BACKGROUND

The development of a Comprehensive Community-level Mitigation Strategy is requirement of the Disaster Mitigation Act of 2000 (DMA2K). In order to be in compliance with DMA2K, local jurisdictions are required to develop, approve and maintain a Natural Hazard Mitigation Plan. If a community fails to meet the requirements of DMA2K, they will no longer be eligible to receive federal funds for mitigation projects through FEMA or any other federal agency.

In 2015 and 2016, the City of Bandon participated in the development of the Coos County Natural Hazards Mitigation Plan but did not formally adopted it.

The City Council is being asked to pass Resolution #19-02, recognizing the Coos County Natural Hazard Mitigation Plan and formally adopting it as the official community-level mitigation strategy for the City of Bandon.

Once approved and executed the Resolution will be forwarded to the Oregon Office of Emergency Management and the Federal Emergency Management Agency for their review and final approval.

An excerpt of the Plan, which is quite lengthy, is included with this agenda item. The excerpt is the opening portion of the Plan, which describes the purpose, participants and methodology of the Plan. The Plan can be viewed, in its entirety, through the Coos County Website. Once approved by the City Council we will work with the County to make a copy available through the City of Bandon website as well.

FISCAL IMPACT

N/A

RECOMMENDATION

Motion to approve Resolution #19-05 adopting the Coos County Natural Hazards Mitigation Plan as the official Natural Hazards Mitigation Plan for the City of Bandon.

SUBMITTED BY

Robert J Mawson, City Manager
RESOLUTION NO. 19-05

A RESOLUTION OF THE MAYOR AND CITY COUNCIL OF THE CITY OF BANDON, OREGON, ADOPTING THE CITY OF BANDON REPRESENTATION IN THE UPDATES TO THE COOS COUNTY NATURAL HAZARDS MITIGATION PLAN

Whereas, the City of Bandon recognizes the threat that natural hazards pose to people, property and infrastructure within our community; and

Whereas, undertaking hazard mitigation actions will reduce the potential for harm to people, property and infrastructure from future hazard occurrences; and

Whereas, an adopted Natural Hazards Mitigation Plan is required as a condition of future funding for mitigation projects under multiple FEMA pre- and post-disaster mitigation grant programs; and

Whereas, the City of Bandon has fully participated in the FEMA prescribed mitigation planning process to prepare the Coos County Natural Hazard Mitigation Plan, which has established a comprehensive, coordinated planning process to eliminate or minimize these vulnerabilities; and

Whereas, the City of Bandon has identified natural hazard risks and prioritized a number of proposed actions and programs needed to mitigate the vulnerabilities of the City of Bandon to the impacts of future disasters within the Coos County Natural Hazard Mitigation Plan; and

Whereas, these proposed projects and programs have been incorporated into the Coos County Natural Hazard Mitigation Plan that has been prepared and promulgated for consideration and implementation by the cities of Coos County; and

Whereas, the Oregon Office of Emergency Management and Federal Emergency Management Agency, Region Ten officials have reviewed the Coos County Natural Hazard Mitigation Plan and pre-approved it (dated May 31, 2016) contingent upon this official adoption of the participating governments and entities;

Whereas, the Coos County NHMP is comprised of two volumes: Volume I - Basic Plan and Volume II - Appendices, collectively referred to herein as the NHMP; and

Whereas, the NHMP is in an ongoing cycle of development and revision to improve its effectiveness.

Now, therefore, be it resolved, that the City of Bandon adopts the Coos County Natural Hazards Mitigation Plan as an official plan; and

Be it further resolved, that the City of Bandon will submit this Adoption Resolution to the Oregon Office of Emergency Management and Federal Emergency Management Agency, Region Ten officials to enable final approval of the Coos County Natural Hazards Mitigation Plan for the City of Bandon.
ADOPTED by the City Council and APPROVED by the Mayor of the City of Bandon, this 6th day of May 2019.

Mary Schamehorn, Mayor

ATTEST:

Denise Russell, City Recorder
Hi Michael,

In reply to your invitation below, my interest is in having the following cities gain FEMA approval of their participation in the Coos County NHMP.

Because they fully participated in the NHMP update back in 2016, all that the following two cities need to do is adopt the County NHMP by resolution and submit the signed resolution to me (it could be they did adopt, but did not submit):

Bandon
Lakeside

Let me know if you need sample resolution language.

The situation for Coquille is a bit more complicated (we’ve had that discussion by email and telephone in the relatively recent past).

Myrtle Point’s situation is more like Coquille’s, but we have not discussed it yet.

The following jurisdictions have all received FEMA approval:

Coos Bay
North Bend
Powers
Coos County

Joseph Murray, OMD-OEM

From: Michael Murphy [mailto:mmurphy@co.coos.or.us]
Sent: Monday, March 25, 2019 1:19 PM
To: John Sweet <jsweet@co.coos.or.us>; Bob Main <rmain@co.coos.or.us>; Bret Harris <bret.harris@or.usda.gov>; Brian Cassoday <brian.cassoday@cooscurryelectric.com>; Gabriel Fabrizio <gfabrizio@co.coos.or.us>; Chuck Dufner
Email meeting----does anyone have anything to add and/or discuss concerning the County NHMP?

Michael Murphy, Program Manager
Coos County Emergency Management
Coos County Sheriff's Office
250 N. Baxter
Coquille, Oregon 97423

mmurphy@co.coos.or.us

541-396-7790
cell 541-404-5385
Fax 541-396-1014
Coos County Natural Hazard Mitigation Plan

Coos County and the Cities of:
Bandon, Coos Bay, Lakeside, North Bend and Powers

Photo Credits Gary Halverson, Oregon State Archives

February, 2016

Volume I: Basic Plan

Prepared for:
Coos County Emergency Management

Prepared by:
University of Oregon
Community Service Center
Oregon Partnership for Disaster Resilience

UNIVERSITY OF OREGON
CSC
Community Service Center

O Oregon Partnership for Disaster Resilience
This Natural Hazard Mitigation Plan was prepared by:

CSC
Community Service Center

With support from:

UNIVERSITY OF OREGON
PPPM
Department of Planning, Public Policy and Management
School of Architecture and Allied Arts

Planning grant funding provided by:

FEMA
Federal Emergency Management Agency (FEMA)
Pre-Disaster Mitigation Program
Grant: EMS-2014-PC-0005
Sub-grant Application Reference: PDMC-PL-10-OR-2013-001

Additional Support Provided by:

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Coos County developed this Multi-jurisdictional Natural Hazards Mitigation Plan (NHMP) through a regional partnership funded by the Federal Emergency Management Agency's (FEMA) Pre-Disaster Mitigation (PDM) Competitive Grant Program: EMS-2014-PC-0005, Sub-grant Application Reference: PDMC-PL-10-OR-2013-001. This updated Natural Hazard Mitigation Plan is a collaboration between Coos County and the Cities of Bandon, Coos Bay, Lakeside, North Bend and Powers. The county received support from the Oregon Partnership for Disaster Resilience (OPDR) at the University of Oregon's Community Service Center.

Special thanks to Mike Murphy, Coos County Emergency Manager, for his leadership in convening the committee.

Coos County NHMP Update Steering Committee

Coos County
- Alex Murphy, Coos County Planning
- Carey Palm, Tribal Liaison – Health Security, Preparedness and Response
- Conny Bunnell, Southwestern Oregon Public Safety Association
- Debbie Simon, Coos County Emergency Management
- Debra Woods, CERT Member
- Donald Marr, Coos Health and Wellness
- Fauna Larkin, Coquille Indian Tribe
- Frank Corrales, Jr., Coos-Curry Electric Cooperative Inc.
- JC Williams, Resident
- Jill Rolfe, Coos County Planning
- John Rowe, Coos County Roadmaster
- Linda Spurgeon, Coos-Curry Electric Cooperative Inc.
- Michael Murphy, Coos County Emergency Management
- Preson Phillips, Oregon Parks and Recreation
- Randy McDonald, Coos-Curry Electric Cooperative Inc.
- Todd Tripp, Coquille Indian Tribe

City of Bandon
- Chris Good, City Administrator

City of Coos Bay
- Jim Hossley, Public Works
- Mark Anderson, Fire
City of Lakeside

- Rudy Sheryeh

City of Powers

- Bill Holland, Mayor, PVFD, CERT
- Donna Holland, Resident

City of North Bend

- David Voss, City Planning
- John Wagner, Resident

Community Service Center Team

- Robert Parker, Director
- Josh Bruce, Program Manager
- Michael Howard, Assistant Program Manager
- Julie Foster, Grant’s Administrator
- Emily Kettel, Graduate Research Fellow
- Michael DeHart, Project Assistant
- Henry Hearly, Project Assistant

Additional Thanks:

To the Department of Geology and Mineral Industries for assistance with hazard data compilation and preliminary risk assessment data; the Department of Land Conservation and Development staff in the hazards, coastal and Risk Map programs for flood data, mapping and process support; to the Oregon Military Department Office of Emergency Management for grant administration and process support. And to the students in PPPM 407-507 who contributed to the city addenda.
About the Community Service Center

The Community Service Center (CSC), a research center affiliated with the Department of Planning, Public Policy, and Management at the University of Oregon, is an interdisciplinary organization that assists Oregon communities by providing planning and technical assistance to help solve local issues and improve the quality of life for Oregon residents. The role of the CSC is to link the skills, expertise, and innovation of higher education with the transportation, economic development, and environmental needs of communities and regions in the State of Oregon, thereby providing service to Oregon and learning opportunities to the students involved.

About the Oregon Partnership for Disaster Resilience

The Oregon Partnership for Disaster Resilience (OPDR) is a coalition of public, private, and professional organizations working collectively toward the mission of creating a disaster-resilient and sustainable state. Developed and coordinated by the Community Service Center at the University of Oregon, the OPDR employs a service-learning model to increase community capacity and enhance disaster safety and resilience statewide.

Plan Template Disclaimer

This Natural Hazards Mitigation Plan is based in part on a plan template developed by the Oregon Partnership for Disaster Resilience. The template is structured to address the requirements contained in 44 CFR 201.6; where language is applicable to communities throughout Oregon, OPDR encourages the use of standardized language. As part of this regional planning initiative, OPDR provided copies of the plan templates to communities for use in developing or updating their natural hazards mitigation plans. OPDR hereby authorizes the use of all content and language provided to Coos County in the plan template.
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Plan Summary

Coos County updated this Multi-jurisdictional Natural Hazards Mitigation Plan (NHMP, MNHMP or Plan) in an effort to prepare for the long-term effects resulting from natural hazards. It is impossible to predict exactly when these hazards will occur, or the extent to which they will affect the community. However, with careful planning and collaboration among public agencies, private sector organizations, and citizens within the community, it is possible to create a resilient community that will benefit from long-term recovery planning efforts.

The Federal Emergency Management Agency (FEMA) defines mitigation as "... the effort to reduce loss of life and property by lessening the impact of disasters ... through risk analysis, which results in information that provides a foundation for mitigation activities that reduce risk." Said another way, natural hazard mitigation is a method of permanently reducing or alleviating the losses of life, property, and injuries resulting from natural hazards through long and short-term strategies. Example strategies include policy changes, such as updated ordinances, projects, such as seismic retrofits to critical facilities; and education and outreach to targeted audiences, such as Spanish speaking residents or the elderly. Natural hazard mitigation is the responsibility of the "Whole Community" - individuals, private businesses and industries, state and local governments, and the federal government.

Why Develop this Mitigation Plan?

In addition to establishing a comprehensive community-level mitigation strategy, the Disaster Mitigation Act of 2000 (DMA2K) and the regulations contained in 44 CFR 201 require that jurisdictions maintain an approved Natural Hazard Mitigation Plan (NHMP) in order to receive federal funds for mitigation projects. Local and federal approval of this Plan ensures that the county and listed jurisdictions will remain eligible for pre- and post-disaster mitigation project grants.

What is Mitigation?

"Any sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event."

-U.S. Federal Emergency Management Agency
Who Participated in Developing the Plan?

The Coos County NHMP is the result of a collaborative effort between the county, cities, special districts, citizens, public agencies, non-profit organizations, the private sector and regional organizations. County and City steering committees guided the Plan development process.

The County Steering Committee included representatives from the following jurisdictions and agencies:

- Coos County
- City of Bandon
- City of Coos Bay
- City of Lakeside
- City of North Bend
- City of Powers
- Coquille Indian Tribe
- Coos-Curry Electric Cooperative
- Coos Health and Wellness
- Southwest Oregon Public Safety Association
- Oregon Parks and Recreation

The Coos County Emergency Manager convened the planning process and will take the lead in implementing, maintaining and updating the plan. Coos County is dedicated to directly involving the public in the continual review and update of the natural hazards mitigation plan. Notably, the Steering Committee included involvement at several meetings by members of the general public. The public will also have the opportunity to continue to provide feedback about the Plan throughout the implementation and maintenance period.

How Does this Mitigation Plan Reduce Risk?

The NHMP is intended to assist Coos County reduce the risk from natural hazards by identifying resources, information, and strategies for risk reduction. It is also intended to guide and coordinate mitigation activities throughout the county. A risk assessment consists of three phases: hazard identification, vulnerability assessment, and risk analysis, as illustrated in the following graphic.
By identifying and understanding the relationship between natural hazards, vulnerable systems, and existing capacity, Coos County is better equipped to identify and implement actions aimed at reducing the overall risk to natural hazards.

**What is Coos County’s Overall Risk to Hazards?**

Coos County reviewed and updated their risk assessment to evaluate the probability of each hazard as well as the vulnerability of the community to that hazard. Scores are based on the Coos County Hazard Analysis submitted to the Oregon Office of Emergency Management. Table ES-1 below summarizes hazard probability and vulnerability as determined by the county steering committee (for more information see Section 2, Risk Assessment). Notably, the Hazard Analysis on file with OEM for Coos County (2007) does not include the coastal erosion hazard. Coastal erosion IS addressed elsewhere in this plan.

**Table PS-1 Natural Hazard Risk Assessment Summary**

<table>
<thead>
<tr>
<th>Hazard</th>
<th>History</th>
<th>Vulnerability</th>
<th>Maximum Threat</th>
<th>Total Threat Score</th>
<th>Hazard Rank</th>
<th>Hazard Tiers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windstorm</td>
<td>20</td>
<td>40</td>
<td>90</td>
<td>63</td>
<td>#1</td>
<td>Top Tier</td>
</tr>
<tr>
<td>Earthquake</td>
<td>14</td>
<td>50</td>
<td>90</td>
<td>42</td>
<td>#2</td>
<td></td>
</tr>
<tr>
<td>Tsunami</td>
<td>14</td>
<td>40</td>
<td>70</td>
<td>56</td>
<td>#3</td>
<td></td>
</tr>
<tr>
<td>Flood</td>
<td>10</td>
<td>40</td>
<td>40</td>
<td>63</td>
<td>#4</td>
<td>Middle Tier</td>
</tr>
<tr>
<td>Wildfire</td>
<td>16</td>
<td>30</td>
<td>40</td>
<td>49</td>
<td>#5</td>
<td></td>
</tr>
<tr>
<td>Drought</td>
<td>16</td>
<td>20</td>
<td>30</td>
<td>56</td>
<td>#6</td>
<td>Bottom Tier</td>
</tr>
<tr>
<td>Landslide</td>
<td>18</td>
<td>10</td>
<td>30</td>
<td>56</td>
<td>#7</td>
<td></td>
</tr>
</tbody>
</table>

Source: Coos County Hazard Analysis, November 2008; Analysis and Ranking by OPDR

At the end of this executive summary, hazard briefs provide summary information for priority hazards in Coos County.
What is the Plan’s Mission?

The mission of the Coos County NHMP is to:

Mission: Create a disaster resilient Coos County.

This can be achieved by increasing public awareness, documenting the resources for risk reduction and loss-prevention, and identifying activities to guide the county towards building a safer, more disaster resistant community.

What are the Plan Goals?

The Plan goals describe the overall direction that the participating jurisdiction’s agencies, organizations, and citizens can take toward mitigating risk from natural hazards. Below is a list of the plan goals (Note: although numbered the goals are not prioritized):

Goal 1: Save lives and reduce injuries.
Goal 2: Minimize and prevent damage to public and private buildings and infrastructure.
Goal 3: Reduce economic losses.
Goal 4: Provide more opportunities for development outside of mapped hazardous areas.
Goal 5: Protect natural and cultural resources.
Goal 6: Increase cooperation and coordination among private entities, and local, state, and federal agencies.
Goal 7: Update natural hazard sections of the comprehensive plan and integrate local NHMPs with comprehensive plans and implementing measures.
Goal 8: Increase education, outreach, awareness, and collaboration.
Goal 9: Incorporate current data (by reference) into local NHMPs, comprehensive plans, and implementing measures.

How are the Action Items Organized?

The action items are organized within an action matrix included within Section 3, Mitigation Strategy (full descriptions are provided in Appendix A, Action Item Forms). Coos County has not identified highest priority action items at this time; the Steering Committee will identify...
prioritized actions during one of their semi-annual meetings following adoption and approval of the NHMP.

Data collection, research and the public participation process resulted in the development of the action items. The Action Item Matrix portrays the overall Plan framework and identifies linkages between the plan goals and actions. The matrix documents the title of each action along with, the coordinating organization, timeline, and the Plan goals addressed. Action items particular to each of the participating cities are included at the end of the action item matrix in Section 3, Mitigation Strategy and in the addenda.

**Comprehensive Action Plan**

The following table summarizes specific priority NHMP actions. Refer to the Mitigation Strategy section for a complete list of actions. Volume II, Appendix A contains detailed information for all action items, including potential partners, implementation ideas, proposed timeline and estimated budget.
<table>
<thead>
<tr>
<th>Priority Mitigation Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coos County</strong></td>
</tr>
<tr>
<td>Participate in the FEMA Risk Map discovery, hazard study, and resilience meeting processes.</td>
</tr>
<tr>
<td>Utilize the final multi-hazard risk report and assessment currently being developed through FEMA's RiskMap program to update the Coos County Hazard Analysis.</td>
</tr>
<tr>
<td>Utilize the final multi-hazard risk report and assessment currently being developed through FEMA's RiskMap program to update local risk assessment maps to show areas at risk for all hazards.</td>
</tr>
<tr>
<td>Reduce risk of coastal erosion through hazard mapping and regulation.</td>
</tr>
<tr>
<td>Complete a risk analysis for the flood hazard using newly acquired Light Detection and Ranging (LIDAR) data.</td>
</tr>
<tr>
<td><strong>City of Bandon</strong></td>
</tr>
<tr>
<td>Participate in the FEMA Risk Map discovery, hazard study, and resilience meeting processes.</td>
</tr>
<tr>
<td>Utilize the final multi-hazard risk report and assessment developed through FEMA's Risk Map program to update the Goal 7 section of the Bandon Comprehensive Plan.</td>
</tr>
<tr>
<td>Adopt a Tsunami Land Use Overlay Zone.</td>
</tr>
<tr>
<td>Obtain lidar collection data from DOGAMI.</td>
</tr>
<tr>
<td>Stock containers in city park with emergency response supplies.</td>
</tr>
<tr>
<td>Through multi-agency coordination, implement abatement plan for control of Noxious Weeds, specifically Gorse, Scotch Broom, and Butterfly Brush.</td>
</tr>
<tr>
<td><strong>City of Coos Bay</strong></td>
</tr>
<tr>
<td>Participate in the FEMA Risk Map discovery, hazard study, and resilience meeting processes.</td>
</tr>
<tr>
<td>Utilize the final multi-hazard risk report and assessment developed through FEMA's Risk Map program to update the Goal 7 section of the Coos Bay Comprehensive Plan.</td>
</tr>
<tr>
<td>Adopt a Tsunami Land Use Overlay Zone.</td>
</tr>
<tr>
<td><strong>City of Lakeside</strong></td>
</tr>
<tr>
<td>Participate in the FEMA Risk Map discovery, hazard study, and resilience meeting processes.</td>
</tr>
<tr>
<td>Utilize the final multi-hazard risk report and assessment developed through FEMA's Risk Map program to update the Goal 7 section of the Lakeside Comprehensive Plan.</td>
</tr>
<tr>
<td>Identify and map high risk slide areas to create an accurate logistical assessment.</td>
</tr>
<tr>
<td>Through multi-agency coordination, implement abatement plan for control of Noxious Weeds, specifically Gorse, Scotch Broom, and Butterfly Brush.</td>
</tr>
<tr>
<td><strong>City of North Bend</strong></td>
</tr>
<tr>
<td>Participate in the FEMA Risk Map discovery, hazard study, and resilience meeting processes.</td>
</tr>
<tr>
<td>Utilize the final multi-hazard risk report and assessment developed through FEMA's Risk Map program to update the Goal 7 section of the North Bend Comprehensive Plan.</td>
</tr>
<tr>
<td>Adopt a Tsunami Land Use Overlay Zone.</td>
</tr>
<tr>
<td><strong>City of Powers</strong></td>
</tr>
<tr>
<td>Participate in the FEMA Risk Map discovery, hazard study, and resilience meeting processes.</td>
</tr>
<tr>
<td>Implement wildfire actions identified in the Coos County Community Wildfire Protection Plan.</td>
</tr>
<tr>
<td>Utilize the final multi-hazard risk report and assessment developed through FEMA's Risk Map program to update the Goal 7 section of the Powers Comprehensive Plan.</td>
</tr>
</tbody>
</table>

Source: NHMP Steering Committee; Oregon Partnership for Disaster Resilience
How will the plan be implemented?

The plan maintenance section of this Plan outlines the formal process that will ensure that the Coos County NHMP remains an active and relevant document. The Plan will be implemented, maintained and updated by a designated convener. The Coos County Emergency Services Manager is the designated convener (Plan Convener) and is responsible for overseeing the review and implementation processes. The Plan maintenance process includes a schedule for monitoring and evaluating the Plan semi-annually and producing a plan revision every five years. This section also describes how the communities will integrate public participation throughout the plan maintenance process.

Plan Adoption

Once the Plan is locally reviewed and deemed complete the Plan Convener submits it to the State Hazard Mitigation Officer at the Oregon Military Department – Office of Emergency Management (OEM). OEM reviews the Plan and submits it to the Federal Emergency Management Agency (FEMA – Region X) for review. This review will address the federal criteria outlined in FEMA Interim Final Rule 44 CFR Part 201.6. Once the Plan is pre-approved by FEMA, the county and cities formally adopt the Plan via resolution. The Coos County Plan Convener will be responsible for ensuring local adoption of the Coos County NHMP and providing the support necessary to ensure plan implementation. Once the resolution is executed at the local level and documentation is provided to FEMA, the Plan is formally acknowledged by FEMA and the county (and participating cities) will re-establish eligibility for the Pre-Disaster Mitigation Grant Program, the Hazard Mitigation Grant Program funds, and the Flood Mitigation Assistance program funds.

The accomplishment of the NHMP goals and actions depends upon regular Steering Committee participation and adequate support from county and city leadership. Thorough familiarity with this Plan will result in the efficient and effective implementation of appropriate mitigation activities and a reduction in the risk and the potential for loss from future natural hazard events.

The Steering Committees for Coos County and participating cities each met to review the Plan update process and their governing bodies adopted the NHMP as shown below:

Coos County adopted the plan on [DATE], 2016

The City of Bandon adopted the plan on [DATE], 2016
The City of Coos Bay adopted the plan on [DATE], 2016

The City of Lakeside adopted the plan on [DATE], 2016

The City of North Bend adopted the plan on [DATE], 2016

The City of Powers adopted the plan on [DATE], 2016

FEMA Region X approved the Coos County NHMP on [DATE], 2016. With approval of this Plan, the entities listed above are now eligible to apply for the Robert T. Stafford Disaster Relief and Emergency Assistance Act’s hazard mitigation project grants through [DATE], 2016.
SECTION I: INTRODUCTION

Section I: Introduction provides a general introduction to natural hazard mitigation planning in Coos County. In addition, it addresses the planning process requirements contained in 44 CFR 201.6(b) thereby meeting the planning process documentation requirement contained in 44 CFR 201.6(c)(1). The section concludes with a general description of how this plan is organized.

What is Natural Hazard Mitigation?

The Federal Emergency Management Agency (FEMA) defines mitigation as “…the effort to reduce loss of life and property by lessening the impact of disasters … through risk analysis, which results in information that provides a foundation for mitigation activities that reduce risk.”¹ Said another way, natural hazard mitigation is a method of permanently reducing or alleviating the losses of life, property, and injuries resulting from natural hazards through long and short-term strategies. Example strategies (see Figure 1.1) include policy changes, such as updated land development ordinances; projects, such as seismic retrofits to critical facilities; and process tasks such as quarterly reporting to the Board of County Commissioners on mitigation activities.

Figure 1.1 – Mitigation Strategy Categories

<table>
<thead>
<tr>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Adopt hazard overlay zone(s)</td>
</tr>
<tr>
<td>- Require base isolation for critical facility construction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Buyout flood-prone properties</td>
</tr>
<tr>
<td>- Underground power lines</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Quarterly NHMP Planning Commission briefing</td>
</tr>
<tr>
<td>- Integrate mitigation into capital improvements</td>
</tr>
</tbody>
</table>

Source: Oregon Partnership for Disaster Resilience

Natural hazard mitigation is the responsibility of the “Whole Community” - individuals, private businesses and industries, state and local governments, and the federal government. At the local level, engaging in mitigation activities provides jurisdictions with a number of benefits, including reduced loss of life, property, essential services, critical facilities and economic hardship; reduced short-term and long-term recovery and reconstruction costs; increased cooperation and communication within the community through the planning process; and increased potential for state and federal funding for recovery and reconstruction projects.

¹ FEMA, What is Mitigation? http://www.fema.gov/what-mitigation
Why Develop a Mitigation Plan?

Coos County developed and continues to update this Natural Hazards Mitigation Plan (NHMP or Plan) in an effort to reduce future loss of life and damage to property or infrastructure resulting from natural hazards. It is impossible to predict exactly when natural hazard events will occur, or the extent to which they will affect community assets. However, with careful planning and collaboration among public agencies, private sector organizations, and citizens within the community, it is possible to minimize the losses that can result from natural hazards.

In addition to establishing a comprehensive community-level mitigation strategy, the Disaster Mitigation Act of 2000 (DMA2K) and the regulations contained in 44 CFR 201 require that jurisdictions maintain an approved NHMP in order to receive certain types of federal funding for mitigation projects. Local and federal approval of this plan ensures that the county and listed cities will remain eligible for pre- and post-disaster mitigation project grants available through FEMA’s Hazard Mitigation Assistance program.

What Federal Requirements Does This Plan Address?

The Disaster Mitigation Act of 2000 (DMA2K) is the latest federal legislation addressing mitigation planning. The Act reinforces the importance of mitigation planning and emphasizes planning for natural hazards before they occur. Specifically, DMA2K established the Pre-Disaster Mitigation (PDM) grant program and new requirements for the national post-disaster Hazard Mitigation Grant Program (HMGP). Section 322 of the Act specifically addresses mitigation planning at the state and local levels. State and local jurisdictions must have approved mitigation plans in place in order to qualify to receive post-disaster HMGP funds. Mitigation plans must demonstrate that State and local jurisdictions’ proposed mitigation measures are based on a sound planning process that accounts for the risk to the individual and State and local jurisdictions’ capabilities.

Chapter 44 Code of Federal Regulations (CFR), section 201.6, also requires a local government to have an approved mitigation plan in order to receive HMGP project grants. Pursuant of Chapter 44 CFR, the Natural Hazard Mitigation Plan planning processes shall include opportunity for the public to comment on the plan during review, and the updated Natural Hazard Mitigation Plan shall include documentation of the public planning process used to develop the plan. The Natural Hazard Mitigation Plan update must also contain a risk assessment, mitigation strategy and a plan maintenance process that has been formally adopted by the governing body of the jurisdiction. Lastly, the Natural Hazard Mitigation Plan must be submitted to Oregon Military Department – Office of Emergency Management (OEM) for initial plan review, and then federal approval. Additionally, a recent change in

---

2 Code of Federal Regulations, Chapter 44. Section 201.6, subsection (a), 2015
3 ibid, subsection (b). 2015
4 ibid, subsection (c). 2015
5 ibid, subsection (d). 2015
What is the Policy Framework for Natural Hazards Planning in Oregon?

Planning for natural hazards is an integral element of Oregon's statewide land use planning program, which began in 1973. All Oregon cities and counties have comprehensive plans (Comprehensive Plans) and implementing ordinances that are required to comply with the statewide planning goals. The challenge faced by state and local governments is to keep this network of local plans coordinated in response to the changing conditions and needs of Oregon communities.

Statewide land use planning Goal 7: Areas Subject to Natural Hazards requires that local governments, "... adopt comprehensive plans (inventories, policies and implementing measures) to reduce risk to people and property from natural hazards." Goal 7, along with other land use planning goals, has helped to reduce losses from natural hazards. Through risk identification and the recommendation of risk-reduction actions, this plan aligns with the goals of the jurisdiction's Comprehensive Plan, and helps each jurisdiction meet the requirements of statewide land use planning Goal 7.

The primary responsibility for the development and implementation of risk reduction strategies and policies lies with local jurisdictions. However, additional resources exist at the state and federal levels. Some of the key agencies in this area include Oregon Military Department – Office of Emergency Management (OEM), Oregon Building Codes Division (BCD), Oregon Department of Forestry (ODF), Oregon Department of Geology and Mineral Industries (DOGAMI), and the Department of Land Conservation and Development (DLCD).

Figure 1.2

Source: Oregon Partnership for Disaster Resilience

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6 http://www.oregon.gov/LCD/docs/goals/goal7.pdf
How was the Plan Developed and Updated?

The Plan was developed by the Coos County Natural Hazard Mitigation Plan Steering Committee, which includes members of the county and incorporated jurisdictions. The Coos County Steering Committee formally convened on three occasions to discuss and revise the plan. Steering Committee members contributed data and maps, and reviewed and updated the community profile, risk assessment, action items, and implementation and maintenance plan.

An open public involvement process is essential to the development of an effective plan. In order to develop a comprehensive approach to reducing the effects of natural disasters, the planning process shall include an opportunity for the public, neighboring communities, local and regional agencies, as well as, private and non-profit entities to comment on the Plan during review. OPDR provided a publicly accessible project website (http://csc.uoregon.edu/opdr/cooscounty) for the general public to provide feedback on the draft NHMP via a web form. In addition, a newspaper article was written about the Plan update, as well as a press release that was distributed at preparedness fairs during the update process.

How is the Plan Organized?

Each volume of the Plan provides specific information and resources to assist readers in understanding the hazard-specific issues facing county and city residents, businesses, and the environment. Combined, the sections work in synergy to create a mitigation plan that furthers the community’s mission to reduce or eliminate long-term risk to people and their property from hazards and their effects. This plan structure enables stakeholders to use the section(s) of interest to them.

Volume I: Basic Plan

Plan Summary

The executive summary provides an overview of the FEMA requirements plans process and highlights the key elements of the risk assessment, mitigation strategy, and implementation and maintenance strategy.

Section 1: Introduction

The introduction briefly describes the countywide mitigation planning efforts and the methodology used to develop the Plan.

Section 2: Risk Assessment

Section 2 provides the factual basis for the mitigation strategies contained in Section 3. Additional information is included within Appendix D, which contains an overall description of Coos County and the Cities of Bandon, Coos Bay, Coquille, Lakeside, Myrtle Point, North Bend, and Powers. This section includes a brief description of community sensitivities and

7 Code of Federal Regulations, Chapter 44. Section 201.6, subsection (b). 2015

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vulnerabilities and an overview of the hazards addressed in Volume II of this plan. The Risk Assessment allows readers to gain an understanding of the county’s, and other jurisdictions’, sensitivities — those community assets and characteristics that may be impacted by natural hazards, as well as the county’s, and other jurisdictions’, resilience — the ability to manage risk and adapt to hazard event impacts. Additionally, this section provides information on the jurisdictions’ participation in the National Flood Insurance Program (NFIP). This NHMP addresses the following hazards:

- Coastal Erosion
- Drought
- Earthquake
- Flood
- Landslide
- Tsunami
- Wildfire, and
- Windstorm

Section 3: Mitigation Strategy

This section documents the Plan vision, mission, goals, and actions (mitigation strategy) and also describes the components that guide implementation of the identified actions. Actions are based on community sensitivity and resilience factors and the hazard assessments in Section.

Section 4: Plan Implementation and Maintenance

This section provides information on the implementation and maintenance of the Plan. It describes the process for prioritizing projects, and includes a suggested list of tasks for updating the Plan to be completed at the semi-annual and five-year review meetings.

Volume 2: Appendices

The resource appendices are designed to provide the users of the Coos County NHMP with additional information to assist them in understanding the contents of the mitigation plan, and provide them with potential resources to assist with plan implementation.

Appendix A: Action Item Forms

This appendix contains the detailed action item forms for each of the mitigation strategies identified in this Plan.

Appendix B: Planning and Public Process

This appendix includes documentation of all the countywide public processes utilized to develop the Plan. It includes invitation lists, agendas, sign-in sheets, and summaries of Steering Committee meetings as well as any other public involvement methods.

Appendix C: Community Profile

The community profile describes the county and participating cities from a number of perspectives in order to help define and understand the regions sensitivity and resilience to
natural hazards. The information in this section represents a snapshot in time of the current sensitivity and resilience factors in the region when the Plan was updated. Sensitivity factors can be defined as those community assets and characteristics that may be impacted by natural hazards, (e.g., special populations, economic factors, and historic and cultural resources). Community resilience factors can be defined as the community's ability to manage risk and adapt to hazard event impacts (e.g., governmental structure, agency missions and directives, and plans, policies, and programs).

Appendix D: Economic Analysis of Natural Hazard Mitigation Projects

This appendix describes the Federal Emergency Management Agency's (FEMA) requirements for benefit cost analysis in natural hazards mitigation, as well as various approaches for conducting economic analysis of proposed mitigation activities. The Oregon Partnership for Disaster Resilience developed this appendix. It has been reviewed and accepted by FEMA as a means of documenting how the prioritization of actions shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

Appendix E: Grant Programs and Resources

This appendix lists state and federal resources and programs by hazard.