

Chapter 1 INTRODUCTION TO THE PLAN

1.1 Background

The dramatic increase in the costs associated with natural disasters over the past decades fostered interest in identifying and implementing effective means of reducing vulnerability. On February 26, 2002, the Federal Emergency Management Agency (FEMA) published Interim Final Rule 44 CFR Part 201, which required all states and local governments to develop natural hazards mitigation plans to be eligible for certain hazard mitigation grant programs, and in the case of the states, to be eligible for certain categories of disaster assistance.

Disasters occur as a predictable interaction among three broad systems: natural systems (e.g., watersheds and continental plates), the built environment (e.g., cities and roads), and social systems (community organization infrastructure that includes demographics, business climate, service provision, etc.). What is not predictable is exactly when natural hazards will occur or the extent to which they will affect communities within the state. However, with careful planning and collaboration it is possible to minimize the losses that can result from natural hazards.

Hazard mitigation is defined at 44 CFR 201.2 as *any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards*. Hazard mitigation is the responsibility of individuals, private businesses and industries, state and local governments, and the federal government. Engaging in mitigation actions provides the state, counties, cities, businesses, and citizens with a number of benefits: fewer injuries and deaths; less damage to buildings, critical facilities, and infrastructure; diminished interruption in essential services; reduced economic hardship; minimized environmental harm; and quicker, lower-cost recovery.

The Oregon Natural Hazards Mitigation Plan (NHMP, Plan) guides mitigation actions throughout the state. It contains the most complete and up-to-date description of Oregon's natural hazards and their probability, the state's vulnerabilities, its mitigation strategies and implementation resources. Oregon's counties and cities can rely upon this information when preparing local natural hazards mitigation plans. Similarly, local NHMPs provide the state with a deeper understanding of local and regional mitigation goals and issues, advancing alignment of mitigation goals and strategies statewide. Further, Oregon's Natural Hazards Mitigation Plan meets FEMA eligibility requirements for enhanced hazard mitigation and disaster assistance funding, benefitting the state and local communities alike.

The Oregon NHMP is one component of the first volume of the *Oregon Emergency Management Plan*, administered by the Oregon Military Department's Office of Emergency Management. [Figure 1-1](#) illustrates this organizational relationship.

Figure 1-1. The Oregon NHMP as a Component of the Oregon Emergency Management Plan



Source: Modified from Oregon Partnership for Disaster Resilience

1.2 Plan Structure

The Oregon Natural Hazards Mitigation Plan is a Standard Plan in 2020, meeting the requirements of both 44 CFR 201.4 (Standard State Mitigation Plans).

The Standard Plan contains three main chapters: (a) Risk Assessment, (b) Mitigation Strategy, and (c) Planning Process.

A list of acronyms, a glossary, and a list of references follow these chapters.

The Plan closes with links to appendices providing additional information illuminating the Risk Assessment, Mitigation Strategy, and Planning Process chapters.

1.3 Standard Plan

1.3.1 Risk Assessment

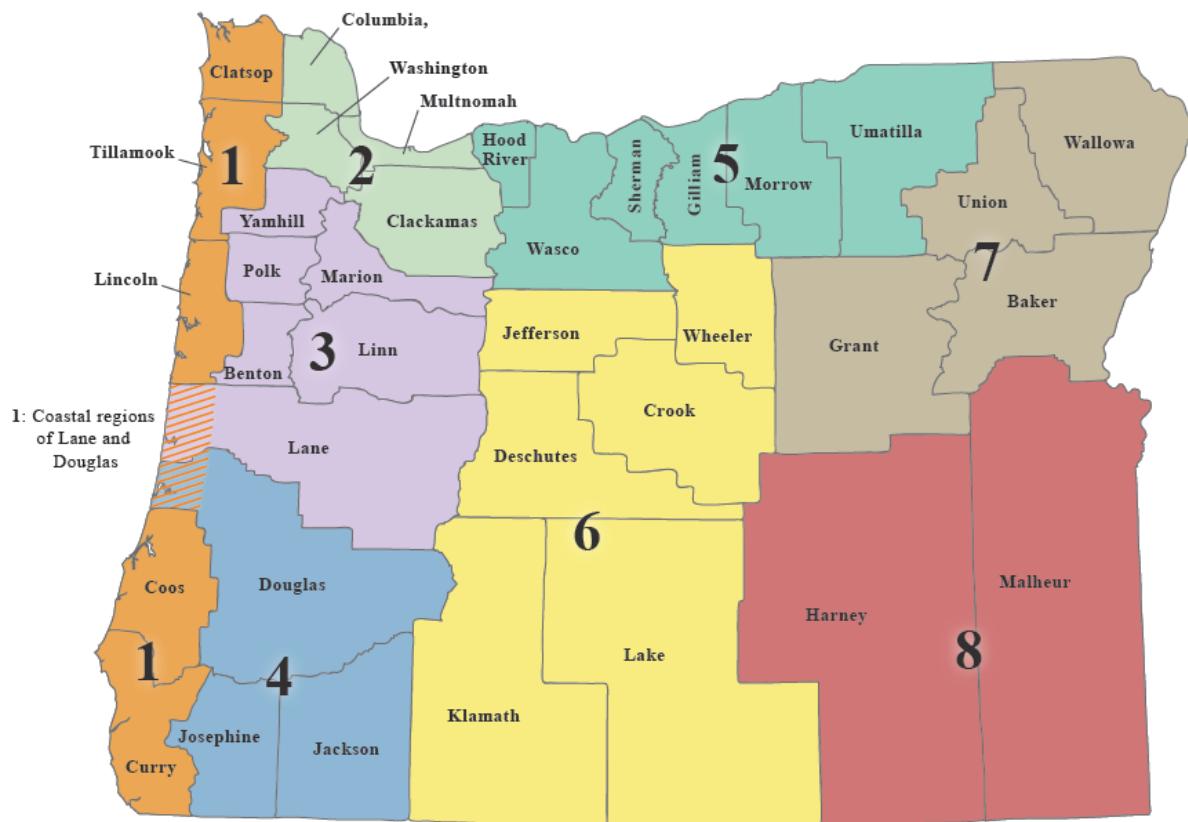
The Risk Assessment is presented on two levels: statewide and regional.

The State Risk Assessment profiles each of Oregon's 11 natural hazards and the predicted impacts of climate change on each of the hazards. It also discusses Oregon's vulnerabilities, including social vulnerabilities, to each hazard, and provides loss estimates for state-owned/leased buildings and critical/essential facilities as well as local critical facilities, and for the first time, historic resources and archaeological resources. The state risk assessment also presents a summary of the state of the science of climate change and how climate change is anticipated to influence the presentation of hazards, particularly in terms of probability.

The Regional Risk Assessment consists of eight separate risk assessments, one for each of the eight Oregon NHMP Natural Hazard Regions ([Figure 1-2](#)) established by the Oregon Military Department's Office of Emergency Management (OEM). Each Regional Risk Assessment begins with a summary, then profiles the region's unique demographic, natural environment, land use, and economic characteristics. Finally, each Regional Risk Assessment describes how each hazard presents in the region; discusses the influence of climate change on the presentation of each hazard, again, particularly in terms of probability; analyzes the region's vulnerabilities, including social and seismic lifeline vulnerabilities, to each hazard; and provides loss estimates for state-owned/leased buildings and critical/essential facilities as well as local critical facilities located in the region's hazard areas.

A new risk assessment methodology has been piloted with this update to better assess risk by considering probability and vulnerability together; to enable comparison across all hazards statewide; and then to better link the risk assessment with mitigation goals and actions. To facilitate this linkage, the state risk assessment chapters have been reorganized for this update. Instead of separate sections discussing hazards and vulnerability, the chapter has been organized like the previous regional risk assessment chapters with the hazards assessment followed directly by the vulnerability assessment. In both the state and regional risk assessments, these are now followed directly by a brief "Risk" section which attempts to synthesize their information and culminate in a risk assessment.

The State applied for and received a FEMA High Hazard Potential Dams grant to undertake risk assessments and related work concerning state-regulated dams. The grant required that high hazard potential dams be addressed the same way the eleven recognized natural hazards are addressed. As the State has not to date considered dam safety a natural hazard, and as it is primarily associated with flood hazards, the State has met this requirement by incorporating dam safety into the state and regional flood hazard risk assessment sections and into other relevant chapters of the Oregon NHMP. The Dam Safety risk assessments mimic the structure of the eleven state-recognized natural hazard risk assessments, effectively treating it as a twelfth natural hazard, but without a discrete chapter.

Figure 1-2. Oregon NHMP Natural Hazards Regions

1.3.2 Mitigation Strategy

The Mitigation Strategy establishes the state's mission, vision, and goals for natural hazard mitigation. A set of tables describe mitigation actions the state has completed, continues to perform, and desires to achieve over the life of this Plan. Current and potential funding sources for implementing mitigation actions are identified.

This chapter also assesses the state's ability to implement the mitigation strategy, both before and after a disaster, through its policies, programs, and funding sources. It also generally assesses the effectiveness of local mitigation policies, programs, and other capabilities.

Finally, the Mitigation Strategy describes the state's support of local mitigation planning, prioritization of funding for local mitigation plans and projects, and coordination of local NHMPs with the Oregon NHMP.

1.3.3 Planning Process

This chapter details the process of updating the Oregon NHMP and identifies the changes made to the Plan through the update process. It frames processes for tracking implementation progress, and for monitoring, evaluating, and eventually updating this edition of the Plan. It highlights how the Oregon NHMP is related to, coordinates with, or is integrated with other planning initiatives.

1.4 Enhanced Plan

The Enhanced Plan chapter is the state's opportunity to showcase its commitment to a comprehensive natural hazard mitigation program and its ability to support that commitment through skilled and effective management of funding, projects, and planning; support of local mitigation plans and projects; integration of mitigation plans and projects with other state and federal plans, programs, and initiatives; and continual progress in implementation. It contains detailed information about how funding was obtained and used during the life of the previous Plan; how funding decisions are made; how completed mitigation projects are evaluated; and how the state provides funding and technical assistance to cities and counties for developing and updating local NHMPs and accomplishing mitigation actions. This exceptional level of effort and demonstration of excellence earns dividends in the form of increased federal funding.

Because Oregon will lose enhanced plan status, this 2020 Oregon NHMP is being submitted as a standard plan. Oregon intends to make the changes necessary to regain enhanced plan status as quickly as possible. Chapter 5, Enhanced Plan is left in "placeholder" status, optimistic that Oregon will regain enhanced plan status during the effective period of the 2020 Oregon NHMP.