Chapter 5: PLANNING PROCESS

In This Chapter

The Oregon NHMP Planning Process is divided into three sections: 1) Introduction, 2) Developing the 2015 Plan, and 3) Maintaining the 2015 Plan.

1. Introduction: States the purpose of this chapter.
2. Developing the 2015 Plan: Describes the participants and details the 2015 Plan development process. Demonstrates how the 2015 Oregon NHMP is integrated with other State, regional, and federal initiatives. Includes a table identifying changes from the 2012 Plan.
3. Maintaining the 2015 Plan: Analyzes the efficacy of the method and schedule for monitoring, evaluating, and updating the 2012 Oregon NHMP and establishes a method and schedule for monitoring, evaluating, and updating the 2015 Oregon NHMP. Summarizes how mitigation measures and project closeouts will be monitored. Identifies a system for reviewing progress toward achieving Plan goals and mitigation actions. Describes how the mitigation action tables are used to show whether mitigation actions in the 2012 Oregon NHMP were implemented as planned.
5.1 Introduction

**44 CFR §201.4(b), Planning process.** An effective planning process is essential in developing and maintaining a good plan. The mitigation planning process should include coordination with other State agencies, appropriate Federal agencies, interested groups, and be integrated to the extent possible with other ongoing State planning efforts as well as other FEMA mitigation programs and initiatives.

The Disaster Mitigation Act of 2000 (44 CFR 201) had required that states update their multi-hazard mitigation plans every three years to maintain eligibility for federal disaster assistance. Effective May 27, 2014, amendments to 44 CFR §201 changed the state mitigation planning update cycle from three to five years. Due to contract obligations, Oregon is completing the three-year update already in progress with a deadline of March 2, 2015. However, the State requested and received a one-year no-cost extension to better align the update with the State budget process. We anticipate completion well before that year ends, in late summer or early fall 2015. Oregon first completed a Natural Hazards Mitigation Plan (Oregon NHMP or Plan) in 1992 with subsequent updates occurring in 2000, 2004, 2006, 2009, and 2012.

The purpose of this chapter is three-fold:

- To describe the process used to develop the 2015 Oregon NHMP;
- To describe the process to be used for tracking progress on mitigation activity and goal achievement during the life of the 2015 Plan; and
- To describe the method and schedule for monitoring, evaluating, and updating the 2015 Plan.
5.2 Developing the 2015 Plan

Requirement 44 CFR §201.4(c), Plan content. To be effective the plan must include the following elements:

Requirement 44 CFR §201.4(c)(1)  Description of the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how other agencies participated.

The purpose of this section is to describe the process used to develop the 2015 Oregon NHMP. Key meetings, participants, decision points, interagency coordination and public outreach efforts are described. In addition, other state and federal planning efforts with which the 2015 Plan is integrated are identified, as are the sections of the 2012 Plan that were revised.

5.2.1 Participants and Coordination

The State Interagency Hazard Mitigation Team (IHMT)

Prior to the spring of 1996, what is today the State IHMT was an informal group of state agencies whose representatives met on an ad hoc basis following Presidentially-declared disasters. On March 4, 1997, in response to the floods and landslides of the autumn and winter of 1996-1997, Governor Kitzhaber directed OEM to make the State Interagency Hazard Mitigation Team a permanent body with regular meetings. The State Hazard Mitigation Officer, housed in OEM, chairs the State IHMT. Today the State IHMT meets quarterly to understand losses arising from natural hazards, recommend and coordinate strategies to mitigate loss of life, property, and natural resources, and to maintain the Oregon NHMP.

State IHMT member agencies:

- Business Oregon – Infrastructure Finance Authority
- Oregon Climate Change Research Institute and Oregon Climate Service
- Oregon Department of Administrative Services – Chief Financial Office
- Oregon Department of Agriculture
- Oregon Department of Consumer and Business Services – Building Codes Division
- Oregon Department of Consumer and Business Services – Insurance Division
- Oregon Department of Environmental Quality
- Oregon Department of Fish and Wildlife
- Oregon Department of Forestry
- Oregon Department of Geology and Mineral Industries
- Oregon Department of Land Conservation and Development
- Oregon Department of State Lands
- Oregon Department of Transportation
- Oregon Health Authority – Health, Security, Prevention, and Response Program
- Oregon Military Department – Oregon Office of Emergency Management
- Oregon Parks and Recreation Department
- Oregon Partnership for Disaster Resilience
- Oregon Public Utility Commission
- Oregon State Police – Office of State Fire Marshal
- Oregon Water Resources Department
State IHMT meetings are open to the public, and representatives from non-State IHMT agencies and organizations are added as needed. During the 2013-2015 plan update process, IHMT meetings included a standing agenda item for topics related to the Oregon NHMP update.

State IHMT agencies provided staff and other resources to accomplish the update. State IHMT agency Hazard Leads reviewed and updated portions of the Plan. The Hazard Leads were organized into related Hazard Groups (Table 5-1) to foster interagency communication and collaboration, specifically while updating hazard characterizations and mitigation actions, and more generally beyond this project. A state-sponsored collaborative electronic workspace was provided to facilitate project information sharing among hazard groups.

Table 5-1. | Table XX: State IHMT Hazard Groups

<table>
<thead>
<tr>
<th>Hazard Groups</th>
<th>Leads</th>
<th>Other Member Agencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coastal Hazards/Climate Change</td>
<td>Coastal Erosion: DOGAMI</td>
<td>WDFW, OHA, DSL, DLCD,</td>
</tr>
<tr>
<td></td>
<td>Climate Change: DLCD &amp; OCCRI/OCS</td>
<td>OPRD, ODOT, OCCRI/OCS</td>
</tr>
<tr>
<td>Fire/Drought/Dust Storm</td>
<td>Fire: ODF</td>
<td>ODFW, DEQ, , DSL, DLCD, ODF,</td>
</tr>
<tr>
<td></td>
<td>Drought: WRD</td>
<td>OEC, OSFM, ODOT, OHA</td>
</tr>
<tr>
<td></td>
<td>Dust Storm: ODOT &amp; OEM</td>
<td></td>
</tr>
<tr>
<td>Earthquake/Tsunami/Volcano</td>
<td>Earthquake: DOGAMI &amp; OEM</td>
<td>DLCD, DEQ, OEM, OHA, OPRD,</td>
</tr>
<tr>
<td></td>
<td>Tsunami: DOGAMI</td>
<td>PUC</td>
</tr>
<tr>
<td></td>
<td>Volcano: DOGAMI</td>
<td></td>
</tr>
<tr>
<td>Flood/Landslide/Windstorm/Winter Storm</td>
<td>Flood: DLCD</td>
<td>WRD, DSL, ODFW, DEQ, OEC,</td>
</tr>
<tr>
<td></td>
<td>Landslide: DOGAMI</td>
<td>ODOT, OHA, OPRD, PUC</td>
</tr>
<tr>
<td></td>
<td>Windstorm: PUC &amp; OCCRI</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Winter Storm: ODOT &amp; OEM</td>
<td></td>
</tr>
</tbody>
</table>

Source: DLCD

DLCD managed and facilitated the update process with oversight and direction from the State IHMT, guidance from FEMA, and in close cooperation with OEM and the State Hazard Mitigation Officer, DOGAMI, and OPDR. Other state and federal agencies also contributed substantively and substantially to the update.

The hazard characterizations, probability, and vulnerability assessments were reviewed and revised by subject matter experts from State IHMT agencies, the Oregon Climate Change Research Institute (OCCRI) and Oregon Climate Service (OCS). Significantly, OCCRI and OCS became involved in the State’s natural hazard mitigation planning process for the first time during this cycle, lending expertise in the areas of climate change, drought, and windstorms. The Regional Profiles were developed by OPDR. Information about state-owned and leased buildings and critical and essential facilities was provided by DAS, analyzed and reported by DOGAMI. ODOT provided information about seismic lifelines. The Local Capability Assessment, Coordination of Local Mitigation Planning, and Funding sections were reviewed and revised by OPDR, OEM, and DLCD. The Enhanced Plan was developed by OEM. Mitigation actions were reviewed, evaluated, revised, and prioritized by State IHMT agency representatives and reviewed, revised, and approved by the State IHMT. Goals were reviewed, revised, and approved by the State IHMT.

The State IHMT’s Risk Assessment Sub-Committee (RAS-C), comprised of personnel from OEM, DLCD, DOGAMI, DEQ, Business Oregon’s Infrastructure Finance Authority, the University of Oregon, and FEMA developed a new concept methodology for a risk assessment that could, if fully developed, be used to assess risk for all hazards at both the state and local levels.
The Silver Jackets, a US Army Corps of Engineers program is implemented in Oregon as another sub-committee of the State IHMT. It brings together a number of federal and State agencies and has been instrumental in moving flood hazard mitigation forward during this update cycle. This is a new and successful initiative in federal and State collaboration and coordination since approval of the 2012 Oregon NHMP.

Another successful initiative was establishment of quarterly coordination phone calls between FEMA and State IHMT agencies the week prior to State IHMT meetings. This is continuing to improve lines of communication and enhance coordination by providing a regular forum for information exchange.

Because DLCD, DOGAMI, OEM, and OPDR are working on a variety of related mitigation projects together and separately, they have also begun bi-monthly coordination meetings that are providing a useful avenue for enhancing coordination and collaboration and better serving local governments.

Further, FEMA’s Risk MAP Program as implemented in Oregon is providing another important link between state agencies, OPDR, local governments and FEMA and NOAA programs in addressing natural hazard mitigation (particularly flooding) as well as climate change impacts. Oregon’s Risk MAP coordinator is also involved with state agencies, universities, and others in a number of initiatives to make natural hazard information available to and accessible by local governments and the public.

5.2.2 The Planning Process

A major change occurred in the planning process during this update cycle: DLCD took responsibility for updating and maintaining the Oregon NHMP. Prior to this, OPDR had facilitated Oregon NHMP updates. Oregon demonstrated its ever-strengthening commitment to natural hazard mitigation by taking this step, and by hiring two natural hazards planners to manage the plan update and implement other natural hazard mitigation initiatives. The transfer of responsibility and hiring process consumed the first year of the update cycle, significantly abbreviating the project timeline. Therefore, plan update tasks were undertaken simultaneously rather than sequentially, then reviewed and revised as necessary to ensure consistency. In September 2014, the State requested a one-year no-cost extension for the project to ease the abbreviated timeline and better align the grant performance period with the state legislative session. FEMA granted the extension in December 2014. The 2015 Oregon NHMP is therefore the result of a two-and-a-half year, collaborative interagency plan update process that occurred between March 2013 and September 2015.

Table 5-2. Table XX: Chronology

<table>
<thead>
<tr>
<th>2012</th>
<th>• DLCD took responsibility for updating and maintaining the Oregon NHMP.</th>
</tr>
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<tbody>
<tr>
<td>February 2013</td>
<td>• DLCD hired two natural hazards planners.</td>
</tr>
<tr>
<td>March 2013</td>
<td>• DLCD developed a scope of work, work program, and timeline. Together these documents described a two-year work plan for developing the 2015 Oregon NHMP.</td>
</tr>
</tbody>
</table>
NHMP, and clearly identified roles and responsibilities, requirements, tasks, deliverables, and timelines for task completion.

- DLCD convened the State IHMT Risk Assessment Sub-Committee (RAS-C) and began facilitating a process with the State IHMT’s Risk Assessment Subcommittee (RAS-C) to develop a new risk assessment concept methodology intended to address the lack of a clear and common methodology for identifying the most vulnerable geographic areas in the state. This process closed successfully in August 2013. The concept methodology has not been tested and could not be used for this update. The State is seeking funding from the state legislature and other funding opportunities to continue this work, looking forward to completing development and implementation over several NHMP update cycles. For more information, see Future Enhancements to the State Risk Assessment.

- The planning process began in earnest in April 2013 with a letter from the DLCD’s Director, Jim Rue, to directors of other State IHMT agencies’ announcing the beginning of the 2015 Oregon NHMP update cycle, requesting their commitment to it and their attendance at the April 2013 meeting of the State IHMT.

- Development of goals for the update and organization of the planning process were the first orders of business at the April 2013 State IHMT meeting. The scope of work, work program, and timeline were presented and agreed to by the State IHMT. These goals for the update were articulated and agreed to by the State IHMT:
  - Improve interagency coordination and collaboration on natural hazard mitigation activities.
  - Enhance the risk assessment methodology.
  - Regain “Enhanced Plan” status.
  - Address climate change and sea level rise in the risk assessment.
  - Make project information easily available to interested parties.
  - Make risk assessment data accessible to local jurisdictions.
  - Prioritize actions for funding based on the enhanced risk assessment.
  - Eliminate redundancy and increase consistency throughout the Plan.
  - Review action items to ensure they are SMART (specific, measurable, achievable, realistic, and time-oriented).
  - Make the 2015 Plan a “living document.”

- DLCD also introduced the process for developing a new risk assessment concept methodology at this meeting.

- The RAS-C identified risk assessment evaluation criteria. DLCD, OPDR and InfoGraphics conducted literature reviews of risk assessment methods found in academic literature and other state Natural Hazard Mitigation Plans.

- FEMA approved the scope of work, work program, and timeline.

- The RAS-C discussed literature review findings and how to integrate emerging
trends into an Oregon-tailored model.

- DLCD identified State IHMT agency staff leads for each hazard to review and update portions of the Plan, and organized related Hazard Groups (Section 5.2.1 and Table 5-1). A state-sponsored collaborative electronic workspace was provided to facilitate project information sharing among hazard groups.
- DLCD met with Hazard Leads to discuss vulnerability data: theme, source, quality and accessibility.

- InfoGraphics facilitated a discussion with the RAS-C about big picture objectives, technical approach and data inputs for the new risk assessment model.
- The Earthquake/Tsunami/Volcano and Flood/Landslide/Windstorm/Winter Storm Hazard Groups held their first meetings. They were introduced to the update project and the collaborative electronic workspace, and discussed their tasks and timelines.
- To facilitate local government and public involvement, a website for the plan update project was established on DLCD’s website. A listserv was also developed to provide project information to interested parties.
- DLCD’s Regional Representatives were apprised of the project, website, and listserv, and provided with a spreadsheet showing the NHMP and NFIP status of each city and county in the state. DLCD continued throughout the update process to provide revised spreadsheets to the appropriate regional representative whenever a community received “approval pending adoption” or final approval of its NHMP from FEMA.
- The Regional Representatives provided contact information for local government officials who were emailed an invitation to join the listserv, visit the website, and comment on posted draft documents. They were also encouraged to pass this information along to other interested parties.

- The Fire/Drought/Dust Storm and Coastal Hazards/Climate Change Hazard Groups held their first meetings. They were introduced to the update project and the collaborative electronic workspace, and discussed their tasks and timelines.
- DLCD took delivery of the 2012 Oregon NHMP document files from OPDR.
- State IHMT held its quarterly meeting at which DLCD discussed progress and next steps for the update, highlighting the launch of the project website and listserv. DLCD also discussed progress on development of the new risk assessment concept methodology.

- InfoGraphics presented a concept model, 3-year work plan and budget to the RAS-C.
- To facilitate local government and public involvement, a website for the State IHMT was established on OEM’s website. DLCD’s Regional Representatives were
appraised of the website launch and were encouraged to pass this information along to other interested parties.

- The Hazard Group Leads met to discuss integrating climate change into the hazard characterizations.
- Hazard Leads began reviewing the 2012 Oregon NHMP mitigation actions in preparation for a September discussion of them with all hazard group members.

**September 2013**

- DLCD developed a method for reorganizing and streamlining the 2015 Oregon NHMP. It included a new approach to the Risk Assessment section of the Plan that integrates the Hazard Chapters, reducing redundancies and streamlining the update process.
- The Hazard Groups met and discussed the status of the mitigation actions in the 2012 Oregon NHMP and which should be retained, removed, changed, or added. For more detail, see Mitigation Actions.

**October 2013**

- RAS-C members gave unanimous support to the risk assessment concept model and discussed possible funding opportunities.
- The State IHMT held its quarterly meeting. DLCD briefed the State IHMT on progress, and received approval to continue with its proposals for streamlining the document and prioritizing mitigation actions. DLCD also updated the IHMT on the final workplan, timeline and budget presented by InfoGraphics for the new risk assessment concept model, and discussed possible funding opportunities.
- DLCD met with Hazard Leads and presented 2015 Risk Assessment update tasks. Each Hazard Lead was provided with templates and instructions for updating the state and local (regional) risk assessments including hazard characterizations, probabilities and vulnerabilities. The Hazard Leads worked on the Risk Assessments through March 2014. DLCD continued meeting and communicating with the Hazard Leads individually to refine the updates and produce a preliminary draft risk assessment.
- DLCD provided its Regional Representatives and OPDR with an informational piece about the update and requested they provide it to their contacts in local jurisdictions and other contacts who may be interested.

**November 2013**

- DLCD together with OHA and DOGAMI submitted a grant proposal to NOAA that to further development of the risk assessment concept model. The proposal was not approved for funding.
- DLCD and Hazard Leads continued work on updating the risk assessment.
- DLCD continued readying the mitigation actions for prioritization.
December 2013

- The Hazard Leads met and began prioritizing mitigation actions by scoring each “priority” action on several criteria. Next, managers were asked to identify their agencies’ level of support for each action. For more detail, see Mitigation Actions.
- DOGAMI completed updating statewide hazard maps for coastal erosion, earthquakes, floods, landslides, tsunamis, volcanic hazards, and wildfires.

January 2014

- DLCD posted the prioritized mitigation actions on the project website for public review and comment.
- The State IHMT held its quarterly meeting. DLCD provided an update on project progress, including the risk assessment and a presentation of the prioritized mitigation actions. The State IHMT requested the actions be organized by hazard.
- The Silver Jackets hosted a presentation by DLCD and discussion of the Oregon NHMP update process at its regular meeting and followed up with suggestions for action.
- DOGAMI completed updating the inventory of state-owned and -leased buildings and critical or essential facilities and non-state-owned or -leased critical or essential facilities.

February 2014

- DLCD continued work on prioritizing and re-organizing mitigation actions and updating the State Risk Assessment.
- DOGAMI completed updating the database of state-owned and -leased buildings and critical and essential facilities.
- Work on regional profiles, mitigation strategy, and plan maintenance and monitoring began and continued through the summer.

March 2014

- DLCD prepared a preliminary draft of the State-level Risk Assessment for public review.
- DLCD prepared spreadsheets showing revised and prioritized mitigation actions for public review.

April 2014

- The State IHMT held its quarterly meeting. The State IHMT reviewed the existing goals and revised one for better alignment with agency policy and activities. A review of county NHMP goals against Oregon NHMP goals revealed areas where the State goals could better reflect local goals, and the State IHMT added three new goals to achieve that consistency. Several mitigation actions were reviewed, revised, and added. The IHMT decided to consider prioritizing hazards for the next Plan update. DLCD presented the Preliminary Draft State Risk Assessment.
- The Preliminary Draft State Risk Assessment and one regional risk assessment
May – June 2014

- The State Risk Assessment and prioritized mitigation actions were posted on the project website for public review and comment. A notice was sent to the listserv.

- DLCD continued to work with the Hazard Leads and OPDR through the summer of 2014, pursuing enhancements to both the state and local (regional) level risk assessments in response to FEMA’s comments and to continue to fill gaps and improve the Risk Assessment.

- Work also continued on the Mitigation Strategy, Planning Process, and Enhanced Plan chapters.

July 2014

- The State IHMT held its quarterly meeting. DLCD presented a brief update on overall progress of the project, the status of the Preliminary Draft 2015 Oregon NHMP, finalization of mitigation actions, development of mitigation success stories, and next steps.

- Work continued on refining the mitigation action tables; refining maps; collecting mitigation success stories; and completing unfinished portions of the Preliminary Draft 2015 Plan. Formatting and editing began.

August 2014

- A Preliminary Draft 2015 Oregon NHMP was posted to the project website for public review and comment. One set of comments was received.

- Work continued on completing unfinished portions, formatting and editing the August 2014 Preliminary Draft 2015 Oregon NHMP into a Draft 2015 Oregon NHMP to be posted for public comment.

- OEM, the Oregon Parks & Recreation Department, the State Historic Preservation Office, and the Oregon Heritage Commission advanced work on developing a coordinated, long-term approach to mitigating impacts to cultural and historic resources from natural hazards. For the first time, the Oregon NHMP includes a section describing potential future enhancements to the risk assessment and mitigation strategy intended to protect and preserve cultural and historic resources.

September 2014

- By letter dated September, 23, 2014 to the State Hazard Mitigation Officer, DLCD requested a one-year no-cost extension for the project to ease the abbreviated timeline and better align the grant performance period with the state legislative session.

- Work continued on preparing the Draft 2015 Oregon NHMP.
October 2014
- By letter dated October 22, 2014 to FEMA, the State Hazard Mitigation Officer requested a one-year no-cost extension for this and other projects.
- Work continued on preparing the Draft 2015 Oregon NHMP.
- The State IHMT held its quarterly meeting. The State Hazard Mitigation Officer reported on the one-year no-cost extension requests, including the request for this project, and that work is continuing on the Draft 2015 Oregon NHMP.

November 2014
- Work continued on preparing the Draft 2015 Oregon NHMP.

December 2014
- By letter dated December 12, 2014, FEMA approved the requested one-year no-cost extension to March 1, 2016.
- Content of the Draft 2015 Oregon NHMP was largely completed; formatting and editing continued.

January 2015
- Formatting and editing continued.
- FEMA began an informal review of the 2nd Preliminary Draft Plan.

February 2015
- DLCD posted the formatted and edited Draft 2015 Oregon NHMP to the project website for public review and comment.

March 2015
- FEMA provided comments based on its informal review of the 2nd Preliminary Draft Plan.
- The public review and comment period ended.
- DLCD and Hazard Leads responded to comments.
- Additional necessary formatting and editing was done.

April 2015
- The Draft 2015 Oregon NHMP was published for final comments, in particular from the State IHMT.
- The State IHMT held its quarterly meeting. The Draft 2015 Oregon NHMP was reviewed and approved for formal submittal to FEMA with a few revisions.
- DLCD made the revisions and finalized the Final Draft 2015 Oregon NHMP.

May 2015
- On May 1, 2014, the State Hazard Mitigation Officer submitted the Final Draft 2015 Oregon NHMP to FEMA for formal review.
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- FEMA’s 45-day review period began.

June 2015

- FEMA’s 45-day review period ended on June 15, 2014. FEMA required the State to make a few revisions.
- The State began working in the revisions.

July 2015

- Work on the revisions was completed and the 2015 Oregon NHMP was resubmitted to FEMA.

August 2015

- FEMA issued “Approval Pending Adoption.”

September 2015

- Governor Brown promulgated the plan by letter dated XXX.
- FEMA issued final approval on XXX.

Source: DLCD

5.2.3 Program Integration

The Oregon Natural Hazards Mitigation Plan is integrated with other State, regional, and FEMA initiatives with increasing collaboration taking place among State agencies and between State agencies and FEMA and other federal agencies.

While not comprehensive, Table 5-3 presents a synopsis of the major State programs and initiatives integrated with other state, regional, and FEMA initiatives. Additional detail and examples are provided following Table 5-3. Integration of mitigation strategies with state, regional, and federal initiatives is also noted in the Mitigation Action Tables Table 3-1, Table 3-2, and Table 3-3.

Table 5-3. Integration with Other State, Regional, and FEMA Programs and Initiatives

<table>
<thead>
<tr>
<th>Lead(s)</th>
<th>Plan or Program</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>OEM</td>
<td>Quarterly mitigation coordination calls with FEMA</td>
<td>Updates on planning, grant offerings, policy and regulations. This coordination generally occurs the week before the regularly scheduled quarterly meetings of the State IHMT and provides current information for the State IHMT.</td>
</tr>
<tr>
<td>OEM, FEMA</td>
<td>State of Oregon Hazard Mitigation Grant Program Administrative Plan DR-4169 (2014)</td>
<td>This plan provides policy and guidelines for administering hazard mitigation grants. It complies with the Stafford Act (1988 and as amended) and the Sandy Recovery Improvement Act (2013). It has been updated since the last state mitigation plan was approved by FEMA (2012) to include major disaster declarations DR-4055 and DR-4169.</td>
</tr>
<tr>
<td>Lead(s)</td>
<td>Plan or Program</td>
<td>Description</td>
</tr>
<tr>
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</tr>
<tr>
<td>OEM</td>
<td>Oregon Local Disaster Assistance Loan and Grant Account (ORS 401.536)</td>
<td>Appropriated per biennium by the legislature, the Oregon Local Disaster Assistance and Loan and Grant Account provides loans and grants to local governments and school districts to provide full or in part match funding to federally declared disaster relief that requires a match. Funds may also be used for non-federally declared disasters, and to help pay for administration of loans.</td>
</tr>
<tr>
<td>OSSPAC</td>
<td>Oregon Resilience Plan (2013)</td>
<td>This plan reviews policy options, summarizes relevant reports and studies by state agencies, and makes recommendations on policy direction to protect lives and keep commerce flowing during and after a Cascadia earthquake and tsunami.</td>
</tr>
<tr>
<td>DLCD, Oregon Sea Grant, OPDR</td>
<td>North Coast Disaster Resilience Plan</td>
<td>Multi-hazard (sea level rise, other hazards) plan for the North Oregon Coast.</td>
</tr>
<tr>
<td>DLCD</td>
<td>Oregon Statewide Planning Goal 7</td>
<td>This statewide land use goal requires all local city and county comprehensive plans to include measures to reduce the risk to people and property from natural hazards.</td>
</tr>
<tr>
<td>DLCD</td>
<td>Oregon Risk MAP and Risk Plan</td>
<td>This website provides information about FEMA activities, including floodplain and mapping issues, project status, and links to other agency partners.</td>
</tr>
<tr>
<td>DLCD</td>
<td>NFIP Implementation</td>
<td>The NFIP Implementation Program provides in-depth technical assistance to local governments, property owners, other stakeholder and interest groups and coordinates with the State Hazard Mitigation Officer to sustain an active program of mitigating repetitive loss, severe repetitive loss, and substantially damaged properties.</td>
</tr>
<tr>
<td>DLCD</td>
<td>NFIP Implementation - CRS</td>
<td>In 2014, the NFIP Implementation Program initiated two Community Rating System (CRS) Users’ Groups to provide a forum for CRS communities and those contemplating joining the CRS Program to share information and expertise and ultimately increase participation throughout the State.</td>
</tr>
<tr>
<td>DLCD</td>
<td>FEMA Technical Mapping Advisory Council</td>
<td>The State NFIP Coordinator is currently serving Oregon and the United States as a member of FEMA’s Technical Mapping Advisory Council.</td>
</tr>
<tr>
<td>DOGAMI</td>
<td>LIDAR-Based Risk Assessment Initiative</td>
<td>This initiative provides high-resolution digital elevation mapping (LIDAR) so that Oregon communities can better understand their risks from geomorphological features, such as landslides and floodplain and flood hydrology. As of October 2009, it was available in 11 data acquisition blocks.</td>
</tr>
<tr>
<td>ODOT</td>
<td>Oregon Highways Seismic Options Report (2013)</td>
<td>This report assesses the risk of a major seismic event to highway facilities in Oregon and outlines options for phased retrofitting. (New report)</td>
</tr>
<tr>
<td>State IHMT, USACE</td>
<td>Oregon Silver Jackets Team</td>
<td>The Silver Jackets Team is a subcommittee to the State Interagency Hazard Mitigation Team that establishes and strengthens intergovernmental partnerships to better develop solutions to state flood hazard challenges.</td>
</tr>
<tr>
<td>Business Oregon</td>
<td>State Seismic Rehabilitation Grant</td>
<td>This grant program, administered by the Infrastructure Finance Authority at Business Oregon, provides funds to rehabilitate...</td>
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<tr>
<td>Lead(s)</td>
<td>Plan or Program</td>
<td>Description</td>
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<tr>
<td></td>
<td>Program</td>
<td>critical public buildings, particularly schools and emergency service facilities.</td>
</tr>
<tr>
<td>Business Oregon</td>
<td>HUD Disaster Resilience Competition (2014 – 2017)</td>
<td>Nearly $1 billion will be available nationally through HUD’s Community Development Block Grant-Disaster Recovery fund. It will fund projects to help communities rebuild from a declared disaster and increase their resilience to future disasters.</td>
</tr>
<tr>
<td>Oregon Water Resources</td>
<td>Integrated Water Resources Strategy (2012)</td>
<td>This plan increases the understanding of Oregon’s water needs and identifies a strategy to meet these needs.</td>
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<tr>
<td>Department</td>
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Source: Oregon Office of Emergency Management. (Adapted)

**Statewide Planning Goals.** DLCD is the State’s land use planning agency and is responsible for implementing 19 Statewide Planning Goals, including Goal 7, Areas Subject to Natural Hazards, which requires comprehensive plans and implementing measures to reduce risk to people and property from natural hazards. The State and FEMA’s share this goal. With its added natural hazard planning capacity, DLCD has been able to begin encouraging and assisting local governments with integrating their NHMPs and comprehensive plans. In January 2014, DLCD released its guidance document, “Preparing for a Cascadia Subduction Zone Tsunami: A Land Use Guide for Oregon Coastal Communities” and is actively assisting coastal communities with tsunami mitigation planning.

**City of Madras Natural Hazard Mitigation Plan Integration.** The University of Oregon’s Community Planning Workshop completed a successful pilot project assisting the City of Madras with integrating its NHMP into its Comprehensive Plan. FEMA’s new Whole Community concept is oriented toward integration of the NHMP into the Comp Plan: “A Whole Community approach to building community resilience requires finding ways to support and strengthen the institutions, assets, and networks that already work well in communities.” Through this successful pilot project, the Goal 7 section of Madras’s Comprehensive Plan was updated and integrated with its recently updated and FEMA-approved NHMP, supporting one another more effectively. The project team also created educational materials to help residents of Madras understand the NHMP, the Comprehensive Plan, and what their integration means.

**Community College and University Campus Mitigation Plans.** In 2003, FEMA initiated its Disaster-Resistant University Initiative. Given the importance of colleges and universities to the economy and future success of the country, the initiative is an important investment in our institutions of higher education. This initiative encourages universities and colleges throughout the country to identify their risks and assess their vulnerability to natural and man-made hazards, and to develop a hazard mitigation plan.

The guidance for colleges and universities is similar to that provided to local communities. Currently, seven Oregon community colleges and universities—Eastern Oregon University, Linn-Benton Community College, Mount Hood Community College, Oregon Tech, Southern Oregon University, University of Oregon, and Western Oregon University all have approved mitigation plans, while Oregon State University is initiating development of a campus-wide (multi-location) hazard mitigation plan.

**Community Wildfire Protection Plans.** The Oregon Department of Forestry (ODF) produces data on wildfire hazards throughout the State. It also works with communities on Community Wildfire Protection Plans (CWPPs) which often are used as the wildfire hazard section of local NHMPs. Both are updated on five-year cycles and ODF, OPDR, OEM, and DLCD are interested in instituting this integration, and fostering integration with comprehensive plans.
Climate Change. DLCD has a lead role in planning for climate change in Oregon, and along with OCCRI and OCS has brought expertise and Oregon Climate Change Adaptation Framework into the NHMP planning process.

North Coast Disaster Resilience Project. In 2013, DLCD’s Oregon Coastal Management Program received a grant from NOAA to conduct a pilot project focused on improving community resilience to natural hazards, including hazards related to climate change. The project was led jointly by DLCD, OPDR, and Oregon Sea Grant with several other state agencies providing support throughout the project. Four communities participated: Clatsop County, Gearhart, Seaside and Cannon Beach. Through the project, the agencies and communities developed an approach to planning for community resilience at the local level and established a network of people, organizations, and communities to improve community resilience to coastal hazards.

NFIP and Risk MAP. DLCD houses the State NFIP Coordinator and the State Risk MAP Coordinator. Together, DLCD and FEMA sponsor robust NFIP Implementation and Risk MAP Programs. The NFIP Implementation Program provides in-depth technical assistance to local governments, property owners, other stakeholder and interest groups and coordinates with the State Hazard Mitigation Officer to sustain an active program of mitigating repetitive loss, severe repetitive loss, and substantially damaged properties. In 2014, the NFIP Implementation Program initiated two Community Rating System (CRS) Users’ Groups to provide a forum for CRS communities and those contemplating joining the CRS Program to share information and expertise and ultimately increase participation throughout the State. The State NFIP Coordinator was called upon to testify before the Senate Banking Committee on the Biggert-Waters Flood Insurance Reform Act of 2012 and is currently serving Oregon and the United States as a member of FEMA’s Technical Mapping Advisory Council. The State NFIP Coordinator works closely with the State Risk MAP Coordinator on flood hazard identification and mitigation studies, levee certification, and other issues. The State Risk MAP Coordinator also works closely with FEMA to plan and prioritize Oregon Risk MAP activities; with DOGAMI on developing and analyzing multi-hazard data and making it accessible to local governments through the Risk MAP Program; and with OPDR on helping communities understand and implement Risk MAP studies.

Geologic Hazards. DOGAMI is the source of much of Oregon’s hazard data, conducting research in coastal hazards, earthquakes and related hazards, floods, landslides, volcanic hazards, and tsunamis. DOGAMI works closely with DLCD, OPDR, and other entities to apply its research and help prevent and mitigate potential losses from natural hazards.

Oregon Silver Jackets Team. The Oregon Silver Jackets Team is a subcommittee of the State Interagency Hazard Mitigation Team dedicated to improving state intergovernmental partnerships focused on developing comprehensive and sustainable solutions to state flood hazard challenges. The team is led and funded by the US Army Corps of Engineers, Portland District. Other participants include:

- Oregon Department of Land, Conservation, and Development
- Oregon Office of Emergency Management
- Federal Emergency Management Agency (FEMA) Region X
- Oregon Department of Geology and Mineral Industries (DOGAMI)
- National Weather Service’s Northwest River Forecast Center (NWS-NWRFC)
- US Geological Survey

Portland Lidar Consortium. Coordinated by DOGAMI, the Portland Lidar Consortium is a group of federal, state, and local governments that are working together to fund lidar mapping for portions (or
all) of Clatsop, Tillamook, Washington, Clackamas, Multnomah, Hood River, Marion, and Yamhill Counties. Seventeen agencies have worked together to map 2,200 square miles of lidar data. This coordination reduced the cost of collecting the data, and increased the quality and standardization of the data acquired.

Based in part on the success of the Portland Lidar Consortium, the Oregon Legislature provided some funding and directed DOGAMI to expand lidar collection efforts to other parts of the state in 2007. The state continues to work with local governments and other organizations to expand lidar mapping efforts.

**Integrated Water Resources Strategy.** The Oregon Water Resources Division is involved in water issues that affect hazard mitigation, from flooding to drought. The agency developed an Integrated Water Resources Strategy which provides a blueprint to help the State better understand and meet its instream and out-of-stream needs, taking into account water quantity, water quality, and ecosystem needs. Several of the Strategy’s actions are directly related to hazard mitigation.

**Seismic Rehabilitation Grant Program.** Business Oregon’s Infrastructure Finance Division administers the Oregon Seismic Rehabilitation Grant Program (SRGP) which provides state funds for seismic rehabilitation of critical public buildings, particularly public schools (K-12, community colleges, education service districts, and universities) and emergency services facilities (hospital buildings with acute inpatient care facilities, fire stations, police stations, sheriff’s offices, 9-1-1 centers and Emergency Operations Centers).

**Health, Security, Preparedness, and Response.** The Oregon Health Authority’s Health Security, Preparedness and Response (HSPR) Program develops public health systems to prepare for and respond to major, acute threats and emergencies that impact the health of people in Oregon. The Program addresses eight of Oregon’s eleven natural hazards, plus extreme heat and bioterrorism.

**Office of Emergency Management.** OEM is the hub of emergency planning for the State of Oregon. It houses the State Hazard Mitigation Officer, supports the State IHMT, and is responsible for all stages of the disaster cycle – mitigation, preparation, response, and recovery – for human-caused hazards as well as natural hazards. The 2015 Natural Hazard Mitigation Plan constitutes Volume 1 of the Oregon Emergency Operations Plan with which all other emergency plans are coordinated.

**Emergency Management Performance Grants Program.** OEM also administers the Emergency Management Performance Grants Program (EMPG) which passes through funding from FEMA to state, local, tribal and territorial governments for preparing for all hazards. One requirement for local and tribal governments to obtain this funding is to have a current, FEMA-approved NHMP.
### 5.2.5 Revisions to the 2012 Oregon Natural Hazard Mitigation Plan

**Table 5-4: Revisions to the 2012 Oregon Natural Hazard Mitigation Plan**

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SOURCE: DLCD

TO BE ADDED.
5.3 Maintaining the Plan

**Requirement 44 CFR §201.4(c), Plan content.** To be effective the plan must include the following elements:

- A Plan Maintenance Process that includes: (i) An established method and schedule for monitoring, evaluating, and updating the plan; (ii) A system for monitoring implementation of mitigation measures and project closeouts; and (iii) A system for reviewing progress on achieving goals as well as activities and projects identified in the Mitigation Strategy.

The purpose of this section is to describe procedures for maintaining the Oregon NHMP which involves monitoring progress in achieving mitigation actions and Plan goals as well as monitoring, evaluating and updating the Oregon NHMP itself.

The procedures described in this section are informed by analyses of previous plan maintenance methods and schedules and the State’s current and projected capabilities. Because this plan and the state’s capabilities are ever-evolving, the systems and processes described herein are subject to change. The information collected and documented through the plan maintenance process will serve as the basis for the next plan update. The process of updating the plan provides the state with an opportunity to review its progress in achieving mitigation goals and chart its course for the next mitigation planning cycle.

**5.3.1 Analysis of the 2012 Plan Maintenance Process**

The Oregon NHMP was last updated and formally adopted by Governor Kitzhaber on March 5, 2012. As described earlier in this chapter, DLCD first took on responsibility for updating the Plan during 2012 and hired two positions to manage the effort in 2013. The process of transferring responsibility and gearing up to execute consumed the first 14 months of the update cycle. Subsequently and necessarily, all available resources were allocated to the update; therefore, the detailed plan maintenance and monitoring process for the plan and mitigation actions set forth in the 2012 Plan was not able to be followed. FEMA acknowledged this situation through the 2015 Plan update funding negotiation. Nevertheless, a thorough review and evaluation of the entire 2012 Plan was undertaken through the plan update process – including Plan goals and mitigation actions – substituting effectively for the Plan maintenance and monitoring process envisioned in the 2012 Plan. All sections of the 2012 plan were reviewed and revised, augmented, or deleted. Some new sections were added. The 2012 Plan was also reorganized for 2015. See Section 5.2.5 for details. Whether mitigation actions were implemented as anticipated is indicated by their status on the mitigation action tables. 2012 actions that appear on the 2015 Priority table have not yet been accomplished. Those on the Ongoing table are being implemented. Those that are done, not being done, replaced or covered by another action appear on the Removed table with the reason for removal. Table 3-4 shows the disposition of the 2012 mitigation actions in the 2015 Plan. Section 3.3.3 discusses the changes in mitigation action priorities from 2012 to 2015.

In 2012, Oregon lost enhanced plan status due to project implementation and program management issues. Much effort has been expended during this update cycle on making the changes necessary to regain enhanced plan status. OEM and the State Hazard Mitigation Officer have been leading the charge, working closely with FEMA and making substantial progress. In anticipation of regaining enhanced plan status, the 2012 Enhanced Plan (Chapter 4) was also thoroughly reviewed, evaluated, and revised during this update cycle.
5.3.2 Monitoring, Evaluating, and Updating the 2015 Plan

5.3.2.1 Monitoring the 2015 Plan

DLCD, with input and involvement from State IHMT agency representatives will prepare an annual NHMP progress report. While it is anticipated that the report will be prepared during the first quarter of the calendar year to be delivered to the State IHMT at its regularly scheduled April meeting, this schedule may be amended as circumstances dictate (e.g., a disaster declaration might require an adjustment). The first annual report for this planning cycle will be prepared in 2016 for 2015. Annual reports will be suspended for the last two years of the planning cycle (2019 report on 2018, and 2020 report on 2019) to conserve scarce resources by avoiding duplication of effort, as the information developed during that period will be part of the plan update.

The annual report will document any declared disaster events that have occurred in the previous year and milestones in plan implementation, such as key meetings, decision points, interagency coordination, public outreach efforts, mitigation action status, and mitigation success stories. The report will also document progress toward achieving Plan goals by correlating mitigation action status and successes with the goals and other state mitigation-related activities and initiatives. The information in the annual reports will be included in the Plan update.

Further, at a regular quarterly meeting as soon as feasible following a declared disaster event in Oregon, the State IHMT will discuss the event in the context of the Oregon NHMP and provide any necessary direction for updating the Plan. This discussion will be documented and any directed plan revisions will be included in the annual report or Plan update depending on when the disaster event occurred.

5.3.2.2 Monitoring Mitigation Actions and Project Closeouts

Progress on state mitigation actions will be monitored through the annual reporting process. Progress of “Priority” mitigation actions will be noted; completed actions or those that will not be completed will be deleted from the “Priority” list and entered on the “Removed” list with a brief explanation. Progress of “Ongoing” mitigation actions will be noted. Mitigation action monitoring was not pursued as a plan maintenance activity during this update cycle due to its unique circumstances. The work was done as part of the update process.

In addition, OEM will continue systematically monitoring the implementation of FEMA-funded mitigation actions and projects for which it is the grantee at both state and local levels using required sub-grantee quarterly reporting; telephone and e-mail communications; and project site visits as required. Successful project implementation requires open communication between the grantee and sub-grantee to ensure schedules, budget, and scope-of-work deliverable requirements are met. Project closeouts are always conducted on site allowing the grantee and sub-grantee to certify completion of the project activity (performance component) and that all eligible expenses have been submitted, reviewed for eligibility and reimbursed (financial component). OEM documents project closeout by summary performance and financial reports making sure the sub-grantee is aware of documentation retention requirements, audit requirements and maintenance schedule (if required) to ensure the performance of the mitigation over the life of the project. The State Hazard Mitigation Officer is responsible for reporting this information to the State IHMT for projects funded by the Hazard Mitigation Grant, Pre-Disaster Mitigation and Flood Mitigation Assistance programs.
Outside of the traditional FEMA mitigation grant programs, state and local governments identify and oftentimes implement mitigation actions and projects using their own capabilities and resources. At the local level, this may include the development and adoption of local ordinances and regulations that have a hazard mitigation component; mitigation codes and standards as part of ongoing transportation and public works programs; hazard-related components of local comprehensive land use plans; and so forth. While it may not be possible to track and report on every mitigation accomplishment in local mitigation plans, communities will see the positive cumulative impacts of these efforts in reduced disaster losses. The state encourages the seamless integration of mitigation activities into the day-to-day operations of state and local government programs.

5.3.2.3 Evaluating the 2015 Plan

DLCD will manage and facilitate the plan update process, beginning with review and evaluation of the 2015 Oregon NHMP. The criteria to be used for evaluation of the 2015 Plan are:

- Accuracy and utility of the State and Regional Risk Assessments in the context of any disaster events that may have occurred during the update cycle.
- Progress toward “Future Enhancements” discussed in Section 2.2.4.
- Progress toward completion of mitigation actions.
- Progress in coordinating State and local mitigation planning.
- Progress toward achieving Plan goals.

Results of the evaluation will be documented and serve as the basis for updating the Plan.

5.3.2.4 Updating the 2015 Plan

DLCD will manage the update of the 2015 Oregon NHMP for 2020. The process will begin in 2018 following completion of the annual report for 2017. The information from the plan maintenance process’s three annual reports (2016 for 2015, 2017 for 2016, and 2018 for 2017) will be included in the update.

DLCD will analyze the 2015 Plan and present alternative approaches and a recommendation to the State IHMT. Once the approach is agreed upon, DLCD will develop a scope of work and timeline, present it to the State IHMT for review and approval, and then forward the approved scope and timeline to FEMA for its approval.

During the 2015 update process, the suite of natural hazards the State is addressing in its NHMP was questioned. The State IHMT also became aware of substantial differences in the amount and availability of data and technical expertise for certain hazards. During the next update cycle, the State IHMT will re-evaluate the established suite of hazards, potentially making changes, and prioritize the final suite of hazards to address these issues and make optimum use of resources. The decisions on which hazards to address and to what extent will have a profound effect on the approach to and scope of work for the 2020 Oregon NHMP update.

Other issues that would affect 2020 plan update approach and scope of work include:

- The extent of progress on developing and implementing the new risk assessment concept methodology;
- The availability of new or updated hazard, probability, and vulnerability data, including climatic change and cultural and historic resources;
- The extent of progress on enhancing state and local natural hazard mitigation planning and coordination; and
Any new requirements included in FEMA’s revised state NHMP guidance currently being drafted.

One goal of the 2015 update is to produce the Oregon NHMP as a “living document” that staff can update continually during its life, while maintaining a static version for public use. If that goal is achieved and implemented effectively, it could provide a head start on the 2020 update.