



CURRY COUNTY BOARD OF COMMISSIONERS

GENERAL MEETING

Wednesday, March 16, 2016 – 10:00 A.M.
Commissioners' Hearing Room, Courthouse Annex
94235 Moore Street, Gold Beach, Oregon

www.co.curry.or.us

AGENDA

*Items may be taken out of sequence to accommodate staff availability and the public. Estimated time are in () on each item.
For public comment, a completed speaker's slip must be submitted.*

- 1. CALL TO ORDER & PLEDGE OF ALLEGIANCE**
- 2. AGENDA AMENDMENTS**
- 3. APPROVAL OF AGENDA**
- 4. PRESENTATIONS TO THE BOARD**
 - a. Homeless Resources Forum by League of Women Voters – Connie Hunter (10 Min)
- 5. PUBLIC COMMENTS**
- 6. NEW BUSINESS**
 - a. Working Out of Class in Finance Department - Commissioner (15 Min)
- 7. OLD BUSINESS**
 - a. Recreational Marijuana Land Use Regulation Alternatives - Community Development (20 Min)
- 8. PROCLAMATIONS/RESOLUTIONS/ LEGISLATIVE ACTIONS**
 - a. Resolution to Set Hearing Date for Mass Gathering (Cape Blanco Country Music Festival) – Economic Development (5 Min)
 - b. Curry County Multi-Jurisdictional Natural Hazards Mitigation Plan Adoption – Emergency Services (10 Min)
- 9. ADMINISTRATIVE ACTIONS/ APPOINTMENTS**
 - a. Environmental Health Contract Amendment #1 – Curry Community Health (5 Min)
 - b. New Hire Deputy District Attorney J Spansail – District Attorney (10 Min)
 - c. Proposed Personnel Rules Changes – Personnel (5 Min)
 - d. Renewal of Insurance Agent Services Contract with CAL/OR (5Min)
 - e. Scrivener Errors – Administration (4 Min)
 - f. 2016 9-1-1 Jurisdiction Plan – Sheriff (15 min)

Curry County does not discriminate against individuals with disabilities and all public meetings are held in accessible locations. Auxiliary aids will be provided upon request with 48 hours advance notification. Please call 541-247-3296 if you have questions regarding this notice.

10. CONSENT CALENDAR (4 Min)

- a. Minutes 02-10-2016 Workshop
- b. Minutes 02-10-2016 Special Meeting
- c. Minutes 02-12-2016 Special Meeting
- d. Minutes 02-26-2016 Special Meeting

11. COMMISSIONER UPDATES/ LIAISON & STAFF REPORTS

- a. Staff Reports – Community Development and Surveyor (2 Min)

12. ANNOUNCEMENTS

- a. Anyone who would like to be included on the email list for County Public Notices can do so by contacting the Board of Commissioners Office.
- b. Members needed for RSVP, contact Vicky McGuinness at 541-247-3280
- c. A member needed for CCD Business Development, contact Commissioner Brown at 541-247-3229
- d. A member needed for the Ambulance Service Area Advisory Committee that has Emergency Room Doctor experience, contact Commissioner Brown at 541-247-3229
- e. Next Board of Commissioners General Meeting on 04-06-2016 at 10:00 a.m.

13. EXECUTIVE SESSION

Executive Session ORS 192.660(2)(h) To consult with counsel concerning the legal rights and duties of a public body with regard to current litigation or litigation likely to be filed and ORS 192.660(2)(f) To consider information or records that are exempt by law from public inspection.

14. ADJOURN

CURRY COUNTY BOARD OF COMMISSIONERS
AGENDA ITEM ROUTING SLIP
FORM 10-001.1 Rev. 03-02-2016

PART I – SUBMITTING DEPARTMENT: RETURN TO [BOC OFFICE@CO.CURRY.OR.US](mailto:BOC_OFFICE@CO.CURRY.OR.US)

AGENDA ITEM TITLE: Homeless Resources Forum by League of Women Voters

AGENDA DATE^a: 03-16-16 **DEPARTMENT:** **TIME NEEDED:** 10 min

^aSubmit by seven days prior to the next General Meeting (eight days if a holiday falls within that seven day period)

CONTACT PERSON: Connie Hunter **PHONE/EXT:** 412-1224 **TODAY'S DATE:** 03-07-16

BRIEF BACKGROUND OR NOTE^b:

^bIndicate if more than one copy to be signed

FILES ATTACHED:

SUBMISSION TYPE: Exhibit

(1)Email Info

(2)

Are there originals in route (paper copies with pre-existing signatures) Yes No

QUESTIONS:

1. Would this item be a departure from the Annual Budget if approved? Yes No
(If Yes, brief detail)
2. Does this agenda item impact any other County department? Yes No
(If Yes, brief detail)
3. If Land Transaction, filed with the clerk? Yes No N/A

INSTRUCTIONS ONCE SIGNED:

No Additional Activity Required

OR

File with County Clerk

Name:

Send Printed Copy to:

Address:

Email a Digital Copy to:

City/State/Zip:

Other

Phone:

Due date to send: / /

Email:

***Note: Most signed documents are filed/recorded with the Clerk per standard process.**

PART II – COUNTY CLERK REVIEW

EVALUATION CRITERIA:

CLERK ASSESSMENT: Does this agenda item meet filing/recording standards? Yes No N/A

(If No, brief detail)

PART III - FINANCE DEPARTMENT REVIEW

EVALUATION CRITERIA 1-4:

1. Confirmed Submitting Department's finance-related responses Yes No
Comment:
2. Confirmed Submitting Department's personnel-related materials Yes No N/A
Comment:
3. If job description, Salary Committee reviewed: Yes No N/A
4. If hire order requires an UA, is it approved? Yes No Pending N/A

PART IV – COUNTY COUNSEL REVIEW

AGENDA ASSIGNMENT TYPE: Presentations

LEGAL ASSESSMENT: Does this agenda item have a legal impact? Yes No

(If Yes, brief detail)

PART V – BOARD OF COMMISSIONER REVIEW/COMMENT

LIAISON COMMISSIONER AGREES TO ADD TO AGENDA:

Commissioner Susan Brown Yes No

Commissioner Thomas Huxley Yes No

Commissioner David Brock Smith Yes No

Not applicable to Sheriff's Department since they do not have a liaison

From: Connie Hunter
Sent: Monday, February 29, 2016 10:39 AM
To: Susan Brown; David Brock Smith; Thomas Huxley
Cc: Julie Schmelzer
Subject: LWVCC March Homeless Resources Forums Update

ALL:

This is a request to be added to the next Curry County Board of Commissioners' meeting agenda so that I may give updated information regarding the League of Women Voters of Curry County's upcoming Homeless Resources Forums updates.

Here is the information that we have thus far for statistics:
In Port Orford, 35% of the population are below the poverty rate. There are 69 homeless children attending school in gold beach while in Brookings there are 56 homeless children in grades K through 12. The rate of homeless people in Creek County is among the top 10 in Oregon. These are most current as they are from Julie Schmelzer's outstanding Economic Development forums that were organized last month by LWVCC. VERY WELL CONCEIVED AND RECIEVED PRESENTATION, by the way!

Attached is the first article that is being used to promote the forum in Port Orford. Below, are the updated panelists' list.

Thank you so much for all your help!

Connie Hunter
March Homeless Resources Forums Coordinator
LWVCC

UPDATES INCLUDED:

The League of Women Voters homeless resource forums are to help citizens better understand homelessness and to bring awareness to the community-based resources that are available. We hope to create awareness and initiate the long-term goal of ending homelessness in Curry County. Speakers will share a wealth of information including how to interact with someone who is homeless, understanding the stage of homelessness, and how to support a community solution for a world-wide problem.

LWVCC HOMELESS RESOURCE FORUMS SCHEDULES AND SPEAKERS, TO DATE:

- (1) Tuesday, March 8th, Port Orford, Library at 1 p.m.
- Mayor Jim Auburn
- Chief Hank Hobart, POPD
- Mike Lehman, Ex. Dir. Oregon Coast Community Action (ORCCA)
- Alice Loshbaugh, Pres., Common Good Food Bank
- Monica Alexander, Community Health Worker, Coast Community Health Center

--Ginger Pearson, Community Health Worker, Coast Community Health Center
--Pastor Ronn Kerr
--Terry Brayer, Vietnam veteran
--Speaker TBD, Community Health Worker, Liberty Advocacy Group, Inc.
--Jonathan "Jay" Trost, Director of Curry County Juvenile Department and Curry Community Health's Board President

(2) Tuesday, March 15th, Curry Campus, Southwestern Oregon Community College at 5:30 p.m.
--Berta Balli, V.A. Roseburg Healthcare System, Social worker and community healthcare worker
--Jonathan Harkness, V.A. Roseburg Healthcare System, community healthcare worker
--Sgt. Kelby McCrae
--Maria F. Walker, Business and Employment Specialist, Oregon Employment Department
--Mike Lehman, Ex. Dir., Oregon Coast Community Action (ORCCA)
--Bill Farrell, Pres. Vietnam Veterans of America Chapter 757
--Janice Scanlon, Brookings-Harbor Food Bank
--Terry Brayer, Vietnam veteran
--Rev. Bernie (still waiting for confirmation)
--Jonathan "Jay" Trost, Director of Curry County Juvenile Department and Curry Community Health's Board President

(3) Thursday, March 24th, Gold Beach City Hall at 5:30 p.m.
--Beth Hidalgo, Curry Community Health
--Lila Thorp, SDA, 3rd Street Pantry
--Lt. Mick Espinoza, Curry County Sheriff's Department
--Chief Dixon Andrews, City of Gold Beach Police Department
--Terry Brayer, Vietnam veteran
-- Speaker TBD, Community Health Worker, Liberty Advocacy Group, Inc.
-- Speaker TBD, Oregon Coast Community Action (ORCCA)
--Jonathan "Jay" Trost, Director of Curry County Juvenile Department and Curry Community Health's Board President

CURRY COUNTY BOARD OF COMMISSIONERS
AGENDA ITEM ROUTING SLIP
FORM 10-001.1 Rev. 03-02-2016

PART I – SUBMITTING DEPARTMENT: RETURN TO BOC_OFFICE@CO.CURRY.OR.US

AGENDA ITEM TITLE: Working out of class - Accounting functions

AGENDA DATE^a: 03-16-16 **DEPARTMENT:** Accounting **TIME NEEDED:** 15 min

^aSubmit by seven days prior to the next General Meeting (eight days if a holiday falls within that seven day period)

CONTACT PERSON: Tom Huxley **PHONE/EXT:** 3213 **TODAY’S DATE:** 03-09-16

BRIEF BACKGROUND OR NOTE^b: General discussion only: Also; discussion on search status for Accountant replacement and 2016-2017 budget process.

^bIndicate if more than one copy to be signed

FILES ATTACHED:

SUBMISSION TYPE: Discussion/Decision

(1)None:

(2)

Are there originals in route (paper copies with pre-existing signatures) Yes No

QUESTIONS:

1. Would this item be a departure from the Annual Budget if approved? Yes No
(If Yes, brief detail)
2. Does this agenda item impact any other County department? Yes No
(If Yes, brief detail)
3. If Land Transaction, filed with the clerk? Yes No N/A

INSTRUCTIONS ONCE SIGNED:

No Additional Activity Required

OR

File with County Clerk

Name:

Send Printed Copy to:

Address:

Email a Digital Copy to:

City/State/Zip:

Other

Phone:

Due date to send: / /

Email:

^cNote: Most signed documents are filed/recorded with the Clerk per standard process.

PART II – COUNTY CLERK REVIEW

EVALUATION CRITERIA:

CLERK ASSESSMENT: Does this agenda item meet filing/recording standards? Yes No N/A
(If No, brief detail)

PART III - FINANCE DEPARTMENT REVIEW

EVALUATION CRITERIA 1-4:

1. Confirmed Submitting Department’s finance-related responses Yes No
 Comment:
2. Confirmed Submitting Department’s personnel-related materials Yes No N/A
 Comment:
3. If job description, Salary Committee reviewed: Yes No N/A
4. If hire order requires an UA, is it approved? Yes No Pending N/A

PART IV – COUNTY COUNSEL REVIEW

AGENDA ASSIGNMENT TYPE: New Business

LEGAL ASSESSMENT: Does this agenda item have a legal impact? Yes No
(If Yes, brief detail)

PART V – BOARD OF COMMISSIONER REVIEW/COMMENT

LIAISON COMMISSIONER AGREES TO ADD TO AGENDA:

Commissioner Susan Brown Yes No

Commissioner Thomas Huxley Yes No

Commissioner David Brock Smith Yes No

Not applicable to Sheriff’s Department since they do not have a liaison

CURRY COUNTY BOARD OF COMMISSIONERS
AGENDA ITEM ROUTING SLIP
FORM 10-001.1 Rev. 03-02-2016

PART I – SUBMITTING DEPARTMENT: RETURN TO BOC_OFFICE@CO.CURRY.OR.US

AGENDA ITEM TITLE: Board of Commissioners Public Information Session Regarding Recreational Marijuana Land Use Regulation alternatives.

AGENDA DATE^a: 03.16.2016 **DEPARTMENT:** Community Development **TIME NEEDED:** 20-30 minutes

^aSubmit by seven days prior to the next General Meeting (eight days if a holiday falls within that seven day period)

CONTACT PERSON: Carolyn Johnson **PHONE/EXT:** 247-3228 **TODAY'S DATE:** 03.08.2016

BRIEF BACKGROUND OR NOTE^b: This public information session is another community opportunity to comment on local regulations for the production, processing and sale of recreational marijuana.

^bIndicate if more than one copy to be signed

FILES ATTACHED:

SUBMISSION TYPE: Memorandum

- (1)staff report
- (2)

Are there originals in route (paper copies with pre-existing signatures) Yes No

QUESTIONS:

1. Would this item be a departure from the Annual Budget if approved? Yes No
(If Yes, brief detail)
2. Does this agenda item impact any other County department? Yes No
(If Yes, brief detail)
3. If Land Transaction, filed with the clerk? Yes No N/A

INSTRUCTIONS ONCE SIGNED:

No Additional Activity Required

OR

- File with County Clerk
- Send Printed Copy to:
- Email a Digital Copy to:
- Other

Name:
Address:
City/State/Zip:

Phone:

Due date to send: / /

Email:

***Note: Most signed documents are filed/recorded with the Clerk per standard process.**

PART II – COUNTY CLERK REVIEW

EVALUATION CRITERIA:

CLERK ASSESSMENT: Does this agenda item meet filing/recording standards? Yes No N/A
(If No, brief detail)

PART III - FINANCE DEPARTMENT REVIEW

EVALUATION CRITERIA 1-4:

1. Confirmed Submitting Department's finance-related responses Yes No
Comment:
2. Confirmed Submitting Department's personnel-related materials Yes No N/A
Comment:
3. If job description, Salary Committee reviewed: Yes No N/A
4. If hire order requires an UA, is it approved? Yes No Pending N/A

PART IV – COUNTY COUNSEL REVIEW

AGENDA ASSIGNMENT TYPE: Old Business

LEGAL ASSESSMENT: Does this agenda item have a legal impact? Yes No
(If Yes, brief detail)

PART V – BOARD OF COMMISSIONER REVIEW/COMMENT

LIAISON COMMISSIONER AGREES TO ADD TO AGENDA:

- Commissioner Susan Brown Yes No
- Commissioner Thomas Huxley Yes No

Commissioner David Brock Smith **Yes** **No**

Not applicable to Sheriff's Department since they do not have a liaison



BOARD OF COMMISSIONERS STAFF REPORT

Meeting Date: March 16, 2016

Prepared by: Carolyn Johnson, Planning Director

Subject: Public Information session regarding Recreational Marijuana land use regulation alternatives.

Staff Recommendation: Support the February 25, 2016 Planning Commission recommendation not to develop County recreational marijuana regulations at this time.

Discussion: This public information session provides another community opportunity to comment on local regulations for the production, processing and sale of recreational marijuana. This matter was the subject of a Planning Commission (Commission) workshop on January 28; a Board of Commissioners (BOC) morning workshop on February 10¹; and a BOC and Commission joint workshop on February 25, 2016.²

The State has developed regulations³ for growing, processing and selling recreational marijuana. Cities and counties may also adopt recreational marijuana land use regulations. Should the BOC decline to adopt local recreational marijuana regulations, recreational marijuana will be treated no differently than any other farm crop for growing and processing (with some exceptions).⁴ Likewise, retail and wholesale sales would simply be subject to Oregon Liquor Licensing Commission (OLLC) requirements and limitations.

Since the February 25, 2016 joint BOC and Commission meeting, the Governor on March 4, 2016 signed into law Senate Bill 1598 which instituted a series of Land Use, and other recreational marijuana regulation modifications.⁵ SB 1598 modifications included new limitations on marijuana growing and retail sales operations.

Related to growing, SB 1598 notes that a Land Use Compatibility Statement (LUCS) from a local agency is not required for a grow site if 1) the applicant is applying for a recreational license where a medical purpose for the grow site has been registered with the State and the address is outside of City limits and 2) the recreational grow sites are limited to a grow canopy of 5,000 square feet outdoors and 1,250 square feet indoors. In other words, an individual or entity already licensed for medical marijuana production can grow a small amount of marijuana for recreational purposes without going to the County and receiving a LUCS in advance of

¹ <http://www.co.curry.or.us/Portals/0/Documents/BOC/Meeting%20Packets/Packet%20BOC%20WS%20wPC%2002-25-2016.pdf> – end of the document

² See Exhibit 1 for further background.

³ <http://www.oregon.gov/olcc/marijuana/Pages/Recreational-Marijuana-Laws-and-Rules.aspx>

⁴ Related to growing marijuana, the State of Oregon identifies marijuana as a crop that would generally follow the requirements for any crops grown in farm/ag zones. However farm area use of land for marijuana growing is prohibited from permitting dwellings and commercial activities related to marijuana.

⁵ Fingerprinting, Workers Permit, Processing sites regulations, Reporting, Site inspection, Dispensaries as non-profits, Research Proposals and Expungement.

securing an OLLC license. A LUCS from the County would still be required to process or sell any amount of recreational marijuana.

Related to retail sales, SB 1598 states local agencies are not to adopt regulations prohibiting an authorized recreational marijuana retail sales premise within 1,000 feet from another recreational marijuana retail facility. Additionally, SB 1598 notes local laws can't be developed imposing a setback requirement for an agricultural building used to produce marijuana where an OLLC license has been issued unless the agricultural building was constructed on or before July 1, 2015; is located at an address where a marijuana grow site first registered with the Oregon Health Authority on or before January 1, 2015; was used to produce marijuana for medicinal purposes on or before January 1, 2015 and has four opaque walls and a roof.

At the workshops referenced earlier in this report, three local recreational marijuana regulation options were examined, but without the new SB 1598 information. The new information includes minor changes to the regulations known to the Board and Commission at prior meetings and do not appear to merit additional evaluation. The three options previously discussed include:

Option 1: Adopt County regulations for the production, processing and sale of recreational marijuana.⁶ BOC selection of Option 1 would require future public hearing(s) to review and take action on County regulations.

Option 2: Add an initiative to the November 2016 ballot to opt out of the recreational marijuana framework established by the State. BOC selection of Option 2 would need to entail direction to staff to craft an opt-out ballot measure.

Option 3: Do not develop County recreational marijuana regulations at this time but rely on State regulations and current County land use criteria for the regulation of recreational marijuana.

Planning Commission Recommendation: The Commission recommended Option 3 with a "wait-and-see" approach to learn if State regulations are adequate and whether there would be a need for new County land use regulations related to recreational marijuana.⁷

The Commission noted the County could learn of growers, producers, sellers in advance of the recreational marijuana commercial activity as State law requires OLLC licensees to provide a LUCS statement from the local government. The Commission did not have knowledge of the SB 1598 requirements/limitations. However a LUCS for each licensee application will still be required but with some limited exceptions as outlined earlier in this report. Because the OLLC web site offers a listing of licensees by County, the absence of a LUCS in the limited cases created by SB 1598 could be mitigated by County monitoring of the OLLC web site.⁸

As noted in the staff recommendation at the beginning of this report, the Commission's recommendation should be supported by the Board. County Counsel will have additional comments to share related to this recommendation.

⁶ The draft regulations text can be found on exhibit 2 of the 02.10.2016 BOC packet:
<http://www.co.curry.or.us/Portals/0/Documents/BOC/Meeting%20Packets/Packet%20BOC%20WS%20420%2002-10-2016.pdf>

⁷ Some Commissioners expressed concern about potential for odors from a grow site. The County's Odor nuisance abatement ordinance does not apply to farm use odors.

⁸ To date two OLLC licenses have been issued in Curry County for recreational marijuana growers

Exhibit 1

Background

Measure 91 was approved by Oregon voters in November of 2014 legalizing of marijuana for recreational purposes as of July 1, 2015. The measure also gives the Oregon Liquor Control Commission the authority to tax, license and regulate recreational marijuana grown, processed and sold for commercial purposes.

Subsequently the Oregon Legislature adopted laws giving counties and cities the authority adopt “reasonable regulations” for the production, processing and sale of recreational and medical marijuana. State law defines the variety of marijuana businesses:

- *Production*: manufacture, planting, cultivation, growing or harvesting of marijuana in Oregon. The State of Oregon regards the production of marijuana as a farm use.⁹
- *Processing*: processing, compounding or conversion of marijuana into cannabinoid products, concentrates, or extracts; excluding packaging or labeling.
- *Wholesaling*: purchasing marijuana items in Oregon for resale to a person other than a consumer in Oregon.
- *Retailing*: selling marijuana items to a consumer in Oregon.

The Oregon Liquor Control Commission (OLCC) is the state agency that will regulate the commercial growing and selling of recreational marijuana by way of licensing and regulating commercial recreational marijuana operations. The regulations put in place by OLCC are vast and rulemaking is still underway.

Individuals and business entities who seek to establish a recreational marijuana related business will be required to obtain a license from the OLCC. With the exception of the instances and circumstances noted in recent Senate bill 1598, the County must issue a Land Use Compatibility Statement for any recreational marijuana related business to be included in an application for a license from OLCC. OLCC began receiving license applications on January 4, 2016 and advises they will be phasing Producer (grower) licenses in early in 2016 followed by Processor and Wholesaler licenses. It’s estimated that Retailer licenses will be issued in late summer or early fall of 2016. Once a license from OLCC is issued, the licensee may begin his/her business provided all state and local regulations are met.

The Legislature also provided counties and cities an option to “opt-out” of permitting recreational marijuana by December 27, 2015. Oregon counties and cities who did not “opt-out” may not completely prohibit any of the defined types of marijuana-related land uses approved with Measure 91 without a vote of the people.

⁹ <http://www.oregonlaws.org/ors/215.203>

CURRY COUNTY BOARD OF COMMISSIONERS
AGENDA ITEM ROUTING SLIP
FORM 10-001.1 Rev. 03-02-2016

PART I – SUBMITTING DEPARTMENT: RETURN TO [BOC OFFICE@CO.CURRY.OR.US](mailto:BOC_OFFICE@CO.CURRY.OR.US)

AGENDA ITEM TITLE: Resolution to Set Hearing Date for Mass Gathering (Cape Blanco Country Music Festival)

AGENDA DATE^a: 3/16/16 **DEPARTMENT:** Econ Dev **TIME NEEDED:** 5 min.

^aSubmit by seven days prior to the next General Meeting (eight days if a holiday falls within that seven day period)

CONTACT PERSON: Julie Schmelzer **PHONE/EXT:** 3253 **TODAY'S DATE:** 3/4/16

BRIEF BACKGROUND OR NOTE^b: We set the date by resolution, and then schedule the hearing accordingly

^bIndicate if more than one copy to be signed

FILES ATTACHED:

SUBMISSION TYPE: Resolution

(1)Resolution

(2)

Are there originals in route (paper copies with pre-existing signatures) Yes No

QUESTIONS:

1. Would this item be a departure from the Annual Budget if approved? Yes No
(If Yes, brief detail)
2. Does this agenda item impact any other County department? Yes No
(If Yes, brief detail) Sheriff, Roads, CCH, Planning
3. If Land Transaction, filed with the clerk? Yes No N/A

INSTRUCTIONS ONCE SIGNED:

No Additional Activity Required

OR

File with County Clerk

Name: Julie Schmelzer

Send Printed Copy to:

Address:

Email a Digital Copy to:

City/State/Zip:

Other

Phone:

Due date to send: 3 /18 / 16

Email:

schmelzerj@co.curry.or.us

***Note: Most signed documents are filed/recorded with the Clerk per standard process.**

PART II – COUNTY CLERK REVIEW

EVALUATION CRITERIA:

CLERK ASSESSMENT: Does this agenda item meet filing/recording standards? Yes No N/A

(If No, brief detail)

PART III - FINANCE DEPARTMENT REVIEW

EVALUATION CRITERIA 1-4:

1. Confirmed Submitting Department's finance-related responses Yes No
Comment:
2. Confirmed Submitting Department's personnel-related materials Yes No N/A
Comment:
3. If job description, Salary Committee reviewed: Yes No N/A
4. If hire order requires an UA, is it approved? Yes No Pending N/A

PART IV – COUNTY COUNSEL REVIEW

AGENDA ASSIGNMENT TYPE: Proclamations/Resolutions

LEGAL ASSESSMENT: Does this agenda item have a legal impact? Yes No

(If Yes, brief detail) Order for notice and hearing on mass gathering permit satisfies legal requirement

PART V – BOARD OF COMMISSIONER REVIEW/COMMENT

LIAISON COMMISSIONER AGREES TO ADD TO AGENDA:

Commissioner Susan Brown Yes No

Commissioner Thomas Huxley Yes No

Commissioner David Brock Smith Yes No

Not applicable to Sheriff's Department since they do not have a liaison

BEFORE THE BOARD OF COUNTY COMMISSIONERS

IN AND FOR THE COUNTY OF CURRY, OREGON

In the Matter of a Resolution)
Setting a Hearing on an Application)
On a Proposed Outdoor Mass) RESOLUTION NO. _____
Gathering – Cape Blanco Country)
Music Festival)

WHEREAS, Promoter BootsNBeach, LLC., has submitted to the Board of Curry County Commissioners a permit application to hold an outdoor mass gathering, to wit: the proposed Cape Blanco Country Music Festival sponsored by BI-Mart to be held on July 28-31st, 2016; and

WHEREAS, the proposed event would be held on private property about six miles north of Port Orford, Oregon, off of Highway 101 on Cape Blanco Road; and

WHEREAS, the application satisfies the requirements of ORS 433.750;

NOW, THEREFORE, THE BOARD OF CURRY COUNTY COMMISSIONERS RESOLVES AS FOLLOWS:

- 1) A hearing on the application for the mass gathering will be held on April 20, 2016, at 10:30 A.M. in the Commissioners’ Hearing Room, Courthouse Annex, 94235 Moore Street, Gold Beach, Oregon.
- 2) Notice of the Hearing shall be published in one or more newspapers of general circulation in the County at least ten calendar days before the hearing in accordance with ORS 433.750(4).
- 3) The County shall give notice of the hearing to the county sheriff, the county health officer and the chief of the fire district in which the gathering is to be held.

DATED this 16 day of March, 2016.

CURRY COUNTY BOARD OF COMMISSIONERS

Approved as to form:

Thomas Huxley, Chair

John HuttI
Curry County Legal Counsel

Susan Brown, Vice Chair

David Brock Smith, Commissioner

CURRY COUNTY BOARD OF COMMISSIONERS
AGENDA ITEM ROUTING SLIP
FORM 10-001.1 Rev. 03-02-2016

PART I – SUBMITTING DEPARTMENT: RETURN TO [BOC OFFICE@CO.CURRY.OR.US](mailto:BOC_OFFICE@CO.CURRY.OR.US)

AGENDA ITEM TITLE: Curry County Multi-Jurisdictional Natural Hazards Mitigation Plan Adoption

AGENDA DATE^a: March 16, 2016 **DEPARTMENT:** Sherrif/ESC **TIME NEEDED:** 10 min

^aSubmit by seven days prior to the next General Meeting (eight days if a holiday falls within that seven day period)

CONTACT PERSON: Don Kendall **PHONE/EXT:** 3208 **TODAY'S DATE:** 3/8/16

BRIEF BACKGROUND OR NOTE^b: Resolution to adopt NHMP

^bIndicate if more than one copy to be signed

FILES ATTACHED:

SUBMISSION TYPE: Resolution

- (1)Resolution
- (2)NHMP

Are there originals in route (paper copies with pre-existing signatures) Yes No

QUESTIONS:

1. Would this item be a departure from the Annual Budget if approved? Yes No
(If Yes, brief detail)
2. Does this agenda item impact any other County department? Yes No
(If Yes, brief detail)
3. If Land Transaction, filed with the clerk? Yes No N/A

INSTRUCTIONS ONCE SIGNED:

No Additional Activity Required

OR

File with County Clerk

Name: Don Kendall

Send Printed Copy to:

Address:

Email a Digital Copy to:

City/State/Zip:

Other

Phone:

Due date to send: / /

Email: kendalld@co.curry.or.us

^cNote: Most signed documents are filed/recorded with the Clerk per standard process.

PART II – COUNTY CLERK REVIEW

EVALUATION CRITERIA:

CLERK ASSESSMENT: Does this agenda item meet filing/recording standards? Yes No N/A

(If No, brief detail) The Resolution can be scanned and filed but not the pamphlet(s)

PART III - FINANCE DEPARTMENT REVIEW

EVALUATION CRITERIA 1-4:

1. Confirmed Submitting Department's finance-related responses Yes No
Comment:
2. Confirmed Submitting Department's personnel-related materials Yes No N/A
Comment:
3. If job description, Salary Committee reviewed: Yes No N/A
4. If hire order requires an UA, is it approved? Yes No Pending N/A

PART IV – COUNTY COUNSEL REVIEW

AGENDA ASSIGNMENT TYPE: Proclamations/Resolutions

LEGAL ASSESSMENT: Does this agenda item have a legal impact? Yes No

(If Yes, brief detail) NHMP adoption allows us to qualify for funding

PART V – BOARD OF COMMISSIONER REVIEW/COMMENT

LIAISON COMMISSIONER AGREES TO ADD TO AGENDA:

Commissioner Susan Brown Yes No

Commissioner Thomas Huxley Yes No

Commissioner David Brock Smith Yes No

Not applicable to Sheriff's Department since they do not have a liaison

Curry County Natural Hazard Mitigation Plan

Curry County and the Cities of:
Port Orford, Gold Beach and Brookings



February 2016

Volume I: Basic Plan

Prepared for:
Curry County Emergency Management

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



UNIVERSITY OF OREGON



This Natural Hazard Mitigation Plan was prepared by:



With support from:



Planning grant funding provided by:



FEMA

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

Additional Support Provided by:



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SPECIAL THANKS & ACKNOWLEDGEMENTS

Curry County developed this Multi-jurisdictional Natural Hazards Mitigation Plan (NHMP) through a regional partnership funded by the Federal Emergency Management Agency's (FEMA) Pre-Disaster Mitigation (PDM) Competitive Grant Program: EMS-2014-PC-0005, Sub-grant Application Reference: PDMC-PL-10-OR-2013-001. This updated Natural Hazard Mitigation Plan is a collaboration between Curry County and the Cities of Port Orford, Gold Beach and Brookings. The county utilized a four-phased planning process, plan templates and plan development support provided by the Oregon Partnership for Disaster Resilience (OPDR) at the University of Oregon's Community Service Center.

Special thanks to Don Kendal, Curry County Emergency Manger, for his leadership in convening the committee and to Beth Barker-Hidalgo, Curry Community Health, for her vision and support throughout.

Curry County NHMP Update Steering Committee

Curry County

- Andy Stubbs, Curry County Medical Reserve Corps
- Beth Barker-Hidalgo, Curry Community Health
- Derwin Boggs, Coos Forest Patrol
- Don Kendall, Curry County Emergency Management
- Glenda Park, Coos-Curry Electric Cooperative
- Julie Schmelzer, Curry County Administrator/Economic Development
- Peggy Sattler, US Forest Service
- Randy McDonald, Coos-Curry Electric Cooperative
- Terri Bangs, American Red Cross

City of Port Orford

- Jim Auburn, Mayor, City of Port Orford
- Terrie Richards, City of Port Orford

City of Gold Beach

- Jodi Fritts, City Administrator/Planning Director, City of Gold Beach

City of Brookings

- Gary Millman, City Administrator, City of Brookings
- LauraLee Snook, City of Brookings Public Works
- Donna Colby-Hanks, City of Brookings
- Donny Dotson, City of Brookings

Additional Listed Members (Invited)

- Susan Brown, Curry County Commissioner
- Tom Huxley, Curry County Commissioner
- David Brock Smith, Curry County Commissioner
- Renee Kolen, Curry County Clerk
- Jerry Herbage, Curry County Attorney
- Jim Kolen, Curry County Assessor
- John Ward, Curry County Sherriff
- Doug Robbins, Curry County Roadmaster
- Bruce Floyd, Gold Beach Fire Chief
- Jim Watson, Brookings Fire Chief
- Rosie Hoxeng, Gold Beach Chamber of Commerce/Coastal Home Health and Hospice
- Frank Corrales, Coos Curry Electric
- Ted Fitzgerald, Port of Brookings Harbor
- Monte Edwards, US Forest Service
- Mike Pope, US Bureau of Land Management
- Brett Weidemiller, Coos Forest Patrol
- Dave Lacey, Surf Rider

Community Service Center Team

- Robert Parker, Director
- Josh Bruce, Program Manager
- Michael Howard, Assistant Program Manager
- Julie Foster, Grant's Administrator
- Emily Kettel, Graduate Research Fellow
- Michael DeHart, Project Assistant
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Additional Thanks:

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

About the Community Service Center

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

About the Oregon Partnership for Disaster Resilience

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

Plan Template Disclaimer

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

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PLAN SUMMARY

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

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

44 CFR 201.6 – The local mitigation plan is the representation of the jurisdiction’s commitment to reduce risks from natural hazards, serving as a guide for decision makers as they commit resources to reducing the effects of natural hazards.

Why Develop this Mitigation Plan?

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

44 CFR 201.6(a)(1) – A local government must have a mitigation plan approved pursuant to this section in order to receive HMGP project

What is Mitigation?

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

- U.S. Federal Emergency Management Agency

Who Participated in Developing the Plan?

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

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

- Curry County
- City of Port Orford
- City of Gold Beach
- City of Brookings
- American Red Cross
- Coos-Curry Electric Cooperative
- Coos Forrest Protective Association
- Oregon Department of Forestry
- Curry Community Health

44 CFR 201.6(c)(1) – Documentation of the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was

The Curry County Emergency Manager convened the planning process and will take the lead in implementing, maintaining and updating the plan. Curry County is dedicated to directly involving the public in the continual review and update of the natural hazards mitigation plan. Although members of the Steering Committee represent the public to some extent, the public will also have the opportunity to continue to provide feedback about the Plan throughout the implementation and maintenance period. Notably, the county invited additional participation in the planning process.

How Does this Mitigation Plan Reduce Risk?

The NHMP is intended to assist Curry County reduce the risk from natural hazards by identifying resources, information, and strategies for risk reduction. It is also intended to guide and coordinate mitigation activities throughout the county. A risk assessment consists of three phases: hazard identification, vulnerability assessment, and risk analysis, as illustrated in the following graphic.

44 CFR 201.6(c)(2) – A Risk Assessment that provides the factual basis for activities proposed in the strategy . . .

Figure ES-I Understanding Risk



Source: Oregon Partnership for Disaster Resilience.

By identifying and understanding the relationship between natural hazards, vulnerable systems, and existing capacity, Curry County is better equipped to identify and implement actions aimed at reducing the overall risk to natural hazards.

What is Curry County’s Overall Risk to Hazards?

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

Table ES-1 Risk Assessment Summary

Hazard	History	Vulnerability	Maximum		Total Threat Score	Hazard Rank	Hazard Tiers
			Threat	Probability			
Flood	20	50	100	70	240	# 1	Top Tier
Windstorm	20	50	100	70	240	# 2	
Wildfire	20	50	100	70	240	# 3	
Tsunami	8	50	100	35	193	# 4	Middle Tier
Earthquake	2	50	100	35	187	# 5	
Landslide	20	5	80	70	175	# 6	
Volcanic Ash	2	50	100	7	159	# 7	Bottom Tier
Drought	8	15	70	56	149	# 8	

Source: Curry County Hazard Analysis, October 2007; Analysis and Ranking by OPDR

At the end of this executive summary, hazard briefs provide summary information for priority hazards in Curry County.

What is the Plan's Mission?

The mission of the Curry County NHMP is to:

Mission: *Create a disaster resilient Curry County.*

44 CFR 201.6(c)(3)(i) – A description of mitigation goals to reduce or avoid long-term vulnerabilities to the

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

What are the Plan Goals?

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

Goal 1: *Save lives and reduce injuries.*

Goal 2: *Minimize and prevent damage to public and private buildings and infrastructure.*

Goal 3: *Reduce economic losses.*

Goal 4: *Increase public and private sector involvement in natural hazard mitigation, education, and critical facilities planning.*

Goal 5: *Provide more opportunities for development outside of mapped hazardous areas.*

Goal 6: *Protect natural and cultural resources.*

Goal 7: *Increase cooperation and coordination among private entities, and local, state, and federal agencies.*

Goal 8: *Update natural hazard sections of the comprehensive plan and integrate local NHMPs with comprehensive plans and implementing measures.*

Goal 9: *Increase education, outreach, awareness, and collaboration.*

Goal 10: *Increase natural hazard outreach to vulnerable populations in Curry County.*

How are the Action Items Organized?

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

44 CFR 201.6(c)(3)(ii) – A section that identifies and analyzes a comprehensive range of specific mitigation actions . . .

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

Comprehensive Action Plan

The following table summarizes specific **priority** NHMP actions. Refer to the Mitigation Strategy section for a complete list of actions. Volume II, Appendix A contains detailed information for all action items, including potential partners, implementation ideas, proposed timeline and estimated budget.

Table ES-2: High Priority NHMP Actions

Priority Mitigation Actions
Curry County
Utilize the final multi-hazard risk report and assessment currently being developed by DOGAMI through FEMA's RiskMap program to update the Curry County Hazard Analysis.
Utilize the final multi-hazard risk report and assessment currently being developed by DOGAMI through FEMA's RiskMap program to update the Goal 7 Section of the Curry County Comprehensive Plan.
Conduct non-structural seismic retrofit workshops with government agencies, businesses, and residents to prevent damage from earthquakes.
City of Port Orford
Implement Port Orford Comprehensive Plan, Goal 7 Section, Policy 5
Implement Port Orford Comprehensive Plan, Goal 7 Section, Policy 7
Implement Port Orford Comprehensive Plan, Goal 7 Section, Policy 8
Implement Port Orford Comprehensive Plan, Goal 7 Section, Policy 9
Adopt a Tsunami Land Use Overlay Zone
City of Gold Beach
Update the Goal 7 Section of the Gold Beach Comprehensive Plan.
Adopt a Tsunami Land Use Overlay Zone
City of Brookings
Safe Drinking Water Resiliency Project [HUD Resilience Competition Project]
Critical Healthcare Resiliency Project [HUD Resilience Competition Project]
Sewer Storm Disaster Repairs Project [HUD Resilience Competition Project]
Multifamily LMI and Tsunami-Safe Housing Program [HUD Resilience Competition Project]
Electricity Reliability Project [HUD Resilience Competition Project]
Update the Goal 7 Section of the Brookings Comprehensive Plan.
Adopt a Tsunami Land Use Overlay Zone
Analyze the Port Jetty's and storm water system in Brookings for stability during floods and severe storms and identify mitigation options
Convert existing distribution facilities to underground at the Port of Brookings/Harbor

Source: NHMP Steering Committee; HUD Resilience Team; Oregon Partnership for Disaster Resilience

How will the plan be implemented?

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

44 CFR 201.6(c)(3)(iii) – An action plan describing how the actions . . . will be prioritized, implemented and administered . . .

44 CFR 201.6(c)(4) – A plan maintenance process . . .

Plan Adoption

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

44 CFR 201.6(c)(5) – Documentation that the plan has been formally adopted by the governing body of the jurisdiction . . .

44 CFR 201.6(d) – Plan review [process]

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

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

Curry County adopted the plan on **[DATE], 2016**

The City of Port Orford adopted the plan on **[DATE], 2016**

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

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

FEMA Region X approved the Curry County NHMP on [DATE], 2016. With approval of this Plan, the entities listed above are now eligible to apply for the Robert T. Stafford Disaster Relief and Emergency Assistance Act's hazard mitigation project grants through [DATE], 2021.

Hazard Briefs

The following provide brief summaries for each of the priority hazards in Curry County.

Wind/Winter Storm

History of Hazard in County

Recent Events:

March 2012: Curry and 11 other counties - Damaging winds, heavy rains, flooding, mudslides, landslides, and erosion result in \$6 million in damages and a Disaster Declaration (DR-4055).

Historically Significant Events:

2007 (Dec. 1-3): A relentless storm pummeled the Oregon and Washington Coasts for three-days bringing the strongest winds the area has seen since the Columbus Day storm.

2002 (Feb. 7): A strong low pressure system came onshore in Southwest Oregon. Maximum wind gusts reported included 84 mph in Gold Beach.

1962 (Oct. 12): Columbus Day Storm.

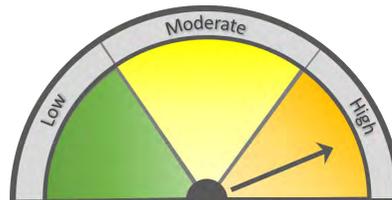
1950 (Jan): Heaviest snow statewide since record keeping started; six-inches in Brookings and three in Gold Beach.

17,592

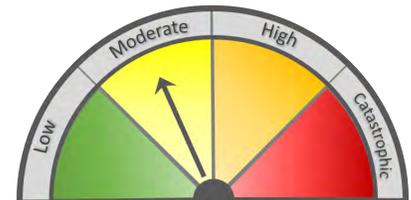
members in the Coos-Curry
Electric Cooperative.

100%

of the local power supply is
produced outside the region.



Hazard Probability



Community Vulnerability

Description of the Hazard

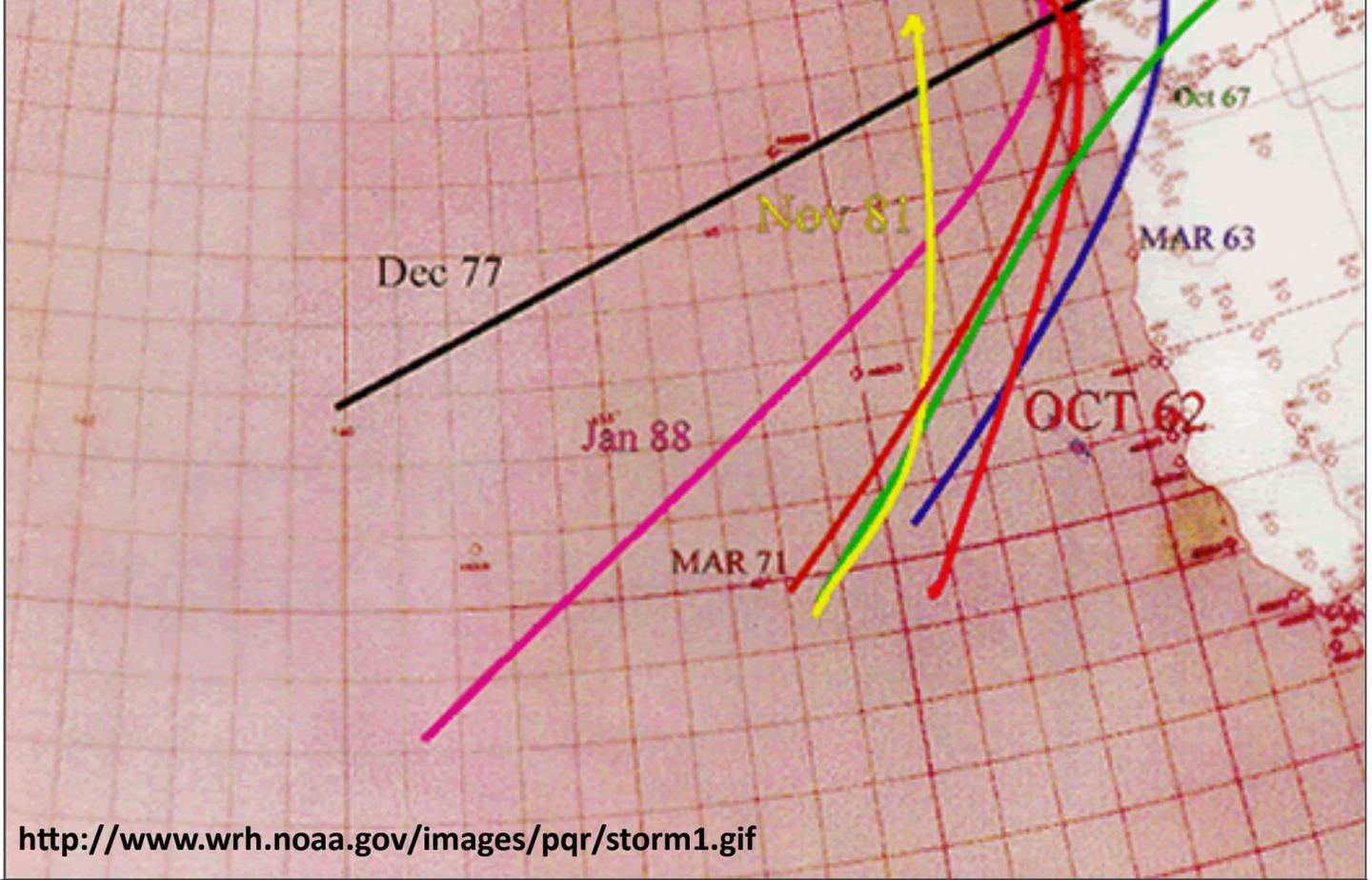
Windstorms are generally short duration events involving straight-line winds and/or gusts in excess of 50 mph. Although windstorms can affect all of Curry County, they are especially dangerous along the coastline and coastal headlands. A windstorm will frequently knock down trees and power lines, damage homes, businesses, public facilities, and create tons of storm related debris. In addition, windstorms contribute to wave action and coastal erosion. Severe winter storms can consist of rain, freezing rain, ice, snow, cold temperatures, and wind. They generally originate from troughs of low pressure offshore that ride along the jet stream during fall, winter, and early spring months. Wind and rain are the primary concerns in Curry County; snow and ice events are rare on the south coast.

Findings and Implications for Curry County

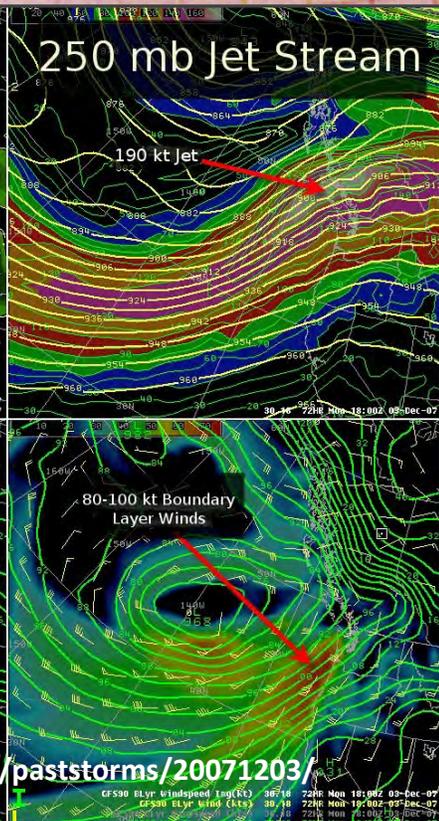
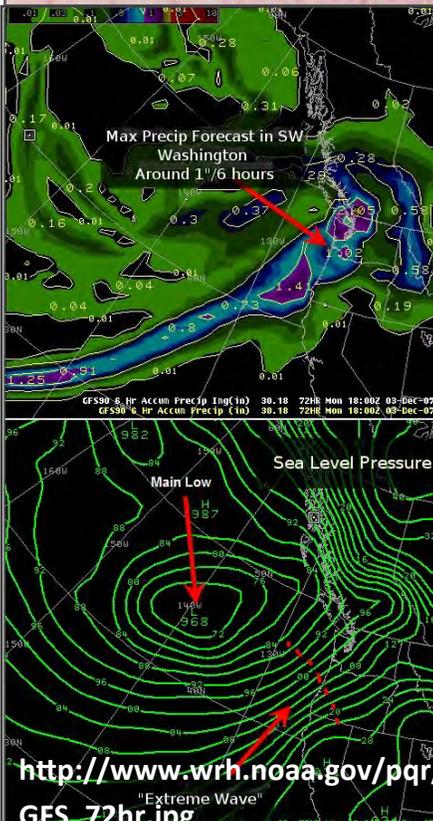
- Changing climate and weather patterns may alter the frequency, intensity and duration of wind and winter storm events.
- Damaging wind is the primary concern; snow and ice events are rare.
- Power outages are common and can last due to isolation and impacts to transportation from downed trees.
- Opportunities to mitigate power outages include undergrounding and adding diverse and redundant local power supplies to homes, businesses and the local electrical grid.
- Wind storms are a chronic hazard on the Oregon coast and coastal residents tend to be prepared to deal with them.

Sampling of High Wind Producing Storm Track

From a 1985 Paper by John Coparanis



<http://www.wrh.noaa.gov/images/pqr/storm1.gif>



December 1-3, 2007 Hurricane Force Windstorm

A windstorm packing hurricane force winds battered the coasts of Washington and Oregon during December 1-3, 2007. Winds with this storm were second only to that of the 1962 Columbus Day Storm with a recorded gust of 129 mph at Bay City, Oregon (reports of as much as 147 mph at unpopulated areas); however, the longevity of winds with this storm far exceeded the Columbus Day Storm with sustained winds in excess of 50 mph for over 2 days. This storm also delivered significant wave heights (top 1/3 of wave heights) of 48 feet before unmooring the buoys that were observing them and caused significant flooding on coastal rivers and some Willamette Tributaries. This led to the closure of all east-west roads through the Coast Range into the Willamette Valley and cut power to the area for at least 4 days. Image to the left shows the NWS 72-Hour Model Forecast for this storm.

<http://www.wrh.noaa.gov/pqr/paststorms/20071203/>

GFS 72hr. img

Wildfire

History of Hazard in County

Recent Events:

June 2014: Curry County- the Euchre Creek Fire, 12 miles north of Gold Beach, burned 56 acres.

Historically Significant Events:

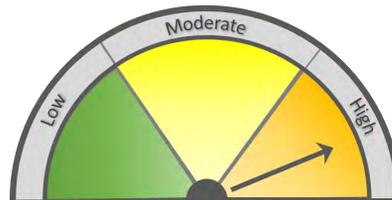
2002: The Biscuit Fire burned roughly 500,000 acres for a total cost of \$150 million in damages.

1936: Bandon Fire burns 225 acres and most of the City of Bandon just north of Curry County.

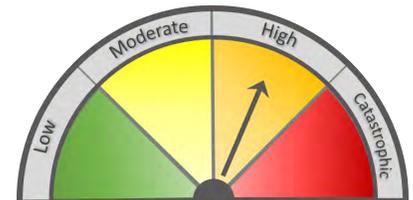
1868: Coos and Curry Counties- 90% of Elliott State Forest burns. Fire is stopped when it reaches the ocean after burning through 296,000 acres and \$150 Million in suppression costs.

\$2.68

is the amount in the Coos Forest Protection Association District FY '13-'14 Budget per acre of timber covered.



Hazard Probability



Community Vulnerability

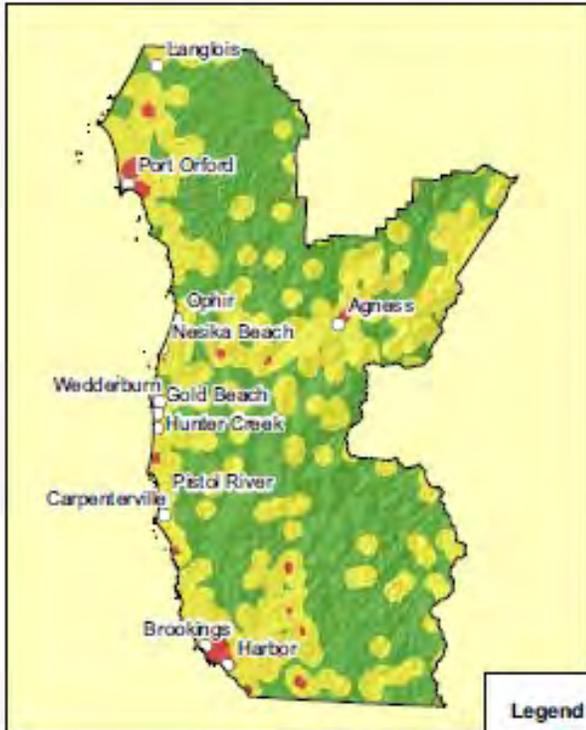
Description of the Hazard

Wildfires occur in areas with large amounts of flammable vegetation that require a suppression response due to uncontrolled burning. Fire is an essential part of Oregon's ecosystem, but can also pose a serious threat to life and property particularly in the state's growing rural communities. Wildfire can be divided into three categories: interface, wildland, and firestorms. The increase in residential development in interface areas has resulted in greater wildfire risk. Fire has historically been a natural wildland element and can sweep through vegetation that is adjacent to a combustible home. New residents in remote locations are often surprised to learn that in moving away from built-up urban areas, they have also left behind readily available fire services providing structural protection.

Findings and Implications for Curry County

- Changing climate and weather patterns may alter the size, location and frequency of future wildfires in Curry County.
- Gorse is a significant, highly flammable source of fuel for wildfires; it is an invasive shrub with large (average mapped polygon size is 34 acres in the region), dense patches common between Bandon and Port Orford.
- The Curry County Community Wildfire Protection Plan was developed in 2008 and has not been updated since.
- According to the 2008 CWPP, only a third of homes at risk to wildfire had the minimum recommended defensible space buffer of 30-feet.

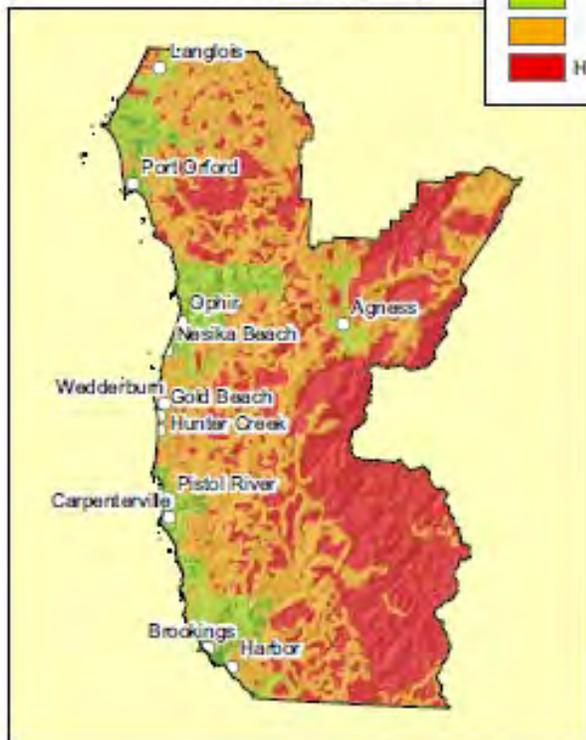
Ignition Risk



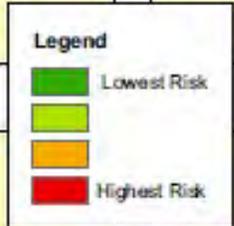
Hazard



Protection Capability



Values At Risk



0 4.5 9 18 Miles



Wildfire Risk Assessment Map 2 Risk Assessment Factors

Created by: Jim Wolf, February 5, 2008



This map is a public resource of general information. Use this information at your own risk. Curry County makes no warranty of any kind, expressed or implied, including any warranty of merchantability, fitness for a particular purpose, or any other matter.



History of Hazard in County

Recent Events:

March 2011: Oregon Coast- A 9.0 magnitude earthquake originating from Japan caused \$6.7 million worth of damages along the Oregon coast. The event resulted in a Disaster Declaration in Curry County; the Port of Brookings experienced extensive damage.

Historically Significant Events:

March 1964: 9.2 Earthquake in Alaska generated a distant tsunami the impacted the entire Oregon coast.

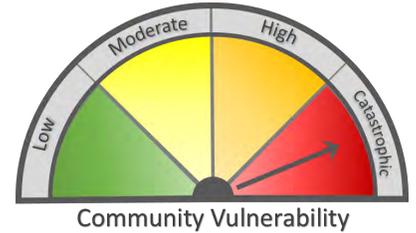
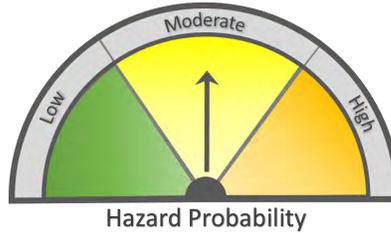
January 1700: ~9.0 Earthquake on the Cascadia Subduction Zone (CSZ) generated a local tsunami.

59%

of residents in Gold Beach live within the DOGAMI delineated “Large” tsunami inundation zone - Wood et. al., 2014

0

Number of locally adopted tsunami land-use overlay zones

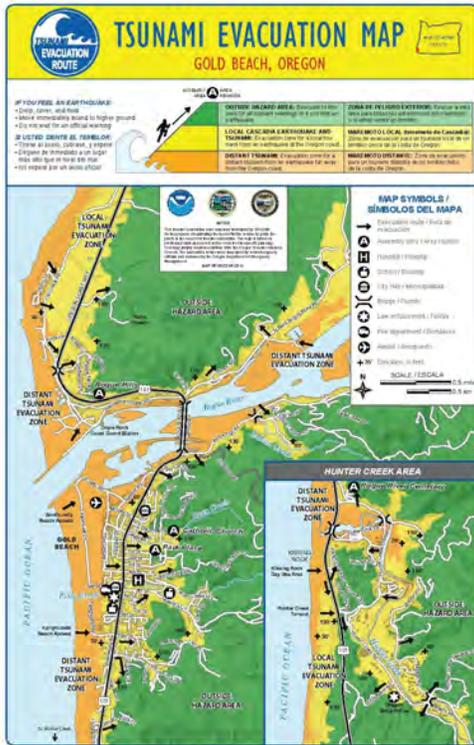
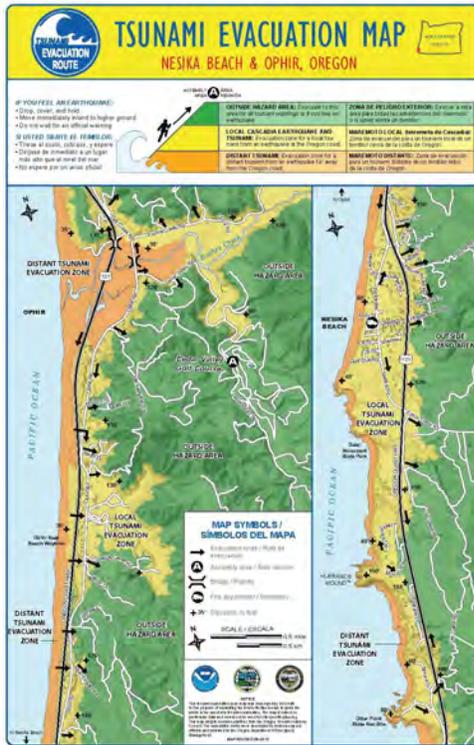
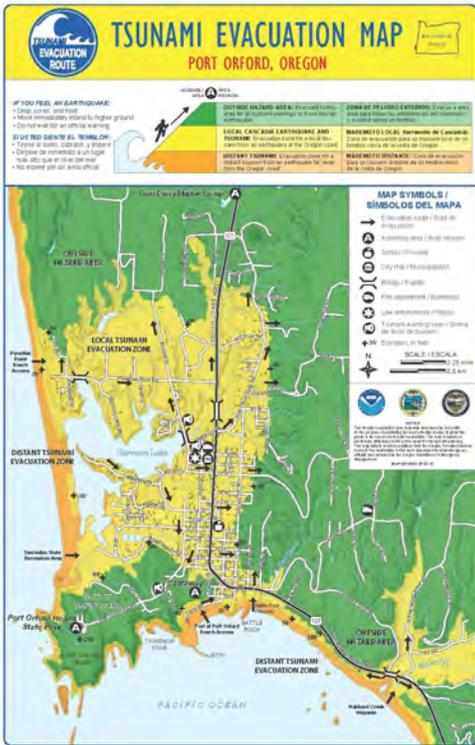


Description of the Hazard

A tsunami generally begins as a single wave but quickly evolves into a series of ocean waves, generated by disturbances from earthquakes, underwater volcanic eruptions, or landslides. The initial tsunami wave mimics the shape and size of the sea floor deformation that causes it. A tsunami from a local source will likely be stronger, higher and travel farther inland (overland and up river) than a distant tsunami (generated from a distant earthquake event such as in Alaska or Japan). The local tsunami wave may be traveling at 30 mph when it hits the coastline and have heights of 20 to more than 60 feet, depending on the coastal bathymetry (water depths) and geometry (shoreline features). Curry County is vulnerable to impacts from both local and distant tsunamis.

Findings and Implications for Curry County

- The southern segment of the CSZ ruptures with an average recurrence interval of roughly 240 years; the most recent CSZ event occurred 315 years ago (Goldfinger et. al. 2012).
- A local tsunami event generated by a CSZ earthquake will catastrophically impact key lifeline infrastructure systems.
- New tsunami inundation data is available; the County has not updated its Comprehensive Plan to reflect this new data.
- Local policy changes, particularly those related to land use and economic development, could reduce community vulnerability if enacted immediately and implemented over time.





History of Hazard in County

Recent Events:

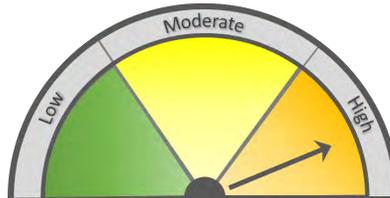
March 2011: Curry County and 12 other counties experienced winds and heavy rains that resulted in flooding, mudslides, and landslides in 13 counties (DR 4055). Damage to state highways alone was estimated at \$5,856,881.

Historically Significant Events:

Numerous landslide events have impacted State Highway 101 over the past half-century closing the highway at times, isolating communities and causing hundreds of thousands of dollars in repairs.

Over **3,000**

landslides have been identified and mapped in the county.



Hazard Probability



Community Vulnerability

Description of the Hazard

A landslide is any detached mass of soil, rock, or debris that falls, slides or flows down a slope or a stream channel. Landslides are classified according to the type and rate of movement and the type of materials that are transported. In a landslide, two forces are at work: 1) the driving forces that cause the material to move down slope, and 2) the friction forces and strength of materials that act to retard the movement and stabilize the slope. When the driving forces exceed the resisting forces, a landslide occurs. Landslides are a chronic, recurring hazard in Curry County.

Findings and Implications for Curry County

- Transportation infrastructure in Curry County is particularly vulnerable to landslide hazards.
- In 2013, the Oregon Department and Mineral Industries completed a detailed landslide study for Curry County; the County has not updated its Comprehensive Plan to reflect this new data.
- Local policy changes, particularly those related to land use and transportation, could significantly reduce community vulnerability if enacted immediately and implemented over time.
- Changing climate and weather patterns may alter the size, location and frequency of landslides in Curry County.



Flood

History of Hazard in County

Recent Events:

January 2012: Coos and Curry flooding along with landslides and mudslides.

March 2012: Coos and Curry Counties- Winds and heavy rain caused flooding, mudslides, and landslides in twelve counties. Damage to state highways estimated at \$5,856,881.

November 2012: Curry County- Rain flooded the Chetco River and Hunter Creek with 9.84 inches of rain recorded at Harbor in a 24-hour period.

November 2012: Curry and Josephine flooding caused \$4 million in damages to infrastructure.

Historically Significant Events:

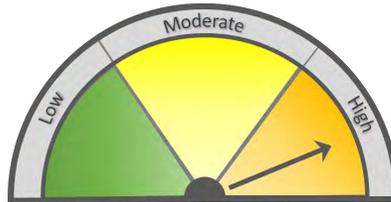
Curry County experiences chronic flooding on an almost annual basis. The County has been named in five major disaster declarations over the past half-century.

359

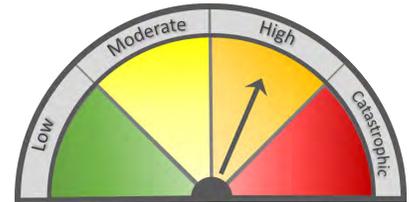
flood insurance policies exist in the county ...

33%

of those policies are pre-firm.



Hazard Probability



Community Vulnerability

Description of the Hazard

Flooding results when surface water flow exceeds the carrying capacity of rivers, streams, channels, ditches, and other drainage systems. In Oregon, flooding is most common from October through April when storms from the Pacific Ocean bring intense rainfall. Most of Oregon's destructive natural disasters have included flooding. Flooding can be aggravated when rain is accompanied by snow-melt and frozen ground; the spring cycle of melting snow is the most common source of flood in the region. The principal types of flood that occur in Curry County include: coastal flooding from high tides and ocean storms, and high river flows (within estuaries the two types combine to create flood hazards). Flooding may also occur in combination with a local or distant tsunami event.

Findings and Implications for Curry County

- Changing climate and weather patterns may alter the size, location and frequency of future floods in Curry County.
- None of the cities or county participate in the Community Rating System.
- Curry has no severe repetitive flood loss properties and only three repetitive flood loss buildings.

Coos Co

Curry County

FEMA Special Flood Hazard Area (SFHA)

Also known as the "100-year flood"

- Effective -
Sept. 25, 2009

Douglas Co

Port Orford

Gold Beach

Brookings

ROGUE R

ROGUE R

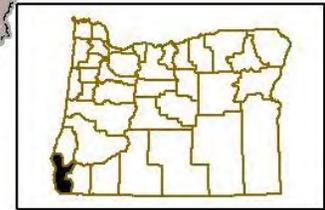
ILLINOIS R

PISTOL R

CHETCO R

101

101



0 2.5 5 10 Miles

Josephine Co



Legend

-  County
-  Rivers
-  City Limits
-  SFHA

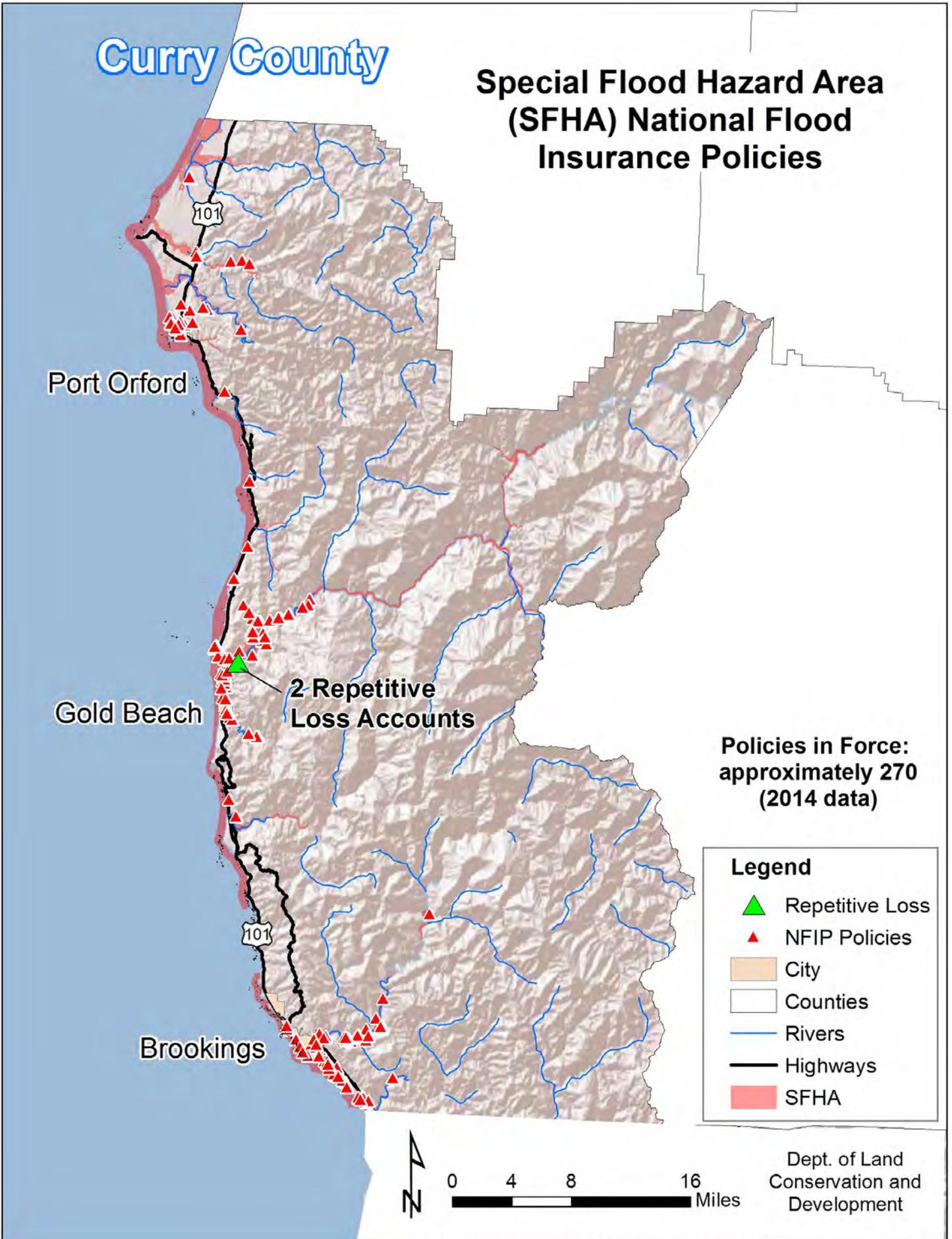
Dept. of Land Conservation and Development



California

Curry County

Special Flood Hazard Area (SFHA) National Flood Insurance Policies



Earthquake



History of Hazard in County

Recent Events:

Curry County has not experienced any damaging earthquakes in the past 100 years.

Historically Significant Events:

November 1873: 7.3 Intraplate Earthquake off Oregon Coast resulted in minor damage throughout southwest Oregon.

January 1700: ~9.0 Earthquake on the Cascadia Subduction Zone (CSZ) generated a local tsunami.

88

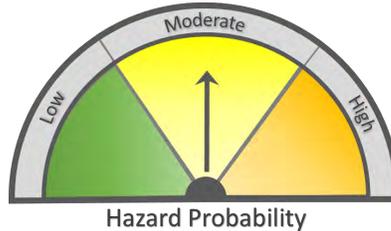
bridges exist in Curry County.

1975

Bridges built prior to this year have a significant structural collapse potential when subjected to earthquake forces.

77%

of the Curry County's bridges were built before 1975.



Hazard Probability



Community Vulnerability

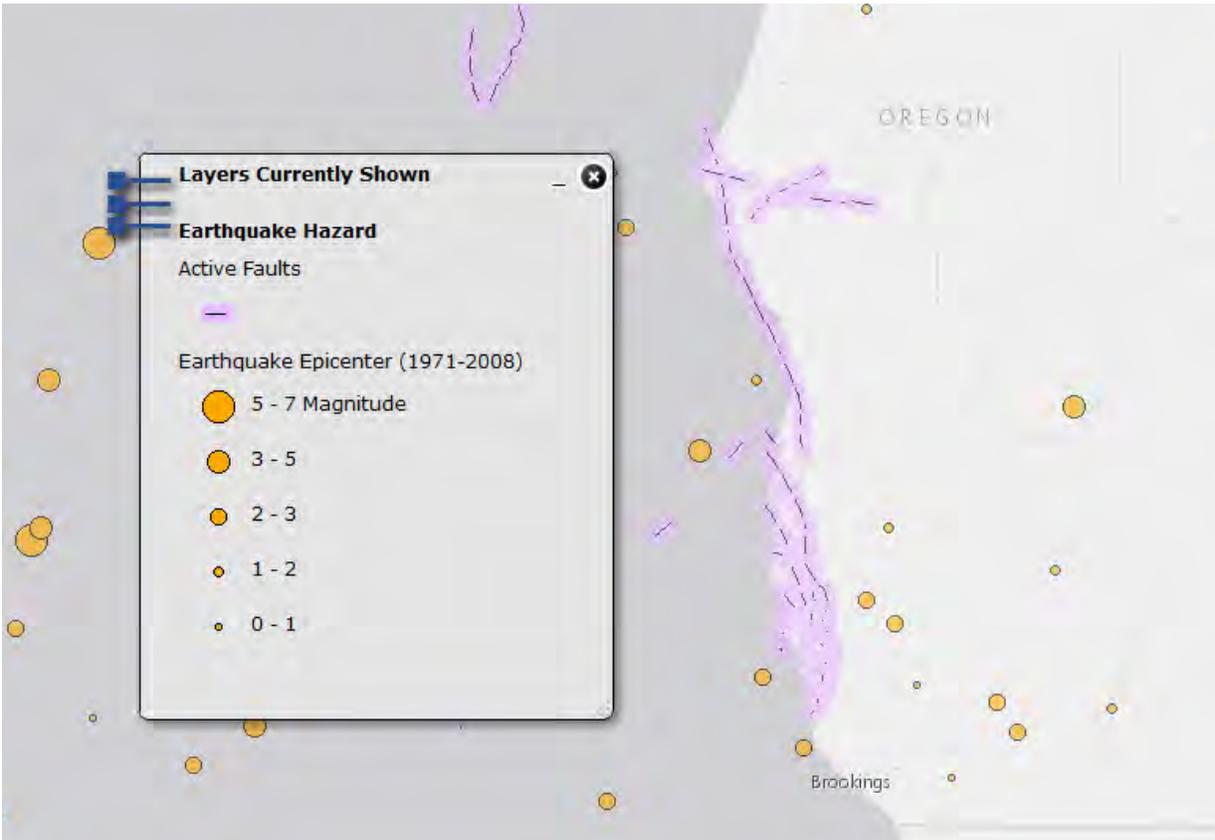
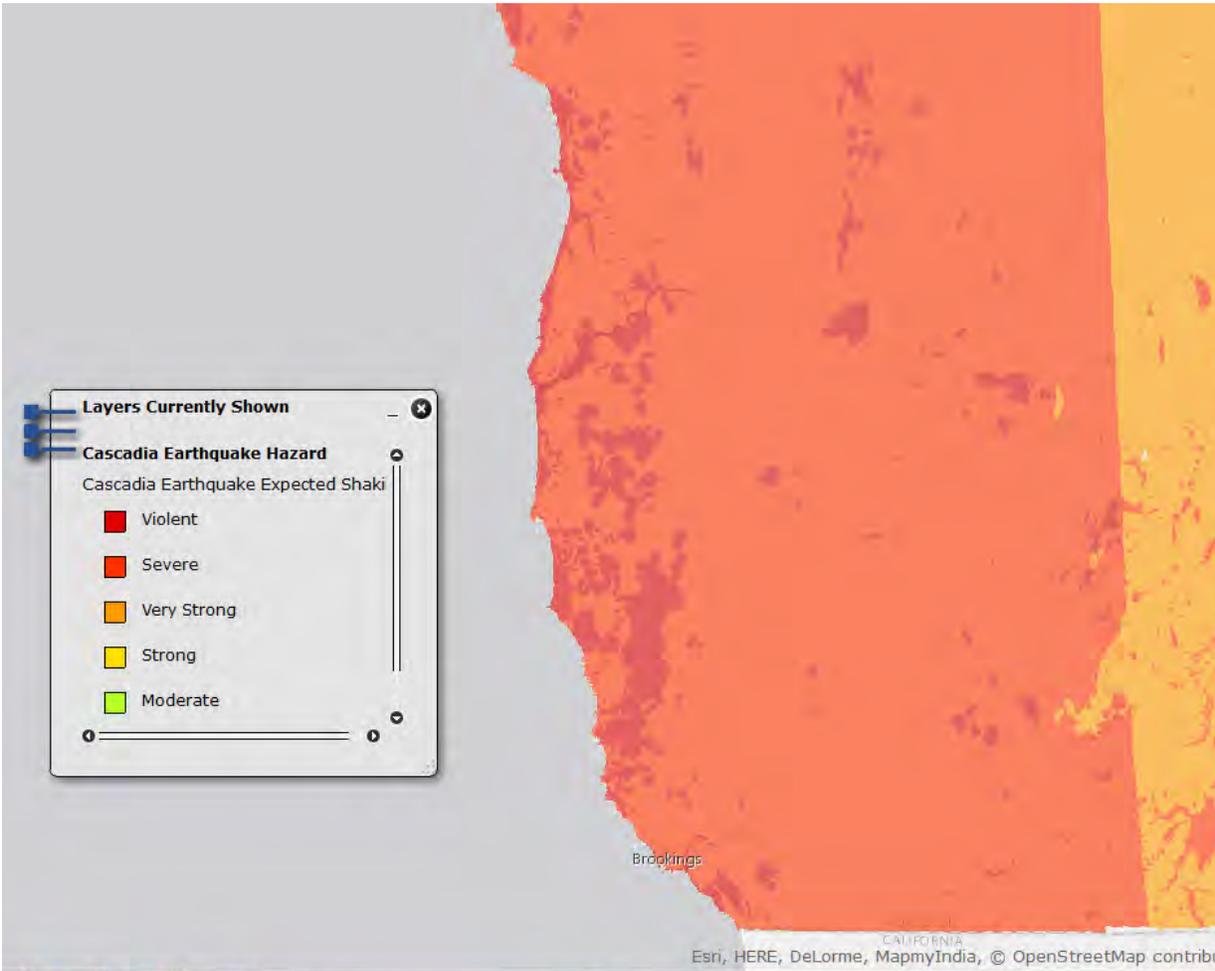
Description of the Hazard

Oregon and the Pacific Northwest in general are susceptible to earthquakes from four sources: 1) the off-shore Cascadia Subduction Zone (CSZ); 2) deep intra-plate events within the Juan de Fuca Plate; 3) shallow crustal events within the North American Plate; and 4) earthquakes associated with volcanic activity.

The areas most susceptible to ground amplification and liquefaction have young, soft alluvial sediments, found along river and stream channels. The extent of the damage to structures and injury and death to people will depend upon the type of earthquake, proximity to the epicenter and the magnitude and duration of the event.

Findings and Implications for Curry County

- The southern segment of the CSZ ruptures with a recurrence of roughly 240 years; the last CSZ event occurred 315 years ago (Goldfinger et. al. 2012).
- Seven out of 18 (38%) county schools have a high (>10%) or very high (100%) collapse potential (DOGAMI 2008).
- The county budget has declined from \$75.6 million in 2010/2011 to \$57.3 million in 2014/2015; nearly 70% of the 2014/2015 budget (~\$40 million) is restricted to the County Road Fund.
- New revenue sources or external funds will be needed to address Curry County's lifeline infrastructure vulnerabilities.





Coastal Erosion

History of Hazard in County

Recent Events:

No new coastal erosion events have been identified since the last update of the Curry County Natural Hazard Mitigation Plan (NHMP) in 2010.

Historically Significant Events:

1998 (Feb): Port Orford- Heavy surf damaged Port Orford's sewage treatment plant, causing approximately \$300,000 in damage and eroded the dune that separates the ocean from Garrison Lake, one of Port Orford's water sources.

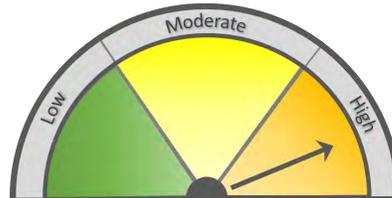
2004: Otter Point State Park- Coastal erosion destroyed a hiking trail.

-1.9 ft./yr.

erosion rate at Nesika Beach bluffs

~20

homes are currently developed along the bluff



Hazard Probability



Community Vulnerability

Description of the Hazard

Coastal erosion is a natural process that continually affects the entire coast. Erosion becomes a hazard when development, life or community safety are threatened. Waves, currents, tides and storms resulting in episodic and recurrent erosion constantly affect beaches, sand spits, dunes and bluffs. Shoreline retreat may be gradual over a season or many years, or it can be drastic, with the loss of substantial upland area during the course of a single storm event. The 2015 Draft Oregon NHMP identifies coastal erosion within its coastal hazards annex that also includes coastal flooding, landslides, earthquake, and tsunami.

Findings and Implications for Curry County

- Changing climate and weather patterns may alter the frequency, intensity and duration of wind and winter storm events.
- Sea level rise may change the incidence and location of coastal erosion over time.
- Coastal erosion can effect utilities, transportation networks, and essential facilities with potential long-term impacts on residents and the local economy.
- Some of the highest erosion rates for bluff-backed shorelines in Oregon are found along a segment within the Nesika Beach area of Curry County, with bluff toe retreats measured at 1.9 feet per year (DOGAMI).

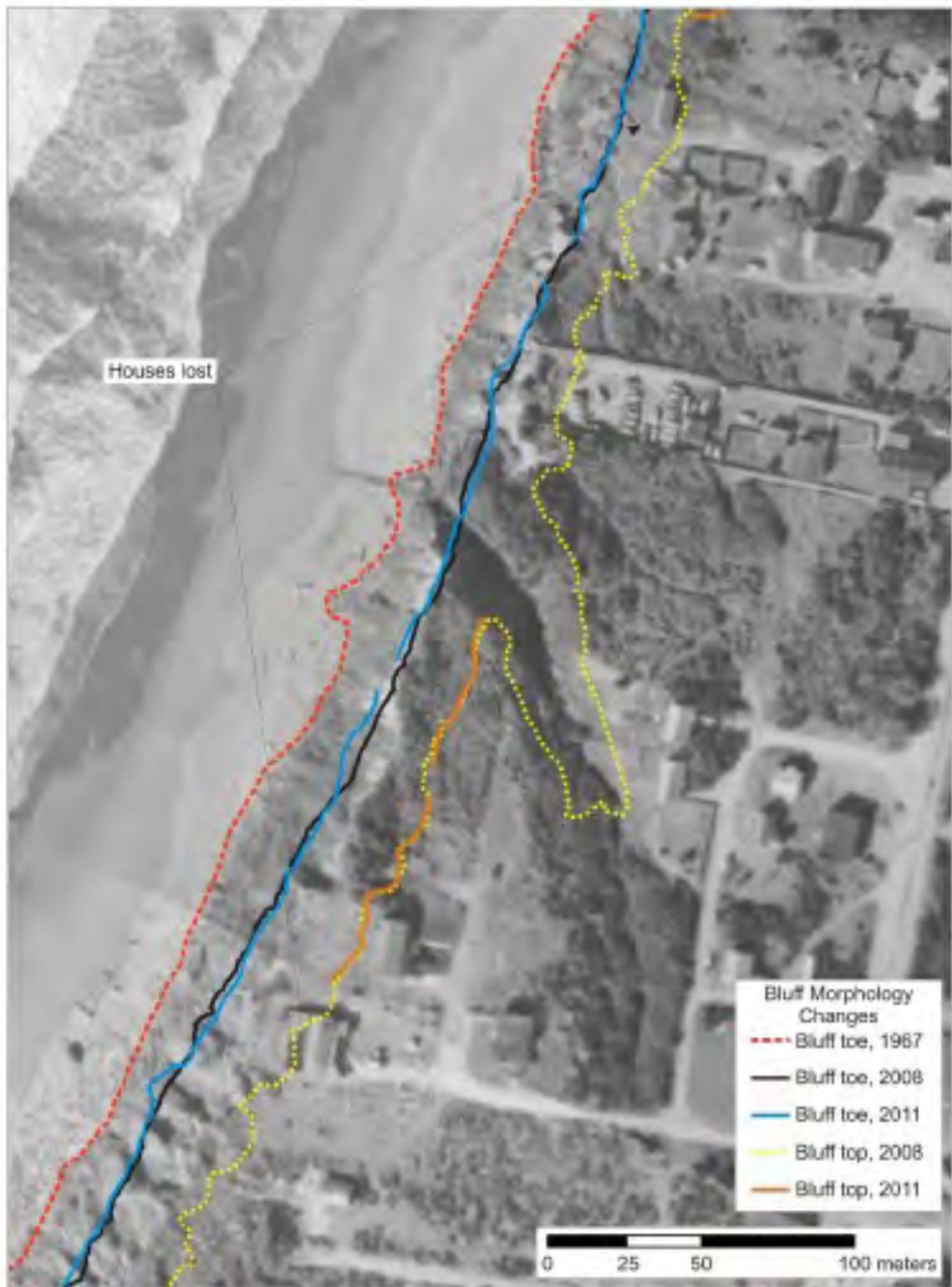


Figure 22. Close-up view of geomorphic changes (bluff toe and top) along a portion of the Nesika Beach shore depicted on a 1967 orthorectified image. Note the two homes identified in the 1967 aerial images that have been lost due to retreat of the bluffs.

Source: Department of Geology and Mineral Industries - Open-File Report o-13-07. Refer to this report for additional mapping and analysis of shoreline changes in the Gold Beach and Nesika Beach areas of Curry County. <http://www.oregongeology.org/pubs/ofr/O-13-07.pdf>

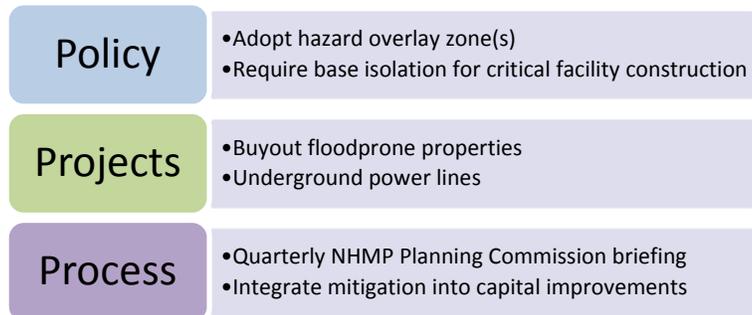
SECTION I: INTRODUCTION

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

What is Natural Hazard Mitigation?

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

Figure 1.1 – Mitigation Strategy Categories



Source: Oregon Partnership for Disaster Resilience

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

¹ FEMA, *What is Mitigation?* <http://www.fema.gov/what-mitigation>

Why Develop a Mitigation Plan?

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

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

What Federal Requirements Does This Plan Address?

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

Chapter 44 Code of Federal Regulations (CFR), section 201.6, also requires a local government to have an approved mitigation plan in order to receive HMGP project grants.² Pursuant of Chapter 44 CFR, the Natural Hazard Mitigation Plan planning processes shall include opportunity for the public to comment on the plan during review, and the updated Natural Hazard Mitigation Plan shall include documentation of the public planning process used to develop the plan.³ The Natural Hazard Mitigation Plan update must also contain a risk assessment, mitigation strategy and a plan maintenance process that has been formally adopted by the governing body of the jurisdiction.⁴ Lastly, the Natural Hazard Mitigation Plan must be submitted to Oregon Military Department – Office of Emergency Management (OEM) for initial plan review, and then federal approval.⁵ Additionally, a recent change in

² Code of Federal Regulations, Chapter 44. Section 201.6, subsection (a), 2015

³ *ibid*, subsection (b). 2015

⁴ *ibid*, subsection (c). 2015

⁵ *ibid*, subsection (d). 2015

the way OEM administers the Emergency Management Performance Grant (EMPG), which helps fund local emergency management programs, also requires a FEMA-approved NHMP.

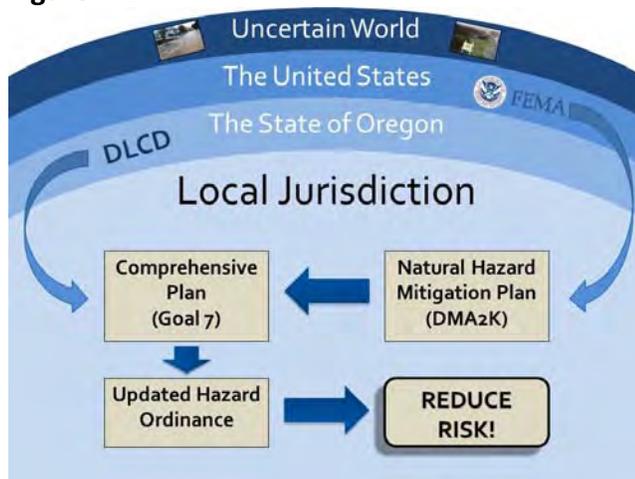
What is the Policy Framework for Natural Hazards Planning in Oregon?

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

Statewide land use planning Goal 7: Areas Subject to Natural Hazards requires that local governments, “. . . adopt comprehensive plans (inventories, policies and implementing measures) to reduce risk to people and property from natural hazards.”⁶ Goal 7, along with other land use planning goals, has helped to reduce losses from natural hazards. Through risk identification and the recommendation of risk-reduction actions, this plan aligns with the goals of the jurisdiction’s Comprehensive Plan, and helps each jurisdiction meet the requirements of statewide land use planning Goal 7.

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

Figure 1.2



Source: Oregon Partnership for Disaster Resilience

⁶ <http://www.oregon.gov/LCD/docs/goals/goal7.pdf>

How was the Plan Developed and Updated?

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

An open public involvement process is essential to the development of an effective plan. In order to develop a comprehensive approach to reducing the effects of natural disasters, the planning process shall include an opportunity for the public, neighboring communities, local and regional agencies, as well as, private and non-profit entities to comment on the Plan during review.⁷ OPDR provided a publicly accessible project website (<http://csc.uoregon.edu/opdr/currycounty>) for the general public to provide feedback on the draft NHMP via a web form. In addition, Curry County submitted a newspaper article describing the plan update process. Finally, County staff posted flyers and discussed the plan update process informally with local elected officials.

How is the Plan Organized?

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

Volume I: Basic Plan

Plan Summary

The plan summary provides an overview of the FEMA requirements plans process and highlights the key elements of the risk assessment, mitigation strategy, and implementation and maintenance strategy. In addition, the plan summary presents short briefing papers for top and middle tier hazards identified in the plan.

Section 1: Introduction

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

Section 2: Risk Assessment

Section 2 provides the factual basis for the mitigation strategies contained in Section 3. Additional community profile information is included within Appendix C, which contains an overall description of Curry County and the Cities of Brookings, Gold Beach and Port Orford.

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

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

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

Section 3: Mitigation Strategy

This section documents the Plan vision, mission, goals, and actions (mitigation strategy) and also describes the components that guide implementation of the identified actions. Actions are based on community sensitivity and resilience factors and the hazard assessments in Section 2 and the Hazard Annexes (Volume II).

Section 4: Plan Implementation and Maintenance

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

Volume 2: Appendixes

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

Appendix A: Action Item Forms

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

Appendix B: Planning and Public Process

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

Appendix C: Community Profile

The community profile describes the county and participating cities from a number of perspectives in order to help define and understand the regions sensitivity and resilience to

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

Appendix D: Economic Analysis of Natural Hazard Mitigation Projects

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

Appendix E: Grant Programs and Resources

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

SECTION 2: RISK ASSESSMENT

This section of the NHMP addresses 44 CFR 201.6(b)(2) - Risk Assessment. The Risk Assessment applies to Curry County and the Cities of Port Orford, Gold Beach and Brookings. City specific information is called out where relevant. In addition, this chapter can assist with addressing Oregon Statewide Planning Goal 7 – Areas Subject to Natural Hazards.

The information presented below, along with hazard specific information presented in the Hazard Annexes and community characteristics presented in the Community Profile Appendix, is used to inform the risk reduction actions identified in Section 3 – Mitigation Strategy. The risk assessment process is graphically depicted in Figure 2-1 below. Ultimately, the goal of hazard mitigation is to reduce the area where hazards and vulnerable systems overlap.

Figure 2-1 Understanding Risk



Source: Oregon Partnership for Disaster Resilience.

What is a Risk Assessment?

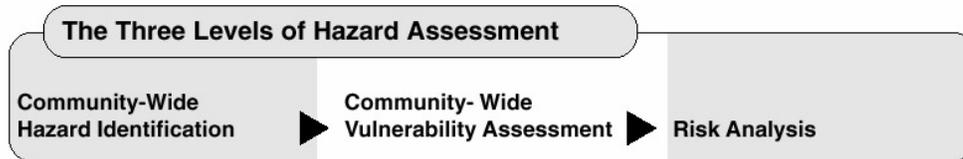
A risk assessment consists of three phases: hazard identification, vulnerability assessment, and risk analysis.

- **Phase 1:** Identify hazards that can impact the jurisdiction. This includes an evaluation of potential hazard impacts – type, location, extent, etc.

- **Phase 2:** Identify important community assets and system vulnerabilities. Example vulnerabilities include people, businesses, homes, roads, historic places and drinking water sources.
- **Phase 3:** Evaluate the extent to which the identified hazards overlap with, or have an impact on, the important assets identified by the community.

The following figure illustrates the three-phase risk assessment process:

Figure 2-2 Three Phases of a Risk Assessment



Source: Planning for Natural Hazards: Oregon Technical Resource Guide, 1998

This three-phase approach to developing a risk assessment should be conducted sequentially because each phase builds upon data from prior phases. However, gathering data for a risk assessment need not occur sequentially.

Hazard Identification

Curry County identifies nine natural hazards that could have an impact on the county and each of the participating jurisdictions. Summary information for each hazard is presented below and in the hazard briefs (including maps) in the plan summary; additional information pertaining to the types and characteristics of each hazard is available in the State of Oregon Natural Hazard Mitigation Plan Region 1 Risk Assessment. Table 2-1 lists the hazards identified in the county in comparison to the hazards identified in the State of Oregon NHMP for Coastal Oregon (Region 1), which includes Curry County.

Table 2-1 Curry County Hazard Identification

Curry County	Oregon NHMP Region 1: Oregon Coast
Coastal Erosion	Coastal Hazards*
Drought	Drought
Earthquake	Earthquake (Cascadia/ Crustal)
Flood	Flood (Riverine/ Tidal)
Landslide	Landslide
Tsunami	Tsunami (Local/ Distant)
Volcanic Ash	Volcano
Wildfire	Wildfire
Windstorm	Windstorm
-	Winter Storm

*In the State NHMP, Coastal Hazards include: Coastal Erosion (short/ long term), Landslides, Earthquakes and Tsunamis

Source: Curry County NHMP Steering Committee (2015) and State of Oregon (Draft) NHMP, Region 1: Coastal Oregon (2015)

The following subsections briefly describe relevant information for each hazard. For additional background on the hazards, vulnerabilities and general risk assessment information for coastal hazards in Oregon, refer to the [State of Oregon NHMP, Region 1: Coastal Oregon Risk Assessment \(2015\)](#).

Coastal Erosion

Coastal erosion is a natural process that continually affects the entire coast. Erosion becomes a hazard when development, life or community safety are threatened. Waves, currents, tides and storms resulting in episodic and recurrent erosion constantly affect beaches, sand spits, dunes and bluffs. Shoreline retreat may be gradual over a season or many years, or it can be drastic, with the loss of substantial upland area during the course of a single storm event. The 2015 Draft Oregon NHMP identifies coastal erosion within its coastal hazards annex that also includes coastal flooding, landslides, earthquake, and tsunami.

Refer to the following DOGAMI report for additional information: [OPEN-FILE REPORT O-13-07 OREGON BEACH SHORELINE MAPPING AND ANALYSIS PROGRAM: QUANTIFYING SHORT- TO LONG-TERM BEACH AND SHORELINE CHANGES IN THE GOLD BEACH, NESIKA BEACH, AND NETARTS LITTORAL CELLS, CURRY AND TILLAMOOK COUNTIES, OREGON.](#)

Coastal erosion occurs throughout the year in Curry County, but is accelerated during the winter months when storms increase the rate of erosion. The extent of the hazard varies throughout the county. However, coastal erosion is gradually eroding the Nesika Beach area, north of Gold Beach, threatening beachfront homes. Harris State Park experiences coastal erosion on a regular basis, and in 2004, erosion destroyed a hiking trail in Otter Point State Park. In the Dawson Tract Subdivision north of Brookings, a home had to be torn down due to coastal erosion. Finally, in February 1998, heavy surf damaged Port Orford's sewage treatment plant, causing approximately \$300,000 in damage and eroding the dune that separates the ocean

Image 1 Coastal erosion Nesika Beach



Source: John Woodland, March 2010.

Image 2 Coastal erosion Nesika Beach



Source: Oregon Partnership for Disaster Resilience, March 2010.

from Garrison Lake, which is one of Port Orford's sources of water. The dune breach has since been repaired and is monitored regularly. Coastal erosion is limited to the area within the coastal fringe.

No new coastal erosion events have been identified since the last update of the Curry County Natural Hazard Mitigation Plan (NHMP) in 2010.

- February 1998: Port Orford- Heavy surf damaged Port Orford's sewage treatment plan, causing approximately \$300,000 in damage and eroding the dune that separates the ocean from Garrison Lake, one of Port Orford's sources of water.
- 2004: Otter Point State Park- Coastal erosion destroyed a hiking trail.

Drought

A drought is a period of drier than normal conditions. Drought occurs in virtually every climatic zone, but its characteristics vary significantly from one region to another. Drought is a temporary condition; it differs from aridity, which is restricted to low rainfall regions and is a permanent feature of climate. The extent of drought events depends upon the degree of moisture deficiency, and the duration and size of the affected area. Drought is a slow onset hazard that can take months or years to manifest and can last for months to years at a time. All of Curry County is potentially susceptible to drought. Typically, droughts occur as regional events and often affect more than one city and county.

Drought conditions are not uncommon in Curry County. The environmental and economic consequences can be significant, especially for Curry County's agricultural sector. Drought also increases the probability of wildfires in Curry County.

Three recent drought events have been added to the hazard history list for drought since 2010.

- 1961: Coos and Curry Counties- Abnormally high temperatures in the two counties.
- 1976-1981: Western Oregon- Intense drought. 1976-77 was the single driest year of the century.
- 1985-1997: Curry County- A general dry period throughout the state; the Governor issued a Drought Declaration for Curry County in 1992.
- 2000-2001: Statewide- the second most intense drought in Oregon's history.
- December 2002: Coos, Curry and Douglas Counties - Governor Declared State of Drought Emergency declared "due to conditions caused by drought and low water."
- 2004-2005: Coos, Curry, and Douglas Counties- Counties declared primary natural disaster area due to drought.
- *August 2013: Curry County- Agricultural losses due to recent drought. Curry County designated as primary natural disaster area.*
- *December 2014: Lane, Douglas, and Coos Counties- Drought disaster declaration for the three counties due to below average snowpack.*
- *July 2015: Formal Governor Declared Determination of State of Drought Emergency due to drought, low snow pack levels, and low water conditions.*

Earthquake

Oregon and the Pacific Northwest in general are susceptible to earthquakes from four sources: 1) the off-shore Cascadian Fault Zone; 2) deep intra-plate events within the subducting Juan de Fuca Plate; 3) shallow crustal events within the North American Plate; and 4) earthquakes associated with volcanic activity.¹

Curry County has not experienced any major earthquake events in recent history. Seismic events do, however, pose a significant threat. In particular, a Cascadia Subduction Zone (CSZ) event could produce catastrophic damage and loss of life in Curry County. The geographical position of Curry County makes it also susceptible to deep intraplate events within the subducting Juan de Fuca Plate, and shallow crustal events within the North American Plate.

According to the Oregon NHMP, the return period for the largest of the CSZ earthquakes (Magnitude 9.0+) is 530 years with the last CSZ event occurring 314 years ago in January of 1700. The probability of a 9.0+ CSZ event occurring in the next 50 years ranges from 7 - 12%. Notably, 10 - 20 "smaller" Magnitude 8.3 - 8.5 earthquakes identified over the past 10,000 years affect only the southern half of Oregon and northern California. The average return period for these events is roughly 240 years. The combined probability of any CSZ earthquake occurring in the next 50 years is 37 - 43%.

While Curry County has not experienced any significant earthquakes in recent memory, earthquakes in Oregon that have affected the county are listed below. Three earthquake events have been added since the 2010 plan update.

- January 1700: Offshore, Cascadia Subduction Zone- Approximately 9.0 earthquake generated a tsunami that struck Oregon, Washington, and Japan; destroyed Native American villages along the coast.
- November 1873: Brookings Area- Chimneys fell at Port Orford, Grants Pass, and Jacksonville. There were no aftershocks to the 7.3 magnitude earthquake. The origin was probably the Gorda block off the Juan de Fuca plate. Intraplate event.
- November 1962: Portland- A 5.2-5.5 magnitude earthquake caused damage to many homes (chimneys, windows, etc). The earthquake was a crustal event.
- March 1993: Scotts Mills- A 5.6 magnitude earthquake caused \$27 million in damages to homes, schools, businesses, state buildings (Salem). Crustal Event (FEMA-985-DR-OR).
- September 1993: Klamath Falls- Two earthquakes (5.9-6.0) caused two deaths and extensive damage. \$7.5 million in damage to homes, commercial, and government buildings. Crustal event (FEMA-1004-DR-OR).
- July 2004: Newport, OR- A 4.9 magnitude earthquake recorded southwest of Newport. No damages.
- August 2004: Newport, OR- A 4.7 magnitude earthquake recorded northeast of Newport. No damages.
- April 2008: Newport, OR- A swarm of 5.0-5.4 earthquakes occurred off the Central Oregon coast.

- *October 2011: Oregon Coast- A 5.3 magnitude earthquake occurred off the Oregon coast. The earthquake was 172 miles northwest of Brookings.*
- *February 2012: Oregon Coast- A 6.0 magnitude earthquake occurred off the Oregon coast about 190 miles northwest of Brookings. There were no reported damages.*
- *April 2012: Oregon Coast- A 5.9 magnitude earthquake occurred off the Oregon coast. The earthquake was 196 miles away from Brookings. There were no reported damages.*

Flood

Flooding results when precipitation or coastal storm surge events create water flow that exceed the carrying capacity of rivers, streams, channels, ditches, and other watercourses. In Oregon, flooding is most common from October through April when storms from the Pacific Ocean bring intense rainfall. Most of Oregon's destructive natural disasters have been floods.²

Floods frequently occur in Curry County during periods of heavy rainfall. The primary sources of riverine flooding include Chetco River, Elk River, Pistol River, Rogue River, Sixes River, Winchuck River, and Hunter Creek. The extent of the mapped 100-year flood zone is primarily limited to these rivers. The extent of the coastal flood hazard is primarily limited to coastal beaches and estuaries. FEMA, DLCD and DOGAMI are currently in the process of updating flood hazard extent mapping in Curry County.

Refer to the following DOGAMI report for additional information: [OPEN-FILE REPORT O-15-07 COASTAL FLOOD HAZARD STUDY, CURRY COUNTY, OREGON](#)

Four flood events have been added since the 2010 plan update.

- October 1950: Curry County- Period of heavy rainfall with 10 to 12 inches recorded for the County.
- October 1953: Curry County- Period of heavy rain from a wet winter storm. Gold Beach had a storm total of 9.8 inches of rain, while Port Orford recorded 7.25 inches of rain.
- December-January 1964-65: Curry County- The December 1964 rainstorm was among the most severe in western Oregon since the late 1870s. Hundreds of miles of roads and highways were washed out or badly damaged, and thousands of people had to be evacuated due to ensuing floods. Rivers in Curry County were above the flood stage, and mudslides, bridge failures, and inundation closed several roads.
- February 1996: Curry County- Flooding occurred throughout Oregon and Curry County. Region-wide damage estimates exceeded \$1 billion.
- November-December 1996: Curry County- Oregon State of Emergency declared for Curry County due to flooding and landslides from heavy rains.
- January 1997: Statewide- Flooding widespread throughout Oregon, with many roads closed due to high water and landslides. The governor declared a State of

² Taylor, George H. and Chris Hannan. *The Oregon Weather Book*. Corvallis, OR: Oregon State University Press. 1999

Emergency in January due to heavy rains that began December 21, 1996 and caused flooding, landslides, and erosion in 18 counties, including Curry County.

- December 2005: Curry County- Heavy flooding in Curry County due to heavy rains. Damages occurred in Curry, Coos, Josephine, and Jackson Counties.
- December 2007: Oregon Coast- Strong storms along the entire Oregon Coast. Curry County was included in a Presidential Disaster Declaration for the Coast.
- 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 rain caused flooding, mudslides, and landslides in twelve counties. Damage to state highways estimated at \$5,856,881.*
- *November 2012: Curry County- Rain flooded the Chetco River and Hunter Creek, and 9.84 inches of rain were recorded at Harbor in a 24-hour period.*
- *November 2012: Curry and Josephine Counties- Heavy rain caused \$4 million in damages to infrastructure.*

Landslide

A landslide is any detached mass of soil, rock, or debris that falls, slides or flows down a slope or a stream channel. Landslides are classified according to the type and rate of movement and the type of materials that are transported. In a landslide, two forces are at work: 1) the driving forces that cause the material to move down slope, and 2) the friction forces and strength of materials that act to retard the movement and stabilize the slope. When the driving forces exceed the resisting forces, a landslide occurs.

Curry County is subject to landslide events. The severity or extent of landslides is typically a function of geology and the landslide triggering mechanism. Rainfall initiated landslides tend to be smaller, and earthquake induced landslides may be very large. Even small slides can cause property damage, result in injuries, or take lives. Notably, DOGAMI has engaged in an extensive program to identify and measure the extent of landslides in Oregon. Several DOGAMI publications specific to Curry County provide information and mapping of landslide areas.

Refer to the following DOGAMI reports for additional information: [Open-File Report O-14-10, Landslide Inventory of Coastal Curry County, Oregon](#); [Open-File Report O-13-02, Landslide Inventory Map of the Harbor Hills Area, Curry County, Oregon](#).

One landslide event has been added since 2010.

- 1953: Curry County- Landslide near the Harbor Hills area (southeast of Brookings) damaged a home and closed Highway 101.
- 1993: Highway 101- the "Arizona Inn Slide" shut down Highway 101 for two weeks. ODOT has since installed new drainage systems. Previous slides occurred in 1938, 1954, 1978, and 1981.
- 1994-1995: Gold Beach- Hooskaneden slide closed down Highway 101, 18 miles south of Gold Beach.
- Winter 1996-1997: Curry County- Significant landslide events occurred in Curry County as a result of intense rainfall from the February storms. The governor declared two State of Emergencies for Curry County during this period.

- 1999: Curry County- Landslide on Highway 101 at Reinhart Creek (MP 311.2-311.7) cost \$1,300,000 to repair. There was \$500,000 worth of repairs on Highway 101 and 80 Acres Road (MP 332.5-333).
- 2001: Curry County- Landslide on Highway 101 at Slide Creek (MP 310.6-310.8) cost \$1,100,000 to repair. A landslide at Humbug State Park near Bear Trap Creek (MP 307.06-307.16) cost \$175,000 to repair.
- January 2006: Curry County- Gregory Point landslide 2.2 miles south of Port Orford blocked Highway 101.
- 2008: Curry County- Heavy rains caused approximately 3,000 tons of mud and debris and covered Harbor Heights Road in the Harbor Hills area southeast of Brookings, blocking access to several homes.
- *March 2011: Curry County and 12 other counties- Winds and heavy rains caused flooding, mudslides, and landslides in 13 counties. Damage to state highways estimated at \$5,856,881.*

Tsunami

A tsunami generally begins as a single wave but quickly evolves into a series of ocean waves, generated by disturbances from earthquakes, underwater volcanic eruptions, or landslides (includes landslides that start below the water surface and landslides that enter a deep body of water from above the water surface). In these cases the initial tsunami wave mimics the shape and size of the sea floor deformation that causes it. A tsunami from a local source will likely be stronger, higher and travel farther inland (overland and up river) than a distant tsunami (generated from a distant earthquake event such as in Alaska or Japan). The local tsunami wave may be traveling at 30 mph when it hits the coastline and have heights of 20 to 60 feet, potentially higher depending on the coastal bathymetry (water depths) and geometry (shoreline features). Significant portions of Gold Beach and Port Orford are susceptible to tsunamis, particularly those generated by CSZ events. Brookings is the least vulnerable city to tsunami impacts. However, much of the unincorporated city of Harbor (which is within the Brookings Urban Growth Boundary) is vulnerable to tsunami impacts. Brookings is one of two cities selected to compete in a national Housing and Urban Development sponsored Resilience competition as a result of the damage sustained during the 2011 Tohoku earthquake and tsunami event. Table 2-4 provides additional jurisdiction specific information about the extent and potential damage associated with local and distant tsunami sources.

DOGAMI Tsunami Inundation Maps publications incorporate all the best tsunami science available today, including recent publications by colleagues studying the Cascadia Subduction Zone, updated computer simulation models using high-resolution lidar topographic data, and knowledge gained from the 2004 Sumatra, 2010 Chile, and 2011 Tōhoku earthquakes and tsunamis. Both the local and distant source tsunami inundation maps show simulated wave heights and inundation extents for the various scenarios. Refer to the DOGAMI Tsunami Inundation Map Series (TIMS) for Curry County for specific hazard extent information: [TIM map publication overview](#). Refer to the following DOGAMI report for additional information: [OPEN-FILE REPORT O-13-19 TSUNAMI INUNDATION SCENARIOS FOR OREGON](#).



One major tsunami event has been added to this hazard history section since the 2010 NHMP update.

- January 26, 1700: Oregon Coast- A magnitude 9 subduction zone earthquake generated a tsunami that caused damage along the entire Oregon Coast and as far away as Japan.
- November 1873: Port Orford- An earthquake in northern California generated a tsunami. Structures at the high tide line in Port Orford were damaged.
- April 1, 1946: Coos Bay and Bandon- A tsunami generated by a magnitude 7.8 earthquake in the Aleutian Islands of Alaska killed 165 people and cost over \$26 million. The highest inundation waves occurred in Hawaii, where a 12-meter run-up was recorded. The tsunami arrived at the island of Hilo 4.9 hours after the earthquake originated, and 96 people lost their lives. A 10-foot wave was recorded at Coos Bay and Bandon, but no damages were recorded.
- November 4, 1952: Bandon- An earthquake in Kamchatka, Russia caused a four-foot tsunami in Bandon where log decks broke loose from their foundation piers.
- March 1964: Oregon Coast: A tsunami struck southeastern Alaska following an earthquake beneath Prince William Sound. The tsunami arrived along the Alaskan coastline between 20 and 30 minutes after the quake, devastating coastal villages. The tsunami spread across the Pacific Ocean and caused damage and fatalities in other coastal areas, including Oregon. Coos Bay suffered \$20,000 in damages. Along the entire Oregon coast, damage was estimated to be between \$750,000 and \$1 million.
- *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. A State of Emergency was declared in Curry County due to damage at the Port of Brookings.

Wildfire

Wildfires occur in areas with large amounts of flammable vegetation that require a suppression response due to uncontrolled burning. Fire is an essential part of Oregon's ecosystem, but can also pose a serious threat to life and property particularly in the state's growing rural communities. The increase in residential development in interface areas has resulted in greater wildfire risk. Fire has historically been a natural wildland element and can sweep through vegetation that is adjacent to a combustible home. New residents in remote locations are often surprised to learn that in moving away from built-up urban areas, they have also left behind readily available fire services providing structural protection. The 2008 [Curry County Community Wildfire Protection Plan](#) identified sixteen communities "at risk" to the effects of wildfire. According to the CWPP, the fire regime and condition class for forests in Southwest Oregon are typically low to moderate. The wildfire risk assessment maps in the CWPP show specific hazard extent information.

Only one wildfire event has been added since the 2010 plan update.

- 1868: Coos and Curry Counties- 90% of Elliott State Forest burns. Fire is stopped when it reaches the ocean after burning through 296,000 acres.
- September 1936: Coos and Curry Counties: Temperatures reached 90 degrees and humidity dropped to 6% sparking wildfires throughout the two counties.
- 1987: Southern Coast Range- The Silver Fire occurred in the Southern Coast Range and burned 97,000 acres.
- 2002: Curry County- The Biscuit Fire burned roughly 500,000 acres for a total cost of \$150 million in damages.
- *June 2014: Curry County- the Euchre Creek Fire, 12 miles north of Gold Beach, burned 56 acres.*

Windstorm

A windstorm is generally a short duration event involving straight-line winds and/or gusts in excess of 50 mph. Although windstorms can affect the entirety of Curry County, they are especially dangerous along the beaches, headlands and coastal bluffs as well as in developed areas with large trees or tree stands. The extent of any particular windstorm is determined by its track, intensity and local terrain.³ In the southwest Oregon, wind speed is typically 60 mph for 25-year storm events, 70 mph for 50-year storm events and 80 mph for 100-year storm events. Curry County has experienced multiple 25-, 50-, and 100-year windstorm events over the past century with impacts occurring county wide. A windstorm will frequently knock down trees and power lines, damage homes, businesses, public facilities, and create tons of storm related debris. Windstorms are a common, chronic hazard in Curry County.

³ State of Oregon Natural Hazards Mitigation Plan (2015)

Only one windstorm event has been added to this hazard history section since the 2010 NHMP update.

- January 1921: Oregon Coast- Hurricane-force winds along the entire coast.
- January 1950: Curry County- Severe winter weather with snow, sleet, and freezing rain closed down highways and power lines.
- December 1951: Statewide- Large windstorm with coastal winds between 60 and 100 mph. Damage across the state.
- November 1958: Curry County- Wind Storm with gusts between 80 and 100 mph, over a billion board feet of timber fell, roads in Coos County largely blocked.
- February 1961: Curry County- Heavy gusts and significant rain caused widespread damage in Coos County.
- October 1962: Curry County- Columbus Day Storm. Most destructive wind storm in Oregon's history, and caused widespread damage in Coos County.
- October 1967: Oregon Coast- Severe wind damage along the coast, winds 100 to 110 mph.
- March 1983: Brookings- Tornado touched down in Brookings, causing \$25,000 in damage.
- December 1995: Western Oregon- State of Emergency declared throughout western Oregon due to a major windstorm.
- November 1996: Curry County- Heavy rain in Curry County.
- February 2002: Curry County: Windstorm with 88 mph winds recorded in Bandon. Severe damage to utilities and roads caused by falling trees. State of Emergency declared for Coos, Curry, Douglas, Lane and Linn Counties.
- November 2002: Brookings: Tornado touched down in Brookings causing \$500,000 in damage.
- November 2006: Curry County- Storms with winds measured at 70 mph created a total of \$10,000 in damages.
- December 2006: Coos, Curry, and Douglas Counties: Windstorms with winds over 90 mph caused \$225,000 for Coos, Curry, and Douglas counties.
- December 2007: Oregon and Washington- A relentless storm pummeled the Oregon and Washington Coasts for 3 days, bringing the strongest winds the area has seen since the Columbus Day storm.
- *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.*

Winter Storm

Severe winter storms can consist of rain, freezing rain, ice, snow, cold temperatures, and wind. They originate from troughs of low pressure offshore that ride along the jet stream during fall, winter, and early spring months. Severe winter storms, while possible, do not normally affect Curry County; the strength and severity of such storms are low.

No new winter storm events were identified.

- 1950 (Jan): Heaviest snow statewide since record keeping started; six-inches in Brookings and three in Gold Beach.

Volcanic Ash

Curry County is located on the Pacific Rim. Tectonic movement within the earth's crust can renew nearby dormant volcanoes resulting in ash fallout. Volcanic activity is possible from Mount Hood and Mount Saint Helens, Three Sisters, Mount Bachelor, and the Newberry Crater areas. Because the distance to these potentially active volcanic areas is so great, the only adverse effect that would impact areas of Curry County is ash fallout. The area affected by ash fallout depends upon the height attained by the eruption column and the atmospheric conditions at the time of the eruption. There is no recent geologic history of volcanic impacts in Curry County and the probability of future events is very low.

Federal Disaster and Emergency Declarations

Reviewing past events can provide a general sense of the hazards that have caused significant damage in the county. Where trends emerge, disaster declarations can help inform hazard mitigation project priorities.

President Dwight D. Eisenhower approved the first federal disaster declaration in May 1953 following a tornado in Georgia. Since then, federally declared disasters have been approved within every state as a result of natural hazard related events. As of January 2015, FEMA has approved a total of 29 major disaster declarations, two emergency declarations, and 58 fire management assistance declarations in Oregon.⁴ When governors ask for presidential declarations of major disaster or emergency, they stipulate which counties in their state they want included in the declaration. Table 2-2 summarizes the major disasters declared in Oregon that affected Curry County, since 1955. The table shows that there have been seven major disaster declarations for the county. All but one of these were related to severe wind or storm events resulting primarily in flooding, landslides and wind related damage. The only other declaration in the county was related to a distant tsunami event triggered by the 2011 Tohoku Earthquake in Japan.

An Emergency Declaration is more limited in scope and without the long-term federal recovery programs of a Major Disaster Declaration. Generally, federal assistance and funding are provided to meet a specific emergency need or to help prevent a major disaster from occurring. Curry County has only one recorded Emergency Declaration related to the 2005 Hurricane Katrina evacuation.

Fire Management Assistance may be provided after a State submits a request for assistance to the FEMA Regional Director at the time a "threat of major disaster" exists. There is only one fire management assistance declaration on record for the county.

⁴ FEMA, *Declared Disasters by Year or State*, http://www.fema.gov/news/disaster_totals_annual.fema#markS. Accessed January 9, 2015.

Table 2-2 FEMA Major Disaster (DR), Emergency (EM), and Fire Management Assistance (FMA) Declarations for Curry County

Declaration Number	Declaration Date	Incident Period		Incident	Individual Assistance	Public Assistance Categories
		From	To			
DR-184	12/24/1964	12/24/1964	12/24/1964	Heavy rains and flooding	Yes	A, B, C, D, E, F, G
DR-413	1/25/1974	1/25/1974	1/25/1974	Severe Storm, Flooding	Yes	A, B, C, D, E, F, G
DR-1405	3/12/2002	2/7/2002	2/8/2002	Severe Windstorm	None	A, B, C, D, E, F, G
DR-1632	3/20/2006	12/18/2005	1/21/2006	Severe Storm, Flooding, Landslides	None	A, B, C, D, E, F, G
DR-1733	12/8/2007	12/1/2007	12/17/2007	Sever Storm, Flooding, Landslides	None	A, B, C, D, E, F, G
DR-1964	3/25/2011	3/11/2011	3/11/2011	Tsunami Wave Surge	None	A, B, C, D, E, F, G
DR-4055	3/2/2012	1/17/2012	1/21/2012	Severe Storm, Flooding, Landslides	None	A, B, C, D, E, F, G
EM-3228	9/7/2005	8/29/2005	10/1/2005	Hurricane Katrina Evacuation	None	B
FMA-2453	7/28/2002	7/27/2002	-	Florence Fire	None	B

Source: FEMA, Oregon Disaster History. Major Disaster Declarations.

The table below presents the probability scores for each of the natural hazards present in Curry County and for the participating cities. As shown in the table with **bold text**, several hazards are rated with high probabilities.

Table 2-5 Natural Hazard Probability Assessment Summary

Hazard	Curry County	Port Orford	Gold Beach	Brookings
Coastal Erosion	High	High	High	High
Drought	Moderate	Moderate	Moderate	Moderate
Earthquake (Cascadia)	Moderate	Moderate	Moderate	Moderate
Flood	High	High	High	High
Landslide	High	High	High	High
Tsunami	Moderate	Moderate	Moderate	Moderate
Wildfire	High	Moderate	Moderate	Low
Windstorm	High	High	High	High
Winter Storm	Low	Low	Low	Low

Source: Curry County NHMP Steering Committee (including Port Orford, Gold Beach and Brookings) 2015.

Vulnerability Assessment

Community vulnerabilities are an important component of the NHMP risk assessment. For more in-depth information regarding specific community vulnerabilities, reference Volume II, Hazard Annexes and Appendix C: Community Profile.

Population

The socio-demographic qualities of the community population such as language, race and ethnicity, age, income, and educational attainment are significant factors that can influence the community's ability to cope, adapt to and recover from natural disasters. Historically, 80 percent of the disaster burden falls on the public.⁵ Of this number, a disproportionate burden is placed upon special needs groups, particularly children, the elderly, the disabled, minorities, and low-income persons. Population vulnerabilities can be reduced or eliminated with proper outreach and community mitigation planning.

Population Vulnerabilities

- As of 2013, over one-quarter (28.6%) of Curry County's population is over the age of 64; that number is projected to rise to more than 40% (or roughly 10,500 individuals) by 2030. Curry County's elderly population is expected to grow at a rate two-times faster than Oregon. Roughly 14% of Oregon's population is over the age of 64, with a projection of 21% by 2030.⁶
- The Curry County age dependency ratio⁷ is 71, which is higher than that of the State of Oregon (48.6); the age dependency figure for the county is expected to increase to 113 by the year 2030. The dramatic increase is due to the growth in population over age 64 (expected population under 15 years is expected to decrease by 2030. All three incorporated cities in Curry County have age dependency ratios over 50.
- Curry County median income was 78% (\$39,516) of the state median (\$50,229) in 2013. Port Orford had an even lower median (\$30,182), with Brookings and Gold Beach slightly higher at \$43,389 and \$47,069 respectively.
- Approximately 15% of the total Curry County population lived at or below the poverty line in 2013, with 20% of children in poverty.
- While over 90% of the population over 25 has graduated high school or higher, only 20% of the population has a bachelor's degree or higher.
- Approximately one-quarter of the Curry County population is estimated to have a disability. Of that, 2,693 individuals over 65 (42.4%) are disabled.
- Nearly 40% of Curry County renters spend more than 35% of their income on housing. For the cities, those percentages are: 36% in Gold Beach, 45% in Brookings and 61% in Port Orford.⁸

Economy

Economic diversification, employment and industry are measures of economic capacity. However, economic resilience to natural disasters is far more complex than merely restoring

⁵ Hazards Workshop Session Summary #16, *Disasters, Diversity, and Equity*, University of Colorado, Boulder (2000).

⁶ Office of Economic Analysis, Department of Administrative Services. Long Term County Forecast. Long-term Oregon State's County Population Forecast, 2010-2050. Accessed December 2013.

⁷ Dependency Ratio: the ratio of population typically not in the work force (less than 15, greater than 64)

⁸ U.S. Census Bureau, 2008-2012 American Community Survey, Tables B25070 & B25091.

employment or income in the local community. Building a resilient economy requires an understanding of how the component parts of employment sectors, workforce, resources and infrastructure are interconnected in the existing economic picture. The current and anticipated financial conditions of a community are strong determinants of community resilience, as a strong and diverse economic base increases the ability of individuals, families and the community to absorb disaster impacts for a quick recovery.

Economic Vulnerabilities

- According to the Oregon Employment Department, Curry County unemployment has decreased from 13% in 2009 to 10.6% in 2013.
- The largest sectors of employment in Curry County are Government (19%) Trade, Transportation, and Utilities (19%), Leisure and Hospitality (17%), and Education and Health Services (11%).⁹
- The largest revenue sectors in Curry County are Retail Trade (\$227.7 million), Manufacturing (\$190.6 million) and Health Care and Social Assistance (\$61.8 million).
- The Education and Health Services sector is expected to have the most growth from 2012 to 2022 at 17%.¹⁰ Natural Resources and Mining and Leisure and Hospitality are the next closest growth sectors, with both projecting 9% growth from 2012 to 2022.
- Curry County has the second lowest property tax rate in the state at 0.5996 per \$1,000 of assessed value.
- The total county budget has fallen to \$57.3 million in 2014/2015 from \$75.4 million in 2010/2011.

Environment

The capacity of the natural environment is essential in sustaining all forms of life including human life, yet it often plays an underrepresented role in community resiliency to natural hazards. The natural environment includes land, air, water and other natural resources that support and provide space to live, work and recreate.¹¹ Natural capital such as wetlands and forested hill slopes play significant roles in protecting communities and the environment from weather-related hazards, such as flooding and landslides. When natural systems are impacted or depleted by human activities, those activities can adversely affect community resilience to natural hazard events.

⁹ Oregon Employment Department, "2013 Covered Employment and Wages Summary Reports," <http://www.qualityinfo.org/olmisj/labforce>. Accessed October 2014.

¹⁰ Oregon Employment Department "Regional Employment Projections by Industry & Occupation 2012-2022". <http://www.qualityinfo.org>. Accessed October 2014.

¹¹ Mayunga, J. "Understanding and Applying the Concept of Community Disaster Resilience: A capital-based approach. Summer Academy for Social Vulnerability and Resilience Building," (2007).

Environmental Vulnerabilities

- Environmental assets, particularly those along the coastal margin, are vulnerable to sea level rise, salt water intrusion and ocean acidification. Changes in these categories are largely being driven by changes in global temperature and climate regimes.
- Higher sea levels and more powerful storms will alter coastal shorelines, shorelands and estuaries. Increased wave heights and storm surges can also lead to loss of natural buffering functions of beaches, tidal wetlands and dunes.¹²
- Forest ecosystems are also vulnerable to drought, wildfire and severe storm impacts.

Built Environment, Critical Facilities, and Infrastructure

Critical facilities (i.e. police, fire, and government facilities), housing supply and physical infrastructure are vital during a disaster and are essential for proper functioning and response. The lack or poor condition of infrastructure can negatively affect a community's ability to cope, respond and recover from a natural disaster. Following a disaster, communities may experience isolation from surrounding cities and counties due to infrastructure failure. These conditions force communities to rely on local and immediately available resources.

Housing Vulnerabilities

- Mobile home and other non-permanent residential structures account for **25.6%** of the housing in Curry County. In Gold Beach and Port Orford, mobile homes account for 19.7% and 16.3% respectively.¹³ These structures are particularly vulnerable to certain natural hazards, such as earthquake, tsunami, windstorms and heavy flooding events.
- Based on U.S. Census data, more than 55% of the residential housing in Curry County was built after the current seismic building standards of 1990.¹⁴
- Approximately one-quarter of residential structures were constructed prior to the local implementation of the flood elevation requirements of the 1970's (county Flood Insurance Rate Maps –FIRMs- were not completed until the late 1970s and early 1980s).¹⁵
- Curry County recorded over 1,100 new private residential building permits between 2002 and 2011. Of those, roughly 60% were in unincorporated portions of the county; Brookings accounted for another 36%. Virtually no new residential building permits were recorded in Gold Beach or Port Orford during that period.

¹² Department of Land Conservation and Development Coastal Management Program.

¹³ U.S. Census Bureau, 2008-2012 American Community Survey, Table DP04.

¹⁴ Ibid.

¹⁵ Ibid.

- The housing vacancy rate in Curry County was estimated at just over 17% in 2013. Approximately one-quarter of the housing units in Gold Beach and Port Orford were estimated to be vacant; the number is marginally better at 15.7% in Brookings.¹⁶

Critical Facilities and Infrastructure Vulnerabilities

- Virtually all state and county roads and bridges in Curry County are vulnerable to multiple hazards including flood, landslide, earthquake, tsunami and coastal erosion. Curry County has over 70 bridge or culvert crossings on Highway 101 alone. Impacts to the transportation system can result in the isolation of vulnerable populations, limit access to critical facilities such as hospitals and adversely impact local commerce, employment and economic activity.
- There is one general hospital in the county with 24/7 emergency room and inpatient services; located in Gold Beach, the hospital is in the process of being rebuilt because it does not meet current fire code. The Curry Medical Center in Brookings provides urgent care services from 8 a.m. to 8 p.m. seven days a week; the medical center does not have an emergency room.
- All of Curry County’s power is generated outside the region; there is no redundancy in power transmission and only limited redundancy in the power distribution network.
- There are no “high threat potential” dams located in Curry County; the county has eight dams categorized as “low threat potential: Ferry Creek, Big Creek and six additional structures on unnamed tributaries of Elk River and Floras Lake.

National Flood Insurance Program (NFIP) Vulnerability

FEMA modernized the Curry County Flood Insurance Rate Maps (FIRMs) in September 2009. The table below shows that as of March 2015, Curry County (including the incorporated cities) has 359 National Flood Insurance Program (NFIP) policies in force. Of those, 117 were developed before development of the initial FIRM. Fifty paid claims have been made in the county totaling just under \$1 Million. The last Community Assistance Visit (CAV) for Curry County was on February 23, 2001 (the most recent CAV was in Brookings on August 25, 2001). Neither the county nor any of the incorporated cities are members of the Community Rating System (CRS). The table shows that the majority of flood insurance policies are for residential structures, primarily single-family homes.

¹⁶ Ibid, Table B25004.

Table 2-3 Flood Insurance Detail

Jurisdiction	Current FIRM Date	Initial FIRM Date	Total Policies	Pre-FIRM Policies	Policies by Building Type				Minus Rated A Zone	Minus Rated V Zone
					Single Family	2 to 4 Family	Other Residential	Non-Residential		
Curry	-	-	359	117	265	10	44	40	3	0
County*	9/25/2009	4/3/1978	265	80	187	1	43	34	3	0
Brookings	9/25/2009	9/18/1985	23	8	19	2	0	2	0	0
Gold Beach	9/25/2009	11/15/1985	49	21	38	7	0	4	0	0
Port Orford	9/25/2009	1/29/1980	22	8	21	0	1	0	0	0

Jurisdiction	Insurance in Force	Total Paid Claims	Pre-FIRM Claims Paid	Total Paid Amount	Substantial Damage Claims	Repetitive Loss Buildings	Severe Repetitive Loss	CRS Class Rating	Last CAV
Curry County*	\$ 63,419,600	34	18	\$ 594,812	1	2	0	NA	2/23/2001
Brookings	\$ 7,242,000	4	3	\$ 26,452	0	0	0	NA	8/25/2001
Gold Beach	\$ 13,264,900	9	7	\$ 310,652	0	1	0	NA	9/27/1999
Port Orford	\$ 6,082,000	3	3	\$ 9,238	0	0	0	NA	NA

* Portion of entire county under county jurisdiction
 NP - Not Participating NA - Information not Available/ Not Applicable

Source: Information compiled by Department of Land Conservation and Development, March 2015.

One substantial damage claim has been paid in the county to date. Data provided by the State Floodplain Manager in March 2015 shows that there are a total of three Repetitive Loss Structures (one in Gold Beach and two in the unincorporated area) and no Severe Repetitive Loss Structures.

Figure 2-3 Repetitive Loss and Severe Repetitive Loss Properties



Source: Department of Land Conservation and Development, August 2015.

Cascadia Tsunami Specific Vulnerability (Catastrophic Hazard)

The Department of Geology and Mineral Industries updated the Tsunami Inundation Maps for Curry County in 2012. The table below shows the number and percentage of buildings at risk in each of five inundation scenario zones.¹⁷ Importantly, the data suggest that there has been **only one** “extra extra large” event and **only one** additional “extra large” event over the past 10,000 years. The data suggest three additional events in the “large” category. So, the majority (14) of Cascadia generated tsunami events that have occurred over the last 10,000 years appear to fall in either the small or medium categories. Even so, the table shows a significant percentage (over 25%) of existing buildings in Gold Beach at risk to even a small Cascadia tsunami event. Gold Beach, in particular, should strongly consider Tsunami mitigation actions, particularly changes in local land use policy and development regulations. There are 16 Tsunami Inundation Map panels for Curry County available for viewing or download at: <http://www.oregongeology.org/tsuclearinghouse/pubs-inumaps.htm>.¹⁸

Table 2.X – CSZ Tsunami Vulnerability by Jurisdiction

	Total Buildings	Local Source (CSZ) Tsunami Inundation Event										
		Small		Medium		Large		Extra Large		Extra Extra large		
		#	%	#	%	#	%	#	%	#	%	
Entire County	19,204	1,080	5.6%	1,936	10.1%	3,239	16.9%	5,670	29.5%	6,483	33.8%	
Port Orford	City Limit	867	17	2.0%	48	5.5%	286	33.0%	668	77.0%	693	79.9%
	UGB	1,361	11	0.8%	38	2.8%	261	19.2%	736	54.1%	786	57.8%
Gold Beach	City Limit	1,739	469	27.0%	764	43.9%	1,136	65.3%	1,433	82.4%	1,475	84.8%
	UGB	2,532	520	20.5%	866	34.2%	1,326	52.4%	1,808	71.4%	1,888	74.6%
Brookings	City Limit	3,631	25	0.7%	42	1.2%	51	1.4%	179	4.9%	398	11.0%
	UGB	8,268	171	2.1%	385	4.7%	609	7.4%	1,339	16.2%	1,781	21.5%

Source: Department of Geology and Mineral Industries; City Limit building count analysis by CSC.

DOGAMI also developed Tsunami Inundation Maps for two distant tsunami scenarios: Alaska M9.2 and Alaska Maximum. Only modest building impacts are expected under either scenario for the county. Gold Beach could see impacts to roughly 15% of its existing development under the Alaska Maximum scenario.

Table 2.X – Distant Tsunami Vulnerability (Alaska Scenarios) by Jurisdiction

	Total Buildings	Distant Source (A-ASZ) Tsunami Inundation Event				
		Alaska M9.2		Alaska Medium		
		#	%	#	%	
Entire County	19,204	35	0.20%	529	2.80%	
Port Orford	City Limit	867	1	0.1%	11	1.3%
	UGB	1,361	0	0.0%	6	0.4%
Gold Beach	City Limit	1,739	6	0.3%	268	15.4%
	UGB	2,532	3	0.1%	285	11.3%
Brookings	City Limit	3,631	1	0.0%	16	0.4%
	UGB	8,268	6	0.1%	126	1.5%

Source: Department of Geology and Mineral Industries; City Limit building count analysis by CSC.

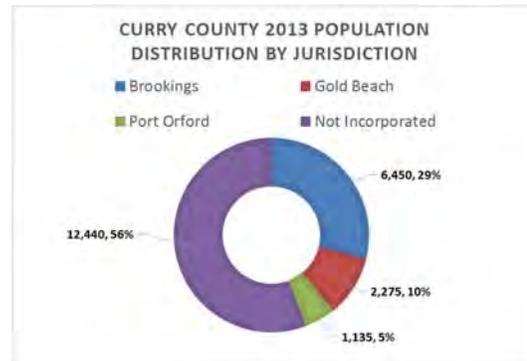
¹⁷ The five scenarios are labeled as “T-shirt sizes” ranging from Small, Medium, Large, Extra Large, to Extra Extra Large. The data reflect the cumulative number of buildings in each zone.

¹⁸ Note that the building vulnerability numbers listed in these tables may not match the numbers on the DOGAMI Tsunami Inundation Map panels. DOGAMI is currently working to address errors in building counts related to city limit and urban growth boundary extents.

Vulnerability Summary

Vulnerability assesses the extent to which people are susceptible to injury or other impacts resulting from a hazard as well as the exposure of the built environment or other community assets (social, environmental, economic, etc.) to hazards. The exposure of community assets to hazards is critical in the assessment of the degree of risk a community has to each hazard. Identifying the populations, facilities and infrastructure at risk from various hazards can assist the county in prioritizing resources for mitigation, and can assist in directing damage assessment efforts after a hazard event has occurred. The exposure of county and city assets to each hazard and potential implications are explained in each hazard section.

Vulnerability includes the percentage of population and property likely to be affected under an “average” occurrence of the hazard. Curry County evaluated the best available vulnerability data to develop the vulnerability scores presented below. For the purposes of this NHMP, the county and cities utilized the Oregon Military Department – Office of Emergency Management (OEM) Hazard Analysis methodology vulnerability definitions to determine hazard probability.



The table below presents the vulnerability scores for each of the natural hazards present in Curry County and for participating cities. As shown in the table with **bold text**, several hazards are rated with high vulnerabilities.

Table 2-4 Community Vulnerability Assessment Summary

Hazard	Curry County	Port Orford	Gold Beach	Brookings
Coastal Erosion	Moderate	Moderate	Moderate	Low
Drought	Moderate	Moderate	Moderate	Moderate
Earthquake (Cascadia)	High	High	High	High
Flood	High	Moderate	High	High
Landslide	High	Moderate	Moderate	High
Tsunami	High	High	High	High
Wildfire	High	High	High	High
Windstorm	Moderate	Moderate	Moderate	Moderate
Winter Storm	Moderate	Moderate	Moderate	Moderate

Source: Curry County NHMP Steering Committee (including Port Orford, Gold Beach and Brookings) 2015.

For local governments, conducting the hazard analysis is a useful step in planning for hazard mitigation, response, and recovery. The method provides the jurisdiction with sense of hazard priorities, but does not predict the occurrence of a particular hazard.

Risk Assessment

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.

Port Orford, Gold Beach and Brookings participated in County Steering Committee meetings and/or worked with OPDR to complete a jurisdiction specific hazard analysis. City specific information is presented following general information for the county.

County Methodology

This NHMP includes a summary of the Curry County Hazards Analysis (2007). The hazard analysis methodology by counties in Oregon (primarily to inform Emergency Operations Planning) was first developed by FEMA circa 1983, and gradually refined by the Oregon Military Department's Office of Emergency Management over the years.

The methodology produces scores that range from 24 (lowest possible) to 240 (highest possible). Vulnerability and probability are the two key components of the methodology. Vulnerability examines both typical and maximum credible events, and probability endeavors to reflect how physical changes in the jurisdiction and scientific research modify the historical record for each hazard. Vulnerability accounts for approximately 60% of the total score, and probability approximately 40%. We include the hazard analysis summary here to ensure consistency between the EOP and NHMP. Because Curry County has not updated the Hazard Analysis in eight years, the NHMP includes an action to update and resubmit the analysis to OEM.

The Oregon method provides the jurisdiction with a sense of hazard priorities, or relative risk. It doesn't predict the occurrence of a particular hazard, but it does "quantify" the risk of one hazard compared with another. By doing this analysis, planning can first be focused where the risk is greatest.

In this analysis, severity ratings, and weight factors, are applied to the four categories of history, vulnerability, maximum threat (worst-case scenario), and probability as demonstrated below.

History (Weight Factor = 2)

History is the record of previous occurrences. Events to include in assessing history of a hazard in your jurisdiction are events for which the following types of activities were required:

- The Emergency Operations Center (EOC) or alternate EOC was activated;
- Three or more Emergency Operations Planning (EOP) functions were implemented, e.g., alert & warning, evacuation, shelter, etc.;
- An extraordinary multi-jurisdictional response was required; and/or
- A "Local Emergency" was declared.

LOW = 0 to 1 event in the past 100 years, scores between 1 and 3 points

MODERATE = 2 to 3 event in the past 100 years, scores between 4 and 7 points

HIGH = 4+ events in the past 100 years, scores between 8 and 10 points

Probability (Weight Factor = 7)

Probability is the likelihood of future occurrence within a specified period of time.

LOW = one incident likely within 75 to 100 years, scores between 1 and 3 points

MODERATE = one incident likely within 35 to 75 years, scores between 4 and 7 points

Vulnerability (Weight Factor = 5)

Vulnerability is the percentage of population and property likely to be affected under an “average” occurrence of the hazard.

LOW = < 1% affected, scores between 1 and 3 points

MODERATE = 1 - 10% affected, scores between 4 and 7 points

HIGH = > 10% affected, scores between 8 and 10 points

Maximum Threat (Weight Factor = 10)

Maximum threat is the highest percentage of population and property that could be impacted under a worst-case scenario.

LOW = < 5% affected, scores between 1 and 3 points

MODERATE = 5 - 25% affected, scores between 4 and 7 points

HIGH = > 25% affected, scores between 8 and 10 points

The risk analysis involves estimating the damage, injuries, and costs likely to be incurred in a geographic area over a period of time. Risk has two measurable components: (1) the magnitude of the harm that may result, defined through the vulnerability assessment (assessed in the previous section), and (2) the likelihood or probability of the harm occurring. The table below presents the entire updated hazard analysis matrix for Curry County. The hazards are listed in rank order from high to low. The table shows that hazard scores are influenced by each of the four categories combined. Notably, the Hazard Analysis on file with OEM for Curry County (2007) does not include the coastal erosion hazard. With considerations for past historical events, the probability or likelihood of a particular hazard event occurring, the vulnerability to the community, and the maximum threat or worst-case scenario, flood, windstorm, and wildfire events rank as the top hazard threats to the county (top tier). Tsunami, earthquake, and landslide events rank in the middle (middle tier). Volcanic ash and droughts comprise the lowest ranked hazards in the county (bottom tier).

Table 2-6 Hazard Analysis Matrix – Curry County

Hazard	History	Vulnerability	Maximum		Total Threat	Hazard Rank	Hazard Tiers
			Threat	Probability			
Flood	20	50	100	70	240	# 1	Top Tier
Windstorm	20	50	100	70	240	# 2	
Wildfire	20	50	100	70	240	# 3	
Tsunami	8	50	100	35	193	# 4	Middle Tier
Earthquake	2	50	100	35	187	# 5	
Landslide	20	5	80	70	175	# 6	
Volcanic Ash	2	50	100	7	159	# 7	Bottom Tier
Drought	8	15	70	56	149	# 8	

Source: Curry County Hazard Analysis, October 2007; Analysis and Ranking by OPDR

For local governments, conducting the hazard analysis is a useful step in planning for hazard mitigation, response, and recovery. The method provides the jurisdiction with sense of hazard priorities, but does not predict the occurrence of a particular hazard.

The Department of Geology and Mineral Industries is currently conducting a multi-hazard risk assessment for Curry County utilizing HAZUS and other susceptibility and exposure assessment techniques. That analysis is expected to be complete in 2016. We present a PRELIMINARY DRAFT summary here for ILLUSTRATIVE PURPOSES ONLY. These numbers are preliminary and should not be used for policy decisions at this time.

Table 2-7 DRAFT Susceptibility and Exposure Analysis Curry County

Hazards	Susceptibility / Exposure	Curry County (TOTAL)				Curry County (Unincorporated)			
		Total Bldgs	%	Total Value	%	Total Bldgs	%	Total Value	%
		20,767	100%	\$1,636,259,000	100%	13,982	100%	\$911,511,000	100%
Coastal Erosion*	Very High Susceptibility	Incomplete Data				52	0%	\$9,636,000	1%
	High Susceptibility					106	1%	\$18,522,000	2%
	Moderate Susceptibility					139	1%	\$24,484,000	3%
Local Tsunami	XX Large Inundation	6,600	32%	\$542,538,000	33%	3,881	28%	\$267,661,000	29%
	Large Inundation	3,145	15%	\$306,566,000	19%	1,626	12%	\$137,874,000	15%
	Small Inundation	978	5%	\$99,449,000	6%	485	3%	\$53,184,000	6%
Riverine Flooding	.2% annual chance (500-yr flood)	839	4%	\$11,539,000	1%	693	5%	\$9,182,000	1%
	1% annual chance (100-yr flood)	520	3%	\$5,318,000	0%	447	3%	\$4,449,000	0%
	2% annual chance (50-yr flood)	310	1%	\$2,231,000	0%	268	2%	\$1,958,000	0%
	10% annual chance (10-yr flood)	119	1%	\$567,000	0%	99	1%	\$528,000	0%
Earthquake	Complete Damage	8,374	40%	\$825,314,000	50%	6,663	48%	\$478,204,000	52%
	Extensive Damage	4,783	23%			3,717	27%		
	Moderate Damage	7,938	38%			5,770	41%		
	Slight Damage	5,412	26%			3,838	27%		
Wildfire	High Exposure	30	0%	\$1,426,000	0%	30	0%	\$1,426,000	0%
	Moderate Exposure	87	0%	\$6,691,000	0%	86	1%	\$6,631,000	1%
Landslide	Very High Susceptibility	1,343	6%	\$105,523,000	6%	1,238	9%	\$93,087,000	10%
	High Susceptibility	3,970	19%	\$308,646,000	19%	3,227	23%	\$224,602,000	25%
	Moderate Susceptibility	12,634	61%	\$959,478,000	59%	9,257	66%	\$593,329,000	65%

Source: DOGAMI; Table summary by OPDR.

City Specific Risk Assessment

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.

All three of the incorporated cities in Curry County - Port Orford, Gold Beach and Brookings, participated in this plan update. The Department of Geology and Mineral Industries is currently conducting a multi-hazard risk assessment for Curry County utilizing HAZUS and other susceptibility and exposure assessment techniques. That analysis is expected to be complete in 2016. We present a PRELIMINARY DRAFT summary here for ILLUSTRATIVE PURPOSES ONLY. These numbers are preliminary and should not be used for policy decisions at this time.

Table 2-8 DRAFT Susceptibility and Exposure Analysis Curry Jurisdictions

Hazards	Susceptibility / Exposure	Brookings				Gold Beach				Port Orford			
		Total Bldgs	%	Total Value	%	Total Bldgs	%	Total Value	%	Total Bldgs	%	Total Value	%
		3,949	100%	\$462,342,000	100%	1,912	100%	\$189,329,000	100%	924	100%	\$73,077,000	100%
Coastal Erosion*	Very High Susceptibility	No Data											
	High Susceptibility												
	Moderate Susceptibility												
Local Tsunami	XX Large Inundation	427	11%	\$64,680,000	14%	1,560	82%	\$157,240,000	83%	732	79%	\$52,957,000	72%
	Large Inundation	69	2%	\$14,691,000	3%	1,179	62%	\$130,542,000	69%	271	29%	\$23,459,000	32%
	Small Inundation	18	0%	\$4,754,000	1%	463	24%	\$38,576,000	20%	12	1%	\$2,935,000	4%
Riverine Flooding	.2% annual chance (500-yr flood)	2	0%	\$7,000	0%	144	8%	\$2,350,000	1%	-	0%	\$0	0%
	1% annual chance (100-yr flood)	-	0%	\$0	0%	70	4%	\$790,000	0%	3	0%	\$79,000	0%
	2% annual chance (50-yr flood)	-	0%	\$0	0%	42	2%	\$273,000	0%	-	0%	\$0	0%
	10% annual chance (10-yr flood)	-	0%	\$0	0%	20	1%	\$39,000	0%	-	0%	\$0	0%
Earthquake	Complete Damage	540	14%	\$181,631,000	39%	836	44%	\$117,222,000	62%	335	36%	\$48,257,000	66%
	Extensive Damage	516	13%			336	18%			214	23%		
	Moderate Damage	1,435	36%			469	25%			264	29%		
	Slight Damage	1,249	32%			229	12%			96	10%		
Wildfire	High Exposure	-	0%	\$0	0%	-	0%	\$0	0%	-	0%	\$0	0%
	Moderate Exposure	-	0%	\$0	0%	1	0%	\$60,000	0%	-	0%	\$0	0%
Landslide	Very High Susceptibility	51	1%	\$7,848,000	2%	52	3%	\$4,461,000	2%	2	0%	\$127,000	0%
	High Susceptibility	307	8%	\$47,620,000	10%	336	18%	\$28,101,000	15%	100	11%	\$8,323,000	11%
	Moderate Susceptibility	1,780	45%	\$213,652,000	46%	1,151	60%	\$117,344,000	62%	446	48%	\$35,153,000	48%

Source: DOGAMI; Table summary by OPDR.

OPDR also worked with students in PPPM 407-507 - Hazard Mitigation Planning for Natural Hazards and Community Resilience to complete relative risk assessment summaries for each jurisdiction. Summary information for each city is presented below.

Table 2-7 Relative Risk Assessment for Port Orford

Enterprise-wide		SEVERITY = MAGNITUDE of IMPACTS										SEVERITY IMPACTS	RELATIVE RISK	
HAZARD RISK ASSESSMENT MODEL	Relative probability this event will occur	HEALTH AND SAFETY		FACILITIES IMPACT		COMMUNITY IMPACT								
Threat Event / Hazard	1= Implausible 2= Very Rare 3= Rare 4= Likely 5= Almost Certain	Potential deaths or injuries		Physical damage & costs		Economic interruption		Ecologic Interruption		Social interruption		Overall Impact (Average)	Probability x Impact Severity	
		Question 1	Question 2	Question 1	Question 2	Question 1	Question 2	Question 1	Question 2	Question 1	Question 2			
Natural Hazards	Coastal Erosion	5	1	2	3	2	3	1	1	1	1	1	1.60	8.00
	Drought	4	1	1	1	2	4	5	4	4	2	2	2.60	9.10
	Earthquake	3	1	5	5	5	5	5	3	3	5	5	4.20	12.60
	Flood	4	3	4	4	2	3	1	1	3	1	2	2.40	9.60
	Landslide/Debris Flow	5	3	4	4	2	3	4	1	2	2	3	2.80	14.00
	Local Tsunami	3	1	5	5	5	5	5	3	5	4	5	4.30	12.90
	Distant Tsunami	3	1	4	5	5	4	2	2	3	1	3	3.00	9.00
	Volcano	1	1	1	1	1	2	1	2	1	1	1	1.20	0.60
	Wildfire (WUI)	3	1	3	4	3	3	2	4	4	1	3	2.80	8.40
	Windstorm	5	3	4	3	2	2	2	2	3	3	3	2.70	13.50
Winter Storm	2	1	4	2	2	2	2	1	2	2	2	2.00	4.00	

Source: Analysis and Ranking by OPDR

Table 2-7 Relative Risk Assessment for Gold Beach

Enterprise-wide		SEVERITY = MAGNITUDE of IMPACTS										SEVERITY IMPACTS	RELATIVE RISK	
HAZARD RISK ASSESSMENT MODEL	Relative probability this event will occur	HEALTH AND SAFETY		FACILITIES IMPACT		COMMUNITY IMPACT								
Threat Event / Hazard	1= Implausible 2= Very Rare 3= Rare 4= Likely 5= Almost Certain	Potential deaths or injuries		Physical damage & costs		Economic interruption		Ecologic Interruption		Social interruption		Overall Impact (Average)	Probability x Impact Severity	
		Question 1	Question 2	Question 1	Question 2	Question 1	Question 2	Question 1	Question 2	Question 1	Question 2			
Natural Hazards	Coastal Erosion	5	1	3	3	2	2	1	1	1	1	1	1.60	8.00
	Drought	4	1	1	1	2	4	5	4	4	2	2	2.60	10.40
	Earthquake - Cascadia (3-5min)	3	1	5	5	4	5	5	3	3	4	5	4.00	12.00
	Flood - Riverine	4	3	4	4	2	3	1	1	3	1	3	2.50	10.00
	Landslide/Debris Flow	5	3	4	4	3	3	2	1	2	1	3	2.60	13.00
	Local Tsunami	3	1	5	5	4	5	4	3	5	5	5	4.20	12.60
	Distant Tsunami	3	1	5	4	3	4	2	2	3	2	3	2.90	8.70
	Volcano	1	1	1	1	1	2	1	2	1	1	1	1.20	1.20
	Wildfire (WUI)	3	1	3	4	2	3	1	4	4	1	3	2.60	7.80
	Windstorm	5	3	4	5	2	2	2	1	3	1	3	2.60	13.00
Winter Storm	2	1	3	5	1	2	2	1	2	1	2	2.00	4.00	

Source: Analysis and Ranking by OPDR

Table 2-7 Relative Risk Assessment for Brookings

Enterprise-wide		SEVERITY = MAGNITUDE of IMPACTS										SEVERITY IMPACTS	RELATIVE RISK	
HAZARD RISK ASSESSMENT MODEL	Relative probability this event will occur	HEALTH AND SAFETY		FACILITIES IMPACT		COMMUNITY IMPACT								
Threat Event / Hazard	1= Implausible 2= Very Rare 3= Rare 4= Likely 5= Almost Certain	Potential deaths or injuries		Physical damage & costs		Economic interruption		Ecologic Interruption		Social interruption		Overall Impact (Average)	Probability x Impact Severity	
		Question 1	Question 2	Question 1	Question 2	Question 1	Question 2	Question 1	Question 2	Question 1	Question 2			
Natural Hazards	Coastal Erosion	4	1	3	3	2	2	1	1	1	1	1	1.60	6.40
	Drought	4	1	1	1	2	4	5	4	4	2	2	2.60	10.40
	Earthquake - Cascadia (3-5min)	3	1	5	5	4	5	5	3	3	4	5	4.00	12.00
	Flood - Riverine	4	3	4	4	2	3	1	1	3	1	3	2.50	10.00
	Landslide/Debris Flow	5	3	3	4	3	3	2	1	2	1	3	2.50	12.50
	Local Tsunami	3	1	5	4	3	5	4	3	5	5	5	4.00	12.00
	Distant Tsunami	3	1	5	4	2	4	2	2	3	2	3	2.80	8.40
	Volcano	1	1	1	1	1	2	1	2	1	1	1	1.20	1.20
	Wildfire (WUI)	3	1	3	4	2	3	1	4	4	1	3	2.60	7.80
	Windstorm	5	3	4	5	2	2	2	1	3	1	3	2.60	13.00
Winter Storm	2	1	3	5	1	2	2	1	2	1	2	2.00	4.00	

Source: Analysis and Ranking by OPDR

This relative risk assessment is useful in prioritizing hazards and potential mitigation interventions. The assessment is subjective. In some cases incomplete data or assumptions can significantly change the outcome. The information should be used as a starting point for

further discussion and should be refined as conditions change or as more objective data is obtained. OPDR utilized the following definitions to complete scoring.

Probability Definitions:

1. Implausible: No previous recorded events or indicative evidence of potential events. Miniscule potential or means to occur.
2. Very Rare: Few recorded events or little indicative evidence of potential events. Little potential or means to occur.
3. Rare: Several recorded events; some indicative evidence of potential events. Modest potential or means to occur.
4. Likely: A number of recorded events and ample indicative evidence of potential events. Considerable potential or means to occur.
5. Almost Certain: Numerous recorded events and unequivocal indicative evidence of potential events. Significant potential or means to occur.

Potential Deaths and Injuries

Question 1. If this event has occurred in the past in your (region, county, city), what were the extent of injuries and deaths that occurred?

1. None, or this event has never occurred
2. Few minor injuries
3. Multiple minor injuries or a major injury
4. Multiple major injuries or a death
5. Multiple deaths and major injuries

Question 2. Consider the potential for injuries or deaths from past events or from similar events in other communities, and any changes or trends that would affect future injuries and deaths from this type of event. Estimate the number of injuries and deaths that could result from this event:

1. None
2. Few minor injuries
3. Multiple minor injuries or possible major injury
4. Multiple major injuries or possible death
5. Multiple deaths and major injuries

Physical Damage and Costs

Question 1. Consider the vulnerability of your (region, county, city, facility) to this event. Estimate the extent of damage:

1. Little or no damage
2. Mild damage to several facilities
3. Moderate damage to multiple facilities
4. Severe damage to multiple facilities
5. Extensive damage to most facilities

Question 2. Considering the extent of damage, estimate the total cost to respond to the event and repair or replace all damaged facilities in your (region, county, city, facility):

1. Less than \$1 million
2. Between \$1 million and \$10 million
3. Between \$10 million and \$100 million
4. Between \$100 million and \$1 billion
5. More than \$1 billion

Economic Interruption

Question 1. If this event occurred in your (region, county, city, facility) estimate the duration of interruption to commercial business:

1. Hours
2. Days
3. Weeks
4. Months
5. Year or longer

Question 2. If this event occurred in your (region, county, city, facility) estimate the percentage of commercial business that would be interrupted:

1. Less than 10%
2. 10-30%
3. 30-50%
4. 50-75%
5. Greater than 75%

Ecologic Interruption

Question 1. If this event occurred in your (region, county, city, facility) estimate the percentage of ecologic systems that will be impacted by this event?

1. <10%
2. 10-25%
3. 25-50%
4. 50-75%
5. >75%

Question 2. Consider the value your community places on ecosystem services* (clean water, clean air, open space, hunting, fishing, recreation, resource extraction, etc.). If this event occurred, what impact will it have on the community's ability to benefit from and/or access ecosystem services?

1. Little or no impact
2. Mild impact
3. Moderate impact
4. Severe impact
5. Extensive impact

*Ecosystem Services are the processes by which the environment produces resources that we often take for granted such as clean water, timber, habitat for wildlife and fisheries, and pollination of native and agricultural plants. Whether we find ourselves in the city or a rural area, the ecosystems in which humans live provide goods and services that can be impacted by natural hazard events. ~ Definition adapted from 2000 Ecological Society of America document.

Social Interruption

Question 1. If this event occurred in your (region, county, city, facility) estimate the percentage of the population that would be displaced by this event?

1. <10%
2. 10-25%
3. 25-50%
4. 50-75%
5. >75%

Question 2. Consider the social networks in your community (cultural/sport events, education, religious activities, volunteer opportunities, civic engagement, etc.). If this event occurred, what impact would it have on the community's ability to engage in meaningful social interactions?

1. Little or no impact
2. Mild impact
3. Moderate impact
4. Severe impact
5. Extensive impact

SECTION 3: MITIGATION STRATEGY

Section 3 outlines Curry County's strategy to reduce or avoid long-term vulnerabilities to the identified hazards. Specifically, this section presents a mission and specific goals and actions thereby addressing the mitigation strategy requirements contained in 44 CFS 201.6(c). The NHMP Steering Committee reviewed and updated the mission, goals, and action items documents in this plan. Additional planning process documentation is in Appendix B.

Mitigation Plan Mission

The Plan mission states the purpose and defines the primary functions of Curry County's NHMP. It is intended to be adaptable to any future changes made to the Plan and need not change unless the community's environment or priorities change.

The mission of the Curry County NHMP is:

Create a disaster resilient Curry County.

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

The 2015 NHMP Steering Committee reviewed the 2010 plan mission statement and agreed it accurately describes the overall purpose and intent of this Plan. This is the exact wording that was present in the 2010 plan. The Steering Committee believes the concise nature of the mission statement allows for a comprehensive approach to mitigation planning.

Mitigation Plan Goals

Mitigation plan goals are more specific statements of direction that the Curry County citizens, and public and private partners can take while working to reduce the county's risk from natural hazards. These statements of direction form a bridge between the broad mission statement and particular action items. The goals listed here serve as checkpoints as agencies and organizations begin implementing mitigation action items.

Stakeholder participation was a key aspect in developing the Plan goals. Meetings with the project Steering Committee, stakeholder interviews and public workshops all served as methods to obtain input and priorities in developing goals for reducing risk and preventing loss for natural hazards in Curry County.

The 2015 Curry County NHMP Steering Committee reviewed the 2010 plan goals in comparison to the Draft State Natural Hazard Mitigation Plan goals and determined they would modify their goals to better align with the State Natural Hazard Mitigation Plan goals, as well as current conditions in the County.

All the Plan goals are important are listed below in no particular order or priority. Establishing community priorities within action items neither negates nor eliminates any

goals but it establishes which action items to consider to implement first, should funding become available. Below is a list of the re-confirmed plan goals:

Goal 1: *Save lives and reduce injuries.*

Goal 2: *Minimize and prevent damage to public and private buildings and infrastructure.*

Goal 3: *Reduce economic losses.*

Goal 4: *Increase public and private sector involvement in natural hazard mitigation, education, and critical facilities planning.*

Goal 5: *Provide more opportunities for development outside of mapped hazardous areas.*

Goal 6: *Protect natural and cultural resources.*

Goal 7: *Increase cooperation and coordination among private entities, and local, state, and federal agencies.*

Goal 8: *Update natural hazard sections of the comprehensive plan and integrate local NHMPs with comprehensive plans and implementing measures.*

Goal 9: *Increase education, outreach, awareness, and collaboration.*

Goal 10: *Increase natural hazard outreach to vulnerable populations in Curry County.*

During the Steering Committee meetings on February 25, 2015 and April 9, 2015 the Curry County NHMP update committee (including city representatives) reviewed and revised the Curry County mission statement and goal statements. The cities of Port Orford, Gold Beach and Brookings all agreed to adopt the plan mission and goals as revised. Each city reviewed and revised city specific actions as needed.

Action Item Development Process

Development of action items was a multi-step, iterative process that involved brainstorming, discussion, review, and revisions. Action items can be developed through a number of sources. The figure below illustrates some of these sources.

Figure 3-1 Development of Action Items



Source: Oregon Partnership for Disaster Resilience, 2008.

The majority of the action items were first created during the 2005 and 2010 NHMP planning process. During these processes, steering committees developed maps of local vulnerable populations, facilities, and infrastructure in respect to each identified hazard. Review of these maps generated discussion around potential actions to mitigate impacts to the vulnerable areas. The Oregon Partnership for Disaster Resilience (OPDR) provided guidance in the development of action items by presenting and discussing actions that were used in other communities. OPDR also took note of ideas that came up in Steering Committee meetings and drafted specific actions that met the intent of the Steering Committee. Based on a review of potential exposure, susceptibility, severity, relative risk and existing mitigation activities that are underway or expected, OPDR suggested a set of priority actions for the next five-year cycle. In addition, OPDR included actions specific to the City of Brookings current HUD Resilience Phase II application.

Priority Mitigation Actions

Action items identified through the planning process are an important part of the mitigation plan. Action items are detailed recommendations for activities that local departments, citizens, and others could engage in to reduce risk. Due to resource constraints, Curry County is listing a set of high priority actions in an effort to focus attention on an achievable set of high leverage activities over the next five-years. Detailed implementation information for each action is listed in Appendix A.

Table 1: High Priority NHMP Actions

Priority Mitigation Actions
Curry County
Utilize the final multi-hazard risk report and assessment currently being developed by DOGAMI through FEMA's RiskMap program to update the Curry County Hazard Analysis.
Utilize the final multi-hazard risk report and assessment currently being developed by DOGAMI through FEMA's RiskMap program to update the Goal 7 Section of the Curry County Comprehensive Plan.
Conduct non-structural seismic retrofit workshops with government agencies, businesses, and residents to prevent damage from earthquakes.
City of Port Orford
Update the Goal 7 Section of the Port Orford Comprehensive Plan.
Adopt a Tsunami Land Use Overlay Zone
City of Gold Beach
Update the Goal 7 Section of the Port Orford Comprehensive Plan.
Adopt a Tsunami Land Use Overlay Zone
City of Brookings
Safe Drinking Water Resiliency Project [HUD Resilience Competition Project]
Critical Healthcare Resiliency Project [HUD Resilience Competition Project]
Sewer Storm Disaster Repairs Project [HUD Resilience Competition Project]
Multifamily LMI and Tsunami-Safe Housing Program [HUD Resilience Competition Project]
Electricity Reliability Project [HUD Resilience Competition Project]
Update the Goal 7 Section of the Brookings Comprehensive Plan.
Adopt a Tsunami Land Use Overlay Zone
Analyze the Port Jetty's and storm water system in Brookings for stability during floods and severe storms and identify mitigation options
Convert existing distribution facilities to underground at the Port of Brookings/Harbor.

Source: NHMP Steering Committee; HUD Resilience Team; Oregon Partnership for Disaster Resilience

Action Item Matrix

The action item matrix presents a pool of mitigation actions. The majority of these actions are carried forward from prior versions of this plan. This expanded list of actions is available for local consideration as resources, capacity, technical expertise and/or political will become available. The matrix documents a description of the action, if the Steering Committee identified the action as high priority, the coordinating organization, partner organizations, timeline, and the Plan goals addressed. Refer to Appendix A, Action Item Forms for detailed information about each action item.

Note: Jurisdictional review and identification of additional priority action items will take place during the quarterly meeting immediately following finalization of the DOGAMI Multi-Hazard Risk Report (currently being funded through FEMA's Risk Map program).

Table 2: Curry County NHMP Actions

Action Item	Hazard	Proposed Action Title	Timeline
High Priority #1	Multi-Hazard	Utilize the final multi-hazard risk report and assessment currently being developed by DOGAMI through FEMA's RiskMap program to update the Curry County Hazard Analysis.	1-2 years
High Priority #2	Multi- Hazard	Utilize the final multi-hazard risk report and assessment currently being developed by DOGAMI through FEMA's RiskMap program to update the Goal 7 Section of the Curry County Comprehensive Plan.	1-3 years
High Priority #3	Earthquake	Conduct non-structural seismic retrofit workshops with government agencies, businesses, and residents to prevent damage from earthquakes.	Ongoing
#1	Coastal Erosion	Continue to monitor the progression of coastal erosion in conjunction with sea level rise.	LT
#2	Drought	Continue to enforce existing water requirement codes for rural residents	Ongoing
#3	Drought	Identify and evaluate alternative water sources.	LT
#4	Earthquake	Conduct non-structural seismic retrofit workshops with government agencies, businesses, and residents to prevent damage from earthquakes.	ST
#5	Flood	Continue to review and assess the county's floodplain ordinance to determine whether it meets current National Flood Insurance Program (NFIP) requirements	LT
#6	Flood	Take steps for the county to qualify for participation in the National Flood Insurance Program's (NFIP) Community Rating System.	LT
#7	Flood	Maintain the county's Flood Insurance Rate Maps (FIRM) when new data becomes available.	LT
#10	Landslide	Continue to track landslide events along major roadways and develop appropriate mitigation measures	Ongoing
#11	Tsunami	Seek funding to relocate critical services outside of the tsunami inundation zone	LT
#12	Wildfire	Review and update the 2008 Curry County Community Wildfire Protection Plan.	LT
#13	Wildfire	Encourage new development to incorporate wildfire mitigation measures and ensure adequate emergency access	Ongoing
#14	Windstorm	Educate the public about the role of proper tree pruning and care in preventing damage during windstorms	Ongoing
#15	Windstorm	Encourage utilities to underground construction methods where possible to reduce loss of service from windstorms.	LT
#16	Multi- Hazard	Ensure that all critical facilities have backup power and/or emergency operations plans in place to deal with power outages	LT
#17	Multi-Hazard	Identify and disseminate information regarding alternate transportation routes	ST
#18	Multi-Hazard	Further develop risk assessment maps to show areas at risk for all hazards.	Underway
#19	Multi-Hazard	Establish mutual aid agreements between government agencies and commercial businesses in the event of an emergency (e.g. fuel, heavy equipment, food, etc.)	Ongoing- Critical
#20	Multi-Hazard	Encourage citizens to prepare and maintain provisions for a minimum of one week without services.	LT
#21	Multi-Hazard	Adopt the 2012 post-disaster framework for Curry County	ST
#22	Multi- Hazard	Educate and encourage businesses, schools, and governmental organizations to develop continuity of operations plans.	ST
#23	Multi-Hazard	Develop backup systems for county records	LT
#25	Multi-Hazard	Encourage special districts (including ports) to develop addenda to the Curry County Natural Hazards Mitigation Plan.	Critical
#26	Multi-Hazard	Identify Red Cross shelters that are seismically sound, and retrofit existing shelters.	LT
#27	Multi-Hazard	Explore developing a redundant utility system to supply Curry County with continuous service.	LT
#28	Multi-Hazard	Develop a multi- hazard public education campaign targeted to residents and tourists about the natural hazards Curry County is vulnerable to and mitigation measures they can implement.	Ongoing
#29	Multi-Hazard	Complete a risk analysis for the hazards addressed in this plan when information is available, to estimate potential loss of life and damage to property.	Underway
#30	Multi- Hazard	Outsource an engineering analysis/ study for each Coos-Curry Electric Substation in Curry County (8) to identify necessary work to harden and improve each facility's reliability and structural integrity.	Immediate 1-3 Years
#31	Multi-Hazard	Coos-Curry Electric needs to replace critical overhead distribution feeders with underground to facilitate power restoration work and lessen power outage duration after major weather events.	LT

Source: NHMP Steering Committee; Oregon Partnership for Disaster Resilience

Table 3: Port Orford NHMP Actions

Action Item	Hazard	Proposed Action Title	Timeline
High Priority #1	Multi Hazard	Utilize the final multi-hazard risk report and assessment currently being developed by DOGAMI through FEMA's RiskMap program to update the Goal 7 Section of the Port Orford Comprehensive Plan.	1-2 years
High Priority #2	Tsunami	Adopt a Tsunami Land Use Overlay Zone based on DOGAMI Tsunami Inundation Maps	1-2 years
#1	Flood	Ensure continued compliance in the National Flood Insurance Program (NFIP) through enforcement of local floodplain management ordinances.	Long Term- Continuous
#2	Earthquake	Upgrade/Retrofit Critical facilities to reduce potential of earthquake collapse.	2-4 years
#3	Wildfire	Continue through multi agency coordination, to develop and initiate an abatement plan for noxious weeds – specifically gorse, scotch broom, and butterfly brush.	Long-Term Continuous
#4	Landslide	Continue to identify and map high risk slide areas for mitigation possibilities and funding sources.	Long Term- ongoing
#5	Earthquake/Tsunami	Continue to implement and enhance public education program regarding earthquakes and tsunamis.	Long term- continuous
#6	Multi-Hazard	Identify and map all roads, logging trails, and private drives to access during a catastrophic event.	1-2 Years
#7	Wildfire	Continue wildfire public education programs.	Long Term- Continuous
#8	Wildfire	Continue wildfire prevent through public education programs to target residents, tourist, and companies in the area.	Ongoing
#9	Multi-Hazard	Evaluate water and sewer lanes for limited extension to new areas.	Long-Term

Source: NHMP Steering Committee; Oregon Partnership for Disaster Resilience

Table 4: Gold Beach NHMP Actions

Action Item	Hazard	Proposed Action Title	Timeline
High Priority #1	Multi Hazard	Utilize the final multi-hazard risk report and assessment currently being developed by DOGAMI through FEMA's RiskMap program to update the Goal 7 Section of the Port Orford Comprehensive Plan.	1-2 years
High Priority #2	Tsunami	Adopt a Tsunami Land Use Overlay Zone based on DOGAMI Tsunami Inundation Maps	1-2 years
#1	Multi Hazard	Continue to implement public education programs regarding natural hazards.	Long term- ongoing
#2	Earthquake	Seek funding to retrofit buildings and/or infrastructure at risk of damage in a high magnitude earthquake.	3-5 years and ongoing
#3	Flood	Ensure continued compliance in the National Flood Insurance Program (NFIP) through enforcement of local floodplain management ordinances.	Ongoing
#4	Flood	Analyze the Port Jetty in Gold Beach for stability and identify mitigation options. Analyze stability of community airport due to the inundation of floodwaters from creeks and sewer systems.	Short term (given funding); 2-3 years
#5	Landslide	Identify and map high-risk slide areas to create an accurate logistical assessment.	<1 year once initiated
#6	Landslide	Evaluate current and high hazard slides for prioritization and explore mitigation possibilities.	2-4 years
#7	Wildfire	Through multi-agency coordination, develop an abatement plan for control of noxious weeds, specifically Gorse, Scotch Broom and Butterfly Brush.	1-2 years for plan. Abatement, ongoing
#8	Wildfire	Identify and map all roads, private drives, logging trails to increase the ability of firefighters to locate and gain access to provide services and/or evacuations.	2 years, and ongoing

Source: NHMP Steering Committee; Oregon Partnership for Disaster Resilience

Table 5: Brookings NHMP Actions

Action Item	Hazard	Proposed Action Title	Timeline
High Priority #1	Multi Hazard	Utilize the final multi-hazard risk report and assessment currently being developed by DOGAMI through FEMA's RiskMap program to update the Goal 7 Section of the Port Orford Comprehensive Plan.	1-2 years
High Priority #2	Tsunami	Adopt a Tsunami Land Use Overlay Zone based on DOGAMI Tsunami Inundation Maps	1-2 years
High Priority #3	Multi-Hazard	Analyze the Port Jetty's and storm water system in Brookings for stability during floods and severe storms and identify mitigation options	1-2 years
#1	Multi-Hazard	Convert existing distribution facilities to underground at the Port of Brookings/Harbor.	1-2 years
#2	HUD Resilience	Safe Drinking Water Resiliency Project	1-2 years
#3	HUD Resilience	Critical Healthcare Resiliency Project	1-2 years
#4	HUD Resilience	Sewer Storm Disaster Repairs Project	1-2 years
#5	HUD Resilience	Multifamily LMI and Tsunami-Safe Housing Program	1-2 years
#6	HUD Resilience	Electricity Reliability Project	1-2 years
#7	Flood	Ensure continued compliance in the National Flood Insurance Program (NFIP) through enforcement of local floodplain management ordinances.	Long Term- Continuous
#8	Flood	Develop Alternate Water Sources	Immediate (1-3 Years)
#9	Earthquake	Upgrade/retrofit critical facilities to reduce potential of earthquake collapse.	2-4 Years
#10	Earthquake	Seek funding to study the seismic vulnerability of buildings in the City of Brookings and retrofit those that are vulnerable to seismic hazards.	2-4 Years
#11	Earthquake	Seek funding to study the seismic vulnerability of infrastructure in the City of Brookings and retrofit those that are vulnerable to seismic hazards.	2-4 Years
#12	Wildfire	Continue to implement and enhance public education programs regarding wildfires, earthquakes, and tsunamis.	Long Term, Continuous
#13	Landslide	Continue to identify and map high risk slide areas to create an accurate logistical assessment.	Long-Term Ongoing
#14	Multi-Hazard	Review of county and community comprehensive plans for the need to update hazard specific sections to reflect the latest information on seismic hazards in each community.	Long Term- Continuous
#15	Multi-Hazard	Analyze the Port Jetty's and storm water system in Brookings for stability during floods and severe storms and identify mitigation options	Short Term 1-2 Years
#16	Multi-Hazard	Convert existing distribution facilities to underground at the Port of Brookings/Harbor.	1-3 Years
#17	Multi-Hazard	Coos-Curry Electric needs to install additional fuel storage at its Brookings and Port Orford offices to fuel existing generators in case of emergency.	Long-Term

Source: NHMP Steering Committee; Oregon Partnership for Disaster Resilience

Action Item Worksheets

Each action item has a corresponding action item worksheet describing the activity, identifying the rationale for the project, identifying potential ideas for implementation, and assigning coordinating and partner organizations. The action item worksheets can assist the community in pre-packaging potential projects for grant funding. The worksheet components are described below. These action item worksheets are located in Appendix A, Action Item Forms.

Proposed Action Title

Each action item includes a brief description of the proposed action.

Alignment with Plan Goals

The Plan goals addressed by each action item are identified as a means for monitoring and evaluating how well the mitigation plan is achieving its goals, following implementation.

Affected Jurisdiction

Many of the action items within this Plan apply to all of the participating cities and the county; however, some action items are specific to one city or to the County. The list of affected jurisdictions is provided on the right side of the matrix. Each city identified as an “affected jurisdiction” will contribute to accomplishing the specified action at a local level. The action item form in Appendix A provides more detailed information.

Alignment with Existing Plans/ Policies

Identify any existing community plans and policies where the action item can be incorporated. Incorporating the mitigation action into existing plans and policies, such as comprehensive plans, will increase the likelihood that it will be implemented.

Rationale or Key Issues Addressed

Action items should be fact-based and tied directly to issues or needs identified throughout the planning process. Action items can be developed at any time during the planning process and can come from a number of sources, including participants in the planning process, noted deficiencies in local capability, or issues identified through the risk assessment. The rationale for proposed action items is based on the information documented in Section II and the Hazard Annexes.

Implementation through Existing Programs

For each action item, the form is designed to solicit ideas for implementation, which serve as the starting point for taking action. Ideas for implementation could include: (1) collaboration with relevant organizations, (2) alignments with the community priority areas, and (3) applications to new grant programs.

The ideas for implementation offer a transition from theory to practice and serve as a starting point for this Plan. This component of the action item is dynamic, since some ideas may prove to not be feasible, and new ideas may be added during the Plan maintenance process. Ideas for implementation include such things as: collaboration with relevant organizations, grant programs, tax incentives, human resources, education and outreach, research, and physical manipulation of buildings and infrastructure. When an action is implemented, more work will probably be needed to determine the exact course of action.

The Curry County NHMP includes a range of actions that, when implemented will reduce loss from hazard events in the County. Within the Plan, FEMA requires the identification of existing programs that might be used to implement these action items. Curry County and the participating cities currently address statewide planning goals and legislative requirements through their comprehensive land use plans, capital improvements plans, mandated standards, and building codes. To the extent possible, the jurisdictions will work

to incorporate the recommended mitigation action items into existing programs and procedures.

Many of the recommendations contained in the Deschutes County NHMP are consistent with the goals and objectives of the existing plans and policies. Where possible, Deschutes County and the participating cities will implement the recommendations and actions contained in the NHMP through existing plans and policies. Plans and policies already in existence have support from local residents, businesses, and policy makers. Many land-use comprehensive, and strategic plans get updated regularly, and can adapt easily to changing conditions and needs.¹ Implementing the action items contained in the NHMP through such plans and policies increases their likelihood of being supported and implemented.

Coordinating Organization:

The coordinating organization is the public agency with the regulatory responsibility to address natural hazards, or that is willing and able to organize resources, find appropriate funding, or oversee activity implementation, monitoring, and evaluation.

Internal and External Partners:

The internal and external partner organizations listed in the Action Item Worksheets are potential partners recommended by the project steering Committee but not necessarily contacted during the development of the Plan. The coordinating organization should contact the identified partner organizations to see if they are capable of, and interested in, participation. This initial contact is also to gain a commitment of time and/or resources toward completion of the action items.

Internal partner organizations are departments within the county or other participating jurisdictions that may be able to assist in the implementation of action items by providing relevant resources to the coordinating organization.

External partner organizations can assist the coordinating organization in implementing the action items in various functions and may include local, regional, state, or federal agencies, as well as local and regional public and private sector organizations.

Potential Funding Sources

When possible, identify potential funding sources for the action item. Example funding sources can include: the federal Pre-Disaster Mitigation and Flood Mitigation Grant Program; or local funding sources such as capital improvement or general funds. An action item may also have multiple funding sources.

Estimated Cost

Where possible, an estimate of the cost for implementing the action item is included.

¹ Ibid.

Timeline

Action items include both short and long-term activities. Each action item includes an estimate of the timeline for implementation. *Short-term action items* (ST) are activities that may be implemented with existing resources and authorities in one to two years. *Long-term action items* (LT) may require new or additional resources and/or authorities, and may take from one to five years to implement. *Ongoing* action items signify that work has begun and will either exist over an indefinite timeline, or an extended timeline.

Status

As action items are implemented or new ones are created during the Plan maintenance process, it is important to indicate the status of the action item – whether it is new, ongoing, deferred, or complete. Documenting the status of the action will make reviewing and updating the mitigation Plan easier during the Plan’s five-year update, and can be used as a benchmark for progress. *Deferred* action items have yet to see any significant work begin on the particular action.

Priority

High priority action items are designated in order to clarify the importance of these mitigation actions for the affected jurisdictions.

SECTION 4:

PLAN IMPLEMENTATION AND MAINTENANCE

The Plan Implementation and Maintenance section details the formal process that will ensure that the Natural Hazard Mitigation Plan (NHMP) remains an active and relevant document. The Plan implementation and maintenance process includes a schedule for monitoring and evaluating the Plan quarterly, as well as producing an updated plan every five years. Finally, this section describes how the county will integrate public participation throughout the Plan maintenance and implementation process.

Implementing the Plan

The success of the Curry County NHMP depends on how well the outlined action items are implemented. In an effort to ensure that the activities identified are implemented, the following steps will be taken. The Plan will be formally adopted, a coordinating body will be assigned, a convener shall be designated, the identified activities will be prioritized and evaluated, and finally, the Plan will be implemented through existing plans, programs, and policies.

Plan Adoption

The Curry County NHMP was developed and will be implemented through a collaborative process. After the Plan is locally reviewed and deemed complete, the Curry County Emergency Manager submits it to the State Hazard Mitigation Officer (SHMO) at the Oregon Military Department – Office of Emergency Management (OEM). OEM submits the plan to FEMA- Region X for review. This review addresses the federal criteria outlined in the FEMA Interim Final Rule 44 CFR Part 201. Upon acceptance by FEMA, the County will adopt the plan via resolution. At that point, the County will gain eligibility for the Pre-Disaster Mitigation Grant Program, the Hazard Mitigation Grant Program funds, and Flood Mitigation Assistance program funds. Following adoption by the county, the participating jurisdictions should convene local decision makers and adopt the Curry County Multijurisdictional NHMP.

Convener

The Curry County Emergency Manager will take responsibility for plan implementation and will facilitate the Curry County Hazard Mitigation Coordinating Body meetings and will assign tasks such as updating and presenting the Plan to the rest of the members of the Coordinating Body. Plan implementation and evaluation will be a shared responsibility among all of the assigned Hazard Mitigation Coordinating Body members. The Convener's responsibilities include:

- Forming a new ad hoc group in June and invite key stakeholders;
- Organizing Coordinating Body meeting dates, times, locations, agendas, and member notification;
- Documenting the discussions and outcomes of committee meetings;

- Serving as a communication conduit between the Coordinating Body and the public/stakeholders
- Identifying emergency management-related funding sources for natural hazard mitigation projects; and,
- Utilizing the Risk Assessment as a tool for prioritizing proposed natural hazard risk reduction projects.

Coordinating Body

The Curry County Convener will form a Natural Hazard Coordinating Body for updating and implementing the NHMP. The Coordinating Body responsibilities include:

- Attending future Plan maintenance and Plan update meetings (or designating a representative to serve in your place);
- Serving as the local evaluation committee for funding programs such as the Pre-Disaster Mitigation Grant Program, the Hazard Mitigation Grant Program funds, and Flood Mitigation Assistance program funds;
- Prioritizing and recommending funding for natural hazard risk reduction projects;
- Evaluating and updating the NHMP in accordance with the prescribed maintenance schedule;
- Developing and coordinating ad hoc and/or standing subcommittees as needed; and,
- Coordinating public involvement activities

Meetings

The following jurisdictions, agencies, and/or organizations were represented and served on the Steering Committee during the development of the Curry County NHMP (for a list of individuals, see the Acknowledgements section of this NHMP):

- Curry County
- City of Brookings
- City of Port Orford
- City of Gold Beach
- Coos Forest Patrol
- Coos Curry Electric Cooperative, Inc.
- American Red Cross
- Curry Community Health
- Brookings Fire and Rescue
- US Forest Service

To make the coordination and review of the Curry County NHMP as broad and as useful as possible, the Coordinating Body will engage additional stakeholders and other relevant hazard mitigation organizations and agencies to implement the identified action items. Specific organizations have been identified as either internal or external partners on the individual action item forms found in Appendix A.

Implementation through Existing Programs

The NHMP includes a range of actions that, when implemented, will reduce loss from hazard events in the county. Within the Plan, FEMA requires the identification of existing programs that might be used to implement these action items. Curry County, and the participating cities, currently addresses statewide planning goals and legislative requirements through their comprehensive land use plans, capital improvement plans, mandated standards, and building codes. To the extent possible, Curry County, and participating cities will work to incorporate the recommended mitigation action items in existing programs and procedures.

Many of the recommendations contained in the NHMP are consistent with the goals and objectives of Curry County and participating cities' plans and policies. Where possible, Curry County, and participating cities, should implement the recommended actions contained in the NHMP through existing plans and policies. Plans and policies already in existence often have support from local residents, businesses, and policy makers. Many land-use, comprehensive, and strategic plans get updated regularly, and can adapt easily to changing conditions and needs. Implementing the action items contained in the NHMP through such plans and policies increases the likelihood of being supported and implemented.

Examples of plans, programs, or agencies that may be used to implement mitigation activities include:

- City and County Budgets
- Community Wildfire Protection Plans
- Comprehensive Land Use Plans
- Economic Development Action Plans
- Zoning Ordinances and Building Codes

For additional examples of plans, programs or agencies that may be used to implement mitigation activities, refer to Appendix C, *Community Profile*.

Plan Maintenance

Plan maintenance is a critical component of the NHMP. Proper maintenance of the Plan ensures that this Plan will maximize the county and participating city's efforts to reduce the risks posed by natural hazard. This section was developed by OPDR and includes a process to ensure that a regular review and update of the Plan occurs. The coordinating body and local staff are responsible for implementing this process, in addition to maintaining and updating the Plan through a series of meetings outlined in the maintenance schedule below.

Meetings

The Coordinating Body will meet on a **quarterly basis** to complete the following tasks. During the first meeting, the Coordinating Body will:

- Update hazard histories after the winter season;
- Prioritize potential mitigation projects, and

- Review existing action items to determine appropriateness for funding before the budget is approved in May.

During the second meeting, the Coordinating Body will:

- Review existing action items to determine appropriateness for funding; and,
- Discuss methods for continued public involvement and education before the summer months begin.

During the third meeting, the Coordinating Body will:

- Update the risk assessment; and
- Review existing action items to determine appropriateness for funding.

During the final meeting, the Coordinating Body will:

- Update decision makers on progress of the plan; and
- Document successes and lessons learned during the year.

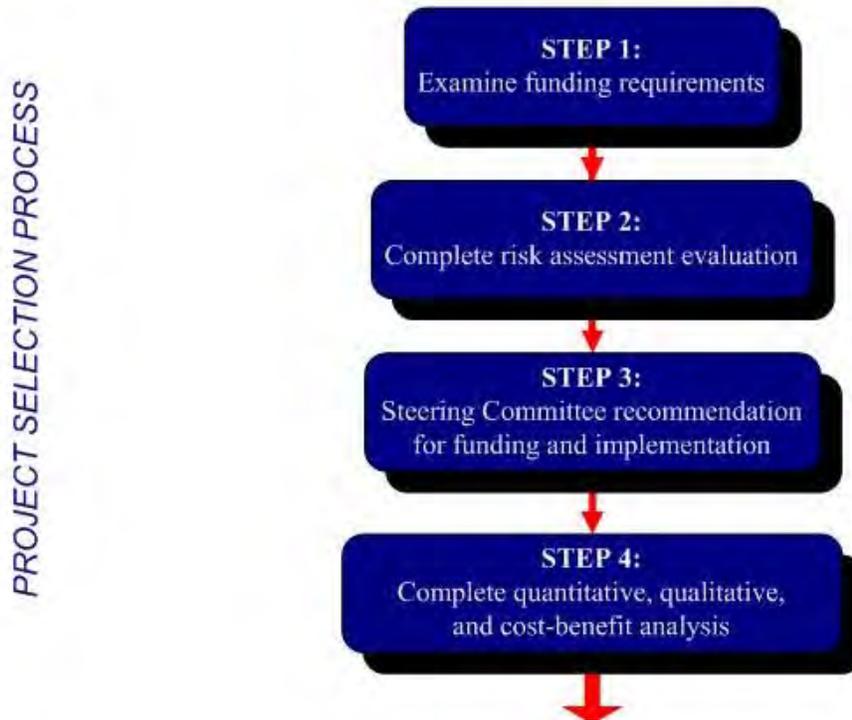
These meetings are an opportunity for the cities to report back to the county on progress that has been made towards their components of the NHMP. The ad hoc committee that will be formed may revise the schedule as resources and events shift.

The Convener will be responsible for documenting the outcome of the quarterly meetings. The process the Coordinating Body will use to prioritize mitigation projects is detailed in the section below. The Plan's format allows the County and participating jurisdictions to review and update sections when new data becomes available. New data can be easily incorporated, resulting in a NHMP that remains current and relevant to the participating jurisdictions.

Project Prioritization Process

Each of the participating jurisdictions has included a short list of prioritized actions. Because DOGAMI is in the process of completing updated multi-hazard risk assessment products, future mitigation plan maintenance meetings will revisit the prioritization process. The Disaster Mitigation Act of 2000 requires that jurisdictions identify a process for prioritizing potential actions. Potential mitigation activities often come from a variety of sources; therefore, the project prioritization process needs to be flexible. Committee members, local government staff, other planning documents, or the risk assessment may be the source to identify projects. Figure 4-1 illustrates the project development and prioritization process.

Figure 4-1 Action Item and Project Review Process



Source: Oregon Partnership for Disaster Resilience.

Step 1: Examine funding requirements

The first step in prioritizing the Plan’s action items is to determine which funding sources are open for application. Several funding sources may be appropriate for the county’s proposed mitigation projects. Examples of mitigation funding sources include, but are not limited to: FEMA’s Pre-Disaster Mitigation competitive grant program (PDM), Flood Mitigation Assistance (FMA) program, Hazard Mitigation Grant Program (HMGP), National Fire Plan (NFP), Community Development Block Grants (CDBG), local general funds, and private foundations, among others. Please see Appendix E, *Grant Programs and Resources* for a more comprehensive list of potential grant programs.

Because grant programs open and close on differing schedules, the Coordinating Body will examine upcoming funding streams’ requirements to determine which mitigation activities would be eligible. The Coordinating Body may consult with the funding entity, Oregon Military Department – Office of Emergency Management (OEM), or other appropriate state or regional organizations about eligibility requirements. This examination of funding sources and requirements will happen during the Coordinating Body’s quarterly Plan maintenance meetings.

Step 2: Complete risk assessment evaluation

The second step in prioritizing the Plan’s action items is to examine which hazards the selected actions are associated with and where these hazards rank in terms of community

risk. The Coordinating Body will determine whether or not the Plan's risk assessment supports the implementation of eligible mitigation activities. This determination will be based on the location of the potential activities, their proximity to known hazard areas, and whether community assets are at risk. The Coordinating Body will additionally consider whether the selected actions mitigate hazards that are likely to occur in the future, or are likely to result in severe/ catastrophic damages.

Step 3: Coordinating Body Recommendation

Based on the steps above, the Coordinating Body will recommend which mitigation activities should be moved forward. If the Coordinating Body decides to move forward with an action, the coordinating organization designated on the action item form will be responsible for taking further action and, if applicable, documenting success upon project completion. The Coordinating Body will convene a meeting to review the issues surrounding grant applications and to share knowledge and/or resources. This process will afford greater coordination and less competition for limited funds.

Step 4: Complete quantitative and qualitative assessment, and economic analysis

The fourth step is to identify the costs and benefits associated with the selected natural hazard mitigation strategies, measures, or projects. Two categories of analysis that are used in this step are: (1) benefit/cost analysis, and (2) cost-effectiveness analysis. Conducting benefit/cost analysis for a mitigation activity assists in determining whether a project is worth undertaking now, in order to avoid disaster-related damages later. Cost-effectiveness analysis evaluates how best to spend a given amount of money to achieve a specific goal. Determining the economic feasibility of mitigating natural hazards provides decision makers with an understanding of the potential benefits and costs of an activity, as well as a basis upon which to compare alternative projects. Figure 4-2 shows decision criteria for selecting the appropriate method of analysis.

Figure 4-2 Action Item and Project Review Process



Source: Oregon Partnership for Disaster Resilience.

If the activity requires federal funding for a structural project, the Coordinating Body will use a FEMA- approved cost-benefit analysis tool to evaluate the appropriateness of the activity. A project must have a benefit/cost ratio of greater than one in order to be eligible for FEMA grant funding.

For non-federally funded or nonstructural projects, a qualitative assessment will be completed to determine the project’s cost effectiveness. The Coordinating Body will use a multivariable assessment technique called STAPLE/E to prioritize these actions. STAPLE/E stands for Social, Technical, Administrative, Political, Legal, Economic, and Environmental. Assessing projects based upon these seven variables can help define a project’s qualitative cost effectiveness. OPDR at the University of Oregon’s Community Service Center has tailored STAPLE/E technique for use in natural hazard action item prioritization.

Continued Public Involvement and Participation

The participating jurisdictions are dedicated to involving the public directly in the continual reshaping and updating of the Curry County NHMP. Although members of the Coordinating Body represent the public to some extent, the public will also have the opportunity to continue to provide feedback about the Plan.

To ensure that these opportunities will continue, the County and participating jurisdictions will:

- Post copies of their plans on corresponding websites;

- Place articles in the local newspaper directing the public where to view and provide feedback;
- Use existing newsletters such as schools and utility bills to inform the public where to view and provide feedback; and,
- Present new and relevant information at community events such as the Home Show, the County Fair, The Azalea Festival, National Night Out, and the Country Music Festival.

In addition to the involvement activities listed above, Curry County will ensure continued public involvement by posting the Curry County NHMP on the County's website (<http://www.co.curry.or.us/>). The Plan will also be archived and posted on the University of Oregon Libraries' Scholar's Bank Digital Archive (<http://scholarsbank.uoregon.edu>).

Five-Year Review of Plan

This plan will be updated every five years in accordance with the update schedule outlined in the Disaster Mitigation Act of 2000. **The Curry County NHMP is due to be updated by June XX, 2021.** The convener will be responsible for organizing the coordinating body to address plan update needs. The coordinating body will be responsible for updating any deficiencies found in the plan, and for ultimately meeting the Disaster Mitigation Act of 2000's plan update requirements.

The following 'toolkit' can assist the convener in determining which plan update activities can be discussed during regularly scheduled plan maintenance meetings, and which activities require additional meeting time and/or the formation of sub-committees.

Figure 4-3. Natural Hazards Mitigation Plan Update Toolkit

Question	Yes	No	Plan Update Action
Is the planning process description still relevant?			Modify this section to include a description of the plan update process. Document how the planning team reviewed and analyzed each section of the plan, and whether each section was revised as part of the update process. (This toolkit will help you do that).
Do you have a public involvement strategy for the plan update process?			Decide how the public will be involved in the plan update process. Allow the public an opportunity to comment on the plan process and prior to plan approval.
Have public involvement activities taken place since the plan was adopted?			Document activities in the "planning process" section of the plan update
Are there new hazards that should be addressed?			Add new hazards to the risk assessment section
Have there been hazard events in the community since the plan was adopted?			Document hazard history in the risk assessment section
Have new studies or previous events identified changes in any hazard's location or extent?			Document changes in location and extent in the risk assessment section
Has vulnerability to any hazard changed?			Document changes in vulnerability in the risk assessment section
Have development patterns changed? Is there more development in hazard prone areas?			Document changes in vulnerability in the risk assessment section
Do future annexations include hazard prone areas?			Document changes in vulnerability in the risk assessment section
Are there new high risk populations?			Document changes in vulnerability in the risk assessment section
Are there completed mitigation actions that have decreased overall vulnerability?			Document changes in vulnerability in the risk assessment section
Did the plan document and/or address National Flood Insurance Program repetitive flood loss properties?			Document any changes to flood loss property status
Did the plan identify the number and type of existing and future buildings, infrastructure, and critical facilities in hazards areas?			1) Update existing data in risk assessment section, or 2) determine whether adequate data exists. If so, add information to plan. If not, describe why this could not be done at the time of the plan update If yes, the plan update must address them: either state how deficiencies were overcome or why they couldn't be addressed
Did the plan identify data limitations?			1) Update existing data in risk assessment section, or 2) determine whether adequate data exists. If so, add information to plan. If not, describe why this could not be done at the time of the plan update
Did the plan identify potential dollar losses for vulnerable structures?			Document any updates in the plan goal section
Are the plan goals still relevant?			Document whether each action is completed or pending. For those that remain pending explain why. For completed actions, provide a 'success' story.
What is the status of each mitigation action?			Add new actions to the plan. Make sure that the mitigation plan includes actions that reduce the effects of hazards on both new and existing buildings.
Are there new actions that should be added?			If not, add this action to meet minimum NFIP planning requirements
Is there an action dealing with continued compliance with the National Flood Insurance Program?			Document these changes in the plan implementation and maintenance section
Are changes to the action item prioritization, implementation, and/or administration processes needed?			Document these changes in the plan implementation and maintenance section
Do you need to make any changes to the plan maintenance schedule?			Document these changes in the plan implementation and maintenance section
Is mitigation being implemented through existing planning mechanisms (such as comprehensive plans, or capital improvement plans)?			If the community has not made progress on process of implementing mitigation into existing mechanisms, further refine the process and document in the plan.

Source: Oregon Partnership for Disaster Resilience.

Curry County Natural Hazard Mitigation Plan

Curry County and the Cities of:
Port Orford, Gold Beach and Brookings



November 2015

Volume II: Appendix

Prepared for:
Curry County Emergency Management

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



UNIVERSITY OF OREGON



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APPENDIX A-1: PRIORITY ACTION ITEM FORMS

The following table lists priority actions for the 2016 Curry County Multi-Jurisdictional Natural Hazard Mitigation Plan. The action item forms that follow present specific information for each action item.

Table A-1 Priority Mitigation Actions

Priority Mitigation Actions
Curry County
Utilize the final multi-hazard risk report and assessment currently being developed by DOGAMI through FEMA's RiskMap program to update the Curry County Hazard Analysis.
Utilize the final multi-hazard risk report and assessment currently being developed by DOGAMI through FEMA's RiskMap program to update the Goal 7 Section of the Curry County Comprehensive Plan.
Conduct non-structural seismic retrofit workshops with government agencies, businesses, and residents to prevent damage from earthquakes.
City of Port Orford
Implement Port Orford Comprehensive Plan, Goal 7 Section, Policy 5
Implement Port Orford Comprehensive Plan, Goal 7 Section, Policy 7
Implement Port Orford Comprehensive Plan, Goal 7 Section, Policy 8
Implement Port Orford Comprehensive Plan, Goal 7 Section, Policy 9
Adopt a Tsunami Land Use Overlay Zone
City of Gold Beach
Update the Goal 7 Section of the Gold Beach Comprehensive Plan.
Adopt a Tsunami Land Use Overlay Zone
City of Brookings
Safe Drinking Water Resiliency Project [HUD Resilience Competition Project]
Critical Healthcare Resiliency Project [HUD Resilience Competition Project]
Sewer Storm Disaster Repairs Project [HUD Resilience Competition Project]
Multifamily LMI and Tsunami-Safe Housing Program [HUD Resilience Competition Project]
Electricity Reliability Project [HUD Resilience Competition Project]
Update the Goal 7 Section of the Brookings Comprehensive Plan.
Adopt a Tsunami Land Use Overlay Zone
Analyze the Port Jetty's and storm water system in Brookings for stability during floods and severe storms and identify mitigation options
Convert existing distribution facilities to underground at the Port of Brookings/Harbor.

Curry County Priority Action #1 (Multi-Hazard)		Alignment with Plan Goals:				
Utilize the final multi-hazard risk assessment report currently being developed by DOGAMI through FEMA's RiskMap program to update the Curry County Hazard Analysis (using the OEM Hazard Analysis Method).		<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input type="checkbox"/> 4	<input checked="" type="checkbox"/> 5
		<input type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input type="checkbox"/> 8	<input checked="" type="checkbox"/> 9	<input type="checkbox"/> 10
Alignment with Existing Plans/Policies:						
County Emergency Management Performance Grant						
Rationale for Proposed Action Item:						
DLCD manages the Oregon Risk Map program. DOGAMI is a FEMA Risk Map Cooperating Technical Partner. Through its Risk Map contract, DOGAMI is currently developing a comprehensive multi-natural-hazard risk assessment for Curry County. The assessment covers flood, coastal erosion, earthquake, local and distant tsunami, landslide and wildfire hazards. When complete, the new hazard information can be used by Curry County and its incorporated jurisdictions to update the local Hazard Threat Analysis required by OEM as a condition of Curry County's Emergency Management Performance grant. The county is encouraged to work with DOGAMI during the risk assessment update process to ensure the information being provided can be easily incorporated into the OEM Threat Assessment methodology.						
Ideas for Implementation:			Actions Status			
Use the new data to update the threat assessment scores			Added in 2015.			
Coordinating Organization:		Curry County Emergency Management				
Internal Partners:			External Partners:			
Curry Community Health			DOGAMI, OEM, DCLD			
Potential Funding Sources:			Estimated cost:		Timeline:	
FEMA Risk Map Program (Current Funding), Existing County General Fund and EMPG Grant funds for County Emergency Manager			The DOGAMI assessment work is already funded by FEMA. Using the information to update the threat assessment should be a low cost activity.		<input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Short Term (1-4 years) <input type="checkbox"/> Mid-Term (4-10 years) <input type="checkbox"/> Long-Term (10+ years)	
Action Item Status:		New				

Curry County Priority Action #2 (Multi-Hazard)		Alignment with Plan Goals:				
Utilize the final multi-hazard risk report and assessment currently being developed by DOGAMI through FEMA's RiskMap program to update the Goal 7 Section of the Curry County Comprehensive Plan.		<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> 5
		<input checked="" type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input checked="" type="checkbox"/> 8	<input checked="" type="checkbox"/> 9	<input checked="" type="checkbox"/> 10
Alignment with Existing Plans/Policies:						
Statewide Planning Goal 7; Curry County Comprehensive Plan						
Rationale for Proposed Action Item:						
Originally adopted in 1982, the Natural Hazard section of the Curry County Comprehensive Plan was last amended via Ordinance 06-01 in 2005. Over that 10 year period, significant updates to hazard information for multiple natural hazards have been made, including recent updates to local tsunami inundation hazard maps. Notably, the Department of Land Conservation and Development (DLCD) recently completed a tsunami land use guidebook . In addition, DLCD recently received a FEMA Risk Map grant to assist Curry County with an update to the hazards section of the comprehensive plan. This is coincident with the recent hiring of a new planning director in Curry County. This action reflects the need to update the county policy framework as it relates to natural hazards given the availability of new hazard information. In addition, the action acknowledges the availability of federal and state resources to assist Curry County with the plan update process.						
Ideas for Implementation:				Actions Status		
Use the new hazard data to update the Curry County Comprehensive Plan				Added in 2015.		
Coordinating Organization:		Curry County Community Development				
Internal Partners:			External Partners:			
Planning Commission; Board of County Commissioners; Economic Development; Curry Community Health; Curry Emergency Management			DCLD, FEMA, DOGAMI, Oregon Sea Grant; Oregon Resilience Officer; Oregon Regional Solutions			
Potential Funding Sources:			Estimated cost:		Timeline:	
DLCD has received a FEMA Risk Map grant to provide capacity and technical assistance to support this action item			\$40,000		<input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Short Term (1-4 years) <input type="checkbox"/> Mid-Term (4-10 years) <input type="checkbox"/> Long-Term (10+ years)	
Action Item Status:		New				

Curry County Priority Action #3 (Earthquake)		Alignment with Plan Goals:				
Conduct non-structural seismic retrofit workshops with government agencies, businesses, and residents to prevent damage from earthquakes.	<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input type="checkbox"/> 5	
	<input type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input type="checkbox"/> 8	<input checked="" type="checkbox"/> 9	<input checked="" type="checkbox"/> 10	
Alignment with Existing Plans/Policies:						
Statewide Planning Goal 7; Curry County Comprehensive Plan						
Rationale for Proposed Action Item:						
<p>Seismic hazards pose a real and serious threat to many communities in Oregon, requiring local governments, planners, and engineers to consider their community's safety. Earthquake damage occurs because we have built structures that cannot withstand severe shaking. Buildings, ports, and lifelines (highways, telephone lines, gas, water, etc.) suffer damage in earthquakes. Damage and loss of life can be very severe if structures are not designed to withstand shaking, are on ground that amplifies shaking, or ground which liquefies due to shaking.</p> <p>Nonstructural retrofits protect building contents with little cost and effort. Examples of retrofits include:</p> <ul style="list-style-type: none"> • Securing water heaters, large appliances, bookcases, pictures and bulletin boards; • Latching cabinet doors; and • Using safety film on windows. <p>The Disaster Mitigation Act of 2000 requires communities to identify mitigation actions that reduce the effects of hazards on a new and existing buildings and infrastructure [201.6(c)(3)(ii)]. Hazard impacts to government agencies, businesses, and residents can be reduced by pursuing non-structural retrofits to existing buildings.</p>						
Ideas for Implementation:					Actions Status	
<p>Develop informational brochures about individual mitigation opportunities and post on the city's website, include in the water bill, and make available on the front counters at the police and public works departments. Include recommendations regarding non-structural retrofits in these brochures. Use the following modes of communication or events to educate the public: Quarterly Newsletter, Website, Flyers, National Night Out, Safety Fair</p> <p>Distribute a "Homeowner's Guide to Non-Structural Retrofit" (or something similar) found here: http://www.seattle.gov/DPD/cms/groups/pan/@pan/@emergprep/documents/web_informatio_nal/dpds_005877.pdf</p>					Deferred due to lack of resources	
Coordinating Organization:	Curry County Community Development - Building					
Internal Partners:			External Partners:			
Economic Development; Curry Community Health; Emergency Management			Community Emergency Response Team, Oregon Seismic Safety Policy Advisory Commission, Oregon Emergency Management – Geologic Hazards Program, Institute for Business and Home Safety			
Potential Funding Sources:			Estimated cost:	Timeline:		
Emergency Management Performance Grant; AmeriCorps			\$40,000	<input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Short Term (1-4 years) <input type="checkbox"/> Mid-Term (4-10 years) <input type="checkbox"/> Long-Term (10+ years)		
Action Item Status:	Continued Action from 2010 Plan					

Port Orford Priority Action #1 (Multi-Hazard)		Alignment with Plan Goals:				
Implement Port Orford Comprehensive Plan, Goal 7 Section, Policies 5		<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> 5
		<input checked="" type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input checked="" type="checkbox"/> 8	<input checked="" type="checkbox"/> 9	<input checked="" type="checkbox"/> 10
Alignment with Existing Plans/Policies:						
Statewide Planning Goal 7; Port Orford Comprehensive Plan – Goal 7						
Rationale for Proposed Action Item:						
In May of 2012, the City of Port Orford updated the Goals and Policies section of the Port Orford Comprehensive Plan, including the Goal 7 Section related to natural hazards. The City’s Hazard Planning Goals are to (1) Protect life and property from natural disasters and hazards, (2) Maintain inventories and base mapping . . . , and (3) Maintain updated implementing ordinances . . . Port Orford Hazard Policy 5 states: “Work with Curry County to maintain and implement the updated Emergency Operations Plan and the Natural Hazard Mitigation Plan including systems for disaster warnings, and procedures for the protection of citizens in the case of earthquakes, tsunamis and other natural disasters.”						
Ideas for Implementation:					Actions Status	
Policy 5: <ul style="list-style-type: none"> Regularly brief the City Council and Planning commission regarding the EOP and NHMP. Meet with Curry County Emergency Management on at least a quarterly basis. Request input, support and technical assistance from Oregon Regional Solutions. 					Added in 2015	
Coordinating Organization:			City of Port Orford			
Internal Partners:			External Partners:			
Port Orford City Council, City Administrator			Curry County Emergency Management; Curry County Economic Development; Oregon Office of Emergency Management; Department of Land Conservation and Development; Department of Geology and Mineral Industries; Oregon Regional Solutions			
Potential Funding Sources:			Estimated cost:		Timeline:	
General fund, FEMA Hazard Mitigation Grant Program, FEMA Pre-Disaster Mitigation Program			Varies		<input checked="" type="checkbox"/> Ongoing <input type="checkbox"/> Short Term (1-4 years) <input type="checkbox"/> Mid-Term (4-10 years) <input type="checkbox"/> Long-Term (10+ years)	
Action Item Status:		New				

Port Orford Priority Action #2 (Tsunami)		Alignment with Plan Goals:				
Implement Port Orford Comprehensive Plan, Goal 7 Section, Policy 7		<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> 5
		<input checked="" type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input checked="" type="checkbox"/> 8	<input checked="" type="checkbox"/> 9	<input checked="" type="checkbox"/> 10
Alignment with Existing Plans/Policies:						
Statewide Planning Goal 7; Port Orford Comprehensive Plan – Goal 7						
Rationale for Proposed Action Item:						
In May of 2012, the City of Port Orford updated the Goals and Policies section of the Port Orford Comprehensive Plan, including the Goal 7 Section related to natural hazards. The City’s Hazard Planning Goals are to (1) Protect life and property from natural disasters and hazards, (2) Maintain inventories and base mapping . . . , and (3) Maintain updated implementing ordinances . . . Port Orford Hazard Policy 7 states: “Work with other agencies and community organizations to develop natural disaster shelters outside the tsunami inundation zone.”						
Ideas for Implementation:					Actions Status	
Policy 7: (1) Inventory community organizations located outside the tsunami inundation zone, (2) Meet with organization leadership to determine interest in serving as a shelter, (3) Develop and implement an interagency agreement, (4) Work with shelter partners to conduct regular (one to four times per year) evacuation and shelter exercises.					Added in 2015	
Coordinating Organization:		City of Port Orford				
Internal Partners:			External Partners:			
Port Orford City Council, City Administrator			Community Emergency Response Team, Oregon Seismic Safety Policy Advisory Commission, Oregon Emergency Management – Geologic Hazards Program, Community / Voluntary Organizations Active In Disasters (COAD and VOAD)			
Potential Funding Sources:			Estimated cost:		Timeline:	
General Fund; VOAD; Local community organizations; Oregon foundation grant			Varies		<input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Short Term (1-4 years) <input type="checkbox"/> Mid-Term (4-10 years) <input type="checkbox"/> Long-Term (10+ years)	
Action Item Status:		New				

Port Orford Priority Action #3 (Multi-Hazard)		Alignment with Plan Goals:				
Implement Port Orford Comprehensive Plan, Goal 7 Section, Policy 8		<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> 5
		<input checked="" type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input checked="" type="checkbox"/> 8	<input checked="" type="checkbox"/> 9	<input checked="" type="checkbox"/> 10
Alignment with Existing Plans/Policies:						
Statewide Planning Goal 7; Port Orford Comprehensive Plan – Goal 7						
Rationale for Proposed Action Item:						
<p>In May of 2012, the City of Port Orford updated the Goals and Policies section of the Port Orford Comprehensive Plan, including the Goal 7 Section related to natural hazards. The City’s Hazard Planning Goals are to (1) Protect life and property from natural disasters and hazards, (2) Maintain inventories and base mapping . . . , and (3) Maintain updated implementing ordinances . . . Port Orford Hazard Policy 8 states: “Work with Curry County and state agencies including, but not limited to the Department of Geology and Mineral Industries (DOGAMI) to develop and implement tsunami and other emergency preparedness plans including the Port Orford Natural Hazards Mitigation Plan, the Emergency Operations Plan, the Continuity of Operations Plan and other plans, with the objective of incorporating and coordinating facilities and personnel to be capable of conducting emergency operations. Upgrade emergency operations and facilities as funding becomes available.”</p>						
Ideas for Implementation:					Actions Status	
Policy 8: <ul style="list-style-type: none"> Utilize the Department of Land Conservation and Development’s tsunami land use guidebook. Utilize the final multi-hazard risk report and assessment currently being developed by DOGAMI through FEMA's RiskMap program to update and/or revise Port Orford’s NHMP strategy. Utilize the final multi-hazard risk report and assessment currently being developed by DOGAMI through FEMA's RiskMap program to update the Goal 7 Section of the Port Orford Comprehensive Plan policies as needed. 					Added in 2015	
Coordinating Organization:		City of Port Orford				
Internal Partners:			External Partners:			
Mayor and Council, City Administrator			Curry County Emergency Management; Curry County Economic Development; Oregon Office of Emergency Management; Department of Land Conservation and Development; Department of Geology and Mineral Industries; Oregon Regional Solutions			
Potential Funding Sources:			Estimated cost:		Timeline:	
General Fund; DLCD Technical Assistance Grant			Unknown		<input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Short Term (1-4 years) <input type="checkbox"/> Mid-Term (4-10 years) <input type="checkbox"/> Long-Term (10+ years)	
Action Item Status:		New				

Port Orford Priority Action #4 (Multi-Hazard)		Alignment with Plan Goals:				
Implement Port Orford Comprehensive Plan, Goal 7 Section, Policy 9		<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> 5
		<input checked="" type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input checked="" type="checkbox"/> 8	<input checked="" type="checkbox"/> 9	<input checked="" type="checkbox"/> 10
Alignment with Existing Plans/Policies:						
Statewide Planning Goal 7; Port Orford Comprehensive Plan – Goal 7						
Rationale for Proposed Action Item:						
In May of 2012, the City of Port Orford updated the Goals and Policies section of the Port Orford Comprehensive Plan, including the Goal 7 Section related to natural hazards. The City’s Hazard Planning Goals are to (1) Protect life and property from natural disasters and hazards, (2) Maintain inventories and base mapping . . . , and (3) Maintain updated implementing ordinances . . . Port Orford Hazard Policy 9 states: “Prepare a post-tsunami redevelopment plan for the City of Port Orford as opportunities for funding such a plan become available.”						
Ideas for Implementation:					Actions Status	
Policy 9: Review the Curry County Recovery Plan (2011 final draft) and Utilize the Department of Land Conservation and Development’s tsunami land use guidebook . Budget local funds or apply for technical assistance grant to develop redevelopment plan (through DLCD, Oregon local foundation or other funder). Engage with the South Coast Resilience Network partners (e.g. Reedsport, Bandon, Brookings) to receive local assistance in developing redevelopment plan. Solicit assistance for Oregon Sea Grant or other university based partners (e.g. landscape architecture or community planning department).					Added in 2015	
Coordinating Organization:		City of Port Orford				
Internal Partners:			External Partners:			
Mayor and Council, City Administrator			Curry County Emergency Management; Curry County Economic Development; Oregon Office of Emergency Management; Department of Land Conservation and Development; Department of Geology and Mineral Industries; Oregon Regional Solutions			
Potential Funding Sources:			Estimated cost:		Timeline:	
General Fund; DLCD Technical Assistance Grant; Oregon foundation grant (e.g. Oregon Community Foundation, The Ford Family Foundation, Meyer, etc.)			\$10,000 to \$50,000		<input type="checkbox"/> Ongoing <input type="checkbox"/> Short Term (1-4 years) <input checked="" type="checkbox"/> Mid-Term (4-10 years) <input type="checkbox"/> Long-Term (10+ years)	
Action Item Status:		Continued Action from 2010 Plan				

Port Orford Priority Action #5 (Tsunami)		Alignment with Plan Goals:				
Adopt a Tsunami Land Use Overlay Zone		<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> 5
		<input checked="" type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input checked="" type="checkbox"/> 8	<input checked="" type="checkbox"/> 9	<input checked="" type="checkbox"/> 10
Alignment with Existing Plans/Policies:						
Statewide Planning Goal 7; Port Orford Comprehensive Plan – Goal 7						
Rationale for Proposed Action Item:						
<p>In 2012, the Department of Geology and Mineral Industries completed significant updates to Port Orford tsunami inundation hazard maps. In addition, the Department of Land Conservation and Development (DLCD) recently completed a tsunami land use guidebook. The Port Orford Comprehensive Plan provides clear Goal Language and Policy Direction to reduce local impacts resulting from the tsunami hazard. According to preliminary DOGAMI analysis, approximately 30% of Port Orford’s existing building stock is located in the Large Inundation Zone and roughly 70% is within the XX Large Inundation Zone. Development and adoption of a local land use overlay zone will ensure a local conversation about what specific uses are appropriate within each of the five DOGAMI tsunami inundation zones. Once adopted, the zone will ensure that new development will directed outside the tsunami inundation zone or only be allowed where appropriate within the tsunami zones.</p>						
Ideas for Implementation:					Actions Status	
Review the Curry County Recovery Plan (2011 final draft) and Utilize the Department of Land Conservation and Development’s tsunami land use guidebook . Update the Port Orford Buildable Lands Inventory. Determine the percentage of residential, commercial, industrial and public land desired both within and outside the inundation zone. Draft a tsunami overlay ordinance that meets local needs. Expand the Urban Growth Boundary if needed.					Added in 2015	
Coordinating Organization:		City of Port Orford				
Internal Partners:			External Partners:			
Mayor and Council, City Administrator			Department of Land Conservation and Development; Curry County Economic Development; Port of Port Orford; Department of Geology and Mineral Industries; Oregon Regional Solutions.			
Potential Funding Sources:		Estimated cost:		Timeline:		
General Fund; DLCD Technical Assistance Grant		Unknown		<input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Short Term (1-4 years) <input type="checkbox"/> Mid-Term (4-10 years) <input type="checkbox"/> Long-Term (10+ years)		
Action Item Status:		New				

Gold Beach Priority Action #1 (Multi-Hazard)		Alignment with Plan Goals:				
Utilize the final multi-hazard risk report and assessment currently being developed by DOGAMI through FEMA's RiskMap program to update the Goal 7 Section of the Gold Beach Comprehensive Plan.		<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> 5
		<input checked="" type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input checked="" type="checkbox"/> 8	<input checked="" type="checkbox"/> 9	<input checked="" type="checkbox"/> 10
Alignment with Existing Plans/Policies:						
Statewide Planning Goal 7						
Rationale for Proposed Action Item:						
Originally adopted in 1982, the Gold Beach Comprehensive Plan has not been significantly updated since. Significant updates to hazard information for multiple natural hazards have been made since the 1980s, including recent updates to local tsunami inundation hazard maps. Notably, the Department of Land Conservation and Development (DLCD) recently completed a tsunami land use guidebook . This action reflects the need to update the Gold Beach policy framework as it relates to natural hazards given the availability of new hazard information.						
Ideas for Implementation:				Actions Status		
Use new hazard data to update the Gold Beach Comprehensive Plan				Added in 2015.		
Coordinating Organization:		Gold Beach Community Development				
Internal Partners:			External Partners:			
Planning Commission; City Council; City Department Representatives			DCLD, FEMA, DOGAMI, Oregon Sea Grant; Oregon Resilience Officer; Oregon Regional Solutions			
Potential Funding Sources:			Estimated cost:		Timeline:	
General fund, DLCDC technical assistance grant, Oregon, Oregon foundation grant (e.g. Oregon Community Foundation, The Ford Family Foundation, Meyer, etc.)			\$20,000 to \$40,000+		<input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Short Term (1-4 years) <input type="checkbox"/> Mid-Term (4-10 years) <input type="checkbox"/> Long-Term (10+ years)	
Action Item Status:		New				

Gold Beach Priority Action #2 (Tsunami)		Alignment with Plan Goals:				
Adopt a Tsunami Land Use Overlay Zone		<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> 5
		<input checked="" type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input checked="" type="checkbox"/> 8	<input checked="" type="checkbox"/> 9	<input checked="" type="checkbox"/> 10
Alignment with Existing Plans/Policies:						
Statewide Planning Goal 7						
Rationale for Proposed Action Item:						
<p>In 2012, the Department of Geology and Mineral Industries completed significant updates to Gold Beach tsunami inundation hazard maps. In addition, the Department of Land Conservation and Development (DLCD) recently completed a tsunami land use guidebook. The Gold Beach Comprehensive Plan provides general guidance to reduce local impacts resulting from hazards. According to preliminary DOGAMI analysis, approximately 70% of Port Orford’s existing building stock is located in the Large Inundation Zone and roughly 80% is within the XX Large Inundation Zone. Development and adoption of a local land use overlay zone will ensure a local conversation about what specific uses are appropriate within each of the five DOGAMI tsunami inundation zones. Once adopted, the zone will ensure that new development will be directed outside the tsunami inundation zone or only be allowed where appropriate within the tsunami zones.</p>						
Ideas for Implementation:					Actions Status	
<p>Review the Curry County Recovery Plan (2011 final draft) and Utilize the Department of Land Conservation and Development’s tsunami land use guidebook. Update the Gold Beach Buildable Lands Inventory. Determine the percentage of residential, commercial, industrial and public land desired both within and outside the inundation zone. Draft a tsunami overlay ordinance that meets local needs. Expand the Urban Growth Boundary if needed.</p>					Added in 2015	
Coordinating Organization:			City of Gold Beach			
Internal Partners:			External Partners:			
Mayor and Council, City Administrator			Department of Land Conservation and Development; Curry County Economic Development; Department of Geology and Mineral Industries; Oregon Regional Solutions.			
Potential Funding Sources:			Estimated cost:		Timeline:	
General Fund; DLCD Technical Assistance Grant			Unknown		<input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Short Term (1-4 years) <input type="checkbox"/> Mid-Term (4-10 years) <input type="checkbox"/> Long-Term (10+ years)	
Action Item Status:		New				

Brookings Priority Action #1 (Multi-Hazard)		Alignment with Plan Goals:				
Safe Drinking Water Resiliency Project [HUD Resilience Competition Project]		<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> 5
		<input checked="" type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input checked="" type="checkbox"/> 8	<input checked="" type="checkbox"/> 9	<input checked="" type="checkbox"/> 10
Alignment with Existing Plans/Policies:						
HUD Resilience Competition Project						
Rationale for Proposed Action Item:						
<p>“The water supply for Brookings and Harbor consists of a single raw water source that is susceptible to saltwater intrusion. One factor affecting the water systems is the tsunami surges that occurred in 2011, which threatened the freshwater supply of the community. A tsunami is a series of tidal surges and it is estimated that the highest tidal surge in the 2011 tsunami was eight feet. The 2011 tsunami was a “distant tsunami” event meaning that the tidal surge was much lower than can be expected in a “local tsunami” event as is predicted from a CSZ earthquake. This proposed project is consistent with the Redundant Water Supply Plan of 2015 which provided clear recommendations, preliminary concepts, schematic drawings and cost estimates for capital improvement projects that could be completed in order to establish an alternative water supply.” - State of Oregon HUD NDRC Phase 2 Application</p>						
Ideas for Implementation:				Actions Status		
Refer to the HUD application for additional information and implementation ideas				Added in 2015.		
Coordinating Organization:		City of Brookings				
Internal Partners:			External Partners:			
			State of Oregon			
Potential Funding Sources:			Estimated cost:		Timeline:	
HUD Resilience Competition			\$7,662,359		<input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Short Term (1-4 years) <input type="checkbox"/> Mid-Term (4-10 years) <input type="checkbox"/> Long-Term (10+ years)	
Action Item Status:		New				

Brookings Priority Action #2 (Multi-Hazard)		Alignment with Plan Goals:				
Critical Healthcare Resiliency Project [HUD Resilience Competition Project]		<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> 5
		<input checked="" type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input checked="" type="checkbox"/> 8	<input checked="" type="checkbox"/> 9	<input checked="" type="checkbox"/> 10
Alignment with Existing Plans/Policies:						
HUD Resilience Competition Project						
Rationale for Proposed Action Item:						
<p>“There is a demonstrated need for an expanded medical clinic and emergency department (ED) in Brookings, as it is the largest city in the state of Oregon without emergency medical services (CHD website, 2015). Every day, between two to six ambulances transport patients from Curry Medical Center to an emergency room elsewhere in the region (CHD website, 2015). The Curry Health Network (CHN), a taxpayer-supported public hospital district, understands the need and is working on expanding health care services offered to the Brookings Harbor community to alleviate long-distance travel.” - State of Oregon HUD NDRC Phase 2 Application</p>						
Ideas for Implementation:				Actions Status		
Refer to the HUD application for additional information and implementation ideas				Added in 2015.		
Coordinating Organization:		City of Brookings				
Internal Partners:			External Partners:			
			State of Oregon			
Potential Funding Sources:			Estimated cost:		Timeline:	
HUD Resilience Competition			\$13,284,458		<input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Short Term (1-4 years) <input type="checkbox"/> Mid-Term (4-10 years) <input type="checkbox"/> Long-Term (10+ years)	
Action Item Status:		New				

Brookings Priority Action #3 (Multi-Hazard)		Alignment with Plan Goals:				
Sewer Storm Disaster Repairs Project [HUD Resilience Competition Project]		<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> 5
		<input checked="" type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input checked="" type="checkbox"/> 8	<input checked="" type="checkbox"/> 9	<input checked="" type="checkbox"/> 10
Alignment with Existing Plans/Policies:						
HUD Resilience Competition Project						
Rationale for Proposed Action Item:						
<p>“There is a significant infiltration and intrusion problem in the City sewer system. This problem was exacerbated during the January 2012 flood disaster with millions of gallons of stormwater entering and overwhelming the sewer collection system. At one point, the peak flow at the Wastewater Treatment Plant (WWTP) reached 10.3 million gallons; more than 10 times the typical daily flow, resulting in four reported sanitary sewer overflows (SSOs). This was the most reported SSOs the City has ever experienced in one storm event. Initial phases to repair the sewer system have been started, where TV inspection of the system determined weakened areas of the system where most of the infiltration is occurring. The next steps are re-inspection followed by pipe lining and, if needed, excavation and replacement.” - State of Oregon HUD NDRC Phase 2 Application</p>						
Ideas for Implementation:				Actions Status		
Refer to the HUD application for additional information and implementation ideas				Added in 2015.		
Coordinating Organization:		City of Brookings				
Internal Partners:			External Partners:			
			State of Oregon			
Potential Funding Sources:			Estimated cost:		Timeline:	
HUD Resilience Competition			\$1,137,615		<input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Short Term (1-4 years) <input type="checkbox"/> Mid-Term (4-10 years) <input type="checkbox"/> Long-Term (10+ years)	
Action Item Status:		New				

Brookings Priority Action #4 (Multi-Hazard)		Alignment with Plan Goals:				
Multifamily LMI and Tsunami-Safe Housing Program [HUD Resilience Competition Project]		<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> 5
		<input checked="" type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input checked="" type="checkbox"/> 8	<input checked="" type="checkbox"/> 9	<input checked="" type="checkbox"/> 10
Alignment with Existing Plans/Policies:						
HUD Resilience Competition Project						
Rationale for Proposed Action Item:						
<p>"Low and moderate income families in Brookings and Harbor are concentrated within the most vulnerable areas and are subject to higher risk of flooding and potential loss of life due to tsunami impacts than middle and upper income families. These families are also more likely to be renters and burdened by housing costs than middle and upper income families. Based on feedback from local housing advocates and service providers, there is a dire shortage of affordable rental housing in Brookings and no affordable rental housing options in areas outside of the tsunami inundation zone. Families would choose to move to safer areas, without the risk of flooding and evacuation concerns, if they could afford to." - State of Oregon HUD NDRC Phase 2 Application</p>						
Ideas for Implementation:				Actions Status		
Refer to the HUD application for additional information and implementation ideas				Added in 2015.		
Coordinating Organization:		City of Brookings				
Internal Partners:			External Partners:			
			State of Oregon			
Potential Funding Sources:			Estimated cost:		Timeline:	
HUD Resilience Competition			\$4,475,000		<input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Short Term (1-4 years) <input type="checkbox"/> Mid-Term (4-10 years) <input type="checkbox"/> Long-Term (10+ years)	
Action Item Status:		New				

Brookings Priority Action #5 (Multi-Hazard)		Alignment with Plan Goals:				
Electricity Reliability Project [HUD Resilience Competition Project]		<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> 5
		<input checked="" type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input checked="" type="checkbox"/> 8	<input checked="" type="checkbox"/> 9	<input checked="" type="checkbox"/> 10
Alignment with Existing Plans/Policies:						
HUD Resilience Competition Project						
Rationale for Proposed Action Item:						
<p>"Electric service to Brookings Harbor is provided by Coos-Curry Electric Cooperative (CCEC), which purchases electricity from the Bonneville Power Administration (BPA). CCEC provides the only source of grid power for the entire South Oregon Coast from Gold Beach on the north to the California border in the south. CCEC receives power from the BPA at CCEC's Gold Beach substation and then conveys the power to customers. The key "backbone" of CCEC's electric system is the high-voltage transmission lines which run from Gold Beach to Harbor and provide power to several substations and to the lower-voltage distribution lines which provide service to customers. CCEC's transmission line is a dead-end line that terminates at the Harbor substation, from which lower-voltage distribution lines continue southwards. There is no connection between CCEC's electric grid and the California electric grid. Therefore, failure of CCEC's transmission lines means that there is no back-up power source. Customers who lose power are unavoidably without power until CCEC's system is repaired." - State of Oregon HUD NDRC Phase 2 Application</p>						
Ideas for Implementation:				Actions Status		
Refer to the HUD application for additional information and implementation ideas				Added in 2015.		
Coordinating Organization:		City of Brookings				
Internal Partners:			External Partners:			
			State of Oregon			
Potential Funding Sources:			Estimated cost:		Timeline:	
HUD Resilience Competition			\$4,367,840		<input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Short Term (1-4 years) <input type="checkbox"/> Mid-Term (4-10 years) <input type="checkbox"/> Long-Term (10+ years)	
Action Item Status:		New				

Brookings Priority Action #6 (Multi-Hazard)		Alignment with Plan Goals:				
Utilize the final multi-hazard risk report and assessment currently being developed by DOGAMI through FEMA's RiskMap program to update the Goal 7 Section of the Brookings Comprehensive Plan.		<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> 5
		<input checked="" type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input checked="" type="checkbox"/> 8	<input checked="" type="checkbox"/> 9	<input checked="" type="checkbox"/> 10
Alignment with Existing Plans/Policies:						
Statewide Planning Goal 7						
Rationale for Proposed Action Item:						
Brookings maintains and regularly updates its Comprehensive Plan. The last update occurred in 2014. Even so, the Goal 7 natural hazards section contains relatively general policy direction. Significant updates to hazard information for multiple natural hazards have been made in recent years, including recent updates to local landslide inventories and tsunami inundation hazard maps. The Department of Geology and Mineral Industries is currently working to complete an updated multi-hazard risk report. This action reflects the need to update the Brookings policy framework as it relates to natural hazards given the availability of new hazard information.						
Ideas for Implementation:				Actions Status		
Use new hazard data to update the Brookings Comprehensive Plan				Added in 2015.		
Coordinating Organization:		Brookings Community Development				
Internal Partners:			External Partners:			
Planning Commission; City Council; City Department Representatives			DCLD, FEMA, DOGAMI, Oregon Sea Grant; Oregon Resilience Officer; Oregon Regional Solutions			
Potential Funding Sources:			Estimated cost:		Timeline:	
General fund, DLCD technical assistance grant, Oregon, Oregon foundation grant (e.g. Oregon Community Foundation, The Ford Family Foundation, Meyer, etc.)			\$20,000 to \$40,000+		<input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Short Term (1-4 years) <input type="checkbox"/> Mid-Term (4-10 years) <input type="checkbox"/> Long-Term (10+ years)	
Action Item Status:		New				

Brookings Priority Action #7 (Tsunami)		Alignment with Plan Goals:				
Adopt a Tsunami Land Use Overlay Zone		<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> 5
		<input checked="" type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input checked="" type="checkbox"/> 8	<input checked="" type="checkbox"/> 9	<input checked="" type="checkbox"/> 10
Alignment with Existing Plans/Policies:						
Statewide Planning Goal 7						
Rationale for Proposed Action Item:						
<p>In 2012, the Department of Geology and Mineral Industries completed significant updates to Brookings tsunami inundation hazard maps. Those updates include the unincorporated community of Harbor which is outside the Brookings city limit but inside the Urban Growth Boundary. In addition, the Department of Land Conservation and Development (DLCD) recently completed a tsunami land use guidebook. The Brookings Comprehensive Plan provides general guidance to reduce local impacts resulting from hazards. Because Brookings has much less developed area subject to tsunami inundation, there are more opportunities to limit new development within inundation areas. Notable, the unincorporated area of Harbor, which is within the Brookings UGB, has higher tsunami inundation exposure. Development and adoption of a local land use overlay zone will ensure a local conversation about what specific uses are appropriate within each of the five DOGAMI tsunami inundation zones. Once adopted, the zone will ensure that new development will be directed outside the tsunami inundation zone or only be allowed where appropriate within the tsunami zones.</p>						
Ideas for Implementation:					Actions Status	
<p>Review the Curry County Recovery Plan (2011 final draft) and Utilize the Department of Land Conservation and Development's tsunami land use guidebook. Update the Gold Beach Buildable Lands Inventory. Determine the percentage of residential, commercial, industrial and public land desired both within and outside the inundation zone. Draft a tsunami overlay ordinance that meets local needs. Expand the Urban Growth Boundary if needed.</p>					Added in 2015	
Coordinating Organization:		City of Brookings				
Internal Partners:			External Partners:			
Mayor and Council, City Administrator			Department of Land Conservation and Development; Curry County Economic Development; Department of Geology and Mineral Industries; Oregon Regional Solutions.			
Potential Funding Sources:			Estimated cost:		Timeline:	
General Fund; DLCD Technical Assistance Grant			Unknown		<input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Short Term (1-4 years) <input type="checkbox"/> Mid-Term (4-10 years) <input type="checkbox"/> Long-Term (10+ years)	
Action Item Status:		New				

Brookings Priority Action #8 (Multi-Hazard)		Alignment with Plan Goals:				
Analyze the Port Jetty's and storm water system in Brookings for stability during floods and severe storms and identify mitigation options	<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> 5	
	<input checked="" type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input checked="" type="checkbox"/> 8	<input checked="" type="checkbox"/> 9	<input checked="" type="checkbox"/> 10	
Alignment with Existing Plans/Policies:						
Port Plan						
Rationale for Proposed Action Item:						
<p>Brookings is struggling with the deterioration of their waterfront areas, jetties, and dunes. Constant erosion from rain, wind and storm surges impact the safety of their ports, and the economic health of these communities.</p> <p>The local Ports are also impacted by heavy rain baring winter storms that cause deterioration of jetty's and threaten one of the area's most lucrative community business infrastructures. The threat to sport and commercial fishing as well as property damage when storm waters inundate marinas, rivers and low lying areas at sea level.</p> <p>The City of Brookings has a storm water master plan that was created in 2008 and can help to identify mitigation options. There is a need to now implement the plan.</p> <p>The Disaster Mitigation Act of 2000 requires communities to identify actions and projects that reduce the effects of hazards on both new and existing buildings and infrastructure [201.6(c)(3)(ii)].</p>						
Ideas for Implementation:					Actions Status	
<ul style="list-style-type: none"> Survey maintenance needs of Port Jetty's and storm water system for stability Explore funding sources for work needed Implement the Brookings 2008 Storm Water Master Plan 					Deferred from 2010	
Coordinating Organization:		City of Brookings Public Works				
Internal Partners:			External Partners:			
Port of Brookings City of Brookings Planning and Finance						
Potential Funding Sources:		Estimated cost:	Timeline:			
General Fund; DLCDC Technical Assistance Grant		Unknown	<input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Short Term (1-4 years) <input type="checkbox"/> Mid-Term (4-10 years) <input type="checkbox"/> Long-Term (10+ years)			
Action Item Status:		Continued Action from 2010 Plan				

Brookings Priority Action #8 (Severe Storm)		Alignment with Plan Goals:			
Convert existing distribution facilities to underground at the Port of Brookings/Harbor	<input checked="" type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input checked="" type="checkbox"/> 5
	<input checked="" type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input checked="" type="checkbox"/> 8	<input checked="" type="checkbox"/> 9	<input checked="" type="checkbox"/> 10
Alignment with Existing Plans/Policies:					
Coos-Curry Electric's Disaster Plan, Long Range Plan, and Construction Work Plan.					
Rationale for Proposed Action Item:					
Coos Curry Electric Cooperative has completed converting existing overhead distribution facilities to underground at the Port of Port Orford. Distribution facilities at the Port of Gold Beach are also underground. This proposed action item is to convert existing distribution facilities to underground at the Port of Brookings/Harbor.					
Ideas for Implementation:				Actions Status	
Refer to CCEC Construction Work Plan				Added in 2015	
Coordinating Organization:	Coos Curry Electric Cooperative				
Internal Partners:		External Partners:			
Linda Spurgeon		Port of Brookings Harbor, BPA, Membership			
Potential Funding Sources:		Estimated cost:	Timeline:		
Coos Curry Electric Cooperative CIP		\$500,000	<input type="checkbox"/> Ongoing <input checked="" type="checkbox"/> Short Term (1-4 years) <input type="checkbox"/> Mid-Term (4-10 years) <input type="checkbox"/> Long-Term (10+ years)		
Action Item Status:	New				

APPENDIX A-2: ACTION ITEM POOL

The action item forms in this section present information for non-priority county action items. Note that in some cases information will need to be revised, updated or completed as each action item is considered.

Coastal Erosion # 1

Proposed Action Item:		Alignment with Plan Goals:	
Continue to monitor the progression of coastal erosion in conjunction with sea level rise.		<i>Minimize and prevent damage Increase education and outreach Protect natural resources</i>	
Alignment with Existing Plans/Policies:			
Curry County Zoning Ordinance			
Rationale for Proposed Action Item:			
<p>New research conducted in January 2010 suggests that wave heights along the Oregon coast are increasing which may impact the rate of coastal erosion. According to the study, the highest waves may be as much as 46 feet, up from estimates of only 33 feet that were made as recently as 1996, a 40 percent increase. December and January are the months such waves are most likely to occur, although summer waves are also significantly higher. (Peter Ruggiero, Paul D. Komar, Jonathan C. Allan, "Increasing wave heights and extreme value projections: The wave climate of the U.S. Pacific Northwest," Coastal Engineering, Volume 57, Issue 5, May 2010, Pages 539-552) Given this new data, Curry County and Oregon State Parks should monitor rates of coastal erosion in areas zoned for development and consider reassessing development standards to prevent coastal erosion from damaging future buildings and infrastructure.</p> <p>The Disaster Mitigation Act of 2000 requires communities to identify mitigation actions that reduce the effects of hazards on a new buildings and infrastructure [201.6(c)(3)(ii)]. Monitoring rates of coastal erosion to understand the problem, and reassessing coastal development standards to account for an increase in erosion will reduce the effects of coastal erosion on new buildings and infrastructure.</p>			
Ideas for Implementation:			
Identify areas where development is permitted and coordinate efforts among Oregon State Parks, local organizations such as Coast Watch, and Oregon State University to monitor rates of coastal erosion in these areas.			
Identify development standards to be reassessed that will account for an increase in coastal erosion.			
Coordinating Organization:	State Parks-ODOT, Sea Grant		
Internal Partners:		External Partners:	
Planning Division Coast Watch, County Road Department, County Commission		ODOT, OSU Marine Biology Extension Office, DLCD	
Potential Funding Sources:		Estimated cost:	Timeline:
			Long Term 2-4 years
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Drought # 1

Proposed Action Item:		Alignment with Plan Goals:	
Continue to enforce existing water requirement codes for rural residents through improved management.		<i>Minimize and prevent damage Increase education and outreach</i>	
Alignment with Existing Plans/Policies:			
Curry County Zoning Ordinance			
Rationale for Proposed Action Item:			
<p>Curry County has water storage requirements for rural residents that are outlined in the Curry County Zoning Ordinance. These requirements are enforced to combat drought as well as wildfire. Continuing to enforce existing water requirement codes for rural residents will ensure that water is available to address potential drought conditions and an increased vulnerability to wildfire due to drought.</p> <p>The Disaster Mitigation Act of 2000 requires communities to identify mitigation actions that reduce the effects of hazards on a new and existing buildings and infrastructure [201.6(c)(3)(ii)]. Enforcing existing water requirements will ensure the necessary water is present if rural residents need to protect their property from wildfires.</p>			
Ideas for Implementation:			
Continue to enforce water requirements for rural residents.			
Educate rural residents about the dangers of drought and wildfire in Curry County.			
Coordinating Organization:		Curry County Planning Division	
Internal Partners:		External Partners:	
Curry County cities		Coos Forest Protective Association, State of Oregon Water Resources Department, Community Wildfire Protection Team	
Potential Funding Sources:		Estimated cost:	Timeline:
			Ongoing
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Drought # 2

Proposed Action Item:		Alignment with Plan Goals:	
Identify and evaluate alternative water sources.		<i>Minimize and prevent damage</i> <i>Increase education and outreach</i>	
Alignment with Existing Plans/Policies:			
Rationale for Proposed Action Item:			
Need to diversify water sources.			
Ideas for Implementation:			
Coordinating Organization:			
Internal Partners:		External Partners:	
Potential Funding Sources:		Estimated cost:	Timeline:
			Long Term
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	New Action (2015)		

Flood # 1

Proposed Action Item:		Alignment with Plan Goals:	
Continue to review and assess the county's floodplain ordinance to determine whether it meets current NFIP requirements.		<i>Save lives and reduce injuries</i> <i>Minimize and prevent damage</i> <i>Reduce economic loss</i> <i>Increase cooperation and coordination</i>	
Alignment with Existing Plans/Policies:			
Curry County Zoning Ordinance			
Rationale for Proposed Action Item:			
<p>The National Flood Insurance Program provides communities with federally-backed flood insurance to homeowners, renters, and business owners, provided that communities develop and enforce adequate floodplain management ordinances. The benefits of adopting NFIP standards for communities are a reduced level of flood damage in the community and stronger buildings that can withstand floods. According to the NFIP, buildings constructed in compliance with NFIP building standards suffer approximately 80 percent less damage annually than those not built in compliance. Curry County reviewed and updated its floodplain ordinance in September 2009 when it adopted new floodplain maps developed by FEMA. Curry County will continue to review and assess its floodplain ordinance to determine whether it meets the current National Flood Insurance Program requirements.</p> <p>The Disaster Mitigation Act of 2000 requires communities to identify mitigation actions that address new and existing buildings and infrastructure [201.6(c)(3)(ii)]. Continued participation in the NFIP will help reduce the level of flood damage to new and existing buildings in communities while providing homeowners, renters and business owners additional flood insurance protection.</p>			
Ideas for Implementation:			
<p>Actively participate with DLCD and FEMA during Community Assistance Visits. The Community Assisted Visit (CAV) is a scheduled visit to a community participating in the NFIP for the purpose of 1) conducting a comprehensive assessment of the community's floodplain management program; 2) assisting the community and its staff in understanding the NFIP and its requirements; and 3) assisting the community in implementing effective flood loss reduction measures when program deficiencies or violations are discovered.</p> <p>Conduct an assessment of NFIP ordinances when new floodplain maps are available to ensure they reflect current flood hazards.</p> <p>Mitigate areas that are prone to flooding and/or have the potential to flood.</p>			
Coordinating Organization:		Curry County Planning Division	
Internal Partners:		External Partners:	
County Commission, Planning Commission		FEMA, DOGAMI, DLCD	
Potential Funding Sources:		Estimated cost:	Timeline:
			Long Term (2-4 Years)
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Flood # 2

Proposed Action Item:		Alignment with Plan Goals:	
Take steps to qualify for participation in the National Flood Insurance Program's (NFIP) Community Rating System.		<i>Save lives and reduce injuries</i> <i>Minimize and prevent damage</i> <i>Reduce economic losses</i>	
Alignment with Existing Plans/Policies:			
Curry County Zoning Ordinance; Curry County Flood Damage Prevention Ordinance			
Rationale for Proposed Action Item:			
<p>The Community Rating System (CRS) is operated under the National Flood Insurance Program (NFIP). The NFIP provides flood insurance to homes and businesses located in floodplains at a reasonable cost, and encourages the movement of development away from the floodplain. The program is based upon mapping areas of flood risk, and requiring local implementation to reduce that risk, primarily through restrictions on new development in floodplains. CRS recognizes community efforts that go beyond the minimum standards of the NFIP. This recognition is in the form of reduced flood insurance premiums for communities that adopt such standards. CRS encourages community activities that reduce flood losses, facilitate accurate insurance rating, and promote flood insurance awareness. (<i>Oregon Technical Resource Guide</i>. July 2000. Community Planning Workshop. Eugene, OR: University of Oregon. p. 4-34.)</p> <p>The Disaster Mitigation Act of 2000 requires communities to identify mitigation actions that address new and existing buildings and infrastructure [201.6(c)(3)(ii)]. Joining the CRS program will further protect existing buildings in Curry County from flooding events by mitigating homes beyond the minimum standards of the NFIP.</p>			
Ideas for Implementation:			
<p>Visit the CRS website to find out specifics on what Curry County can do to qualify for the CRS program and improve their CRS rating. CRS website: http://training.fema.gov/EMIWeb/CRS/. Example actions include: relocating structures in the floodplain, maintaining drainage systems, preserving open space, mapping areas not on a FIRM.</p> <p>Determine whether becoming member of the CRS is cost-effective</p>			
Coordinating Organization:	Curry County Planning		
Internal Partners:		External Partners:	
Curry County Emergency Services, Curry County Road Department		FEMA, OEM, CRS Program, Property Owners Impacted	
Potential Funding Sources:		Estimated cost:	Timeline:
			Long Term
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Flood # 3

Proposed Action Item:		Alignment with Plan Goals:	
Maintain the county's Flood Insurance Rate Maps (FIRM) when new data becomes available.		<i>Save lives and reduce injuries</i> <i>Minimize and prevent damage</i> <i>Reduce economic loss</i> <i>Increase cooperation and coordination</i>	
Alignment with Existing Plans/Policies:			
Curry County Development Code			
Rationale for Proposed Action Item:			
<p>Curry County has Flood Insurance Rate Maps current as of September 2009. The Department of Geology and Mineral Industries (DOGAMI) is currently developing digital maps of the county using Light Detection and Ranging (LIDAR) data. The LIDAR data may be useful in redrawing FIRM maps because they can be used to develop detail geologic photos of the landscape.</p> <p>The Disaster Mitigation Act of 2000 requires communities to identify geographic extent of hazards known to impact the community [201.6(c)(2)(i)]. Updated Flood Insurance Rate Maps can assist Curry County in better defining the flood hazard within the community based on the most recent data.</p>			
Ideas for Implementation:			
<p>If there are areas that need to be revised for the flood map, complete the MT-2 Forms Package (Application Forms for Conditional Letters of Map Revision and Letters of Map Revision). The forms and instructions are designed to assist requesters (community officials or individuals via community officials) in gathering the data that the FEMA needs to determine whether the effective NFIP map and Flood Insurance Study report for a community should be revised.</p> <p>Once LIDAR maps have been completed, Curry County may want to incorporate the new data into their existing FIRMs to reflect the latest information and new vulnerabilities, where applicable.</p>			
Coordinating Organization:		Curry County Planning Division	
Internal Partners:		External Partners:	
County Commission, Planning Commission		FEMA, DOGAMI, DLCD	
Potential Funding Sources:		Estimated cost:	Timeline:
			Long Term (2-4 Years)
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Flood # 4

Proposed Action Item:		Alignment with Plan Goals:	
Research flood prone areas and develop appropriate mitigation action items.		<i>Minimize and prevent damage</i>	
Alignment with Existing Plans/Policies:			
Curry County Flood Damage Prevention Ordinance, Curry County Flood Insurance Study			
Rationale for Proposed Action Item:			
<p>In Curry County, the Euchre, Chetco, Hunter’s Creek, Rogue, Winchuck, Humbug Creek all have potential flooding issues. Curry County recently updated its Flood Insurance Rate Maps to reflect new floodplain information for these areas. Researching these areas using Light Detection and Ranging (LIDAR) data to identify potential vulnerabilities, and developing appropriate mitigation action items will prevent floods from causing future damage.</p> <p>The Disaster Mitigation Act of 2000 requires communities to identify mitigation actions that address new and existing buildings and infrastructure [201.6(c)(3)(ii)]. Determining flood prone areas and developing appropriate mitigation actions can reduce any impacts that floods would have along the above rivers and creeks.</p>			
Ideas for Implementation:			
Using updated Flood Insurance Rate Maps (FIRM), the Curry County Road Department can determine potential flood prone areas and take the necessary and relevant steps to reduce the impacts of flooding on county infrastructure.			
Coordinating Organization:		Curry County Road Department	
Internal Partners:		External Partners:	
Planning Division, Emergency Services		FEMA, OEM	
Potential Funding Sources:		Estimated cost:	Timeline:
Flood Mitigation Assistance			Long Term (2-4 Years)
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Flood # 5

Proposed Action Item:		Alignment with Plan Goals:	
Identify critical infrastructure in slide and flood zones using existing databases.		<i>Minimize and prevent damage</i>	
Alignment with Existing Plans/Policies:			
Rationale for Proposed Action Item:			
Ideas for Implementation:			
Coordinating Organization:		Utilities- County Roads	
Internal Partners:		External Partners:	
Potential Funding Sources:		Estimated cost:	Timeline:
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	New Action (2015)		

Landslide # 1

Proposed Action Item:		Alignment with Plan Goals:	
Continue to track landslide events along major roadways and develop appropriate mitigation measures.		<i>Save lives and reduce injuries</i> <i>Minimize and prevent damage</i> <i>Reduce economic losses</i>	
Alignment with Existing Plans/Policies:			
Curry County Transportation Systems Plan			
Rationale for Proposed Action Item:			
<p>The Curry County Steering Committee rates the probability of a landslide occurring as high, meaning that one event is likely in a 10-35 year period. Curry County's risk assessment also notes that the landslide hazard is most prevalent along county roads and Highway 101. Continuing to track landslide events along major roadways and developing appropriate mitigation measures will reduce the impact of landslides on existing county transportation routes.</p> <p>The Disaster Mitigation Act of 2000 requires communities to identify actions and projects that reduce the effects of hazards on new and existing buildings and infrastructure [201.6(c)(3)(ii)]. Tracking landslide events along major roadways, and developing appropriate mitigation measures can reduce the impact to existing infrastructure in the county.</p>			
Ideas for Implementation:			
Use DOGAMI's LIDAR maps of Curry County showing landslide hazard areas to identify potential landslide areas and track them on a regular basis.			
Coordinate efforts with the Oregon Department of Transportation (ODOT) to develop appropriate mitigation measures along the Highway 101 corridor.			
Coordinating Organization:		Curry County Road Department	
Internal Partners:		External Partners:	
Curry County Planning Division, Emergency Management		ODOT, FEMA, DOGAMI	
Potential Funding Sources:		Estimated cost:	Timeline:
			Short Term (0-2 Years)
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Tsunami # 1

Proposed Action Item:		Alignment with Plan Goals:	
Seek funding to relocate critical services outside of the tsunami inundation zone.		<i>Save lives and reduce injuries</i> <i>Minimize and prevent damage</i>	
Alignment with Existing Plans/Policies:			
Curry County Capital Improvements Plan.			
Rationale for Proposed Action Item:			
Curry County's tsunami risk assessment has identified several critical facilities in the county's tsunami inundation zone. These include:			
<ul style="list-style-type: none"> • Police and fire departments in Port Orford and Gold Beach • All Curry County governmental offices in Gold Beach 			
Seeking funds to relocate these critical services outside of the tsunami inundation zone will make Curry County more resilient to tsunamis and better able to respond and recover from a tsunami event.			
The Disaster Mitigation Act of 2000 requires communities to identify actions and projects that reduce the effects of hazards on new and existing buildings and infrastructure [201.6(c)(3)(ii)]. Relocating critical services outside of the tsunami inundation zone would be a step towards safeguarding critical services.			
Ideas for Implementation:			
Determine what funding sources are available for moving critical services outside of the tsunami inundation zone and begin applying for that funding.			
Identify potential locations for relocating or rebuilding critical service facilities.			
Coordinating Organization:		Curry County Commission	
Internal Partners:		External Partners:	
Curry County Road Department		FEMA, OEM	
Potential Funding Sources:		Estimated cost:	Timeline:
Department of Homeland Security Pre-Disaster Mitigation Program			Long Term (2-4 Years)
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Wildfire # 1

Proposed Action Item:		Alignment with Plan Goals:	
Implement actions in the Curry County Community Wildfire Protection Plan.		<i>Save lives and reduce injuries</i> <i>Minimize and prevent damage</i> <i>Reduce economic losses</i> <i>Increase cooperation and coordination</i> <i>Protect natural and cultural resources</i>	
Alignment with Existing Plans/Policies:			
Curry County Community Wildfire Protection Plan			
Rationale for Proposed Action Item:			
<p>A Community Wildfire Protection Plan (CWPP) identifies a community's wildfire risk and develops long and short term mitigation strategies to reduce the impacts of wildfire. Curry County completed a CWPP in 2008. Implementing CWPP actions will significantly reduce Curry County's risk to wildfire and potential damage that the county may face.</p> <p>The Disaster Mitigation Act of 2000 requires communities to identify geographic extent of hazards known to impact the community [201.6(c)(2)(i)]. The wildfire risk assessment indicates that Curry County has a high probability and high vulnerability to wildfires. Implement mitigation actions in the Curry County CWPP will significantly reduce the county's wildfire vulnerability.</p>			
Ideas for Implementation:			
<p>Coordinate planning efforts with Curry County Emergency Management and local communities.</p> <p>Develop strategies to involve the public to gather feedback on the wildfire risk in Curry County and strategies to reducing that risk.</p>			
Coordinating Organization:		Community Wildfire Protection Team (CWPT)	
Internal Partners:		External Partners:	
Curry County Emergency Services		BLM, Oregon Department of Forestry, US Forest Service, cities, property owners	
Potential Funding Sources:		Estimated cost:	Timeline:
Identified in the Curry County CWPP.			Long Term (2-4 Years)
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Wildfire # 2

Proposed Action Item:		Alignment with Plan Goals:	
Encourage new development to incorporate wildfire mitigation measures and ensure adequate emergency access.		<i>Save lives and reduce injuries</i> <i>Minimize and prevent damage</i> <i>Protect natural resources</i>	
Alignment with Existing Plans/Policies:			
Curry County Community Wildfire Protection Plan, Curry County Zoning Ordinance			
Rationale for Proposed Action Item:			
<p>According to the wildfire risk assessment, Curry County continues to see growth in forested areas and along steep slopes, factors which increase these developments' vulnerability to wildfires. In addition, there are several properties in the Wildland-Urban Interface that are considered at risk to wildfires. Encouraging new and existing developments in the WUI to incorporate wildfire mitigation measures and ensure adequate emergency access will protect new developments from future wildfire events.</p> <p>The Disaster Mitigation Act of 2000 requires communities to identify actions and projects that reduce the effects of hazards on new and existing buildings and infrastructure [201.6(c)(3)(ii)]. Encouraging new and existing development to incorporate wildfire mitigation and ensure adequate emergency access will protect both new and existing buildings.</p>			
Ideas for Implementation:			
Continue enforcement of zoning and development codes for new construction.			
Conduct outreach with WUI communities/properties about wildfire mitigation and assess properties for wildfire risk			
Coordinating Organization:		Curry County Planning Division	
Internal Partners:		External Partners:	
Curry County Emergency Services		Oregon Department of Forestry, FEMA	
Potential Funding Sources:		Estimated cost:	Timeline:
			Ongoing
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Wind Storm # 1

Proposed Action Item:		Alignment with Plan Goals:	
Educate the public about the role of proper tree pruning and care in preventing damage during windstorms.		<i>Minimize and prevent damage</i> <i>Increase education and outreach</i>	
Alignment with Existing Plans/Policies:			
Rationale for Proposed Action Item:			
<p>High winds can topple trees and break limbs which in turn can result in downed power lines and power outages. Damaging windstorms that cause extended power outages can also disrupt businesses and critical facilities such as hospitals and care centers. Educating the community about the risk of downed power lines and proper tree pruning and care can reduce the impact of power outages on the community.</p> <p>According to Curry County’s risk assessment, the county has a high probability of a wind storm occurring and a high vulnerability to wind storms. Given these high probability and vulnerability ratings, Curry County is also susceptible to experiencing downed power lines and extended power outages. Educating the community about the risk of downed power lines and developing appropriate preparedness measures for power outages will raise awareness about the risks of downed power lines and reduce the community’s overall vulnerability to power outages.</p>			
Ideas for Implementation:			
Use brochures and public outreach activities to disseminate information to community members.			
Post information on the county’s website about the risk of downed power lines and preparedness measures that community members can take in the event of a power outage.			
Coordinating Organization:		Curry County Emergency Management	
Internal Partners:		External Partners:	
Curry County Planning Division		Coos-Curry Electric Cooperative	
Potential Funding Sources:		Estimated cost:	Timeline:
			Ongoing
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Wind Storm #2

Proposed Action Item:		Alignment with Plan Goals:	
Encourage utilities to use underground construction methods where possible to reduce loss of service from windstorms.		<i>Minimize and prevent damage</i> <i>Reduce economic losses</i>	
Alignment with Existing Plans/Policies:			
Rationale for Proposed Action Item:			
<p>Tree falls during wind or winter storm events can be a risk to overhead power lines. During a wind or winter storm, tree falls have the potential to down overhead power lines, causing electric power failures. Curry County’s development code requires that all new subdivisions have underground utilities, however, undergrounding utilities outside of subdivisions and in older subdivisions can reduce the effect of ice loading and tree falls to reduce a community's risk to wind or winter storms, and limit disruptions in service.</p> <p>Curry County experiences severe wind storm events annually and is vulnerable to windstorm events in the future. The wind/winter storm risk assessment notes that Curry County’s probability of a windstorm recurring is high and the county’s vulnerability to windstorm events is also high. Undergrounding critical power lines to reduce the effect tree falls can help mitigate a community's risk to wind storms, and limit disruptions in service.</p> <p>The Disaster Mitigation Act of 2000 requires communities to identify actions and projects that reduce the effects of hazards on both new and existing buildings and infrastructure [201.6(c)(3)(ii)]. Supporting electrical utilities to use underground construction methods where possible can reduce future power outages from windstorms.</p>			
Ideas for Implementation:			
<p>Support/encourage Coos-Curry Electric to use underground construction methods outside of new subdivisions and in older subdivisions, or where possible, to reduce power outages from windstorms.</p> <p>Consider providing incentives to utilities or property owners to underground utilities.</p>			
Coordinating Organization:		Coos-Curry Electric	
Internal Partners:		External Partners:	
Curry County Emergency Services, Curry County Road Department		Other public utilities	
Potential Funding Sources:		Estimated cost:	Timeline:
Pre-Disaster Mitigation Funding Hazard Mitigation Grant Funding			Long Term (2-4 Years)
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Multi-Hazard # 1

Proposed Action Item:		Alignment with Plan Goals:	
Ensure that all critical facilities have backup power and/or emergency operations plans in place to deal with power outages.		<i>Save lives and reduce injuries</i> <i>Minimize and prevent damage</i>	
Alignment with Existing Plans/Policies:			
Rationale for Proposed Action Item:			
<p>After hurricane Katrina, Harrison County Mississippi noted that "It is important that critical facilities function during and after disasters. Local units of government want to insure continuous service by strengthening essential facilities such as fire stations, city halls, shelters, and police stations. In addition, emergency backup generators should be provided to each critical facility." (Harrison County Community Recovery Plan. August 2006. FEMA ESF-14 in support of the state of Mississippi. p. 61) Ensuring that all critical facilities have backup power and emergency operations plans to deal with power outages will assist residents in recovering from a natural disaster as well as make the process easier.</p> <p>The Disaster Mitigation Act of 2000 requires communities to identify mitigation actions that address new and existing buildings and infrastructure [201.6(c)(3)(ii)]. Ensuring that all critical facilities have backup power and emergency operations plans to deal with power outages will help protect existing buildings and infrastructure and allow for continuous service.</p>			
Ideas for Implementation:			
<p>Conduct an assessment of critical facilities to determine their priority in an emergency and whether they should have backup generators and emergency operations plans.</p> <p>Seek funding from Federal and state resources to obtain generators and to develop emergency operations plans</p>			
Coordinating Organization:		Curry County Emergency Services	
Internal Partners:		External Partners:	
Curry County Departments		FEMA, Oregon Emergency Management	
Potential Funding Sources:		Estimated cost:	Timeline:
			Long Term
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan.		

Multi-Hazard # 2

Proposed Action Item:		Alignment with Plan Goals:	
Identify and disseminate information regarding alternate transportation routes.		<i>Save lives and reduce injuries Increase education and outreach</i>	
Alignment with Existing Plans/Policies:			
Curry County Emergency Operations Plan			
Rationale for Proposed Action Item:			
Flood, earthquake, tsunami, wind storms, landslides, or wildfire could disrupt transportation routes throughout the county, especially Highway 101 which is the primary highway through Curry County. Identifying alternate transportation routes and disseminating information to the public about these routes can facilitate evacuation efforts and prevent loss of life to natural hazard events.			
Ideas for Implementation:			
Identify alternate transportation routes in coordination with the County Sheriff, local Fire Departments, and ODOT.			
Map alternative transportation routes using GIS software			
Coordinating Organization:		Curry County Roads	
Internal Partners:		External Partners:	
Curry County Emergency Services		Forest Service, ODOT, DOGAMI, Curry County Aviation	
Potential Funding Sources:		Estimated cost:	Timeline:
			Short Term 0-2 Years)
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Multi-Hazard # 3

Proposed Action Item:		Alignment with Plan Goals:	
Further develop risk assessment maps to show areas at risk for all hazards.		<i>Save lives and reduce injuries Minimize and prevent damage</i>	
Alignment with Existing Plans/Policies:			
Curry County Comprehensive Plan, Curry County Development Code			
Rationale for Proposed Action Item:			
<p>Developing risk assessment maps that show areas at risk for all hazards can improve land use planning efforts in Curry County and can prevent future damage to property caused by natural hazard events. Rural areas in Curry County are experiencing growth and some of these areas have not been adequately mapped. The Department of Geology and Mineral Industries (DOGAMI) is currently developing new maps using Light Detection and Ranging (LIDAR) data that can show areas at risk to landslides tsunamis, and floods. When they are available, these hazard inventories should be incorporated into the zoning and land development ordinance. Developing risk assessment maps using the latest hazard data that show areas at risk for all hazards can prevent future damage to buildings and infrastructure.</p> <p>The Disaster Mitigation Act of 2000 requires communities to identify mitigation actions that address new buildings and infrastructure [201.6(c)(3)(ii)]. Developing risk assessment maps showing the hazard risk for all hazards can reduce the impact to new buildings and infrastructure.</p>			
Ideas for Implementation:			
Coordinate with the Department of Geologic and Mineral Industries (DOGAMI), the Federal Emergency Management Agency (FEMA), and Oregon Emergency Management (OEM) to develop and update risk assessment maps for Curry County.			
Coordinating Organization:		Curry County Commissioners	
Internal Partners:		External Partners:	
Curry County Road Department, Curry Emergency Services		DOGAMI, FEMA, OEM	
Potential Funding Sources:		Estimated cost:	Timeline:
			Short Term (0-2 Years)
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Multi-Hazard # 4

Proposed Action Item:		Alignment with Plan Goals:	
Establish mutual aid agreements between government agencies and commercial businesses in the event of an emergency (e.g. fuel, heavy equipment, food, etc.)		<i>Increase cooperation and coordination</i> <i>Save lives and reduce injuries</i> <i>Reduce economic losses</i>	
Alignment with Existing Plans/Policies:			
Curry County Emergency Operations Plan			
Rationale for Proposed Action Item:			
<p>Mutual aid agreements and assistance agreements are agreements between agencies, organizations, and jurisdictions that provide a mechanism to quickly obtain emergency assistance in the form of personnel, equipment, materials, and other associated services. The primary objective is to facilitate rapid, short-term deployment of emergency support prior to, during, and after an incident. (Source: FEMA NIMS Resource Center)</p> <p>Developing formal agreements with internal and external partners could assist the partners in collaborating and sharing the responsibility of natural hazard mitigation. Such actions to form collaborative partnerships and commitments to mitigation can assist the city in reducing its risk to the natural hazards addressed by the Natural Hazards Mitigation Plan.</p>			
Ideas for Implementation:			
<p>Identify and pursue MOUs with potential external partners such as non-profit organizations or state and federal agencies that may be able to assist in implementing pre-disaster mitigation activities.</p> <p>Renew MOUs for each calendar year so that they can be updated to reflect the changing needs and conditions of the community and internal and external partners; have both internal and external partners resign the updated MOUs each calendar year.</p> <p>Develop a continuity of operations plan for city functions. Identify opportunities for mutual-aid where needed.</p>			
Coordinating Organization:	Curry County Emergency Services		
Internal Partners:	External Partners:		
Curry County Road Department, Curry County Sheriff's Department, Curry Board of Commissioners	Local businesses, FEMA, OEM		
Potential Funding Sources:	Estimated cost:	Timeline:	
	none	Ongoing-Critical	
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Multi-Hazard # 5

Proposed Action Item:		Alignment with Plan Goals:	
Encourage citizens to prepare and maintain provisions for one week without services.		<i>Save lives and reduce injuries Increase education and outreach</i>	
Alignment with Existing Plans/Policies:			
Curry County Emergency Operations Plan			
Rationale for Proposed Action Item:			
<p>Given the importance of Highway 101 to Curry County and its proximity to numerous potential hazards, in the event of a catastrophic disaster it is likely that many residents of Curry County will be cut-off from their regular transportation and food systems. By encouraging citizens to prepare and maintain provisions for one week without services will increase the resiliency of community members to natural hazard events.</p> <p>The Disaster Mitigation Act of 2000 requires that communities continue to involve the public beyond the original planning process [201.6(c)(4)(ii)]. Developing public education programs for hazard risk mitigation and preparedness would be a way to keep the public informed of, and involved in, the county's actions to mitigate and prepare for hazards.</p>			
Ideas for Implementation:			
Provide educational material and examples of how to assemble the necessary provisions to residents of the city and employees. Outreach and awareness campaigns need to be carefully organized and developed to ensure that residents receive critical information. Information can be disseminated through the city's website or in the local newspaper. Involving the local chambers of commerce can also help to reach out to businesses. Supplies can also be kept in shipping containers located outside of mapped hazardous areas.			
Coordinating Organization:		Curry County Emergency Services	
Internal Partners:		External Partners:	
CERT, Curry County Sheriff, Curry County Board of Commissioners		DOGAMI, FEMA, OEM, hospitals	
Potential Funding Sources:		Estimated cost:	Timeline:
			Long Term (2-4 Years)
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Multi-Hazard # 6

Proposed Action Item:		Alignment with Plan Goals:	
Support efforts to create a post-disaster redevelopment plan for Curry County.		<i>Save lives and reduce injuries</i> <i>Reduce economic losses</i> <i>Increase cooperation and coordination</i>	
Alignment with Existing Plans/Policies:			
Curry County Development Code			
Rationale for Proposed Action Item:			
<p>Curry County is currently in the process of developing a post-disaster recovery plan (effort started in the fall of 2009). Developing a post-disaster recovery plan will improve the county's resilience to natural hazards (i.e. the ability to survive future natural disasters with minimum loss of life and property).</p> <p>Decisions taken in the heat of the emergency period immediately following a disaster often compromise significant opportunities to rebuild a safer community for the future. The pressure exerted by residents and property owners to have their disaster-stricken community rebuilt to its pre-disaster form and condition as quickly as possible remains a powerful factor in local, state, and federal emergency management to this day. There are ways to restrain such pressures and maintain mitigation and other post-disaster goals as high priorities during the process of long-term reconstruction even as the ashes, the rubble, and the water are receding or being cleared away. The secret lies in identifying in advance those decisions that will need to be made after a disaster that are most likely to have long-term repercussions for hazard mitigation.</p> <p>Pre-disaster and post-disaster mitigation should be two parts of a seamless whole in a sound plan for post-disaster recovery and reconstruction. The only difference is one of scale, of accelerating the pace with which existing mitigation plans are implemented, as a result of the influx of outside assistance. What is important about planning for post-disaster hazard mitigation is that the additional resources that facilitate hazard mitigation in the aftermath of a disaster do not materialize by accident. Local governments manage to secure such resources in large part because they have planned to do so. (Source: FEMA, "Policies for Guiding Planning for Post-Disaster Recovery and Reconstruction")</p>			
Ideas for Implementation:			
Support efforts currently underway to develop a post-disaster recovery plan.			
<p>Designate a recovery management team that is empowered to monitor the process and implement the community's post-disaster recovery policies. This team should also serve as the post-disaster recovery planning team, and can/should include persons involved in pre-disaster mitigation planning efforts. Involve a wide range of stakeholders and community leaders/volunteers. Discuss post-disaster recovery planning at future mitigation plan meetings.</p>			
Coordinating Organization:	Curry County Board of Commissioners		
Internal Partners:		External Partners:	
All county departments		Fire Department, Sheriff Department, cities, Oregon Partnership for Disaster Resilience	
Potential Funding Sources:		Estimated cost:	Timeline:
Department of Homeland Security			Short Term (0-2 Years)
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Multi-Hazard # 7

Proposed Action Item:		Alignment with Plan Goals:	
Educate and encourage businesses, schools, and governmental organizations to develop continuity of operations plans.		<i>Minimize and prevent damage</i> <i>Reduce economic losses</i> <i>Increase education and outreach</i>	
Alignment with Existing Plans/Policies:			
Curry County Emergency Operations Plan			
Rationale for Proposed Action Item:			
<p>It is important for Curry County businesses, schools and governmental organizations to stay open for both economic and societal benefits. In particular, the retail, fishing, timber and hospitality industries are some of the most important in Curry County.</p> <p>Research conducted by Richard Wilson has shown that staff turnover is likely to occur after a disaster. Veteran staff is critical after a disaster. It is important to prevent turnover so that existing personnel do not have to take on extra responsibilities during an already stressful time. Continuity planning can also help lessen turnover by ensuring competitive salaries and benefits and by reducing the amount of stress that staff will have to endure.</p> <p>The Disaster Mitigation Act of 2000 requires communities to develop actions that reduce the impact of a natural hazard [201.6(c)(3)(ii)]. Educating businesses, schools and governmental organizations about the importance of developing continuity of operations plans can encourage the development of plans and make businesses and governmental organizations more resilient to natural hazards.</p>			
Ideas for Implementation:			
Place links to business continuity best practices on the Curry County Emergency Services website for easy access.			
For governmental organizations, research and review completed continuity of operations plans (COOPs) to provide a foundation of expected content and issues to review. The COOP should ensure shelter housing for critical staff and family members such as city officials, public works employees, emergency response, and others.			
Assess and prioritize critical positions and resources vital to the continuance of important County functions.			
Incorporate government COOP into the existing Emergency Operations Plans where applicable.			
Coordinating Organization:	Curry County Emergency Management		
Internal Partners:		External Partners:	
All county departments		FEMA, OEM, Cities, Chambers of Commerce	
Potential Funding Sources:		Estimated cost:	Timeline:
			Short Term (0-2 Years)
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Multi-Hazard # 8

Proposed Action Item:		Alignment with Plan Goals:	
Develop back-up systems for county records.		<i>Minimize and prevent damage</i>	
Alignment with Existing Plans/Policies:			
Rationale for Proposed Action Item:			
<p>County records are pivotal in ensuring Curry County or any county can conduct the county's business. Without a back-up system for those records, it leaves the county vulnerable to data loss in the event of a natural disaster.</p> <p>After hurricane Katrina, Harrison County Mississippi noted that "It is important that critical facilities function during and after disasters. Local units of government want to ensure continuous service by strengthening essential facilities such as fire stations, city halls, shelters, and police stations."¹ Ensuring that Curry County has a backup system for its records will assist in the county's recovery from a natural disaster and assist in continuing to provide essential county services.</p> <p>The Disaster Mitigation Act of 2000 requires communities to develop actions that reduce the impact of a natural hazard [201.6(c)(3)(ii)]. Developing a back-up system for county records would reduce the impact and loss of government continuity.</p>			
Ideas for Implementation:			
Determine what system or systems (electronic or otherwise) would be most beneficial in helping Curry County back-up county records.			
Coordinating Organization:		Curry County Commissioners	
Internal Partners:		External Partners:	
GIS, Planning Division, Curry County Emergency Services		Cities, OEM	
Potential Funding Sources:		Estimated cost:	Timeline:
			Long Term (2-4 Years)
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

¹ Source: Harrison County Community Recovery Plan. August 2006. FEMA ESF-14 in support of the state of Mississippi. p. 61.

Multi-Hazard # 9

Proposed Action Item:		Alignment with Plan Goals:	
Incorporate the natural hazards mitigation plan into the Curry County Comprehensive Plan.		<i>Save lives and reduce injuries</i> <i>Minimize and prevent damage</i> <i>Increase education and outreach</i> <i>Increase cooperation and coordination</i>	
Alignment with Existing Plans/Policies:			
Curry County Comprehensive Plan, Curry County Zoning Ordinance			
Rationale for Proposed Action Item:			
<p>Goal 7 requires every local comprehensive plan to include an inventory of natural hazards within the jurisdiction of the community and to enact plan policies and implementing ordinances to direct development away from or otherwise safeguard it from the risks posed by future hazard events. Several other state goals (2, 5, 17 and 18) also contain provisions pertaining to natural hazards. New risk assessment information continually becomes available. The county believes it is important to update their Comprehensive Plan as needed to reflect new hazard information.</p> <p>The goals of mitigation planning closely mirror and advance many of the underlying objectives of sound land use planning in guiding the current and future development of the community and meeting the physical, economic, social and environmental interests of its residents. The importance of linking mitigation and land use planning is recognized in the federal Disaster Mitigation Act of 2000 (DMA2K) which requires communities to incorporate natural hazard mitigation into existing plans and policies. A periodic review of the appropriate planning documents to integrate new risk assessment information would help to integrate natural hazard mitigation into more routine tasks.</p>			
Ideas for Implementation:			
<p>Review latest vulnerability assessment and policies addressing natural hazards. The county's vulnerability assessments highlight earthquakes, landslides, coastal erosion, wildfire, tsunamis, and severe windstorms as the natural hazards most likely to create severe impacts within the community (in terms of population and/or resources affected). Implement mitigation actions that depend upon land use plans, policies and regulations to regulate the design, location, intensity, type and impact of development in hazardous areas.</p> <p>Amend comprehensive plans, policies and implementation strategies to reflect future development in seismic and tsunami hazard areas, if needed. Enact policies and implementing ordinances to direct development away from hazardous areas.</p>			
Coordinating Organization:	Curry County Planning Division		
Internal Partners:		External Partners:	
County Commission, Planning Commission		DLCD, FEMA	
Potential Funding Sources:		Estimated cost:	Timeline:
			Ongoing
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Multi-Hazard # 10

Proposed Action Item:		Alignment with Plan Goals:	
Encourage special districts (including ports) to develop addenda to the Curry County Natural Hazards Mitigation Plan.		<i>Increase cooperation and coordination</i> <i>Minimize and prevent damage</i>	
Alignment with Existing Plans/Policies:			
Rationale for Proposed Action Item:			
<p>Special districts are important parts of Curry County. They provide critical services to the public. By encouraging the special districts (ports included) to become involved in the Curry County Natural Hazard Mitigation Plan by creating addenda, all of Curry County is made less vulnerable to natural hazard events.</p> <p>The Disaster Mitigation Act of 2000 requires communities to identify mitigation actions that address new and existing buildings and infrastructure [201.6(c)(3)(ii)]. Special districts creating addenda would help protect future and existing buildings and infrastructure from all natural hazards affecting the county.</p>			
Ideas for Implementation:			
Contact special districts during when the 2010 Curry County Natural Hazard Mitigation Plan needs to be updated in 2015 and explain the potential benefits to them if they create addenda to the plan.			
Coordinating Organization:		Curry County Commissioners	
Internal Partners:		External Partners:	
Curry County Emergency Services		Special districts	
Potential Funding Sources:		Estimated cost:	Timeline:
Pre-Disaster Mitigation Funding			Critical
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Multi-Hazard # 11

Proposed Action Item:		Alignment with Plan Goals:	
Identify Red Cross shelters that are seismically sound, and retrofit existing shelters.		<i>Save lives and reduce injuries Minimize and prevent damage</i>	
Alignment with Existing Plans/Policies:			
Curry County Emergency Operations Plan			
Rationale for Proposed Action Item:			
<p>Red Cross shelters are important after a catastrophic disaster. In the event of a natural hazard emergency, residents as well as vulnerable populations, such as the very young, the elderly, and tourists, may need to seek shelter. The elderly, the very young, and tourists that visit the county are particularly vulnerable because they may require special accommodations. Identifying the Red Cross shelters that are seismically sound and retrofitting existing shelters will ensure that shelters are available to the public in the event of a natural disaster.</p> <p>The Disaster Mitigation Act of 2000 requires communities to identify mitigation actions that address new and existing buildings and infrastructure [201.6(c)(3)(ii)]. Seismically retrofitting existing shelters would help protect future and existing buildings and infrastructure.</p>			
Ideas for Implementation:			
<p>Determine the current seismic stability of existing Red Cross shelters, and pursue funding for seismic retrofits to any building found seismically unsound.</p> <p>Coordinate efforts with the police and fire stations and schools.</p>			
Coordinating Organization:		Red Cross	
Internal Partners:		External Partners:	
Curry County Emergency Services, Police, Fire		Schools, OEM, FEMA	
Potential Funding Sources:		Estimated cost:	Timeline:
State seismic rehabilitation program Pre-Disaster Mitigation Program Hazard Mitigation Grant Program			Long Term
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Multi-Hazard # 12

Proposed Action Item:		Alignment with Plan Goals:	
Explore developing a redundant utility system to supply Curry County with continuous service.		<i>Minimize and prevent damage Increase cooperation and coordination</i>	
Alignment with Existing Plans/Policies:			
Rationale for Proposed Action Item:			
<p>Only one power line from the north supplies power to all of Curry County, making the county vulnerable to widespread power outages in the event of a disaster. In the event of a large-scale natural disaster, it is possible and even likely that Curry County would be without power for an extended period of time. Exploring the possibility of a redundant power supply will help ensure continuous service in the county.</p> <p>The Disaster Mitigation Act of 2000 requires communities to develop actions that reduce the impact of a natural hazard [201.6(c)(3)(ii)]. Developing a redundant utility system for Curry County would help reduce the impact of natural disasters.</p>			
Ideas for Implementation:			
<p>Determine the Curry County’s electrical need and whether or not it would be feasible to provide that energy by developing a redundant utility system.</p> <p>Coordinate efforts with Coos-Curry Electric and other utility providers to the south.</p>			
Coordinating Organization:		Curry County Commission	
Internal Partners:		External Partners:	
Curry County Economic Development, Curry County Emergency Services		Coos-Curry Electric, other utility providers	
Potential Funding Sources:		Estimated cost:	Timeline:
			Long Term (2-4 Years)
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Multi-Hazard # 13

Proposed Action Item:		Alignment with Plan Goals:	
Develop a multi-hazard public education campaign targeted to residents and tourists about the natural hazards Curry County is vulnerable to and mitigation measures they can implement.		<i>Save lives and reduce injuries</i> <i>Minimize and prevent damage</i> <i>Increase cooperation and coordination</i> <i>Increase education and outreach</i>	
Alignment with Existing Plans/Policies:			
Rationale for Proposed Action Item:			
Developing educational campaigns to conduct education and outreach efforts regarding natural hazards can improve Curry County's resiliency to natural hazard events.			
The Disaster Mitigation Act of 2000 requires communities to identify mitigation actions that address new and existing buildings and infrastructure [201.6(c)(3)(ii)]. By educating residents and tourists about natural hazards in Curry County, they are then empowered to make intelligent choices about their own homes, businesses and behaviors.			
Ideas for Implementation:			
<p>Educate residents and tourists about the earthquake and tsunami risks. Post information in well-traveled areas, including restaurants, hotels, parks, and campgrounds.</p> <p>Continue wildfire education & outreach activities during wildfire season (fall).</p> <p>Target tsunami education & outreach to the following populations residing in the tsunami-inundation zone: persons 65 years of age and older; singer-mother households; and renters.</p> <p>Develop education & outreach activities to occur during earthquake awareness month (April).</p> <p>Evaluate feasibility and applicability of a standardized siren system in beach residential and recreational areas.</p> <p>Assess the placement of tsunami warning signs throughout the coastal communities and Highway 101 corridor.</p> <p>Provide fire safety and fire prevention information pamphlets in easy to read and understandable formats.</p> <p>Target areas frequented by tourists such as motels, RV parks, community and state parks, restaurants, real estate offices, and the chamber of commerce. Provide these areas with kiosks for display of information if necessary.</p> <p>Establish weekly fire prevention articles in local print media during fire season.</p>			
Coordinating Organization:		Curry County Emergency Services	
Internal Partners:		External Partners:	
Planning Division, Police, Fire		Coos Forest Protective Association, Community Wildfire Protection Team, DOGAMI, FEMA, OEM	
Potential Funding Sources:		Estimated cost:	Timeline:
			Ongoing
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Multi-Hazard # 14

Proposed Action Item:		Alignment with Plan Goals:	
Complete a risk analysis for the hazards addressed in this plan, when information is available, to estimate potential loss of life and damage to property.		<i>Minimize and prevent damage</i> <i>Reduce economic losses</i>	
Alignment with Existing Plans/Policies:			
Rationale for Proposed Action Item:			
<p>A risk analysis involves estimating the damage, injuries, and costs likely to be incurred in a geographic area over a period of time. Risk has two measurable components: (1) the magnitude of the harm that may result, defined through the vulnerability assessment, and (2) the likelihood or probability of the harm occurring. Hazards US (HAZUS) is a risk assessment software program for analyzing potential losses from floods, hurricane winds and earthquakes and can assist communities in completing the risk analysis phase. In HAZUS-MH current scientific and engineering knowledge is coupled with the latest geographic information systems (GIS) technology to produce estimates of hazard-related damage before, or after a disaster occurs. Completing a risk analysis with available data for the hazards listed in this plan can help Curry County in prioritizing areas for natural hazards mitigation.</p> <p>The Disaster Mitigation Act of 2000 recommends that communities estimate the potential dollar losses to vulnerable structures. [201.6(c)(2)(ii)(B)]. Completing a risk analysis for hazards addressed in this plan will provide Curry County with an estimate of the potential effects impacts of a hazard event.</p>			
Ideas for Implementation:			
<p>Order the HAZUS-MH software free of charge from the FEMA Publication Warehouse. Information can be found at http://www.fema.gov/plan/prevent/hazus/index.shtm. Federal, State, and local government agencies and the private sector can order this information.</p> <p>Coordinate efforts to complete a risk analysis with the Department of Geology and Mineral Industries (DOGAMI) who has used HAZUS-MH software for several counties and cities across Oregon.</p> <p>Use the results from the HAZUS software to update Curry County’s vulnerability assessment and develop appropriate mitigation actions as needed.</p>			
Coordinating Organization:		Curry County GIS	
Internal Partners:		External Partners:	
Emergency Services, Planning Division, Road Department		DOGAMI, OEM, FEMA	
Potential Funding Sources:		Estimated cost:	Timeline:
			Long Term
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Multi-Hazard # 15

Proposed Action Item:		Alignment with Plan Goals:	
Outsource an engineering analysis/study for each Coos-Curry Electric Substation in Curry County (8) to identify necessary work to harden and improve each facility's reliability and structural integrity.			
Alignment with Existing Plans/Policies:			
Coos-Curry Electric's Disaster Plan, Long-Range Plan and Construction Work Plan			
Rationale for Proposed Action Item:			
Disaster preparedness.			
Ideas for Implementation:			
Coordinating Organization:	Coos- Curry Electric		
Internal Partners:		External Partners:	
		BPA Membership	
Potential Funding Sources:		Estimated cost:	Timeline (Circle One):
CFC		\$30,000 for study/analysis	Immediate 1-3 Years
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	New Action (2015)		

Multi-Hazard # 16

Proposed Action Item:		Alignment with Plan Goals:	
Coos-Curry Electric needs to replace critical overhead distribution feeders with underground to facilitate power restoration work and lessen power outage duration after major weather events.			
Alignment with Existing Plans/Policies:			
Coos-Curry Electric's Disaster Plan, Long Range Plan, and Construction Work Plan.			
Rationale for Proposed Action Item:			
Disaster preparedness.			
Ideas for Implementation:			
Coordinating Organization:			
Internal Partners:		External Partners:	
		BPA Membership	
Potential Funding Sources:		Estimated cost:	Timeline (Circle One):
		\$5 million	Long Term (4+ years)
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	New Action (2015)		

Plan Implementation Action Item # 1

Proposed Action Item:		Alignment with Plan Goals:	
Consider adopting the South Coast Emergency Management Advisory Committee as the coordinating body for the Curry County Natural Hazards Mitigation Plan.		<i>Increase cooperation and coordination</i>	
Alignment with Existing Plans/Policies:			
South Coast Emergency Management Advisory Committee Bylaws (2004)			
Rationale for Proposed Action Item:			
In 2004, Coos and Curry Counties created the South Coast Emergency Management Advisory Committee (SCEMAC) which advises Coos and Curry County and city governments about their emergency management programs. To avoid duplicating activities between the mitigation plan's coordinating body and SCEMAC, the coordinating body should consider adopting SCEMAC as the coordinating body for the mitigation plan if it so chooses and if it improves the ability of the counties to implement local mitigation actions.			
Ideas for Implementation:			
Review the activities of the mitigation plan's coordinating body and the SCEMAC to determine if activities are being duplicated.			
If efficiencies can be obtained, revise the SCEMAC bylaws and Section 4 of the Curry County Natural Hazards Mitigation Plan to make SCEMAC the mitigation plan's coordinating body.			
Coordinating Organization:	Mitigation Plan Coordinating Body		
Internal Partners:		External Partners:	
Curry County Emergency Services		Coos County, SCEMAC members	
Potential Funding Sources:		Estimated cost:	Timeline:
			Short Term (0-2 Years)
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Port Orford Action Item Updates

Action Item	Proposed Action Title	Coordinating Organization	Partner Organizations	Timeline	Alignment with Plan Goals					
					Saves Lives and Reduce Injuries	Minimize and Prevent Damage	Reduce Economic Losses	Increase Cooperation and Coordination	Increase Education and Outreach	Protect Natural and Cultural Resources
#1	Ensure continued compliance in the National Flood Insurance Program (NFIP) through enforcement of local floodplain management ordinances.	City of Port Orford	Curry County Planning Department, FEMA, OEM, DLCD	Long Term-Continuous	X					X
#2	Upgrade/Retrofit Critical facilities to reduce potential of earthquake collapse.	City of Port Orford	City of Port Orford: Planning, Finance, Port Orford School System, State of Oregon, Emergency Management, State of Oregon, Douglas County Emergency Management DOGAMI	2-4 years	X				X	
#3	Continue through multi agency coordination, to develop and initiate an abatement plan for noxious weeds – specifically gorse, scotch broom, and butterfly brush.	City of Port Orford	Private Land Owners within the City Curry County Local Port Orford Weed Board	Long-Term Continuous	X				X	
#4	Continue to identify and map high risk slide areas for mitigation possibilities and funding sources.	City of Port Orford	City of Port Orford Public Works Coos County Highways, Oregon Department of Transportation	Long Term-ongoing	X				X	X
#5	Continue to implement and enhance public education program regarding earthquakes and tsunamis.	City of Port Orford	City of Port Orford Police and Fire Port Orford Schools, DOGAMI, OEM	Long term-continuous	X				X	X
#6	Continue to review of City Comprehensive plans for the need to update hazard specific section to reflect the latest information on seismic and tsunami hazards in the City.	City of Port Orford	DOGAMI, City of Port Orford Planning, Public Works	Long Term-Continuous	X					

NOTES:

Port Orford Action Item Updates

#7	Identify and map all roads, logging trails, and private drives to access during a catastrophic event.	City of Port Orford Police and Fire Departments	City of Port Orford- City Services: Planning Curry County – Emergency Services, Private Logging Companies Curry County Forest	1-2 years	X						X
#8	Continue wildfire public education programs.	City of Port Orford	City of Port Orford - Public Works, Planning, Community Development Fire and Police Departments Curry County U.S. Forest Service Oregon Department of Forestry	Long Term-Continuous	X						X
#9	Continue wildfire prevent through public education programs to target residents, tourist, and companies in the area.	City of Port Orford	City of Port Orford Fire Department, Oregon Department of Forestry Coos Forestry Association							X	
#10	Evaluate water and sewer lanes for limited extension to new areas.										

NOTES:

Action Item Updates- City of Gold Beach

Action Item	Proposed Action Title	Coordinating Organization	Partner Organizations	Timeline	Status
#1 Multi-Hazard	Continue to review city comprehensive plan and zoning ordinance for the need to update hazard specific section to reflect the latest information on natural hazards.	City Manager (Planning Department is contracted to Curry County)	City attorney, Curry County Planning Department	Long term-ongoing	
#2 Multi-Hazard	Continue to implement public education programs regarding natural hazards.	Fire & Police Departments	Area Agency on Aging, Curry County Extension Office	Long term-ongoing	
#3 Earthquake	Seek funding to retrofit buildings and/or infrastructure at risk of damage in a high magnitude earthquake.	Gold Beach Public Works Department	City Manager, Curry County Planning Department	3-5 years and ongoing	
#4 Flood & Severe Winter Storm	Ensure continued compliance in the National Flood Insurance Program (NFIP) through enforcement of local floodplain management ordinances.	City Manager (Planning Department is contracted to Curry County)	FEMA, DLCD, Curry County Planning Department	Ongoing	
#5 Flood & Severe Winter Storm	Analyze the Port Jetty in Gold Beach for stability and identify mitigation options. Analyze stability of community airport due to the inundation of floodwaters from creeks and sewer systems.	Port of Gold Beach & Community Airport	Port of Brookings, Army Corps of Engineers	Short term (given funding); 2-3 years	
#6 Landslide	Identify and map high-risk slide areas to create an accurate logistical assessment.	City Manager (Planning Department is contracted to Curry County)	DOGAMI, Curry County Planning Department, ODOT, private industry (logging)	<1 year once initiated	
#7 Landslide	Evaluate current and high hazard slides for prioritization and explore mitigation possibilities.	Gold Beach Public Works Department	ODOT, Private Industry (logging)	2-4 years	
#8 Wildfire	Through multi-agency coordination, develop an abatement plan for control of noxious weeds, specifically Gorse, Scotch Broom and Butterfly Brush.	Fire Department (with significant assistance from external partners)	Curry Wildfire Protection Team	1-2 years for plan. Abatement, ongoing	
#9 Wildfire	Identify and map all roads, private drives, logging trails to increase the ability of firefighters to locate and gain access to provide services and/or evacuations.	Fire Department (with significant assistance from external partners)	Coos Forest Protective Association, U.S. Forest Service, Industrial Partners (logging companies), BLM, Curry Wildfire Protection Team, Curry County Planning Department, ODOT	2 years, and ongoing	

NOTES:

Action #1 (Flood)

Proposed Action Item:		Alignment with Plan Goals:	
Ensure continued compliance in the National Flood Insurance Program (NFIP) through enforcement of local floodplain management ordinances.		<i>Protect life and property</i> <i>Natural systems</i>	
Alignment with Existing Plans/Policies:			
Brookings floodplain management ordinances			
Rationale for Proposed Action Item:			
<p>The National Flood Insurance Program provides communities federally backed flood insurance to homeowners, renters, and business owners, provided that communities develop and enforce adequate floodplain management ordinances. The benefits of adopting NFIP standards for communities are a reduced level of flood damage in the community and stronger buildings that can withstand floods. According to the NFIP, buildings constructed in compliance with NFIP building standards suffer approximately 80 percent less damage annually than those not built in compliance.</p> <p>The CAV is a scheduled visit to a community participating in the NFIP for the purpose of: 1) Conducting a comprehensive assessment of the community's floodplain management program; 2) assisting the community and its staff in understanding the NFIP and its requirements; and 3) assisting the community in implementing effective flood loss reduction measures when program deficiencies or violations are discovered.</p> <p>The three incorporated cities in Curry County – Port Orford, Gold Beach, and Brookings- have limited resources and rely on the county for certain services and public facilities. Because the cities rely so heavily upon the County to provide services, this action is considered to be a multi-jurisdictional action because it benefits both the County and all the participating cities.</p> <p>The Disaster Mitigation Act of 2000 requires communities to identify mitigation actions that address new and existing buildings and infrastructure [201.6(c)(3)(ii)]. Continued participation in the NFIP will help reduce the level of flood damage to new and existing buildings in communities while providing homeowners, renters and business owners additional flood insurance protection.</p>			
Ideas for Implementation:			
<ul style="list-style-type: none"> • Actively participate with DLCD and FEMA during Community Assistance Visits. • Conduct an assessment of the floodplain ordinances to ensure they reflect current flood hazards and situations, and meet NFIP requirements. <p>The cities should coordinate with the county to ensure that floodplain ordinances and NFIP regulations are maintained and enforced.</p>			
Coordinating Organization:		City of Brookings	
Internal Partners:		External Partners:	
Curry County Planning Department		FEMA, OEM, DLCD	
Potential Funding Sources:		Estimated cost:	Timeline
			Long Term Continuous
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued from 2010 Plan		

Action #2 (Flood)

Proposed Action Item:		Alignment with Plan Goals:	
Develop Alternate Water Sources.		<i>Protect life and property</i> <i>Natural systems</i>	
Alignment with Existing Plans/Policies:			
Rationale for Proposed Action Item:			
One sole source for the water system Chetco River. Discussion of putting Ferry Creek Reservoir back on line.			
Ideas for Implementation:			
Coordinating Organization:		Public Works, City Manager	
Internal Partners:		External Partners:	
Curry County Planning Department			
Potential Funding Sources:		Estimated cost:	Timeline
			Long Term Continuous
Form Submitted by:	LauraLee Snook		
Action Item Status:	New Action (2015)		

Action #3 (Earthquake)

Proposed Action Item:		Alignment with Plan Goals:	
Upgrade/retrofit critical facilities to reduce potential of earthquake collapse		<i>Protect life and property, Partnerships and implementation</i>	
Alignment with Existing Plans/Policies:			
Rationale for Proposed Action Item:			
<p>From 2005-2007, under the direction of Oregon Senate Bill 2, DOGAMI completed a statewide seismic needs assessment that surveyed K-12 public school buildings, hospital buildings with acute inpatient care facilities, fire stations, police stations, sheriff's offices and other law enforcement agency buildings. The needs assessment consisted of rapid visual screenings (RVS). RVS results were grouped into categories by risk of probable damage in a high magnitude earthquake. The following buildings within the City of Port Orford were at "high" risk of probable damage in a high magnitude event:</p> <ul style="list-style-type: none"> • Brookings-Harbor High School • Upper Chetco Charter School <p>The Disaster Mitigation Act of 2000 requires communities to identify actions and projects that reduce the effects of hazards on both new and existing buildings and infrastructure [201.6(c)(3)(ii)].</p>			
Ideas for Implementation:			
<ul style="list-style-type: none"> • Partner with State of Oregon, Oregon Emergency Management • Conduct structural survey of specified buildings listed in DOGAMI's RVS assessment Apply current retrofitting technology to critical facilities 			
Coordinating Organization:		City of Brookings Public Works	
Internal Partners:		External Partners:	
City of Brookings: Planning, Finance Brookings School System		State of Oregon Emergency Management State of Oregon Douglas County Emergency Management DOGAMI	
Potential Funding Sources:		Estimated cost:	Timeline
			2-4 Years
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued from 2010 Plan		

Action #4 (Earthquake)

Proposed Action Item:		Alignment with Plan Goals:	
Seek funding to study the seismic vulnerability of buildings in the City of Brookings and retrofit those that are vulnerable to seismic hazards.		<i>Protect life and property, Partnerships and implementation</i>	
Alignment with Existing Plans/Policies:			
Rationale for Proposed Action Item:			
<p>From 2005-2007, under the direction of Oregon Senate Bill 2, DOGAMI completed a statewide seismic needs assessment that surveyed K-12 public school buildings, hospital buildings with acute inpatient care facilities, fire stations, police stations, sheriff's offices and other law enforcement agency buildings. The needs assessment consisted of rapid visual screenings (RVS). RVS results were grouped into categories by risk of probable damage in a high magnitude earthquake. The following buildings within the City of Port Orford were at "high" risk of probable damage in a high magnitude event:</p> <ul style="list-style-type: none"> • Brookings-Harbor High School • Upper Chetco Charter School <p>The Disaster Mitigation Act of 2000 requires communities to identify actions and projects that reduce the effects of hazards on both new and existing buildings and infrastructure [201.6(c)(3)(ii)].</p>			
Ideas for Implementation:			
Coordinating Organization:		City of Brookings Public Works	
Internal Partners:		External Partners:	
City of Brookings: Planning, Finance		State of Oregon Emergency Management State of Oregon Douglas County Emergency Management DOGAMI	
Potential Funding Sources:		Estimated cost:	Timeline
			2-4 Years
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued from 2010 Plan		

Action #5 (Earthquake)

Proposed Action Item:		Alignment with Plan Goals:	
Seek funding to study the seismic vulnerability of infrastructure in the City of Brookings and retrofit those that are vulnerable to seismic hazards.		<i>Protect life and property, Partnerships and implementation</i>	
Alignment with Existing Plans/Policies:			
Rationale for Proposed Action Item:			
<p>From 2005-2007, under the direction of Oregon Senate Bill 2, DOGAMI completed a statewide seismic needs assessment that surveyed K-12 public school buildings, hospital buildings with acute inpatient care facilities, fire stations, police stations, sheriff's offices and other law enforcement agency buildings. The needs assessment consisted of rapid visual screenings (RVS). RVS results were grouped into categories by risk of probable damage in a high magnitude earthquake. The following buildings within the City of Port Orford were at "high" risk of probable damage in a high magnitude event:</p> <ul style="list-style-type: none"> • Brookings-Harbor High School • Upper Chetco Charter School <p>The Disaster Mitigation Act of 2000 requires communities to identify actions and projects that reduce the effects of hazards on both new and existing buildings and infrastructure [201.6(c)(3)(ii)].</p>			
Ideas for Implementation:			
Coordinating Organization:		City of Brookings Public Works	
Internal Partners:		External Partners:	
City of Brookings: Planning, Finance		State of Oregon Emergency Management State of Oregon Douglas County Emergency Management DOGAMI	
Potential Funding Sources:		Estimated cost:	Timeline
			2-4 Years
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued from 2010 Plan		

Action #6 (Wildfire)

Proposed Action Item:		Alignment with Plan Goals:	
Continue to implement and enhance public education programs regarding wildfires, earthquakes, and tsunamis.		<i>Protect life and property</i> <i>Public awareness</i>	
Alignment with Existing Plans/Policies:			
Rationale for Proposed Action Item:			
<p>Wildfires generally defined as, the uncontrolled burning of forest, brush, or grassland, can be, caused by many forces. Natural ignition is usually a result of weather conditions and fuel. Human caused, fires add another dimension. Causes such as lightning strikes, faulty mufflers or catalytic converters, sparking logging equipment, and cans or broken bottles which can become so heated in the sun that they ignite dry material nearby must all be considered. In rural areas, livestock owners (particularly those with backyard horse corral) have been surprised by flash fires when manure heaps generated enough heat to spontaneously combust.</p> <p>Brookings is a part of Curry County and is vulnerable to wildfires every year given dry, hot, and windy conditions. Public education enhances safety and reduces the risk of wildfires. Education is most effective during the spring, summer, and fall fire season. Education can be limited due to current funds and staff time.</p>			
Ideas for Implementation:			
<ul style="list-style-type: none"> • Provide fire safety and fire prevention information pamphlets in easy to read and understandable format. • Target areas frequented by tourists such as motels, RV parks, community and state parks, restaurants, real estate offices, and chamber of commerce for local cities. • Provide these areas with kiosks for display of information if necessary. • Provide information to schools and colleges in the area. • Provide informational videos for local government access TV as well as local TV Stations. • Establish weekly fire prevention articles in local print media during fire season. 			
Coordinating Organization:		City of Brookings Public Works	
Internal Partners:		External Partners:	
City of Brookings - Public Works, Planning, Community Development Fire and Police Departments		Curry County U.S. Forest Service Oregon Department of Forestry	
Potential Funding Sources:		Estimated cost:	Timeline
			Long Term
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued from 2010 Plan		

Action #7 (Landslide)

Proposed Action Item:		Alignment with Plan Goals:	
Continue to identify and map high risk slide areas to create an accurate logistical assessment.		<i>Protect life and property</i> <i>Partnerships and implementation</i> <i>Natural systems</i>	
Alignment with Existing Plans/Policies:			
Rationale for Proposed Action Item:			
<p>The impetus for developing this database, is a desire to better document the magnitude and distribution of landslide occurrences throughout Oregon. Funding for the project was awarded to the Oregon Department of Geology and Minerals Industries (DOGAMI) through a competitive bidding process by the Federal Emergency Management Agency (FEMA). The resulting inventory provides both technical and non technical users with readily accessible data for exploring landslide issues.</p> <p>This data will lead to a greater understanding of regional landslide issues, and assist government and community agencies in devising means to minimize the threat to public safety and property that landslides pose.</p>			
Ideas for Implementation:			
<ul style="list-style-type: none"> • Develop a regional committee to include private companies (logging) with specific knowledge of extreme rural areas, to study high-risk areas. • Develop a regional map of high-risk areas. 			
Coordinating Organization:		City of Brookings Planning	
Internal Partners:		External Partners:	
City of Brookings Public Works		Oregon Department of Transportation Private Timber Industries	
Potential Funding Sources:		Estimated cost:	Timeline
			Long Term- Ongoing
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued from 2010 Plan		

Action #8 (Multi-Hazard)

Proposed Action Item:		Alignment with Plan Goals:	
Review of county and community comprehensive plans for the need to update hazard specific sections to reflect the latest information on seismic hazards in each community.		<i>Protection of life and property Update natural hazard sections of the comprehensive plan and integrate local NHMPs with comprehensive plans and implementing measures.</i>	
Alignment with Existing Plans/Policies:			
Rationale for Proposed Action Item:			
<p>Paleoseismic studies along the Oregon coast indicate that the state has experienced seven Cascadia Subduction Zone (CSZ) events possibly as large as M9 in the last 3,500 years. These events are estimated to have an average recurrence interval between 500 and 600 years, although the time interval between individual events ranges from 150 to 1000 years. Scientists estimate the chance in the next 50 years of a great Subduction zone earthquake is between 10 and 20 percent assuming that the recurrence is on the order of 400±200 years.¹.</p> <p>Curry County is rated ‘high’ for both vulnerability and probability of earthquake damage (Oregon Emergency Management, 2003) within a 10 year period. When or where the next big earthquake will strike cannot be predicted. However, with several seismically active faults in close proximity to the Oregon coast, the potential for large or extremely destructive earthquakes or earthquake generated tsunamis cannot be overlooked or taken lightly.</p>			
Ideas for Implementation:			
<ul style="list-style-type: none"> • Review latest vulnerability assessment and policies addressing seismic and tsunami hazards. • Amend comprehensive plans, policies and implementations to reflect future development in seismic and tsunami hazard areas, where and if needed. 			
Coordinating Organization:		City of Brookings Planning	
Internal Partners:		External Partners:	
City of Brookings Public Works		DOGAMI	
Potential Funding Sources:		Estimated cost:	Timeline
			Long Term- Ongoing
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued from 2010 Plan		

Action #9 (Multi-Hazard)

Proposed Action Item:		Alignment with Plan Goals:	
Analyze the Port Jetty's and storm water system in Brookings for stability during floods and severe storms and identify mitigation options		<i>Protect life and property</i>	
Alignment with Existing Plans/Policies:			
Rationale for Proposed Action Item:			
<p>Brookings is struggling with the deterioration of their waterfront areas, jetties, and dunes. Constant erosion from rain, wind and storm surges impact the safety of their ports, and the economic health of these communities.</p> <p>The local Ports are also impacted by heavy rain baring winter storms that cause deterioration of jetty's and threaten one of the area's most lucrative community business infrastructures. The threat to sport and commercial fishing as well as property damage when storm waters inundate marinas, rivers and low lying areas at sea level.</p> <p>The City of Brookings has a storm water master plan that was created in 2008 and can help to identify mitigation options. There is a need to now implement the plan.</p> <p>The Disaster Mitigation Act of 2000 requires communities to identify actions and projects that reduce the effects of hazards on both new and existing buildings and infrastructure [201.6(c)(3)(ii)].</p>			
Ideas for Implementation:			
<ul style="list-style-type: none"> • Survey maintenance needs of Port Jetty's and storm water system for stability • Explore funding sources for work needed • Implement the Brookings 2008 Storm Water Master Plan 			
Coordinating Organization:		City of Brookings Public Works	
Internal Partners:		External Partners:	
Port of Brookings City of Brookings Planning and Finance			
Potential Funding Sources:		Estimated cost:	Timeline
			1-2 Years
Form Submitted by:	Curry County Steering Committee		
Action Item Status:	Continued Action from 2010 Plan		

Action #10 (Multi-Hazard)

Proposed Action Item:		Alignment with Plan Goals:	
CCEC has completed converting existing overhead distribution facilities to underground at the Port of Port Orford. Distribution facilities at the Port of Gold Beach are underground. This proposed action item is to convert existing distribution facilities to underground at the Port of Brookings/Harbor.			
Alignment with Existing Plans/Policies:			
Coos-Curry Electric's Disaster Plan, Long Range Plan, and Construction Work Plan.			
Rationale for Proposed Action Item:			
Disaster preparedness.			
Ideas for Implementation:			
Coordinating Organization:			
Internal Partners:		External Partners:	
		BPA Membership	
Potential Funding Sources:		Estimated cost:	Timeline
CFC		\$500,000	Immediate (1-3 Years)
Form Submitted by:	Linda Spurgeon		
Action Item Status:	New Action (2015)		

Action #11 (Multi-Hazard)

Proposed Action Item:		Alignment with Plan Goals:	
Coos-Curry Electric needs to install additional fuel storage at its Brookings and Port Orford offices to fuel existing generators in case of emergency.			
Alignment with Existing Plans/Policies:			
Coos-Curry Electric's Disaster Plan.			
Rationale for Proposed Action Item:			
Disaster preparedness and self-reliance.			
Ideas for Implementation:			
Coordinating Organization:			
Internal Partners:		External Partners:	
		BPA	
Potential Funding Sources:		Estimated cost:	Timeline
		\$25,000	Immediate (1-3 Years)
Form Submitted by:	Linda Spurgeon		
Action Item Status:	New Action (2015)		

ⁱ NOAA, 1993. Tsunamis affecting the West Coast of the United States: 1806-1992.

APPENDIX B: PLANNING AND PUBLIC PROCESS

Plan Update Changes

This section of Appendix B describes the changes made to the 2010 Curry County Natural Hazards Mitigation Plan (NHMP) during the 2015 plan update process. Major changes are documented by plan section.

Project Background

Curry County partnered with the Oregon Partnership for Disaster Resilience (OPDR) and the Community Service Center to update the 2010 Curry County Natural Hazards Mitigation Plan (NHMP). The Disaster Mitigation Act of 2000 requires communities to update their mitigation plans every five years to remain eligible for Pre-Disaster Mitigation (PDM) program funding, Flood Mitigation Assistance (FMA) program funding, and Hazard Grant Mitigation Program (HMGP) funding. OPDR met with members of the Curry County steering committee in February, April and May of 2015 to update portions of the county's NHMP. The Cities of Port Orford, Gold Beach and Brookings participated in the plan update process.

OPDR and the committees made several changes to the 2009 NHMP. Note that a primary goal for this update was to streamline that plan and make it more accessible to a wide range of stakeholders. Major changes are documented and summarized in this memo.

2015 Plan Update Changes

The sections below discuss *major* changes made to the 2010 Curry County NHMP during the 2015 plan update process. Major changes include the replacement or deletion of large portions of text, changes to the plan's organization, new mitigation action items, and incorporation of city information directly into the multi-jurisdictional NHMP; in addition, this update includes new preliminary hazard data and analysis from DOGAMI. Additional risk assessment information currently being developed through the FEMA Risk Map program will be incorporated during the five-year maintenance period. If a section is not addressed in this memo, then it can be assumed that no significant changes occurred.

Table B.1 below lists the 2010 plan section names and the corresponding 2015 section names, as updated (major Volumes are highlighted).

Table B-1 Changes to Plan Organization

2010 Curry County Multi-jurisdictional NHMP	2015 Curry County Multi-jurisdictional NHMP
Acknowledgements	Acknowledgements
Table of Contents	Table of Contents
Volume I: Basic Plan	Volume I: Basic Plan
Executive Summary	Plan Summary
Section 1: Introduction	Section 1: Introduction
Section 2: Community Overview	Section 2: Risk Assessment and Appendix C: Community Profile
Section 3: Mission, Goals, and Action Items	Section 3: Mitigation Strategy
Section 4: Plan Implementation and Maintenance	Section 4: Plan Implementation and Maintenance
Volume II: Hazard Annexes	Volume I: Basic Plan
Coastal Erosion	
Drought	
Earthquake	
Flood	Section 2: Risk Assessment
Landslide	
Tsunami	
Wildfire	
Windstorm	
Volume III: City/Special District Addenda	Volume I: Basic Plan; Volume II
Brookings	Section 1: Introduction; Section 2: Risk Assessment; Section 3: Mitigation Strategy; Section 4: Plan Implementation and Maintenance; Appendix A, B, and C
Gold Beach	
Port Orford	
Volume IV: Mitigation Resources	Volume II: Apendixes
Appendix A: Action Item Fprms	Appendix A: Action Item Fprms
Appendix B: Planning and Public Process	Appendix B: Planning and Public Process
Appendix C: Economic Analysis of Natural Hazard Mitigation Projects	Appendix C: Community Profile
Appendix D: Region 1 Household Survey	Appendix D: Economic Analysis
Appendix E: Resources Directory	Appendix E: Grant Programs

Source: OPDR

Front Pages

1. The plan’s cover has been updated.
2. Acknowledgements have been updated to include the 2015 project partners and planning participants.

Volume I: Basic Plan

Volume I provides the overall plan framework for the 2015 Multi-jurisdictional NHMP update. Volume I contains the following sections: Plan Summary; Section 1: Introduction; Section 2: Risk Assessment; Section 3: Mitigation Strategy; and Section 4: Plan Implementation and Maintenance.

Plan Summary

The 2015 NHMP includes a plan summary that provides information about the purpose of natural hazards mitigation planning and describes how the plan will be implemented. In addition, we've added a set of hazard briefs. These are intended to summarize important information and implications for most of the hazards in the plan. Maps or graphics are included where applicable.

Section 1: Introduction

Section 1 introduces the concept of natural hazards mitigation planning and summarizes key sections of CFR 44.206. Additionally, Section 1 summarizes the 2015 plan update process, and provides an overview of how the plan is organized. Major changes to Section 1 include the following:

- Section 1 includes new information that replaces out of date text found in the 2009 NHMP. The new text describes the federal requirements that the plan addresses and gives examples of the policy framework for natural hazards planning in Oregon.
- Section 1 of the 2015 update, outlines the entire layout of the plan update, which has been altered as described above.

Section 2: Risk Assessment

Section 2, Risk Assessment, is new to the 2015 NHMP and consists of three phases: hazard identification, vulnerability assessment, and risk analysis; material that was previously described in the Community Profile, and Hazard Annex. Hazard identification involves the identification of hazard geographic extent, its intensity, and probability of occurrence. The second section addresses community vulnerability. The third section provides an overall assessment of risk to the county and participating cities. Changes to Section 2 include:

1. Hazard identification, characteristics, history, probability, vulnerability, and hazard specific mitigation activities were updated.
2. Updated NFIP information.
3. Incorporation of County Hazard Analysis information using the Oregon Office of Emergency Management methodology.
4. In addition, links to specific hazard studies and data are embedded directly into the plan where relevant and available. Addition detail is also provided for the tsunami hazard specifically.
5. Updated hazard assessment (history, maximum threat, probability, and vulnerability scores) for the county and participating cities.

Section 3: Mitigation Strategy

This section provides the basis and justification for the mission, goals, and mitigation actions identified in the NHMP. Major changes to Section 3 include the following:

- The section name changed from “Mission, Goals, Actions” to “Mitigation Strategy”
- Updated goals, reviewed and revised to align with the State NHMP.
- The revision of existing actions, lead agency and partner designations (as shown in Table 3-2 and the updated forms of Appendix A).
- A list of prioritized actions for each jurisdiction (including new action item forms in Appendix A)
- The Curry County steering committee met to review the 2009 NHMP action items. Steering Committee members and stakeholders provided updates and edits to the actions where applicable.
- New action items are based upon continuous community needs, the identification of new hazards, deferred action items, and current needs based upon the community risk assessment. They are designed to be feasibly accomplished within the next five years, and can be found in Appendix A. Several of these actions were proposed by OPDR based on a review of the risk assessment.

Section 4: Plan Implementation and Maintenance

The emergency manager proposed an updated implementation schedule and the steering committee concurred. The steering committee will discuss options to integrate the NHMP into other planning documents (including the pending county comprehensive plan update) during their meetings. In addition, the plan includes a specific action to incorporate the results of the Curry County Risk Report, currently being finalized by DOGAMI as part of the Oregon Risk Map program.

Volume II: Appendixes

Below is a summary of the appendixes included in the 2015 NHMP:

Appendix A: Action Item Forms

Action item forms were created for each of the priority actions. Action item forms from the prior plan are included where still relevant. Additional forms have been included as placeholders for new non-priority actions included in the action item pool.

Appendix B: Planning and Public Process

This planning and public process appendix reflects changes made to the Curry County NHMP and documents the 2015 planning and public process.

Appendix C: Community Profile

The community profile has been updated and streamlined for readability. The profile includes information for Curry County and the participating cities.

Appendix D: Economic Analysis of Natural Hazard Mitigation Projects

Updates are provided for the economic analysis of natural hazard mitigation projects.

Appendix E: Grant Programs

Grant programs and resources were previously listed in the NHMP's hazard profiles. Some of the previously provided resources were deemed unnecessary since this material is covered within the Oregon NHMP.

2015 NHMP Public Participation Process

The steering committee is directly involved in reaching out the public in the review and update of the natural hazard mitigation plan. Although members of the steering committee represent the public to some extent, the residents of Curry County, Gold Beach, Port Orford, and Brookings are also given the opportunity to provide feedback about the Plan. The Plan will undergo review on an annual basis.

Public Involvement Summary

During public review OPDR received no comments via the project page for the Curry County NHMP update. Members of the steering committee provided edits and updates to the NHMP during this period, as reflected in the final document.

Media Release



Contact:
Don Kendall
(541-247-3208)
kendalld@co.curry.or.us



Curry County Plans to Mitigate Natural Hazards

Gold Beach, Or. – Curry County is currently working to update the Curry County Multi Jurisdiction Hazard Mitigation Plan. The planning team consists of various stakeholders from the County and incorporated cities working in coordination with the Oregon Partnership for Disaster Resilience, and Oregon Emergency Management. Upon completion and FEMA (Federal Emergency Management Agency) approval, Curry County's Natural Hazard Mitigation Plan will allow the county eligibility to apply for federal funding towards natural hazard mitigation projects. The next meeting will be at the Gold Beach City Hall, May 15th 9:00 – 11:00 am. You can see our progress by viewing: <http://csc.uoregon.edu/opdr/currycounty>

Natural hazard mitigation is any sustained action taken to reduce or eliminate the long-term risk to human life and property from natural hazards. Example mitigation strategies include policy changes, such as updated ordinances; projects, such as seismic retrofits to critical facilities; and education and outreach to targeted audiences, such as non-English speaking residents or senior populations. Mitigation is the responsibility of individuals, private business and industries, state and local governments, and the federal government. Engaging in mitigation activities provides jurisdictions with a number of benefits, including reduced loss of life, property, essential services, critical facilities and economic assets; reduced short-term and long-term recovery and reconstruction costs; increased cooperation and communication within the community and region through the planning process; and increased potential for state and federal funding for recovery and reconstruction projects.

It is impossible to predict exactly when natural hazards will occur, or the extent to which they will affect the region. However, with careful planning and collaboration among public agencies, private sector organizations, and citizens within the region, it is possible to minimize the losses that can result from natural disasters.

Throughout history, Oregon has been subject to a range of natural disasters that have brought devastating consequences to communities. The County's Natural Hazard Mitigation Plan focuses on the primary natural hazards that could affect Curry County and include: coastal erosion, drought, earthquake, flood, landslide, tsunami, wildfire, and windstorm. The dramatic increase in the costs associated with natural disasters over the past decades has fostered interest in identifying and implementing effective means of reducing vulnerability. For every dollar spent on mitigation, society can expect an average savings of \$4. (National Institute of Building Science's Multi-hazard Mitigation Council. "Natural Hazard Mitigation Saves: An Independent Study to Assess the Future Savings from Mitigation Activities" 2005).

Steering Committee

The Curry County Emergency Manager invited Steering committee members and convened the committee. The steering committee guided the update process through several steps including updates to the hazard history, goal confirmation and prioritization, action item review and development, and information sharing to update the plan and to make the plan as comprehensive as possible. The steering committee met on the following dates:

- **Meeting #1: Kickoff, Hazard Identification, and Community Profile-** February 25, 2015
- **Meeting #2: Public Involvement Strategies, Goal Updates, and Action Item Review-** April 9, 2015
- **Meeting #3: Public Outreach Strategies, Action Item Prioritization, and Plan Implementation and Maintenance-** May 15, 2015

The steering committee formed under the guidance of Don Kendall, the Curry County Emergency Manager. The steering committee invested considerable time into the mitigation plan. For a full list of steering committee members, see the Acknowledgments section of this NHMP.

The following pages provide copies of meeting agendas and sign-in sheets from county and city steering committee meetings.

Kick-Off and Hazard Identification, and Community Profile Work Session Materials



Meeting:	Curry County Natural Hazards Mitigation Plan Update: Kickoff Meeting
Date:	February 25, 2015
Time:	9:00 am – 11:00 am
Location:	Gold Beach City Hall, 29592 Ellensburg Ave

I. Introductions	(15 minutes)
• Welcome & Introductions	
II. National Disaster Resilience Competition	(10 minutes)
III. Natural Hazards Mitigation Planning Overview	(25 minutes)
• Hazard Mitigation Planning	
• Plan Update Process	
• Project timeline	
IV. Community Profile	(10 minutes)
• Feedback on Draft	
• Opportunities for Curry County	
V. Break (if needed)	(5 minutes)
VI. Hazard History Review	(15 minutes)
• Feedback on Draft	
VII. State and County Goals	(10 minutes)
VIII. Break Out Groups: Action Item List Review	(20 minutes)
• Discuss Progress Since Last Update	
IX. Closing and Next Steps	(10 minutes)
• Questions	
• Next Steps	
• Schedule Future Meetings	



Meeting Sign-In

Curry County NHMP Update: Meeting #1: Kickoff February 25, 2015
Gold Beach, Oregon

Name	Representing	Email
Randy McDonald	COOS Curry Elec.	Randy.m@cooscurryelectr.com
Derwin Boggs	Coos Forest Patrol	derwin_boggs@Oregon.gov
Donna Colby-Hanks	City of Brookings	dcolbyhanks@brookings.or.us
Gary Millman	City of Brookings	gmillman@brookings.or.us
Danny Dotson	City of Brookings	ddotson@brookings.or.us
Terri Bangs	American Red Cross	gardenerst@charternet
Beth Barker-Hendry	Curry Community Health	hidalgo@currych.org

Name	Representing	Email
Randy Stubbs	Brookings Fire CCMRC CC CERT	randy.stubbs@cooscurry.com
Don Kendall	COUNTY	kendalld@co.curry.or.us
Jim Kelen	Curry County Assessor	Kelenj@curry.or.us

Public Involvement Strategies, Goal Updates, and Action Item Review Meeting Materials



Meeting: Curry County Natural Hazards Mitigation Plan Update: Meeting 2
Date: April 9, 2015
Time: 1:00 to 4:00
Location: Gold Beach City Hall

AGENDA

- I. Welcome and Meeting Goals (15 minutes)
- II. Public Involvement Strategies (20 minutes)
- III. Community Profile (10 minutes)
- IV. Goal Updates (25 minutes)
- V. Break (10 minutes)
- VI. Action Item Review (90 minutes)
 - a. Review 2010 Action Items
 - b. Create list for Plan Update
- VII. Wrap-Up & Next Steps (10 minutes)



Meeting Sign-In

Curry County NHMP Update: Meeting #2: April 9, 2015
 Gold Beach, Oregon

Name	Representing	Email
Don Kendall	Curry Co. DES	kendalld@curry.co.or.us
Andy Stubbs	Brookings Fire & Rescue	andy.stubbs@y.lhmcn astubbs@esmail.com
Bern Barkenhardt	Curry Community Health	hidalgob@currych.org
Lauralee Sneek	Brookings P.W.	lsneek@brookings.or.us
Glenda Park	Coos-Curry Electric Cooperative, Inc	gpark@cooscurryelectric.co
Terrie Richards	City of FORT ORFORD	trichards@portorford.org
Julia Schmelzer	Curry County	schmelzerj@co.curry.or.us

Public Outreach Strategies, Action Item Prioritization, and Plan Implementation and Maintenance Meeting Materials



Meeting: Curry County Natural Hazards Mitigation Plan Update: Meeting 3
Date: May 15, 2015
Time: 9:00 AM- 11:00 AM
Location: Gold Beach City Hall

AGENDA

- I. **Welcome and Meeting Goals** (15 minutes)
- II. **Public Outreach Strategy Updates** (20 minutes)
- III. **Prioritize Strategies** (45 minutes)
- IV. **Plan Implementation and Maintenance** (30 minutes)
- V. **Wrap-Up & Next Steps** (10 minutes)



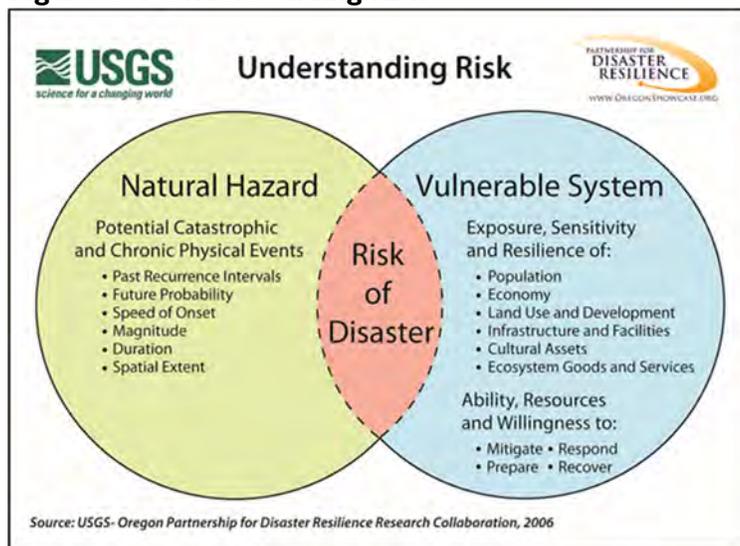
Meeting Sign-In
 Curry County NHMP Update: Meeting #3: May 15, 2015
 Gold Beach, Oregon

Name	Representing	Email
Jim Auburn	City of Port Orford	jauborne@portorford.org
Julie Schmelzer	Curry County	schmelzerj@cc-nhmp.or.us
Don Kendall	Curry Co. OES	kendalld@co.curry.or.us
Peggy Sattler	US Forest Service	psattler@fs.fed.us
Andy Stubbs	CCMRC, BFR	andy.stubbs@yln.com

APPENDIX C: COMMUNITY PROFILE

The community overview describes Curry County from a number of perspectives to help define and understand the county’s sensitivity to natural hazards. Sensitivity factors can be defined as those community assets and characteristics that may be impacted by natural hazards, (e.g., special populations, economic factors, and historic and cultural resources). Community resilience factors can be defined as the community’s ability to manage risk and adapt to hazard event impacts (e.g., governmental structure, agency missions and directives, and plans, policies, and programs). The information in this section represents a snapshot in time of the current sensitivity and resilience factors in the county when the plan was developed. The information documented below, along with the hazard assessments located in the Hazard Annex, should be used as the local level rationale for the risk reduction actions identified in Section 3 – Mission, Goals, and Action Items. The identification of actions that reduce the county’s sensitivity and increase its resilience assist in reducing overall risk, or the area of overlap in Figure C.1 below.

Figure C-1 Understanding Risk



Source: Oregon Partnership for Disaster Resilience

Community Overview

Curry County is located in southwest coastal Oregon and encompasses 1,627 square miles. The county is bounded to the north by Coos County, to the northeast by Douglas County, to the east by Josephine County, and to the south by California. Lands within Curry County are administered by US Forest Service, the Bureau of Land Management, Oregon Parks and Recreation Department, and the Department of State Lands. Much of the county’s 80 miles of undeveloped coastline are dedicated as state parks, and all of the offshore islands are in the Oregon Islands National Wildlife Refuge.

Curry County has a diverse geography. The terrain along the northwest coast is relatively flat. However, farther inland to the east and south, the Coast Range and the Klamath Mountains run through the majority of the county, giving the inland areas a mountainous topography. Elevations within the county range from sea level to over 5,000 feet, with Mount Brandy as the county’s highest elevation at 5,298 feet. Major rivers in Curry County include the Rogue, Chetco and their tributaries

Curry County has a mild and humid marine climate that results from the moderating influences of the Pacific Ocean and from rainfall induced by the coast mountain range. Average January temperatures are 48.2 degrees, and average July temperatures are 59.7 degrees. Rainfall amounts vary depending on the location. Along the lower coastal elevations, rainfall averages between 65 to 90 inches per year, while areas on the higher west slopes of the coast mountain range may get up to 200 inches.

Although Curry County’s climate is generally considered temperate, in most winters, one or two storms bring strong and sometimes damaging winds to the coastal areas. The following table presents a brief overview of the demographics of Curry County.

Table I. Curry County Demographics

POPULATION	Brookings	Gold Beach	Port Orford	Curry County	Oregon
Total Population	6,450	2,275	1,135	22,300	3,919,020
Average Annual Growth Rate	-0.02%	0.42 %	-0.89 %	0.28 %	0.67 %
Living With A Disability	22.0 %	26.5 %	31.5 %	25.1 %	13.8 %
-Over age 65	38.9 %	45.4 %	45.7 %	42.4 %	37.7 %
Total Households	3,011	1,048	579	10,355	1,516,456
Living in Poverty	9 %	18 %	35 %	15 %	16 %
-Children	12 %	30 %	68 %	20 %	22 %
Median Income	\$43,389	\$47,069	\$30,182	\$39,516	\$50,229

Source: Profile Data Tables

Organization

The remainder of this chapter is organized into snapshots of each community, starting with the county, and proceeding through each city. Statistics are presented with the corresponding higher jurisdiction (i.e. County-State, City-County). Following each set of statistics is a set of trends taken from the data, and implications for those trends related to natural hazard mitigation.

All data sourced from US Census American Community Survey 2009-2013, as well as OEM Regional Profiles

CURRY COUNTY COMMUNITY PROFILE FAST FACTS

Curry County

POPULATION	Curry County	Oregon
Total Population	22,300	3,919,020
Average Annual Growth Rate	0.28 %	0.67 %
Population	28.4 %	13.9 %
-Over age 64	12.5 %	18.8 %
-Under age 15		
Non-white Population	8 %	15 %
Hispanic or Latino Population	6 %	12 %
Speak English less than "very well"	1.1 %	6.2 %
Single Parents	5.3 %	8.6 %
Living With A Disability	25.1 %	13.8 %
-Over age 65	42.4 %	37.7 %
Without Health Insurance	16.8 %	15.8%
Living in Poverty	15 %	16 %
-Children	20 %	22 %
Population 25 & Older	17,553	2,612,044
-High School Graduates	91.2 %	89.2 %
-Bachelor's Degree or Higher	20.7 %	29.2 %

HOUSING	Curry County	Oregon
Total Households	10,355	1,516,456
Family Households with Children	14.7 %	27.3%
Householder Living Alone	33.2 %	27.8 %
Multi-Family Units	13.0 %	23.2 %
Mobile Homes	25.6 %	8.6 %
Cost Burdened		
-Owners	49 %	42 %
-Renters	39 %	42 %
Housing Stock Built		
-Prior 1990	68.2 %	67.0 %
-Prior 1970	27.2 %	36.0 %
Owner Occupied Units	67.8 %	32.0 %
Vacant Units	11.4 %	6.2 %
Average new units per year over last 5 years	56.2	N/A

ECONOMICS	Curry County	Oregon
Median Income	\$39,516	\$50,229
Unemployment Rate	10.6 %	7.7 %
-Change since 2009	-2.4 %	-3.4 %
Total Employees	6,173	N/A
Percent Private Employment	81 %	N/A
Highest portion of total revenues		
-Retail Trade	38.7 %	
-Manufacturing	32.5 %	
-Health Care	10.5 %	N/A
Overnight Visitor Volumes (in millions)	1.5	85.1

*N/A=data not available at that level of detail

Trends

Trends identify cultural and socio-economic directions the county is headed, and how they may differ from the State of Oregon or county as a whole.

- Minor population growth over the last five years
- An aging population expected to increase over time
- A relatively homogenous population of white, English speaking residents
- Primarily single family, owned occupied housing
- A very high percentage of mobile homes
- High percentage of residents living with a disability
- Primarily private employment with low average pay
- High unemployment rate that has been slowly decreasing over the last five years
- Primary sectors of retail trade and manufacturing

Implications

Implications discuss how the identified trends impact natural hazards and long term planning for the city or county.

- The growing population of elderly residents will create challenges for any evacuation or rescue efforts
- The primary focus on retail and trade sectors makes the economy especially vulnerable to the transportation network
- The economy in general will continue to be vulnerable, and any major disaster could have severe consequences on finances
- Despite a large percentage of mobile homes, the county's housing stock remains relatively stable through its homogeneity

CURRY COUNTY COMMUNITY PROFILE FAST FACTS

Brookings

POPULATION	Brookings	Curry County
Total Population	6,450	22,300
Average Annual Growth Rate	-0.02%	0.28 %
Population		
-Over age 64	N/A	28.4 %
-Under age 15		12.5 %
Non-white Population	11.1 %	8 %
Hispanic or Latino Population	6.5 %	6 %
Speak English less than "very well"	N/A	1.1 %
Single Parents	6.2 %	5.3 %
Living With A Disability		
-Over age 65	22.0 %	25.1 %
	38.9 %	42.4 %
Without Health Insurance	19.2 %	16.8 %
Living in Poverty		
-Children	9 %	15 %
	12 %	20 %
Population 25 & Older		
-High School Graduates	4,897	17,553
	92.1 %	91.2 %
-Bachelor's Degree or Higher	22.2 %	20.7 %

*N/A=data not available at that level of detail

HOUSING	Brookings	Curry County
Total Households	3,011	10,355
Family Households with Children	15.8 %	14.7 %
Householder Living Alone	33.3 %	33.2 %
Multi-Family Units	22.9 %	13.0 %
Mobile Homes	1.7 %	25.6 %
Cost Burdened		
-Owners	32 %	49 %
-Renters	46 %	39 %
Housing Stock Built		
-Prior 1990	56.4 %	68.2 %
-Prior 1970	25.5 %	27.2 %
Owner Occupied Units	56.8 %	67.8 %
Vacant Units	11.5 %	11.4 %
Average new units per year over last 5 years	N/A	56.2

ECONOMICS	Brookings	Curry County
Median Income	\$43,389	\$39,516
Unemployment Rate-Change since 2009	N/A	10.6 % -2.4 %
Total Employees	N/A	6,173
Percent Private Employment	N/A	81 %
Highest portion of total revenues		
-Retail Trade	N/A	38.7 % 32.5 %
-Manufacturing		10.5 %
-Health Care		
Overnight Visitor Volumes (in millions)	N/A	1.5

Trends

Trends identify cultural and socio-economic directions the county is headed, and how they may differ from the State of Oregon or county as a whole.

- Minor population loss over the last five years, but relatively stable
- Brookings is more diverse than the county, with a higher percentage of multi-family units and lower percentage of mobile homes, compared with the county
- Lower percentage of residents living in poverty and living with a disability, compared with the county
- Lower percentage of owner occupied homes
- Much lower percentage of older homes, compared with the county

Implications

Implications discuss how the identified trends impact natural hazards and long term planning for the city or county.

- Brookings has a more structurally resilient housing stock than the rest of the county, however a higher percentage of renters will be more difficult to communicate with
- Residents will be more physically able to relocate in the event of an evacuation
- There may be a decline in population over the next five years

CURRY COUNTY COMMUNITY PROFILE FAST FACTS

Gold Beach

POPULATION	Gold Beach	Curry County
Total Population	2,275	22,300
Average Annual Growth Rate	0.42 %	0.28 %
Population		
-Over age 64		28.4 %
-Under age 15	N/A	12.5 %
Non-white Population	7.7 %	8 %
Hispanic or Latino Population	2.3 %	6 %
Speak English less than "very well"	N/A	1.1 %
Single Parents	7.8 %	5.3 %
Living With A Disability		
-Over age 65	26.5 %	25.1 %
	45.4 %	42.4 %
Without Health Insurance	20.1 %	16.8 %
Living in Poverty		
-Children	18 %	15 %
	30 %	20 %
Population 25 & Older	1,800	17,553
	89.2 %	91.2 %
-High School Graduates	22.5 %	20.7 %
-Bachelor's Degree or Higher		

*N/A=data not available at that level of detail

HOUSING	Gold Beach	Curry County
Total Households	1,048	10,355
Family Households with Children	17.7 %	14.7 %
Householder Living Alone	35.3 %	33.2 %
Multi-Family Units	25.5 %	13.0 %
Mobile Homes	19.7 %	25.6 %
Cost Burdened		
-Owners	53 %	49 %
-Renters	36 %	39 %
Housing Stock Built		
-Prior 1990	70.0 %	68.2 %
-Prior 1970	40.6 %	27.2 %
Owner Occupied Units	68.7 %	67.8 %
Vacant Units	19.7 %	11.4 %
Average new units per year over last 5 years	N/A	56.2

ECONOMICS	Gold Beach	Curry County
Median Income	\$47,069	\$39,516
Unemployment Rate		10.6 %
-Change since 2009	N/A	-2.4 %
Total Employees	N/A	6,173
Percent Private Employment	N/A	81 %
Highest portion of total revenues		
-Retail Trade		38.7 %
-Manufacturing		32.5 %
-Health Care	N/A	10.5 %
Overnight Visitor Volumes (in millions)	N/A	1.5

Trends

Trends identify cultural and socio-economic directions the county is headed, and how they may differ from the State of Oregon or county as a whole.

- Growing at a rate faster than the remainder of the county
- Higher percentage of families with children, as well as multi-family units
- A much higher vacancy rate and percentage of mobile homes
- A higher percentage of uninsured, single parents, and those living in poverty
- A much higher median income than the county

Implications

Implications discuss how the identified trends impact natural hazards and long term planning for the city or county.

- The growth rate coupled with a high vacancy rate likely means new types of housing are needed
- Gold Beach faces additional challenges in working with the higher percentage of vulnerable populations (single parents and those living in poverty)
- The city may have additional sources of revenue compared with the county, due to the higher median income

CURRY COUNTY COMMUNITY PROFILE FAST FACTS

Port Orford

POPULATION	Port Orford	Curry County
Total Population	1,135	22,300
Average Annual Growth Rate	-0.89 %	0.28 %
Population		
-Over age 64		28.4 %
-Under age 15	N/A	12.5 %
Non-white Population	2.4 %	8 %
Hispanic or Latino Population	4.2 %	6 %
Speak English less than "very well"	N/A	1.1 %
Single Parents	10.2 %	5.3 %
Living With A Disability		
-Over age 65	31.5 %	25.1 %
	45.7 %	42.4 %
Without Health Insurance	25.5 %	16.8 %
Living in Poverty		
-Children	35 %	15 %
	68 %	20 %
Population 25 & Older	967	17,553
	88.0 %	91.2 %
-High School Graduates	22.0 %	20.7 %
-Bachelor's Degree or Higher		

*N/A=data not available at that level of detail

HOUSING	Port Orford	Curry County
Total Households	579	10,355
Family Households with Children	15.5 %	14.7 %
Householder Living Alone	36.8 %	33.2 %
Multi-Family Units	10.4 %	13.0 %
Mobile Homes	16.3 %	25.6 %
Cost Burdened		
-Owners	63 %	49 %
-Renters	62 %	39 %
Housing Stock Built		
-Prior 1990	72.7 %	68.2 %
-Prior 1970	47.0 %	27.2 %
Owner Occupied Units	64.9 %	67.8 %
Vacant Units	19.2 %	11.4 %
Average new units per year over last 5 years	N/A	56.2

ECONOMICS	Port Orford	Curry County
Median Income	\$30,182	\$39,516
Unemployment Rate		10.6 %
-Change since 2009	N/A	-2.4 %
Total Employees	N/A	6,173
Percent Private Employment	N/A	81 %
Highest portion of total revenues		
-Retail Trade		38.7 %
-Manufacturing		32.5 %
-Health Care	N/A	10.5 %
Overnight Visitor Volumes (in millions)	N/A	1.5

Trends

Trends identify cultural and socio-economic directions the county is headed, and how they may differ from the State of Oregon or county as a whole.

- Population shrinking at twice the rate Curry County is growing
- Twice the number of single parents and three times the percentage of children living in poverty
- A median income 24% less than the county average
- A population that is more cost burdened than other cities, with a significantly older housing stock

Implications

Implications discuss how the identified trends impact natural hazards and long term planning for the city or county.

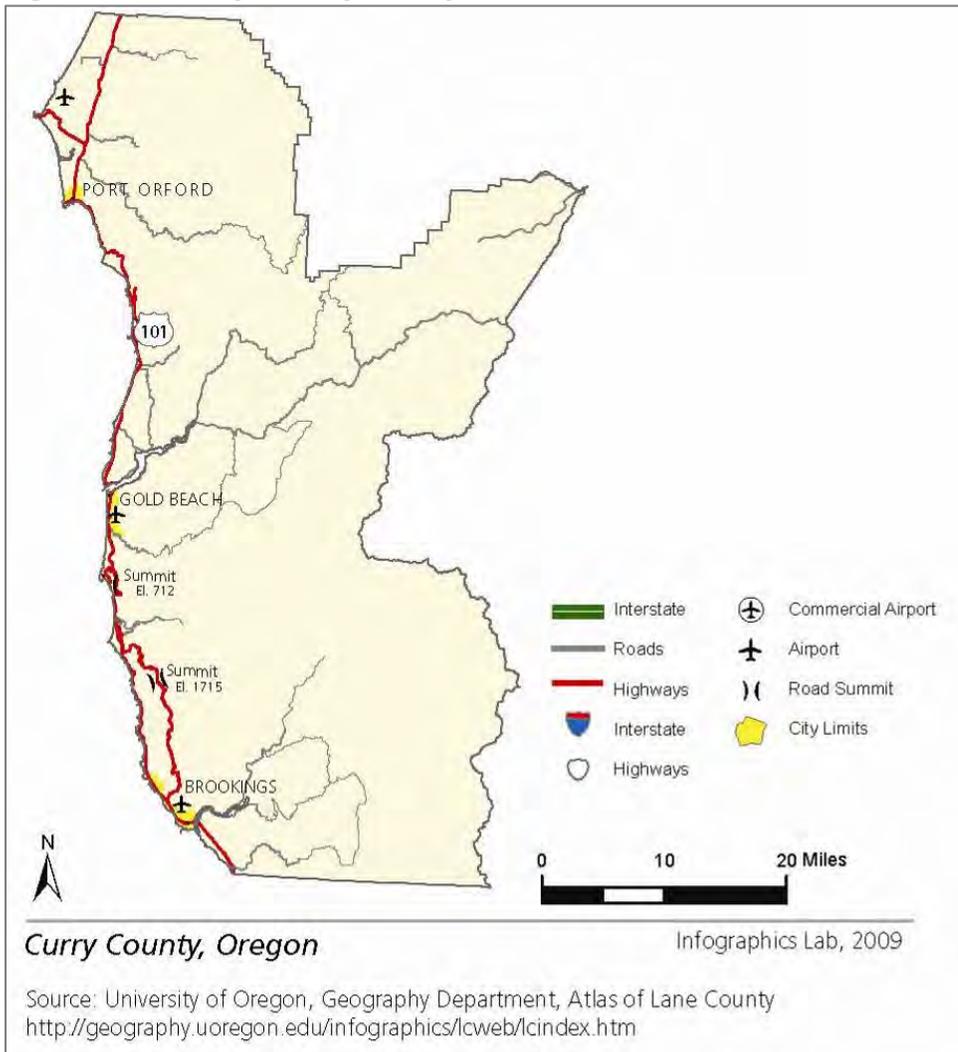
- Port Orford has an especially vulnerable population compared with the rest of the county
- Their residents are less likely to be able to recover from an event that damages the housing stock
- A shrinking population creates challenges for planning

Infrastructure & Critical Facilities

Transportation networks, systems for power transmission, and critical facilities such as hospitals and police stations are all vital to the functioning of the region. Due to the fundamental role that infrastructure plays in both pre-disaster and post-disaster planning, it deserves special attention in the context of creating more resilient communities. The information provided in this section of the profile can serve as the basis for informed decisions about how to reduce the vulnerability of Curry County's infrastructure to natural hazards.

There are three primary modes of transportation in Curry County: roads, air, and marine. Four State Highways-- US Highway 101, Cape Blanco Highway (Hwy 250), Carpenterville Highway (Hwy 255), and Port Orford Highway (Hwy 251)—are located in Curry County. Highways 250 and 251 are relatively minor highways that do not serve a large population area. Highway 101 runs north-south along the Pacific Coast, providing the only major highway connection between Curry County and the other surrounding counties. Figure C.2 shows the county's primary transportation routes.

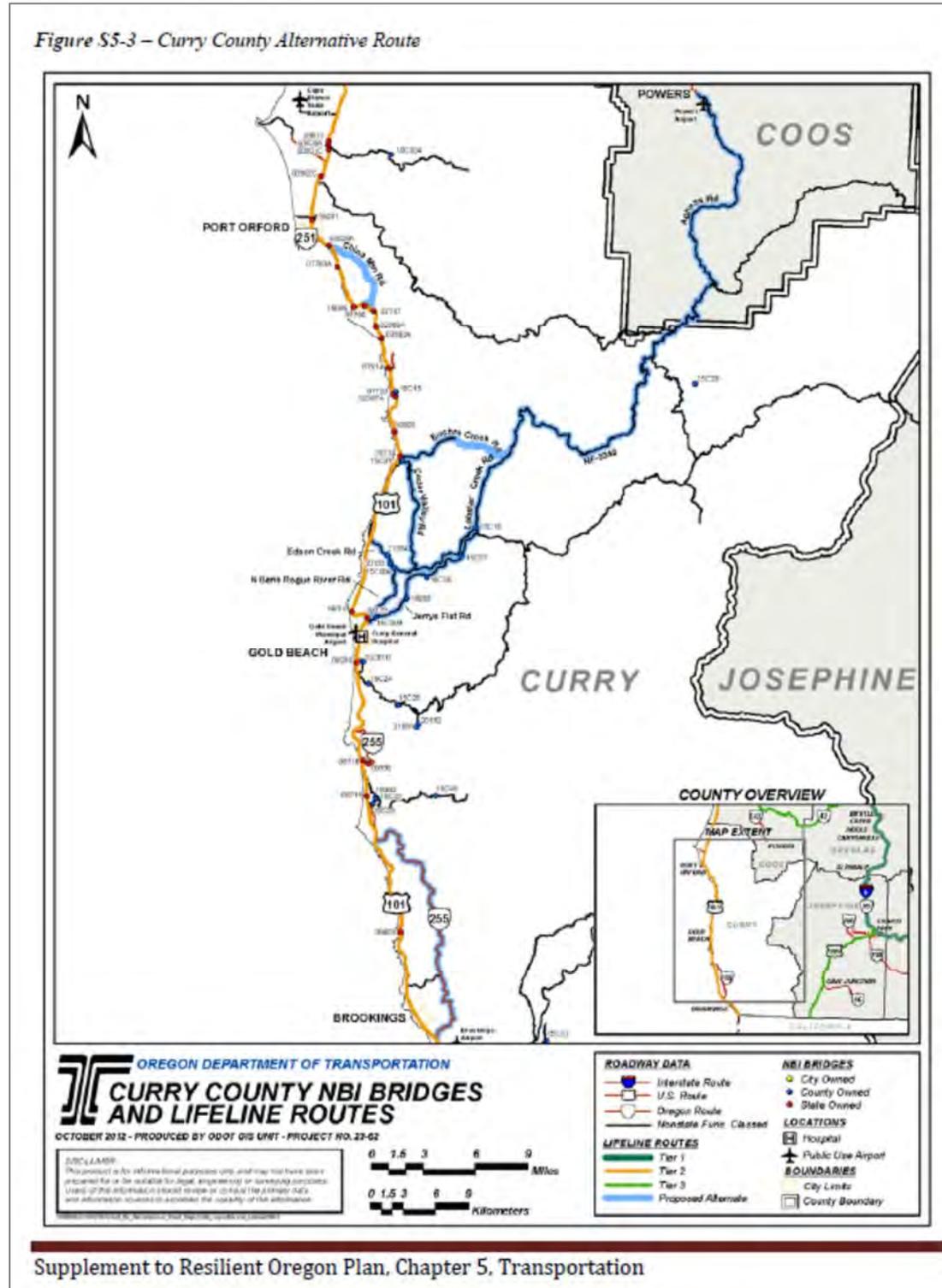
Figure C.2: Curry County Transportation Routes



Source: 2010 Curry County NHMP

In addition, ODOT has identified several alternative lifeline routes in Curry County.

Figure C.3: Curry County Lifeline and Alternative Transportation Routes



Source: Oregon Department of Transportation, Supplement to Resilient Oregon Plan

Bridge Conditions

The condition of Curry County's bridges can also impact the county's risk to natural hazards. Most bridges are not seismically retrofitted, which is important because of the county's earthquake risk. Damaged bridges can disrupt traffic and exacerbate economic losses because of the inability of industries to transport services and products to clients. There are 468 bridges and culverts in Curry County, of which 138 bridges are in use by state highways and 115 bridges are in use by county highways.

Curry County's marine facilities consist of three ports: the Port of Brookings, which is located at the east bank of the Chetco River, south of Highway 101; the Port of Gold Beach, which is located at the mouth of the Rogue River; and the Port of Port Orford. There are also three small airports that serve Curry County: Curry Coast Airpark (Brookings), Gold Beach Airport, and the Cape Blanco State Airport.

Critical Facilities

Critical facilities are those facilities that are essential to government response and recovery activities (e.g., police and fire stations, public hospitals, public schools). Figure C.4 on the following page shows the general location of critical facilities in the county. Notably, the limited and dispersed nature of development in Curry County can isolate critical facilities and create "islands" when hazard events occur.

- Curry County has one hospital, Curry County General Hospital, located in Gold Beach.
- Two small medical centers located in Brookings and Port Orford.
- The county has four police stations.
- The county has 11 fire and rescue stations.
- There are six school districts within Curry County.
- Power to local critical facilities, businesses, and residential dwellings in Coos, Curry, Douglas, and Josephine counties is provided by the Coos Curry Electric Cooperative.

Dam Assessment

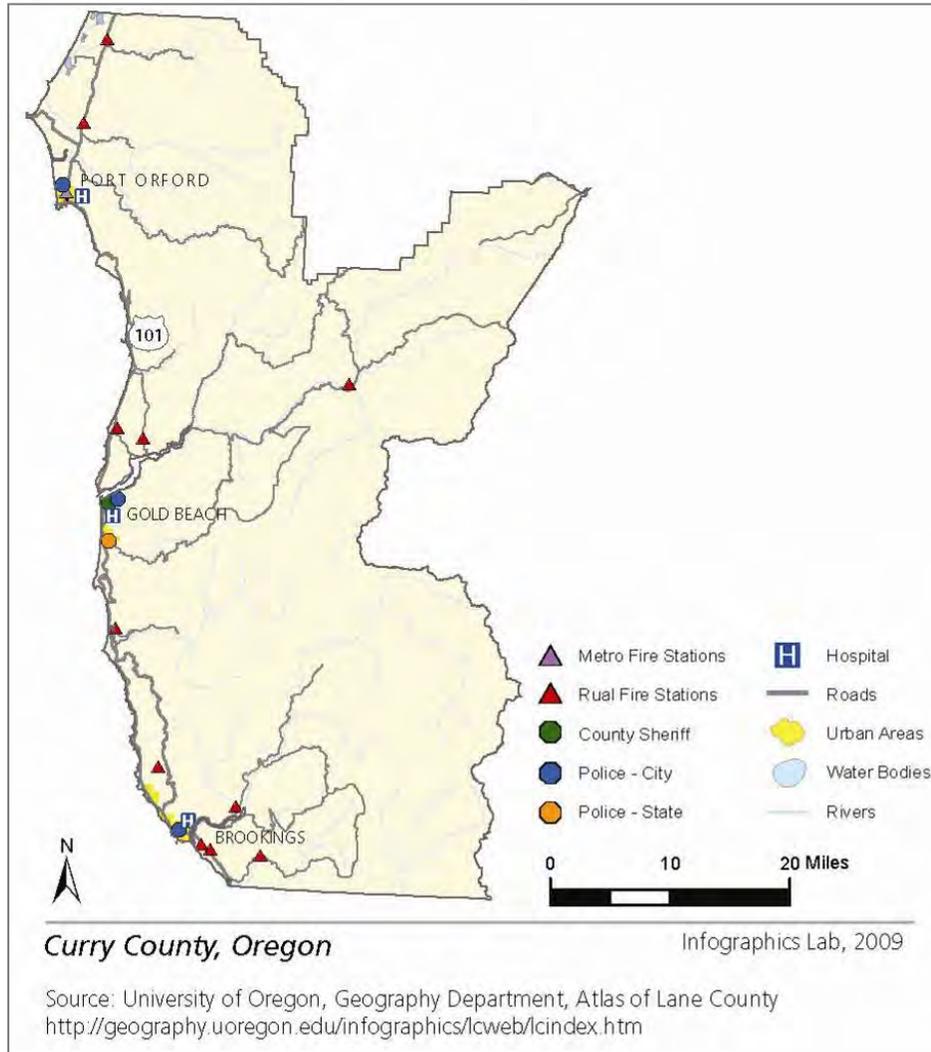
Curry County has eight dams.¹ Dams are ranked with hazard ratings of low, significant, or high, and define the downstream consequences of a sudden dam failure. A high hazard rating does not indicate that a dam has a high risk of failure, but that if it should fail, it would lead to direct loss of human life and significant property damage. Further evaluation of the high hazard dams are needed to determine if they pose a hazard risk to human life.

Threat potential of dams in Curry County:

- High-0
- Significant-0
- Low-8 (Ferry Creek, Big Creek, Unnamed tributaries of Elk River and Floras Lake)

¹ Water Resources Department "Dam Inventory Query, 2007"
http://apps2.wrd.state.or.us/apps/misc/dam_inventory/Default.aspx.

Figure C.4: Curry County Critical Response Facilities



Source: 2010 Curry County NHMP

Additional Tables

The following tables have been referenced in Appendix C: Community Profile for Curry County.

Curry County and Oregon Race, 2013

Race	Oregon	Curry County			Port Orford
		Brookings	Gold Beach		
Total Population	3,868,721	22,361	6,334	2,433	1,229
One Race	3,722,867	21,433	5,898	2,360	1,207
White	3,297,149	20,632	5,630	2,246	1,199
Black or African American	70,328	28	27	0	0
American Indian and Alaska Native	47,411	392	41	35	0
Asian	147,986	87	2	60	4
Native Hawaiian and Other Pacific Islander	14,993	7	3	0	4
Some Other Race	145,000	287	195	19	0
Two or More Races	145,854	928	436	73	22
Hispanic or Latino (of any race)	461,901	1,307	412	55	52
Not Hispanic or Latino	3,406,820	21,054	5,922	2,378	1,177

Source: US Census Bureau, 2009-2013 American Community Survey 5-Year Estimates, DP05 "ACS Demographic and Housing Estimates," accessed Dec 2014.

Curry County and Oregon Family vs. Non-Family Households, 2013

	Total Households Estimate	Family Households		Nonfamily Households		Householder Living Alone	
		Estimate	Percent	Estimate	Percent	Estimate	Percent
Oregon	1,516,456	966,968	63.8%	549,488	36.2%	421,168	27.8%
Curry County	10,355	6,164	59.5%	4,191	40.5%	3,440	33.2%
Brookings	3,011	1,768	58.7%	1,243	41.3%	1,002	33.3%
Gold Beach	1,048	642	61.3%	406	38.7%	370	35.3%
Port Orford	579	311	53.7%	268	46.3%	213	36.8%

Source: U.S. Census Bureau. 2012 American Community Survey. <http://factfinder2.census.gov/>. Table DP02: Selected Social Characteristics. 2008-2012 American Community Survey 5-Year Estimates.

Curry County and Oregon Family Housing Types, 2013

	Total Households Estimate	Family Households with Children		Single Parent (male)		Single Parent (female)		Married Couple with Children	
		Estimate	Percent	Estimate	Percent	Estimate	Percent	Estimate	Percent
Oregon	1,516,456	414,003	27.3%	36,021	2.4%	94,499	6.2%	283,483	18.7%
Curry County	10,355	1,519	14.7%	277	2.7%	272	2.6%	970	9.4%
Brookings	3,011	476	15.8%	99	3.3%	88	2.9%	289	9.6%
Gold Beach	1,048	185	17.7%	13	1.2%	69	6.6%	103	9.8%
Port Orford	579	90	15.5%	15	2.6%	44	7.6%	31	5.4%

Source: U.S. Census Bureau. 2013 American Community Survey. <http://factfinder2.census.gov/>. Table DP02: Selected Social Characteristics. 2009-2013 American Community Survey 5-Year Estimates.

Curry County and Oregon Disabilities By Age Group, 2013

	Total Population*	With a disability		Under 18 years with a disability		65 years and over with a disability	
	Estimate	Estimate	Percent	Estimate	Percent**	Estimate	Percent**
Oregon	3,829,588	526,868	13.8%	38,775	4.5%	207,477	37.7%
Curry County	22,202	5,577	25.1%	197	5.5%	2,693	42.4%
Brookings	6,268	1,378	22.0%	50	5.0%	630	38.9%
Gold Beach	2,392	635	26.5%	29	6.8%	241	45.4%
Port Orford	1,229	387	31.5%	26	12.6%	154	45.7%

*Non-institutionalized population

**Percent of Age Group

Source: U.S. Census Bureau. 2012 American Community Survey. <http://factfinder2.census.gov/>. Table DP02: Selected Social Characteristics. 2008-2012 American Community Survey 5-Year Estimates

Curry County Households Spending >35% of Income on Housing, 2009-2013

Jurisdiction	Owners		Renters
	With Mortgage	Without Mortgage	
Oregon	30%	12%	42%
Curry County	40%	9%	39%
Brookings	31%	1%	46%
Gold Beach	36%	17%	36%
Port Orford	43%	20%	61%

Source: U.S. Census Bureau, 2008-2012 American Community Survey, Table B25070 "Gross Rent as a Percentage of Household Income in the Past 12 Months" and Table B25091 "Mortgage Status by Selected Monthly Owner Costs as a Percentage of Household Income in the Past 12 Months", accessed July 2014.

Curry County and Oregon Average Pay, 2012

Jurisdiction	Employees	Average Pay	Percent State
			Average
Oregon	1,679,364	\$45,010	100%
Region 1	70,445	--	--
Clatsop	16,888	\$33,680	74.8%
Coos	21,579	\$33,332	74.1%
Curry	6,180	\$31,801	70.7%
Lincoln	17,329	\$32,387	72.0%
Tillamook	8,469	\$32,685	72.6%

Source: Oregon NHMP, Region 1 Profile, Table 15

Curry County-Employment and Wages, 2013

Jurisdiction	2013				Percent Change in Employment (2009-2013)	Employment Forecast (2012-2022)
	Firms	Employees	Percent Workforce	Average Pay		
Total Payroll Employment	774	6,173	100%	\$31,826	-1%	7%
Total Private	714	5,023	81%	\$29,865	1%	7%
Natural Resources and Mining	44	298	5%	\$36,196	19%	9%
Construction	92	332	5%	\$30,297	-16%	6%
Manufacturing	19	563	9%	\$47,786	0%	7%
Trade, Transportation & Utilities	129	1,185	19%	\$30,177	3%	5%
Information	11	65	1%	\$29,115	-22%	-7%
Financial Activities	68	238	4%	\$34,604	-16%	7%
Professional and Business Services	65	428	7%	\$46,258	2%	-2%
Education and Health Services	80	669	11%	\$25,701	12%	17%
Leisure and Hospitality	114	1,028	17%	\$14,963	2%	9%
Other Services	90	216	3%	\$18,345	1%	8%
Private Non-Classified	-	-	-	-	-	-
Government	60	1,150	19%	\$40,391	-12%	7%
Federal	12	84	1%	\$53,648	-17%	-7%
State	11	174	3%	\$26,876	-19%	5%
Local	37	892	14%	\$41,778	-10%	8%

Source: Oregon Employment Department, "2009 and 2013 Covered Employment and Wages Summary Report". <http://www.qualityinfo.org/olmisj/labforce>. Accessed October 2014

Curry County- Employment Sectors and Revenue

Sector Meaning (NAICS code)	Sector Revenue (\$1,000)	Percent of Total Revenue
Retail Trade	\$227,007	38.7%
Manufacturing	\$190,654	32.5%
Health Care & Social Assistance	\$61,817	10.5%
Wholesale Trade	-	-
Accommodation & Food Services	\$56,246	9.6%
Professional, Scientific & Technical Services	\$9,526	1.6%
Real Estate & Rental & Leasing	\$12,725	2.2%
Administrative & Support & Waste Management & Remediation Services	\$12,847	2.2%
Other Services (except Public Administration)	\$10,321	1.8%
Arts, Entertainment & Recreation	5,008	0.9%
Information	516	0.1%
Total	\$586,667	100%

Source: U.S. Census Bureau, 2007 Economic Census, Table EC0700A1 "All sectors: Geographic Area Series: Economy-Wide Key Statistics: 2007", <http://factfinder2.census.gov/>, accessed July 2014.

Curry County Community Organizations

Name and Contact Information	Description	Service Area	Populations Served							Involvement with Natural Hazard Mitigation
			Businesses	Children	Disabled	Elders	English Second Families	Low Income		
US Department of Agriculture Farm Service Agency 376 N Central Blvd. Coquille, OR 97423-1244 (541) 396-4323	Administer a variety of commodity, loan, conservation, and emergency disaster assistance programs to small farms. Maintains an "emergency plan" for continuity of operations and assistance to producers.	Coos and Curry Counties	✓							<ul style="list-style-type: none"> • Education and outreach • Information dissemination • Participate in mitigation efforts
Coos Forest Protective Association (CFPA) CFPA Headquarters 63612 Fifth Road Coos Bay, Oregon 97420 (541) 267-3161	Private, nonprofit corporation that provides protection from fires on 1.5 million acres of private, county, state and Bureau of Land Management timber and grazing lands in Coos, Curry and western Douglas counties	Coos and Curry Counties	✓	✓	✓	✓		✓	✓	<ul style="list-style-type: none"> • Participate in mitigation efforts
Oregon Coast Community Action 2110 Newmark Ave Coos Bay, Oregon 97420 (541) 888-1574	Nonprofit network of programs that feed, house, warm and educate people.	Coos, Curry and Western Douglas Counties		✓	✓	✓		✓	✓	<ul style="list-style-type: none"> • Education and outreach • Information dissemination • Participate in mitigation efforts
Southwestern Oregon Community College, Curry County Campuses*	Provide high quality learning opportunities for individuals in Curry County	Curry County	✓		✓	✓		✓	✓	<ul style="list-style-type: none"> • Education and outreach • Information dissemination • Participate in mitigation efforts
Curry County Economic and Community Development 94235 Moore Street PO Box 746 Gold Beach, OR 97444 (541) 247-4466	Offers many services and resources to assist new business, existing business and the residents of Curry County.	Curry County	✓	✓	✓	✓		✓	✓	<ul style="list-style-type: none"> • Education and outreach • Information dissemination • Participate in mitigation efforts
Curry County Health Foundation P.O. Box 1274, Gold Beach, OR 97444 (541) 247-3189	Supports Curry General Hospital and the delivery of health care services throughout Curry County	Curry County		✓	✓	✓		✓	✓	<ul style="list-style-type: none"> • Education and outreach • Information dissemination • Participate in mitigation efforts
OSU Extension Service Curry County 29390 Ellensburg (Hwy 101) Gold Beach, Or 97444 541-247-6672	Offers a wealth of non-formal educational programs and information services	Curry County	✓	✓	✓	✓		✓	✓	<ul style="list-style-type: none"> • Education and outreach • Information dissemination
Brookings Habitat for Humanity Curry County HFH PO Box 1212 Brookings, OR 97415 (541) 412-7166	Works in partnership with people in need to build safe, decent housing	Curry County		✓	✓	✓		✓	✓	<ul style="list-style-type: none"> • Education and outreach • Information dissemination • Participate in mitigation efforts

Source: Various, Research by OPDR

Appendix D: Economic Analysis of Natural Hazard Mitigation Projects

This appendix was developed by the Oregon Partnership for Disaster Resilience at the University of Oregon's Community Service Center. It has been reviewed and accepted by the Federal Emergency Management Agency as a means of documenting how the prioritization of actions shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.

The appendix outlines three approaches for conducting economic analyses of natural hazard mitigation projects. It describes the importance of implementing mitigation activities, different approaches to economic analysis of mitigation strategies, and methods to calculate costs and benefits associated with mitigation strategies. Information in this section is derived in part from: The Interagency Hazards Mitigation Team, *State Hazard Mitigation Plan*, (Oregon Military Department – Office of Emergency Management, 2000), and Federal Emergency Management Agency Publication 331, *Report on Costs and Benefits of Natural Hazard Mitigation*. This section is not intended to provide a comprehensive description of benefit/cost analysis, nor is it intended to evaluate local projects. It is intended to (1) raise benefit/cost analysis as an important issue, and (2) provide some background on how economic analysis can be used to evaluate mitigation projects.

Why Evaluate Mitigation Strategies?

Mitigation activities reduce the cost of disasters by minimizing property damage, injuries, and the potential for loss of life, and by reducing emergency response costs, which would otherwise be incurred. Evaluating possible natural hazard mitigation activities provides decision-makers with an understanding of the potential benefits and costs of an activity, as well as a basis upon which to compare alternative projects.

Evaluating mitigation projects is a complex and difficult undertaking, which is influenced by many variables. First, natural disasters affect all segments of the communities they strike, including individuals, businesses, and public services such as fire, police, utilities, and schools. Second, while some of the direct and indirect costs of disaster damages are measurable, some of the costs are non-financial and difficult to quantify in dollars. Third, many of the impacts of such events produce "ripple-effects" throughout the community, greatly increasing the disaster's social and economic consequences.

While not easily accomplished, there is value, from a public policy perspective, in assessing the positive and negative impacts from mitigation activities, and obtaining an instructive benefit/cost comparison. Otherwise, the decision to pursue or not pursue various mitigation options would not be based on an objective understanding of the net benefit or loss associated with these actions.

What are some Economic Analysis Approaches for Evaluating Mitigation Strategies?

The approaches used to identify the costs and benefits associated with natural hazard mitigation strategies, measures, or projects fall into three general categories: benefit/cost analysis, cost-effectiveness analysis and the STAPLE/E approach. The distinction between the three methods is outlined below:

Benefit/Cost Analysis

Benefit/cost analysis is a key mechanism used by the state Oregon Military Department – Office of Emergency Management (OEM), the Federal Emergency Management Agency, and other state and federal agencies in evaluating hazard mitigation projects, and is required by the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Public Law 93-288, as amended.

Benefit/cost analysis is used in natural hazards mitigation to show if the benefits to life and property protected through mitigation efforts exceed the cost of the mitigation activity. Conducting benefit/cost analysis for a mitigation activity can assist communities in determining whether a project is worth undertaking now, in order to avoid disaster-related damages later. Benefit/cost analysis is based on calculating the frequency and severity of a hazard, avoiding future damages, and risk. In benefit/cost analysis, all costs and benefits are evaluated in terms of dollars, and a net benefit/cost ratio is computed to determine whether a project should be implemented. A project must have a benefit/cost ratio greater than 1 (i.e., the net benefits will exceed the net costs) to be eligible for FEMA funding.

Cost-Effectiveness Analysis

Cost-effectiveness analysis evaluates how best to spend a given amount of money to achieve a specific goal. This type of analysis, however, does not necessarily measure costs and benefits in terms of dollars. Determining the economic feasibility of mitigating natural hazards can also be organized according to the perspective of those with an economic interest in the outcome. Hence, economic analysis approaches are covered for both public and private sectors as follows.

Investing in Public Sector Mitigation Activities

Evaluating mitigation strategies in the public sector is complicated because it involves estimating all of the economic benefits and costs regardless of who realizes them, and potentially to a large number of people and economic entities. Some benefits cannot be evaluated monetarily, but still affect the public in profound ways. Economists have developed methods to evaluate the economic feasibility of public decisions which involve a diverse set of beneficiaries and non-market benefits.

Investing in Private Sector Mitigation Activities

Private sector mitigation projects may occur on the basis of one or two approaches: it may be mandated by a regulation or standard, or it may be economically justified on its own

merits. A building or landowner, whether a private entity or a public agency, required to conform to a mandated standard may consider the following options:

1. Request cost sharing from public agencies;
2. Dispose of the building or land either by sale or demolition;
3. Change the designated use of the building or land and change the hazard mitigation compliance requirement; or
4. Evaluate the most feasible alternatives and initiate the most cost effective hazard mitigation alternative.

The sale of a building or land triggers another set of concerns. For example, real estate disclosure laws can be developed which require sellers of real property to disclose known defects and deficiencies in the property, including earthquake weaknesses and hazards to prospective purchases. Correcting deficiencies can be expensive and time consuming, but their existence can prevent the sale of the building. Conditions of a sale regarding the deficiencies and the price of the building can be negotiated between a buyer and seller.

STAPLE/E Approach

Considering detailed benefit/cost or cost-effectiveness analysis for every possible mitigation activity could be very time consuming and may not be practical. There are some alternate approaches for conducting a quick evaluation of the proposed mitigation activities which could be used to identify those mitigation activities that merit more detailed assessment. One of those methods is the STAPLE/E approach.

Using STAPLE/E criteria, mitigation activities can be evaluated quickly by steering committees in a synthetic fashion. This set of criteria requires the committee to assess the mitigation activities based on the Social, Technical, Administrative, Political, Legal, Economic and Environmental (STAPLE/E) constraints and opportunities of implementing the particular mitigation item in your community. The second chapter in FEMA's How-To Guide "Developing the Mitigation Plan – Identifying Mitigation Actions and Implementation Strategies" as well as the "State of Oregon's Local Natural Hazard Mitigation Plan: An Evaluation Process" outline some specific considerations in analyzing each aspect. The following are suggestions for how to examine each aspect of the STAPLE/E approach from the "State of Oregon's Local Natural Hazard Mitigation Plan: An Evaluation Process."

Social: Community development staff, local non-profit organizations, or a local planning board can help answer these questions.

- Is the proposed action socially acceptable to the community?
- Are there equity issues involved that would mean that one segment of the community is treated unfairly?
- Will the action cause social disruption?

Technical: The city or county public works staff, and building department staff can help answer these questions.

- Will the proposed action work?
- Will it create more problems than it solves?
- Does it solve a problem or only a symptom?
- Is it the most useful action in light of other community goals?

Administrative: Elected officials or the city or county administrator, can help answer these questions.

- Can the community implement the action?
- Is there someone to coordinate and lead the effort?
- Is there sufficient funding, staff, and technical support available?
- Are there ongoing administrative requirements that need to be met?

Political: Consult the mayor, city council or city board of commissioners, city or county administrator, and local planning commissions to help answer these questions.

- Is the action politically acceptable?
- Is there public support both to implement and to maintain the project?

Legal: Include legal counsel, land use planners, risk managers, and city council or county planning commission members, among others, in this discussion.

- Is the community authorized to implement the proposed action? Is there a clear legal basis or precedent for this activity?
- Are there legal side effects? Could the activity be construed as a taking?
- Is the proposed action allowed by the comprehensive plan, or must the comprehensive plan be amended to allow the proposed action?
- Will the community be liable for action or lack of action?
- Will the activity be challenged?

Economic: Community economic development staff, civil engineers, building department staff, and the assessor's office can help answer these questions.

- What are the costs and benefits of this action?
- Do the benefits exceed the costs?
- Are initial, maintenance, and administrative costs taken into account?
- Has funding been secured for the proposed action? If not, what are the potential funding sources (public, non-profit, and private?)
- How will this action affect the fiscal capability of the community?

- What burden will this action place on the tax base or local economy?
- What are the budget and revenue effects of this activity?
- Does the action contribute to other community goals, such as capital improvements or economic development?
- What benefits will the action provide? (This can include dollar amount of damages prevented, number of homes protected, credit under the CRS, potential for funding under the HMGP or the FMA program, etc.)

Environmental: Watershed councils, environmental groups, land use planners and natural resource managers can help answer these questions.

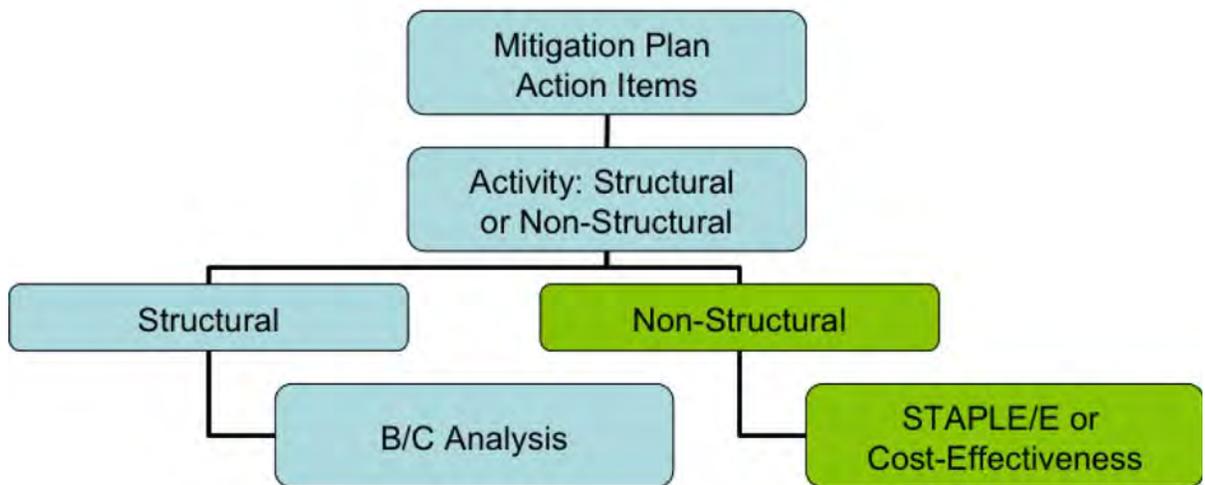
- How will the action impact the environment?
- Will the action need environmental regulatory approvals?
- Will it meet local and state regulatory requirements?
- Are endangered or threatened species likely to be affected?

The STAPLE/E approach is helpful for doing a quick analysis of mitigation projects. Most projects that seek federal funding and others often require more detailed benefit/cost analyses.

When to use the Various Approaches

It is important to realize that various funding sources require different types of economic analyses. The following figure is to serve as a guideline for when to use the various approaches.

Figure D-I Economic Analysis Flowchart



Source: Oregon Partnership for Disaster Resilience. 2005.

Implementing the Approaches

Benefit/cost analysis, cost-effectiveness analysis, and the STAPLE/E are important tools in evaluating whether or not to implement a mitigation activity. A framework for evaluating mitigation activities is outlined below. This framework should be used in further analyzing the feasibility of prioritized mitigation activities.

1. Identify the Activities

Activities for reducing risk from natural hazards can include structural projects to enhance disaster resistance, education and outreach, and acquisition or demolition of exposed properties, among others. Different mitigation projects can assist in minimizing risk to natural hazards, but do so at varying economic costs.

2. Calculate the Costs and Benefits

Choosing economic criteria is essential to systematically calculating costs and benefits of mitigation projects and selecting the most appropriate activities. Potential economic criteria to evaluate alternatives include:

- **Determine the project cost.** This may include initial project development costs, and repair and operating costs of maintaining projects over time.
- **Estimate the benefits.** Projecting the benefits, or cash flow resulting from a project can be difficult. Expected future returns from the mitigation effort depend on the correct specification of the risk and the effectiveness of the project, which may not be well known. Expected future costs depend on the physical durability and potential economic obsolescence of the investment. This is difficult to project. These considerations will also provide guidance in selecting an appropriate salvage value. Future tax structures and rates must be projected. Financing alternatives must be researched, and they may include retained earnings, bond and stock issues, and commercial loans.
- **Consider costs and benefits to society and the environment.** These are not easily measured, but can be assessed through a variety of economic tools including existence value or contingent value theories. These theories provide quantitative data on the value people attribute to physical or social environments. Even without hard data, however, impacts of structural projects to the physical environment or to society should be considered when implementing mitigation projects.
- **Determine the correct discount rate.** Determination of the discount rate can just be the risk-free cost of capital, but it may include the decision maker's time preference and also a risk premium. Including inflation should also be considered.

3. Analyze and Rank the Activities

Once costs and benefits have been quantified, economic analysis tools can rank the possible mitigation activities. Two methods for determining the best activities given varying costs and benefits include net present value and internal rate of return.

- **Net present value.** Net present value is the value of the expected future returns of an investment minus the value of the expected future cost expressed in today's dollars. If the net present value is greater than the projected costs, the project may be determined feasible for implementation. Selecting the discount rate, and identifying the present and future costs and benefits of the project calculates the net present value of projects.
- **Internal rate of return.** Using the internal rate of return method to evaluate mitigation projects provides the interest rate equivalent to the dollar returns expected from the project. Once the rate has been calculated, it can be compared to rates earned by investing in alternative projects. Projects may be feasible to implement when the internal rate of return is greater than the total costs of the project. Once the mitigation projects are ranked on the basis of economic criteria, decision-makers can consider other factors, such as risk, project effectiveness, and economic, environmental, and social returns in choosing the appropriate project for implementation.

Economic Returns of Natural Hazard Mitigation

The estimation of economic returns, which accrue to building or land owners as a result of natural hazard mitigation, is difficult. Owners evaluating the economic feasibility of mitigation should consider reductions in physical damages and financial losses. A partial list follows:

- Building damages avoided
- Content damages avoided
- Inventory damages avoided
- Rental income losses avoided
- Relocation and disruption expenses avoided
- Proprietor's income losses avoided

These parameters can be estimated using observed prices, costs, and engineering data. The difficult part is to correctly determine the effectiveness of the hazard mitigation project and the resulting reduction in damages and losses. Equally as difficult is assessing the probability that an event will occur. The damages and losses should only include those that will be borne by the owner. The salvage value of the investment can be important in determining economic feasibility. Salvage value becomes more important as the time horizon of the owner declines. This is important because most businesses depreciate assets over a period of time.

Additional Costs from Natural Hazards

Property owners should also assess changes in a broader set of factors that can change as a result of a large natural disaster. These are usually termed "indirect" effects, but they can have a very direct effect on the economic value of the owner's building or land. They can be positive or negative, and include changes in the following:

- Commodity and resource prices
- Availability of resource supplies
- Commodity and resource demand changes

- Building and land values
- Capital availability and interest rates
- Availability of labor
- Economic structure
- Infrastructure
- Regional exports and imports
- Local, state, and national regulations and policies
- Insurance availability and rates

Changes in the resources and industries listed above are more difficult to estimate and require models that are structured to estimate total economic impacts. Total economic impacts are the sum of direct and indirect economic impacts. Total economic impact models are usually not combined with economic feasibility models. Many models exist to estimate total economic impacts of changes in an economy. Decision makers should understand the total economic impacts of natural disasters in order to calculate the benefits of a mitigation activity. This suggests that understanding the local economy is an important first step in being able to understand the potential impacts of a disaster, and the benefits of mitigation activities.

Additional Considerations

Conducting an economic analysis for potential mitigation activities can assist decision-makers in choosing the most appropriate strategy for their community to reduce risk and prevent loss from natural hazards. Economic analysis can also save time and resources from being spent on inappropriate or unfeasible projects. Several resources and models are listed on the following page that can assist in conducting an economic analysis for natural hazard mitigation activities.

Benefit/cost analysis is complicated, and the numbers may divert attention from other important issues. It is important to consider the qualitative factors of a project associated with mitigation that cannot be evaluated economically. There are alternative approaches to implementing mitigation projects. With this in mind, opportunity rises to develop strategies that integrate natural hazard mitigation with projects related to watersheds, environmental planning, community economic development, and small business development, among others. Incorporating natural hazard mitigation with other community projects can increase the viability of project implementation.

Resources

CUREe Kajima Project, *Methodologies for Evaluating the Socio-Economic Consequences of Large Earthquakes*, Task 7.2 Economic Impact Analysis, Prepared by University of California, Berkeley Team, Robert A. Olson, VSP Associates, Team Leader; John M. Eidinger, G&E Engineering Systems; Kenneth A. Goettel, Goettel and Associates, Inc.; and Gerald L. Horner, Hazard Mitigation Economics Inc., 1997

Federal Emergency Management Agency, *Benefit/Cost Analysis of Hazard Mitigation Projects*, Riverine Flood, Version 1.05, Hazard Mitigation Economics, Inc., 1996

Federal Emergency Management Agency, *Report on the Costs and Benefits of Natural Hazard Mitigation*. Publication 331, 1996.

Goettel & Horner Inc., *Earthquake Risk Analysis Volume III: The Economic Feasibility of Seismic Rehabilitation of Buildings in the City of Portland*, Submitted to the Bureau of Buildings, City of Portland, August 30, 1995.

Goettel & Horner Inc., *Benefit/Cost Analysis of Hazard Mitigation Projects Volume V, Earthquakes*, Prepared for FEMA's Hazard Mitigation Branch, October 25, 1995.

Horner, Gerald, *Benefit/Cost Methodologies for Use in Evaluating the Cost Effectiveness of Proposed Hazard Mitigation Measures*, Robert Olsen Associates, Prepared for Oregon Military Department – Office of Emergency Management, July 1999.

Interagency Hazards Mitigation Team, *State Hazard Mitigation Plan*, (Oregon State Police – Office of Emergency Management, 2000.)

Risk Management Solutions, Inc., *Development of a Standardized Earthquake Loss Estimation Methodology*, National Institute of Building Sciences, Volume I and II, 1994.

VSP Associates, Inc., *A Benefit/Cost Model for the Seismic Rehabilitation of Buildings*, Volumes 1 & 2, Federal Emergency management Agency, FEMA Publication Numbers 227 and 228, 1991.

VSP Associates, Inc., *Benefit/Cost Analysis of Hazard Mitigation Projects: Section 404 Hazard Mitigation Program and Section 406 Public Assistance Program, Volume 3: Seismic Hazard Mitigation Projects*, 1993.

VSP Associates, Inc., *Seismic Rehabilitation of Federal Buildings: A Benefit/Cost Model*, Volume 1, Federal Emergency Management Agency, FEMA Publication Number 255, 1994.

APPENDIX E: GRANT PROGRAMS AND RESOURCES

Introduction

There are numerous local, state and federal funding sources available to support natural hazard mitigation projects and planning. The Oregon Natural Hazard Mitigation Plan includes a comprehensive list of funding sources (refer to Oregon NHMP Chapter 2 Section F(1)). The following section includes an abbreviated list of the most common funding sources utilized by local jurisdictions in Oregon. Because grant programs often change, it is important to periodically review available funding sources for current guidelines and program descriptions.

Post-Disaster Federal Programs

Hazard Mitigation Grant Program

The Hazard Mitigation Grant Program (HMGP) provides grants to States and local governments to implement long-term hazard mitigation measures after a major disaster declaration. The purpose of the HMGP is to reduce the loss of life and property due to natural disasters and to enable mitigation measures to be implemented during the immediate recovery from a disaster. The HMGP is authorized under Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

<http://www.fema.gov/hazard-mitigation-grant-program>

Physical Disaster Loan Program

When physical disaster loans are made to homeowners and businesses following disaster declarations by the U.S. Small Business Administration (SBA), up to 20% of the loan amount can go towards specific measures taken to protect against recurring damage in similar future disasters. <http://www.sba.gov/category/navigation-structure/loans-grants/small-business-loans/disaster-loans>

Pre-Disaster Federal Programs

Pre-Disaster Mitigation Grant Program

The Pre-Disaster Mitigation (PDM) program provides funds to states, territories, Indian tribal governments, communities, and universities for hazard mitigation planning and the implementation of mitigation projects prior to a disaster event. Funding these plans and projects reduces overall risks to the population and structures, while also reducing reliance on funding from actual disaster declarations. PDM grants are to be awarded on a competitive basis and without reference to state allocations, quotas, or other formula-based allocation of funds. <http://www.fema.gov/pre-disaster-mitigation-grant-program>

Flood Mitigation Assistance Program

The overall goal of the Flood Mitigation Assistance (FMA) Program is to fund cost-effective measures that reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other National Flood Insurance Program (NFIP) insurable structures. This specifically includes:

- Reducing the number of repetitively or substantially damaged structures and the associated flood insurance claims;
- Encouraging long-term, comprehensive hazard mitigation planning;
- Responding to the needs of communities participating in the NFIP to expand their mitigation activities beyond floodplain development activities; and
- Complementing other federal and state mitigation programs with similar, long-term mitigation goals.

<http://www.fema.gov/flood-mitigation-assistance-program>

Detailed program and application information for federal post-disaster and pre-disaster programs can be found in the FY13 Hazard Mitigation Assistance Unified Guidance, available at: <https://www.fema.gov/media-library/assets/documents/33634>. Note that guidance regularly changes. Verify that you have the most recent edition.

For Oregon Military Department, Office of Emergency Management (OEM) grant guidance on Federal Hazard Mitigation Assistance, visit:

http://www.oregon.gov/OMD/OEM/pages/all_grants.aspx - Hazard_Mitigation_Grants

Contact: Dennis Sigrist, dennis.sigrist@oem.state.or.us

State Programs

Seismic Rehabilitation Grant Program

The Seismic Rehabilitation Grant Program (SRGP) provides state funds to strengthen public schools and emergency services buildings so they will be less damaged during an earthquake. Reducing property damage, injuries, and casualties caused by earthquakes is the goal of the SRGP. <http://www.orinfrastructure.org/Infrastructure-Programs/Seismic-Rehab/>

Community Development Block Grant Program

The Community Development Block Grant Program promotes viable communities by providing: 1) decent housing; 2) quality living environments; and 3) economic opportunities, especially for low and moderate income persons. Eligible Activities Most Relevant to Hazard Mitigation include: acquisition of property for public purposes; construction/reconstruction of public infrastructure; community planning activities. Under special circumstances, CDBG funds also can be used to meet urgent community development needs arising in the last 18 months which pose immediate threats to health and welfare.

http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs

Oregon Watershed Enhancement Board

While OWEB's primary responsibilities are implementing projects addressing coastal salmon restoration and improving water quality statewide, these projects can sometimes also benefit efforts to reduce flood and landslide hazards. In addition, OWEB conducts watershed workshops for landowners, watershed councils, educators, and others, and conducts a biennial conference highlighting watershed efforts statewide. Funding for OWEB programs comes from the general fund, state lottery, timber tax revenues, license plate revenues, angling license fees, and other sources. OWEB awards approximately \$20 million in funding annually. More information at: <http://www.oregon.gov/OWEB/Pages/index.aspx>

Federal Mitigation Programs, Activities & Initiatives

Basic & Applied Research/Development

National Earthquake Hazard Reduction Program (NEHRP), National Science Foundation.

Through broad based participation, the NEHRP attempts to mitigate the effects of earthquakes. Member agencies in NEHRP are the US Geological Survey (USGS), the National Science Foundation (NSF), the Federal Emergency Management Agency (FEMA), and the National Institute for Standards and Technology (NIST). The agencies focus on research and development in areas such as the science of earthquakes, earthquake performance of buildings and other structures, societal impacts, and emergency response and recovery. <http://www.nehrp.gov/>

Decision, Risk, and Management Science Program, National Science Foundation.

Supports scientific research directed at increasing the understanding and effectiveness of decision making by individuals, groups, organizations, and society. Disciplinary and interdisciplinary research, doctoral dissertation research, and workshops are funded in the areas of judgment and decision making; decision analysis and decision aids; risk analysis, perception, and communication; societal and public policy decision making; management science and organizational design. The program also supports small grants for exploratory research of a time-critical or high-risk, potentially transformative nature. http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5423

Hazard ID and Mapping

National Flood Insurance Program: Flood Mapping; FEMA

Flood insurance rate maps and flood plain management maps for all NFIP communities. <http://www.fema.gov/national-flood-insurance-program-flood-hazard-mapping>

National Digital Orthophoto Program, DOI – USGS

Develops topographic quadrangles for use in mapping of flood and other hazards. <http://www.ndop.gov/>

Mapping Standards Support, DOI-USGS

Expertise in mapping and digital data standards to support the National Flood Insurance Program. <http://ncgmp.usgs.gov/standards.html>

Soil Survey, USDA-NRCS

Maintains soil surveys of counties or other areas to assist with farming, conservation, mitigation or related purposes. http://soils.usda.gov/survey/printed_surveys/

Project Support

Coastal Zone Management Program, NOAA.

Provides grants for planning and implementation of non-structural coastal flood and hurricane hazard mitigation projects and coastal wetlands restoration.

<http://coastalmanagement.noaa.gov/>

Community Development Block Grant Entitlement Communities Program, US Department of Housing and Urban Development

Provides grants to entitled cities and urban counties to develop viable communities (e.g., decent housing, a suitable living environment, expanded economic opportunities), principally for low- and moderate- income persons.

http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs/entitlement

National Fire Plan (DOI – USDA)

The NFP provides technical, financial, and resource guidance and support for wildland fire management across the United States. Addresses five key points: firefighting, rehabilitation, hazardous fuels reduction, community assistance, and accountability.

<http://www.forestsandrangelands.gov/>

Assistance to Firefighters Grant Program, FEMA

FEMA AFGM grants are awarded to fire departments to enhance their ability to protect the public and fire service personnel from fire and related hazards. Three types of grants are available: Assistance to Firefighters Grant (AFG), Fire Prevention and Safety (FP&S), and Staffing for Adequate Fire and Emergency Response (SAFER).

<http://www.fema.gov/welcome-assistance-firefighters-grant-program>

Emergency Watershed Protection Program, USDA-NRCS

Provides technical and financial assistance for relief from imminent hazards in small watersheds, and to reduce vulnerability of life and property in small watershed areas damaged by severe natural hazard events.

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/ewpp>

Rural Development Assistance – Utilities, USDA

Direct and guaranteed rural economic loans and business enterprise grants to address utility issues and development needs.

http://www.rurdev.usda.gov/Utilities_Programs_Grants.html

Rural Development Assistance – Housing, USDA.

The RDA program provides grants, loans, and technical assistance in addressing rehabilitation, health and safety needs in primarily low-income rural areas. Declaration of major disaster necessary. <http://www.rurdev.usda.gov/HAD-HCFPGrants.html>

Public Assistance Grant Program, FEMA.

The objective of the Federal Emergency Management Agency's (FEMA) Public Assistance (PA) Grant Program is to provide assistance to State, Tribal and local governments, and certain types of Private Nonprofit organizations so that communities can quickly respond to and recover from major disasters or emergencies declared by the President.

<http://www.fema.gov/public-assistance-local-state-tribal-and-non-profit>

National Flood Insurance Program, FEMA

The NFIP makes available flood insurance to residents of communities that adopt and enforce minimum floodplain management requirements. <http://www.fema.gov/national-flood-insurance-program>

HOME Investments Partnerships Program, HUD

The HOME IPP provides grants to states, local government and consortia for permanent and transitional housing (including support for property acquisition and rehabilitation) for low-income persons. <http://www.hud.gov/offices/cpd/affordablehousing/programs/home/>

Disaster Recovery Initiative, HUD

The DRI provides grants to fund gaps in available recovery assistance after disasters (including mitigation).

http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs/dri

Emergency Management Performance Grants, FEMA

EMPG grants help state and local governments to sustain and enhance their all-hazards emergency management programs. <http://www.fema.gov/fy-2012-emergency-management-performance-grants-program>

Partners for Fish and Wildlife, DOI – FWS

The PFW program provides financial and technical assistance to private landowners interested in pursuing restoration projects affecting wetlands and riparian habitats.

<http://www.fws.gov/partners/>

North American Wetland Conservation Fund, DOI-FWS

NAWC fund provides cost-share grants to stimulate public/private partnerships for the protection, restoration, and management of wetland habitats.

<http://www.fws.gov/birdhabitat/Grants/index.shtm>

Federal Land Transfer / Federal Land to Parks Program, DOI-NPS

Identifies, assesses, and transfers available Federal real property for acquisition for State and local parks and recreation, such as open space.

<http://www.nps.gov/ncrc/programs/flp/index.htm>

Wetlands Reserve program, USDA-NCRS

The WR program provides financial and technical assistance to protect and restore wetlands through easements and restoration agreements.

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/easements/wetlands>

Secure Rural Schools and Community Self-Determination Act of 2000, US Forest Service.

Reauthorized for FY2012, it was originally enacted in 2000 to provide five years of transitional assistance to rural counties affected by the decline in revenue from timber harvests on federal lands. Funds have been used for improvements to public schools, roads, and stewardship projects. Money is also available for maintaining infrastructure, improving the health of watersheds and ecosystems, protecting communities, and strengthening local economies. <http://www.fs.usda.gov/pts/>

BEFORE THE BOARD OF COUNTY COMMISSIONERS

IN AND FOR THE COUNTY OF CURRY, OREGON

In the Matter of Adopting)
Updates to the Curry)
County Multi-Jurisdictional)
Natural Hazards Mitigation)
Plan)

RESOLUTION NO. _____

Whereas, Hazard mitigation is any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards; and

Whereas, Hazard mitigation activities may be implemented prior to, during, or after an event; and

Whereas, It has been demonstrated that hazard mitigation is most effective when based on an inclusive, comprehensive, long-term plan that is developed before a disaster occurs; and

Whereas, Curry County recognizes the threat that natural hazards pose to people, property and infrastructure within our community; and

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

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

Whereas, Curry County fully participated in the FEMA prescribed mitigation planning process to prepare this Natural Hazards Mitigation Plan; and

Whereas, the Oregon Office of Emergency Management and Federal Emergency Management Agency, Region X officials have reviewed the *Curry County Multi-Jurisdictional Natural Hazard Mitigation Plan* and pre-approved it (dated, February 22, 2016) contingent upon this official adoption of the participating governments and entities; and

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

Whereas, the NHMP is in an on-going cycle of development and revision to improve its effectiveness; and

Whereas, Curry County adopts the NHMP and directs the County's Natural Hazards Plan Committee to develop, approve, and implement the mitigation strategies and any administrative changes to the NHMP.

Now, therefore, be it resolved, that Curry County adopts *the Curry County Multi-Jurisdictional Natural Hazards Mitigation Plan* as an official plan; and

Be it further resolved, that Curry County will submit this Adoption Resolution to the Oregon Office of Emergency Management and Federal Emergency Management Agency, Region X officials to enable final approval of the *Curry County Multi-Jurisdictional Natural Hazards Mitigation Plan*.

Adopted this 16 day of March, 2016

CURRY COUNTY BOARD OF COMMISSIONERS

Approved as to form:

Thomas Huxley, Chair

John Hutt
Curry County Legal Counsel

Susan Brown, Vice Chair

David Brock Smith, Commissioner

CURRY COUNTY BOARD OF COMMISSIONERS
AGENDA ITEM ROUTING SLIP
FORM 10-001.1 Rev. 03-02-2016

PART I – SUBMITTING DEPARTMENT: RETURN TO [BOC OFFICE@CO.CURRY.OR.US](mailto:BOC_OFFICE@CO.CURRY.OR.US)

AGENDA ITEM TITLE: Enviromental Health Contract Amendment #1 - Signature Authority to Liaison Commissioner

AGENDA DATE^a: 03-16-2016 **DEPARTMENT:** CCH **TIME NEEDED:** 5 Min

^aSubmit by seven days prior to the next General Meeting (eight days if a holiday falls within that seven day period)

CONTACT PERSON: Ken Dukek **PHONE/EXT:** 373-8012 **TODAY'S DATE:** 03-07-2016

BRIEF BACKGROUND OR NOTE^b: This is the Environmental Health contract that CURRY COUNTY has with State of Oregon – Amendment #1. While we provide the service, County retains responsibility.

^bIndicate if more than one copy to be signed

FILES ATTACHED:

SUBMISSION TYPE: Contract

- (1)148154-1 amendment
- (2)

Are there originals in route (paper copies with pre-existing signatures) Yes No

QUESTIONS:

1. Would this item be a departure from the Annual Budget if approved? Yes No
(If Yes, brief detail)
2. Does this agenda item impact any other County department? Yes No
(If Yes, brief detail)
3. If Land Transaction, filed with the clerk? Yes No N/A

INSTRUCTIONS ONCE SIGNED:

No Additional Activity Required

OR

File with County Clerk

Name: Ken Dukek

Send Printed Copy to:

Address: CCH

Email a Digital Copy to:

City/State/Zip:

Other 2 Copies so one can be held by State

Phone:

Due date to send: / /

Email:

^cNote: Most signed documents are filed/recorded with the Clerk per standard process.

PART II – COUNTY CLERK REVIEW

EVALUATION CRITERIA:

CLERK ASSESSMENT: Does this agenda item meet filing/recording standards? Yes No N/A
(If No, brief detail)

PART III - FINANCE DEPARTMENT REVIEW

EVALUATION CRITERIA 1-4:

1. Confirmed Submitting Department's finance-related responses Yes No
Comment:
2. Confirmed Submitting Department's personnel-related materials Yes No N/A
Comment:
3. If job description, Salary Committee reviewed: Yes No N/A
4. If hire order requires an UA, is it approved? Yes No Pending N/A

PART IV – COUNTY COUNSEL REVIEW

AGENDA ASSIGNMENT TYPE: Adminstrative Actions

LEGAL ASSESSMENT: Does this agenda item have a legal impact? Yes No

(If Yes, brief detail) Amends agreement 148154 with respect to payment / financial reporting and pool / lodging oversight terms

PART V – BOARD OF COMMISSIONER REVIEW/COMMENT

LIAISON COMMISSIONER AGREES TO ADD TO AGENDA:

Commissioner Susan Brown Yes No
Commissioner Thomas Huxley Yes No
Commissioner David Brock Smith Yes No

Not applicable to Sheriff's Department since they do not have a liaison



Agreement Number 148154

**AMENDMENT TO
STATE OF OREGON
INTERGOVERNMENTAL AGREEMENT**

In compliance with the Americans with Disabilities Act, this document is available in alternate formats such as Braille, large print, audio recordings, Web-based communications and other electronic formats. To request an alternate format, please send an e-mail to dhs-oha.publicationrequest@state.or.us or call 503-378-3486 (voice) or 503-378-3523 (TTY) to arrange for the alternative format.

This is amendment number **1** to Agreement Number **148154** between the State of Oregon, acting by and through its Oregon Health Authority, hereinafter referred to as “OHA” and

**Curry County
94235 Moore Street, Suite 121
Gold Beach, Oregon 97444
Holly Strahm
Telephone: (541) 373-8079
Email: strahmh@co.curry.or.us**

hereinafter referred to as “County.”

- 1.** This amendment shall become effective on the date this amendment has been fully executed by every party and, when required, approved by Department of Justice.
- 2.** The Agreement is hereby amended as follows:
 - a. Exhibit A, Part 3 “Payment and Financial Reporting” is hereby superseded and restated in its entirety as set forth in “Exhibit A, Part 3 Payment and Financial Reporting” attached hereto and incorporated herein by this reference.
 - b. Exhibit A, Part 4 “State Food Pool and Lodging Section Oversight Activities,” Section 5 is deleted in its entirety and restated with the following:
 5. “OHA shall conduct triennial reviews of LPHA in accordance with OAR 333-012-0070(2).”
- 3. Certification.**
 - a. The County acknowledges that the Oregon False Claims Act, ORS 180.750 to 180.785, applies to any “claim” (as defined by ORS 180.750) that is made by (or caused by) the County and that pertains to this Agreement or to the project for

which the Agreement work is being performed. The County certifies that no claim described in the previous sentence is or will be a “false claim” (as defined by ORS 180.750) or an act prohibited by ORS 180.755. County further acknowledges that in addition to the remedies under this Agreement, if it makes (or causes to be made) a false claim or performs (or causes to be performed) an act prohibited under the Oregon False Claims Act, the Oregon Attorney General may enforce the liabilities and penalties provided by the Oregon False Claims Act against the County. Without limiting the generality of the foregoing, by signature on this Agreement, the County hereby certifies that:

- (1) The information shown in County Data and Certification, of original Agreement or as amended is County’s true, accurate and correct information;
 - (2) To the best of the undersigned’s knowledge, County has not discriminated against and will not discriminate against minority, women or emerging small business enterprises certified under ORS 200.055 in obtaining any required subcontracts;
 - (3) County and County’s employees and agents are not included on the list titled “Specially Designated Nationals and Blocked Persons” maintained by the Office of Foreign Assets Control of the United States Department of the Treasury and currently found at:
<http://www.treas.gov/offices/enforcement/ofac/sdn/t11sdn.pdf>;
 - (4) County is not listed on the non-procurement portion of the General Service Administration’s “List of Parties Excluded from Federal procurement or Nonprocurement Programs” found at:
<https://www.sam.gov/portal/public/SAM/>; and
 - (5) County is not subject to backup withholding because:
 - (a) County is exempt from backup withholding;
 - (b) County has not been notified by the IRS that County is subject to backup withholding as a result of a failure to report all interest or dividends; or
 - (c) The IRS has notified County that County is no longer subject to backup withholding.
- b. County is required to provide its Federal Employer Identification Number (FEIN). By County’s signature on this Agreement, County hereby certifies that the FEIN provided to OHA is true and accurate. If this information changes, County is also required to provide OHA with the new FEIN within 10 days.
- c. Except as expressly amended above, all other terms and conditions of the original Agreement and any previous amendments are still in full force and effect. County certifies that the representations, warranties and certifications contained in the original Agreement are true and correct as of the effective date of this amendment and with the same effect as though made at the time of this amendment.

4. Signatures.

COUNTY: YOU WILL NOT BE PAID FOR SERVICES RENDERED PRIOR TO NECESSARY STATE APPROVALS

Curry County
By:

Authorized Signature	Title	Date
----------------------	-------	------

State of Oregon, acting by and through its Oregon Health Authority
By:

Authorized Signature	Title	Date
----------------------	-------	------

Approved for Legal Sufficiency:

Exempt per OAR 137-045-0050(2)

Assistant Attorney General Date

Office of Contracts and Procurement:

Contract Specialist	Date
---------------------	------

**OREGON HEALTH AUTHORITY
2015-2017 INTERGOVERNMENTAL AGREEMENT
FOR ENVIRONMENTAL HEALTH SERVICES**

**EXHIBIT A
Part 3**

Payment and Financial Reporting

Interim remittances shall be made to OHA subject to ORS 293.462, and in accordance with terms and conditions set forth in Exhibit A, Part 2, IX of this Agreement.

1. **Foodborne Illness Prevention Program** - Not later than thirty (30) days following the last day of a particular calendar quarter, LPHA shall remit **\$1,527.00** to OHA which is a portion of the fees collected by LPHA pursuant to the FIPP Work performed under this Agreement that is approximately twenty-five percent (25%) of the fees assessed for LPHA for a particular calendar year, or as negotiated and modified by amendment to this Agreement.
 - a. The remittance to OHA shall be accompanied by a written remittance summary report that shall describe all Work performed with particularity and by whom it was performed and shall itemize and explain each remittance category contained in the report.
 - b. Each remittance summary report also shall include the total amount remitted to date by LPHA prior to the current remittance LPHA shall send remittances to OHA's Agreement Administrator.
2. **Public Pool and Spa Program** - Not later than thirty (30) days following the last day of a particular calendar quarter, LPHA shall remit to OHA **\$45.00** for each license issued by LPHA in that quarter under ORS 448.035, which is a portion of the fees collected by LPHA.
3. **Tourist Facility Program** - Not later than thirty (30) days following the last day of a particular calendar quarter, for each license issued in that quarter, the Local Public Health Authority must remit 15% of the state licensing fee or 15% of the Local Public Health Authority license fee, whichever is less, to OHA for consultation services and maintenance of the statewide program for facilities licensed under ORS 446.425.

CURRY COUNTY BOARD OF COMMISSIONERS
AGENDA ITEM ROUTING SLIP
FORM 10-001.1 Rev. 03-02-2016

PART I – SUBMITTING DEPARTMENT: RETURN TO [BOC OFFICE@CO.CURRY.OR.US](mailto:BOC_OFFICE@CO.CURRY.OR.US)

AGENDA ITEM TITLE: New Hire - Deputy District Attorney I

AGENDA DATE^a: 3/16/2016 **DEPARTMENT:** District Attorney **TIME NEEDED:** 10 Min

^aSubmit by seven days prior to the next General Meeting (eight days if a holiday falls within that seven day period)

CONTACT PERSON: Everett Dial **PHONE/EXT:** 3298 **TODAY'S DATE:** 3/4/2016

BRIEF BACKGROUND OR NOTE^b:

^bIndicate if more than one copy to be signed

FILES ATTACHED:

SUBMISSION TYPE: Order

- (1) Hire Order
- (2) Job Description

Are there originals in route (paper copies with pre-existing signatures) Yes No

QUESTIONS:

1. Would this item be a departure from the Annual Budget if approved? Yes No
(If Yes, brief detail)
2. Does this agenda item impact any other County department? Yes No
(If Yes, brief detail)
3. If Land Transaction, filed with the clerk? Yes No N/A

INSTRUCTIONS ONCE SIGNED:

No Additional Activity Required

OR

File with County Clerk

Name:

Send Printed Copy to:

Address:

Email a Digital Copy to:

City/State/Zip:

Other

Phone:

Due date to send: / /

Email:

***Note: Most signed documents are filed/recorded with the Clerk per standard process.**

PART II – COUNTY CLERK REVIEW

EVALUATION CRITERIA:

CLERK ASSESSMENT: Does this agenda item meet filing/recording standards? Yes No N/A

(If No, brief detail)

PART III - FINANCE DEPARTMENT REVIEW

EVALUATION CRITERIA 1-4:

1. Confirmed Submitting Department's finance-related responses Yes No
Comment:
2. Confirmed Submitting Department's personnel-related materials Yes No N/A
Comment:
3. If job description, Salary Committee reviewed: Yes No N/A
4. If hire order requires an UA, is it approved? Yes No Pending N/A

PART IV – COUNTY COUNSEL REVIEW

AGENDA ASSIGNMENT TYPE: **Administrative Actions**

LEGAL ASSESSMENT: Does this agenda item have a legal impact? Yes No

(If Yes, brief detail) Authorizes new hire in DA's office effective March 20, 2016

PART V – BOARD OF COMMISSIONER REVIEW/COMMENT

LIAISON COMMISSIONER AGREES TO ADD TO AGENDA:

Commissioner Susan Brown Yes No

Commissioner Thomas Huxley Yes No

Commissioner David Brock Smith Yes No

Not applicable to Sheriff's Department since they do not have a liaison

**CURRY COUNTY
JOB DESCRIPTION**

JOB TITLE: Deputy District Attorney I

EXEMPT:	Yes	
SALARY LEVEL:	E-11	
SUPERVISOR:	District Attorney	
PREPARED BY:	District Attorney	May 2014

POSITION SUMMARY:

Performs legal work in the prosecution of adult criminal cases; punitive contempt of court cases; violation cases and mental commitment cases and juvenile delinquency and dependency cases.

ESSENTIAL DUTIES AND RESPONSIBILITIES:

Responsibilities and duties of the Deputy District Attorney I, include but are not limited to:

1. Reviewing and filing of misdemeanor and minor felony cases, interviewing witnesses and officers, conducting legal research, preparing witnesses to testify, conducting direct and cross examination of witnesses and researching and drafting of memorandums and other legal documents, drafting and review of search and arrest warrants, and preparing for trial.
2. Appearing in Court for: Arraignments, Pre Trial Conferences, Omnibus Hearings, Misdemeanor Trials, Probation revocation hearings, Mental hearings, Juvenile Court hearings, other miscellaneous Court hearings.
2. Work is performed under the supervision of the District Attorney.

SUPERVISORY RESPONSIBILITIES:

None

QUALIFICATION REQUIREMENTS:

Must have a thorough knowledge of the rules of evidence and court practices procedures and terminology.

Must have the ability to organize, interpret and apply legal principles; must establish and maintain effective working relationships with office staff, police agencies, county officials, court officials, attorneys and the public.

DESIRABLE QUALIFICATIONS:

An interest in criminal law, trial work, and prosecution

JOB DESCRIPTION

JOB TITLE: Deputy District Attorney I – Page 2

EDUCATION AND/OR EXPERIENCE:

Must have a juris doctorate; two years of experience in legal practice or legal research and writing; or any satisfactory equivalent combination of experience and training which demonstrates the ability to perform the above described duties. Must at all times of employment be lawfully able to appear in court as a prosecutor and attorney for the State of Oregon.

NECESSARY SPECIAL REQUIREMENTS:

Must have a valid driver license.

Reasonable accommodations may be made to enable individuals with disabilities to perform these essential functions.

**BEFORE THE BOARD OF CURRY COUNTY COMMISSIONERS
IN AND FOR THE COUNTY OF CURRY, OREGON**

**IN THE MATTER OF THE HIRING OF)
A NEW EMPLOYEE)**

ORDER NO: _____

WHEREAS, it is the recommendation of Everett Dial, District Attorney, that the following person be hired to fill the position identified below at the specified salary range, step, rate of pay, and status:

Name	Position	Salary Range/Step	Rate	Status
Joshua A. Spansail	DDA I	E11-E	\$4,966/mo	FT

The job description for this position is attached hereto and incorporated by reference.

WHEREAS, the Board of Commissioners of Curry County, a political subdivision of the State of Oregon, is in agreement with the above stated recommendation;

NOW, THEREFORE, IT IS HEREBY ORDERED that the above stated recommendation be in effect as of March 20, 2016.

Dated this 16 day of March, 2016.

CURRY COUNTY BOARD OF COMMISSIONERS

Approved as to form:

Thomas Huxley, Chair

John Hutt
Curry County Legal Counsel

Susan Brown, Vice Chair

David Brock Smith, Commissioner

CURRY COUNTY BOARD OF COMMISSIONERS
AGENDA ITEM ROUTING SLIP
FORM 10-001.1 Rev. 03-02-2016

PART I – SUBMITTING DEPARTMENT: RETURN TO [BOC OFFICE@CO.CURRY.OR.US](mailto:BOC_OFFICE@CO.CURRY.OR.US)

AGENDA ITEM TITLE: Proposed Personnel Rules Changes

AGENDA DATE^a: 3/16/16 **DEPARTMENT:** Personnel **TIME NEEDED:** 5 minutes

^aSubmit by seven days prior to the next General Meeting (eight days if a holiday falls within that seven day period)

CONTACT PERSON: Julie Swift **PHONE/EXT:** 3233 **TODAY'S DATE:** 3/8/16

BRIEF BACKGROUND OR NOTE^b: Deletions have strikethrough, additions are in Italice

^bIndicate if more than one copy to be signed

FILES ATTACHED:

SUBMISSION TYPE: Discussion/Decision

(1)Exhibit A

(2)Exhibit B

Are there originals in route (paper copies with pre-existing signatures) Yes No

QUESTIONS:

1. Would this item be a departure from the Annual Budget if approved? Yes No
(If Yes, brief detail)
2. Does this agenda item impact any other County department? Yes No
(If Yes, brief detail)
3. If Land Transaction, filed with the clerk? Yes No N/A

INSTRUCTIONS ONCE SIGNED:

No Additional Activity Required

OR

File with County Clerk

Name:

Send Printed Copy to:

Address:

Email a Digital Copy to:

City/State/Zip:

Other

Phone:

Due date to send: / /

Email:

***Note: Most signed documents are filed/recorded with the Clerk per standard process.**

PART II – COUNTY CLERK REVIEW

EVALUATION CRITERIA:

CLERK ASSESSMENT: Does this agenda item meet filing/recording standards? Yes No N/A

(If No, brief detail)

PART III - FINANCE DEPARTMENT REVIEW

EVALUATION CRITERIA 1-4:

1. Confirmed Submitting Department's finance-related responses Yes No
Comment:
2. Confirmed Submitting Department's personnel-related materials Yes No N/A
Comment:
3. If job description, Salary Committee reviewed: Yes No N/A
4. If hire order requires an UA, is it approved? Yes No Pending N/A

PART IV – COUNTY COUNSEL REVIEW

AGENDA ASSIGNMENT TYPE: Adminstrative Actions

LEGAL ASSESSMENT: Does this agenda item have a legal impact? Yes No

(If Yes, brief detail) Authorizes Department Heads to hire employees without Board approval; clarifies standards for employee conduct

PART V – BOARD OF COMMISSIONER REVIEW/COMMENT

LIAISON COMMISSIONER AGREES TO ADD TO AGENDA:

Commissioner Susan Brown Yes No

Commissioner Thomas Huxley Yes No

Commissioner David Brock Smith Yes No

Not applicable to Sheriff's Department since they do not have a liaison

**ARTICLE 13
APPOINTMENTS**

A. ALL VACANCIES FOR EMPLOYMENT POSITIONS IN THE COUNTY SHALL BE FILLED AS PROVIDED IN THIS ARTICLE AND NO APPOINTMENT WILL BE FINAL UNTIL APPROVED BY THE BOARD.

1. *NO DEPARTMENT HEAD APPOINTMENT IS FINAL UNTIL APPROVED BY THE BOARD.*

2. *DEPARTMENT HEAD APPOINTING AUTHORITIES MAY MAKE FINAL APPOINTMENT OF EMPLOYEES SERVING IN THEIR DEPARTMENTS.*

G. APPOINTMENTS: When an appointing authority has selected a candidate to fill a position, the appointing authority shall notify the Personnel Officer. ~~The appointing authority shall then prepare an order to be submitted for Board consideration at a regular or special meeting.~~ *All new appointments not subject to final approval by the Board may be introduced at a public meeting within 60 days of hiring date.*

Appointing authorities shall provide to the Personnel Officer details of the hiring decision in the form of a job offer letter. The Personnel Officer can provide a sample.

**ARTICLE 24
CONDUCT AND DISCIPLINE**

- A. **EMPLOYEE CONDUCT:** The standard of conduct for all employees in the County service shall be in the public interest as opposed to individual interests. In order to render the best possible service to the general public and to reflect credit on County service, high standards of conduct are deemed essential.

Employment shall be conditioned on good behavior and satisfactory performance of duties. *Employees are to maintain a respectful work environment free from discrimination, harassment, sexual harassment, violence, and other offensive or degrading remarks or conduct. It is the responsibility of all employees and agents of the County to treat each other, as well as the public, with courtesy and consideration, to promote an atmosphere of mutual respect and to create a welcoming environment for everyone they come in contact with during the course of their work.*

The above expectations are not exclusive, and include other similar standards appropriate to professionalism and employee conduct.

F. REPORTS OF DEVIATIONS FROM OR VIOLATIONS OF STANDARDS

Deviations from, or violations of, the above described conduct shall be reported to the Department Head. The Department Head shall conduct an investigation or have an investigation conducted to the extent warranted by the report. After the investigation, the Department Head will confer with the County Personnel Officer and County Legal Counsel, and may impose any, all, other, or no discipline allowed under section E, above.

Further, reports of deviations from or violations of this Regulation by a Department Head shall be reported to the Personnel Officer.

If you have any questions or concerns about this Article or Complaint Procedures please share them with your Department Head and/or Personnel Officer.

CURRY COUNTY BOARD OF COMMISSIONERS
AGENDA ITEM ROUTING SLIP
FORM 10-001.1 Rev. 03-02-2016

PART I – SUBMITTING DEPARTMENT: RETURN TO BOC_OFFICE@CO.CURRY.OR.US

AGENDA ITEM TITLE: Renewal of Insurance Agent Services Contract with CAL/OR

AGENDA DATE^a: 2016-03-16 **DEPARTMENT:** Counsel **TIME NEEDED:** 5 mins

^aSubmit by seven days prior to the next General Meeting (eight days if a holiday falls within that seven day period)

CONTACT PERSON: J. Huttl **PHONE/EXT:** 3218 **TODAY'S DATE:** 2016-03-03

BRIEF BACKGROUND OR NOTE^b: This renewal is for one year per contract No. 4572, filed May 3, 2012; Extends contract to June 30, 2017; this last renewal allowed under the original agreement. .

^bIndicate if more than one copy to be signed

FILES ATTACHED:

SUBMISSION TYPE: Contract

- (1)Renewal Contract
- (2)Agreement No. 4572

Are there originals in route (paper copies with pre-existing signatures) Yes No

QUESTIONS:

1. Would this item be a departure from the Annual Budget if approved? Yes No
(If Yes, brief detail)
2. Does this agenda item impact any other County department? Yes No
(If Yes, brief detail)
3. If Land Transaction, filed with the clerk? Yes No N/A

INSTRUCTIONS ONCE SIGNED:

No Additional Activity Required

OR

File with County Clerk

Name: CAL/OR Insurance

Send Printed Copy to:

Address: P.O. Box 2725

Email a Digital Copy to:

City/State/Zip: Brookings, Oregon 97415

Other

Phone:

Due date to send: 03 /18 / 2016

Email:

^cNote: Most signed documents are filed/recorded with the Clerk per standard process.

PART II – COUNTY CLERK REVIEW

EVALUATION CRITERIA:

CLERK ASSESSMENT: Does this agenda item meet filing/recording standards? Yes No N/A
(If No, brief detail)

PART III - FINANCE DEPARTMENT REVIEW

EVALUATION CRITERIA 1-4:

1. Confirmed Submitting Department's finance-related responses Yes No
Comment:
2. Confirmed Submitting Department's personnel-related materials Yes No N/A
Comment:
3. If job description, Salary Committee reviewed: Yes No N/A
4. If hire order requires an UA, is it approved? Yes No Pending N/A

PART IV – COUNTY COUNSEL REVIEW

AGENDA ASSIGNMENT TYPE: Adminstrative Actions

LEGAL ASSESSMENT: Does this agenda item have a legal impact? Yes No
(If Yes, brief detail) This action renews a contract for insurance agent of record services

PART V – BOARD OF COMMISSIONER REVIEW/COMMENT

LIAISON COMMISSIONER AGREES TO ADD TO AGENDA:

Commissioner Susan Brown Yes No

Commissioner Thomas Huxley Yes No

Commissioner David Brock Smith Yes No

Not applicable to Sheriff's Department since they do not have a liaison

INSURANCE AGENT SERVICES CONTRACT

This contract is made on April 18, 2012, by and between Curry County, a political subdivision of the State of Oregon (County), and CAL/OR Insurance Specialists, Inc. (Consultant).

County and Consultant agree as follows:

1. Term

1.1 Except as otherwise provided herein, the initial term of this contract shall commence on July 1, 2012, and end on June 30, 2014.

1.2 This contract may be renewed by written agreement of the parties for three additional terms of one year each, which shall begin on July 1 following the expiration of the preceding term. The provisions of this contract shall apply to each renewal, except that the parties may negotiate changes in the fees for Consultant's services.

2. Administration of Contract: The County Payroll and Personnel Coordinator, or his/her designee, shall have authority to administer this contract on behalf of the Board of Curry County Commissioners.

3. Scope of Services: Consultant shall act as County's Agent of Record for employee benefits insurance, workers compensation, liability, and property insurance. Consultant shall perform all services reasonably necessary to carry out those functions. Said services shall include but not be limited to, the following:

A) With respect to health benefits

3.1 Review the philosophy and strategies of the County regarding employee benefit levels and employer responsibility for providing benefits.

3.2 Assist the Board of Commissioners in establishing a "benefit philosophy".

3.3 Assist the County in identifying and evaluating its employee benefit needs. This shall include a review of the County's operations, number of employees, current benefits provided, insurance contracts, past changes in benefits and reasons for change, union agreements, benefit trends, legal requirements, other governmental programs, cost considerations and County personnel policies.

3.4 Report to the Payroll and Personnel Coordinator and the Board

of Commissioners on the status of current County benefits and make recommendations on short term and long term changes that may be necessary to match the Board of Commissioners benefit philosophy with the County's financial resources.

3.5 Assist the Board of Commissioners and Payroll and Personnel Coordinator in developing a benefit plan manual for all employee benefit insurance including health, life insurance, workers compensation, etc.

3.6 Provide the Payroll and Personnel Coordinator and Board of Commissioners with any available information so that renewal projections may be anticipated.

3.7 Develop and maintain a complete set of insurance and benefit specifications including required coverages, desired forms, deductible options and limits.

3.8 Obtain alternative plans from in force carriers, as well as other carriers. Provide the Payroll and Personnel Coordinator and Board of Commissioners with information on benefit plan redesign and estimated savings including information on alternative products which could be added as a result of savings.

3.9 Present specifications to insurance markets and negotiate premiums and coverage. Review all quotes received for conformance with specifications.

3.10 Organize and work with the Payroll and Personnel Coordinator to encourage participation in benefit design, awareness, and cost containment efforts. Promote rapport and goodwill with employees through positive reinforcement of the high quality of benefits and through quick response to individual employee concerns.

3.11 Assist the County staff with benefit changes.

3.12 Assist the County in design and preparation of new benefit presentations and enrollment aids.

3.13 Assist County staff in annual benefit review.

3.14 Provide an annual summation of the status of benefits, including historical trend analysis and frequency problem review.

B) With Respect to Workers Compensation, liability and property insurance, as applicable

3.15 Provide up-to-date and unbiased information to County Counsel and the Board of Commissioners with relation to the most advantageous insurance and reinsurance markets from the standpoint of availability, cost, security, and coverage.

3.16 Prepare market analyses and forecasts by insurance line prior to each renewal. Such analyses should report pricing and service trends, availability of markets, short-term factors affecting the markets and projections of longer-term direction in which the markets are moving.

3.17 Assist carriers in the design of policy forms as needed.

3.18 Evaluate carriers for consideration as potential markets and assist in continuing re-evaluation of the performance of insurers being used.

3.19 Be mindful of and recommend the use of self-insurance or other risk financing techniques whenever appropriate. Opportunities for non-insurance transfers should also be recommended where observed to be viable alternatives.

3.20 Solicit bids and secure binders prior to effective dates for required insurance coverages. Assist in the preparation of the materials, specifications and background data to be included in bid solicitations from insurers. Assist the Board of Commissioners in selecting insurance coverages.

3.21 Verify accuracy of all policies, endorsements and invoices prior to delivery. Any deviation from specification should be brought to the attention of the County Counsel and appropriate corrections secured.

3.22 Prepare annually a concise summary for each and every insurance policy affected.

3.23 Assist in the preparation and equitable settlement of all claims covered by the County's insurance companies.

3.24 Provide claims audit services, if requested.

3.25 Issue and replace promptly, binders, certificates of insurance, loss payable forms and any other coverage verification documents as required.

3.26 Keep the County Counsel and Board of Commissioners informed on new or changing markets, forms, products, laws, government regulations, and any other information that may affect the Risk Management function.

3.27 Act as liaison with insurance companies as needed.

4. Quality of Service:

4.1 Consultant shall perform the services as an independent contractor in accordance with generally accepted standards in Consultant's profession.

Consultant shall be responsible for the professional quality, technical accuracy and the coordination of all services performed by Consultant. Consultant shall, without additional compensation, correct or revise any error or deficiencies in the services that are caused by Consultant's negligence.

4.2 Consultant shall perform the services as expeditiously as is consistent with professional skill and care. Upon request of County, Consultant shall submit for the County's approval, a schedule for the performance of Consultant's services. The schedule shall include allowance for periods of time required for County's review and approval of the Consultant's services. The schedule approved by County shall become a part of this contract.

5. Consultant's Personnel:

5.1 Services shall be rendered by, or under the supervision of Debbie Krambeal, who shall act as Consultant's representative in all communications and transactions with County.

5.2 Consultant has represented, and by entering into this contract now represents, that all of Consultant's personnel are fully qualified to perform the work to which they will be assigned in a competent and professional manner.

5.3 Consultant will endeavor to honor reasonable specific requests of County with regard to assignment of Consultant's employees to perform services covered by this contract if the requests are consistent with sound business and professional practices.

6. Independent Contractor Status:

6.1 Consultant is engaged by County as an independent contractor and shall not be deemed an "agent" of County as that term is construed under the Oregon Tort Claims Act.

6.2 Consultant shall be responsible for payment of:

6.2.1 Social Security, Federal and State withholding taxes for the wages paid to Consultant's employees.

6.2.2 Taxes on monies disbursed to Consultant's principals.

6.3 Consultant's officers, principals and employees shall not be deemed employees of County and shall not be entitled to any benefits from County that generally are granted to County employees, such as vacation, holiday and sick leave, other leaves with pay, medical and dental coverage, life and disability insurance, overtime, Social Security, worker's compensation, unemployment compensation and retirement benefits.

7. Compliance with Law:

7.1 This contract will be governed by and construed in accordance with

laws of the State of Oregon. Consultant shall promptly observe and comply with all present and future laws, orders, regulations, rules and ordinances of federal, state, county and city governments with respect to the services including, but not limited to, provisions of ORS 279B.220, 279B.230, and 279B.235.

7.2 Consultant is a "subject employer" as defined in ORS 656.005 and shall comply with ORS 656.017. Prior to commencing any services, Consultant shall certify to County that Consultant has workers compensation coverage required by ORS Chapter 656. If Consultant is a carrier insured employer, Consultant shall provide County with a certificate of insurance. If Consultant is a self-insured employer, Consultant shall provide County with a certification from the Oregon Department of Insurance and Finance as evidence of Consultant's status.

8. Ownership of Documents:

All documents prepared by Consultant pursuant to this contract shall be the property of County.

9. Payment:

9.1 Consultant shall be paid for services under this contract as outlined in the attached Exhibit 1.

9.2 Consultant shall bear all costs incurred in performance of the services including, but not limited to, labor, materials, transportation, insurance, bonds, administrative services and overhead. Consultant shall not be entitled to any compensation for the services other than what is allowed by Exhibit 1.

9.3 County shall not be indebted or liable for any obligation created by this contract in violation of the debt limitation of Article XI, Section 10 of the Oregon Constitution.

9.4 County shall not be liable for any expenditure under this contract for which statutory appropriation has not been made pursuant to ORS 294.305 et seq. (Local Budget Law).

9.5 County will soon be in the process of appropriating funds for the services that will be provided during the fiscal year that ends on June 30, 2013. In the event no funds or insufficient funds to pay for the services are appropriated for subsequent fiscal years, County shall immediately notify Consultant, and this contract shall terminate on the last day of the fiscal year for which appropriations are made. Such notice is a condition precedent to invoking the limitation on payment stated in subsection 9.3.

10. Records:

10.1 Consultant shall develop and maintain complete books of account and other records on the services which are adequate for evaluating Consultant's

performance. Consultant's records shall demonstrate a clear distinction between the services and expenses covered by this contract and Consultant's other cases and transactions.

10.2 Consultant's books and records shall be made available for inspection by County at reasonable times, to verify Consultant's compliance with this contract. County shall have the right to request an audit of Consultant's books and records by a certified public accountant retained by County.

11. Indemnification:

11.1 Consultant shall defend, indemnify and save County, its officers and employees harmless from any and all claims, actions, costs, judgments, damages or other expenses resulting from injury to any person (including injury resulting in death), or damage to property (including loss or destruction), of whatsoever nature arising out of or incident to the fault, negligence, wrongful act or wrongful omission of Consultant (including but not limited to, the acts or omissions of Consultant's employees, agents, and others designated by Consultant to perform services attendant to this contract).

11.2 Consultant shall not be held responsible for any claims, actions, costs, judgments, damages or other expenses directly, solely, and proximately caused by the negligence of County.

11.3 The purpose of this section is to allocate risk for claims between County and Consultant. Nothing in this section is intended to waive any limitations on liability established by the Oregon Tort Claims Act.

12. Insurance:

Consultant shall, at its own expense, at all times during the term of this agreement, maintain in force:

12.1 A comprehensive professional liability policy with minimum coverage of at least \$2,000,000 combined single limit. County shall be named as an additional insured. Certificates of Insurance shall be provided to the County upon request.

12.2 A comprehensive general liability policy with minimum coverage of at least \$2,000,000 combined single limit. County shall be named an additional insured. Certificates of Insurance shall be provided to County upon request.

12.3 Currently valid workers' compensation insurance covering all its workers. Certificates of Insurance shall be provided to County upon request.

12.4 A comprehensive automobile liability insurance policy including owned and non-owned automobiles. The coverage under this policy shall be with a minimum coverage of \$2,000,000 per occurrence (combined single limit for bodily injury and property damage claims). Certificates of Insurance shall be provided to County upon request.

13. Default

13.1 There shall be a default under this contract if either party fails to perform any act or obligation required by this contract within ten days after the other party gives written notice specifying the nature of the breach with reasonable particularity. If the breach specified in the notice cannot be completely cured within the ten day period, no default shall occur if the party receiving the notice begins performance of the act or obligation within the ten day period, and thereafter proceeds with reasonable diligence and in good faith to cure the breach as soon as practicable.

13.2 Notwithstanding subsection 13.1, either party may declare a default by written notice to the other party, without allowing an opportunity to cure, if the other party repeatedly breaches the terms of this agreement.

13.3 If a default occurs, the party injured by the default may elect to terminate this contract and pursue any equitable or legal rights and remedies available under Oregon law. All remedies shall be cumulative.

13.4 Any litigation arising out of this contract shall be conducted in Circuit Court of the State of Oregon for Curry County.

13.5 In the event of a breach of contract by Consultant or negligent performance of any of the services, County's rights under this section and any resultant cause of action against Consultant shall not be deemed to accrue until County discovers the breach or negligence, or should have, with reasonable diligence, discovered the breach or negligence. However, the preceding sentence shall not be construed to allow County to prosecute an action against Consultant beyond the maximum time limitation provided by Oregon law.

13.6 Termination shall not prejudice any right of a party prior to the effective date of termination.

14. Termination without Cause:

14.1 In addition to the right to terminate this contract under subsection 13.3, County may terminate by giving Consultant written notice sixty days prior to the termination date.

14.2 If County terminates the contract under subsection 14.1, Consultant will have the right to complete such analyses and records as may be necessary to place its files in order and, where considered necessary to protect its professional reputation, to complete a report on the work performed to date of termination.

14.3 If County terminates the contract under subsection 14.1, Consultant shall be paid for all fees earned and costs incurred prior to the termination date. Consultant shall not be entitled to compensation for lost profits.

15. Notices

Any notice required to be given under this contract or any notice required to be given by law shall be in writing and may be given by personal delivery or by registered or certified mail, or by any other manner prescribed by law.

15.1 Notices to County shall be addressed as follows:

Payroll and Personnel Coordinator
P.O. Box 746
Gold Beach, Or 97444
and
Curry County Counsel
P.O. Box 746
Gold Beach, Or 97444

15.2 Notices to Consultant shall be addressed as follows:

CAL/OR Insurance Specialists, Inc.
P.O. Box 2725
Harbor, OR 97415

16. Interpretation:

Words, terms, and phrases which are not specifically defined in this contract shall have the ordinary meaning ascribed to them in Consultant's business or profession unless the context clearly indicates otherwise. When not inconsistent with the context, words used in the present tense include the future, words in the plural number include the singular and words in the singular include the plural. The word "shall" is mandatory and not merely directory.

17. Successors:

17.1 The successors, assigns and legal representatives of Consultant and County shall be subject to all provisions of this contract.

17.2 Consultant shall not assign any of Consultant's rights or responsibilities under this contract or enter into any subcontracts for performance of the services without obtaining the prior written consent of County.

18. No Waiver

18.1 County's review, approval, acceptance of, or payment for, any of the services shall not be construed to waive any of County's rights under this contract or of any cause of action arising out of Consultant's breach of this contract or negligent performance of services.

18.2 No provision of this contract shall be deemed waived unless such waiver is in writing and signed by the party waiving its rights. Any waiver of a

breach by either party, whether express or implied, shall not constitute waiver of any other breach.

19. Severability:

If any provision of this contract is held by a court to be invalid, such invalidity shall not affect any other provision of this contract. This contract shall be construed as if such invalid provision had never been included.

20. Entire Agreement:

This contract, documents incorporated in this contract by reference and the attached exhibits constitute the entire and final agreement between the parties. This contract may be changed only by written modifications that are signed by both parties.

CONSULTANT
CAL/OR INSURANCE SPECIALISTS, INC.

BY Deborah E. Krambeal DATE 4-12-12
Deborah E. Krambeal
President

FED. ID# 93-1233728

BOARD OF CURRY COUNTY COMMISSIONERS

[Signature] 5-1-12
David G. Itzen, Chair DATE

Bill Waddle 5-1-12
Bill Waddle, Vice-Chair DATE

Abstain 5-1-12
George Rhodes, Commissioner DATE

Approved As To Form:

M. Gerard Herbage
M. Gerard Herbage
Curry County Counsel

EXHIBIT 1

The compensation of consultant shall be in the form of commissions negotiated with the insurance company(ies), at no cost to the County.

RENEWAL OF INSURANCE AGENT SERVICES CONTACT

It is hereby agreed to by and between Curry County, a Political Subdivision of the State of Oregon, and CAL/OR Insurance Specialists, Inc., that the insurance service contract between them filed May 3, 2012 in the Office of the Curry County Clerk, and labeled as Agreement No. 4572, be renewed pursuant to Section 1.2 for an additional one year period under the following terms and conditions:

- 1) The renewal shall be for a one-year term commencing on July 1, 2016.
- 2) All other terms of the contract shall remain the same.

CONSULTANT CAL/OR INSURANCE SPECIALISTS, INC.

By: _____ Date: _____
 Debbie Krambeal, Licensed Agent
 Fed ID#: _____

BOARD OF CURRY COUNTY COMMISSIONERS

Thomas Huxley, Chair

Susan Brown, Vice Chair

David Brock Smith, Commissioner

Approved as to Form:

 John Huttl
 Curry County Legal Counsel

CURRY COUNTY BOARD OF COMMISSIONERS
AGENDA ITEM ROUTING SLIP
FORM 10-001.1 Rev. 03-02-2016

PART I – SUBMITTING DEPARTMENT: RETURN TO BOC_OFFICE@CO.CURRY.OR.US

AGENDA ITEM TITLE: Scrivener Errors

AGENDA DATE^a: 03-16-2016 **DEPARTMENT:** Admin **TIME NEEDED:** 4 min

^aSubmit by seven days prior to the next General Meeting (eight days if a holiday falls within that seven day period)

CONTACT PERSON: Shelia **PHONE/EXT:** 3296 **TODAY'S DATE:** 03-09-2016

BRIEF BACKGROUND OR NOTE^b: Reassigning Numbers to two Orders and one Resolution due to clerical error.

^bIndicate if more than one copy to be signed

FILES ATTACHED:

SUBMISSION TYPE: Order

- (1)Orders assigning new numbers to New Hire Orders for C. Coons and Q. Coons
- (2)Resolution assigning new number to Fees used as Deposits Resolution

Are there originals in route (paper copies with pre-existing signatures) Yes No

QUESTIONS:

- 1. Would this item be a departure from the Annual Budget if approved? Yes No
(If Yes, brief detail)
- 2. Does this agenda item impact any other County department? Yes No
(If Yes, brief detail)
- 3. If Land Transaction, filed with the clerk? Yes No N/A

INSTRUCTIONS ONCE SIGNED:

No Additional Activity Required

OR

File with County Clerk

Name:

Send Printed Copy to:

Address:

Email a Digital Copy to:

City/State/Zip:

Other Email to Swift and Johnson for their records

Phone:

Due date to send: / /

Email:

^cNote: Most signed documents are filed/recorded with the Clerk per standard process.

PART II – COUNTY CLERK REVIEW

EVALUATION CRITERIA:

CLERK ASSESSMENT: Does this agenda item meet filing/recording standards? Yes No N/A
(If No, brief detail)

PART III - FINANCE DEPARTMENT REVIEW

EVALUATION CRITERIA 1-4:

- 1. Confirmed Submitting Department's finance-related responses Yes No
 Comment:
- 2. Confirmed Submitting Department's personnel-related materials Yes No N/A
 Comment:
- 3. If job description, Salary Committee reviewed: Yes No N/A
- 4. If hire order requires an UA, is it approved? Yes No Pending N/A

PART IV – COUNTY COUNSEL REVIEW

AGENDA ASSIGNMENT TYPE: **Administrative Actions**

LEGAL ASSESSMENT: Does this agenda item have a legal impact? Yes No
(If Yes, brief detail) Corrects Clerical Errors

PART V – BOARD OF COMMISSIONER REVIEW/COMMENT

LIAISON COMMISSIONER AGREES TO ADD TO AGENDA:

Commissioner Susan Brown Yes No

Commissioner Thomas Huxley Yes No

Commissioner David Brock Smith Yes No

Not applicable to Sheriff's Department since they do not have a liaison

BEFORE THE BOARD OF COMMISSIONERS
IN AND FOR THE COUNTY OF CURRY, OREGON

In the Matter of an Order)
Correcting a Scrivener's Error)
in the February 17, 2016)
Order Approving the New Hire)
of Survey Tech Cody Coons)

ORDER NO. 20298

WHEREAS, on February 03, 2016 the Board of Curry County Commissioners adopted Order No. 20294, the adoption of a job description for the existing position of County Accountant; and

WHEREAS, on February 17, 2016 the Board of Curry County Commissioners approved the new hire of Cody Coons as a Survey Tech, and this order by scrivener's error was mistakenly also labeled Order No. 20294; and

WHEREAS, it is important that each order adopted by the Board be individually identified;

NOW, THEREFORE IT IS HEREBY ORDERED that the above-referenced order adopted on February 17, 2016, regarding the new hire of Cody Coons as a Survey Tech, is renumbered from Order No. 20294 to Order No. 20298.

Dated this 16 day of March, 2016.

CURRY COUNTY BOARD OF COMMISSIONERS

Approved as to form:

Thomas Huxley, Chair

John Huttl
Curry County Legal Counsel

Susan Brown, Vice Chair

David Brock Smith, Commissioner

BEFORE THE BOARD OF COMMISSIONERS
IN AND FOR THE COUNTY OF CURRY, OREGON

In the Matter of an Order)
Correcting a Scrivener's Error)
in the February 17, 2016) ORDER NO. 20299
Order Approving the New Hire)
of Survey Tech Quincy Coons)

WHEREAS, on February 03, 2016 the Board of Curry County Commissioners adopted Order No. 20295, the new hire of Melanie Flood as a Corrections Deputy I; and

WHEREAS, on February 17, 2016 the Board of Curry County Commissioners approved the new hire of Quincy Coons as a Survey Tech, and this order by scrivener's error was mistakenly also labeled Order No. 20295; and

WHEREAS, it is important that each order adopted by the Board be individually identified;

NOW, THEREFORE IT IS HEREBY ORDERED that the above-referenced order adopted on February 17, 2016, regarding the new hire of Quincy Coons as a Survey Tech, is renumbered from Order No. 20295 to Order No. 20299.

Dated this 16 day of March, 2016.

CURRY COUNTY BOARD OF COMMISSIONERS

Approved as to form:

Thomas Huxley, Chair

John Huttl
Curry County Legal Counsel

Susan Brown, Vice Chair

David Brock Smith, Commissioner

**IN THE BOARD OF CURRY COUNTY COMMISSIONERS
IN AND FOR THE COUNTY OF CURRY**

IN THE MATTER OF APPROPRIATIONS)
FOR AN UNFORSEEN SPECIFIC)
PURPOSE GRANT IN THE 2015-2016) RESOLUTION No 2016-04
FISCAL YEAR BUDGET)

WHEREAS, on February 03, 2016 the Board of Commissioners adopted Resolution 2016-03 modifying the fiscal year 2015-2016 Curry County Budget for appropriations for an unforeseen specific purpose grant; and,

WHEREAS, on February 17, 2016 the Board of Commissioners adopted a Resolution determining the use of land division fees as deposits for land division applications received between February 07, 2016 and June 30, 2016 that by scrivener's error was also mistakenly labeled Resolution 2016-03; and,

WHEREAS, it is important that each Resolution adopted by the Board be individually identified;

BE IT RESOLVED that the above reference resolution adopted on February 17, 2016, regarding land use fees as deposits, is renumbered from 2016-03 to 2016-04.

Dated this 16 day of March 2016.

CURRY COUNTY BOARD OF COMMISSIONERS

Approved as to form:

John Huttli,
Curry County Legal Counsel

Thomas Huxley, Chair

Susan Brown, Vice Chair

David Brock-Smith, Commissioner

CURRY COUNTY BOARD OF COMMISSIONERS
AGENDA ITEM ROUTING SLIP
FORM 10-001.1 Rev. 03-02-2016

PART I – SUBMITTING DEPARTMENT: RETURN TO [BOC OFFICE@CO.CURRY.OR.US](mailto:BOC_OFFICE@CO.CURRY.OR.US)

AGENDA ITEM TITLE: 2016 9-1-1 Jurisdiction Plan

AGENDA DATE^a: 3/16/16 **DEPARTMENT:** Sheriff's Office **TIME NEEDED:** 15 Minutes

^aSubmit by seven days prior to the next General Meeting (eight days if a holiday falls within that seven day period)

CONTACT PERSON: Sgt. Hensley/P.D.**PHONE/EXT:** 3322 **TODAY'S DATE:** 3/11/16

BRIEF BACKGROUND OR NOTE^b: Sergeant Joel Hensley will present the 2016 9-1-1 Jurisdiction Plan Submittal Form and the Curry County Sheriff's Office 9-1-1 Disaster Recovery Plan .

^bIndicate if more than one copy to be signed

FILES ATTACHED: **SUBMISSION TYPE:** Order

- (1)2016 9-1-1 Jurisdiction Plan Submittal Form
- (2)PSAP Service Area Maps
- (3)FY 2014-2015 PSAP Budget Report
- (4) Order Adopting a Curry County 9-1-1 Jurisdiction Plan
- ***C.C.S.O. 9-1-1 Disaster Recovery Plan - Omitted From Public Inspection

Are there originals in route (paper copies with pre-existing signatures) Yes No

QUESTIONS:

1. Would this item be a departure from the Annual Budget if approved? Yes No
(If Yes, brief detail)
2. Does this agenda item impact any other County department? Yes No
(If Yes, brief detail)
3. If Land Transaction, filed with the clerk? Yes No N/A

INSTRUCTIONS ONCE SIGNED:

No Additional Activity Required

OR

File with County Clerk

Name: Hensley

Send Printed Copy to:

Address:

Email a Digital Copy to:

City/State/Zip:

Other

Phone:

Due date to send: / /

Email:

^aNote: Most signed documents are filed/recorded with the Clerk per standard process.

PART II – COUNTY CLERK REVIEW

EVALUATION CRITERIA:

CLERK ASSESSMENT: Does this agenda item meet filing/recording standards? Yes No N/A

(If No, brief detail)

PART III - FINANCE DEPARTMENT REVIEW

EVALUATION CRITERIA 1-4:

1. Confirmed Submitting Department's finance-related responses Yes No
Comment:
2. Confirmed Submitting Department's personnel-related materials Yes No N/A
Comment:
3. If job description, Salary Committee reviewed: Yes No N/A
4. If hire order requires an UA, is it approved? Yes No Pending N/A

PART IV – COUNTY COUNSEL REVIEW

AGENDA ASSIGNMENT TYPE: Agenda Ammendments

LEGAL ASSESSMENT: Does this agenda item have a legal impact? Yes No

(If Yes, brief detail)

PART V – BOARD OF COMMISSIONER REVIEW/COMMENT

LIAISON COMMISSIONER AGREES TO ADD TO AGENDA:

Commissioner Susan Brown Yes No
Commissioner Thomas Huxley Yes No
Commissioner David Brock Smith Yes No

Not applicable to Sheriff's Department since they do not have a liaison

FY 2014 - 15 PSAP Budget Report

INSTRUCTIONS

1. Show only the amount of 9-1-1 Excise Tax that was **actually received** between July 1, 2014 and June 30, 2015. Do not be concerned as to which quarter the tax was collected; only show the actual distributions that occurred and was received between July 1, 2014 and June 30, 2015.
2. Show only those expenditures that occurred between July 1, 2014 and June 30, 2015. Meaning, no matter when the actual work or service was completed or bill received, show only those expenditures in which the check was sent out the door between these dates.
3. Do not show "local" resource amounts. We are only looking for the **expenditure** amounts of local resources for PSAP operations made between July 1, 2014 and June 30, 2015. Local resources are those from any other source other than the State 9-1-1 Excise Tax.

The purpose of this Budget Report is to track actual costs incurred by your PSAP during the period July 1, 2014 and June, 30 2015. This report is required by ORS 403.120.

It is important to remember that the ultimate goal of this report is to provide details regarding the necessity of 9-1-1 Tax funds for the legislature. This report is not to determine compliance nor audit the expenditure of funds used by PSAPs.

Yellow cells require data entry from the PSAP. Green cells contain formulas that will auto-calculate once information has been entered into the appropriate yellow fields. Pink field is provided by OEM as additional information.

If at any time, any assistance is needed to complete this report, please contact Gordon Tiemeyer with OEM at (503) 378-2911 Ext. 22282, or email at: gordon.tiemeyer@state.or.us

This report to be completed and returned no later than January 31, 2016

Section 1: PSAP Information

1.1: PSAP Name: Curry County Sheriff's Office

1.2: Name and Title of the person completing this report:
Sgt. Joel Hensley

1.3: Contact phone & email: 541 247 3320 / hensleyj@co.curry.or.us

1.4: Number of Public or Private Safety agencies served by your PSAP: 25

	Call taker/ Dispatcher	Admin/ Support	
1.5: Total # of employees:	7.00		Authorized Full-Time Equivalents (FTE's)
	7.00		Actual FTE's

1.6: Total 9-1-1 Calls for FY (per ECATS): 5,046

This includes abandoned

1.7: Population Served: 24,000

Estimated population of your 9-1-1 service area

FY 2014 - 15 PSAP Budget Report

Section 2: 9-1-1 Excise Tax Resources

Show ONLY the amount of 9-1-1 Excise Tax received between July 1, 2014 and June 30, 2015

\$0.00	2.1 - Any amount of beginning balance of 9-1-1 Excise Tax as of July 1, 2014
\$ 127,459.93	2.2 - Amount of 9-1-1 Excise Tax received between July 1, 2014 and June 30, 2015.
\$ -	2.3 - Amount of <i>Interest</i> gained on the 9-1-1 Excise Tax.
\$ 127,459.93	2.4 - Total amount of 9-1-1 Excise Tax available for expenditure. (Sum of 2.1, 2.2 and 2.3)

Section 3: 9-1-1 Excise Tax Expenditures

Show ONLY the amount of 9-1-1 Excise Tax spent between July 1, 2014 and June 30, 2015

\$ 127,459.93	3.1 - Amount of 9-1-1 Excise Tax spent for Call-taker/Dispatcher personnel. <i>Amount should reflect that for personnel costs for FTE that answer 9-1-1 calls and/or dispatches on a routine basis.</i>
\$ -	3.2 - Amount of 9-1-1 Excise Tax spent for all other Personnel Services . <i>Show only the dollar amount directly attributable to all other personnel that are not Call Taker/Dispatcher .</i>
\$ -	3.3 - Amount of 9-1-1 Excise Tax spent for Materials and Services . <i>Show only the dollar amount directly attributable to Materials & Services expenditures.</i>
\$ -	3.4 - Amount of 9-1-1 Excise Tax spent for Capital Outlay Expenditures . <i>Show only the dollar amount directly attributable to Capital Outlay Expenditures.</i>
\$ -	3.5 - Amount of 9-1-1 Excise Tax spent for Debt Service . <i>Show only the dollar amount directly attributable to Debt Service.</i>
\$ -	3.6 - Amount of 9-1-1 Excise Tax Transferred to other Funds. <i>Show only the dollar amount of resources transferred from one fund to any other fund, for expenditure in the receiving fund.</i>
\$ -	3.7 - Amount of 9-1-1 Excise Tax Passed Through to another governmental entity. <i>Show only the dollar amount of resources passed through from your PSAP to another PSAP or governmental body.</i>
\$ -	3.8 - Amount of 9-1-1 Excise Tax spent for Other types of expenditure. <i>Show only the dollar amount of resources spent on any other type of expenditure not listed above</i>
\$ 127,459.93	3.9 - Total 9-1-1 Excise Tax expenditures (Sum of 3.1 to 3.8) NOTE: This amount should match or be less than the amount shown in 2.4.
-	Any unspent 9-1-1 Excise Tax for same period. (2.4 - 3.9)

Section 4: 35% Enhanced Sub-account expenditure:

\$304,196.35	4.1 - Amount spent on your PSAP from the 35% Enhanced Sub-account for same period.
--------------	--

FY 2014 - 15 PSAP Budget Report

Section 5: Local Resources Expenditures

NOTE : Please use the same methodology as in Section 3, to indicate the costs paid with local resources.

Reminder: Do NOT show expenditures already shown in Section 3 as part of the Excise Tax.

\$ 201,245.06	5.1 - Amount of Local Resources spent for <i>Call-taker/Dispatcher</i> personnel.
\$ 202,669.31	5.2 - Amount of Local Resources spent for <i>Other Personnel Services</i> .
\$ 52,120.11	5.3 - Amount of Local Resources spent for <i>Materials and Services</i> .
\$ -	5.4 - Amount of Local Resources spent for <i>Capital Outlay Expenditures</i> .
\$ -	5.5 - Amount of Local Resources spent for <i>Debt Service</i> .
\$ 55,724.00	5.6 - Amount of Local Resources <i>Transferred</i> to other Funds.
\$ -	5.7 - Amount of Local Resources <i>Passed Through</i> to another governmental entity.
	5.8 - Amount of Local Resources spent for <i>Other</i> types of expenditures.
\$ 511,758.48	5.9 - Total expenditure of Local Resources (<i>Sum of 5.1 to 5.8</i>)

Section 6: Summary

\$ 639,218.41	6.1 - TOTAL RESOURCES: (2.4 + 5.9)
19.94%	6.2 - % OF RESOURCES ATTRIBUTABLE TO 9-1-1 EXCISE TAXES: (2.4 divided by 6.1)
\$ 639,218.41	6.3 - TOTAL EXPENDITURES: (3.9 + 5.9)
19.94%	6.4 - % OF EXPENDITURES ATTRIBUTABLE TO 9-1-1 EXCISE TAX: (3.9 divided by 6.3)

Section 7: Notes / Comments from the PSAP regarding this report:

Curry County



← Curry County 911 Jurisdiction

← Curry County 911 Jurisdiction

← Curry County 911 Jurisdiction

PORT ORFORD

GOLD BEACH

City of Brookings 911 Jurisdiction →

BROOKINGS

PSAP SERVICE AREA
CURRY COUNTY SO

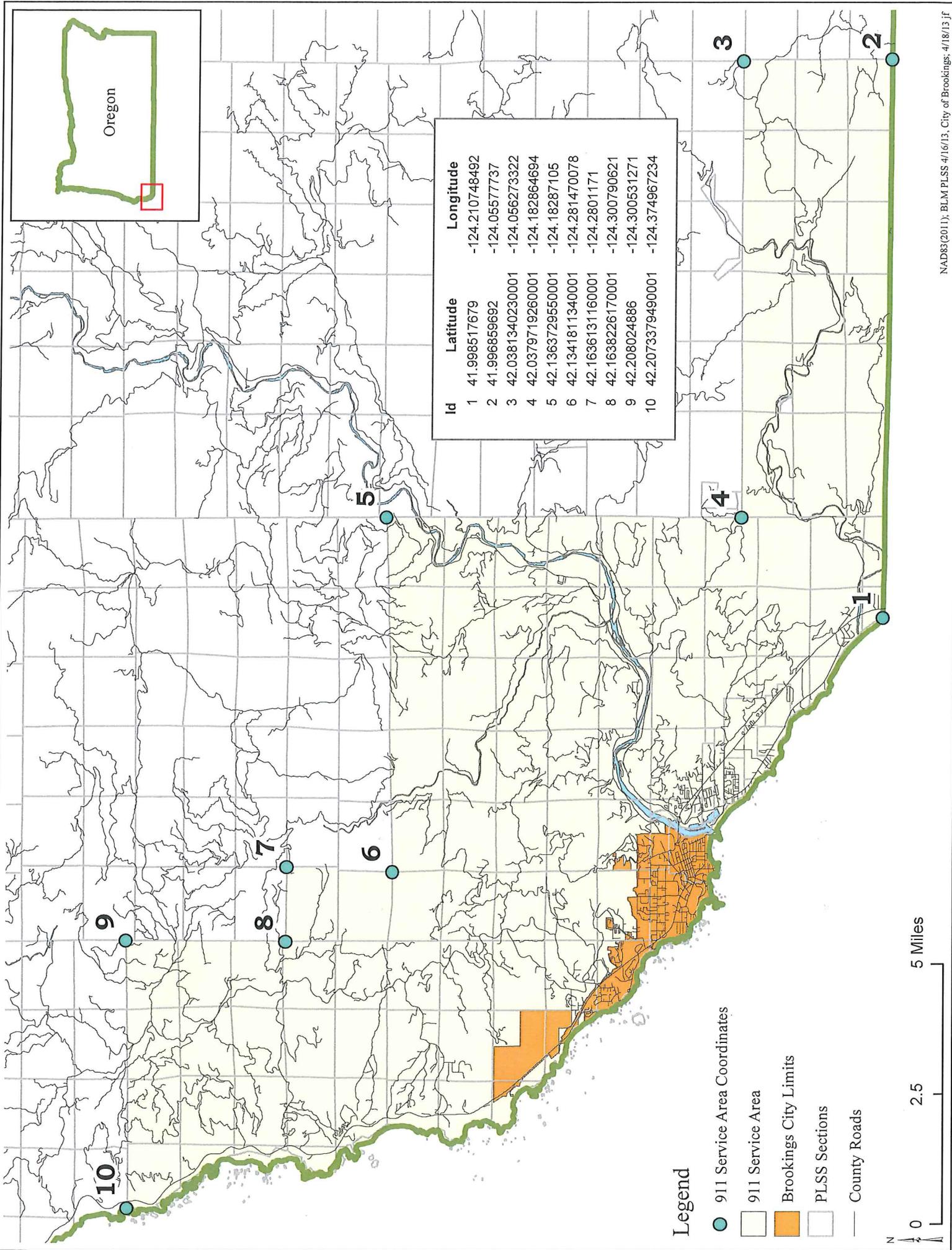
DATE: 2/10/2016 TR#: 10220

CREATED BY: EV

LEGEND

- Streets
- Highways
- City Limits
- Curry County SO





Id	Latitude	Longitude
1	41.998517679	-124.210748492
2	41.9966859692	-124.05577737
3	42.0381340230001	-124.056273322
4	42.0379719260001	-124.182864694
5	42.1363729550001	-124.18287105
6	42.1341811340001	-124.281470078
7	42.1636131160001	-124.2801171
8	42.1638226170001	-124.300790621
9	42.208024886	-124.300531271
10	42.2073379490001	-124.374967234

Legend

- 911 Service Area Coordinates
- 911 Service Area
- Brookings City Limits
- PLS Sections
- County Roads

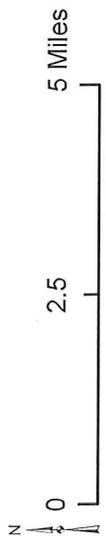


Exhibit A



Oregon Military Department Office of Emergency Management

2016 9-1-1 Jurisdiction Plan Submittal Form

9-1-1 Jurisdiction

Identification and description of the 9-1-1 jurisdiction's governing authority.

Curry County is a General Law County and a Political Subdivision of the State of Oregon. For purposes of this 9-1-1 Jurisdiction Plan, Curry County is a Local Government; the Curry County Board of Commissioners is the Governing Body of a Local Government and the Curry County Sheriff is a Local Law Enforcement Agency. See Generally ORS 403.105(12)(15)(20) & (30)(d).

Contact name: Hensley, Joel

Contact Phone number: 541 247-3320

Physical address: 29808 Colvin St.

Gold Beach, OR 97444

Mailing address: 94235 Moore St #311

Gold Beach, OR 97444

The current total population: 22470

Description of the 9-1-1 service area served by the 9-1-1 jurisdiction:

Curry County 911 Service area includes all incorporated and unincorporated areas of Curry County, Oregon with exception of an area in southern Curry County that is covered by City of Brookings 911 Service area. The westward boarder is the Pacific Ocean. The northern and eastern boundrys outlined for the City of Brookings 911 Service area are as follows

41.998517679 -124.210748492

41.996859692 -124.05577737

42.0381340230001 -124.056273322

42.0379719260001 -124.182864694

42.1363729550001 -124.18287105

42.1341811340001 -124.281470078

42.1636131160001 -124.2801171

42.1638226170001 -124.300790621

42.208024886 -124.300531271

42.2073379490001 -124.374967234

See attached map.

PSAP serving the 9-1-1 jurisdiction

Name of the primary PSAP: Curry County Sheriff

Name of the PSAP's director or administrator: Sgt. Joel Hensley

Phone number for the PSAP's director or administrator: 541 247-3320

Physical Address 29808 Colvin St.

Gold Beach, OR 97444

Mailing Address: 94235 Moore St #311

Gold Beach, OR 97444

10-digit emergency phone number: 541 247-3243

10-digit non-emergency phone number: 541 247-3243

Number of workstations funded from the 9-1-1 Subaccount: 2

Name, address and contact information for all public and private safety agencies served by the 9-1-1 jurisdiction and primary PSAP as required by ORS 403.115

Curry County Sheriff

29808 Colvin St./ 94235 Moore St #311, Gold Beach 97444

Sheriff John Ward

541 247 3242

Gold Beach Police Department

29529 Ellensburg Ave., Gold Beach 97444

Chief Dixon Andrews

541 247-6671

US Forest Service

29279 Ellensburg Ave, Gold Beach 97444

Officer Mike Fakier

541 247-3600

Port Orford Police

Chief Hank Hobart

555 20th St, Port Orford, OR 97456

541-332-9013

Curry County Sheriff Jail

Sgt. Joel Hensley- Jail Commander

29808 Colvin St.

Gold Beach, Or 97444

541 247-3344

CalOre Ambulance

Owner Joe Gregorio

311 Cove St, Brookings, OR 97415

541-469-7911

Port Orford Ambulance

Gayle Wilcox

552 19th St, Port Orford, OR 97465

541-332-8265

Agness Rescue

Chief Bill Scherbarth

35924 Agness-Illahe Road, Agness

541-247-7987

Agness Fire Department

Chief Bill Scherbarth

35924 Agness-Illahe Road, Agness

541 247-7987

Langlois Fire Department

94322 First St, Langlois, OR 97450

Chief Mike Murphy

541-348-2564

Sixes Fire Department

Chief Wayne Moore 541 348-9927

93343 Crystal Cr Rd, Sixes, OR 97476

Port Orford Fire Department

Chief David Duncan 541 253-6033

555 19th St, Port Orford, OR 97465

541-332-9066

Ophir Fire

Chief Adam Brotton

32888 Nesika Rd, Gold Beach, OR 97444

541-247-2452

Cedar Valley Fire

32315 Cedar Valley Rd, Gold Beach, OR 97444

Chief Keith Wright 247-2951

Gold Beach Fire

29592 Ellensburg Ave, Gold Beach, OR 97444

541-247-7029

Chief Tyson Krieger 541-698-0479

Pistol River Fire

24686 Pistol River Loop

541-247-6765

Chief Ron Hanson 541-698-0479

Below are agencies that Curry County 911 Service District answers 911 calls pertaining to emergencies takes information and then transfers information or caller to the following:

Oregon State Police,Southern Area Command 800-442-2068

California Highway Patrol, Humbolt Area Command, 707-268-2010

United States Coast Guard,Brookings, Oregon 541-469-2242

FBI 541-773-2942

FAA 425-227-2000

Curry County Mental Health 541-247-4082

Coos County Hazmat 541-269-2721

OSP Bomb Squad 800-422-2068

Government Trapper 541-404-3711 South county\ 541-655-0845 North county

Public Health 541-247-3300

Gold Beach City Water 541-247-7029

Harbor Water 541-469-3011

Coos Curry Electric 541-332-3931 North/ 541-247-6638 Central/ 541-469-2103 South

Bandon Power 541-347-2437

Bay Cities Ambulance 541-269-1155

Emergency Air Lift Helo 800-804-4911

Mercy Helo 800-786-3729

Coos Forest Patrol 541-247-6241 or 541-267-3161

United States Forest Service Fire 541-247-3699 Monty Edwards

Oregon Fire Marshal 541-776-6114 or 503-373-1540

ODOT 541-858-3103

United States Forest Service Roads 541-247-3689

Signed by the primary point of contact for the 9-1-1 jurisdiction

The following documents must be submitted to OEM by April 1, 2016:

1. A completed 9-1-1 jurisdiction plan Submittal form.
2. A disaster recovery plan meeting the requirements described in ORS 403.150.
3. Map of the geographical area served.
4. A copy of the annual budget report.

If you have questions about the form please contact:

Gillien Duvall
9-1-1 Technology Operations Coord./Program Lead
Office of Emergency Management
Oregon Military Department
gillien.duvall@state.or.us
503.378.2911 Ext. 22250

AND

Toni Sexton
9-1-1 Program Analyst
Office of Emergency Management
Oregon Military Department
toni.sexton@state.or.us
503.378.2911 Ext. 22230

BEFORE THE BOARD OF COMMISSIONERS
FOR CURRY COUNTY, OREGON

In the Matter of an Order Adopting)
A Curry County 9-1-1 Jurisdiction)
Plan Pursuant to ORS 403.105(12))
(15)(20)&(30)d)

ORDER NO. _____

WHEREAS, Pursuant to ORS 403.105(12)(15)(20)&(30)(d), Curry County Board of Commissioners is a governing body of a county local government that provides or has authority to provide police services by and through the office of Curry County Sheriff, a public safety agency; and

WHEREAS, Curry County and the Curry County Sheriff provide 9-1-1 services primarily to the geographic and jurisdictional boundaries of Curry County, Oregon; and,

WHEREAS, a 9-1-1 jurisdiction shall create and maintain a 9-1-1 jurisdiction plan for emergency communications services provided within a 9-1-1 service area pursuant to ORS 403.105 to 403.250 and rules adopted by the Office of Emergency Management, ORS 403.120, attached as Exhibit "A"; and

WHEREAS, Pursuant to ORS 403.150, a 9-1-1 jurisdiction must have a disaster recovery plan for [it's 9-1-1 emergency reporting system] the components of the emergency communications system within the 9-1-1 service area.

WHEREAS, Curry County has met the requirements imposed under ORS 403.105 to 403.250 and rules adopted pursuant to ORS 403.120 and has submitted the 9-1-1 Jurisdiction Plan, attached as Exhibit "A" which also includes the requested documents of the disaster recovery plan, map of the geographical area served, and copy of the annual budget report.

NOW, THEREFORE, THE BOARD OF CURRY COUNTY COMMISSIONERS HEREBY ORDERS AS FOLLOWS:

Effective _____, the Board of Curry County Commissioners adopts the attached, 9-1-1 Jurisdiction Plan and included documents, marked as Exhibit "A" for Curry County, Oregon for emergency communications services.

BOARD OF CURRY COUNTY COMMISSIONERS

Thomas Huxley, Chair

Susan Brown, Vice Chair

David Brock Smith, Commissioner

Approved as to Form:

John Hutt
Curry County Legal Counsel

CURRY COUNTY BOARD OF COMMISSIONERS
AGENDA ITEM ROUTING SLIP
FORM 10-001.1 Rev. 03-02-2016

PART I – SUBMITTING DEPARTMENT: RETURN TO [BOC OFFICE@CO.CURRY.OR.US](mailto:BOC_OFFICE@CO.CURRY.OR.US)

AGENDA ITEM TITLE: Approval of Meeting Minutes

AGENDA DATE^a: 03-16-2016 **DEPARTMENT:** Admin **TIME NEEDED:** 4 min

^aSubmit by seven days prior to the next General Meeting (eight days if a holiday falls within that seven day period)

CONTACT PERSON: Shelia **PHONE/EXT:** 3296 **TODAY'S DATE:** 03-10-16

BRIEF BACKGROUND OR NOTE^b: Approval of Past Meeting Minutes Reviewed by Majority

^bIndicate if more than one copy to be signed

FILES ATTACHED: **SUBMISSION TYPE:** Minutes

- (1) 02-10-2016 Workshop, 02-10-2016 Special Mtg
- (2) 02-12-2016 Special Mtg, 02-26-2016 Special Mtg

Are there originals in route (paper copies with pre-existing signatures) Yes No

QUESTIONS:

- 1. Would this item be a departure from the Annual Budget if approved? Yes No
(If Yes, brief detail)
- 2. Does this agenda item impact any other County department? Yes No
(If Yes, brief detail)
- 3. If Land Transaction, filed with the clerk? Yes No N/A

INSTRUCTIONS ONCE SIGNED:

No Additional Activity Required

OR

File with County Clerk

Name:

Send Printed Copy to:

Address:

Email a Digital Copy to:

City/State/Zip:

Other Online, Boc Packets - Digital

Phone:

Due date to send: / /

Email:

***Note: Most signed documents are filed/recorded with the Clerk per standard process.**

PART II – COUNTY CLERK REVIEW

EVALUATION CRITERIA:

CLERK ASSESSMENT: Does this agenda item meet filing/recording standards? Yes No N/A

(If No, brief detail)

PART III - FINANCE DEPARTMENT REVIEW

EVALUATION CRITERIA 1-4:

- 1. Confirmed Submitting Department's finance-related responses Yes No
Comment:
- 2. Confirmed Submitting Department's personnel-related materials Yes No N/A
Comment:
- 3. If job description, Salary Committee reviewed: Yes No N/A
- 4. If hire order requires an UA, is it approved? Yes No Pending N/A

PART IV – COUNTY COUNSEL REVIEW

AGENDA ASSIGNMENT TYPE: Consent Calendar

LEGAL ASSESSMENT: Does this agenda item have a legal impact? Yes No

(If Yes, brief detail) Approves minutes

PART V – BOARD OF COMMISSIONER REVIEW/COMMENT

LIAISON COMMISSIONER AGREES TO ADD TO AGENDA:

Commissioner Susan Brown Yes No

Commissioner Thomas Huxley Yes No

Commissioner David Brock Smith Yes No

Not applicable to Sheriff's Department since they do not have a liaison



CURRY COUNTY BOARD OF COMMISSIONERS

MINUTES – WORKSHOP

Wednesday, February 10, 2016–10:00 A.M.

Commissioners' Hearing Room, Courthouse Annex
94235 Moore St., Gold Beach, Oregon 97444

Commissioners Present: Chair Thomas Huxley, Vice-Chair Susan Brown, David Brock Smith

Support Staff Present: County Counsel, John Huttli; Administrative Assistant, Shelia Megson

CALL TO ORDER

Commissioner Huxley called the meeting to order at 10:00 a.m.

DISCUSSION TOPIC: Marijuana Regulations

Planning Director Johnson explained that in November of 2014 the voters approved State Measure 91 concerning recreational marijuana. Since then the State has made many rules and is still working on them and making changes. There are many different category licenses that new business owners can apply for. These include Lab, Processor, Producer, Researcher, Retailer, and Wholesaler. The Oregon Liquor Control Commission (OLCC) is the agency that will deal with the licensing and began accepting applications in January. There will be some categories that are issued before others. She had provided a lengthy packet to the Board that outlined the State's current rules. She said that the Planning Commission went over the matter in January, discussed the possibilities of regulation in Curry County and came up with three possible scenarios. The County could decide to add additional regulations to the current State rules, could decide to move to ban the activity in total in the area, or decide to accept the State regulations without imposing any additions. Within the Planning Commission, most preferred to remain with only the State regulations, some wanted more information before they decided and others did want further regulation by the County.

There were some common questions that she had been getting from the public and wanted to address them since many members of the attending public were people that were seeking to enter the business. Q: What is the timeline for the Board of Commissioners to make a decision? A: Time, Place, and Manner (TPM) regulations do not have a hard timeline restriction. The County could decide to abide simply by the State guidelines and then enact further restrictions in the future. Grandfathering would probably not happen and existing businesses may be affected when any new regulations are made. Q: Will the State be providing funds for enforcement? A: There has not been any indication of an offer for that from the State. Commissioner Smith said that he would be looking into the unfunded mandate considerations to that question. Q: Will the state provide notification of all marijuana growers, retailers, etc? A: The County will know most of the operations since a sign off from Community Development Department is a requirement of the OLCC application process. It is not known what the plan of sharing that information will be. Q: Can medical and recreational retail operations coexist in the same building? A: There have been changes at the State level concerning this issue and there may be more. Currently they are permitted to do so but there may be physical barrier requirements. Q: Does the County already have an Ordinance in place for medical marijuana? A: Yes, Ordinance 15-02 that concerns time, place, and manner. County Counsel Huttli remarked that the wording in the Ordinance does allow for changes to be made.

Planner Chester told the Board that the current process is to simply refer to the zoning code to see if the proposed activity is allowed. It is the only determination used when asked to provide the County Sign-Off requirement for the OLCC application process.

The State will be taxing the retail side of the new industry for 17% of sale and the County can choose to add an additional 3% through balloting. There will most likely be a tax sharing structure from the State. Commissioner Brown stated that we could only tax retail sales up to a 3% tax. The move by the State to change categories took an opportunity away from the County. A ballot of the additional tax can only be done in general election years and there are requirements of time in order to get it listed. If not done this year then it will be another four years before they can attempt the tax.

Johnson read aloud a letter from Planning Commissioner Karen Kennedy. It stated that she favors the option of not adding additional regulations at this time and following the State rules. The County should consider it as it would any other tobacco or distillery business. Additional regulations are not yet shown to be needed and the County does not have resources to enforce them. This is the stance of the majority of the Planning Commission.

Planning Commissioner Margaret McHugh told the Board that she thinks that the State rules were not sufficient for the land use planning. She suggested things such as bright lights, odor and dogs should be addressed to protect adjoining land owners. She said that other places have restrictions of a 300 foot setback and recommends at least a 100 foot here. This should not be treated as just any other crop. She also said that she would like a requirement of mail notification of any adjoining properties of anyone that applies for a license.

Commissioner Smith said that he would like another workshop on this topic for more discussion. His current opinion was to initiate regulations that conformed to the current medical marijuana ordinance. He apologized that he had to leave the meeting but he is very interested in the public comments and will be reviewing the video tapes to hear the testimonies. He thanked the Community Development Department for their work. Brown and Smith informed that Ordinance 15-02 have restrictions such as 1000 feet not only from schools but parks, churches, etc.; times of operation were limited to 10:00 a.m. to 6:00 p.m.

Smith left the meeting at 10:35 a.m.

Commissioner Huxley asked for speaker slips from the public and determined to limit the remarks to five minutes each. Johnson told the Board that the County Sign-Off is a yearly requirement and would coincide with businesses' State OLCC renewal requirements.

Carl King from Nesika Beach recommended that the Board enact more restrictions than what is offered by the State. He cited examples of how an adjacent property to his could be used in ways that would affect his enjoyment of his property. They included bright lights, the smell which he has been told that he cannot get high from, and camera use that could potentially film people in parts of his yard. He pointed out that the zoning sign-off states that the activity is of legal use, but it is not according to federal laws.

Jason Adams from Brookings said that he will be starting an outdoor grow business. He said that the use of this medicine has taken him from an overweight, injured vet with chronic pain, he had to get letters and go through a procedure in order to get his medication every month for seven years, to the fit person that he is today. His wife works in the wellness industry as well. Marijuana can stop

seizures and stop tumor growth which is something that every male will encounter if they live long enough. It can significantly cut down on Emergency Room visits by Hospice patients. There are many things that could be done by gathering tax dollars from the increasing business. He cited the successes in Colorado. The smell is the exact same as a prolific plant along all the waterways locally called Skunk Cabbage, so there would be no strange 'new' odor. He does not think additional regulations should be considered unless heavily weighed against the benefits to the entire population, both medicinally and economically. He supports the option to adopt only the State rules and wait to then see if more are needed. Huxley asked Brown if it would be okay with her if he talked to the public at the time that they are at the podium. Brown had no objection. Huxley asked Adams if there was a way to decrease the smell of the plants. Adams replied that he did not know of a way but offered that when he grew plants on his property the neighbors never even noticed. In making his decision to do this as a business, he talked with all of his neighbors, and they have responded favorably. His property used to be a pig farm and this would be seen as a less intrusive odor. He wishes to apply for many OLCC license categories.

Greg Tidey from Buddha's Wellness Center in Port Orford spoke. He lives in an area with many cows that emit more odor than growing marijuana. He supports option three which is to not add anything above the current State regulations, which will actually take effect in May, and could change again. He attends meetings in many locations on the subject, including Portland. He said that Curry County passed Measure 91 in one of the highest percentages in the State. If additional regulations are made, it may cause needed redactions in the future so he suggests they wait to witness what the State submits as their final set of rules. According to the OLCC website there were very few current applicants in Curry County for any licenses. Regulations could be made later if indeed there are problems to address.

Sharon Eblen from Brookings said that she supports not adding additional regulation. This should be viewed as all other businesses. If agricultural activity is allowed then the neighbors are already aware of the activities that could happen. Her example was that she lives next to a forest that she already knows someday could be harvested. Passing unnecessary regulation without there first being a problem to address is never good policy. She shared that she is not a Libertarian but is an attorney. Regulations should only be added if an identified, clear, and specific purpose is shown. She added that there were not enough resources for enforcement in this County.

Karen Clark from the southern part of the County said that she had done a lot of volunteer work with hospice and seniors with cannabis. Many of the patients are on Social Security and restricted incomes. They currently pay higher prices for this medicine and are looking forward to competition happening as well as being able to grow their own plants and save money. A setback rule would make most people unable to grow in their own yards. She supports option three to not add additional regulations. Brown and Johnson assured her that regulations would be for commercial applications and not on personal growing.

Jim Clark who lives in the Winchuck River area wanted to remind everyone that marijuana has many medical benefits. He personally does not use the medicine but could envision a time that it may be needed. He said that if he decided to put a dozen pigs on his property then it would be considered a fine thing to do. That would obviously be more impacting on his neighbors than growing marijuana. He asked the Board to not overreact to situations that are still imaginary. He also pointed out the inability of the County to enforce additional regulations and asked who would really do that job. Brown said if it was a zoning or land use violation then it would be the Planning Director.

Linda Bozack from Brookings told the Board that she lives in a regular neighborhood with close houses. Her neighbors had a grow operation and not only was she not effected by any of the feared suggestions but she didn't even know they had it. There were no adverse effects to anyone until the Police raided their home, put them in jail, and confiscated many things. The only real adverse effects were done by someone trying to enforce rules over a feared substance that has now been legalized. She supports the wait and see suggestion and asked the Board to not add more regulation and discourage the new industry. She asked if the rules for growing hemp are the same as marijuana, is it allowed. Brown didn't think it was legal. Bozak said that would be another great industry with many business possibilities for Curry County. She spoke of tourism businesses that would thrive with this new market. Huxley said she had reached her five minute limit. Brown said that during a visit in Salem last week she had gotten a map that showed pot tours.

Brown asked Johnson about the reasons given for setback requirements in other counties. Johnson said the responses from the other areas were varied and not really sure if there was a specific concern they were trying to address. Dark sky issues already have local ordinances in some places in the county and could be addressed if something were to become a problem.

Huxley read announcements listed on the agenda for the Special Meeting held later that day. Brown reminded the public that workshops are for information sharing and discussion and that no decisions can be made within them. Huxley said that they would move into Executive Session. Administrative Assistant Megson, through a point of order, said that the Workshop should be closed first, the Special Meeting opened, and then they could move into Executive Session. Huttel asked about the timing of the notice given to the public and suggested it would be better to begin the Special Meeting at noon. There was consensus to adjourn until noon.

ADJOURN

Commissioner Huxley adjourned the meeting at 11:26 a.m.

Respectfully Submitted,
Shelía M. Megson

These minutes from Wednesday, February 10, 2016 Board of Commissioners' Workshop approved this 16 day of March, 2016.

CURRY COUNTY BOARD OF COMMISSIONERS

Thomas Huxley, Chair

Susan Brown, Vice Chair

David Brock Smith, Commissioner



CURRY COUNTY BOARD OF COMMISSIONERS

MINUTES – SPECIAL MEETING

Wednesday, February 10, 2016

12:00 p.m. or immediately after the Workshop whichever is first
Commissioners' Hearing Room, Courthouse Annex
94235 Moore St., Gold Beach, Oregon 97444

Commissioners Present: Chair Thomas Huxley, Vice-Chair Susan Brown

Commissioners Absent: David Brock Smith

Support Staff Present: County Counsel, John Huttli; Administrative Assistant, Shelía Megson

1. CALL TO ORDER & PLEDGE OF ALLEGIANCE

The meeting was moved from the Commissioners Hearing Room to the Small Conference Room. Commissioner Huxley called to order at 12:04 p.m. The Pledge was not recited.

2. AGENDA AMENDMENTS

(None.)

3. APPROVAL OF AGENDA

(No Motion or Vote)

4. PUBLIC COMMENTS

(None.)

5. COMMISSIONER UPDATES/ LIAISON & STAFF REPORTS

(None.)

6. ANNOUNCEMENTS

(Announcements were not read.)

7. EXECUTIVE SESSION

Executive Session ORS 192.660(2)(h) To consult with counsel concerning the legal rights and duties of a public body with regard to current litigation or litigation likely to be filed and ORS 192.660(2)(f) To consider information or records that are exempt by law from public inspection

Commissioner Huxley read the ORS stated reasons for Executive Session and the statement of instructions to the press. The Board entered Executive Session at 12:05 p.m.

The Board arose from Executive Session at 12:51 p.m. and went back into open session in the Commissioners' Hearing Room at 12:54 p.m.

Motion by Commissioner Brown to direct County Counsel Huttli to proceed as discussed within the Executive Session, second by Commissioner Huxley. Motion carried with Brown and Huxley voting "aye".

8. ADJOURN

Commissioner Huxley adjourned the meeting at 12:55 p.m.

Respectfully Submitted,
Shelía M. Megson

These minutes from Wednesday, February 10, 2016 Board of Commissioners' Special Meeting approved this 16 day of March, 2016.

CURRY COUNTY BOARD OF COMMISSIONERS

Thomas Huxley, Chair

Susan Brown, Vice Chair

David Brock Smith, Commissioner



CURRY COUNTY BOARD OF COMMISSIONERS

MINUTES – SPECIAL MEETING

Friday, February 12, 2016 –1:00 P.M.

Commissioners' Hearing Room, Courthouse Annex
94235 Moore St., Gold Beach, Oregon 97444

Commissioners Present: Chair Thomas Huxley, Vice-Chair Susan Brown, David Brock Smith

Support Staff Present: County Counsel, John Huttli; Administrative Assistant, Shelia Megson

1. CALL TO ORDER & PLEDGE OF ALLEGIANCE

Commissioner Huxley called the meeting to order at 1:02 p.m. The Pledge was recited by all. Commissioner Huxley and Commissioner Brown were present. Commissioner Smith had not entered yet.

2. AGENDA AMENDMENTS

(None.)

3. APPROVAL OF AGENDA

Commissioner Huxley named this item but no vote was taken.

4. COMMISSIONER UPDATES/ LIAISON & STAFF REPORTS

Commissioner Huxley said that in talks with the Planning Director Carolyn Johnson, he proposes to add an additional topic of recreational marijuana on the upcoming joint meeting agenda between the Curry County Board of Commissioners and the Curry County Planning Commission on February 25, 2016 at 5:30 p.m. Administrative Assistant Megson asked if it would continue as a joint meeting or a separate meeting so that noticing could be done correctly. Brown and Huxley both said it would continue as a joint session since both the Board and the Commission were involved in that topic. Commissioner Brown and Commissioner Huxley both agreed to the addition.

5. ANNOUNCEMENTS

Commissioner Huxley read the announcements.

Smith entered the meeting.

6. EXECUTIVE SESSION

Executive Session ORS 192.660(2)(a) to consider the employment of a public officer, employee, staff member or individual agent. Curry County Accountant.

Commissioner Huxley read the ORS reasons for Executive Session and the Board went into the session at 1:07 p.m.

The Board took a break at 2:00 p.m. and returned at 2:11 p.m.

The Board took a break at 2:37 p.m. and returned at 2:54 p.m.

The Board arose from Executive Session at 3:56 p.m. with no decisions to be made.

7. ADJOURN

Commissioner Huxley adjourned the meeting at 3:56 p.m.

Respectfully Submitted,
Shelía M. Megson

These minutes from Friday, February 12, 2016 Board of Commissioners’ Special Meeting approved this 16 day of March, 2016.

CURRY COUNTY BOARD OF COMMISSIONERS

Thomas Huxley, Chair

Susan Brown, Vice Chair

David Brock Smith, Commissioner



CURRY COUNTY BOARD OF COMMISSIONERS

MINUTES – SPECIAL MEETING

Friday, February 26, 2016 –10:00 A.M.

Commissioners' Hearing Room, Courthouse Annex
94235 Moore St., Gold Beach, Oregon 97444

Commissioners Present: Chair Thomas Huxley, Vice-Chair Susan Brown, David Brock Smith

Support Staff Present: County Counsel, John Huttli; Administrative Assistant, Shelía Megson

1. CALL TO ORDER & PLEDGE OF ALLEGIANCE

Commissioner Huxley called the meeting to order at 10:01 a.m. The Pledge was recited by all.

2. PUBLIC COMMENTS

(None.)

3. COMMISSIONER UPDATES

Commissioner Smith said that he did want to have an addition but due to the agenda format not having the option, he would save it for the General Meeting on 03-02-2016.

4. EXECUTIVE SESSION

Executive Session ORS 192.660(2)(h) To consult with counsel concerning the legal rights and duties of a public body with regard to current litigation or litigation likely to be filed and ORS 192.660(2)(f) To consider information or records that are exempt by law from public inspection

Commissioner Huxley read the ORS reasons for Executive Session and notice to the press.

Huxley said that all but the press was asked to leave. Commissioner Smith asked that Assessor Kolen be allowed to stay since it was to be a topic of which he is familiar. Commissioners Huxley and Brown both disagreed. Kolen left the room.

The Board entered Executive Session at 10:06 a.m.

The Board took a break from 12:06 p.m. to 12:18 p.m.

The Board arose from Executive Session at 12:56 p.m.

5. ANNOUNCEMENT OF ANY DECISIONS

Motion by Commissioner Brown to direct County Counsel to proceed as discussed during Executive Session, second by Commissioner Smith. Motion carried unanimously.

6. ADJOURN

Commissioner Huxley adjourned the meeting at 12:57 p.m.

Respectfully Submitted,
Shelía M. Megson

These minutes from Friday, February 26, 2016 Board of Commissioners’ Special Meeting approved this 16 day of March, 2016.

CURRY COUNTY BOARD OF COMMISSIONERS

Thomas Huxley, Chair

Susan Brown, Vice Chair

David Brock Smith, Commissioner



**Community Development Department
February 2016 Activity Report**

Building Permits: 14 Plan checks reviewed and Permits issued

Building Inspections: 82 **February revenue:** \$17,471.04

Phone/counter/200 calls/visits

Planning Permits

1 Conditional Use Permit	1 Tentative Partition Plan Review and Replat
1 Final Plat review	7 Land Use Compatibility statements
3 New addresses	11 Planning Clearance reviews
1 Property Line Adjustment or vacation	1 Conditional Use Permit renewal
1 replacement address	1 tentative partition plat

Administration

- Design and acquisition of new Community Development Department sign
- Interviewing/training Planning Commission Minute Clerk
- Conferral with County Counsel Huttel, Commissioner Brock Smith and Emergency Services Coordinator Kendall on Emergency Declaration
- Participation in budget workshops
- Interface with Admin/Economic Development Director Schmelzer on codification of Zoning Ordinance
- Evaluation of the Citizen engagement committee process and conferral with Carl King and Planning Commissioner Kevin McHugh
- Preparation of January Community Development Department Activity Report
- Review of Brookings Transportation Management Plan and interface with Brookings planning staff.

Development Projects

- Ongoing communication with Fed Ex representatives regarding building permits, addressing, subdivision of land and follow up to Comp Plan/zone change.
- Communication with BC Fisheries Seafood Plant building permit requirements.
- Response to inquiries about access easements on county roads/interface with Roadmaster.

Development Projects continued ...

- Responses to questions regarding development of residential property in Harbor area.
- Communication with Trash Dogs about clean up on private property.
- Complaint Processing/Elk River Road complaint of nuisance.
- Staff presentation to Port Orford Rotary.
- Phone calls, file review and meetings with Bandon Concrete regarding new Conditional Use Permit application for Aggregate plant site.
- Ongoing phone conferrals with Terry Mock regarding his draft proposal for a mixed use development on his property in the northern part of the county.

Long Range Planning

- Preparation of staff reports, noticing, interface with other staff and preparation meeting with Planning Commission February 10, 2016 joint workshop on Recreational marijuana.
- Preparation of staff reports, noticing, interface with other staff and preparation meeting with BOC and PC chairs and interface with the Planning Commission and BOC at the February 25, 2016 joint workshop on Recreational marijuana.
- Interface with County Surveyor and County Counsel on amendments to the Subdivision Ordinance.
- Continued work with DLCD on the Curry County Natural Hazard Implementation Project.
- Continued conferral and coordination with DLCD regarding Risk map and project management team meeting.
- Preparation of material, presentation to Planning Commission and BOC for their February 25, 2016 joint workshop regarding Business clearance program.
- Conferral with ODOT staff regarding pre-application for grant to update the 2005 County Transportation plan.
- Continued work with Angelo Planning Group regarding Forest Grazing/Timber, AG and EFU zoning updates, modifying suggested changes and brainstorming alternatives.

CURRY COUNTY SURVEYOR
MONTHLY ACTIVITY REPORT
FOR FEBRUARY, 2016

CUSTOMERS ASSISTED:

WALK-IN'S: 30 (We usually spend between ½ and 1 hour with a walk-in.)
PHONE CALLS: Didn't keep close count, about 30 (We sometimes spend up to ½ hour helping people.)

NEW SURVEYS REVIEWED, FILED, SCANNED, COPIED, PUT ON LINE:

T30 - 1	Far North County
T31 - 1	“
T32 - 0	“
T33 - 0	“
T34 - 0	“
T35 - 0	“
T36 - 1	“
T37 - 1	“
T38 - 0	“
T39 - 0	“
T40 - 0	Brookings-Harbor area
T41 - 0	“

DEPOSITS: Feb. 5, 2016 = \$550.00, Feb. 25, 2016 = \$1,886.00

Sherri worked 61.5 hours and Reily worked 49.5 hours in February

Our customer service this period included the following:

- General information questions relating to boundaries
- Real estate investment – general questions from buyers & real estate professionals
- Plat research for inquiries
- Continued work on Public Land Corner Records
- Assistance with other survey questions & occasionally just helping people find what they are looking for in other departments.
- Map copy requests
- Boundary Line questions/research
- Lot Line adjustment inquiries
- Encroachment issues
- Corner research
- Map checks by Surveyor – 4
- Work indexing GPS books to Corner Records was extensive and still being worked on.
- We've continued to notice about 10 guides to using the on-line resources are taken each week from the display rack. Of course they are available on line too.

NOTE:

Due to being out-of-office on Mondays & Fridays, we average 3 missed calls recorded on the phone system that are followed up on Tuesday mornings.

Respectfully submitted,

Reily Smith
County Surveyor