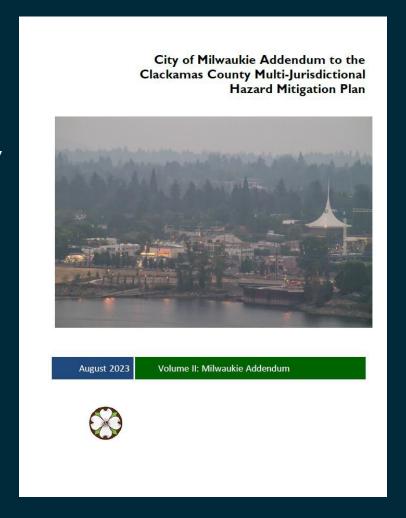


Natural Hazard Mitigation Plan Update

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Natural Hazard Mitigation Plan

- Federally mandated document describing ten natural hazards
- Updated every five years with Clackamas County
- Allows Milwaukie to reflect on vulnerabilities
 - Also essential for FEMA grants



Mission and Goals

Mission

Enhance county resiliency and capacity to address natural hazards by promoting sound public policy and effective mitigation strategies designed to equitably reduce risk and impacts on community members, community lifelines, historic and cultural resources, property, and ecological systems.

Goals

- Protect Life and Property
- Enhance Natural Systems
- Augment Emergency Services

- Encourage Partnerships for Implementation
- Promote Public Awareness
- Advance Equity and Inclusion in Mitigation Planning



Understanding Risk

Figure MA-I Understanding Risk **Understanding Risk** DISASTER RESILIENCE Vulnerable System Natural Hazard Potential Catastrophic Exposure, Sensitivity and Chronic Physical Events Risk and Resilience of: Past Recurrence Intervals · Population of Future Probability Economic Generation Speed of Onset Built Environment Disaster Academic and Research Functions Magnitude · Duration Cultural Assets Spatial Extent Infrastructure Ability, Resources and Willingness to: · Mitigate · Respond · Prepare · Recover Source: USGS- Oregon Partnership for Disaster Resilience Research Collaboration, 2006

Hazard Vulnerability Analysis Matrix

Hazard	History	Vulnerability	Maximum Threat	Probability	Total Threat Score	Hazard Rank	Hazard Tiers
Extreme Heat Event	16	50	90	70	226	1	Тор
Wildfire (WUI)	16	45	90	70	221	2	
Flood - Riverine	10	30	80	70	190	3	
Earthquake - Cascadia (3-5min)	2	50	100	35	187	4	Middle
Earthquake - Crustal (1 min)	2	40	100	42	184	5	
Winter Storm	16	20	90	56	182	6	
Drought	16	20	70	70	176	7	
Windstorm	8	25	70	56	159	8	
Landslide/Debris Flow	12	15	60	56	143	9	Bottom
Volcano	2	15	50	7	74	10	

Action Items

Multi-Hazard Action Items

- 1. Coordinate with Clackamas County, OEM, the American Red Cross, and other relevant agencies to identify shelter facilities within Milwaukie.
- 2. Increase outreach and education for hazard awareness and natural disaster preparedness, especially for low-income, elderly, non-English speaking, and other vulnerable populations.
- 3. Maintain and enhance strategies for debris management for all hazards.
- 4. Improve and obtain resources and equipment essential for responding to and recovering from disasters.
- 5. Coordinate natural hazard related climate change action items through the Milwaukie Community Climate Action Plan.





HUGE LAVE-IN on U.S. 1962 near Washington Greet in Missouline early Transforty available of the state of exploser of exploser of exploser of exploser of exploser of Every Ciliford Norville Jones, about 46, told police.

Action Items Continued

Flood Action Item

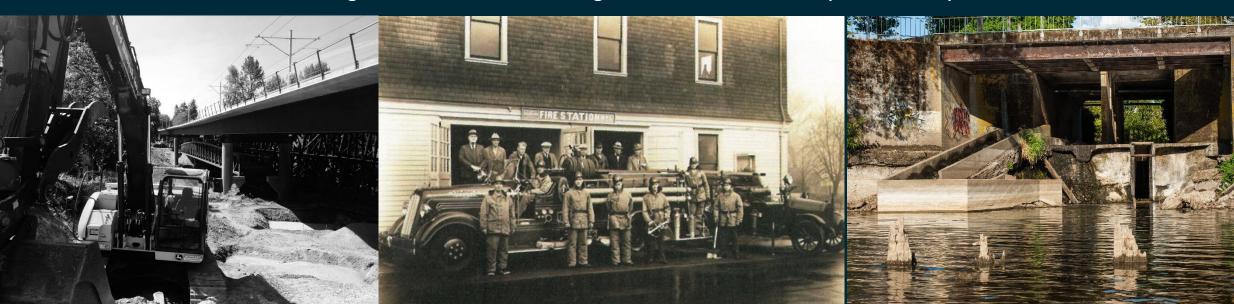
Evaluate alternatives for reducing the flooding hazard for properties along Kellogg Creek, Johnson Creek,
 Mount Scott Creek area, and the Willamette River.

Severe Weather Action Item

 Bury and protect vulnerable, critical infrastructure, such as power lines, to lessen potential failures during severe weather.

Wildfire Action Item

• Coordinate wildfire mitigation action items through the Clackamas County Community Wildfire Protection Plan.



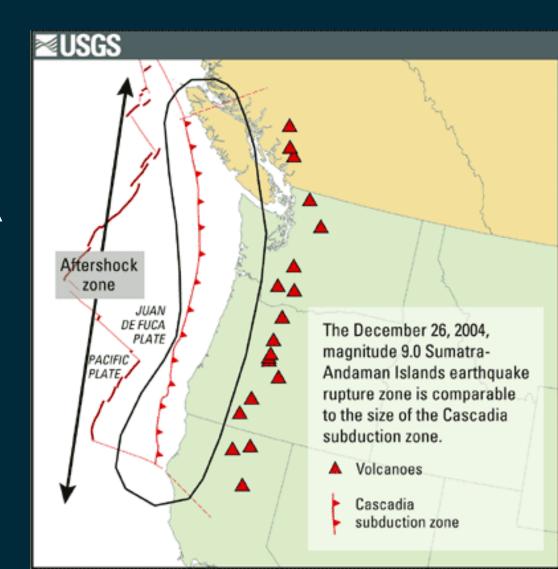
Next Steps

August: Community feedback

September: NHMP submitted to county

October-January: County, OEM, and FEMA reviews

February: Targeted adoption date





Questions & Comments

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