Appendix C: City of Milwaukie

Addendum to the Clackamas County Natural Hazards Mitigation Plan 2012 Amendments and Update

The Oregon Partnership for Disaster Resilience prepared this Appendix to the City of Milwaukie Addendum to the Clackamas County Natural Hazard Mitigation Plan (Milwaukie Addendum) as part of the 2011-12 update to the Clackamas County Natural Hazard Mitigation Plan. Upon local adoption, the appendix will become part of the Milwaukie Addendum and will ensure that the City of Milwaukie maintains FEMA Pre-Disaster Mitigation Program eligibility as well as compliance with the Clackamas County NHMP.

This appendix is organized according to the sections outlined in the Milwaukie Addendum. A description of each section is presented below with proposed changes and updates following each.

Section 1: Planning Process

The planning process section of the Milwaukie Addendum describes the activities used by the steering committee and community to develop the plan. Updates to the Planning Process section are as follows:

On Page 7, following Section 1.2 "Development of the 2009 Milwaukie Natural Hazards Mitigation Plan Addendum," insert the following section:

1.3 2012 Addendum Update

In accordance with the county's Natural Hazards Mitigation Plan update, the City of Milwaukie participated in the update of their addendum. By doing so, Milwaukie will now be aligned with the county, and will update their NHMP in five years.

2012 Committee members included:

- Laura Comstock, Clackamas County Emergency Management/RARE
- Tom Larsen, Milwaukie Building Official
- Willie Miller, Milwaukie Facilities Maintenance Coordinator
- Gregg Ramirez, Clackamas Fire District #1 Emergency Manager
- Dave Rash, Milwaukie Police Captain
- Kate Rosson, Milwaukie GIS Coordinator
- Jay Wilson, Clackamas County Emergency Management

2012 Planning Process

The RARE Participant and Clackamas County Emergency Management developed and facilitated one plan update meeting with the Hazard Mitigation Advisory Committee on May 31, 2012. Please see Appendix A for the meeting agenda and minutes.

NHMP Update Meeting - May 31, 2012: The participant worked with the city lead to convene the steering committee and meet to review and update the city's Natural Hazards Mitigation Plan Addendum. Because the county is in the process of updating their NHMP, each of the cities were required to update their addendums, regardless of when their plan was last updated or developed. As part of this meeting, the steering committee reviewed the county's updated hazard assessment and made necessary changes to their hazard assessment, if necessary. The committee also reviewed their list of community assets to determine if any new additions or changes needed to be made. The committee also reported on progress made to the action items listed in the current NHMP. The committee reviewed the mitigation strategy and plan implementation and maintenance pieces and made changes if necessary.

On Page 9, first sentence following the "Convener" subsection, delete sentence one and replace with the following sentence:

Milwaukie's Public Works Operations Department will serve as the 'convener' for future HMAC meetings.

Milwaukie's Police Captain will serve as the 'convener' for future HMAC meetings.

On Page 9, second paragraph following the "Plan Maintenance" subsection, delete the entire paragraph and replace with the following two paragraphs:

Milwaukie's Addendum to the Clackamas County Natural Hazards Mitigation Plan will be evaluated on a quarterly basis to determine the effectiveness of programs, and to reflect changes in land development or programs that may affect mitigation priorities. The convener will be responsible for contacting HMAC members and organizing the quarterly meetings. HMAC members will be responsible for monitoring and evaluation the progress of the mitigation strategies in the addendum.

Milwaukie's Addendum to the Clackamas County Natural Hazards Mitigation Plan will be evaluated on an annual basis to determine the effectiveness of programs, and to reflect changes in land development or programs that may affect mitigation priorities. The convener will be responsible for contacting HMAC members and organizing the annual meeting. HMAC members will be responsible for monitoring and evaluation the progress of the mitigation strategies in the addendum.

The convener, or city lead designee, will also be responsible for meeting annually with the county Hazard Mitigation Coordinator. This meeting will provide a chance for each of the city leads to meet together and discuss updates and progress with the Hazard Mitigation Coordinator. The convener will report back to the HMAC with information gathered. The Coordinator will be responsible for setting up the meeting, and providing the city leads with updates on new studies or potential funding opportunities for mitigation projects.

On Page 10, second paragraph following the "Formal Review Process" subsection, delete the first sentence and replace with the following:

Although the addendum will be revisited and potentially updated on a quarterly basis, the HMAC will be required to formally update the addendum every five years.

Although the addendum will be revisited and potentially updated on an annual basis, the HMAC will be required to formally update the addendum every five years.

On Page 10, second paragraph following the "Formal Review Process" subsection, delete the last sentence and replace with the following:

The next addendum update is scheduled to occur in September 2012.

The next addendum update is scheduled to occur in September 2017.

On Page 10, third paragraph following the "Formal Review Process" subsection, delete the first sentence and replace with the following:

The Milwaukie HMAC should begin the five year update process in the fall of 2011 to allow enough time for the review and update of the entire addendum by September 2012.

The Milwaukie HMAC should begin the five-year update process in the fall of 2016 to allow enough time for the review and update of the entire addendum by September 2017.

On Page 11, second paragraph under the "Continued Public Involvement" subsection, delete the first sentence and insert the following:

During the 2009 addendum update process, OPDR's website (www.OregonShowcase.org) served as an outreach tool to the community.

During the 2012 addendum update process, OPDR's website (www.csc.uoregon.edu/opdr) served as an outreach tool to the community.

On Page 12, last paragraph under the "Continued Public Involvement" subsection, delete the second sentence and insert the following:

The final adopted and approved addendum will be posted on the ciyt's website at www.cityofmilwaukie.or/publicsafety, on the county's emergency management website at http://www.clackamas.us/emergency/publications.html, and on the University of Oregon Libraries' Scholar's Bank Digital Archive.

The final adopted and approved addendum will be posted on the following websites: the city of Milwaukie, Clackamas County Emergency Management, Clackamas Fire District #1, and the University of Oregon's Libraries' Scholar's Bank Digital Archive.

Section 2: Community Profile

The community profile section of the Milwaukie Addendum describes a variety of community characteristics specific to the City of Milwaukie. Given the limited

amount of time that has elapsed since the community profile was developed, no changes are required or proposed.

Section 3: Hazard Assessment

The hazard assessment section of the Milwaukie Addendum provides information on the location of hazard locations, and an analysis of risk to life, property, and the environment that may result from natural hazard events. Based on new information compiled during the Clackamas County NHMP update process, updates to the Milwaukie Addendum include the following:

On Page 27, list of city hospitals under section "Community Assets: Vulnerability Assessment" delete the following bullet and replace with the following:

- Milwaukie Providence Hospital
- Providence Milwaukie Hospital

On Page 28, list of schools under section "Community Assets: Vulnerability Assessment" remove the following bullet and replace it under subsection, "Potential Shelter Sites:

- Hector Campbell Elementary
- Hector Campbell Elementary

On Page 28, list of schools under subsection "Potential Shelter Sites" add the following bullet:

• Wichita Community Center

On Page 29, add the following subsection "Vulnerable Populations," and insert the following:

- Royal Marc Retirement Residence
- Milwaukie Convalescent Center
- Hillside Manor

On Page 30, add the following subsection "Hazardous Materials," and insert the following:

- Precision Cast Parts
- North Industrial Road
- *International Way*

Section 4: Natural Hazards

The Natural Hazards section of the Milwaukie Addendum describes the types, causes, characteristics and relative risk posed by each individual natural hazard for the city of Milwaukie. Based on new information compiled during the Clackamas County NHMP update process, updates to the Milwaukie Addendum include the following:

On Page 34, insert the following introductory paragraph:

The Natural Hazards section of the Milwaukie Addendum describes the types, causes, characteristics and relative risk posed by each individual natural hazard for the city of Milwaukie. Based on new information compiled during the NHMP update process, an updated list of the 2012 action items for the city of Milwaukie are included in Appendix A: Planning & Public Process.

On Page 38, under "Section 4.1.5 Flood Mitigation Actions," delete the current timeline and insert the following:

Timeline: 3-5 years

Timeline: Ongoing

On Page 45, Paragraph 3 of the "Severe Windstorm Profile" subsection, delete the following two sentences and insert the following:

Milwaukie's HMAC estimates that the probability of severe windstorms occurring is 'high,' meaning one incident is likely within a 10 to 35 year period. This estimate is higher than the county's 'moderate' probability estimate..

Milwaukie's HMAC estimates that the probability of severe windstorms occurring is 'Moderate,' meaning one incident is likely within a 35 to 75 year period. This estimate is in accordance with the county's estimate.

On Page 45, following the "Severe Windstorm Profile" subsection, insert the following paragraph:

Extreme heat has a very low threat in Milwaukie. The HMAC estimates the probability for future extreme heat events is 'low,' meaning one incident is likely within a 75 to 100 year period. This estimate is in accordance with the county's 'low' rating.

On Page 45, Paragraph 2 of the "Vulnerability Assessment" subsection, delete the first paragraph and insert the following:

The HMAC estimates the vulnerability to severe storms is 'high,' meaning more than 10% of the population and assets would be affected. This is higher than the county's 'moderate' rating because history has shown that most of Milwaukie's population and community assets are affected in severe storm events.

The HMAC estimates the vulnerability to winter storms is 'moderate,' meaning 1 to 10% of the population will be affected. This rating is in accordance with the county's rating. The HMAC estimates the vulnerability to windstorms is 'low,' meaning less than 1% of the population will be affected. This rating is also in accordance with the county's vulnerability to windstorms. The vulnerability estimate of future extreme heat events is 'moderate,' meaning between 1 and 10% of the population and assets would be affected in a major event. This estimate is in accordance with the county's rating.

On Page 46, following the 'Severe Storm Mitigation Actions" section, add the following to the "Status" section:

Since 2009, a FEMA grant was used to evaluate the trees along particular routes.

On Page 49, Paragraph 2 of the "Wildfire Profile" subsection, delete the second sentence and replace with:

Milwaukie's HMAC estimates that the probability of wildfires occurring is 'high,' meaning one incident is likely within a 10 to 35 year period. This estimate is higher than the county's 'moderate' probability estimate because Milwaukie has not had a large fire in recent years, thus allowing fuel load to build.

Milwaukie's HMAC estimates that the probability of wildfires occurring is 'low,' meaning one incident is likely within 75 to 100 years. This estimate is lower than the county's probability of 'moderate' because Milwaukie has not had a large fire in recent years, thus allowing fuel load to build.

On Page 53, Paragraph 3 of the "Earthquake Profile" subsection, delete the second sentence and replace with:

Milwaukie's HMAC estimates that the probability of earthquakes occurring is 'high,' meaning one incident is likely within a 10 to 35 year period.

Milwaukie's HMAC estimates that the probability of earthquakes occurring is 'moderate,' meaning one incident is likely within a 35 to 75 year period.

On Page 58, Paragraph 2 of the "Volcanic Eruption Profile" subsection, insert the following sentence:

The vulnerability of volcanic eruptions in Milwaukie is 'moderate' meaning between 1% and 10% will be affected. This is in agreement with the county's rating.

On Page 58, following the "Volcano" subsection, insert the following new "Drought" subsection:

Drought Profile

The Clackamas County Multi-Jurisdictional Natural Hazards Mitigation Plan adequately describes the causes and characteristics, history, location, extent and impacts of drought affecting the city of Milwaukie. Descriptions of the drought hazard can be found on pages DR-1 to DR-6 of the 2012 Clackamas County Natural Hazards Mitigation Plan update.

The probability of drought in Milwaukie was determined using scientific data, historical occurrences, and local knowledge. The HMAC estimates the probability of drought to be 'moderate' meaning one incident is likely within a 35 to 75 year period. This is in accordance with the county's rating. The HMAC estimates that Milwaukie has a 'low' vulnerability to drought conditions, meaning less than 1% of the population could be affected in a large-scale regional event. This is in agreement with the county's 'low' rating.

Drought Mitigation Activities

The existing drought hazard mitigation activities are conducted at the county, regional, state, and federal levels and are described in the Clackamas County Natural Hazards Mitigation Plan. As such, the information will not be repeated here.

Drought Mitigation Action Items

The drought mitigation actions provide direction on specific activities that organizations and residents in Milwaukie can take to reduce risk and prevent loss from Drought events. Each mitigation action is followed by ideas for implementation, which can be used by the steering committee and local decision makers in pursuing strategies for implementation.

DT #1: Develop public brochures to raise awareness about drought hazards and mitigation actions residents can take to reduce the impact of drought.

Ideas for Implementation:

- Meet monthly with neighborhood associations to raise awareness and explain the threat of drought.
- Write articles in the city newsletter, The Pilot, explaining drought hazards and mitigation activities.
- Utilize the website to post information regarding drought.
- Have a booth at the Farmer's Market from May-November, providing information to the public about the dangers of drought and mitigation activities that residents can take.

Coordinating Organization: Neighborhood Services

Timeline: Ongoing

Plan Goals Addressed: Protect Life and Property, Encourage Partnerships and Implementation, Promote Public Awareness

Status: Added during the 2012 update. Yet to be completed.

On Page 59, following the "Multi-Hazard Mitigation Actions" section, add the following to the "Status" section for action item, MH#1:

Since 2009, the Clackamas Watershed Council has worked with Milwaukie to plant trees and native species along Johnson Creek. The city has two Code Compliance Officers who enforce the city's codes regarding overgrown vegetation per the Milwaukie Municipal Code, Section 8.04.110 Weeds and Noxious Growth – Death or decaying trees or tree limbs.

On Page 59, following the "Multi-Hazard Mitigation Actions" section, remove the current coordinating organization and add the following for action item, MH#2:

Clackamas Fire District #1 Emergency Manager

CERT Volunteer

On Page 59, following the "Multi-Hazard Mitigation Actions" section, add the following to the "Status" section for action item, MH#2:

Since 2009, a CERT Volunteer has worked to identify facilities that are adequate shelter sites for Milwaukie residents. There are currently two facilities in Milwaukie that are Red Cross certified and trained shelter facilities, The American Legion and Eagles Wings Ministries.

On Page 60, following the "Multi-Hazard Mitigation Actions" section, remove the first two bullets under, "Ideas for Implementation" and replace with:

- Address 800MHz communication deficiencies;
- Work with the Oregon OEM office of emergency management and the UASI communications working group to resolve 800 MHz communication inoperability
- Address 800MHz communication deficiencies, if any arise;
- Work with the Oregon OEM office of emergency management and the Regional Disaster Preparedness Organization (RDPO) working group to resolve 800 MHz communication inoperability
- Inform residents about the County's Emergency Notification System (CCENS)
- Work to tie-in or interface with both Code Red and CCENS to help with redundancy

On Page 60, following the "Multi-Hazard Mitigation Actions" section, add the following to the "Status" section for action item, MH#4:

Since 2009, the city has engaged in a broad effort to educate the public about Emergency Preparedness. A city webpage was dedicated to the topic, as well as efforts to coordinate a monthly speaker's series on emergency preparation with topics ranging from preparing for earthquakes to community resiliency. Citizens and neighborhood association members are encouraged to become trained through CERT. Two shelters have become Red Cross certified, The American Legion and Eagles Wings Ministries. Emergency Preparedness tips are sent through the city's newsletter, The Pilot, which goes to every address in the city of Milwaukie. Emergency Preparedness tips are provided at each of the seven neighborhood associate meetings.

On Page 61, following the "Multi-Hazard Mitigation Actions" section, delete the MH#5 and insert the following:

MH #5: Promote CERT program activity in the area and recruit new members for training.

MH #5: Maintain and promote CERT program activity in the area and recruit new members for training.

On Page 61, following the "Multi-Hazard Mitigation Actions" section, add the following to the "Status" section for action item, MH#5:

As of 2012, there are currently 20 residents who are trained as CERT responders. The American Legion is currently completing training which will double the current number.

On Page 61, following the "Multi-Hazard Mitigation Actions" section, delete the MH#6 and insert the following:

MH #6: Develop and enhance strategies for debris management for all hazards.

MH #6: Maintain and enhance strategies for regional debris management for all hazards.

On Page 61, following the "Multi-Hazard Mitigation Actions" section, remove the following from the "Ideas for Implementation" section for action item, MH#6:

Work with regional partners to develop a debris removal plan.

On Page 61, following the "Multi-Hazard Mitigation Actions" section, add the following to the "Status" section for action item, MH#6:

As of 2012, the debris management plan was just completed.

On Page 61, following the "Multi-Hazard Mitigation Actions" section, delete the label LT-MH#1 and replace with MH#7, and add the following to the "Status" section for action item, MH#7:

Since 2009, this was completed for the entire region as part of an old UASI (now RDPO) plan.

On Page 62, following the "Multi-Hazard Mitigation Actions" section, delete the label LT-MH#2 and replace with MH#8, and add the following to the "Ideas for Implementation" section for action item, MH#8:

• Incorporated new information obtained by the 2012 DOGAMI LIDAR Quadrant Mapping Project.

On Page 62, following the "Multi-Hazard Mitigation Actions" section, delete the label LT-MH#3 and replace with MH#9.

Section 5: Mitigation Planning Priority System

The Mitigation Planning Priority Section of the Milwaukie Addendum describes the project review and prioritization process for the action items outlined for each hazard in Section 4: Natural Hazards. Given the limited amount of time that has elapsed since the mitigation planning project prioritization was developed, no changes are required or proposed.

