Oregon
John A. Kitzhaber, M.D., Governor

Department of Land Conservation and Development
Planning Services Division
635 Capitol Street NE, Suite 150
Salem, Oregon 97301-2540
Phone: (503) 373-0050
Fax: (503) 378-5518
www.oregon.gov/LCD

April 11, 2014

TO: Oregon State Interagency Hazard Mitigation Team (IHMT)

FROM: Marian Lahav, Natural Hazards Planner, DLCD

RE: April 17, 2014 IHMT Meeting:
2015 Oregon Natural Hazards Mitigation Plan (NHMP) Update
Plan Goals and Mitigation Actions

One of the federal requirements for a State NHMP is that the goals must be linked to the risk assessment. The goals then link the risk assessment to the mitigation actions. During the Plan update process, the goals must be assessed and either validated or revised.

At this point in the process we have a draft state-level risk assessment that characterizes the hazards and their impacts, and identifies the regions most vulnerable to each hazard. It also quantifies potential losses to state-owned and –leased buildings and critical/essential facilities in terms of property values, and identifies critical/essential facilities that are not state-owned or –leased in hazard areas. An analysis of the impacts of seismic events on identified transportation lifelines is also part of the risk assessment. Soon we will also have a regional risk assessment providing similar analysis at the local level.

This memo reviews the links between Oregon NHMP goals mitigation actions, the draft state-level risk assessment, and local NHMP goals. The IHMT will use this review to decide whether to retain the goals as currently written or revise them. The IHMT will also decide whether to add mitigation actions based on the draft risk assessment, and whether to prioritize hazards for the next Plan update cycle. Staff recommends adding three new goals, adding six mitigation actions, and prioritizing hazards in the next plan.

2012 Oregon NHMP Goals

GOAL 1 Protect life and reduce injuries resulting from natural hazards.
GOAL 2 Minimize public and private property damages and the disruption of essential infrastructure and services from natural hazards.
GOAL 3 Increase the resilience of local, regional, and statewide economies.
GOAL 4 Minimize the impact of natural hazards while protecting and restoring the environment.
GOAL 5 Enhance and maintain state capability to implement a comprehensive statewide hazard loss reduction strategy.
GOAL 6 Document and evaluate Oregon's progress in achieving hazard mitigation.
GOAL 7 Motivate the public, private sector, and government agencies to mitigate against the effects of natural hazards through information and education.
GOAL 8 Eliminate development within mapped hazardous areas where the risks to people and property cannot be mitigated.

Link between the Risk Assessment and the Goals of the Oregon NHMP

The purpose of the risk assessment is to identify and characterize Oregon's natural hazards, determine which jurisdictions are most vulnerable to each hazard, and estimate potential losses to vulnerable structures and infrastructure and to state facilities from those hazards. The risk assessment helps the state identify the most vulnerable jurisdictions and strategically target mitigation resources.

The information in the draft state-level risk assessment speaks directly to protection of life and property, infrastructure and services, and local, regional, and state economic resilience, the topics of Goals 1, 2, and 3. The vulnerability assessments for each hazard and the potential loss estimates highlight the importance of informing and educating citizens about the risks and what they can do to reduce potential losses, including eliminating development where risks cannot be mitigated, the topics of Goals 7 and 8. Environmental stewardship, the topic of Goal 4, plays a role in mitigating some hazards, and must be considered in designing mitigation projects. These are clear connections between the information in the risk assessment and the existing goals.

Goals 5 and 6 are more administrative in nature, focusing on the state's ability to implement the Plan, and document and evaluate progress in achieving mitigation.

Staff suggests that no changes are necessary to improve linkages between the risk assessment and the existing Oregon NHMP Goals. If the messages of the risk assessment change substantively once the regional risk assessment is developed, the goals will be revisited.

Link between the Goals in the Oregon NHMP and Goals in Local NHMPs

Local NHMPs are to be coordinated with and linked to the state NHMP. Plan goals offer one avenue for making that linkage with local NHMPs. A preliminary review of county-level NHMPs in Oregon indicates that while some state and local NHMP goals are shared (e.g., protection of life and property, enhancing government's ability to implementation the plan), local plans contain other goals the IHMT may want to adopt to better align state and local visions for hazard mitigation. Suggestions for new goals:

1. Minimize damage to historic and cultural resources.

2. Increase communication, collaboration, and coordination among agencies at all levels of government to mitigate natural hazards.

3. Integrate local NHMPs with comprehensive plans and implementing measures.

Link from the Risk Assessment, through the Goals, to the Mitigation Actions

Risk Assessment
The information in the risk assessment also supports these statements:

A. Much more data is available for some hazards than others, resulting in a more robust risk analysis for the more data-rich hazards.

B. There is a clear need to develop a statewide standardized risk assessment methodology across all hazards.

C. Similarities and differences between state and local level vulnerability assessments have not been analyzed. Some state and local vulnerability assessments are quite consistent, while others are starkly inconsistent. Communication and education among state and local staff responsible for assessing vulnerability would improve understanding and consistency.

D. Several hazards are related to one another through cause and effect (e.g., earthquakes and tsunamis, floods and landslides, drought and wildfires) or through shared drivers (e.g., El Nino Southern Oscillation (ENSO)), indicating opportunity for increasing interagency collaboration and efficiencies in research and mitigation activities.

E. Some state-owned or –leased buildings or critical/essential facilities and their contents cannot be accurately identified using available state data. Property values are not available for critical and essential facilities that are not state-owned or –leased. Local knowledge could be helpful in improving the state data by more accurately identifying buildings and their contents and determining which buildings and critical/essential facilities should be prioritized for mitigation. The state data could be useful at the local level as well. This opportunity for state and local collaboration could improve risk assessments and loss estimates at both levels.

Goals

These statements address issues covered by a number of the Plan goals (Goals 1, 2, 3, 7, 8). In particular, they raise an important question concerning Goal 5, the state's capability to implement a comprehensive statewide hazard loss reduction strategy. The State currently recognizes eleven hazards, obligating it to address each one, and strives to do so as fully and equitably as possible. Due to staffing, funding, data availability, access to expertise, or other reasons, some hazards cannot be addressed to the same extent as others. Staff suggests that prior to the next Plan update cycle, the IHMT prioritize hazards allowing resources to be strategically targeted.

Mitigation Actions

These statements also lead to recommended mitigation actions:

1. Analyze the similarities and differences between state and local vulnerability assessments.

2. Schedule three opportunities for state/local dialogue on local vulnerability assessments in the next year to improve consistency and mutual understanding.

3. Collaborate with local governments to improve the accuracy of potential loss totals by more accurately identifying critical/essential facilities, and determining their property values.

4. Improve state agency procedures for tracking data on state-owned and –leased buildings and critical/essential facilities.

Further, specific recommendations in the risk assessment suggest these new mitigation actions:

5. Develop an improved methodology for gathering data and identifying the communities most vulnerable to drought.

6. Establish a program for studying winter storms and their impacts statewide. Install snowfall sensors throughout the state to develop annual snowfall data.

Summary of Action Requested

Based on the information in the draft state-level risk assessment, the Oregon NHMP goals remain valid and require no revision. However, to improve coordination and linkage with local NHMPs, staff suggests the IHMT add three new goals. Further, staff suggests adding mitigation actions to address information and recommendations in the draft risk assessment. Finally, staff suggests that the IHMT prioritize hazards for the next Plan update.

Should these goals be added?

Y/N 1. Minimize damage to historic and cultural resources.

Y/N 2. Increase communication, collaboration, and coordination among agencies at all levels of government to mitigate natural hazards.

Y/N 3. Integrate local NHMPs with comprehensive plans and implementing measures.

Should these mitigation actions be added?

Y/N 1. Analyze the similarities and differences between state and local vulnerability assessments.

Y/N 2. Schedule three opportunities for state/local dialogue on local vulnerability assessments in the next year to improve consistency and mutual understanding.

Y/N 3. Collaborate with local governments to improve the accuracy of potential loss totals by more accurately identifying critical/essential facilities, and determining their property values.

Y/N 4. Improve state agency procedures for tracking data on state-owned and –leased buildings and critical/essential facilities.

Y/N 5. Develop an improved methodology for gathering data and identifying the communities most vulnerable to drought.

Y/N 6. Establish a program for studying winter storms and their impacts statewide. Install snowfall sensors throughout the state to develop annual snowfall data.

Should the IHMT prioritize hazards for the next Oregon NHMP update cycle?