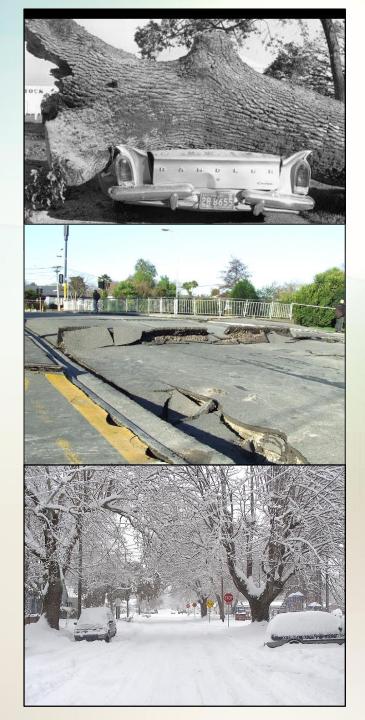
YAMHILL COUNTY NATURAL HAZARD MITIGATION PLAN UPDATE

Brian Young Yamhill County Emergency Manager

August 28, 2019



Background

The Federal Emergency Management Agency (FEMA) requires that counties and cities update their NHMP every five (5) years to be eligible for Hazard Mitigation Assistance funds (44 CFR 201). Yamhill County last updated its FEMA compliant Natural Hazard Mitigation Plan on November 5 of 2014, and thus must have a FEMA compliant NHMP approved by FEMA and adopted locally by November 4 of 2019 to remain eligible for Hazard Mitigation Assistance funding. Having an updated NHMP will allow Yamhill County to continue its efforts to reduce risks to hazards through proactive mitigation planning, projects and policy.

Project

The purpose of this project is to:

- (1) update the existing Yamhill County NHMP,
- (2) improve the risk assessment section through updating the county and city hazards and vulnerabilities,
- (3) streamline the plan for better usability where possible. When implemented, the benefits of an updated NHMP include reduced loss of life and property and decreased long-term economic losses due to reduced recovery and reconstruction costs.

By updating the NHMP, Yamhill County will not only remain eligible for FEMA Hazard Mitigation Assistance funds but will also be a more secure place for industry, citizens, business, and beyond through focused attention on local mitigation actions and investments.

Partnerships

One of the most important aspects of creating a countywide Natural Hazards Mitigation Update is receiving and interpreting data from the local municipalities to accurately represent the unique needs and intricacies of each city. The 2019 Yamhill County NHMP will work closely with the cities to address vulnerable populations, critical communities, public health, geologic risks, climate-specific challenges, critical facilities, and other highly vulnerable entities. This will be an ongoing effort throughout the NHMP update process that will involve multiple community workshops, outreach efforts, and city-specific data analysis.

Participating Cities from 2014:

Amity, Dayton, Dundee, Lafayette, Newberg, Sheridan, Willamina, & Yamhill Cities invited to participate in this update:

McMinnville and Carlton

Special districts invited to participate:

Fire Districts, Soil and Water Conservation Districts, Sewer and Water Districts, utilities



Proposed Yamhill County 2019 Overall Hazard Vulnerability Assessment

HVA: 2017- RANK ORDER

Yamhill County HAZARD RISK ASSESSMENT MODEL		OEM Threat Analysis													
		History			Vulnerability			Maximum Threat			Probability				
Threat Event / Hazard	Thread Event/Hazard	Severity	Weight Factor	Subtotal	Severity	Weight Factor	Subtotal	Sevenity	Weight Factor	Subtotal	Severity	Weight Factor	Subtotal	Total Threat Score	2017 Rank
Natural Hazards	Earthquake - Cascadia (3-5min)	9	2	18	9	5	45	10	10	100	10.	Z	70	233	1
	Rood - Riverne	9	2	18	9	5	45	9		90	9	*	63	216	2
	Winter Storm	9	2	18	8	5	40	8	10	80	8	Ż	56	194	3
	Windstorm	9	2	18	- 5	5	25	7	10	70	8	7	56	169	4
	Drought	4	2	8	5	5	25	8	10	80	5	7	35	148	5
	Earthquake - Crustal (1 min)	4	2	8	1	5	5	7	10	70	7	7	49	132	6
	Landslide/Debris Flow	8	2	16	3	5	15	3	10	30	8	7	56	117	7
	Wildfire	4	2	8	3	5	15	7	10	70	3	7	21	114	8
	Volcano		2	0		5	0		10	0		7	0	0	

DROUGHT

2017 Hazard Analysis

Probability: Moderate (2019: High)

Vulnerability: Moderate

Drought Declared 1992 – All State

EARTHQUAKE

2017 Hazard Analysis

Cascadia Subduction Zone
 Probability: High (2019 Moderate)
 Vulnerability: High

Crustal

Probability: Moderate

Vulnerability: Low (Moderate)

FLOOD

2017 Hazard Analysis

Probability: High

Vulnerability: High

FEMA FIRM: March 2, 2010

LANDSLIDE

2017 Hazard Analysis

Probability: High

Vulnerability: Low

VOLCANO

2017 Hazard Analysis

Probability: (Low)

Vulnerability: (Moderate)

WILDFIRE

2017 Hazard Analysis

Probability: Moderate

Vulnerability: Moderate

WINDSTORM

2017 Hazard Analysis

Probability: High

Vulnerability: Moderate

WINTER STORM

2017 Hazard Analysis

Probability: High

Vulnerability: High



Understanding Risk



Natural Hazard

Potential Catastrophic and Chronic Physical Events

- · Past Recurrence Intervals
- Future Probability
- Speed of Onset
- Magnitude
- Duration
- Spatial Extent

Exposure, Sensitivity and Resilience of:

- Population
- · Economic Generation
- Built Environment

Vulnerable System

- Academic and Research Functions
- Cultural Assets
- Infrastructure

Ability, Resources and Willingness to:

- Mitigate Respond
- Prepare Recover

Risk of Oisaster

Source: USGS- Oregon Partnership for Disaster Resilience Research Collaboration, 2006

MITIGATION

- Hazard Mitigation Planning: Act Before Disaster Strikes
- Mitigation: any sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event



 Strategies: Policy Changes, Education and Outreach, Capital Projects

RISK REDUCTION & MITIGATION PAYS!



Natural Hazard Mitigation Saves: 2018 Interim Report



2018 Report Findings:

- A dollar spent on mitigation saves society an average of \$6.00
- Mitigation is sufficiently costeffective to warrant federal funding on an ongoing basis both before disasters and during postdisaster recovery

MITIGATION PLANNING OPPORTUNITIES

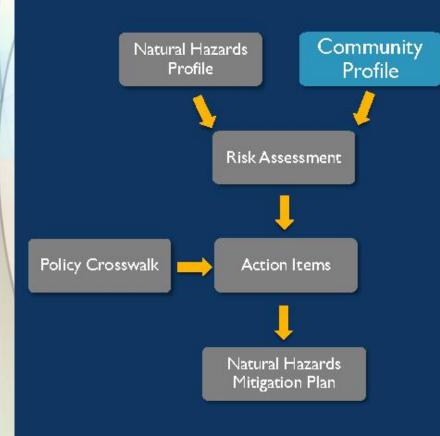


Source: Operon Live



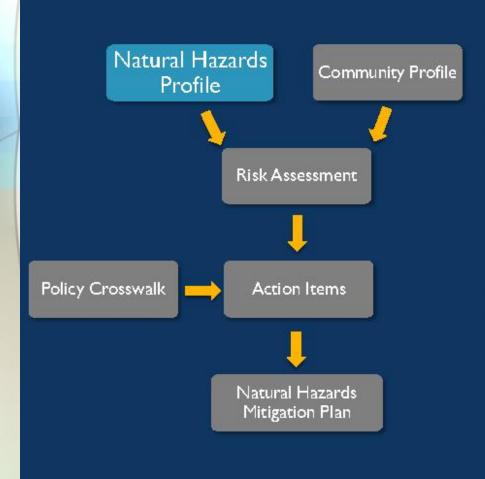
- Awareness of risks, sensitivities, and vulnerabilities
- Reduce hazard impact
- Save lives, property and money
- New community partnerships
- Create more resilient communities
- Mitigation becomes a part of ordinary government business
- Support rapid recovery
- Receive federal funding

STEP I: COMMUNITY PROFILE UPDATE



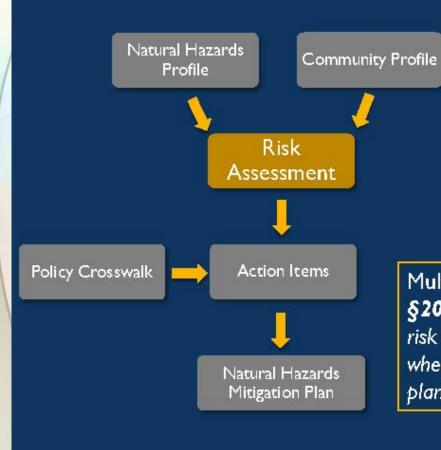
- Local geography
- Climate
- Population characteristics
 - Vulnerable
- Employment
- Economics
- Housing
- Transportation
- Infrastructure
- Cultural resources
- Government structure

STEP 2: NATURAL HAZARDS PROFILE



- Update hazard history
- Review hazard profiles
- Update hazard maps
- Hazard ID Plan Update Requirements
- Description of the hazard
- ID the location
- ID extent of hazard
- Provide information on previous occurrences and probability of future occurrences

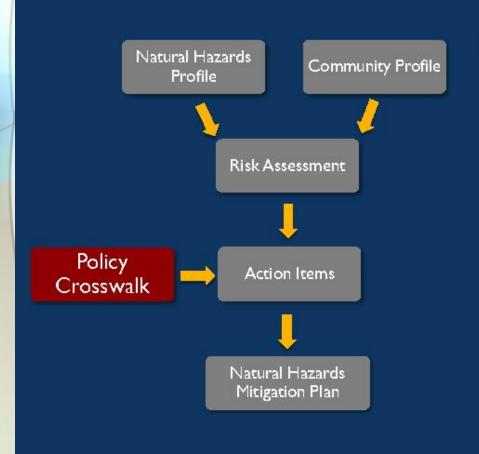
STEP 3: RISK ASSESSMENT



 Risk Assessment: Identifies natural hazards and the community's vulnerability to inform the mitigation strategy

Multi-jurisdictional Risk Assessment - §201.6(c)(2) (iii): For multi-jurisdictional plans, the risk assessment must assess each jurisdiction's risks where they vary from the risks facing the entire planning area.

STEP 4: POLICY CROSSWALK



- Identifies elements of existing plans and policies that may support mitigation strategies
- Example plans:
 - Comprehensive plan
 - Capital improvement plan
 - Community wildfire protection plan
 - Parks and open space plan
 - Floodplain ordinances
 - Emergency operations plan
 - Stormwater mgmt plan

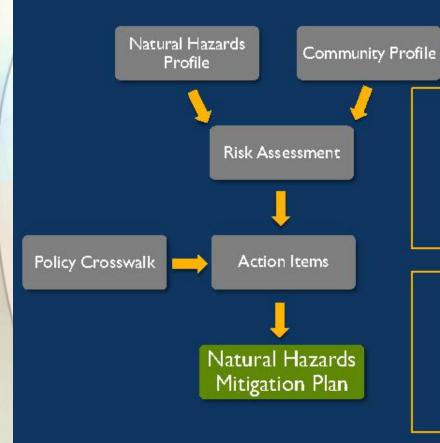
STEP 5: MITIGATION STRATEGY



- Community guide to address vulnerabilities and risks
- Action items

Multi-jurisdictional Mitigation Strategy - §201.6(c)(3) (iv): For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.

STEP 6: UPDATED NHMP



Multi-jurisdictional Participation - §201.6(a)(3) Multi-jurisdictional plans (e.g., watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process

Multi-jurisdictional Plan Adoption - §201.6(c)(5) For multi-jurisdictional plans, each jurisdiction requesting approval of the plan must document that it has been formally adopted.

NHMP CONTENTS

- ♦ Volume I Basic Plan
 - Section I: Introduction
 - Section 2: Risk Assessment
 - Hazard Annexes
 - Section 3: Mitigation Strategies
 - Section 4: Implementation and Maintenance
- Volume II City Addenda
- Volume III Appendices

PLAN MISSION AND GOALS

"To promote public policy and mitigation activities which will enhance the safety to life and property from natural hazards."

Goals:

- Emergency Operations
- Education and Outreach
- Partnership
- Preventive
- Natural Resource Utilization
- Implementation
- Development
- Documentation

Public Outreach

Who is involved?

- Planning Team
- Stakeholders
- Public

Activities:

- Community Events
- Interviews
- News Media
- Presentations to
- Governing bodies
- Questionnaires or
- Surveys
- Roundtables or Forums
- Social Media
- Websites

What has worked in your community in the past? 20

Public Outreach

Community Survey:

- Live for 3-weeks
- Distributed via social media

Survey link: https://bit.ly/2Nwqae7



Thank you for taking the time to complete this survey! The Oregon Partnership for Disaster Resilience at the University of Oregon is working with community leaders in Yamhill County to update their Natural Hazard Mitigation Plan (NHMP).

Natural Hazard Mitigation plans outline community risk to natural hazards and potential actions that can reduce risks to people, property, and the local economy BEFORE the next hazard event (e.g., wildfire, winter storm, flood, earthquake, etc.) strikes.

To review the existing Yamhill County NHMP please click here.

We estimate that this survey should take about 10-15 minutes to complete.

Data from this survey directly informs the natural hazard planning process. Communities in Yamhill County can use this survey data to enhance action item rationale and ideas for implementation. This survey also provides Yamhill County and Cities with a better understanding of desired outreach strategies (sources and formats), a baseline understanding of what people have done to prepare for natural hazards, and desired individual and community strategies for risk reduction.

If you have questions regarding this survey, please click <u>here</u> to contact Michael Howard, with the University of Oregon's Partnership for Disaster Resilience.

Your responses will remain anonymous and will not be linked to any personal information.

Timeline

- Kick- off Meeting July 17, 2019
- Vulnerability Assessment and Action Item Update August 21, 2019
- Action Prioritization and Implementation and Maintenance –
 September 23, 2019
- Draft Plan for Public Review End of September/early October
- Final Plan Submitted to FEMA for Review Mid- to late October/November

Questions

