WELCOME!

2015 Coos County NHMP Update
Kick-Off Meeting
AGENDA

- Introduction and Background
- Natural Hazards Mitigation Planning Overview
- Community Profile
- Break (if needed)
- Hazard History Review
- State and County Goals
- Break Out Groups: Action Item List Review
- Closing and Next Steps
INTRODUCTIONS

- Name
- Organization
- Hopes and/or Expectations
WHAT IS THE COMMUNITY SERVICE CENTER?

The Community Service Center assists Oregon communities by providing planning and technical assistance to help solve local issues and improve the quality of life for Oregon residents.

CSC provides four service learning programs:

- Resource Assistance for Rural Environments
- Economic Development Administration Center
- Community Planning Workshop
- Oregon Partnership for Disaster Resilience
• OPDR coordinates limited resources to generate activity that could not be accomplished by any one group or organization working alone.

• The Approach:
  – Integrated
  – Cost-effective
  – Systematic
OPDR INITIATIVES

- Post-Disaster Recovery Planning for Catastrophic Disasters
- Resilient Communities
- Technical Resource Development and Research
- Local & Statewide Pre-Disaster Mitigation Planning
WORK SESSION GOALS & OBJECTIVES

- **Explain** the natural hazard mitigation planning process
- Review the **benefits** of developing a natural hazard mitigation plan
- Provide an **overview** of the planning process
- Update **recent hazard histories**
- Assess past **mitigation strategies**
NHMP PLANNING PROCESS

Natural Hazards Profile  ➔  Community Profile

Natural Hazards Profile  ➔  Community Profile

Risk Assessment

Policy Crosswalk ➔  Action Items

Natural Hazards Mitigation Plan
AGENDA

- Introduction and Background
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- Community Profile
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- Closing and Next Steps
NATURAL HAZARDS
THE DISASTER CYCLE

- Mitigation
- Preparation
- Response
- Emergency
- Event
- Recovery
- Restoration
- Capacity Building
- Pre-Impact
- Reconstruction
HAZARD, VULNERABILITY & DISASTER

Understanding Risk

Natural Hazard
- Potential Catastrophic and Chronic Physical Events
  - Past Recurrence Intervals
  - Future Probability
  - Speed of Onset
  - Magnitude
  - Duration
  - Spatial Extent

Vulnerable System
- Exposure, Sensitivity and Resilience of:
  - Population
  - Economic Generation
  - Built Environment
  - Academic and Research Functions
  - Cultural Assets
  - Infrastructure
- Ability, Resources and Willingness to:
  - Mitigate
  - Respond
  - Prepare
  - Recover

Risk of Disaster

Source: USGS- Oregon Partnership for Disaster Resilience Research Collaboration, 2006
Hazard Mitigation Planning: Act Before Disaster Strikes

Mitigation: any sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event

Strategies: Policy Changes, Education and Outreach, Capital Projects
COMMUNITY PARTNERSHIPS

- Emergency Management
- County/City Staff
- General Public
- Elected bodies
- Utility Companies
- Regional Solutions Team
- Others?
MITIGATION PLANNING OPPORTUNITIES

- Awareness of risks, sensitivities, and vulnerabilities
- Reduce hazard impact
- Save lives, property and money
- New community partnerships
- Create more resilient communities
- Mitigation becomes a part of ordinary government business
- Support rapid recovery
- Receive federal funding
Plan Elements
STEP 1: COMMUNITY PROFILE UPDATE

- Local geography
- Climate
- Population characteristics
- Employment
- Economics
- Housing
- Transportation
- Infrastructure
- Cultural resources
- Government structure
STEP 2: NATURAL HAZARDS PROFILE

- Update hazard history
- Review 2010 hazard profiles
- Update hazard maps
- Hazard ID Plan Update Requirements
- Description of the hazard
- ID the location
- ID extent of hazard
- Provide information on previous occurrences and probability of future occurrences
Risk Assessment: Identifies natural hazards and the community’s vulnerability to inform the mitigation strategy.

Multi-jurisdictional Risk Assessment - §201.6(c) (2) (iii): For multi-jurisdictional plans, the risk assessment must assess each jurisdiction’s risks where they vary from the risks facing the entire planning area.
STEP 4: POLICY CROSSWALK

- Identifies elements of existing plans and policies that may support mitigation strategies

- Example plans:
  - Comprehensive plan
  - Capital improvement plan
  - Community wildfire protection plan
  - Parks and open space plan
  - Floodplain ordinances
  - Emergency operations plan
  - Stormwater mgmt plan
STEP 5: MITIGATION STRATEGY

- Community guide to address vulnerabilities and risks
- Action items

Multi-jurisdictional Mitigation Strategy - §201.6(c)(3) (iv): For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.
Multi-jurisdictional Participation - §201.6(a)(3) Multi-jurisdictional plans (e.g., watershed plans) may be accepted, as appropriate, as long as each jurisdiction has participated in the process.

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

Kickoff Meeting: February 25, 2015
Meeting #2: End of March/Early April
Meeting #3: Early/Mid-May
Draft for County Review: Mid-June
FEMA Review: July-Mid-August
Adopt NHMP: Fall 2015
Mitigation Funding
2005 Report Findings:

- A dollar spent on mitigation saves society an average of $4.00

- Mitigation is sufficiently cost-effective to warrant federal funding on an ongoing basis both before disasters and during post-disaster recovery
FEDERAL MITIGATION GRANTS

- **Pre-Disaster Mitigation (PDM) Program**
  - Provides funding for hazard mitigation planning, and the implementation of mitigation projects *prior* to a disaster event

- **Flood Mitigation Assistance (FMA) Program**
  - Property owners who participate in the FMA program must have a flood insurance policy on the structure to be mitigated that is current at the time of application and maintained through award

- **Hazard Mitigation Grant Program (HMGP)**
  - Provides funding to implement long-term hazard mitigation measures after a major disaster declaration

- **Emergency Management Performance Grant (EMPG)**
  - OEM requires current NHMP as part of performance measure to receive funds
OTHER FUNDING OPPORTUNITIES

◆ **State Programs (NHMP Not Required)**
  ◆ Community Development Block Grants
  ◆ Oregon Watershed Enhancement Board (OWEB)
  ◆ Seismic Rehabilitation Grant Program

◆ **Local Programs and other Initiatives**
  ◆ Capital Improvements Program
  ◆ Comprehensive Plan/Land Use Ordinances
  ◆ Economic Development Planning

◆ **Other Sources**
  ◆ Economic Development Administration
  ◆ National Fire Plan
  ◆ Homeland Security
  ◆ Infrastructure Finance Authority
  ◆ etc…
HMA ELIGIBLE PROJECT EXAMPLES

- Property acquisition in risk prone areas
- Relocation of structures to lower risk area
- Elevation of existing structures
- Retrofitting existing structures
- Protective measures for utilities, water and sanitary sewer systems, and/or infrastructure
- Stormwater management projects & localized flood reduction projects
# Local Mitigation Plan Review Summary

The plan cannot be approved if the plan has not been formally adopted. Each requirement includes separate elements. All elements of the requirement must be rated “Satisfactory” in order for the requirement to be fulfilled and receive a score of “Satisfactory.” Elements of each requirement are listed on the following pages of the Plan Review Crosswalk. A “Needs Improvement” score on elements shaded in gray (recommended but not required) will not preclude the plan from passing. Reviewer’s comments must be provided for requirements receiving a “Needs Improvement” score.

<table>
<thead>
<tr>
<th>Prerequisite(s) (Check Applicable Box)</th>
<th>NOT MET</th>
<th>MET</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Adoption by the Local Governing Body: §201.6(c)(5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Multi-Jurisdictional Plan Adoption: §201.6(c)(5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Multi-Jurisdictional Planning Participation: §201.8(a)(3)</td>
<td></td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Planning Process</th>
<th>N</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Documentation of the Planning Process: §201.6(b) and §201.6(c)(1)</td>
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<table>
<thead>
<tr>
<th>Risk Assessment</th>
<th>N</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Identifying Hazards: §201.6(c)(2)(i)</td>
<td></td>
<td></td>
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<tr>
<td>6. Profiling Hazards: §201.6(c)(2)(ii)</td>
<td></td>
<td></td>
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<tr>
<td>7. Assessing Vulnerability: Overview: §201.6(c)(2)(ii)</td>
<td></td>
<td></td>
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<tr>
<td>8. Assessing Vulnerability: Addressing Repetitive Loss Properties: §201.6(c)(2)(ii)</td>
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<td></td>
</tr>
<tr>
<td>10. Assessing Vulnerability: Estimating Potential Losses: §201.6(c)(2)(ii)(B)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Assessing Vulnerability: Analyzing Development Trends: §201.6(c)(2)(ii)(C)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Multi-Jurisdictional Risk Assessment: §201.6(c)(2)(ii)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*States that have additional requirements can add them in the appropriate sections of the Local Multi-Hazard Mitigation Planning Guidance or create a new section and modify this Plan Review Crosswalk to record the score for those requirements.

## Scoring System

Please check one of the following for each requirement.

- **N – Needs Improvement:** The plan does not meet the minimum for the requirement. Reviewer’s comments must be provided.
- **S – Satisfactory:** The plan meets the minimum for the requirement. Reviewer’s comments are encouraged, but not required.

### Mitigation Strategy

<table>
<thead>
<tr>
<th>Requirement</th>
<th>N</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. Local Hazard Mitigation Goals: §201.6(c)(3)(i)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Identification and Analysis of Mitigation Actions: §201.6(c)(3)(i)</td>
<td></td>
<td></td>
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<tr>
<td>15. Identification and Analysis of Mitigation Actions: NFIP Compliance: §201.6(c)(3)(ii)</td>
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<tr>
<td>16. Implementation of Mitigation Actions: §201.6(c)(3)(i)</td>
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<tr>
<td>17. Multi-Jurisdictional Mitigation Actions: §201.6(c)(3)(ii)</td>
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</table>

### Plan Maintenance Process

<table>
<thead>
<tr>
<th>Requirement</th>
<th>N</th>
<th>S</th>
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</thead>
<tbody>
<tr>
<td>18. Monitoring, Evaluating, and Updating the Plan: §201.6(c)(4)(i)</td>
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<td></td>
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<tr>
<td>19. Incorporation into Existing Planning Mechanisms: §201.6(c)(4)(i)</td>
<td></td>
<td></td>
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<tr>
<td>20. Continued Public Involvement: §201.6(c)(4)(ii)</td>
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<td></td>
</tr>
</tbody>
</table>

### Additional State Requirements

- Insert State Requirement
- Insert State Requirement
- Insert State Requirement

## Local Mitigation Plan Approval Status

- PLAN NOT APPROVED
- See Reviewer’s Comments
- PLAN APPROVED

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FEMA CROSSWALK
LOCAL PLAN MITIGATION REVIEW GUIDE

◆ Strong emphasis on Mitigation Strategy requirements;
◆ Simplified guidance, only includes the regulatory requirements;
◆ New Guiding Principles and Intent statements support regulatory requirements;
◆ Plan Review Tool replaces the existing Crosswalk in a new format that is easier to use; and
◆ Plan Review Tool communicates implementation of the plan as well as improvements to the plan.
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- Natural Hazards Mitigation Planning Overview
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# COOS COUNTY & INCORPORATED CITIES POPULATION, 2008-2013

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>2008</th>
<th>2013</th>
<th>Population Change 2008-2013</th>
<th>Average Annual Growth Rate</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Population</td>
<td>Percent of County</td>
<td>Population</td>
<td>Percent of County</td>
</tr>
<tr>
<td>Bandon</td>
<td>3,300</td>
<td>5.2%</td>
<td>3,100</td>
<td>4.9%</td>
</tr>
<tr>
<td>Coos Bay</td>
<td>16,670</td>
<td>26.4%</td>
<td>16,160</td>
<td>25.7%</td>
</tr>
<tr>
<td>Coquille</td>
<td>4,165</td>
<td>6.6%</td>
<td>3,850</td>
<td>6.1%</td>
</tr>
<tr>
<td>Lakeside</td>
<td>1,560</td>
<td>2.5%</td>
<td>1,705</td>
<td>2.7%</td>
</tr>
<tr>
<td>Myrtle Point</td>
<td>2,550</td>
<td>4.0%</td>
<td>2,525</td>
<td>4.0%</td>
</tr>
<tr>
<td>North Bend</td>
<td>9,855</td>
<td>15.6%</td>
<td>9,720</td>
<td>15.5%</td>
</tr>
<tr>
<td>Powers</td>
<td>730</td>
<td>1.2%</td>
<td>695</td>
<td>1.1%</td>
</tr>
<tr>
<td><strong>Sub-Total</strong></td>
<td><strong>38,830</strong></td>
<td><strong>61.4%</strong></td>
<td><strong>37,755</strong></td>
<td><strong>60.1%</strong></td>
</tr>
<tr>
<td>Not Incorporated</td>
<td>24,380</td>
<td>38.6%</td>
<td>25,105</td>
<td>39.9%</td>
</tr>
<tr>
<td>Coos Total</td>
<td>63,210</td>
<td>100%</td>
<td>62,860</td>
<td>100%</td>
</tr>
</tbody>
</table>

## OREGON AND COOS COUNTY, URBAN AND RURAL POPULATION, 2000-2010

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Rural</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Oregon</td>
<td>2,694,144</td>
<td>3,104,382</td>
<td>15.2%</td>
<td>727,255</td>
</tr>
<tr>
<td>Region 1</td>
<td>103,534</td>
<td>111,575</td>
<td>7.8%</td>
<td>84,753</td>
</tr>
<tr>
<td>Clatsop</td>
<td>20,976</td>
<td>22,604</td>
<td>7.8%</td>
<td>14,654</td>
</tr>
<tr>
<td>Coos</td>
<td>38,999</td>
<td>38,864</td>
<td>-0.3%</td>
<td>23,780</td>
</tr>
<tr>
<td>Curry</td>
<td>10,030</td>
<td>13,702</td>
<td>36.6%</td>
<td>11,107</td>
</tr>
<tr>
<td>Lincoln</td>
<td>27,640</td>
<td>28,730</td>
<td>3.9%</td>
<td>16,839</td>
</tr>
<tr>
<td>Tillamook</td>
<td>5,889</td>
<td>7,675</td>
<td>30.3%</td>
<td>18,373</td>
</tr>
</tbody>
</table>

U.S. Census Bureau (n.d.). *2010 Decennial Census, Table P2*
U.S. Census Bureau (n.d.). *2000 Decennial Census, Table P002*
# OREGON AND COOS COUNTY AGE GROUPS, 2010-2030

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>2010 Total</th>
<th>&lt; 15 Years Number</th>
<th>&lt; 15 Years Percent</th>
<th>&gt; 64 Years Number</th>
<th>&gt; 64 Years Percent</th>
<th>15 to 64</th>
<th>Age Dependency Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oregon</td>
<td>3,837,300</td>
<td>719,606</td>
<td>18.8%</td>
<td>532,062</td>
<td>13.9%</td>
<td>2,585,632</td>
<td>48.4</td>
</tr>
<tr>
<td>Coos</td>
<td>63,035</td>
<td>9,720</td>
<td>15.4%</td>
<td>13,923</td>
<td>22.1%</td>
<td>39,392</td>
<td>60.0</td>
</tr>
<tr>
<td>2030</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oregon</td>
<td>4,768,000</td>
<td>819,851</td>
<td>17.2%</td>
<td>1,021,190</td>
<td>21.4%</td>
<td>2,926,959</td>
<td>62.9</td>
</tr>
<tr>
<td>Coos</td>
<td>65,210</td>
<td>9,660</td>
<td>14.8%</td>
<td>20,943</td>
<td>32.1%</td>
<td>34,607</td>
<td>88.4</td>
</tr>
</tbody>
</table>

OREGON AND COOS COUNTY POVERTY RATES, 2013

OREGON AND COOS COUNTY DISABILITIES BY AGE GROUP, 2013

COOS COUNTY, AGE OF HOUSING STOCK, 2013

## COOS COUNTY DAMS

<table>
<thead>
<tr>
<th>Threat Potential</th>
<th>Number of Dams</th>
<th>Rivers</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>2</td>
<td>Pony Creek</td>
</tr>
<tr>
<td>Significant</td>
<td>8</td>
<td>Tarheel Creek, Rink &amp; Walker Creek, Chickes Creek Trib., South Fork Coquille River, Fourth Creek, Third Creek, Bear Creek Trib.</td>
</tr>
<tr>
<td>Low</td>
<td>16</td>
<td>Archer Gulch, Coquille River, Eel Creek, Myers Creek, Mill Creek, Geiger Creek, South Fork Rink Creek, Chickness Creek Trib.</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>26</strong></td>
<td>-</td>
</tr>
</tbody>
</table>

*Source: Oregon water Resources Department, “Dam Inventory Query”, [http://apps.wrd.state.or.us/apps/misc/dam_inventory/](http://apps.wrd.state.or.us/apps/misc/dam_inventory/). December 2014.*
COOS COUNTY, EMPLOYMENT SECTORS AND WAGES, 2013

- The government employs 26% of the Coos County workforce.
  - 20% - local government.
- The private sector employs 74% of the Coos County workforce.
  - 19% - Trade, Transportation, and Utilities.
  - 12% - Education and Health Services.
  - 11% - Professional and Business Services.
  - 11% - Leisure and Hospitality.

COMMUNITY PROFILE

- Review Community Profile Draft.
- What information is most important to highlight about your community?
- Are there any changes or additional information that you would like to see in the profile?
OPPORTUNITIES FOR COOS COUNTY

- Are there any big planning or policy projects that are ongoing or scheduled to start within the next year? Within the next 5 years?
  - Large development projects?
  - Comprehensive plan amendments?
  - Properties that are ready for buyout?
Break
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HAZARD HISTORY UPDATES

- What hazards have impacted your community in the last 5 years?
- When?
- What were the impacts?
- Discuss findings at your table.
COASTAL EROSION

- No events since 2010 update.
DROUGHT

- **2004-2005**: Coos, Curry, and Douglas Counties - Counties declared primary natural disaster area due to drought.
- **December 2014**: Lane, Douglas, and Coos Counties - Drought disaster declaration for the three counties due to below average snowpack.
EARTHQUAKE

- October 2011: Oregon Coast- A 5.3 magnitude earthquake occurred off the Oregon coast. The earthquake was 144 miles west of Coos Bay.
- February 2012: Oregon Coast- A 6.0 magnitude earthquake occurred off the Oregon coast about 160 miles west of Coos Bay. There were no reported damages.
- April 2012: Oregon Coast- A 5.9 magnitude earthquake occurred off the Oregon coast. The earthquake was 168 miles west of Coos Bay. There were no reported damages.
FLOOD

- January 2012: Coos and Curry Counties- A severe winter storm caused flooding along with landslides and mudslides in Southern Oregon.

- March 2012: Coos and Curry Counties- Winds and heavy rains caused flooding, mudslides, and landslides in twelve counties. There was an estimated $5,856,881 in damage to state highways.

- December 2012: Oregon Coast- Heavy rains caused serious flooding and landslides along the coast. In Coos County, The Coquille River flooded a park and farmland.
LANDSLIDE

- March 2012: Coos County- Winds and heavy rains caused flooding, mudslides, and landslides in twelve counties. Damages to state highways were estimated at $5,856,881.

- April 2012: Coos Bay- Heavy rains caused landfill on Johnson Rock property to slide into Coos Bay’s Coalbank Slough.
TSUNAMI

- March 2011: Oregon Coast- A 9.0 magnitude earthquake originating from Japan caused $6.7 million worth of damages along the Oregon Coast. Particularly, there was extensive damage to the Port of Brookings, as well as the Port of Depoe Bay, and Charleston Harbor.
WILDFIRE

- 2014: Coos County: The Bone Mountain Fire started as a prescribed fire, but due to extremely dry and windy weather, it became out of control and burned 300 acres of land. The Camas Creek Fire burned 40 acres.
WINDSTORM

- March 2012: Coos and 11 other counties- Damaging winds, heavy rains, flooding, mudslides, landslides, and erosion in Coos and 11 other counties cost nearly $6 million in damages.
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GOALS

- The plan goals help guide the direction of future activities aimed at reducing risk and preventing loss from natural hazards. The goals serve as checkpoints as agencies and organizations begin implementing mitigation action items.

- See handout for comparison of county and state goals.
STATE GOALS AND COOS COUNTY GOALS

- Of the goals that are in your plan now, are there changes that you’d like to make?
- How could Coos County strengthen the plan goals?
- What could Coos County add to their plan goals in order to match state goals?
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MITIGATION ACTIONS REVIEW

- Review your community’s mitigation actions from the 2009 update. Mark each action as one of the following:
  - “C” for completed
  - “O” for ongoing
  - “N” for most likely to be implemented in the next 5 years
  - “U” for unlikely to be implemented in the next 5 years
- Discuss findings at your table.
  - Success stories?
  - Findings from exercise?
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WRAP-UP

- Questions
- Next Steps
- Future Meetings
NEXT STEPS

- Please send comments, questions and feedback regarding:
  - Community Profile
  - Hazard Histories
  - Goals
  - Action Items
POTENTIAL MEETING DATES

Meeting #2
- Week of April 6th
- April 13th
- April 14th
- April 15th

Meeting #3
- Week of May 11th
- May 18th
- May 19th
- May 20th
THANK YOU

Contact Information

Mike Murphy
Emergency Manager
mmurphy@co.coos.or.us

Josh Bruce
OPDR Interim Director
jdbruce@uoregon.edu, 541-346-7326

Emily Kettell
OPDR Research Associate
ekettell@uoregon.edu, 630-715-1288