p>Multnomah County</p>

<b>Action Status</b>	Multnomah County Emergency Management has continued to promote grant opportunities and support participating jurisdictions with grant applications. A follow-up action is included in this plan to support grants that could providing resilience program funding for community-based organizations.	
9	ALL HAZARDS	<b>Assess resources needed for plan implementation and develop capacity options for consideration by participating jurisdictions to pool resources. Develop a cross-jurisdictional team to work on analysis, stakeholder coordination, and grant writing. Partner with state, regional, and academic organizations to coordinate projects related to risk analysis and reduction. Seek opportunities to coordinate planning processes of related plans with similar update cycles, e.g. NHMPs, Community Wildfire Protection Plan, Climate Action Plan.</b>
<b>Action Status</b>	Work has been coordinated through the NHMP Steering Committee and a Gresham Hazard Mitigation Workgroup. Gresham departments have participated in the update to the Community Wildfire Protection Plan and Gresham is developing a Climate Resilience Plan. Gresham also coordinated with the University of Oregon to develop an infrastructure resilience analysis.	
10	ALL HAZARDS	<b>Seek business alliances and other private sector representation in the mitigation planning process.</b>
<b>Action Status</b>	Action is continuing, with an updated action to support local business resilience. The Green Business Alliance has been a program that can support mitigation planning in Gresham.	
11	ALL HAZARDS	<b>Either invite existing Equity Council/Work Group or establish an Equity Working Group to provide guidance to the Hazard Mitigation Plan Steering Committee and other emergency management plans (e.g., Emergency Operations Plans) and programs.</b>
<b>Action Status</b>	A representative from Multnomah County Office of Diversity and Equity has been added to the steering committee since 2017. Multnomah County Emergency Management has also coordinated with the county's Community Involvement Committee to continue to develop best practices for equitable implementation of mitigation programs.	
12	ALL HAZARDS	<b>Further integrate social vulnerability data into the hazard risk assessment and use this to inform decisions on mitigation priorities.</b>
<b>Action Status</b>	Considerations of social vulnerability were expanded in this update, when available. Additional research is continuing to be released, including Metro's new Social Vulnerability Tool, and will continue to be used to refine the plan during the maintenance phase and next update.	

13	ALL HAZARDS	<p><b>Coordinate with the Joint Office for Homeless Services (JO) to reduce risk to natural hazards for people experiencing homelessness. Work with the JO to educate its staff and partner organizations about hazard exposure maps. Encourage JO to reference hazard exposure maps when siting indoor and outdoor locations for people experiencing homelessness. Coordinate with JO on outreach standard operating procedures for people experiencing homelessness during severe weather, flooding events and other emergency situations.</b></p>	Multnomah County
<b>Action Status</b>		Multnomah County Emergency Management now works very closely with JOHS, especially during severe weather and wildfire smoke events. JOHS now has emergency managers who coordinate outreach and coordination for potential natural hazard risks to unhoused communities.	
14	ALL HAZARDS	<p><b>Assist the Coalition of Community Health Clinics (CCHC) in identifying a structural engineer certified in multi-hazard building assessments to assess CCHC clinics. Provide technical assistance to CCHC as it seeks funding source(s) for structural assessments. Provide technical assistance to CCHC to prioritize improvements to CCHC clinics based on assessment findings.</b></p>	Multnomah County
<b>Action Status</b>		Action not advanced. Coordination with community health clinics needs to be re-established.	
15	EARTHQUAKE	<p><b>Advocate for the creation of a Critical Energy Infrastructure (CEI) Hub Disaster Resiliency Workgroup.</b></p>	Multnomah County
<b>Action Status</b>		Planning for the CEI Hub became more formalized during the period after the 2017 plan was adopted, culminating with a 2022 joint Portland/Multnomah County risk study and 2022 Oregon Senate Bill 1567 (both described in this plan).	
16	EARTHQUAKE	<p><b>Participate in Regional Disaster Preparedness Organization (RDPO)/Oregon Department of Geology and Mineral Industries (DOGAMI) regional HAZUS risk assessment for earthquakes. Provide local data where available. Incorporate new data into next NHMP update.</b></p>	Fairview, Gresham, Multnomah County, Troutdale, Wood Village
<b>Action Status</b>		All communities participated in development and engagement with the DOGAMI risk assessment and the new earthquake study was released in 2018 and incorporated into this plan update. Gresham to update city risk maps utilizing new HAZUS data.	
17	EARTHQUAKE	<p><b>Between 2016 and 2018, conduct a Seismic Feasibility Study on the Burnside Bridge, a regional lifeline route, to evaluate various rehabilitation and replacement alternatives for a seismically resilient crossing.</b></p>	Multnomah County

<b>Action Status</b>	The Earthquake Ready Burnside Bridge project is well under way, with the seismic feasibility study completed in 2018 and a goal of beginning construction on a new resilient span by 2025. The next phase of bridge seismic resilience is continued in Multnomah County mitigation action 15, which continues support for the Burnside Bridge and other bridge projects contemplated by the Willamette River Bridge Critical Infrastructure Plan.		
18	EARTHQUAKE	<b>Seek funding, between 2017 and 2019, for a National Environmental Policy Act (NEPA) study to help the county make an informed decision on which alternatives from the Seismic Feasibility Study should be further evaluated in the design phase.</b>	Multnomah County
<b>Action Status</b>	The funding for this study was secured in 2018, and the process for determining seismically the preferred resilient Burnside Bridge alternative has been completed.		
19	EARTHQUAKE	<b>Many agencies within the county have begun to analyze facility-specific seismic risk, e.g., Multnomah County and the Port of Portland. County stakeholders should prioritize critical facilities/infrastructure, gather seismic risk data when available (structural and non-structural), prioritize risk assessments where there are gaps, and begin to develop a funding strategy for mitigation of the most critical facilities. Document what has already been mitigated and make information easily accessible. The list of mitigation needs can also be used after a disaster to include mitigation during recovery/repair activities.</b>	Fairview, Gresham
<b>Action Status</b>	The release of new earthquake risk and vulnerability data has added to building support for major infrastructure projects, including the Earthquake Ready Burnside Bridge, the Port of Portland Resilient Runway, an Emergency Transportation Routes study and priority Triage Routes, and the CEI hub. Gresham seismically retrofitted its last fire station at risk and Fairview built a new, safer, Public Works building. An updated Critical Facility Analysis to be conducted by stakeholders in this plan is an action included in this update.		
20	EARTHQUAKE	<b>Expand seismic retrofit incentive programs for homeowners.</b>	Multnomah County
<b>Action Status</b>	Strategy continued as Multnomah County action 13.		
21	EARTHQUAKE	<b>Inventory and perform seismic upgrades to suspended wastewater conveyance pipelines (i.e., roadway crossings, pipe bridges, etc.).</b>	Fairview, Gresham, Troutdale
<b>Action Status</b>	The City of Gresham successfully used this action to acquire a grant to improve the resilience of a suspended conveyance at Johnson Creek. A lifeline was upgraded as part of the ODOT replacement of the Sandy River Bridge in Troutdale. All three cities have actions that point to building natural hazards resilience into infrastructure planning identified through wastewater master plans.		

22	FLOOD	<b>Over the next five years, install high-water-mark signs to educate the public about flooding potential in targeted locations along or within the leveed areas.</b>	Multnomah County Drainage District
<b>Action Status</b>		Action modified to include additional flood risk information, carried forward as Columbia Corridor Drainage District action 20.	
23	FLOOD	<b>Partners who signed the Declaration of Cooperation will continue participation in Levee Ready Columbia in order to ensure the Portland metro levee system does not lose accreditation by FEMA or become inactive in the U.S. Army Corps of Engineers' Rehabilitation and Inspection Program. The NHMP Steering Committee will continue to integrate flood mitigation relevant to the levee system by staying actively informed and engaged with Levee Ready Columbia, particularly in review of risk assessments and discussions of the appropriate level of protection for the Portland metro levee system. Encourage inclusion of climate, community, economic and environmental considerations.</b>	Fairview, Multnomah County Drainage District, Sandy Drainage Improvement Company, Troutdale, Wood Village
<b>Action Status</b>		Participation in Levee Ready Columbia continues, and this action was maintained as an action for the City of Fairview. The inclusion of the Columbia Corridor Drainage Districts into this plan ensures that the coordination between other plan stakeholders and drainage districts around mitigation strategy will be maintained.	
24	FLOOD	<b>Partners who signed the Declaration of Cooperation to continue participation in Levee Ready Columbia will seek funding to support maintaining certification and accreditation of the Columbia River levee systems, determine appropriate level of flood protection, and educate the public on the benefits and residual risks associated with the levees.</b>	Fairview, Multnomah County Drainage District, Sandy Drainage Improvement Company, Troutdale
<b>Action Status</b>		Partners have continued to support the program, including for program funding. Coordination continues as the Columbia Corridor Drainage Districts move towards consolidation as the Urban Flood Safety and Water Quality District.	
25	FLOOD	<b>Identify target areas for flood mitigation projects, such as high-risk/repetitive risk problem areas. Identify specific mitigation projects and grants for, e.g. land acquisition, home elevation, business flood proofing, floodplain restoration, stormwater infrastructure. Consider if there are areas at risk to multiple hazards that could be targeted for increased cost benefit, e.g. flood + landslide + liquefaction + lahar.</b>	Gresham
<b>Action Status</b>		Implementation of flood risk planning was moved in Gresham from the Comprehensive Plan to the Stormwater Master Plan, which was recently updated. A next step is to utilize the updated 2019 FEMA Flood Insurance Rate Maps to identify any new problem areas.	

26	FLOOD	<p><b>Assess whether local regulations should be updated to better protect citizens based on channel migration zone (CMZ) data. Currently, CMZs are mapped for the Sandy River, including an area around Troutdale. In late 2016, a statewide analysis of CMZ susceptibility will be released. This new data will help prioritize future CMZ mapping projects that may include other portions of the Planning Area.</b></p>	Multnomah County
<b>Action Status</b>		<p>Multnomah County continued an action to consider adding channel migration risk reduction to Emergency Management and Land Use programs, using updated risk mapping for the Sandy River.</p>	
27	FLOOD	<p><b>Identify stormwater stakeholders to participate on the steering committee during the next update. These subject matter experts will help determine how stormwater management planning and projects should be addressed in the next plan update. Explore if a stormwater subcommittee would be beneficial, or if each jurisdiction will track stormwater projects individually through master plans and Capital Improvement Plans. Consider if mitigation grants should be pursued in funding stormwater projects. Consider opportunities to manage stormwater naturally and prepare for increased stormwater runoff from climate change.</b></p>	Gresham, Wood Village
<b>Action Status</b>		<p>Public Works and Engineering staff were represented in this update process. Stormwater management was not identified as a significant vulnerability in this update, compared to other hazards, so this action was deprioritized – however both cities have been actively updating and upgrading stormwater management plans. Gresham to identify, prioritize, and implement restoration projects that benefit floodplain conditions, fish habitat and water quality.</p>	
28	FLOOD	<p><b>Flood-proof wastewater manholes and pipelines within the 100-year floodplain.</b></p>	Gresham, Troutdale, Wood Village
<b>Action Status</b>		<p>These projects continue to be identified as wastewater master plans are revised, which are referenced for potential mitigation grant assistance in this plan update. Gresham will continue to repair/rehabilitate leaking manholes and raise/floodproof those manholes below the base flood elevation.</p>	
29	FLOOD	<p><b>Coordinate with MCDD, SDIC and the Sauvie Island Drainage Improvement Company (SIDIC; collectively, the Districts) when development is proposed in, on or near the levee systems managed by these entities to ensure minimal impact to the levee systems. Land Use, Planning or similar departments will notify the Districts of development that may impact their flood management systems and give them an opportunity to review the plans for impacts to their systems, per U.S. Army Corps of Engineers standards.</b></p>	Multnomah County, Multnomah County Drainage District, Sandy Drainage Improvement Company, Troutdale
<b>Action Status</b>		<p>Columbia Corridor Drainage Districts have been actively participating in development reviews for construction within the levee prism.</p>	

30	FLOOD	<p>Replace, and potentially increase capacity of, the primary stormwater pumping station for the SDIC within the next three years. The current capacity is 37,000 gallons per minute and serves more than 1,550 acres, eight miles of ditches, the Troutdale Airport and a variety of property owners, including a major shipping logistics center and traded-sector manufacturers. Currently, the Port of Portland’s Troutdale Reynolds Industrial Park (TRIP) has 350 acres of developable land for sale. Future development will increase impervious area in SDIC, greatly increasing the amount of stormwater entering the system. The pump station may need to have a higher capacity for this reason, and appropriate capacity will be explored as part of the project.</p>	Sandy Drainage Improvement Company
<b>Action Status</b>	<p>This project is included as a continuing action in this plan (Columbia Corridor Drainage District action 33), with work to integrate into Capital Improvement Planning since the 2017 plan.</p>		
31	FLOOD	<p>Replace the flow control structure regulating water levels on the TRIP wetland mitigation site within the next year. The current flow control structure insufficiently manages water through two 36-inch culverts placed at different invert elevations. A new flow control structure with an adjustable concrete weir structure and larger diameter culvert with gate valve is needed to properly control the flow of stormwater with greater flexibility to adjust flow in support of flood control in the upstream segment of Salmon Creek and environmental protection.</p>	Sandy Drainage Improvement Company
<b>Action Status</b>	<p>This structure was fully functional by 2019.</p>		
32	LANDSLIDE	<p>Consider new DOGAMI landslide data to identify development and infrastructure at risk. This project will be completed by early 2017. Develop and prioritize mitigation projects based on new data. Incorporate new data into other planning mechanisms, such as comprehensive plans and development codes.</p>	Multnomah County, Troutdale, Wood Village
<b>Action Status</b>	<p>The new DOGAMI landslide risk and vulnerability mapping was incorporated into the risk assessment of this plan, and were used to inform landslide mitigation projects identified in this volume, as well as becoming the basis for updated or future geological hazards zoning overlays.</p>		
33	LANDSLIDE	<p>Develop and adopt standards for managing stormwater in landslide hazard areas in accordance with best management practices.</p>	Multnomah County, Troutdale, Wood Village
<b>Action Status</b>	<p>Actions were modified for Multnomah County and Troutdale – calling for a potential update to the Multnomah County geological hazard overlay (action 20) and for Public Works and the Building Department in Troutdale to improve coordination (action 8) for stormwater management opportunities on private sites. Wood Village determined landslide to be of low risk in this update, and does not have an updated action.</p>		
34	LANDSLIDE	<p>Use new landslide hazard information, available from DOGAMI in early 2017, to examine road and utility maintenance practices.</p>	Multnomah County, Troutdale, Wood Village



<b>Action Status</b>		New data has been used to inform the ongoing project to update regional Emergency Transportation Routes. Mitigation strategies for maintenance practices are not described in this plan update, but local and state roads agencies are using the revised mapping in their emergency and capital investment planning.	
<b>35</b>	<b>SEVERE WEATHER</b>	<b>Encourage retrofits that make mobile homes safer in high winds.</b>	Multnomah County, Troutdale, Wood Village
<b>Action Status</b>		This action was maintain as an ongoing need in Wood Village, which continues to have a very high proportion of mobile homes in the total of its housing units.	
<b>36</b>	<b>VOLCANO</b>	<b>Explore the feasibility of limiting critical facilities and/or high-density facilities in the lahar zone (e.g., Pierce County, Washington), and if disclosure of lahar hazard can be included in the permitting processes. (e.g., Orting, Washington).</b>	Troutdale
<b>Action Status</b>		Modified into Troutdale action 10, which explores disclosure of lahar zones during new development permitting.	
<b>37</b>	<b>WILDFIRE</b>	<b>Update the Community Wildfire Protection Plan (CWPP). Integrate the CWPP into the next NHMP update.</b>	Multnomah County
<b>Action Status</b>		The update to the CWPP was in final stages of completion at the same time as this update. The CWPP is similar to the wildfire chapter in this volume, but with more depth. Actions in this updated NHMP refer to the CWPP for wildfire and wildfire smoke mitigation strategies.	
<b>38</b>	<b>WILDFIRE</b>	<b>Provide educational materials, presentations and demonstration projects on defensible space and wildfire mitigation techniques to communities at risk.</b>	Troutdale
<b>Action Status</b>		A number of mitigation strategies relating to community engagement and resilience building are included in the revised CWPP, which is referred to by Troutdale action 12 in this plan. The Troutdale Planning Department has worked on educational materials for residents.	
<b>39</b>	<b>WILDFIRE</b>	<b>Develop and maintain a prioritized list of potential fuels-reduction projects (i.e., combustible materials) in high-risk areas, including fuel reduction prescriptions and cost estimates. Conduct outreach to community/property owners for priority projects to get buy-in for reduction projects. Seek funding for priority projects with community support.</b>	Troutdale

<b>Action Status</b>		A number of mitigation strategies relating to fuels reduction are included in the revised CWPP, which is referred to by Troutdale action 12 in this plan.	
<b>40</b>	<b>WILDFIRE</b>	<b>Promote fire-safe construction practices for existing and new construction in high-risk areas.</b>	Multnomah County, Troutdale
<b>Action Status</b>		A number of mitigation strategies relating to reducing structural ignitability are included in the revised CWPP, which is referred to by Troutdale action 12 and Multnomah County action 25 in this plan.	
<b>41</b>	<b>WILDFIRE</b>	<b>Consider regulations that require fire-safe construction in high-risk areas using Wildland Urban Interface (WUI) overlays.</b>	Multnomah County
<b>Action Status</b>		A consideration of a revised wildfire overlay is an action identified by Multnomah County Land Use in the revision to the CWPP, which is used as a mitigation action reference under Multnomah County action 25 in this plan.	
<b>42</b>	<b>WILDFIRE</b>	<b>Use best available data to consider impacts of wildfire risk when developing policy.</b>	Multnomah County
<b>Action Status</b>		Best available data for wildfire has been updated in the risk assessment for this plan, and for the update to the CWPP.	

### Other Mitigation Actions

- The following nine actions were considered separate from the first 42, and were not aligned to jurisdictions. These actions were intended to be reviewed during the post-adoption period of the 2017 plan and monitored in relation to changing priorities. Several of these actions have been used as the foundation of actions in the 2023 update, especially due to the higher-profile mitigation needs around Severe Weather.

43	ALL HAZARDS	<p><b>Assess resources needed for plan implementation and develop capacity options for consideration by participating jurisdictions to pool resources. Develop a cross-jurisdictional team to work on analysis, stakeholder coordination and grant writing. Partner with state, regional and academic organizations to coordinate projects related to risk analysis and reduction. Seek opportunities to coordinate planning processes of related plans with similar update cycles, e.g., NHMP, CWPP, Climate Action Plan.</b></p>
	<p><b>Action Status</b> Coordination with other planning processes has been increased, and more capacity is now available at the state level to support mitigation grants. A cross-jurisdictional implementation team has not been formed.</p>	
44	ALL HAZARDS	<p><b>Communicate with utility agencies about NHMP actions and priorities, and encourage integration into their planning.</b></p>
	<p><b>Action Status</b> Power utilities operating within Multnomah County have become more involved in coordinated hazard mitigation planning, especially for wildfire, where they were part of the planning team for the update to the Community Wildfire Protection Plan.</p>	
45	EARTHQUAKE	<p><b>Determine a practical method to track existing public buildings that have had seismic upgrades, and to what degree. This information can be included in future risk assessments to provide more accuracy. The public also would benefit from knowing the seismic status of buildings they occupy or visit. Include seismic data for schools, as available. The Portland Public School District will be developing a stand-alone NHMP.</b></p>
	<p><b>Action Status</b> The City of Portland developed a program to identify buildings with unreinforced masonry, but it proved to be controversial. This action has not been developed by participating members of this plan, apart from ongoing improvements in seismic stability at public buildings and continuing awareness of buildings at risk.</p>	
46	FLOOD	<p><b>Seek funding to develop future conditions modeling to inform comprehensive planning in floodplain areas.</b></p>
	<p><b>Action Status</b> Upgraded floodplain modeling has not been a priority since the 2017 plan, due to the increased prominence of other hazards.</p>	
47	FLOOD	<p><b>Identify target areas for flood mitigation projects. Are there any high-risk/repetitive risk problem areas that should be studied in more detail? Are there specific mitigation projects that should be developed and for which grants should be pursued, e.g., land acquisition, home elevation, business flood-proofing, floodplain restoration, stormwater infrastructure. Consider if there are areas at risk to multiple hazards that could be targeted for increased cost benefit, e.g., flood + landslide + liquefaction + lahar.</b></p>

<b>Action Status</b>	New flood maps were issued for part of Multnomah County in 2019. Flooding in the participating communities was limited since the last version of this plan, except in areas managed by the Columbia Corridor Drainage Districts.	
<b>48</b>	<b>SEVERE WEATHER</b>	<b>Collaborate with the Climate Action Plan Committee and City of Portland to decrease the urban heat island effect, especially in areas with populations most vulnerable to heat, through strategies such as revegetation, tree preservation planting and maintenance, depaving and porous pavement, green infrastructure such as bioswales and ecoroofs, and site development performance standards.</b>
<b>Action Status</b>	Mitigation strategies for urban heat were much more heavily prioritized in this update. The City of Gresham has been awarded a grant to plant 50 trees in the Rockwood neighborhood, using this 2017 action as a basis for action.	
<b>49</b>	<b>SEVERE WEATHER</b>	<b>Use new guidance on planning drought-ready communities to develop a focused project on drought mitigation planning and outreach.</b>
<b>Action Status</b>	Drought was not elevated as a priority hazard in this update because of the resilience of local water systems in most of the county.	
<b>50</b>	<b>SEVERE WEATHER</b>	<b>Determine what actions are needed to incorporate emergency management criteria into normal maintenance practices to reduce power disruptions from severe weather.</b>
<b>Action Status</b>	Long-term power loss was heightened In this update’s risk analysis, due to increases in winter storms and preventative power shutoffs due to wildfire risk. Mitigation strategy is now focused on ensuring care to those most harmed due to use of powered medical equipment or refrigerated medications.	
<b>51</b>	<b>WILDFIRE</b>	<b>Work with local fire agencies to (1) integrate new local wildfire data with the regional data in the West-wide Wildfire Risk Assessment for the Planning Area, then (2) update the Wildland Urban Interface (WUI) areas within the Planning Area as needed. Once WUI areas are updated, develop a strategy for tracking vulnerable properties and identifying appropriate mitigation strategies. Prioritize properties with fire response access limitations.</b>
<b>Action Status</b>	Revised wildfire risk data from the US Forest Service and Oregon Department of Forestry has superseded the previous risk data. WUI risk mapping is continuing as part of state legislation reflecting heightened wildfire risk, and participating Fire Districts will evaluate that data when it is finalized and update the countywide CWPP with revised strategies as applicable.	