

Appendix C

Hazard Annexes

The following annexes contain information that is supplemental to the Northeast Oregon Natural Hazards Mitigation Plan's Risk Assessments, Chapters 2-5. Annex resources include excerpts from existing plans, policies, reports, and newspaper articles, as well as maps, and various database records.

Hazards

Drought

- Executive Order
- Newspaper Articles
- Drought Impact Reports
- Map: Average Precipitation in Northeast Oregon
- Map: Palmer Drought Severity Index

Earthquake

- Map: Selected Earthquakes for Oregon 1841-2002
- Map: Fault Lines in Northeast Oregon
- Map: Quaternary Faults and Folds in Oregon
- DOGAMI Seismic Needs Assessment
- Newspaper Articles

Flood

- Map: Average Precipitation in Northeast Oregon
- Map: River Subbasins in Northeast Oregon
- Newspaper Articles
- Flood-Loss Data in Northeast Oregon

Landslide

- Map: Debris Flow Areas in Northeast Oregon
- Newspaper Articles

Wildfire

- Map: Historical Fires in Northeast Oregon
- Map: Wildland-Urban Interface Areas in Union County
- Newspaper Articles

Wind Storm

- Map: Damaging Wind Areas in Northeast Oregon
- Newspaper Articles

Winter Storm

- Newspaper Articles

Hazard Annex Drought



EXECUTIVE ORDER NO. 03-12

DETERMINATION OF A STATE OF DROUGHT EMERGENCY IN UNION COUNTY DUE TO DROUGHT AND LOW WATER CONDITIONS.

Pursuant to ORS 401.055, I find that ongoing drought and low water conditions and weather patterns have the potential to cause an imminent natural and economic disaster in Union County (the "Affected County"). Projected weather patterns are not expected to significantly alleviate the current conditions; drought conditions are continuing. These conditions are expected to have profound consequences on the Affected County's agricultural, livestock, and natural resources and are likely to result in stark economic impacts.

Current conditions are being addressed by state agencies including the Department of Agriculture, the Department of Water Resources, and Oregon Emergency Management.

A timely response to this situation being vital to the well being and economic security of the citizens and businesses of the Affected County, I am therefore declaring a "state of drought emergency" in the Affected County and directing the following activities;

IT IS HEREBY ORDERED AND DIRECTED:

I. The Oregon Department of Agriculture is directed to coordinate and provide assistance in seeking federal resources available to mitigate conditions and effect agricultural recovery in the Affected County.

II. The Department of Water Resources is directed to coordinate and provide assistance and regulation for the Affected County as it determines is necessary in accordance with ORS 536.700 to 536.780.

III. The Office of Emergency Management is directed to coordinate and assist as needed with assessment and mitigation activities to address current and projected conditions in the Affected County.

IV. All other departments are directed to coordinate with the above agencies and to provide appropriate state resources as determined essential to assist affected political subdivisions in the Affected County.

Office of the Governor State of Oregon



EXECUTIVE ORDER NO. EO 03-12
PAGE TWO

V. This Executive Order expires on December 31, 2003

Done at Salem, Oregon this 29 day of August, 2003

A handwritten signature in dark ink, appearing to read "Theodore R. Kulongoski", written over a horizontal line.

Theodore R. Kulongoski
GOVERNOR

ATTEST:


A handwritten signature in dark ink, appearing to read "Bill Bradbury", written over a horizontal line.

Bill Bradbury
SECRETARY OF STATE



Entire State:

Sustained drought conditions have contributed to job losses in the Pacific Northwest timber industry. As the continued drought and related increased fire danger have led to forest closures, thousands of loggers and truck drivers have been forced out of work. According to an official with the Washington Forest Protective Association, drought-related state restrictions have affected about 7,000 forest products employees.

Categories:  Other

Source: Media

Dates of Impact: 1987-10-22 to 1987-10-22

External URL: <http://www.chron.com/CDA/archives/archive.mpl?id=...>

Affected Areas: Entire State

According to an official with the U.S. Department of Agriculture, in 1990 \$4,464,000 was provided to Oregon farmers impacted by drought conditions to purchase emergency feed supplies. (Oregon Emergency Management Drought Council. Meeting minutes.

October 17, 1991. pg. 2)

Categories:  Other

Source: Government

Dates of Impact: 1990-01-01 to 1990-12-31

Affected Areas: Entire State

Across 9 Western states (Arizona, California, Colorado, Idaho, Montana, Nevada, Oregon, Utah, and Washington), wildfires have burned 4.3 million acres to date, which exceeds year-end totals for all but 3 years (1988, 1990, and 1994). One of the most serious fires was in northern California in the Mendocino National Forest. That fire, encompassing nearly 83,000 acres, led to the evacuation of 1,000 people in 5 communities; 3 more towns were on alert. More than 2,700 firefighters and 35 bulldozers were working to clear a line around trees and underbrush, and 650 Army soldiers from Colorado were expected to join them. (From Associated Press, Aug. 18, 19 and 24, 1996).

Categories:  Fire

Source: Media

Dates of Impact: 1996-08-18 to 1996-08-24

Affected Areas: Entire State

As of Aug. 27, fires were burning on more than 238,000 acres in the West. About 18,000 firefighters were battling fires in Oregon, California, Washington, Idaho, Utah, Nevada, Montana, and Wyoming. (From the Associated Press, Aug. 27, 1996)

Categories:  Fire


Source: Media

Dates of Impact: 1996-08-27 to 1996-08-27

Affected Areas: Entire State

Non-farm businesses and agricultural cooperatives are eligible to receive low interest disaster loans in 15 counties in Oregon, due to this year's drought. These businesses can receive loans for up to \$1.5 million to help with financial obligations. (12/14/99, Drought

News Headline)

Categories:  Other

Source: Media

Dates of Impact: 1999-12-14 to 1999-12-14

Affected Areas: Entire State

As sustained drought conditions are depleting the animals' natural drinking water sources, wild horses in parts of Utah, Nevada, California, and Oregon are being gathered by the Bureau of Land Management. The BLM is looking for individuals to adopt the horses, because their chances of survival in the wild during the drought are bleak.

Categories:  Environment


Source: Media

Dates of Impact: 2000-08-28 to 2000-08-28

External URL: http://www.sltrib.com:80/08282000/nation_w/17165....

Affected Areas: Entire State

Drought has caused the recreation industry in Southern Oregon to see lower numbers. One ski resort has seen ticket sales drop by a third. This is due to a low snowpack caused by lack of precipitation and warm clear days which melt the snow on the ground. One ski resort had reports of skiers having to dodge rocks, while another was forced to close one of their lifts due to lack of snow.

Categories:  Social

Source: Media

Dates of Impact: 2001-01-25 to 2001-01-25

External URL: <http://www.oregonlive.com:80/news/oregonian/index...>

Affected Areas: Entire State

Approximately 1,400 farmers are being forced not to irrigate crops in a 200,000 acre area along the Oregon-California border. The shortnosed sucker fish, an endangered species, and Coho salmon, a threatened species, both have populations in the Upper Klamath Lake. The lake is the largest reservoir of the Klamath project and has been depleted by drought and irrigation, further endangering these species. With these restrictions in place, the lake will be used only to support these fish species.

Categories:  Agriculture

Source: Media

Dates of Impact: 2001-04-08 to 2001-04-08

External URL: <http://www.enn.com/news/wire-stories/2001/04/0408...>

Affected Areas: Entire State

Due to lack of hydropower from drought, along with increased demand, Bonneville Power Administration has asked approximately 12 factories in the Pacific Northwest, mostly aluminum plants, to shut down for up to two years. This is an attempt to conserve power and limit the rise of energy prices. This would cut the power demand on the company 5% to 10%, approximately 2,100 megawatts. They have also asked residential users in the area to limit their power use.

Categories:  Water/Energy

Source: Media

Dates of Impact: 2001-04-10 to 2001-04-10

External URL: <http://www.latimes.com/news/science/environ/20010...>

Affected Areas: Entire State

Due to lack of pasture from drought conditions, ranchers in Klamath Basin are selling cattle at triple the normal rate. They do not have sufficient pastures or money to buy enough hay to feed the cattle, and must sell them in large numbers. This is also detrimental to the ranchers because the genetic diversity is lost by selling large percentages of the herd.

Categories:  Agriculture

Source: Media

Dates of Impact: 2001-04-18 to 2001-04-18

External URL: <http://dailynews.yahoo.com/h/6000/20010417/lo/377...>

Affected Areas: Entire State

In a one-week period in August, about 20 wildfires burned across 270,000 acres.

Categories:  Fire

Source: Media

Dates of Impact: 2001-08-31 to 2001-08-31

External URL: <http://www.tdn.com/articles/2005/03/17/oregon/new...>

Affected Areas: Entire State

According to the National Climatic Data Center a widespread, moderate to extreme drought hit several dozen states in the Spring of 2002 and continued through early Fall 2002. Drought affected large portions of the western states, the Great Plains, and much of the eastern U.S. The drought resulted in damages estimated at over \$10.0 billion nationwide.

Categories:  Agriculture

Source: NOAA

Dates of Impact: 2002-01-01 to 2002-12-31

External URL: <http://lwf.ncdc.noaa.gov/oa/reports/billionz.html>

Affected Areas: Entire State

Mountain pine beetle outbreaks were found in every Western state and infected 2.2 million acres in 2003, up from 1.5 million in 2002, according to a Forest Service report released in August 2004. Experts point to drought, hot summers and mild winters as causes for the outbreaks. The acres of forest killed by beetles in Western states jumped from 1.4 million in 1997 to 8.6 million in 2004.

Categories:  Environment

Source: Media

Dates of Impact: 2003-01-01 to 2004-12-31

External URL: <http://californian.com/articles/2005/07/25/news/...>

Affected Areas: Entire State

To date, 45 acres have burned, compared to 8 acres at the same time in 2004. By April 1, one month earlier than usual, the Oregon Dept. of Forestry will have prepared a contingency plan for extra resources in case conditions become severe.

Categories:  Fire

Source: Media

Dates of Impact: 2005-03-22 to 2005-03-22

External URL: <http://www.statesmanjournal.com/apps/pbcs.dll/art...>

Affected Areas: Entire State

Central Oregon farmers plan to grow fewer crops because of uncertainties about irrigation water. Some irrigation districts have announced reduced allocations because of dry conditions.

Categories:  Agriculture

Source: Media

Dates of Impact: 2005-03-26 to 2005-03-26

External URL: <http://seattletimes.nwsources.com/html/localnews/2...>

Affected Areas: Entire State

Due to water rationing, farmers in both Oregon and Washington are cutting back significantly on planting certain crops, including wheat and hay.

Categories:  Agriculture

Source: Media

Dates of Impact: 2005-04-22 to 2005-04-22

External URL: <http://www.democratherald.com/articles/2005/04/22...>

Affected Areas: Entire State

In eastern Oregon, the state Department of Environmental Quality requested that wastewater treatment plant managers take voluntary measures this summer to minimize the impact of effluent on streams and rivers affected by drought. The concern is that stream with below normal streamflows may not be able to dilute the waste, which could affect water quality, fish habitat, and recreation.

Categories:  Water/Energy


Source: Media

Dates of Impact: 2005-04-23 to 2005-04-23

External URL: <http://www.ktvb.com/engine.pl?station=ktvb&id=822...>

Affected Areas: Entire State

According to an official with the U.S. Department of Agriculture, to date in 1991 \$313,000 has been provided to Oregon farmers impacted by drought conditions to purchase emergency feed supplies. (Oregon Emergency Management Drought Council. Meeting minutes. October 17, 1991. pg. 2)

Categories:  Other

Source: Government

Dates of Impact: 1991-01-01 to 1991-09-17

Affected Areas: Entire State

Wallowa County:

Five counties in Oregon, including Union, Baker, Grant, Umatilla, and Wallowa counties, have been declared disaster areas by the Department of Agriculture due to drought and hailstorms. Farmers in these counties will be eligible for low interest government loans. Approximately one-third of the wheat crop in these areas was lost due to weather.

(10/1/99, ABC NewsWire)



Categories:  Agriculture  Other

Source: Media

Dates of Impact: 1999-10-01 to 1999-10-01

Affected Areas: Baker, Grant, Umatilla, Union, Wallowa Counties

Plans to spill water over dams in the Snake and Columbia Rivers have been halted for at least two weeks to maintain electric power generation in the area. The opening of spillways is done to allow young salmon to swim over dams, as opposed to swimming downstream through dangerous dam turbines. The spillways are remaining closed to maintain reliable power in the area. The lack of water from drought is expected to reduce Columbia River levels by half.

Categories:  Water/Energy  Environment


Source: Media

Dates of Impact: 2001-04-05 to 2001-04-05

External URL: <http://www.latimes.com/news/state/20010405/t00002...>

Affected Areas: Baker, Columbia, Gilliam, Hood River, Malheur, Morrow, Multnomah, Sherman, Umatilla, Wallowa, Wasco Counties

The U.S. Department of Agriculture has designated Sherman and Wallowa Counties as primary disaster areas due to drought-related losses.

Categories:  Other


Source: Media

Dates of Impact: 2004-02-04 to 2004-02-04

External URL: <http://news.statesmanjournal.com/article.cfm?i=74...>

Affected Areas: Sherman and Wallowa Counties

State of Oregon - Executive Order No. 05-06, dated May 25, 2005, Wallowa County was included for a drought emergency due to drought and low water conditions.


Categories:  Other

Source: Government

Dates of Impact: 2004-05-25 to 2005-05-25

Affected Areas: Wallowa County

A Wallowa County Board of Commissioner's Resolution was made on May 2, 2005 due to insufficient precipitation and surface water.

Categories:  Other

Source: Government

Dates of Impact: 2005-05-02 to 2005-05-02

Affected Areas: Wallowa County

The U.S. Department of Agriculture has designated Baker and Gilliam counties in Oregon as primary disaster areas due to drought from Oct. 1, 2001, and continuing. The following counties have been designated contiguous disaster areas, also because of drought: Grant, Malheur, Morrow, Sherman, Union, Wallowa, Wasco and Wheeler.

Categories:  Other

Source: Media

Dates of Impact: 2001-10-01 to 2003-11-10


External URL: http://farmjournal.com/news_show_news_article.asp...

Affected Areas: Baker, Gilliam, Grant, Malheur, Morrow, Sherman, Union, Wallowa, Wasco, Wheeler Counties

Union County

Due to losses incurred from sustained drought conditions, farmers and producers in the following Oregon counties are eligible to apply for low-interest loans. The loans are a form of drought disaster assistance provided by the U.S. Department of Agriculture.

(Kadera, Jim. "Drought Aid Begins, Feed Plan Expanded." The Oregonian. Oct. 4, 1988.)

Categories:  Other

Source: Media



Dates of Impact: 1986-10-04 to 1986-10-04

Affected Areas: Baker, Benton, Crook, Curry, Deschutes, Douglas, Grant, Harney, Jackson, Josephine, Klamath, Lake, Lane, Lincoln, Linn, Malheur, Morrow, Umatilla, Union, Wheeler Counties

Five counties in Oregon, including Union, Baker, Grant, Umatilla, and Wallowa counties, have been declared disaster areas by the Department of Agriculture due to drought and hailstorms. Farmers in these counties will be eligible for low interest government loans.

Approximately one-third of the wheat crop in these areas was lost due to weather.

(10/1/99, ABC NewsWire)


Categories:  Agriculture  Other

Source: Media

Dates of Impact: 1999-10-01 to 1999-10-01

Affected Areas: Baker, Grant, Umatilla, Union, Wallowa Counties

The U.S. Department of Agriculture has designated Baker and Gilliam counties in Oregon as primary disaster areas due to drought from Oct. 1, 2001, and continuing. The following counties have been designated contiguous disaster areas, also because of drought: Grant, Malheur, Morrow, Sherman, Union, Wallowa, Wasco and Wheeler.

Categories:  Other


Source: Media

Dates of Impact: 2001-10-01 to 2003-11-10

External URL: http://farmjournal.com/news_show_news_article.asp...

Affected Areas: Baker, Gilliam, Grant, Malheur, Morrow, Sherman, Union, Wallowa, Wasco, Wheeler Counties

Union and Wheeler Counties in Oregon have been designated as primary disaster areas due to the ongoing drought conditions in response to a received written request. Qualified farm operators in these counties are now eligible for low-interest emergency loans from the Farm Service Agency. Crook, Jefferson, and Umatilla Counties were already designated previously and are eligible for the same assistance.

Categories:  Other

Source: Media

Dates of Impact: 2004-01-09 to 2004-01-09

External URL: <http://www.fsa.usda.gov/pas/emStory.asp?StoryID=1...>

Affected Areas: Crook, Jefferson, Umatilla, Union, Wheeler Counties

Baker County

Due to losses incurred from sustained drought conditions, farmers and producers in the following Oregon counties are eligible to apply for low-interest loans. The loans are a form of drought disaster assistance provided by the U.S. Department of Agriculture.

(Kadera, Jim. "Drought Aid Begins, Feed Plan Expanded." The Oregonian. Oct. 4, 1988.)

Categories: 🌾 Other

Source: Media

Dates of Impact: 1986-10-04 to 1986-10-04

Affected Areas: Baker, Benton, Crook, Curry, Deschutes, Douglas, Grant, Harney, Jackson, Josephine, Klamath, Lake, Lane, Lincoln, Linn, Malheur, Morrow, Umatilla, Union, Wheeler Counties

Five counties in Oregon, including Union, Baker, Grant, Umatilla, and Wallowa counties, have been declared disaster areas by the Department of Agriculture due to drought and hailstorms. Farmers in these counties will be eligible for low interest government loans.

Approximately one-third of the wheat crop in these areas was lost due to weather.

(10/1/99, ABC NewsWire)

Categories: 🌿 Agriculture 🌾 Other

Source: Media

Dates of Impact: 1999-10-01 to 1999-10-01

Affected Areas: Baker, Grant, Umatilla, Union, Wallowa Counties

Plans to spill water over dams in the Snake and Columbia Rivers have been halted for at least two weeks to maintain electric power generation in the area. The opening of spillways is done to allow young salmon to swim over dams, as opposed to swimming downstream through dangerous dam turbines. The spillways are remaining closed to maintain reliable power in the area. The lack of water from drought is expected to reduce Columbia River levels by half.

Categories: 💧 Water/Energy 🌿 Environment

Source: Media

Dates of Impact: 2001-04-05 to 2001-04-05

External URL: <http://www.latimes.com/news/state/20010405/t00002...>

Affected Areas: Baker, Columbia, Gilliam, Hood River, Malheur, Morrow, Multnomah, Sherman, Umatilla, Wallowa, Wasco Counties

The U.S. Department of Agriculture has designated Baker and Gilliam counties in Oregon as primary disaster areas due to drought from Oct. 1, 2001, and continuing. The following counties have been designated contiguous disaster areas, also because of drought: Grant, Malheur, Morrow, Sherman, Union, Wallowa, Wasco and Wheeler.

Categories: 🌾 Other


Source: Media

Dates of Impact: 2001-10-01 to 2003-11-10

External URL: http://farmjournal.com/news_show_news_article.asp...

Baker, Gilliam, Grant, Malheur, Morrow, Sherman, Union, Wallowa, Wasco, Wheeler Counties

Umatilla County commissioners have declared the county in a state of drought. They have asked Governor Kulongoski for emergency funds for ag producers. Klamath and Baker counties have also requested aid.

Categories:  Other


Source: Media

Dates of Impact: 2005-03-17 to 2005-03-17

External URL: http://kmtr.com/news/local/story.aspx?content_id=...

Affected Areas: Baker, Klamath, Umatilla Counties

Baker, Crook, Gilliam, Hood River, Klamath, Morrow, Sherman, Umatilla, and Wheeler counties have already been declared in a state of drought emergency; Deschutes County has applied for emergency drought declaration. Drought declarations enable state officials to streamline water permit procedures for users who have lost their usual water sources.

Categories:  Other


Source: Media

Dates of Impact: 2005-05-03 to 2005-05-03

External URL: http://www.bendbulletin.com/news/story.cfm?story_...

Affected Areas: Baker, Crook, Deschutes, Gilliam, Hood River, Klamath, Morrow, Sherman, Umatilla, Wheeler Counties

Baker County commissioners have declared that the county is in drought and want the governor to recognize the severity of the situation. Ranchers are short on hay for their livestock and may have to cull their herds. Water supplies for livestock are also becoming a problem as stock ponds dry up.

Categories:  Other

Source: Media


Dates of Impact: 2007-06-04 to 2007-06-04

External URL: <http://www.kgw.com/sharedcontent/APStories/storie...>

Affected Areas: Baker County

Grant County

Due to losses incurred from sustained drought conditions, farmers and producers in the following Oregon counties are eligible to apply for low-interest loans. The loans are a form of drought disaster assistance provided by the U.S. Department of Agriculture. (Kadera, Jim. "Drought Aid Begins, Feed Plan Expanded." The Oregonian. Oct. 4, 1988.)

Categories:  Other

Source: Media

Dates of Impact: 1986-10-04 to 1986-10-04

Affected Areas: Baker, Benton, Crook, Curry, Deschutes, Douglas, Grant, Harney, Jackson, Josephine, Klamath, Lake, Lane, Lincoln, Linn, Malheur, Morrow, Umatilla, Union, Wheeler Counties

Five counties in Oregon, including Union, Baker, Grant, Umatilla, and Wallowa counties, have been declared disaster areas by the Department of Agriculture due to drought and hailstorms. Farmers in these counties will be eligible for low interest government loans. Approximately one-third of the wheat crop in these areas was lost due to weather.

(10/1/99, ABC NewsWire)


Categories:  Agriculture  Other

Source: Media

Dates of Impact: 1999-10-01 to 1999-10-01

Affected Areas: Baker, Grant, Umatilla, Union, Wallowa Counties

The U.S. Department of Agriculture has designated Baker and Gilliam counties in Oregon as primary disaster areas due to drought from Oct. 1, 2001, and continuing. The following counties have been designated contiguous disaster areas, also because of drought: Grant, Malheur, Morrow, Sherman, Union, Wallowa, Wasco and Wheeler.

Categories:  Other

Source: Media

Dates of Impact: 2001-10-01 to 2003-11-10

External URL: http://farmjournal.com/news_show_news_article.asp...

Affected Areas: Baker, Gilliam, Grant, Malheur, Morrow, Sherman, Union, Wallowa, Wasco, Wheeler Counties

http://droughtreporter.unl.edu/map.jsp?&src=&daterange=custom&c_ot=on&c_wa=on&year2=2007&year1=1850&c_ag=on&day2=15&scn=nv&day1=15&c_fi=on&c_en=on&month2=6&c_so=on&month1=6&Cmd=sv&st=Oregon

DROUGHT SPARKS FISH FREE FOR ALL

Published: August 1, 2007

NORTH POWDER — Key regulations have temporarily been lifted at Thief Valley Reservoir by the Oregon Department of Fish and Wildlife to help anglers land fish before they are killed by this summer's drought.

The temporary rule changes pertain to bag limits, possession limits and harvest methods.

The temporary rules are needed, according to ODFW biologists, to provide the public an opportunity to salvage fish that will be killed as a result of the drought when the reservoir is drained for irrigation purposes.

"Thief Valley Reservoir has reached dead storage level, which means only a few small pools of water remain," said ODFW Fishery Biologist Tim Bailey. "Fish isolated in these pools will become stressed by warm and turbid water, and will die."

Beginning today, Thief Valley Reservoir is open to angling for all game species. The following conditions are in effect:

- There are no daily catch or possession limits.
- Anglers may harvest fish by hand, dip net or angling.
- There are no size limits.

The above amended regulations are in effect through Sept. 30.

DROUGHT IMPACT REPORTS

From 1986 to June 15, 2007:

Wallowa County had 26 reported drought impacts:

- 6 Agriculture
- 4 Fire
- 3 Water/Energy
- 3 Environment
- 1 Social
- 9 Other

Union County had 23 reported drought impacts

- 6 Agriculture
- 4 Fire
- 2 Water/Energy
- 2 Environment
- 1 Social
- 8 Other

Baker County had 27 reported drought impacts

- 6 Agriculture
- 4 Fire
- 3 Water/Energy
- 3 Environment
- 1 Social
- 10 Other

Grant County had 22 reported drought impacts

- 6 Agriculture
- 4 Fire
- 2 Water/Energy
- 2 Environment
- 1 Social
- 7 Other

Number of Reported Drought Impacts for Region 7

	Baker	Grant	Union	Wallowa
1986	1	1	1	1
1987	1	1	1	1
1988	0	0	0	0
1989	0	0	0	0
1990	1	1	1	1
1991	1	1	1	1
1992	0	0	0	0
1993	0	0	0	0
1994	0	0	0	0

1995	0	0	0	0
1996	1	1	1	1
1997	0	0	0	0
1998	0	0	0	0
1999	3	3	3	3
2000	1	1	1	1
2001	8	6	6	8
2002	2	2	2	2
2003	0	0	0	0
2004	1	1	2	3
2005	6	4	4	6
2006	0	0	0	0
2007	1	0	0	0
total	27	22	23	28

Northeast Oregon Natural Hazard Risk Reduction Plan

Drought

Legend

- County Seats
- Average Precipitation: inches per year**
 - 10 - 20
 - - - 25 - 30
 - 35 - 45
 - - - 50 - 60
 - 65 - 70
 - - - 75 - 85
 - 90 - 100
 - - - 105 - 115
- Roads
- Streams
- Lakes
- County Boundaries

0 4 8 16 24 32 Miles



Data Sources: County and City boundaries, county seats, and precipitation contours are from the Oregon Geospatial Data Clearinghouse. Roads are from Oregon Department of Transportation.

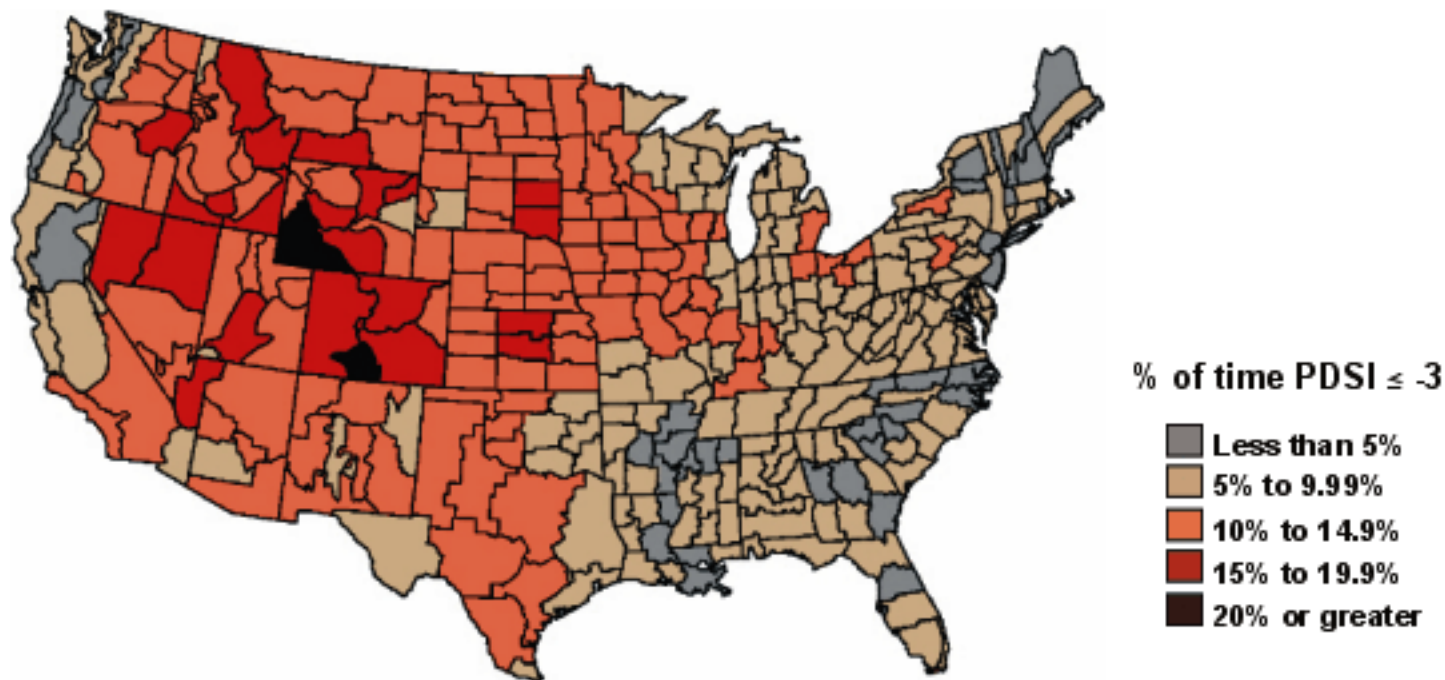
Maps created by Wallowa County GIS, a division of the Wallowa County Planning Department.

The information on this map was derived from various sources. Care was taken in the creation of this map but it is provided "as is". Wallowa County cannot accept any responsibility for errors, omissions, or positional accuracy in the digital data or the underlying records. There are no warranties, express or implied, including the merchantability or fitness for a particular purpose, accompanying this product. However, notification of any errors will be appreciated.

Palmer Drought Severity Index

1895–1995

Percent of time in severe and extreme drought



SOURCE: McKee et al. (1993); NOAA (1990); High Plains Regional Climate Center (1996)
Albers Equal Area Projection; Map prepared at the National Drought Mitigation Center

Hazard Annex

Earthquake

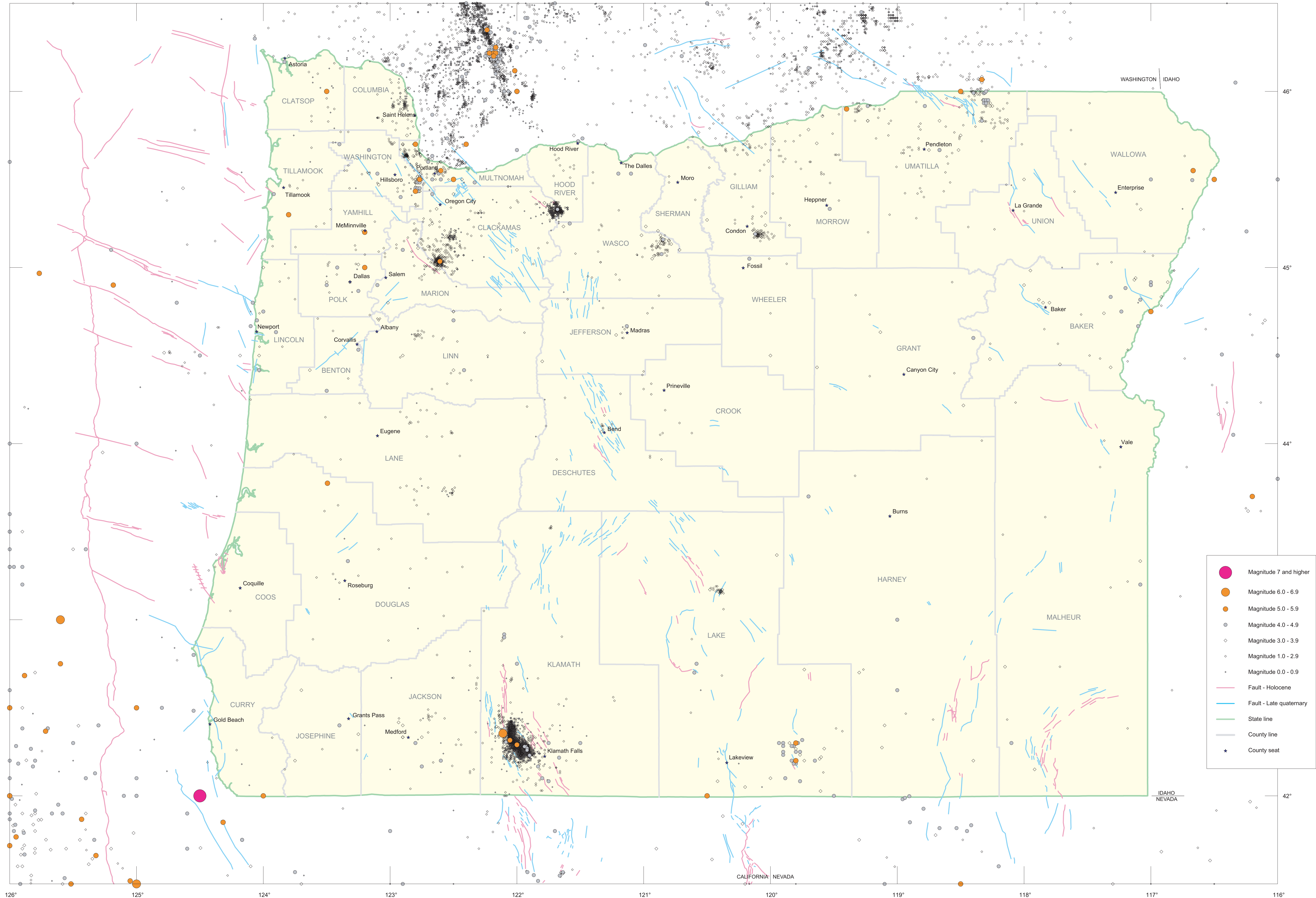
Map of Selected Earthquakes for Oregon, 1841 through 2002

OPEN-FILE REPORT 03-02

Map of Selected Earthquakes for Oregon,
1841 through 2002

By Clark A. Niewendorp and Mark E. Neuhaus

2003



WHAT DOES THE MAP SHOW?

This map shows over 14,000 known earthquakes from 1841 to 2002. The Table to the right is a summary of major quakes that have affected Oregon, causing ground shaking and damage (Wang and Clark, 1999). It shows that Oregonians face injury and property damage from earthquakes originating throughout the Pacific Northwest. For this reason, the Oregon Department of Geology and Mineral Resources produced this map of the epicenters of historic earthquakes in Oregon, off the coast, and along Oregon's border with southern Washington and northern California. Historic patterns show areas in Oregon that are especially vulnerable to earthquakes.

The earthquake dataset for this map was compiled from two sources: the Oregon Department of Geology and Mineral Resources' Earthquake Database for Oregon (Johnson and others, 1994) and data from the Pacific Northwest Seismograph Network (PNSN) at the University of Washington Geophysics Department. You can view and retrieve earthquake data in PNSN's earthquake catalog from the following website:

<http://www.geophysics.washington.edu/SEIS/PNSN/CATDAT/welcome.html>

Johnson and others' (1994) dataset covered the area shown on this map. However, PNSN's current earthquake catalog contains records for earthquakes located between -125° and -117° longitude and 42° and 49° latitude. Earthquakes outside PNSN's coverage are recorders older than October of 1993. A remaining task in preparing a comprehensive earthquake map for Oregon is to incorporate data from other earthquake catalogs, particularly those that cover extreme eastern and southeastern Oregon. Also, the magnitudes of some earthquakes before 1962, roughly 250 events, were determined using intensity data (Jacobson, 1986). Data of this kind are not always precisely accurate. The data reflects poorly determined locations or magnitudes, and are often incomplete.

Earthquake epicenters are displayed on this map as diamonds and circles. These symbols are plotted at different sizes so as to provide a scale. Filled diamonds correspond to an earthquake with a magnitude between 0 and 0.9. Open diamonds represent earthquakes with magnitudes between 0.9 and 3.9. The colored circles represent larger magnitude earthquakes, those over 3.9. A legend explaining these symbols is shown in the lower right margin of the map.

The blackened areas on the map are the concentration of many symbols. This clustering is a result of earthquake activity that occurs in swarms. The largest earthquake in a swarm is the mainshock, sometimes preceded by foreshocks, and almost always followed by aftershocks. Also, within one cluster, there could be many earthquake swarms.

Geologically active faults are shown on this map (Geomatrix Consultants, 1995). Active

faults are defined as those that moved in the last 780,000 years. Faults active in the last 20,000 years are color-coded red. Faults that moved between 20,000 and 780,000 years are color-coded blue. A less-than-straightforward connection between earthquakes and active faults exist in Oregon. The uncertainties in earthquake locations can be large and not all faults are known. Often this uncertainty makes it difficult to associate an earthquake with a particular fault.

Seismicity Patterns

We can make some general observations regarding the seismicity patterns shown on this map. Overall, earthquakes in Oregon are associated with four zones of seismicity: the Cascade seismic zone, Portland Hills (Portland-Vancouver metropolitan area), south-central (Klamath Falls), and northeastern Oregon.

Cascade

The earthquakes in the Cascade seismic zone are part of the Cascade Range of Washington, Oregon, and California, an active volcanic mountain chain where magma ascends into the crust because of the underlying subduction processes. The portion of the Cascade seismic zone in southwestern Washington contains the earthquake (magnitude 5.1) triggering the major lateral blast that ripped away the northern side of the Mount St. Helens volcano. The blast probably happened 20 to 30 seconds after the earthquake began. Approximately 440 earthquakes were associated with the 1980 eruption of Mount St. Helens.

In a typical year, one to several, short-lived swarms of small earthquakes are recorded on the south flank and below the summit of Mount Hood volcano in Oregon. These swarms probably represents a reaction to regional tectonic stresses, not pre-eruption volcanic activity.

Portland Hills

A scattered, northwest-trending cluster of earthquakes, called the Portland Hills seismicity zone, lies in the Portland-Vancouver metropolitan area (Blakely and others, 1995). Notable earthquakes in this zone included the 4.7 magnitude earthquake on November 7, 1961, and the November 5, 1962, earthquake of 5.5 magnitude. The Portland Hills seismicity zone is in a portion of northwestern Oregon sheared into a series of juxtaposed blocks moving in different directions.

Movement of the blocks induces earthquakes along northwest- and northeast-trending fault zones. Two have particular significance: the north northwest-trending Portland Hills and the Mount Angel-Gales Creek fault zones. The Portland Hills fault can be traced through downtown Portland and the fault may be a reason for the unusually steep scarp of Portland's West Hills. To the west, the Mount Angel-Gales Creek fault zone is a single, potentially active fault system that has been mapped from the Cascades into the Willamette Valley through to the Coast Range (Dougherty and Trehu, 2002). The 5.6 magnitude March 25,

1993, Scotts Mills (near Silverton and Woodburn in Marion County, Oregon) earthquake with an epicenter near Mount Angel, in Marion County, Oregon, may be associated with this fault zone (Madin and others, 1993). Other active faults in the Willamette Valley, no less significant, can produce future earthquakes as well.

South-Central Oregon

The dense cluster of earthquakes in south-central Oregon is associated with the September 20, 1993, earthquakes of 5.9 and 6.0 magnitude (Wiley and others, 1993). Aftershocks as large as magnitude 5.1 continued to disturb residents for six months (Sherrard and others, 1997). Epicenters for these earthquakes are near north- to northwest-trending faults about 19 miles northwest of Klamath Falls. Quakes in this area are related to the northernmost part of the Basin and Range geologic province, a vast area extending from south-central Oregon to Arizona and encompassing most of Nevada. The Basin and Range in south-central Oregon is stretching in an east-west direction causing the crust to break into blocks along steeply dipping faults (Wong and Bott, 1995; Wells and others, 1998). Earthquakes such as those near Klamath Falls and the earthquake swarm near the town of Adel (magnitude 5.1) to the east of Lakeview were probably triggered as the crust broke along existing faults.

Northeastern Oregon

In northeastern Oregon, several diffuse areas of seismicity fall on the Oregon-Washington border. The area near Milton-Freewater was the site of the 1936 magnitude 6.4 earthquake. This earthquake and the scattered seismicity in the region are related to the Olympic-Wallawa lineament. The lineament is a broad zone of northwest-trending faults and intervening basins and uplifts stretching from the Olympic Mountains of western Washington across the Cascades and Columbia Basin into the northeast side of the Wallawa Mountains in northeastern Oregon.

REFERENCES

Atwater, B.F., Nelson, A.R., Clague, J.J., Carver, G.A., Yamaguchi, D.K., Bobrowsky, P.T., Bourgeois, J., Darienzo, M.E., Grant, W.C., Hemphill-Haley, E., Kelsey, H.M., Jacoby, G.C., Nishenko, S.P., Palmer, S.P., Peterson, C.D., and Reinhart, M.A., 1995, Summary of coastal geologic evidence for past great earthquakes at the Cascadia subduction zone: *Earthquake Spectra*, Vol. 11, no. 1, p. 1-18.

Atwater, B.F., and Hemphill-Haley, E., 1997, Recurrence intervals for great earthquakes of the past 3,500 years at northeastern Willapa Bay: *U.S. Geological Survey Professional Paper*, 108.

Blakely, R.J., Wells, R.E., Yelin, T.S., Madin, I.P., and Beeson, M.H., 1995, Tectonic setting of the Portland-Vancouver area, Oregon and Washington: Constraints from low-altitude aeromagnetic data: *Geological Society of America*, Vol. 107, no. 9, p. 1051-1062.

Brantley and Topinka, 1984, *Volcanic Studies at the U. S. Geological Survey's David A. Johnston Cascades Volcano Observatory*, Vancouver, Washington: *Earthquake Information Bulletin*, Vol. 16, no. 2, March-April 1984.

Dougherty, M.L., and Trehu, A.M., 2002, Neogene deformation of the Mt. Angel/Gales Creek Fault Zone: Constraints from high-resolution seismic reflection imaging: *USGS Earthquake Hazards Reduction Program Annual Summaries of Technical Reports*, Vol. 37.

Geomatrix Consultants, Inc., 1995, Final Report, Seismic Design Mapping, State of Oregon: January, ODOT Project No. 2442, 5 sections, 4 appendices, 5 plates.

Goldfinger, C., McCaffrey, R., Murray, M., Zwick, P., Nabelek, J., Smith, C.L., and Johnson, C., 1999, GPS constraints on plate coupling in central western Oregon [abs.]: *Seismological Research Letters*, v. 70, p. 244-245.

Johnson, A.G., Seofeld, D.H., Madin, I.P., 1994, Earthquake database for Oregon, 1853 through October 25, 1993: Oregon Department of Geology and Mineral Industries Open-File Report O-94-4, 1 diskette.

Madin, I.P., Priest, G.P., Mabey, M.A., Malone, S., Yelin, T.S., and Meier, D., 1993, March 25, 1993, Scotts Mills earthquake—western Oregon's wake-up call: Oregon Department of Geology and Mineral Industries, Oregon Geology, Vol. 55, no. 3, May 1993.

Shedlock, K.M., and Weaver, C.S., 1991, Program for earthquake hazards assessment in the Pacific Northwest: U.S. Geological Survey Circular 1067, 29 pgs.

Sherrard, D.R., Mastin, L.G., Scott, W.E., and Schilling, S.P., 1997, Volcano Hazards at Newberry Volcano, Oregon: USGS Open-File Report 97-513.

Wang, Y., and Clark, J.L., 1999, Earthquake damage in Oregon: Preliminary estimates of future earthquakes losses: Oregon Department of Oregon and Mineral Industries Special Paper 29, p. 13.

Wells, R.E., Weaver, C.S., and Blakely, R.J., 1998, Fore-arc migration in Cascadia and its neotectonic significance: *Geology*, 26, p. 759-762.

Wiley, T.J., Sherrard, D.R., Keefe, D.K., Qamar, A., Schuster, R.L., Dewey, J.W., Mabey, M.A., Black, G.L., and Wells, R.E., 1993, Klamath Falls earthquakes, September 20, 1993—including the strongest quake ever measured in Oregon: Oregon Department of Geology and Mineral Industries, Oregon Geology, Vol. 55, no. 6, p. 127-136.

Wong, I.G., and Bott, J.D.J., 1995, A look back at Oregon's earthquake history, 1841-1994: Oregon Department of Geology and Mineral Industries, Oregon Geology, Vol. 57, no. 6, p. 125-139.

Wong, I.G., 2002, Intraplate earthquake potential in the Cascadia Subduction Zone beneath western Oregon [abs.]: *Geological Society of America Abstracts with Programs*.

Dougherty, M.L., and Trehu, A.M., 2002, Neogene deformation of the Mt. Angel/Gales Creek Fault Zone: Constraints from high-resolution seismic reflection imaging: *USGS Earthquake Hazards Reduction Program Annual Summaries of Technical Reports*, Vol. 37.

Geomatrix Consultants, Inc., 1995, Final Report, Seismic Design Mapping, State of Oregon: January, ODOT Project No. 2442, 5 sections, 4 appendices, 5 plates.

Goldfinger, C., McCaffrey, R., Murray, M., Zwick, P., Nabelek, J., Smith, C.L., and Johnson, C., 1999, GPS constraints on plate coupling in central western Oregon [abs.]: *Seismological Research Letters*, v. 70, p. 244-245.

Johnson, A.G., Seofeld, D.H., Madin, I.P., 1994, Earthquake database for Oregon, 1853 through October 25, 1993: Oregon Department of Geology and Mineral Industries Open-File Report O-94-4, 1 diskette.

Madin, I.P., Priest, G.P., Mabey, M.A., Malone, S., Yelin, T.S., and Meier, D., 1993, March 25, 1993, Scotts Mills earthquake—western Oregon's wake-up call: Oregon Department of Geology and Mineral Industries, Oregon Geology, Vol. 55, no. 3, May 1993.

Shedlock, K.M., and Weaver, C.S., 1991, Program for earthquake hazards assessment in the Pacific Northwest: U.S. Geological Survey Circular 1067, 29 pgs.

Sherrard, D.R., Mastin, L.G., Scott, W.E., and Schilling, S.P., 1997, Volcano Hazards at Newberry Volcano, Oregon: USGS Open-File Report 97-513.

Wang, Y., and Clark, J.L., 1999, Earthquake damage in Oregon: Preliminary estimates of future earthquakes losses: Oregon Department of Oregon and Mineral Industries Special Paper 29, p. 13.

Wells, R.E., Weaver, C.S., and Blakely, R.J., 1998, Fore-arc migration in Cascadia and its neotectonic significance: *Geology*, 26, p. 759-762.

Wiley, T.J., Sherrard, D.R., Keefe, D.K., Qamar, A., Schuster, R.L., Dewey, J.W., Mabey, M.A., Black, G.L., and Wells, R.E., 1993, Klamath Falls earthquakes, September 20, 1993—including the strongest quake ever measured in Oregon: Oregon Department of Geology and Mineral Industries, Oregon Geology, Vol. 55, no. 6, p. 127-136.

Wong, I.G., and Bott, J.D.J., 1995, A look back at Oregon's earthquake history, 1841-1994: Oregon Department of Geology and Mineral Industries, Oregon Geology, Vol. 57, no. 6, p. 125-139.

Wong, I.G., 2002, Intraplate earthquake potential in the Cascadia Subduction Zone beneath western Oregon [abs.]: *Geological Society of America Abstracts with Programs*.

Historical Earthquakes affecting Oregon			
Date	Location	Magnitude	Comments
Approximate years 1400 BCE 1050 BCE 600 BCE 400, 750, 900	Offshore, Cascadia subduction zone?	Probably 8-9	Researchers Brian Atwater and Ellen Hemphill-Haley have dated earthquakes and tsunamis at Willapa Bay, Washington; these are the midpoints of the age range for these six events.
January 26, 1700	Offshore, Cascadia subduction zone?	Approximately 9	Correlated a tsunami that struck Oregon, Washington and Japan, destroyed Native American villages along the coast.
November 23, 1873	Oregon/California border, near Brookings	6.8	Felt as far away as Portland and San Francisco; may have been an intraplate event because of lack of aftershocks.
July 15, 1936	Milton-Freewater	6.4	Two foreshocks and many aftershocks (60,000,000 damage in 1936 dollars).
April 13, 1949	Olympia, Washington?	7.1	Eight deaths and \$25 million damage (in 1949 dollars); crushed granite, other minor damage in northwest Oregon.
November 5, 1962	Portland/Vancouver	5.5	Shaking lasted up to 30 seconds; chimneys cracked, windows broke, furniture moved.
1968	Adel	5.1	Swarm lasted May through July, decreasing in intensity; increased flow at a hot spring was reported.
April 12, 1976	Near Mapleton	4.8	Sounds described as distant thunder, some booms, and strong wind.
April 25, 1992	Cape Mendocino, California?	7.0	Subduction earthquake at the triple-junction of the Cascadia subduction zone and the San Andreas and Mendocino faults.
March 25, 1993	Scotts Mill	5.6	On Mount Angel-Gales Creek fault; \$50 million damage, including Mount Hood High School and Mount Angel church.
September 20, 1993	Klamath Falls	5.9 and 6.0	Two deaths, \$10 million damage, including county courthouse; rockfalls induced by ground motion.
February 28, 2001	Near Olympia Washington?	6.8	About 400 injuries, \$2 to 3.9 billion damage in the Seattle/Tacoma area; felt-area Vancouver BC, Northwest Oregon, Salt Lake City UT.

*not shown on the map

EARTHQUAKE TERMS

An earthquake is defined as the "perceptible trembling to violent shaking of the ground, produced by the sudden displacement of rocks below the Earth's surface." Rocks respond to stress (being squeezed or pulled apart) near the Earth's surface by breaking. Where the rocks break and move, we call it a fault. The buildup of tectonic forces and release of stress on individual faults is what causes quakes. Higher stresses lead to larger earthquakes.

The earthquake's epicenter is the position on the Earth's surface directly above the focus of the earthquake. The focus is the location within the Earth where underground rock moves and sends out earthquake energy waves. We feel these waves as ground shaking. Earthquakes produce three main types of energy waves: P-waves (push-pull waves), S-waves (side-to-side waves), and L-waves (surface waves). Each radiates from the earthquake focus through the Earth at different rates. The distribution of earthquakes over time is known as seismicity.

The energy released from the earthquake is a basic quantity scientists have measured for more than fifty years. This energy release, or magnitude, is measured on the familiar Richter scale, invented by Charles F. Richter in 1934. Scientists calculate the magnitude of the earthquake from the largest seismic wave or vibration, and a seismograph records the vibrations (seismogram) that an earthquake makes. Earthquakes with a magnitude of about 2 or less are usually called microquakes. They are not usually felt and are generally recorded only on local seismographs. Magnitude 3 and 4 earthquakes are commonly felt, but rarely cause damage. Damaging

ground shaking can accompany a magnitude 5 or 6 event, and major damage commonly occurs from earthquakes of magnitude 7 and greater. The Richter scale has no upper limit. Recently, another scale called the moment magnitude scale has been devised for more precise study of seismic activity. Moment magnitude is generally used now to describe earthquakes, but the categories are about the same.

Earthquake intensity is not the same as Richter's earthquake magnitude. They are frequently confused in media reports. Earthquake intensity describes the strength of shaking at a particular place, based on observations made of building damage. The intensity of an earthquake is expressed today as the Modified Mercalli Scale, devised in 1902 by Giuseppe Mercalli. The scale provides a series of idealized descriptions of the effects of an earthquake. Intensity 1 is imperceptible shaking. Intensity increases by steps to 10, which is total destruction. The intensity scale requires no instrumentation because any observer can make a classification. It provides a basis to estimate the size of historic earthquakes. Also, it is useful because an earthquake has only a single magnitude, but different intensities can be distributed throughout the affected area.

SOURCE OF EARTHQUAKES

Three source cause earthquakes in Oregon (Mabey and others, 1993). First, shallow earthquakes (depths of 0 to 10 miles) occur on active faults in the crust. Second, deeper earthquakes (depths of 10 to 31 miles) are associated with the subducting Juan de Fuca plate. Third, deep earthquakes (depths of 31 to 62 miles) happen where the continental crust and ocean floor plates are locked against each other and periodically snap loose.

The Juan de Fuca plate is a slab of ocean floor moving eastward from the Juan de Fuca Ridge, which is about 300 miles off the coastline of Oregon and Washington. The term Cascadia subduction zone was given to the part of the plate that has descended beneath the westbound continental crust of western Oregon. Earthquakes can be very large in the subduction zone and often produce damaging tsunamis. The last great Cascadia subduction zone earthquake happened off the coast of Oregon and Washington in 1700, with an estimated magnitude of 9.0. Geological evidence indicates that huge subduction zone earthquakes have struck Oregon's coast every 300-800 years, with a record that extends back at least 11,000 years (Atwater and others, 1995; Atwater and Hemphill-Haley, 1997; Goldfinger, 1999). These earthquakes are not evenly spaced in time, and the calculated average intervals between events can be less or more. The Cascadia subduction zone is still continuing

to creep and undoubtedly western Oregon will again experience the affects of a subduction-zone earthquake (Shedlock and Weaver, 1991).

The earthquakes shown on the above map were triggered within the Earth's crust at depths less than 25 miles (Jacobson, 1986). The largest of these earthquakes struck the coastline of Oregon and California near Brookings, Oregon, on November 23, 1873, with an estimated 6.8 magnitude. Wong (2002) suspects that this earthquake could be an exception and the quake was deeper within the descending Juan de Fuca plate.

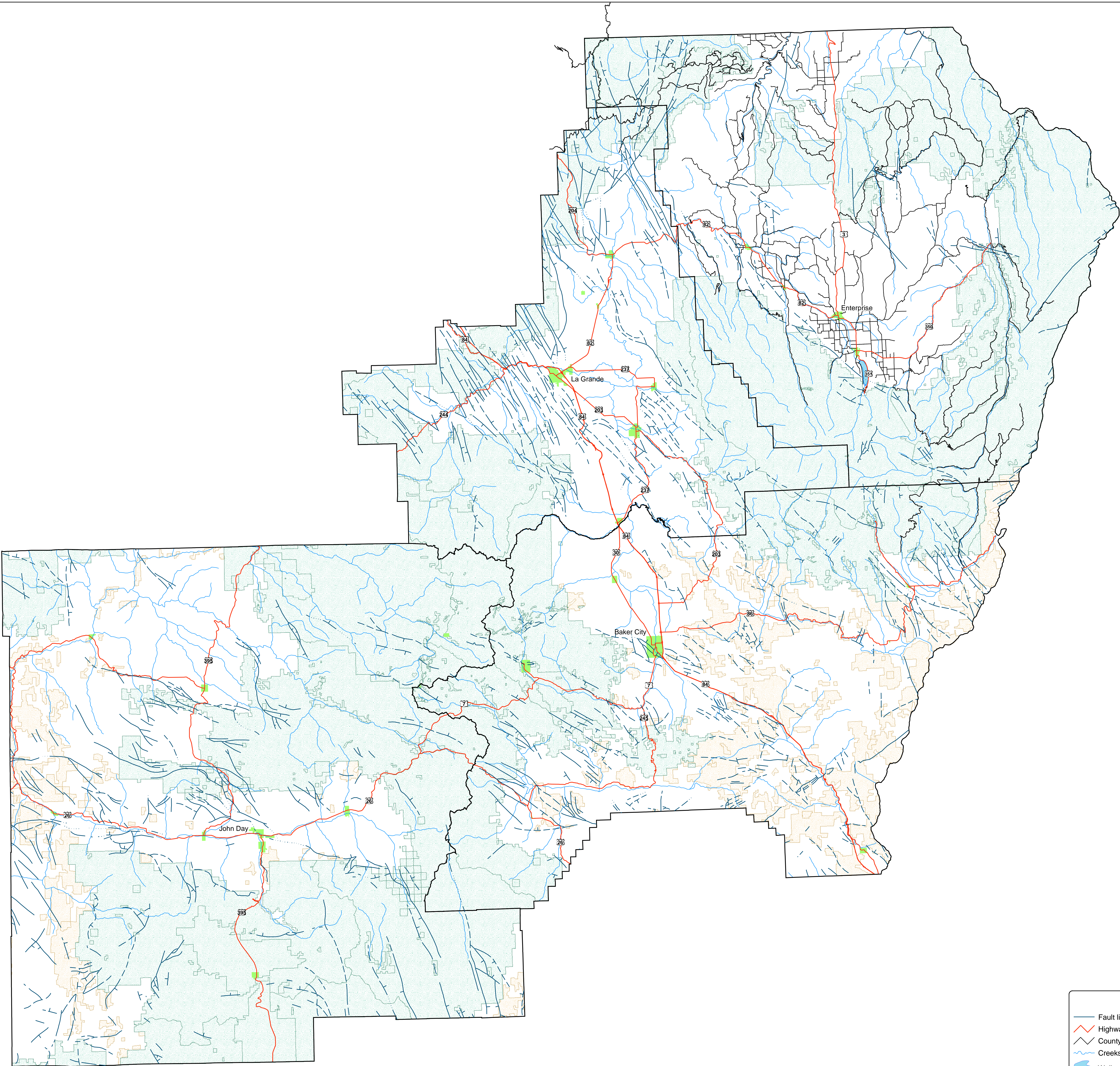
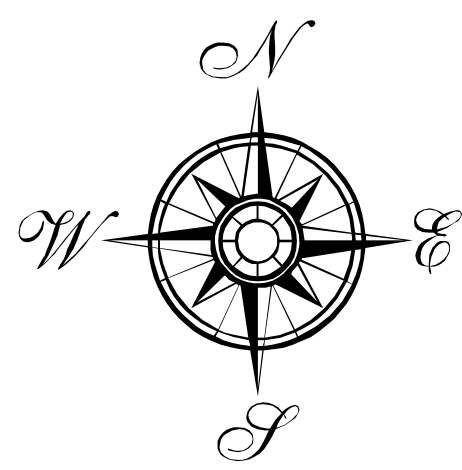
This map is available from:

The Nature of the Northwest Information Center
800 NE Oregon Street #5
Portland, OR 97232
503/872-2750
www.naturenw.org
and the Baker City (541-623-3133) and Grants
Pasts (541-476-2465), Field Offices of the Oregon
Department of Geology and Mineral Industries

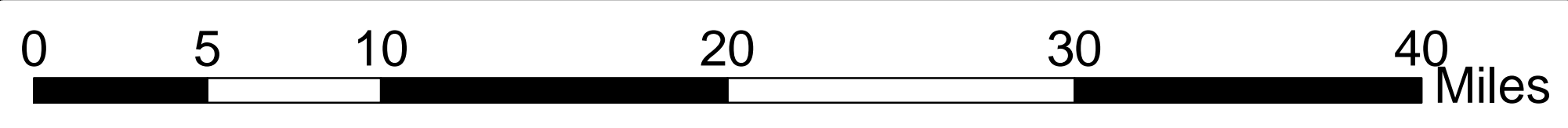
Epicenter Map

The following map shows over 14,000 known earthquakes from 1841 to 2002. The Table to the bottom right is a summary of major quakes that have affected Oregon, causing ground shaking and damage. It shows that Oregonians face injury and property damage from earthquakes originating throughout the Pacific Northwest. For this reason, the Oregon Department of Geology and Mineral Resources produced this map of the epicenters of historic earthquakes in Oregon, off the coast, and along Oregon's border with southern Washington and northern California. Historic patterns show areas in Oregon that are especially vulnerable to earthquakes.

Natural Hazard Mitigation Area: Fault Lines



The information on this map was derived from various public data sources. Care was taken in the creation of this map but it is provided "as is". Wallowa County cannot accept any responsibility for errors, omissions, or positional accuracy in the digital data or the underlying records. There are no warranties express or implied, including the merchantability or fitness for a particular purpose, accompanying this product.

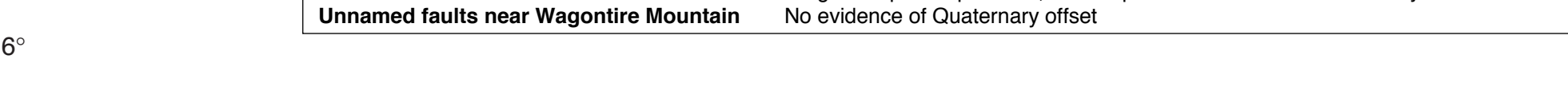
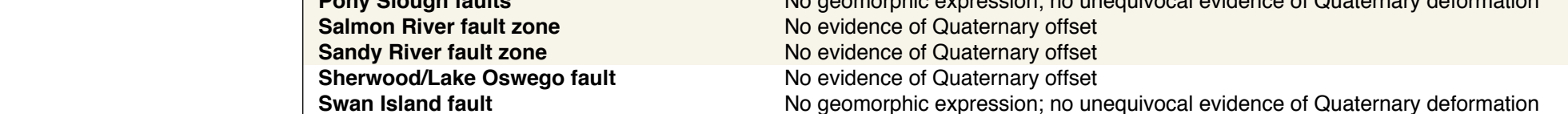
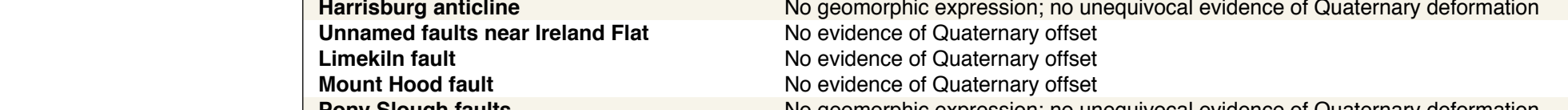
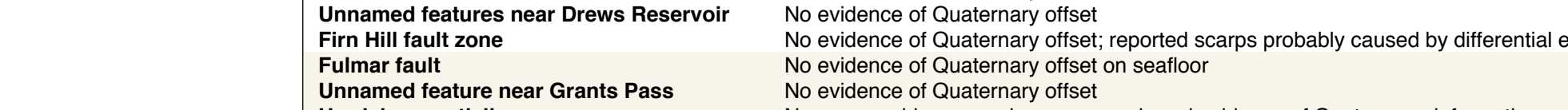
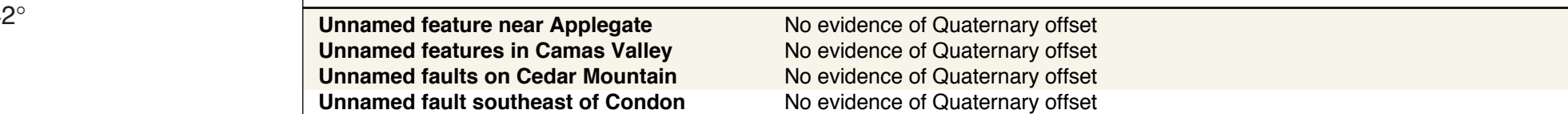
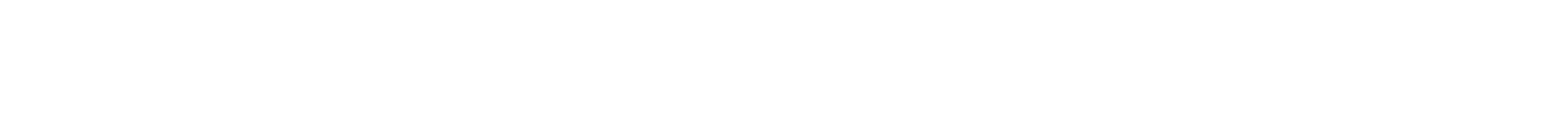
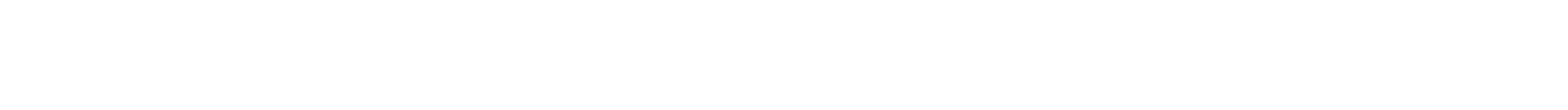
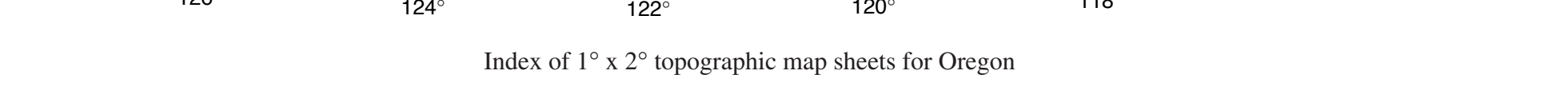
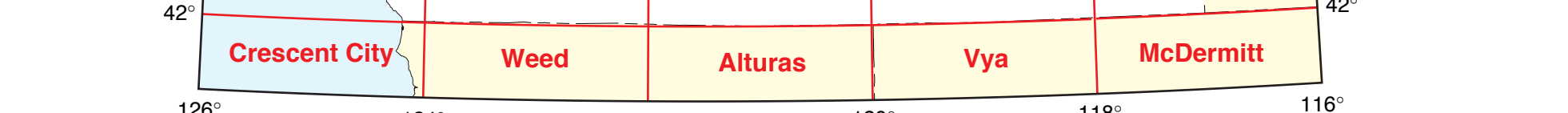
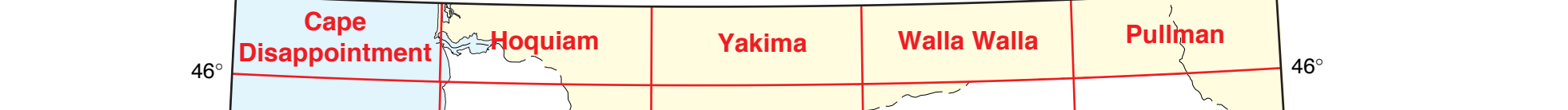
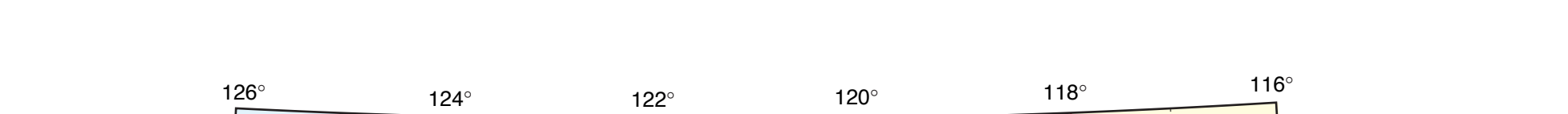
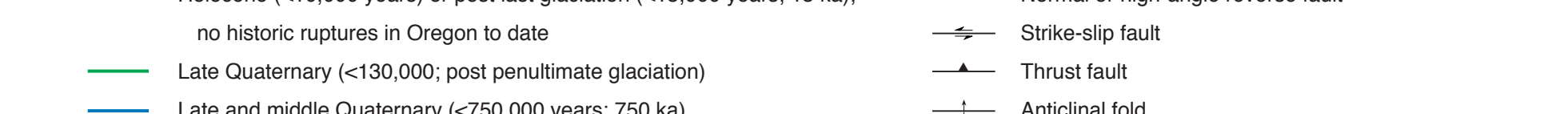
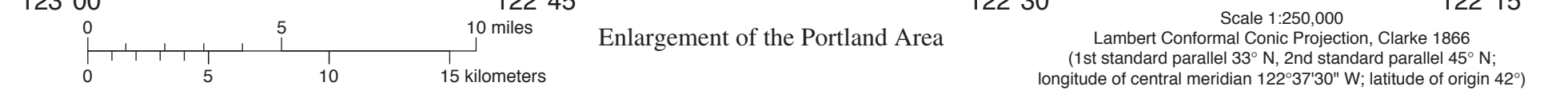
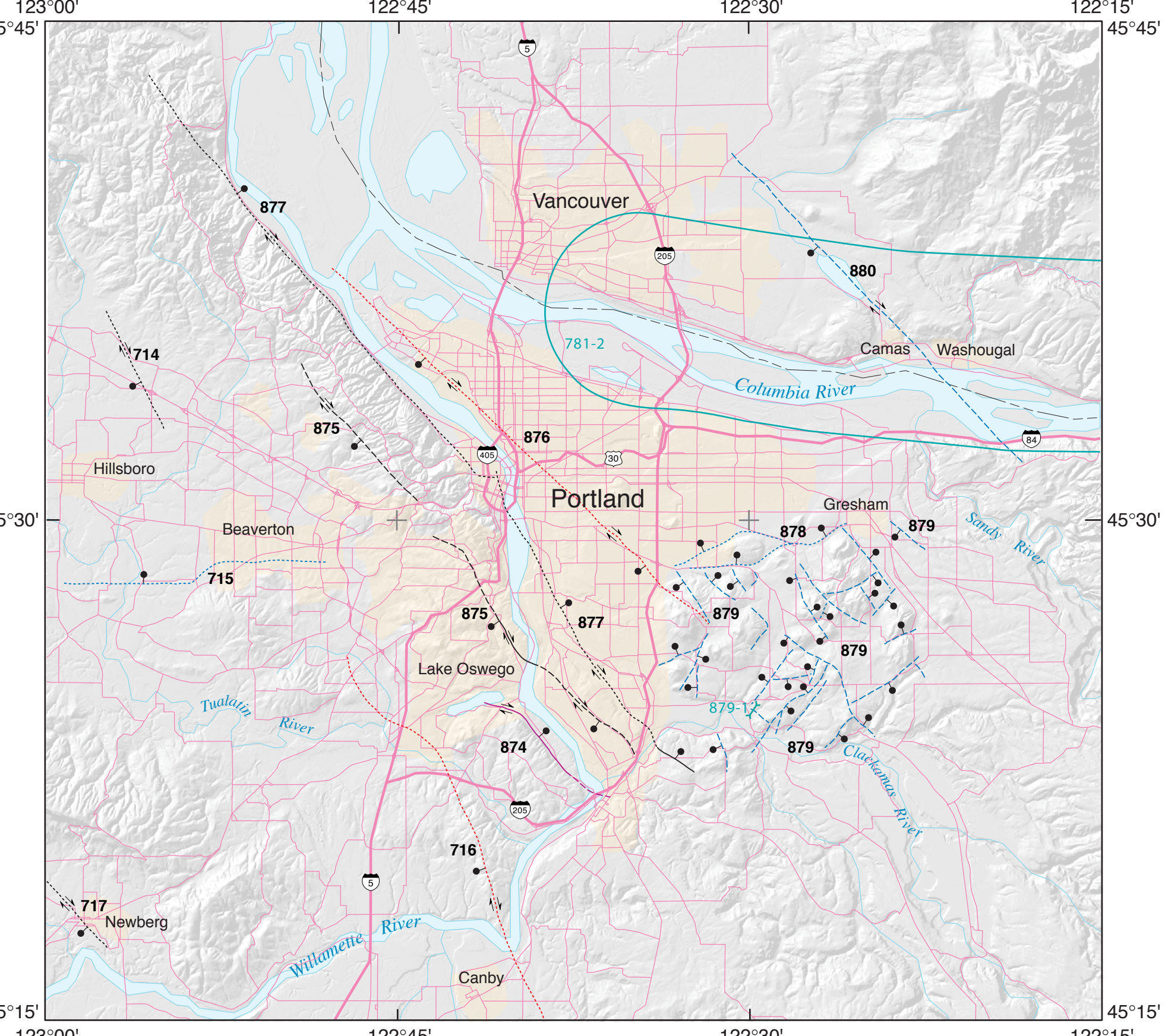
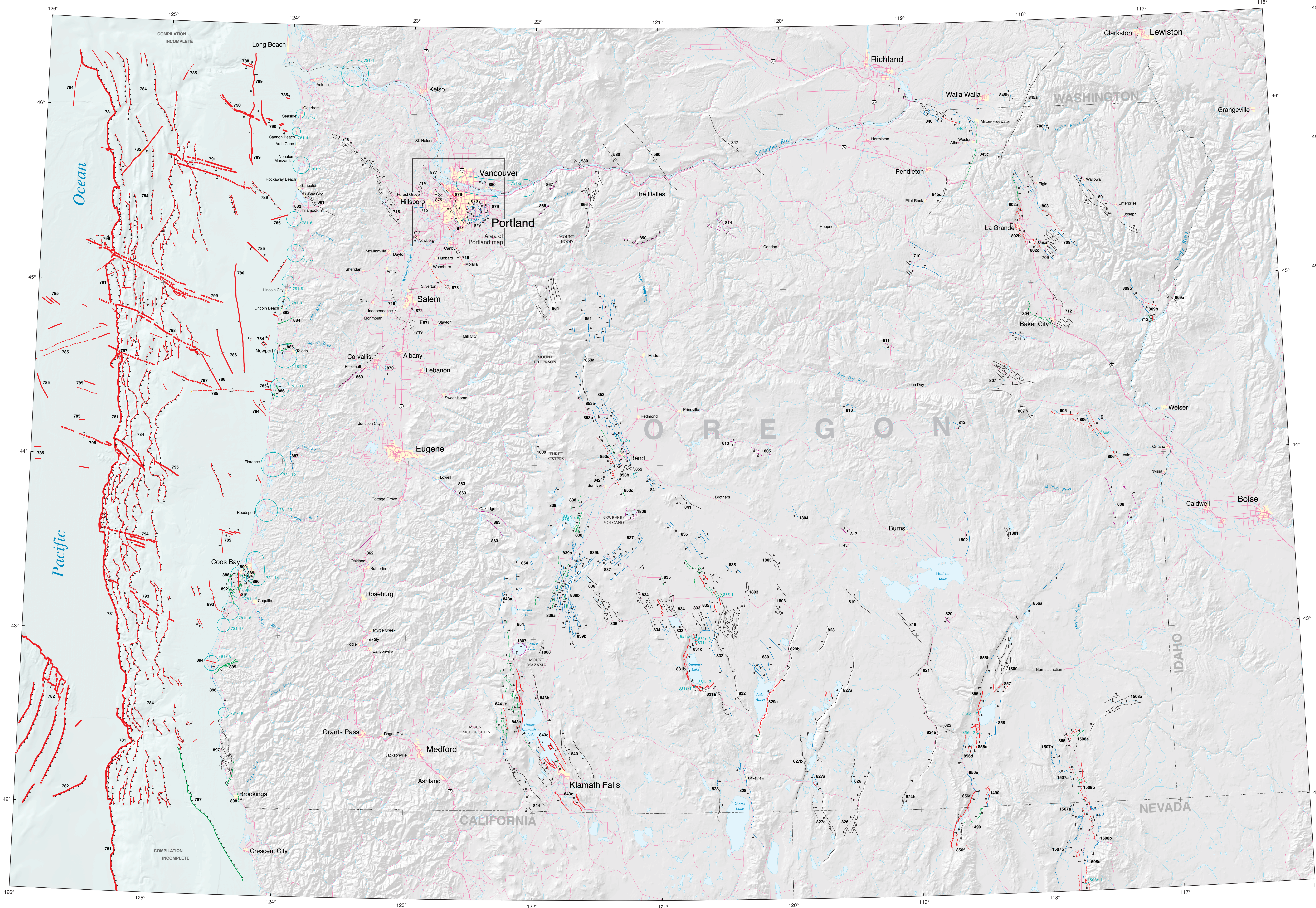


- Legend**
- Fault lines
 - Highways
 - County and Forest Service Roads
 - Creeks & Rivers
 - Wallowa Lake
 - City Limits
 - Forest Service Lands
 - BLM Lands

Map of Quaternary Faults and Folds in Oregon

by
Stephen F. Personius, Richard L. Dart, Lee-Ann Bradley and Kathleen M. Haller

2003



Abbreviations: ka, thousands of years ago; Ma, millions reported or not applicable. Fault numbers not used on map or in database are 787, 792, 800, 815, 816, 818, 823, 848, 849, 860, 861 and 865.

Fault Number	Name of structure	Most recent event (yr)	Slip rate (mm/yr)	Length to end (km)	Length (average) (km)	Asimuth (average)	Fault type
580	Faults near The Dalles	<1.6Ma	<0.2	54.3	96.7	N 38° W	Dextral, Normal, Thrust
708	Unnamed faults near Jassaud Creek	<750 ka	<0.2	5.8	11.1	N 18° E	Normal
709	South Grande Ronde Valley fault	<750 ka	<0.2	20.1	88.3	N 28° W	Normal
710	Ukiah Valley fault	<750 ka	<0.2	32.0	56.7	N 61° W	Normal
711	Sumpter Valley fault	<750 ka	<0.2	12.3	22.3	N 44° W	Normal
712	Unnamed East Baker Valley fault	<1.6 Ma	<0.2	27.3	30.2	N 40° W	Normal
713	Powder River Terrane fault zone	<1.6 Ma	<0.2	5.4	10.9	N 28° E	Normal-Sinistral
714	Helvetic fault	<1.6 Ma	<0.2	7.4	7.4	N 28° W	Normal? Reverse? Dextral?
715	Beverton fault zone	<750 ka	<0.2	14.7	15.1	N 68° E	Normal? Reverse?
716	Carby-Mollala fault	<1.6 Ma	<0.2	50.0	52.5	N 34° W	Dextral-Reverse?
717	Newberg fault	<1.6 Ma	<0.2	5.0	5.0	N 42° W	Dextral-Reverse
718	Gales Creek fault zone	<1.6 Ma	<0.2	72.7	152.1	N 41° W	Dextral-Reverse
719	Salmon Fork Hills homocline	<1.6 Ma	<0.2	31.2	34.3	N 28° W	Monocline
720	Cascade subduction zone	<1.6 Ma	<0.2	>535.6	>547.1	N 28° W	Thrust
721	Blanco transform fault zone	<1.6 Ma	<0.2	1.5	10.5	N 11° E	Dextral-Normal, Normal, Thrust
722	Cascade fold and thrust belt	<1.6 Ma	<0.2	>188.0	>188.0	N 30° W	Anticline, Syncline, Thrust
723	Unnamed offshore faults	<1.6 Ma	<0.2	>188.0	>188.0	N 11° W	Sinistral, Dextral, Reverse, Normal
724	Stonewall anticline	<1.6 Ma	<0.2	82.2	124.9	N 13° W	Anticline, Reverse?
725	Bald Mountain-Big Lagoon fault zone	<130 ka	0.2-1	95.0	96.7	N 27° W	Thrust or Reverse
726	Fault "H"	<1.6 Ma	<0.2	1.5	101.0	N 13° W	Dextral, Reverse
727	Nehalem Bank fault	<1.6 Ma	<0.2	48.7	81.3	N 48° W	Normal, Sinistral?
728	Fault "G"	<1.6 Ma	<0.2	56.7	136.3	N 74° W	Sinistral
729	Thompson Ridge fault	<1.6 Ma	<0.2	48.8	34.5	N 28° W	Normal
730	Coos Basin fault	<1.6 Ma	<0.2	35.4	67.5	N 74° W	Sinistral
731	Heceta Bank structure	<1.6 Ma	<0.2	18.2	18.2	N 58° W	Sinistral? Monocline?
732	Heceta South fault	<1.6 Ma	<0.2	60.3	84.3	N 54° W	Sinistral
733	Alvin Canyon fault	<1.6 Ma	<0.2	71.2	60.0	N 68° W	Sinistral
734	Daisy Bank fault	<1.6 Ma	<0.2	80.1	91.0	N 63° W	Sinistral
735	Wescott fault	<1.6 Ma	<0.2	86.0	178.5	N 51° W	Sinistral
736	Wallace fault	<750 ka	<0.2	86.4	118.8	N 51° W	Normal
737	West Grande Ronde Valley fault zone	<1.6 Ma	<0.2	29.0	44.9	N 62° W	Normal
738	La Grande section	<1.6 Ma	<0.2	25.8	25.8	N 14° E	Normal
739	Craig Mountain section	<1.6 Ma	<0.2	8.6	15.7	N 49° W	Normal
740	East Grande Ronde Valley fault zone	<1.6 Ma	<0.2	49.9	78.0	N 30° W	Normal
741	West Baker Valley fault	<130 ka	<0.2	32.6	68.5	N 54° W	Normal
742	Unnamed fault in Fox Basin (Class B)	<1.6 Ma	<0.2	17.4	23.8	N 81° W	Normal
743	Cottonwood Mountain fault	<1.6 Ma	<0.2	69.4	120.0	N 23° W	Normal
744	Unnamed fault near Union Valley	<1.6 Ma	<0.2	40.3	15.5	N 15° W	Normal
745	Faults near Oryzopsis Ditch (Class B)	<1.6 Ma	<0.2	27.4	58.5	N 13° W	Normal
746	Pine Valley graben fault system	<1.6 Ma	<0.2	35.2	57.2	N 44° W	Normal
747	Halfway-Pooley Valley section	<1.6 Ma	<0.2	25.4	38.2	N 43° W	Normal
748	Unnamed fault near Murders Creek	<750 ka	<0.2	10.8	15.9	N 71° W	Normal? Reverse?
749	Unnamed fault in Fox Basin (Class B)	<1.6 Ma	<0.2	6.1	6.1	N 64° W	Normal
750	Unnamed fault in Lagoon Valley	<750 ka	<0.2	8.4	8.4	N 52° W	Normal
751	Unnamed fault near Polk Butte (Class B)	<1.6 Ma	<0.2	5.5	8.6	N 80° W	Normal? Reverse?
752	Unnamed fault north of Gordon (Class B)	<1.6 Ma	<0.2	43.3	60.0	N 14° E	Normal
753	Unnamed fault on Dry Mountain (Class B)	<1.6 Ma	<0.2	6.2	9.8	N 44° W	Normal
754	Unnamed fault near Diamond Craters (Class B)	<1.6 Ma	<0.2	25.8	25.8	N 43° W	Normal
755	Unnamed fault near V Lake	<1.6 Ma	<0.2	12.8	13.0	N 69° W	Normal? Dextral?
756	Unnamed fault near Dry Valley	<1.6 Ma	<0.2	13.2	20.7	N 21° E	Normal
757	Unnamed fault near Catlow Valley	<1.6 Ma	<0.2	70.4	70.4	N 10° E	Normal
758	Catlow Valley section	<1.6 Ma	<0.2	55.8	61.1	N 62° W	Normal
759	Heavy Valley Valley section	<1.6 Ma	<0.2	11.3	15.4	N 10° E	Normal
760	Guano Valley fault	<1.6 Ma	<0.2	40.2	130.3	N 09° E	Normal, Normal-Dextral
761	Warner Valley fault	<1.6 Ma	<0.2	152.0	250.8	N 09° E	Normal
762	East Warner Valley section	<1.6 Ma	<0.2	89.0	135.2	N 09° E	Normal
763	West Warner Valley section	<1.6 Ma	<0.2	42.1	45.8	N 09° E	Normal
764	Coleman Valley section	<1.6 Ma	<0.2	43.5	78.8	N 07° W	Normal
765	Goose Lake graben faults	<750 ka	<0.2	25.4	60.0	N 14° E	Normal
766	Abert Rim fault	<1.6 Ma	<0.2	77.1	64.8	N 13° E	Normal
767	Lake Abert section	<1.6 Ma	<0.2	35.4	38.0	N 17° E	Normal
768	Unnamed fault north of Abert Lake	<750 ka	<0.2	69.3	141.5	N 14° E	Normal
769	Winter Rim fault system	<1.6 Ma	<0.2	57.9	122.3	N 38° W	Normal
770	Stair Mountain section	<1.6 Ma	<0.2	25.8	25.8	N 07° W	Normal
771	Winter Ridge section	<1.6 Ma	<0.2	25.8	38.2	N 04° W	Normal
772	Aza River section	<1.6 Ma	<0.2	15.4	15.4	N 15° W	Normal
773	Faults east of Summer Lake	<750 ka	<0.2	62.1	96.7	N 10° W	Normal
774	Faults north of Summer Lake	<750 ka	<0.2	25.7	270.6	N 10° W	Normal
775	Unnamed fault near Antelope Mountain	<1.6 Ma	<0.2	131.0	131.0	N 25° E	Normal, Sinistral?
776	Southeast Newberry fault zone	<1.6 Ma	<0.2	66.3	204.5	N 34° W	Normal
777	Unnamed fault near Antelope Mountain	<1.6 Ma	<0.2	37.6	80.3	N 38° E	Normal
778	Southwest Newberry fault zone	<750 ka	<0.2	35.6	121.9	N 41° E	Normal
779	La Pine graben fault	<130 ka	<0.2	145.3	145.3	N 20° E	Normal
780	Chemult graben fault system	<130 ka	<0.2	69.6	514.6	N 07° E	Normal
781	Walker River section	<1.6 Ma	<0.2	60.4	288.5	N 01° E	Normal
782	Faults on the Modoc Plateau	<1.6 Ma	<0.2	25.5	25.5	N 42° W	Normal
783	Unnamed fault near Millican Valley	<750 ka	<0.2	39.7	50.9	N 54° W	Normal
784	Unnamed fault near Klamath Lake	<1.6 Ma	<0.2	147.7	446.6	N 17° W	Normal
785	Klamath graben fault system	<1.6 Ma	<0.2	25.3	25.7	N 15° W	Normal
786	East Klamath Lake section	<1.6 Ma	<0.2	25.3	25.7	N 15° W	Normal
787	South Klamath Lake section	<1.6 Ma	<0.2	25.3	25.7	N 15° W	Normal
788	Sky Lakes fault zone	<1.6 Ma	<0.2	77.3	198.3	N 18° W	Normal
789	Hile fault system	<1.6 Ma	<0.2	140.7	184.0	N 20° E	Sinistral-Normal
790	Kootenai section	<750 ka	<0.2	18.9	18.9	N 07° E	Sinistral-Normal
791	Thum hollow section	<130 ka	<0.2	44.5	101.5	N 10° E	Sinistral-Normal
792	Agency section	<1.6 Ma	<0.2	27.9	29.4	N 28° E	Sinistral-Normal
793	Wallula fault system	<1.6 Ma	<0.2	62.9	160.2	N 53° W	Dextral? Reverse? Normal?
794	Wingfield-Shaw Butte fault	<1.6 Ma	<0.2	10.8	10.8	N 43° W	Dextral?
795	Unnamed fault near Tygh Ridge (Class B)	<750 ka	<0.2	26.3	31.7	N 83° E	Normal? Thrust, Dextral
796	Winn Springs fault zone	<750 ka	<0.2	31.7	115.3	N 03° W	Dextral
797	Shaw Ridge section	<1.6 Ma	<0.2	25.8	11.6	N 11° E	Normal, Normal-Dextral?
798	Melloune fault zone	<750 ka	<0.2	35.6	150.9	N 22° W	Normal-Dextral?
799	Rimrock-Timuck section	<750 ka	<0.2	44.7	56.6	N 29° W	Normal-Dextral?
800	Unmanned-Rift zone section	<750 ka	<0.2	42.8	42.8	N 29° W	Normal-Dextral?
801	Unnamed faults NE of Diamond Lake	<750 ka	<0.2	44.4	39.6	N 00° W	Normal
802	Beane fault zone	<1.6 Ma	<0.2	8.7	8.7	N 23° W	Normal
803	Beane fault zone	<750 ka	<0.2	192.1	264.7	N 11° E	Normal
804	Marm Lake section	<750 ka	<0.2	42.8	42.8	N 29° E	Normal
805	Marm Lake section	<1.6 Ma	<0.2	42.8	42.8	N 29° E	Normal
806	Fields section	<750 ka	<0.2	15.6	23.0	N 13° W	Normal
807	Fields Turf section	<1.6 Ma	<0.2	18.4	18.4	N 14° W	Normal
808	Demo section	<750 ka	<0.2	32.1	32.3	N 43° W	Normal
809	Fields Turf section	<1.6 Ma	<0.2	8.1	8.1	N 14° W	Normal
810	Tule Springs Rims fault	<750 ka	<0.2	37.4	33.5	N 11° E	Normal
811	Unmanned fault near Sulphur (Class B)	<1.6 Ma	<0.2	27.7	27.7	N 11° E	Dextral?
812	Upper Willamette River fault zone (Class B)	<1.6 Ma	<0.2	44.0	50.8	N 52° W	Normal
813	Upper Willamette River fault zone (Class B)	<1.6 Ma	<0.2	19.9	19.9	N 52° W	Normal
814	Hood River Valley fault zone (Class B)	<1.6 Ma	<0.2	44.3	60.8	N 11° W	Normal, Dextral?
815	Unmanned fault near Trout Lake (Class B)	<1.6 Ma	<0.2	9.4	9.4	N 44° E	Thrust
816	Corvallis fault zone (Class B)	<1.6 Ma	<0.2	14.9	14.9	N 33° E	Thrust, Sinistral?
817	Mill Creek fault	<1.6 Ma	<0.2	18.4	20.1	N 66° E	Normal
818	Mill Creek fault	<1.6 Ma	<0.2	11.8	11.8	N 66° E	Reverse-Sinistral?
819	Mount Angel fault	<1.6 Ma	<0.2	29.7	30.4	N 43° W	Reverse-Sinistral?
820	Mount Angel fault	<1.6 Ma	<0.2	8.8	8.8	N 43° W	Reverse-Sinistral?
821	Outfield fault	<1.6 Ma	<0.2	28.7	27.3	N 41° W	Reverse-Dextral
822	Outfield fault	<1.6 Ma	<0.2	39.9	39.9	N 41° W	Reverse-Dextral
823	Porter Hills fault	<1.6 Ma	<0.2	49.3	50.4	N 37° W	Reverse-Dextral? Thrust?
824	Porter Hills fault	<750 ka	<0.2	17.7	17.7	N 37° W	Normal
825	Diamond-Ticket Creek fault zone	<750 ka	<0.2	16.7	63.8	N 00° W	Dextral-Reverse
826	Ticket Creek fault zone	<1.6 Ma	<0.2	23.7	23.7	N 44° W	Normal? Normal? Reverse?
827	Tillamook Bay fault zone	<750 ka	<0.2	31.8	47.6	N 56° W	Reverse-Sinistral
828	Slitz Bay fault zone	<1.6 Ma	<0.2	11.6	10.4	N 73° W	Normal? Reverse?
829	Slitz Bay fault zone	<1.6 Ma	<0.2	11.6	10.4	N 73° W	Normal? Reverse?
830	Yaukey fault	<750 ka	<0.2	12.7	18.5	N 79° W	Reverse? Sinistral?
831	Yaukey fault	<1.6 Ma	<0.2	14.5	14.5	N 79° W	Reverse? Sinistral? Sinistral?
832	East Slough River anticline	<750 ka	<0.2	11.6	21.0	N 10° W	Anticline
833	East Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
834	Unmanned Slough River anticline and faults	<750 ka	<0.2	7.8	14.1	N 70° W	Reverse? Sinistral?
835	Unmanned Slough River anticline	<1.6 Ma	<0.2	7.8	14.1	N 70° W	Reverse? Sinistral?
836	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
837	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
838	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
839	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
840	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
841	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
842	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
843	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
844	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
845	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
846	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
847	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
848	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
849	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
850	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
851	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
852	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
853	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
854	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
855	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
856	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
857	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
858	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
859	Unmanned Slough River anticline	<1.6 Ma	<0.2	11.6	21.0	N 10° W	Anticline
860	Unmanned Slough River anticline	<1.6					

Facility Tracking Data:		Public K12		Individual Public K12		Address	City	ZIP	County	USGS Seismic Zone	Field Plaque	Estimate Decade	ODE Yr Built	Facility Sq Ft	Students Enrolled	NEHRP Soil	Primary 1 Type	Secondary			Tertiary 3 Type	3 RVS	Type Final	F RVS	FEMA 154-Based Collapse Potential	Site Summary Report link
Site Unique ID	Site Type	District Name	Facility Name															1 RVS	2 Type	2 RVS						
Bake_fir01	Fire - City	City of Unity	Unity Fire Department	311 Main	Unity	97884	Baker	Moderate			1970		D	RM1	(0.1)							RM1	(0.1)	Very High (100%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_fir01.pdf	
Bake_fir02	Fire - City	City of Baker City	Baker City Fire	1616 2nd St	Baker City	97814	Baker	Moderate		1980	1980		D	PC1	1.7							PC1	1.7	Moderate (>1%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_fir02.pdf	
Bake_fir03	Fire - RFPD	Pine Valley RFPD	Pine Valley RFPD	125 W Record St	Halfway	97834	Baker	Moderate		1960	1960	1960		D	RM1	1.9	W1			4.1		RM1	1.9	Moderate (>1%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_fir03.pdf	
Bake_fir04	Fire - City	City of Huntington	Huntington VFD	50 E Adams St	Huntington	97907	Baker	Moderate		1950			C	URM	2.5							URM	2.5	Low (<1%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_fir04.pdf	
Bake_fir12	Fire - RFPD	Eagle Valley RFPD	Eagle Valley Fire Dept	89 Main St	Richland	97870	Baker	Moderate		1960			D	RM1	1.9							RM1	1.9	Moderate (>1%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_fir12.pdf	
Bake_fir13	Fire - City	City of Sumpter	Sumpter FD	240 N Mill St	Sumpter	97877	Baker	Moderate		1970			C	W2	0.5							W2	0.5	High (>10%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_fir13.pdf	
Bake_fir14	Fire - RFPD	Mosquito Flat North RFPD	Mosquito Flat North RFPD	39744 Sumpter Valley Hwy	Sumpter	97877	Baker	Moderate		1990			B	S3	3.8							S3	3.8	Low (<1%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_fir14.pdf	
Bake_hos01	Hospital	Catholic Health Initiatives NFP	St. Elizabeth Hospital - Be3325 Pocahontas Rd		Baker City	97814	Baker	Moderate		1970	1987		D	PC1	1.7						1.9	PC1	1.7	Moderate (>1%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_hos01.pdf	
Bake_hos01	Hospital	Catholic Health Initiatives NFP	St. Elizabeth Hospital - Be3325 Pocahontas Rd		Baker City	97814	Baker	Moderate		1987	1980	1987		D	W2	4.7	RM1					RM1	1.9	Moderate (>1%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_hos01.pdf	
Bake_pol01	Police - State	Oregon State Police	OSP - Baker City	1050 S Bridge St	Baker City	97814	Baker	Moderate		1950	1930		D	W2	3.1	RM1				1.9		RM1	1.9	Moderate (>1%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_pol01.pdf	
Bake_pol02	EOC-Public Safety Answering Point - County	Baker County	Baker County Sheriff's Of3410 K Street		Baker City	97814	Baker	Moderate		1970	1990		D	RM1	1.9							RM1	1.9	Moderate (>1%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_pol02.pdf	
Bake_pol03	Fire - City	City of Baker City	Baker City Police Dept	1655 1st St	Baker City	97814	Baker	Moderate		1910	1910		D	RM1	1.5							RM1	1.5	Moderate (>1%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_pol03.pdf	
Bake_sch01	School	North Baker Elementary	52725 Seventh St		Baker City	97814	Baker	Moderate		1910	1913		D	URM	0.2							URM	0.2	High (>10%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_sch01.pdf	
Bake_sch01	School	Baker SD 5J	North Baker Elementary	52725 Seventh St	Baker City	97814	Baker	Moderate		1970	1913		D	RM1	(0.1)							RM1	(0.1)	Very High (100%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_sch01.pdf	
Bake_sch02	School	Baker SD 5J	South Baker Elementary	11285 Third St	Baker City	97814	Baker	Moderate		1953	1950	1953		D	W2	0.1	C2			(0.1)	RM1	(0.1)	C2	(0.1)	Very High (100%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_sch02.pdf
Bake_sch02	School	Baker SD 5J	South Baker Elementary	11285 Third St	Baker City	97814	Baker	Moderate		1970	1953		D	W2	3.1	RM1				1.9		RM1	1.9	Moderate (>1%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_sch02.pdf	
Bake_sch03	School	Baker SD 5J	Baker High School	2500 E St	Baker City	97814	Baker	Moderate		1991	1990	1950		D	W2	1.7						W2	1.7	Moderate (>1%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_sch03.pdf	
Bake_sch03	School	Baker SD 5J	Baker High School	2500 E St	Baker City	97814	Baker	Moderate		1980	1950		D	W2	1.7							W2	1.7	Moderate (>1%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_sch03.pdf	
Bake_sch03	School	Baker SD 5J	Baker High School	2500 E St	Baker City	97814	Baker	Moderate		1960	1950		D	C2	(0.1)							C2	(0.1)	Very High (100%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_sch03.pdf	
Bake_sch03	School	Baker SD 5J	Baker High School	2500 E St	Baker City	97814	Baker	Moderate		1950	1950		D	C2	(0.1)							C2	(0.1)	Very High (100%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_sch03.pdf	
Bake_sch03	School	Baker SD 5J	Baker High School	2500 E St	Baker City	97814	Baker	Moderate		1950	1950		D	C2	1.9							C2	1.9	Moderate (>1%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_sch03.pdf	
Bake_sch03	School	Baker SD 5J	Baker High School	2500 E St	Baker City	97814	Baker	Moderate		1960	1950		D	C2	1.9							C2	1.9	Moderate (>1%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_sch03.pdf	
Bake_sch04	School	Pine Eagle SD 61	Halfway Elementary Scho	170 W Bell St	Halfway	97834	Baker	Moderate		1945	1945		D	W2	3.1							W2	3.1	High (>10%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_sch04.pdf	
Bake_sch04	School	Pine Eagle SD 61	Halfway Elementary Scho	150 W Bell St	Halfway	97834	Baker	Moderate		1970	1945		D	W2	3.1							W2	3.1	High (>10%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_sch04.pdf	
Bake_sch05	School	Pine Eagle SD 61	Pine Eagle High School	375A N Main St	Halfway	97834	Baker	Moderate		1960	1967		D	PC2	0.0	C1			(0.5)			C1	(0.5)	Very High (100%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_sch05.pdf	
Bake_sch05	School	Pine Eagle SD 61	Pine Eagle High School	375A N Main St	Halfway	97834	Baker	Moderate		1960	1967		D	PC2	2.0	C1				2.0	RM1	2.4	PC2	2.0	Moderate (>1%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_sch05.pdf
Bake_sch06	School	Baker SD 5J	Baker Middle School	2090 4th St	Baker City	97814	Baker	Moderate		1920	1916		D	URM	0.2							URM	0.2	High (>10%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_sch06.pdf	
Bake_sch06	School	Baker SD 5J	Baker Middle School	2320 Washington Ave	Baker City	97814	Baker	Moderate		1916	1910	1916		D	URM	0.2						URM	0.2	High (>10%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_sch06.pdf	
Bake_sch07	School	Baker SD 5J	Brooklyn Elementary Sch	1350 Washington St	Baker City	97814	Baker	Moderate		1955	1950	1955		D	W2	0.1	C2			(0.1)	RM1	(0.1)	C2	(0.1)	Very High (100%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_sch07.pdf
Bake_sch08	School	Baker SD 5J	Haines Elementary Schoc	2090 4th St	Haines	97814	Baker	Moderate		1910	1911	17,500		D	URM	0.7						URM	0.7	High (>10%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_sch08.pdf	
Bake_sch09	School	Burnt River SD 30J	Burnt River School	PO Box 8 Highway 26	Unity	97884	Baker	Moderate		1960	1968		D	W2	0.1	RM1			(0.1)			RM1	(0.1)	Very High (100%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_sch09.pdf	
Bake_sch09	School	Burnt River SD 30J	Burnt River School	PO Box 8 Highway 26	Unity	97884	Baker	Moderate		1960	1968		D	W2	3.6							W2	3.6	Low (<1%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_sch09.pdf	
Bake_sch09	School	Burnt River SD 30J	Burnt River School	PO Box 8 Highway 26	Unity	97884	Baker	Moderate		1970	1968		D	RM1	1.9							RM1	1.9	Moderate (>1%)	http://www.oregonology.com/sub/projects/vs/reports/Bake_sch09.pdf	
Gran_fir02	Fire - City	City of Mt Vernon	Mount Vernon Fire Depart	198 W Main	Mount Vernon	97865	Grant	Moderate		1960	1968		C	W1	4.5							W1	4.5	Low (<1%)	http://www.oregonology.com/sub/projects/vs/reports/Gran_fir02.pdf	
Gran_fir03	Fire - City	City of Canyon City	Canyon City VFD	123 S Washington St	Canyon City	97820	Grant	Moderate		1950			B	RM1	3.1							RM1	3.1	Low (<1%)	http://www.oregonology.com/sub/projects/vs/reports/Gran_fir03.pdf	
Gran_fir04	Fire - City	City of Seneca	Seneca Volunteer FD	106 A Avenue	Seneca	97873	Grant	Moderate		1950			D	W1	0.6	RM1			(0.1)			RM1	(0.1)	Very High (100%)	http://www.oregonology.com/sub/projects/vs/reports/Gran_fir04.pdf	
Gran_fir05	Fire - City	City of John Day	John Day Fire Departmen	209 SE Dayton	John Day	97845	Grant	Moderate		1940			D	RM1	(0.5)	C2			(0.5)			RM1	(0.5)	Very High (100%)	http://www.oregonology.com/sub/projects/vs/reports/Gran_fir05.pdf	
Gran_fir05	Fire - City	City of John Day	John Day Fire Departmen	209 SE Dayton	John Day	97845	Grant	Moderate		1950			D	RM1	(0.1)							RM1	(0.1)	Very High (100%)	http://www.oregonology.com/sub/projects/vs/reports/Gran_fir05.pdf	
Gran_fir06	Fire - RFPD	Long Creek FD	Long Creek FD	250 Hardisty St	Long Creek	97856	Grant	Moderate		1980			C	RM1	0.3							RM1	0.3	High (>10%)	http://www.oregonology.com/sub/projects/vs/reports/Gran_fir06.pdf	
Gran_fir06	Fire - RFPD	Long Creek FD	Long Creek FD	250 Hardisty St	Long Creek	97856	Grant	Moderate		1950			C	RM1	0.3							RM1	0.3	High (>10%)	http://www.oregonology.com/sub/projects/vs/reports/Gran_fir06.pdf	
Gran_fir07	Fire - City	City of Prairie City	Prairie City FD and Police	133 S Bridge St	Prairie City	97869	Grant	Moderate		1978	1970	1978		C	RM1	0.3						RM1	0.3	High (>10%)	http://www.oregonology.com/sub/projects/vs/reports/Gran_fir07.pdf	
Gran_fir08	Fire - City	City of Dayville	Dayville Fire	155 School House Dr.	Dayville	97828	Grant	Moderate		1960			C	RM1	1.9							RM1	1.9	Moderate (>1%)	http://www.oregonology.com/sub/projects/vs/reports/Gran_fir08.pdf	
Gran_hos01	Hospital	NFP (BM Hospital District)	NFP (BM Hospital District)	170 W Main St	John Day	97845	Grant	Moderate		1960	2003		D	RM1	0.3	C2				0.3		RM1	0.3	Low (<1%)	http://www.oregonology.com/sub/projects/vs/reports/Gran_hos01.pdf	
Gran_pol01	Police - State	Oregon State Police	OSP	420 W Main St	John Day	97845	Grant	Moderate		1960			D	C2	0.4							C2	0.4	High (>10%)	http://www.oregonology.com/sub/projects/vs/reports/Gran_pol01.pdf	
Gran_pol02	Police - County	Grant County	Grant County Sheriff	205 S Humbolt St	Canyon City	97820	Grant	Moderate		1960	1997		B											Low (<1%)	http://www.oregonology.com/sub/projects/vs/reports/Gran_pol02.pdf	
Gran_pol04	Police - City	City of John Day	John Day Police Dept	450 E Main St	John Day	97845	Grant	Moderate		1950			C	W1	1.0	RM1				0.3		RM1	0.3	High (>10%)	http://www.oregonology.com/sub/projects/vs/reports/Gran_pol04.pdf	
Gran_sch01	School	Long Creek SD 17	Long Creek School	375 E Main St.	Long Creek	97856	Grant	Moderate		1950	1971	11,885	50	C	RM1	0.3						RM1	0.3	High (>10%)	http://www.oregonology.com/sub/projects/vs/reports/Gran_sch01.pdf	
Gran_sch01	School	Long Creek SD 17	Long Creek School	375 E Main St.	Long Creek	97856	Grant	Moderate		1960	1971	11,885	50	C	W2	0.5						W2	0.5	High (>10%)	http://www.oregonology.com/sub/projects/vs/reports/Gran_sch01.pdf	
Gran_sch01	School	Long Creek SD 17	Long Creek School	375 E Main St.	Long Creek	97856	Grant	Moderate		1960	1971	11,885	50	C	RM1	0.3	S3				2.7	RM1	0.3	High (>10%)	http://www.oregonology.com/sub/projects/vs/reports/Gran_sch01.pdf	
Gran_sch02	School	Prairie City SD 4	Prairie City School	740 Overholt St	Prairie City	97869	Grant	Moderate		1920	1929	13,356	157	D	URM	0.2						URM	0.2	High (>10%)	http://www.oregonology.com/sub/projects/vs/reports/Gran_sch02.pdf	
Gran_sch02	School	Prairie City SD 4	Prairie City School	740 Overholt St	Prairie City	97869																				

Unio_sch03	School	La Grande SD 1	La Grande High School	708 K Ave	La Grande	97850	Union	Moderate	1950	1951	162,327	761	D	C2	(0.1)	RM1	(0.1)	C2	(0.1)	Very High (100%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch03.pdf	
Unio_sch03	School	La Grande SD 1	La Grande High School	708 K Ave	La Grande	97850	Union	Moderate	1970	1951	162,327	761	D	C2	(0.1)	PC1	1.7	C1	(0.5)	Very High (100%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch03.pdf	
Unio_sch03	School	La Grande SD 1	La Grande High School	708 K Ave	La Grande	97850	Union	Moderate	1950	1951	162,327	761	D	RM1	(0.1)				(0.1)	Very High (100%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch03.pdf	
Unio_sch03	School	La Grande SD 1	La Grande High School	708 K Ave	La Grande	97850	Union	Moderate	1970	1951	162,327	761	D	PC1	1.7	S1	0.1		S1	0.1	High (>10%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch03.pdf
Unio_sch03	School	La Grande SD 1	La Grande High School	708 K Ave	La Grande	97850	Union	Moderate	1990	1951	162,327	761	D	S3	2.8	RM1	2.4		RM1	2.4	Low (<1%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch03.pdf
Unio_sch04	School	Union SD 5	Union Elementary School	166 W Dearborn St	Union	97883	Union	Moderate	1950	1929	48,303	240	C	W2	0.5				W2	0.5	High (>10%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch04.pdf
Unio_sch04	School	Union SD 5	Union Elementary School	166 W Dearborn St	Union	97883	Union	Moderate	1960	1929		240	C	RM1	0.3	W2	0.5		RM1	0.3	High (>10%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch04.pdf
Unio_sch04	School	Union SD 5	Union Elementary School	340 1st St	Union	97883	Union	Moderate	1930	1929		240	C	C2	1.9	URM	2.1		C2	1.9	Moderate (>1%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch04.pdf
Unio_sch05	School	Union SD 5	Union High School	540 S Main St	Union	97883	Union	Moderate	1910	1905	53,385	218	C	URM	0.6				URM	0.6	High (>10%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch05.pdf
Unio_sch05	School	Union SD 5	Union High School	540 S Main St	Union	97883	Union	Moderate	1940	1905	53,385	218	C	C2	(0.1)	RM1	(0.1)		C2	(0.1)	Very High (100%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch05.pdf
Unio_sch06	School	Imbler SD 11	Imbler High School	6th St and Esther Ave	Imbler	97841	Union	Moderate	1910	1977		147	D	URM	0.2				URM	0.2	High (>10%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch06.pdf
Unio_sch06	School	Imbler SD 11	Imbler High School	6th St and Esther Ave	Imbler	97841	Union	Moderate	1930	1977		147	D	W2	(0.1)				W2	(0.1)	Very High (100%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch06.pdf
Unio_sch06	School	Imbler SD 11	Imbler High School	6th St and Esther Ave	Imbler	97841	Union	Moderate	1950	1977		147	D	RM1	(0.1)				RM1	(0.1)	Very High (100%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch06.pdf
Unio_sch06	School	Imbler SD 11	Imbler High School	6th St and Esther Ave	Imbler	97841	Union	Moderate	1950	1977		160	D	RM1	(0.1)				RM1	(0.1)	Very High (100%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch06.pdf
Unio_sch08	School	Elgin SD 23	Stella Mayfield Elementar	1111 Division St	Elgin	97827	Union	Moderate	1940	1947	45,300	285	D	C2	(0.1)	RM1	(0.1)		C2	(0.1)	Very High (100%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch08.pdf
Unio_sch08	School	Elgin SD 23	Stella Mayfield Elementar	1111 Division St	Elgin	97827	Union	Moderate	1950	1947	45,300	285	D	C2	(0.1)	RM1	(0.1)		C2	(0.1)	Very High (100%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch08.pdf
Unio_sch08	School	Elgin SD 23	Stella Mayfield Elementar	1111 Division St	Elgin	97827	Union	Moderate	1960	1947	45,300	285	D	W2	0.1				W2	0.1	High (>10%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch08.pdf
Unio_sch09	School	La Grande SD 1	Central Elementary Schoc	402 K Ave	La Grande	97850	Union	Moderate	1950	1960	34,690	355	C	W2	0.5	RM1	0.3		RM1	0.3	High (>10%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch09.pdf
Unio_sch10	School	North Powder SD 8J	Powder Valley School	333 G St	North Powder	97867	Union	Moderate	1910	1937	47,764	211	D	URM	0.7				URM	0.7	High (>10%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch10.pdf
Unio_sch10	School	North Powder SD 8J	Powder Valley School	333 G St	North Powder	97867	Union	Moderate	1937	1930	1937	47,764	211	D	W2	0.4	C2	0.0	C2	0.0	Very High (100%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch10.pdf
Unio_sch10	School	North Powder SD 8J	Powder Valley School	333 G St	North Powder	97867	Union	Moderate	1955	1950	1937	47,764	211	D	RM1	(0.1)	S3	2.3	RM1	(0.1)	Very High (100%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch10.pdf
Unio_sch10	School	North Powder SD 8J	Powder Valley School	333 G St	North Powder	97867	Union	Moderate	1960	1937	47,764	211	D	W2	0.1				W2	0.1	High (>10%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch10.pdf
Unio_sch11	School	Imbler SD 11	Cove School	803 Main St	Cove	97824	Union	Moderate	1960	1935	34,801	254	D	W2	0.1				W2	0.1	High (>10%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch11.pdf
Unio_sch11	School	Cove SD 15	Cove School	803 Main St	Cove	97824	Union	Moderate	1950	1935	34,801	254	D	W2	0.1				W2	0.1	High (>10%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch11.pdf
Unio_sch11	School	Cove SD 15	Cove School	803 Main St	Cove	97824	Union	Moderate	1940	1935	34,801	254	D	C2	(0.5)	W2	(0.1)		C2	(0.5)	Very High (100%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch11.pdf
Unio_sch11	School	Cove SD 15	Cove School	803 Main St	Cove	97824	Union	Moderate	1980	1935	34,801	254	D	RM1	(0.1)				RM1	(0.1)	Very High (100%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch11.pdf
Unio_sch11	School	Cove SD 15	Cove School	803 Main St	Cove	97824	Union	Moderate	1930	1935	34,801	254	D	W2	(0.1)				W2	(0.1)	Very High (100%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch11.pdf
Unio_sch11	School	Cove SD 15	Cove School	803 Main St	Cove	97824	Union	Moderate	1990	1935	34,801	254	D	W2	4.7				W2	4.7	Low (<1%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch11.pdf
Unio_sch12	School	La Grande SD 1	Greenwood Elementary S	2300 N Spruce St	La Grande	97850	Union	Moderate	1950	1960	34,919	354	D	W2	0.1	RM1	(0.1)		RM1	(0.1)	Very High (100%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch12.pdf
Unio_sch12	School	La Grande SD 1	Greenwood Elementary S	2300 N Spruce St	La Grande	97850	Union	Moderate	1960	1960	34,919	354	D	C2	(0.1)	RM1	(0.1)		C2	(0.1)	Very High (100%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch12.pdf
Unio_sch13	School	La Grande SD 1	Island City Elementary Sc	10201 W 4th St	Island City	97850	Union	Moderate	1970	1970	25,029	222	D	W2	0.1				W2	0.1	High (>10%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch13.pdf
Unio_sch13	School	La Grande SD 1	Island City Elementary Sc	10201 W 4th St	Island City	97850	Union	Moderate	1970	1970	25,029	222	D	PC1	1.7				PC1	1.7	Moderate (>1%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch13.pdf
Unio_sch14	School	Elgin SD 23	Elgin High School	1400 Birch St	Elgin	97827	Union	Moderate	1950	1957	40,000	139	D	W2	0.1	RM1	(0.1)		RM1	(0.1)	Very High (100%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch14.pdf
Unio_sch14	School	Elgin SD 23	Elgin High School	1400 Birch St	Elgin	97827	Union	Moderate	1960	1957	40,000	139	D	W2	(0.1)				RM1	(0.1)	Very High (100%)	http://www.oregongeology.com/sub/projects/rs/reports/Unio_sch14.pdf
Wall_eoc01	EOC-Public Safety Answering Point - County	Wallowa County	Emergency Operations C	104 West Greenwood	Enterprise	97828	Wallowa	Moderate	1909	1900	1909		D	URM	0.2				URM	0.2	High (>10%)	http://www.oregongeology.com/sub/projects/rs/reports/Wall_eoc01.pdf
Wall_fir01	Fire - City	City of Joseph	Joseph Fire Dept	201 N Russell St	Joseph	97846	Wallowa	Moderate	1980				D	S3	2.8				S3	2.8	Low (<1%)	http://www.oregongeology.com/sub/projects/rs/reports/Wall_fir01.pdf
Wall_fir02	Fire - RFPD	Wallowa FD	Wallowa FD	104 N Pine St	Wallowa	97885	Wallowa	Moderate	1990				D	S3	2.3				S3	2.3	Low (<1%)	http://www.oregongeology.com/sub/projects/rs/reports/Wall_fir02.pdf
Wall_fir03	Fire - City	City of Enterprise	Enterprise Fire Departme	108 NE 1st St	Enterprise	97828	Wallowa	Moderate	1950				D	RM1	(0.1)				RM1	(0.1)	Very High (100%)	http://www.oregongeology.com/sub/projects/rs/reports/Wall_fir03.pdf
Wall_fir04	Fire - RFPD	Wallowa FD	Wallowa FD	60000 Mt Howard Ln	Joseph	97846	Wallowa	Moderate	2000				D	S3	2.3				S3	2.3	Low (<1%)	http://www.oregongeology.com/sub/projects/rs/reports/Wall_fir04.pdf
Wall_fir05	Fire - RFPD	Lostine VFD	Lostine VFD	128 Hwy 82	Lostine	97857	Wallowa	Moderate	1960				D	W1	0.6				W1	0.6	High (>10%)	http://www.oregongeology.com/sub/projects/rs/reports/Wall_fir05.pdf
Wall_hos01	Hospital	NFP - Wallowa	Wallowa Memorial Hospit	401 Ne 1st St	Enterprise	97828	Wallowa	Moderate		2007	40,000		D								Low (<1%)	http://www.oregongeology.com/sub/projects/rs/reports/Wall_hos01.pdf
Wall_pol01	Police - City	City of Enterprise	Enterprise PD	104 W Greenwood	Enterprise	97828	Wallowa	Moderate		2005			D								Low (<1%)	http://www.oregongeology.com/sub/projects/rs/reports/Wall_pol01.pdf
Wall_pol02	Police - City	City of Joseph	Joseph PD	201 N Main St	Joseph	97846	Wallowa	Moderate		1940			D	C2	2.0	RM1	2.0		C2	2.0	Moderate (>1%)	http://www.oregongeology.com/sub/projects/rs/reports/Wall_pol02.pdf
Wall_pol03	Police - State	Oregon State Police	OSP	65495 Adler Slope Rd	Enterprise	97828	Wallowa	Moderate		2000			D	W1	6.2				W1	6.2	Low (<1%)	http://www.oregongeology.com/sub/projects/rs/reports/Wall_pol03.pdf
Wall_pol04	Police - City	City of Enterprise	Enterprise PD	104 W Greenwood	Enterprise	97828	Wallowa	Moderate		2005			D								Low (<1%)	http://www.oregongeology.com/sub/projects/rs/reports/Wall_pol04.pdf
Wall_pol05	Police - County	Wallowa County	Wallowa County Sheriff's	104 W Greenwood	Enterprise	97828	Wallowa	Moderate		2005			D								Low (<1%)	http://www.oregongeology.com/sub/projects/rs/reports/Wall_pol05.pdf
Wall_sch02	School	Wallowa SD 12	Wallowa Elementary Schc	315 1st St	Wallowa	97885	Wallowa	Moderate	1920	1922	43,098	143	D	URM	0.2				URM	0.2	High (>10%)	http://www.oregongeology.com/sub/projects/rs/reports/Wall_sch02.pdf
Wall_sch02	School	Wallowa SD 12	Wallowa Elementary Schc	315 1st St	Wallowa	97885	Wallowa	Moderate	1940	1922	43,098	143	D	C2	(0.5)				C2	(0.5)	Very High (100%)	http://www.oregongeology.com/sub/projects/rs/reports/Wall_sch02.pdf
Wall_sch02	School	Wallowa SD 12	Wallowa Elementary Schc	315 1st St	Wallowa	97885	Wallowa	Moderate	1950	1922	43,098	143	D	RM1	2.4				RM1	2.4	Low (<1%)	http://www.oregongeology.com/sub/projects/rs/reports/Wall_sch02.pdf
Wall_sch02	School	Wallowa SD 12	Wallowa Elementary Schc	315 1st St	Wallowa	97885	Wallowa	Moderate	1940	1922	43,098	143	D	W2	(0.1)				W2	(0.1)	Very High (100%)	http://www.oregongeology.com/sub/projects/rs/reports/Wall_sch02.pdf
Wall_sch02	School	Wallowa SD 12	Wallowa Elementary Schc	315 1st St	Wallowa	97885	Wallowa	Moderate	1950	1922	43,098	143	D	W2	0.1				W2	0.1	High (>10%)	http://www.oregongeology.com/sub/projects/rs/reports/Wall_sch02.pdf
Wall_sch04	School	Enterprise SD 21	Enterprise High School	201 Se 4th St	Enterprise	97828	Wallowa	Moderate	1917	1910	1917	35,293	159	C	URM	0.6			URM	0.6	High (>10%)	http://www.oregongeology.com/sub/projects/rs/reports/Wall_sch04.pdf
Wall_sch04	School	Enterprise SD 21	Enterprise High School	201 Se 4th St	Enterprise	97828	Wallowa	Moderate	1950	1917	35,293	159	C	RM1	0.3				RM1	0.3	High (>10%)	http://www.oregongeology.com/sub/projects/rs/reports/Wall_sch04.pdf
Wall_sch04	School	Enterprise SD 21	Enterprise High School	201 Se 4th St	Enterprise	97828	Wallowa	Moderate	1950	1917	35,293	159	C	RM1	0.3				RM1	0.3	High (>10%)	http://www.oregongeology.com/sub/projects/rs/reports/Wall_sch04.pdf
Wall_sch04	School	Enterprise SD 21																				

From the La Grande Observer:

Published: March 3, 2001

President Bush has proposed eliminating a federal program that provides funding for disaster preparedness. The timing of the president's announcement couldn't have come at a worse time — the day of the 6.8-magnitude earthquake near Seattle, one of the cities that has used Project Impact funds to promote safer homes, schools and businesses. The cutback doesn't make sense — being prepared for disasters is a whole lot cheaper than paying the bill for not being prepared after disaster strikes.

Administration officials said the cuts were proposed because the preparedness programs weren't effective. Washington officials believe differently.

U.S. Sen. Patty Murray, D-Wash., said the fact that Wednesday's quake didn't cause more damage was "a wonderful show of what the project has done."

The administration needs to rethink its position and consider some sage advice from the Boy Scouts: Be Prepared.

Here's to-do list:

Living in Northeast Oregon, some of us might think we are far removed from the possibility of an earthquake. But faults run through our region, too, and earthquakes are possible. The Eastern Oregon Chapter of the American Red Cross is reminding residents that we, too, need to be prepared.

Here's what we should have on hand, according to the Red Cross:

- A flashlight with extra batteries.
- A battery-operated radio with extra batteries.
- A one- to three-day supply of bottled water.
- Non-perishable food.
- An extra supply of prescription medication and a list of those medications.
- A wrench to turn off gas and water supply if necessary.
- A family evacuation plan.

Here's what we can do to be ready:

- Know where to shut off gas and water to the house.
- Prepare a kit with items listed above. A duffel bag can hold the items.
- Assess your house for earthquake danger such as heavy pictures and art with glass, and display cases with breakable collectibles that could pose a hazard should they fall. In most cases pictures and display cases can be secured to minimize the hazard.
- Take a first aid/CPR class.

People who would like to learn more about disaster preparedness can visit the Red Cross office in the basement of Pierce Library at Eastern Oregon University, or call 962-3036.

WE CAN BE BETTER PREPARED FOR QUAKE

Published: March 2, 2001

Aside from bricks and shattered glass that needed to be cleaned up on Seattle's sidewalks, some structural damage to Washington's Capitol in Olympia and other buildings, and several minor injuries, the Northwest got by fairly well in Wednesday's 6.8-magnitude earthquake.

Fortunately the quake southwest of Seattle was centered 33 miles underground. If an earthquake of that severity occurred much closer to the surface, the area might have experienced more devastation.

Still, Wednesday's jolt is a reminder that the Northwest is vulnerable to the sudden shifting of the earth's plates. The region does not have to wait for 50 to 100 years for the ground to move. In fact, Oregon and Washington have experienced 10 earthquakes of various magnitudes over the past 25 years. Even areas like the Grande Ronde Valley are not immune from the possibility of an earthquake.

Can we do a better job preparing our houses, buildings and public roads, bridges and other infrastructure for an earthquake? Millions of dollars already have been spent in recent years in stabilizing buildings, and that helped the Northwest weather this week's quake. Additional money must be invested to reduce the effects of the next inevitable major earthquake.

People, too, need to think about how they would behave in an earthquake. The ones who crawled under desks and tables to protect themselves from possible falling debris responded properly. The folks who quickly ran from buildings might have been putting themselves and others at risk. People should consider the age and structural integrity of the building where they work or live. They're often better off staying put than moving rapidly outdoors.

People should also look at the valuables perched on mantles and bookshelves in their homes. Can some of that expensive china, glassware or trinkets be better protected from the pulling and swaying of an earthquake? In Saturday's editorial we will list some specific things people should do to be ready for an earthquake.

Wednesday's Puget Sound event shows that more forethought and preparation are needed to reduce a quake's potential horrible effects.

No harm in responding

La Grande's city fire department won the race to the barn fire on N. Cherry Street Wednesday morning. City firefighters arrived before their counterparts from the La Grande Rural Fire Department in Island City could get there.

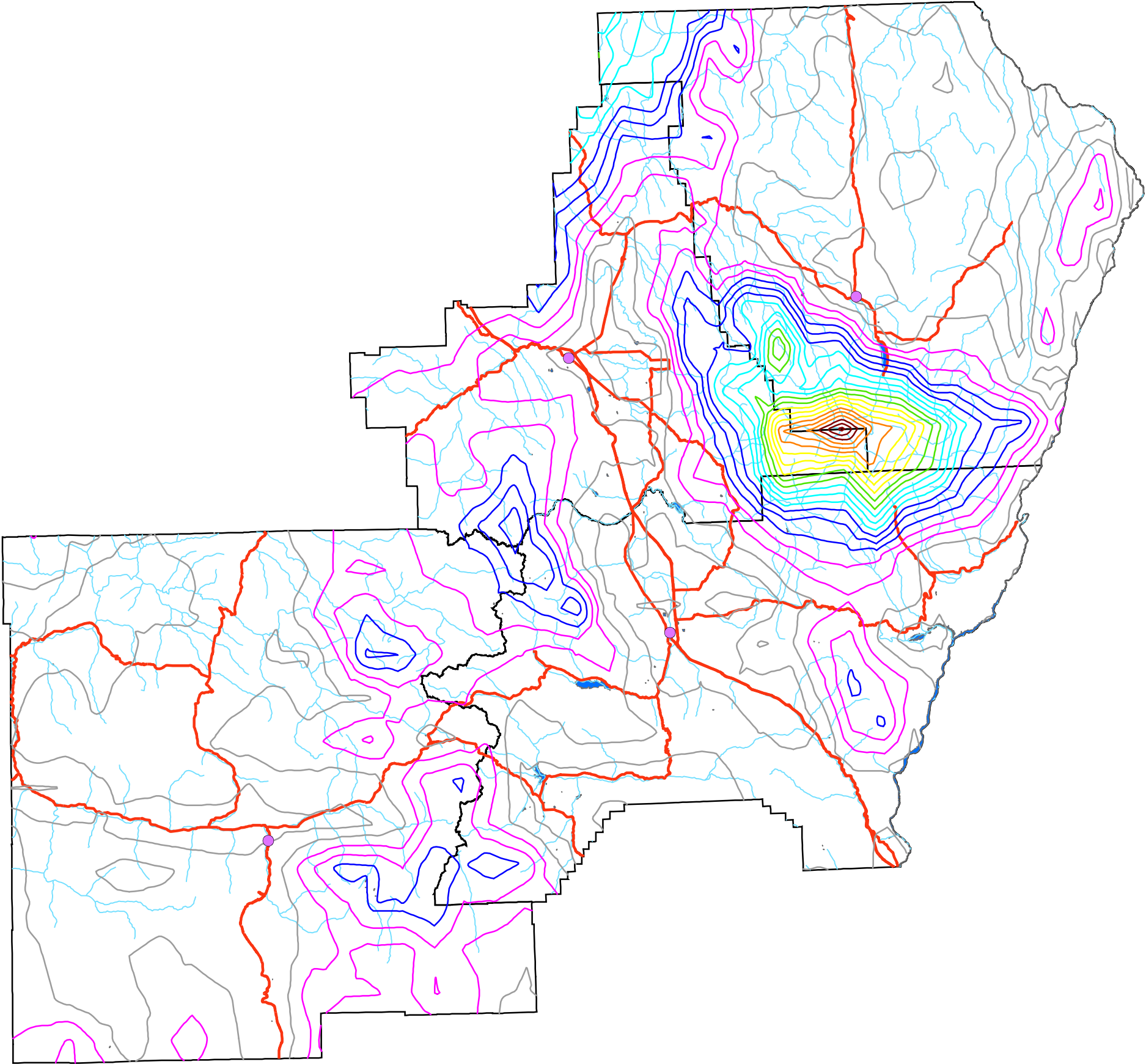
As it turned out, the fire was actually in the rural fire district, outside La Grande's city limits. It was the rural firefighters' responsibility to report first to a fire within their district, and call for mutual aid from La Grande if necessary.

But what was the harm of city firefighters getting to the fire first? Precious minutes, property and lives could be wasted while waiting to decide if a fire is within one's territory. That would not serve the public's interests very well at all.

Hazard Annex

Flood

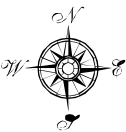
Northeast Oregon
Natural Hazard Risk
Reduction Plan
Average Precipitation



Legend

- County Seats
- Average Precipitation: inches per year
 - 10 - 20 inches
 - 25 - 30 inches
 - 35 - 45 inches
 - 50 - 60 inches
 - 65 - 70 inches
 - 75 - 85 inches
 - 90 - 100 inches
 - 105 - 115 inches
- Roads
- Streams
- Lakes
- County Boundaries

0 4 8 16 24 32 Miles



Data Sources: County and City boundaries, county seats, and precipitation contours are from the Oregon Geospatial Data Clearinghouse. Roads are from Oregon Department of Transportation.

Maps created by Wallowa County GIS, a division of the Wallowa County Planning Department.

The information on this map was derived from various sources. Care was taken in the creation of this map but it is provided "as is". Wallowa County cannot accept any responsibility for errors, omissions, or positional accuracy in the digital data or the underlying records. There are no warranties, express or implied, including the merchantability or fitness for a particular purpose, accompanying this product. However, notification of any errors will be appreciated.

Northeast Oregon
Natural Hazard Risk
Reduction Plan

River Subbasins

Legend

 County Seats

 Roads

 County Boundaries

 Brownlee Reservoir

 Burnt River

 Hells Canyon

 Imnaha River

 Lower Grande Ronde River

 Lower John Day

 Lower Snake/Asotin

 Middle Fork John Day

 North Fork John Day

 Powder River

 Silvies

 South Fork Crooked

 Umatilla

 Upper Grande Ronde River

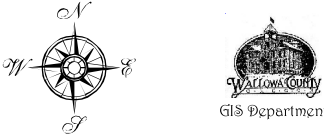
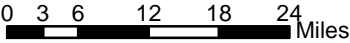
 Upper John Day

 Upper Malheur

 Walla Walla

 Wallowa River

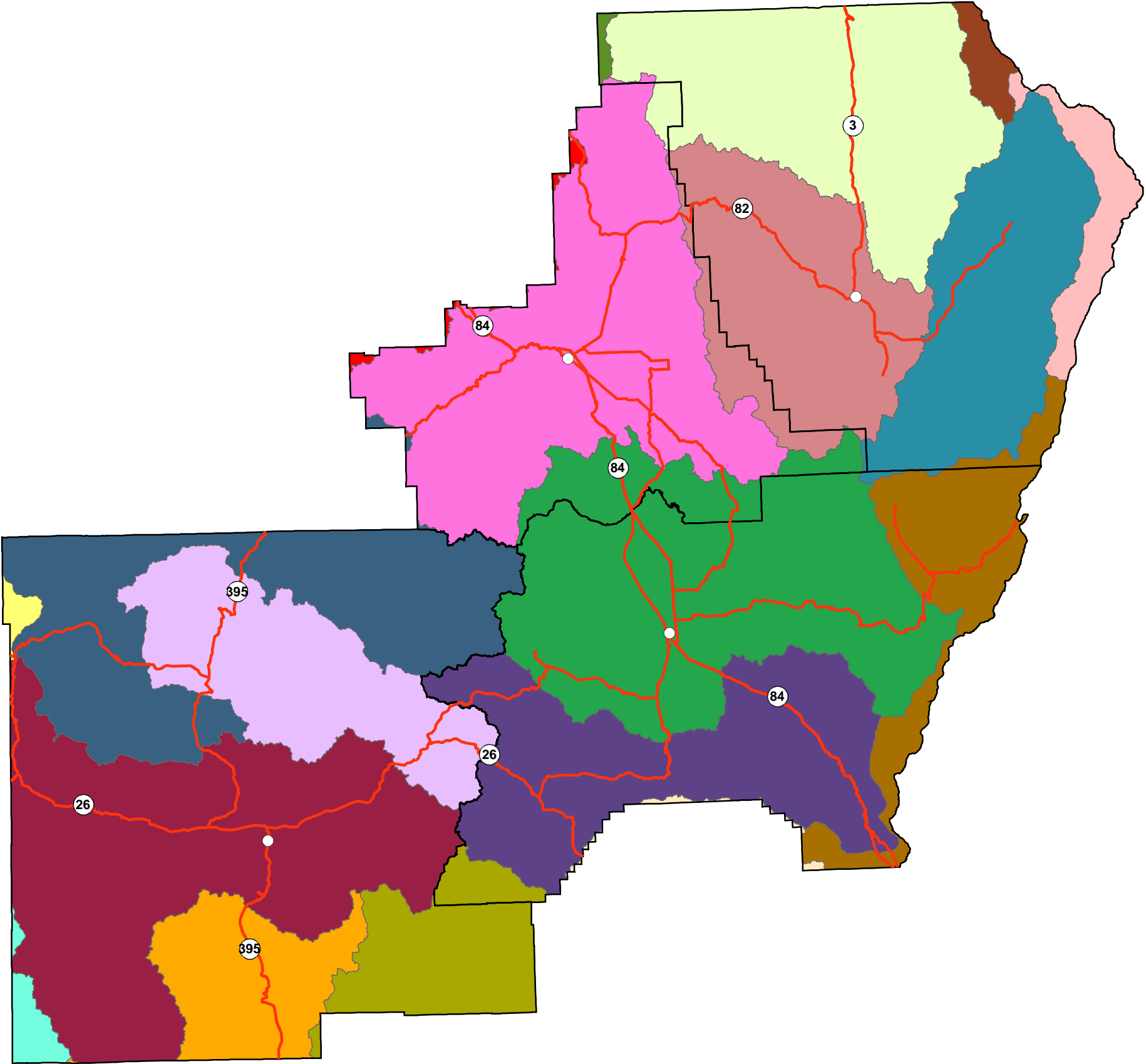
 Willow



Data Sources: County boundaries, county seats, and subbasins are from the Oregon Geospatial Data Clearinghouse. Roads are from Oregon Department of Transportation.

Maps created by Wallowa County GIS, a division of the Wallowa County Planning Department.

The information on this map was derived from various sources. Care was taken in the creation of this map but it is provided "as is". Wallowa County cannot accept any responsibility for errors, omissions, or positional accuracy in the digital data or the underlying records. There are no warranties, express or implied, including the merchantability or fitness for a particular purpose, accompanying this product.



River runs into future on back of plan

By Alice Perry Linker

Observer Staff Writer

The swimming hole near La Grande's Spruce Street Bridge may disappear.

Fishing is expected to improve, however, and wildlife may become more abundant along a two-mile stretch of the Grande Ronde River between the bridge next to Riverside Park and the Island City Bridge, according to a plan to restore the river banks and stop river bed erosion.

A feasibility study prepared by the Army Corps of Engineers and co-sponsored by Union County, the City of La Grande and the county's Soil and Water Conservation District details a plan designed to halt erosion of the river bed (known as a head-cut) at the bridge and improve stream and bank conditions

downstream for about two miles. The study calls for the work to be done in two phases, with the first phase starting at the Spruce Street Bridge and scheduled to begin in September 2001.

A public hearing on the first phase will begin at 7 p.m. Wednesday in the Misener Conference room of the county's Chaplin Building on Fourth Street. Written public comment will be taken until Dec. 27.

Work on the plan began more than two years ago, but implementation has been delayed, partly because of personnel changes at the Corps of Engineers.

When the plan was started, costs for both phases were estimated at \$1 million, with 25 percent of that to be shared by the local governments. The Corps'

formal report released earlier this month lists the cost at slightly more than \$3.2 million for the first phase. The local governments' share has not changed.

"We originally thought the cost would not be more than \$1 million to do both phases," said Union County Planner Hanley Jenkins. "We don't have to decide if we can do this until the feasibility study is accepted."

Jenkins said he expects the Dec. 27 deadline for public comment to be extended and more than one public hearing to be scheduled over the next few months.

"We'd like to hold additional hearings after the holidays are over," he said.

See RIVER, Page 2A

River

Continued from Page 1A

Grants from the Bureau of Land Management may be available to help with the cost.

The Corps' analysis cites changes in the river channel in past years to reduce flooding and gravel mining in the stream as reasons for the river bed erosion.

"For the most part, the channel has been straightened considerably from its former alignment," the report states. "This straightening tends to increase the erosive energy of the river."

The plan to reduce the erosion near the Spruce Street Bridge calls for in-stream installation of rock weirs about 50 feet apart. Crevices in the rocks would allow bull trout passage along the river. A concrete grade control structure would be built in the river at the headcut.

The changes in the river at the bridge will cause a deep swimming hole to disappear, but the changes are expected to improve fishing conditions and will not affect boating, according to the engineering report.

An irrigation diversion would remain in place near the bridge.

Further downstream, just below the headcut, a narrower and deeper channel will be established within the river, creating more meandering. Rocks, root wads and logs will be anchored in the river banks to help prevent erosion, and rock structures will be built in the stream near the side of the river.

Storm Drops Two Inches in Half Hour

Published: June 30, 2006



Crews from the Oregon Department of Transportation hauled rock to repair a shoulder along Highway 86 that eroded during a flash flood Thursday afternoon. Debris washed across the highway in two places — at Milepost 17 about 17 miles east of Baker City (above photo), and at Milepost 14. Baker City Herald/Heather Honeywell

By JAYSON JACOBY
jjacoby@bakercityherald.com

When Diane Naglee got home Thursday evening she noticed right off that her old bridge was gone — and a new river was rumbling through her property.

This was a problem.

"That bridge is the only way in to my place," said Naglee, whose home is just north of Highway 86, about 15 miles east of Baker City.

The loss of the bridge doesn't affect any other homes because the structure was along Naglee's private driveway rather than a public road.

The steel-and-wood bridge, which crosses Ruckles Creek, apparently performed flawlessly until Thursday afternoon.

That's when a cloudburst gushed about two inches of rain in half an hour, transforming Ruckles Creek from barely a trickle to a torrent which, besides breaking Naglee's bridge, bent irrigation pipes, wrecked barbed wire fences and floated half-ton hay bales.

"It's a mess," Naglee said this morning.

"We've never had a storm like this one," said Naglee's neighbor, Christie Wilde, who has lived in the Keating Valley since 1980. "I've never seen it rain that hard."

The storm, which struck about 2 p.m., also spawned gales that snapped several trees, spewed lightning bolts that knocked out power to 370 homes, and triggered a debris flows that slowed traffic on Highway 86.

"It was just the most amazing lightning storm I've seen in years," said Buzz Harper, who lives near Keating and is chief of the Keating Rural Fire Protection District.

Naglee, who moved into her place in March, said that when she drove across the bridge Thursday morning on her way to work in Baker City, Ruckles Creek was dry — as it usually is in late June.

But when she arrived home at 6:30 p.m., Ruckles Creek "was raging so hard I could not walk across it without worrying about getting swept away."

Wilde drove Naglee home via a detour that included a couple of roads and one of Wilde's fields.

By this morning Ruckles Creek had receded so that Naglee, wearing a pair of rubber boots, could splash across safely.

But she still needs a bridge.

"It's very inconvenient," Naglee said.

She said a contractor was supposed to look at the bridge site today.

Naglee said she doesn't know if her homeowner's insurance policy will pay for the damage. She hopes she might be able to salvage parts of the bridge, including the two-by-eight wood planks.

Those planks, along with other sections of the structure, washed downstream several hundred yards and got tangled with an irrigation wheel line that Christie Wilde and her husband, Oliver, own.

"Our wheel line actually caught Diane's bridge," Christie Wilde said.

Christie Wilde said the rain gauge at the couple's home collected an inch and three-quarters of water Thursday afternoon and evening — and most of that sluiced down in about half an hour, she said.

The deluge caused flash floods in several shallow draws, Christie Wilde said, and all that water funneled into Ruckles Creek.

"It just made Ruckles Creek a raging river," she said. "There's really no place for it to go but into our fields."

Wilde said floodwaters "wiped out" sections of fence and damaged the wheel line as well as a main irrigation supply pipe.

Rain was the storm's ingredient along Ruckles Creek, but several miles east, in lower Keating Valley, the thunderstorm battered the area with wind, as well.

Harper said wind felled several trees on the Phillips Ranch and on the Powder River Ranch, where Harper works.

He said one of the toppled trees on the Powder River Ranch barely missed slamming into another ranch worker's home. Harper said the tree "had to be one of the biggest willows in Baker County."

Muddy water mixed with sagebrush, rocks and other debris flowed across Highway 86 near Mileposts 14 and 17, said Brad Payton, who works at the Oregon Department of Transportation's Baker City maintenance station.

Payton said the highway stayed open, although flaggers guided traffic through the two flooded sections.

He said ODOT crews hauled in rock to temporarily repair sections of the highway shoulder that the floodwater gnawed at. Workers will have to bring in boulders to solidify the shoulder later, Payton said.

"The road's still not very pretty, but it's in good shape for the holiday weekend," he said.

Lightning caused fuses to open on Oregon Trail Electric Cooperative lines, cutting power to 370 customers at about 2:15 p.m.

OTEC crews restored power to 348 of those customers at 2:45 p.m., and to the remaining 22 customers at 3:30 p.m.

Baker Valley escaped the worst of the storm's wrath.

A third of an inch of rain fell at the Baker City Municipal Airport. The strongest wind gust was 17 mph.

STORM POUNDS LA GRANDE

Published: July 20, 2004



DISASTER SCENE: Friends of Russ Bergette gather around his home at 63450 Gekeler Lane Monday to survey the damage after all of the surrounding trees snapped in half and landed on the roof of his newly remodeled home. The trees ripped out a meter base and took down telephone and power lines around the house. The Observer/LAURA MACKIE-HANCOCK

**By Bill Rautenstrauch
Observer Staff Writer**

A sudden severe storm cut a wide swath of destruction through the Grande Ronde Valley late Monday afternoon.

Winds estimated at 70 miles per hour sent a modular building tumbling across the grounds at the Union County Airport and upended a semi-truck on Interstate 84 east of La Grande. A house on Gekeler was pummeled by several trees, and numerous homes in La Grande were hit by falling branches.

Slightly over an inch of rain fell in about half an hour.

In the airport incident, operations manager Doug Yearous was taken by ambulance to Grande Ronde Hospital, where he was treated for injuries and later released.

The modular building has served as a temporary airport operations center since a fire destroyed the regular office last year. Yearous was inside the building when the winds took it.

"I was shutting things down and I felt the trailer slip and move," Yearous said this morning. "I got knocked out on the second hit. I remember hitting my face on the other side of the room." Yearous said he believed the trailer rolled about four times. It came to rest upon an airplane owned by Ron Nash.

The plane was one of at least five damaged during the storm.

The semi-truck overturned in the eastbound lane of I-84 near milepost 266, about a mile from the Flying J truck stop. No injuries were reported.

The National Weather Service in Pendleton had no reliable estimate of the wind speed during the storm, though one weather spotter near Island City said winds gusted to 60-70 mph. Also at Island City, nearly an inch of rainfall was reported.

The weather service said a sensor that measures wind speed at the airport was knocked out early in the storm and did not render a reading.

The service said its network of spotters submitted numerous reports of storm damage. No spotter reported seeing a funnel cloud that would have indicated a tornado. A tornado did strike in Grant County Monday, the service said.

La Grande Public Works Director Dan Chevalier said this morning flooding occurred at several places around the city because the storm sewer system couldn't keep up with the flow of water. A power outage caused electric pumps to shut down, adding to the problem.

Chevalier said downed trees and power lines kept his department working overtime.

"We worked until about eight o'clock last night, and this morning crews are out cleaning up," he said.

Chevalier said Bud Jackson's Sports Bar at the east end of Adams and the Golden Harvest Restaurant at the corner of Greenwood and Jefferson downtown were among buildings whose interiors were flooded.

Flooding was heaviest in the Island Avenue underpass.

Dara Decker, Union County Emergency Services officer, said drivers trying to take their vehicles through the deep waters caused some complications.

"A couple of people tried to drive through it. Their cars stalled and had to be towed out," she said.

Decker said her office received numerous reports of damage from throughout the county.

"There were multiple trees down across roads and on top of buildings, and some of the railroad crossing bars along Island Avenue were ripped off," Decker said.

Eastern Oregon University felt the impact of the storm but suffered no significant damage, said Michael Rhodes, EOU's interim physical plant facilities and planning director.

Water flowed into the ground level floors of Ackerman Hall, Pierce Library and Hoke Center.

The water had to be cleaned up by crews but did not cause any damage.

Normally the water would have been caught by EOU's storm drains but they were backed up because of the storm, Rhodes said.

The storm also blew down many branches on campus. Rhodes said that crews will be cleaning up the branches for much of the next two days.

The Oregon Department of Transportation was busy cleaning up debris until late in the evening, said spokesman Tom Strandberg.

Strandberg said crews monitored the storm via radar and were ready when it struck.

"We were following it and we had people standing by, ready to go," he said.

Strandberg said there were no full highway closures during the incident, though debris caused some single-lane closures.

Damage to the valley's crops was being assessed this morning.

The weather service was in La Grande this morning, investigating the path of the storm, its wind speed, and other factors.

<u>Community</u>	<u>ID</u>	<u>Repetative Count</u>	<u>\$</u>	<u>Single Losses Count</u>	<u>\$</u>	<u>Policies in l Count</u>
Baker County						
Baker City	410002	0		0	2 \$25,491.00	136
Baker County, unin	410001	0		0	\$0.00	37
Green Horn	410265	0		0	\$0.00	0
Haines	410003	0		0	\$0.00	2
Halfway	410004	0		0	\$0.00	0
Grant County						
Canyon City	410075	0		0	\$0.00	5
Dayville	410076	0		0	\$0.00	0
Granite	410264	0		0	\$0.00	0
Grant County	410074	0		0	\$0.00	23
John Day	410077	2	\$16,643.56	6	\$47,684.00	49
Long Creek	410078	0		0	\$0.00	2
Monument	410079	0		0	\$0.00	0
Union County						
Cove	410217	0		0	\$0.00	0
Elgin	410218	0		0	\$0.00	9
Island City	410220	0		0		10
La Grande	410260	0		4	\$38,334.00	66
North Powder	410221	0		0	\$0.00	0
Summerville	410222	0		0	\$0.00	1
Union County	410216	2	\$7,276.36	2	\$7,276.00	40
Wallowa County						
Enterprise	410225	0		0	\$0.00	62
Joesph	410226	0		0	\$0.00	3
Lostine	410227	0		0	\$0.00	2
Wallowa County	410224	0		2	\$15,788.00	26
Wallowa City	410228	0		0	\$0.00	3
						96

Force (as of 4/200)

Value

\$15,521,200.00

\$4,813,300.00

\$0.00

\$280,000.00

\$0.00

\$506,700.00

\$0.00

\$0.00 not mapped

\$1,797,200.00

\$5,038,100.00

\$26,000.00

\$0.00

\$0.00

\$690,300.00

\$1,677,400.00

\$10,866,200.00

\$0.00

\$140,000.00

\$6,577,000.00

\$7,196,400.00

\$683,700.00

\$480,000.00

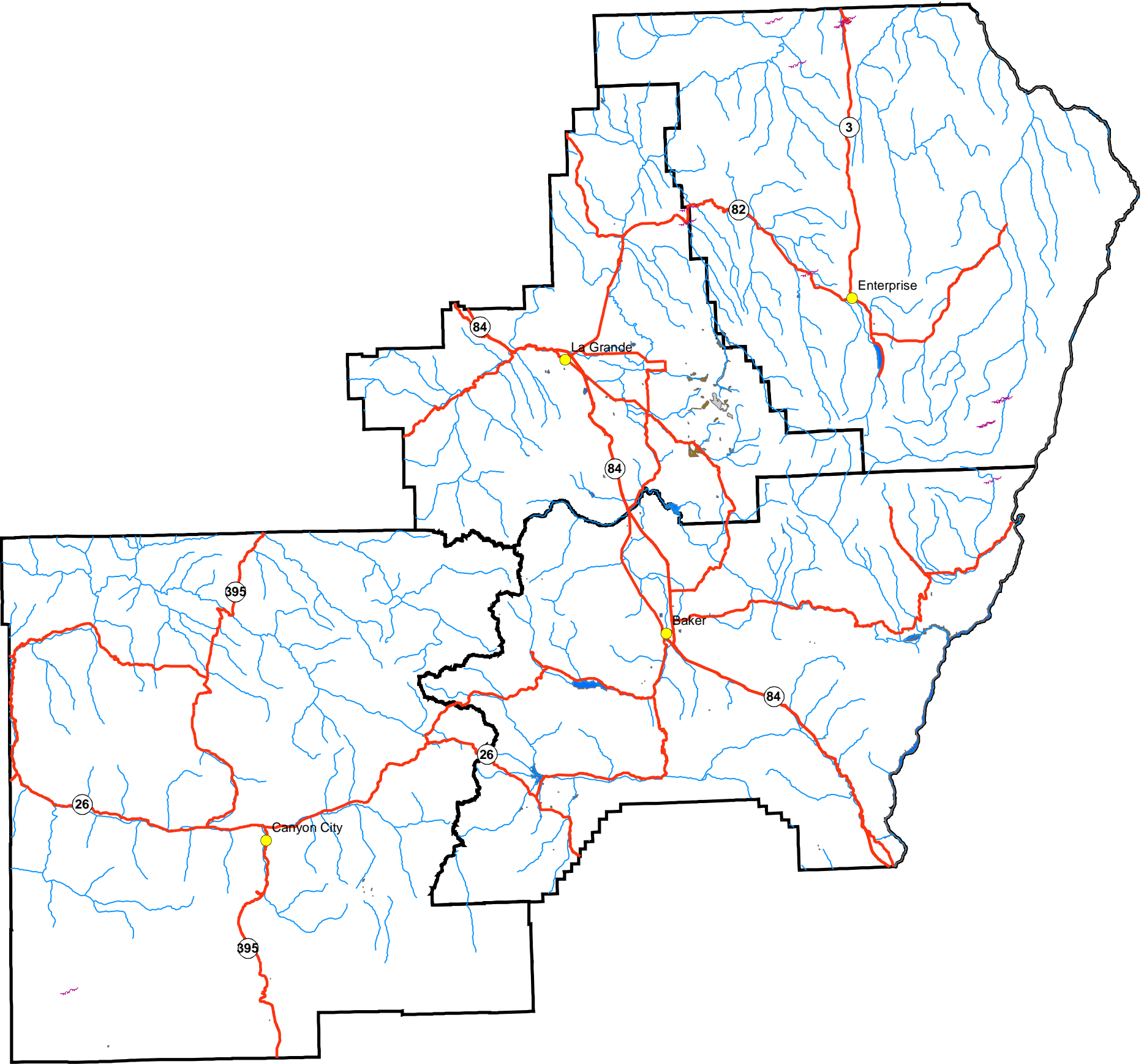
\$3,829,200.00

\$768,900.00

Hazard Annex

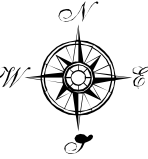
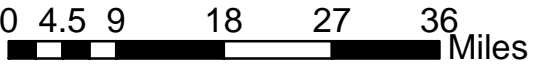
Landslide

Northeast Oregon Natural Hazard Risk Reduction Plan Debris Flow Areas



Legend

- County Seats
- Landslides
- Roads
- Streams
- Lakes
- Landslide Areas
- Stream Alluvium
- Ash and Eolian Deposits
- Alluvial Fan Deposits
- Landslide Deposits
- County Boundary



Data Sources: County boundaries, county seats, streams and lakes are from the Oregon Geospatial Data Clearinghouse. Critical and Essential facility data was provided by each individual county. Roads are from Oregon Dept. of Transportation. Power lines and Airstrips are from Oregon Department of Forestry.

Maps created by Wallowa County GIS, a division of the Wallowa County Planning Department.

The information on this map was gathered from various sources. Care was taken in the creation of this map but it is provided "as is". Wallowa County cannot accept any responsibility for errors, omissions, or positional accuracy in the digital data or the underlying records. There are no warranties, express or implied, including the merchantability or fitness for a particular purpose, accompanying this product. However, notification of any errors will be appreciated.

LANDSLIDE HITS SCOUT CAMP

Published: July 19, 2002

By Gary Fletcher

Observer Staff Writer

WALLOWA LAKE — Some terrified 10- and 11-year-olds and their parents from Pendleton and the Tri-Cities escaped from a Boy Scout camp dining hall about 4 p.m. Thursday before the building was carried away by a flash flood and crashed into trees.

Thundershowers high in the hills above the camp filled streams and caused the flooding and mudslide, officials said.

Some of the group of 30 Webelo Scouts who were outside the dining hall saw a "black waterfall and trees falling, and warned the others," said Don Butler, an employee at the Blue Mountain Council's Wallowa Lake Scout Camp. Later someone reported the smell of fresh dirt in the air.

The group headed for Butler's cabin 200 feet on the opposite side of the West Fork of the Wallowa River.

The last of them were crossing a suspension footbridge across the river when they looked back to see the mess hall they'd just evacuated, carried down the hill in a mudslide and crash into trees.

Camp director Monte Job's pickup truck washed down the hill and into the river. Trapped inside was Blondie, his 11-year-old yellow lab.

The scout group made it to Butler's cabin.

Then the river changed course, bypassed the suspension foot bridge built in 1996 and cut a new channel within 20 feet of the cabin.

Two residences became an island. A tree service company in the area used its cherry picker to pluck a man from one of them.

Wallowa County Sheriff Fred Steen and Undersheriff Steve Rogers arrived on the scene to make an assessment. Those plans were thrown in reverse when a second wall of water came down at them, smashing two camp staff cars together.

The sheriff's team began going door to door downstream, evacuating the area to the Methodist Camp, and then contacting some residents close to the river on the east side.

One resident reported that the high water running by her house lasted over a half hour, then began to subside. In the meantime they saw coolers, firewood and entire logs rushing by, carried atop dark waves.

The muddy water receded and Rogers returned to the camp with search and rescue personnel who located a person upstream who had been cut off by the debris flow.

Once all the people were accounted for, a search and rescue team along with Don Holum, the new county dog control officer, retrieved Blondie from the pickup in the river. The dog had been there about three hours.

Assessing the situation overhead was a U.S. Forest Service helicopter carrying Wallowa County Commission Chairman Mike Hayward. Hayward had issued a county declaration of disaster for the south Wallowa Lake area.

For a short time, residents were warned not to drink from the south lake water system because of turbidity. The system was checked and the warning was lifted. Shortly after 8:30 p.m. most residents were allowed back in the area.

People, however, were not allowed to return to two marooned and threatened buildings, and eight other structures considered at risk due to the changing river channel and debris flows.

The American Red Cross set up a shelter for displaced people at the Joseph Community Center. The agency also opened a canteen at the south lake for emergency workers.

There were no reported injuries or deaths.

Thundershowers high in the headwaters of Adams, Johnson and BC creeks caused them to rise. Apparently saturated soils up BC Creek liquefied and came roaring down the steep slope.

The National Weather Service was forecasting clearer skies for the area over the weekend.

The debris flow was several feet thick. Woody debris created a surface skiff approximately 200 feet in diameter at the south end of the lake.

Boaters were advised to watch out for logs and debris floating on the lake.

"We really appreciate people's cooperation," said Matthew Marmor, Wallowa County Emergency Program manager. Marmor was referring to the residents who cooperated in leaving their cabins, as well as all the volunteers and agencies that responded to help.

"This community responds well together," Marmor said.

A similar flash flood about four years ago struck the Hurricane Creek Campground, forcing people from their tents. There were no injuries. Earlier, gullywashers took out the Hurricane Creek Road.

Reach Gary Fletcher at 541-426-3255 or at entobs@eoni.com.

SCOUT EXECUTIVE RECOUNTS FLASH FLOOD, NARROW ESCAPE

Published: July 20, 2002



DESTROYED IN A FLASH:
Pacific Power workers shut off electricity to the Wallowa Lake Boy Scout camp mess hall after it was destroyed by a flash flood Thursday. Heavy rain in a high, snow-filled basin triggered the deluge.

Observer photos/GARY
FLETCHER

By Gary Fletcher

Observer Staff Writer

WALLOWA LAKE — Heavy July rains, not October snow, closed Wallowa Lake Boy Scout Camp this year.

No one was injured Thursday when a landslide destroyed the mess hall as its occupants fled to safety. Three vehicles were also moved and damaged by the flash flood. Heavy rain in a high, snow-filled basin triggered the deluge of debris.

"We will definitely rebuild," said W. Mark Griffin, Scout executive of the Blue Mountain Council in Kennewick, Wash.

However, with the council's financial difficulties, and no flood insurance coverage, he had no idea when the rebuilding could start.

Griffin said he was proud of the staff of four adults and six teens, and the 15 Scouts each there with a parent.

"The staff, youth and parents were calm and excited during the life-threatening adventure," he said, "They handled everything well."

A fire drill, held the first day of each camp, lets everybody know that "here's where you go" and a head count is taken to make sure everyone is OK. In 1966, an adult and a youth were lost when the original mess hall burned. It was rebuilt about a year later, Griffin said, and rebuilt again in 1992.

"Everybody knew what to do Thursday. That's why we drill," Griffin said. "They acted quickly and got out of way."

Be Prepared is the Scouts' motto. The whole focus is to prepare people for crisis situations, Griffin said.

Thursday, the Scouts were taking part in rainy-day activities inside the dining hall.

One of the 15 parents was outside and saw the stream changing color, heard a noise like a jet and saw trees coming down the hill, Griffin said.

The group fled the area over a suspension foot bridge across the Wallowa River.

What likely is the heart of the former camp's appearance in many people's memory now looks like a steep, alluvial fan of rocks and mud.

However, this is only a small portion of the 90-acre site, much of which is located on an extremely steep hillside.

Accessibility will be the key issue, Griffin said. There is no longer access to the upper campsites across B.C. Creek. Access to the entire camp is also an issue. The council wants no general traffic up Pollock Road, in consideration of the neighbors. The long-term plan was to develop a parking lot on Scout property east of the river and access the camp across the foot bridge.

Now the new river channel moved out from under the bridge and around the east end of it through the Scout property.

- Camp history

The camp was established in 1938 after Pacific Power & Light donated land to the Scouts.

The camp was a regular Boy Scout summer camp through which merit badges could be earned. The camp even had a rifle range.

In 1980, water issues became a concern because of new county standards, Griffin said. The Scout council couldn't afford a new water system, Griffin said. The issues were resolved when the Scouts allowed the Wallowa Lake Water District put a water tank on Scout property. In turn, the Scouts were allowed use of the newly approved water system.

A full-scale summer operation could not be afforded after that, because the council had financial problems, Griffin said. Local people stepped forward to support the camp. Among them were Dale Mammon of La Grande, Jerry Perren of Enterprise and Ben Boswell of Lostine.

The camp has been used since for training courses, and two- to three-night

campouts. Griffin said the council realized there was a potential to do more, such as older teen high-adventure treks working with the Forest Service regarding low-impact, leave-no-trace camping.

The council covers eight Northeast Oregon counties and four Southeast Washington counties.

The youth who escaped the building Thursday were Heppner and Tri-Cities Webelo Scouts, 10 and 11 year olds preparing to become Boy Scouts.

Their escape route took them by the old A-frame cabin untouched by the slide. Some water ran around both sides of a big new log building being constructed, and apparently left it undamaged. The building was donated by Dr. Stacey Clark and husband Robert, of La Grande.

Persons wishing to contribute to rebuild the camp can contact W. Mark Griffin, Scout Executive, BSA Blue Mountain Council, 8478 West Gage Blvd., Kennewick, WA 99336; e-mail mgriffin@bsamail.org; telephone 800-821-4939.

Other damage included the B.C. Creek Bridge, washed out above the camp on the Chief Joseph Mountain Trail 1803. As a result, that trail is closed. The West Fork Wallowa River Trail 1810 to the high lakes basin and 1820 to Frazier Lake and Hawkins Pass remains open.

Forest Service engineers thought it unlikely that the B.C. Creek Bridge could be replaced this season, because of the processes to be completed, such as seeking funding. An engineer estimated the replacement cost to be in excess of \$100,000. The bridge was constructed with a helicopter, within the last 12 years, Griffin said.

About 1/8 mile below the Scout camp on the Wallowa River, two residences are encircled by water, because the river channel was moved to the east some 200 feet. It rejoins the main channel below the two residences.

Wallowa County Commission Chairman Mike Hayward, reviewing the site again Friday, said that it is up to the property owners and the Oregon Division of State Lands to decide if an attempt will be made to put the river back in its previous channel, now filled with debris.

Reach Fletcher at

[gletcher @lagrandeobserver.com](mailto:gletcher@lagrandeobserver.com)

STORM ROCKS WALLOWA LAKE AREA

Published: June 29, 2004



ROADBLOCK: A severe thunderstorm Monday scattered rocks across roads at Wallowa Lake. Erosion from hail and rain rutted driveways and trails at the lake.

The Observer/GARY
FLETCHER

ENTERPRISE — An intense thunderstorm Monday temporarily blocked trail riders, knocked out telephone service, and scattered rocks across roads at Wallowa Lake.

The slide was about 2 miles up the Aneroid Lake Trail. It was below the power dam and bridge, so horseback riders detoured around it via Pacificorp's road to the dam.

The north end of the county also got pounded with rain, said Matthew Marmor, Wallowa County emergency program manager.

Flash flood warnings were issued by the National Weather Service for the Wenaha area in the northwest section of Wallowa County. No damages have yet been reported.

About 11 a.m. a black cloud hung over Wallowa Lake for nearly an hour and marble-sized hail piled up.

The hail stripped needles off tamarack trees, cones off the Douglas fir and blooms from the flowers, a resident said.

The runoff turned into streams down the west moraine and through property such as Trout Haven resort.

The erosion rutted driveways and trails, and washed away some of the lakeshore bank.

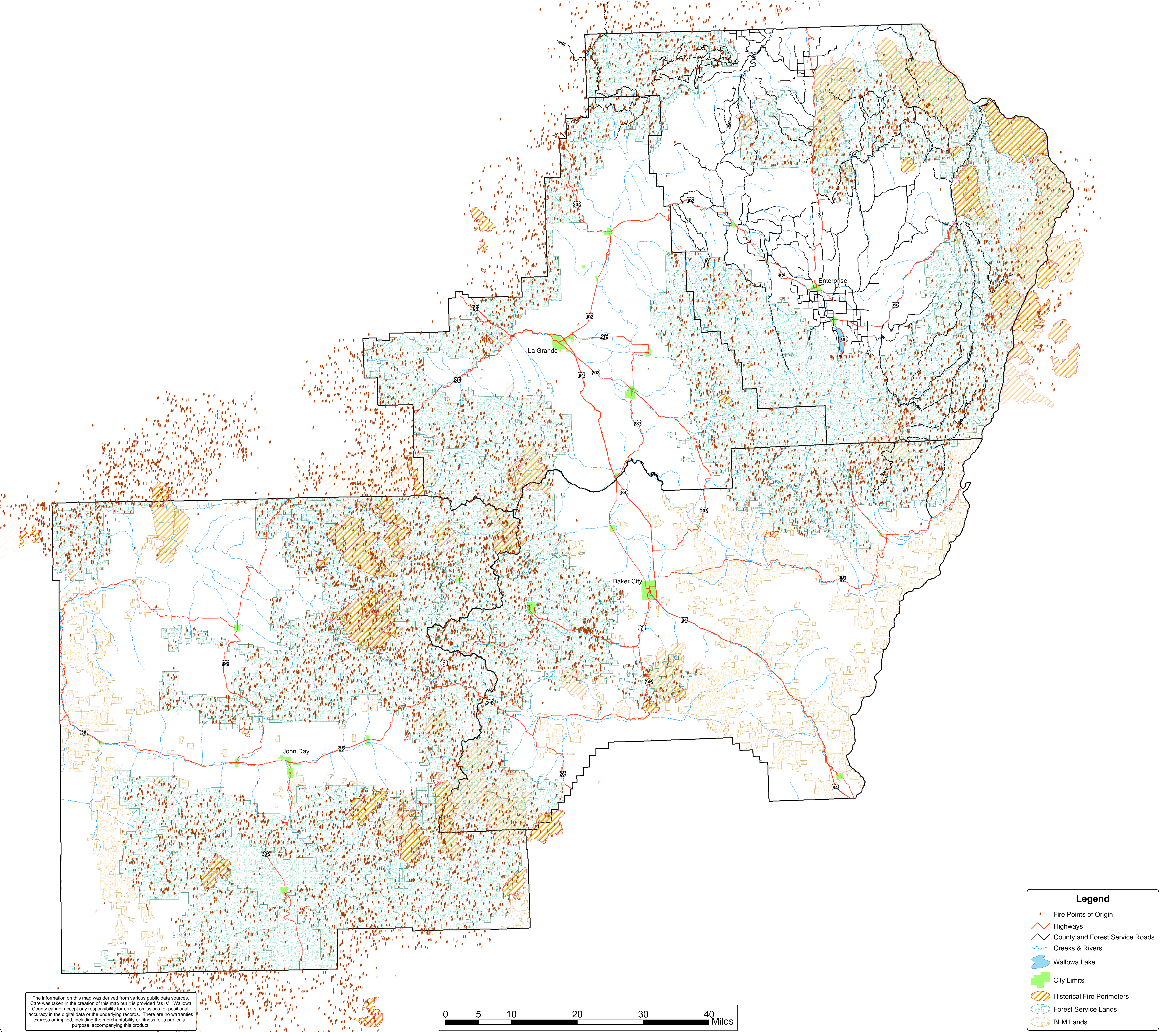
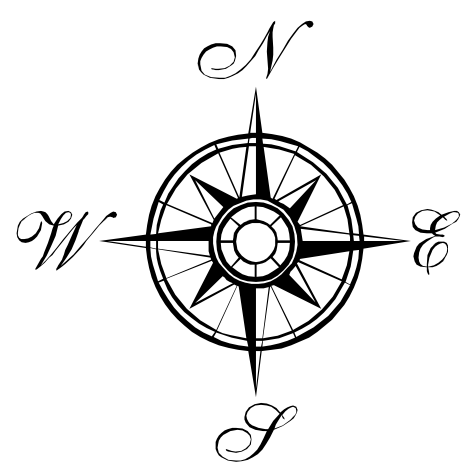
Lakeshore Drive, on the lake's west side, was cleared by 3 p.m., and telephone service was restored by about 4 p.m.

— Gary Fletcher

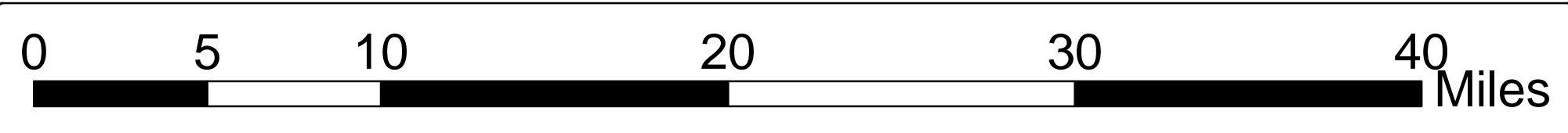
Hazard Annex

Wildfire

Natural Hazard Mitigation Area: Historical Fires



The information on this map was derived from various public data sources. Care was taken in the creation of this map but it is provided "as is". Wallowa County cannot accept any responsibility for errors, omissions, or positional accuracy in the digital data or the underlying records. There are no warranties express or implied, including the merchantability or fitness for a particular purpose, accompanying this product.



Legend

Fire Points of Origin

Highways

County and Forest Service Roads

Creeks & Rivers

Wallowa Lake

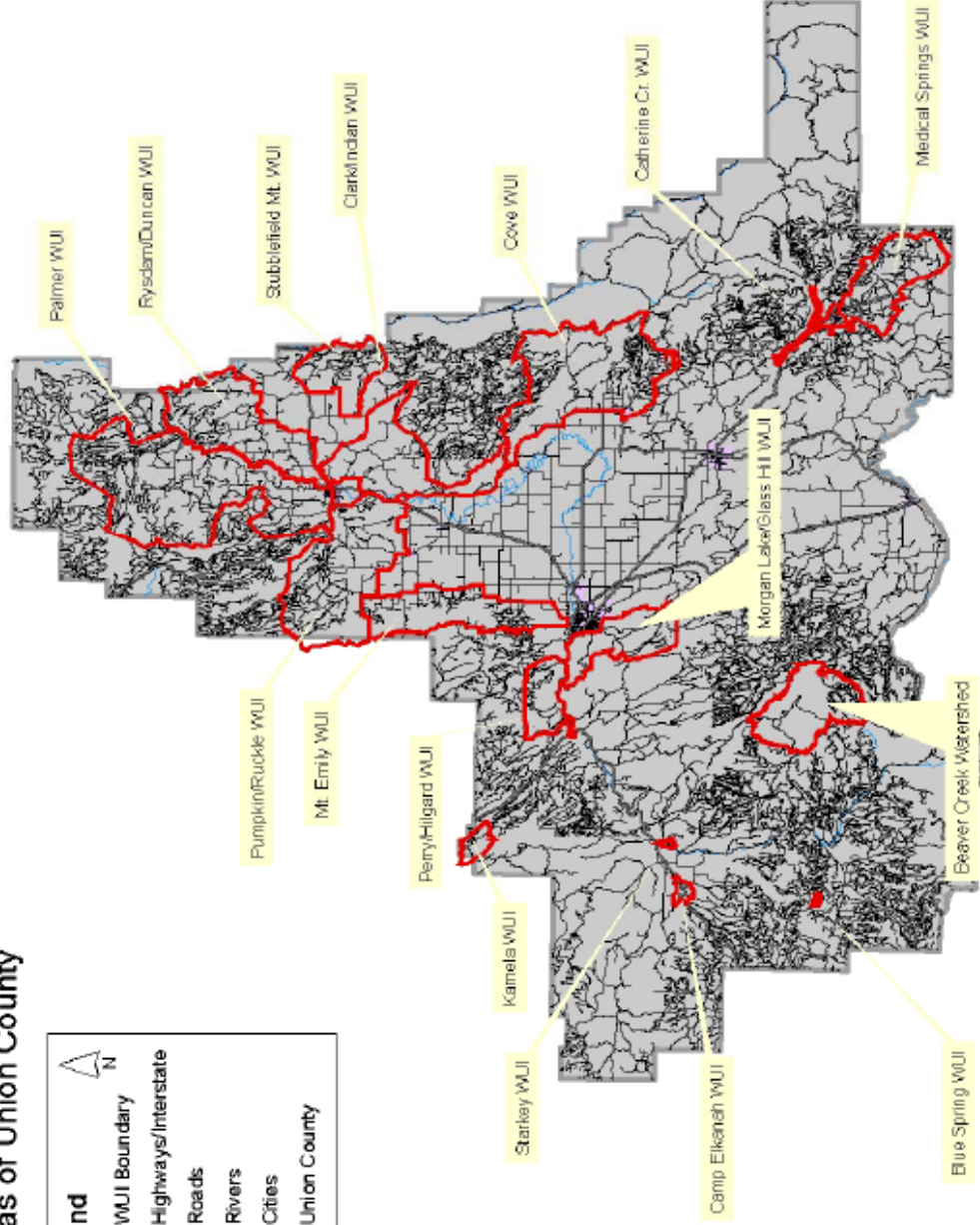
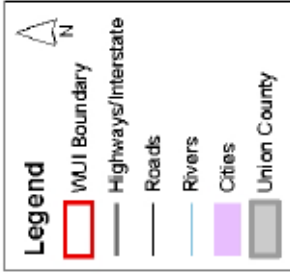
City Limits

Historical Fire Perimeters

Forest Service Lands

BLM Lands

WUI Areas of Union County



For Visual Display Only



Northwest Oregon District OES-49
 La Grande, OR
 July 25, 2005

Crews scramble as stray lightning sets off scattering of new fires

Published: August 7, 2007

By JAYSON JACOBY
Baker City Herald

The second batch of lightning bolts in as many days sparked at least eight wildfires in Northeastern Oregon Monday, but the high-voltage squalls also splattered rain on the flames.

Those showers, combined with lower temperatures and higher humidities, helped fire crews quickly douse each of the new blazes.

Meanwhile an older and much larger fire, which was ignited by lightning in late July in a wilderness area north of Granite, continued to grow Monday, albeit relatively slowly.

The biggest of Monday's new blazes, on Mount Emily north of La Grande, burned half an acre. A second fire, near the Minam Canyon overlook on Highway 82 east of Elgin, scorched a quarter-acre; the six other blazes were all smaller than one-tenth of an acre.

"We had some pretty heavy precipitation directly under the storm clouds," said Dennis Winkler, assistant fire management officer for the Wallowa-Whitman National Forest. "We actually had a little bit of good luck."

Good timing, too.

Forests and rangelands are so dry, Winkler said, that each lightning bolt is more likely than usual to kindle a fire. And a single thunderstorm can spawn dozens, even hundreds, of bolts.

"The fuels are ready to burn," Winkler said.

Rain, or just a boost in humidity, can impede a fire's spread for several hours, he said — enough time, in many cases, for firefighters to hack control lines around the guttering flames.

Conversely, lightning fires sometimes smolder, undetected, for days, before blossoming on a hot, dry, blustery afternoon.

"In that case they can be off to the races in a hurry," Winkler said.

The Trout Meadows fire certainly got ahead of fire crews on Friday.

Fire officials believe lightning sparked the fire on July 26, but it wasn't until Friday, eight days later, that the blaze attained any momentum.

In less than two days flames spread over more than 2,000 acres near the northeast corner of the North Fork John Wilderness, about 10 miles north of Granite and 12 miles west of Anthony Lakes.

The Trout Meadows fire grew by about 550 acres on Monday, to an estimated 2,710 acres this morning, said Paul Galloway, an information officer at the fire camp in Ukiah.

The fire moved south, downhill toward the North Fork of the John Day River, Galloway said.

As of this morning the blaze did not pose a threat to the river's runs of chinook salmon and steelhead, he said.

Firefighters have built control lines along about 15 percent of the fire's perimeter, and their goal is to keep the flames north of the river, Galloway said. About 550 people are assigned to the Trout Meadows fire, and the firefighting tab totaled \$1.2 million as of this morning.

To reduce damage to the ground, crews are not using bulldozers or other heavy equipment inside the wilderness, Galloway said. The Umatilla National Forest has, however, temporarily waived the ban on chainsaws in the wilderness so that crews can use saws as they build fire lines.

Sections of Forest Roads 52 and 51 north and east of the fire remain closed to the public, Galloway said. That means travelers can't drive from Granite or Anthony Lakes to either Ukiah or Starkey. However, Forest Road 73, the Elkhorn Drive Scenic Byway, remains open between Granite and Anthony Lakes.

Most of the North Fork John Day Wilderness north of Crane Creek Trail is closed to the public. A complete list of closures is posted on the Umatilla National Forest's Web site:
www.fs.fed.us/r6/uma/

Due to the extreme fire danger, restrictions on campfires, off-road vehicle driving and smoking remain in effect on public and private lands in Northeastern Oregon.

Other fires

- * Crawfish Lake, two miles southwest of Anthony Lake
- * Blue Springs Summit, along Granite Highway between Sumpter and Granite
- * Chicken Hill, five miles west of Anthony Lakes
- * Camp Carson Mine, three miles northeast of Anthony Lakes
- * Smith Mountain, north of Wallowa
- * Glass Hill, near Ladd Canyon

FIRES FORCE LAND-USE RESTRICTIONS

Published: July 9, 2007

By MIKE FERGUSON

mferguson@bakercityherald.com

A string of lightning-caused fires forced county officials to restrict use in the county's unprotected areas this morning and convinced federal officials to take similar action effective a minute after midnight Tuesday.

Three Baker County fires, including one in steep terrain near Unity, were still being monitored this morning.

Friday's lightning, which was concentrated in the southern portion of Baker County, started 13 area fires — nine in the Wallowa-Whitman National Forest, three on Oregon Department of Forest protected lands and one inside the North Powder Rural Fire District. Ten of those fires were contained or controlled at less than one acre in size, forest officials reported.

Two others — the Park Fire, a seven-acre fire a mile west of Granite Mountain in the East Eagle Creek area and the five-acre fire three miles west of Cornucopia near East Eagle Creek — were close to containment this morning, said Judy Wing, public affairs officer for the Wallowa-Whitman National Forest.

By this morning, the Ironside Complex fire on Ironside Mountain southeast of Unity had grown to nearly 700 acres, a spokeswoman for the Bureau of Land Management said. Two national Hot Shot crews were on the scene advancing to the interior of the fire this morning to help battle the fire burning in country with steep terrain with limited accessibility.

The fire burned early in the weekend in grass, brush and scattered juniper on private land protected by the Oregon Department of Forestry. Firefighters contained the blaze by Sunday using bulldozers, hand crews and ODF engines. The fire is being mopped up and patrolled by fire engines, according to Wing.

Upon the advice of the state fire marshal, Baker County Commission Chair Fred Warner Jr. put about 300,000 acres of unprotected lands into regulated use closure. While that's an annual event in Baker County — especially during drought years — it's a little early in the season, he said.

County commissioners will vote on the formal declaration during their regular meeting Wednesday morning.

Prohibited actions within the county's unprotected lands include:

- o Smoking while traveling, except in vehicles on improved roads, in boats on the water or in cleared areas.

- o Open fires, except in permitted burn barrels.
- o Debris burning, except in burn barrels.
- o Non-industrial chain saw use between 10 a.m. and 8 p.m.
- o Off-road use of any motorized vehicle, except on improved roads.
- o Mowing of dried and cured grass between 10 a.m. and 8 p.m.

Federal public-use restrictions take effect at 12:01 a.m. Tuesday, said Wallowa-Whitman Forest Supervisor Steve Ellis.

Matt Reidy, the Forest's fire management officer, said the restrictions are necessary because "long-range weather predictions indicate a continuation of hot, dry weather conditions" and "potential for large wildfires."

According to a U.S. Forest Service press release, public-use restrictions prohibit campfires outside of designated recreation sites. Liquified and bottle gas stoves and heaters may be used for cooking and heating.

Under the restrictions, motorized travel off developed Forest roads and trails is not allowed, except to get to a campsite within 300 feet of the road. At this time, there is no restriction on firewood cutting.

The public use restrictions for the Wallow-Whitman National Forest allow the use of campfires in the Eagle Cap Wilderness, with the exception of standard campfire restrictions in parts of the Wilderness.

A regulated closure on private land in northeast Oregon protected by the Oregon Department of Forestry will take effect at the same time federal restrictions apply.

Near Baker City, here are the federal and state recreation areas where campfires are allowed:

- o Anthony Lakes campground and picnic area.
- o Grande Ronde Lake campground and day use.
- o McCully Forks campground.
- o Millers Lane campground.
- o Mowich Loop picnic site.
- o Mud Lake campground.
- o Peavy Cabin.
- o Southwest Shore campground.
- o Union Creek campground and picnic area.

In the Unity area, campfires are allowed at the Anglers Guard station, Elk Creek campground, Oregon campground, South Fork campground, Stevens Creek campground, Wetmore campground and Yellow Pine campground.

Near Halfway, they're permitted in these places: Eagle Forks campground, Fish Lake campground, Lake Fork campground, McBride campground, Tamarack campground, and Twin Lakes campground.

For more information, visit this Web site: www.fs.fed.us/r6/w-w/

Red Mountain fire jumps control lines

Published: September 14, 2006

By JAYSON JACOBY

jjacoby@bakercityherald.com

Gusty winds on Wednesday invigorated the two wildfires burning in Baker County, but officials said the chilly rain that dampened both blazes overnight should help crews subdue the fires today.

"It's definitely good weather for firefighting," said Virginia Gibbons, a spokeswoman at the Red Mountain fire camp near the Anthony Lakes Highway.

Steve Butterworth, who's Gibbons' counterpart at the Clear Creek fire north of Halfway, agreed.

"Today's going to be a good day to knock the fire down," Butterworth said this morning.

Wednesday wasn't so good.

The blustery cold front that barged into Baker County from the north lifted airborne embers across control lines at the southeast corner of the 840-acre Red Mountain fire, Gibbons said.

Those embers ignited a blaze that spread across 30 acres Wednesday afternoon.

"The main objective today is to build a new line around that area," Gibbons said.

The 11,800-acre Clear Creek fire advanced across about 1,300 acres on Wednesday, and flames crept into the Fish Lake campground about 20 miles north of Halfway, Butterworth said.

Crews wrapped fire-deflecting foil around outhouses to protect the structures, he said.

Several air tankers and helicopters dumped fire-retardant and water on the fire as it moved east and northeast.

"We had quite an air show," Butterworth said.

The fire fizzled overnight, though, as the temperature plummeted and rain started falling about 2 a.m.

"We don't have a rain gauge, but the rain hitting my tent kept me awake for at least half an hour," Butterworth said this morning. "Things are really wet and cool."

The temperature at 5 a.m. was 39 degrees, and fog was draped over Fish Lake at 8:30, Butterworth said.

Fire officials have not canceled any of the road, trail and area closures around either fire.

Butterworth said he expects officials will re-open the road to Cornucopia within the next couple days, however. The Clear Creek fire no longer poses an imminent threat to the historic ghost town or to a brand-new 4,000-square-foot guest lodge, but firefighters have not removed the thousands of feet of hose that snake across the road, Butterworth said.

The Elkhorn Drive Scenic Byway remains closed in the Anthony Lakes area, Gibbons said.

FIRE CREWS CORRAL BLAZES

Published: August 18, 2007

UKIAH— Firefighters continue to contain the wildfires sparked in the mountains around Ukiah by Wednesday's lightning storm.

Friday fire crews were busy constructing fire lines around six of the 29 blazes burning on Umatilla National Forest and Oregon Department of Forestry acreage.

The remaining fires were in various stages of mop-up. Crews were actively extinguishing all burning materials to further prevent any escape fire. Many of the fires were discovered early and had relatively good ground access so that fire crews could take quick action on them before they became large fires.

Today, windy conditions are predicted with rain in the forecast for Sunday. Temperatures are expected to be 10 degrees cooler Sunday.

The status of the major fires that the fire crews were taking action on is as follows:

- **Owen Butte:** Several fires have burned together, and unburned fuels are present within the fire perimeter. Night crews conducted burn-out operations to secure the fire perimeter and consolidate multiple fires.
- **Hidaway:** Fire line has been built around the fire, and structural protection resources will be released today.
- **Sugarbowl:** Fire is completely lined and mop-up is continuing. Smoke in the afternoon may be visible due to interior islands of unburned fuels.
- **Camas:** Fire is lined and very few smokes are present. Highway 244 is the southern boundary of the fire.
- **Incident 244** (two miles north of Hidaway Springs) and Incident 246 (north of Owen Butte): Fires are lined and mop-up is very far along.
- **The Otter Creek Fire**, located near Round Meadows, grew to approximately 2,500 acres. The Umatilla National Forest decided to assign a separate group, the Blue Mountain Interagency Incident Management Team, to attend to the fire.

The Otter Creek Fire is near Otter Creek, about 14 miles southeast of Ukiah, and is burning in fairly steep, remote country. This fire has a high potential to grow. Firefighters are working against the difficulty of the terrain and the abundance of fuels. There are no structures threatened. The main concern is to protect vital fish habitat and popular hunting areas.

The public is asked to watch out for fire equipment on Road 46.

Due to extremely fire conditions, public use restrictions remain in effect and a complete campfire ban has been imposed on the following state and federal lands in Northeast Oregon and Southeast Washington: Umatilla NF, Malheur NF, Wallowa-Whitman NF, BLM lands in the Burns BLM District and Oregon State Parks in the Northeast Oregon ODF Protection area.

CREWS GAIN GROUND ON AREA WILDFIRES

Published: August 10, 2007

The southern fire line of the 3,570-acre Trout Meadows Fire 30 miles southeast of Ukiah is close to being connected.

Fire crews are constructing the line in some remote areas and must walk great distances into the North Fork John Day Wilderness, the Forest Service reported. To minimize the risk to the firefighters and to maximize their time along the perimeter of the fire, crews have been camping at Moon Meadows — about one mile from the southwest corner of the fire.

The Forest Service said helicopter support is critical in this remote area because of the numerous spot fires that have been discovered in the past few days and lower humidity that will increase the chance of additional ignitions.

The fire is 35 percent contained as 631 firefighters, five helicopters, 14 fire engines, nine water tankers and a dozer are working to suppress the fire. Crews are continuing to use minimum impact suppression tactics within the wilderness area. Full containment is expected Aug. 15.

Closures are still in effect, including portions of Forest Service Roads 51 and 52, due to firefighting traffic and heavy smoke in the area. Numerous road, trail and area closures are also in effect near the fire. The public is advised to visit the Umatilla National Forest web site, <http://www.fs.fed.us/r6/uma/> , for latest information.

Suppression results for the Battle Creek Fire near Joseph also looked good Thursday, but that fire is far from dead. The fire was calm Thursday with smoke emerging from heavy fuels. The potential for flare-ups exists when heavy fuels dry out.

This morning fire suppression efforts were turned over to a professional Type III organization. Resources remaining will be operating out of Memaloose, near Hat Point Lookout, where the incident command post will be situated. At 79,299 acres, the fire is 80 percent contained. A reduction in total personnel to 135, and the subsequent reduction in all resource categories reflect the smaller Type III organization.

Travelers are advised to use extreme caution while driving on Highway 39 due to hazardous conditions from heavy fire traffic.

Public and industrial restrictions remain in place. For specific details on closures and restrictions, go online to the Wallowa-Whitman web site at <http://www.fs.fed.us/r6/w-w/> .

CREWS CONTAIN ELGIN WILDFIRES

Published: August 9, 2007

Fire crews made good progress Wednesday with both the Gordon Creek and Beehive fires northwest of Elgin.

Crews focused on holding and improving control lines and began mop-up. The mop-up work is extensive on both fires due to the amount of downed material within the perimeters of the fires. Crews will continue to mop-up and monitor fires in the coming days.

The Gordon Creek Fire was contained at 17 acres, and the Beehive contained at five acres. The causes of both fires are still under investigation.

Oregon Department of Forestry officials have announced that due to the extreme fire hazard conditions in the area, additional restrictions on private industrial lands will go into effect at 12:01 a.m. Friday. These regulations prohibit the use of mechanized harvesters with high-speed rotary saws, tracked felling or skidding equipment, slash busting equipment and cable yarding systems between the hours of 1 and 8 p.m. local time, except when working at landings.

The public is reminded that a regulated closure is in effect on private land and public use restrictions are in effect on federal land. All burn permits issued by Northeast Oregon District have been canceled. In addition, other city, county and rural fire agencies may have cancelled open burning. Please check restrictions before conducting any activity on private land or on public land.

For more information, go online to the state or federal forests at websites www.odf.state.or.us/areas/eastern/northeast/default.asp or www.fs.fed.us/r6/w-w.

WILDFIRES FLARE UP NEAR ELGIN, RESIDENTS EVACUATED

Published: August 8, 2007

- Mardi Ford
- The Observer

Some rural residents northwest of Elgin were evacuated Tuesday when a fire broke out around 5 p.m., threatening several residences in the Gordon Creek area four miles out of town.

The initial attack on the fire was swift with a joint effort by crews with the Elgin, La Grande, Imbler, Cove and Union rural fire protection districts and the Sammyville Volunteers. The effort was aided by Oregon Department of Forestry resources including seven engines, three dozers, one helicopter, one air tanker and air attack.

The cause of the fire is undetermined, said Jamie Knight with the ODF. Knight also said evacuated residents did return to their homes last night.

The Gordon Creek Fire was 60 percent contained by this morning after burning approximately 15 acres. Full containment is expected sometime today with a Type III incident commander marshaling miscellaneous overhead support along with ground resources including two 20-person hand crews, four engines, two water tenders and a dozer.

Knight said crowning and torching fire behavior was still occurring and that mop-up efforts were challenging firefighters due to the heavily timbered overstory in the canopy. In addition, the ground is thick with dead and downed trees and other fuels, she said.

Interestingly, a second fire in the same area four miles northwest of Elgin was reported at the same time Tuesday. Responders to the Beehive Fire included two Elgin and one Cove rural fire district engines, three ODF engines and the landowner's dozer.

That fire has burned 3 acres in ponderosa pine with brush understory combined with some dead and downed material. Some individual tree torching was also observed. Although the fire is 90 percent contained, Knight said mop-up activities would be extensive because of the amount of material burning on the ground.

A Type IV incident commander managing three engines and an eight-person hand crew are assigned to the day shift for mop-up and patrolling established control lines.

The causes of both fires is under investigation. Knight wouldn't comment on whether the two were related. However, she repeated that the public needs to remember a regulated closure is in effect on private land and public use restrictions are in effect on federal land.

All burn permits issued by Northeast Oregon District have been canceled and the county has canceled open burning.

Other new fires in the area included eight from Monday's lightning storm. They were ignited in the Elkhorn Mountains, Mount Emily area and Minam vicinity — three on ODF-protected lands and five on the Wallowa-Whitman National Forest.

By Tuesday morning, initial attack crews had contained all of the fires, the largest of which reached one-half acre.

CREWS CONTINUE MAKING PROGRESS ON AREA WILDFIRES

Published: July 28, 2007

Aided by scattered rainfall in the past few days, fire crews continue to make progress containing diminishing wildland blazes across Northeast Oregon.

Two of the smaller fires in Hells Canyon's Battle Creek Complex, Grizzly Ridge and Deep Creek, were declared contained on Friday. Lightning started the fires July 14.

The Battle Creek Fire proper, listed at 60,977 acres, continues to expand to the north, but burnout operations have met with success along the boundaries.

Crews hope to confine the fire to the east side of Summit Ridge, and strive to check the burn's northern progress, forecasted at up to 2 miles an hour, in the vicinity of Somers Point, on the eastern edge of the Lord Flat Plateau.

The Monument Complex Fire, three miles northeast of Monument, continued to burn with Friday's drying fuels and increased winds. Nonetheless, the Northeast Oregon Interagency Dispatch Center (NOIDC) reports that "most of the fire ... is in mop-up status, and crews are working in 100-degree weather to extinguish all remaining hot spots within 300 feet of the fire perimeter."

The Monument Fire, sparked on July 13, is currently listed at 54,000 acres and 70 percent containment. Crews are focusing on stabilizing the soil in the burned area, according to the NOIDC.

Oregon Department of Forestry and Forest Service fire crews quickly contained the Pole Creek Fire, ignited by lightning July 26 four miles south of the Unity Reservoir.

Updated fire information may be accessed at www.inciweb.org.

Details on road closures and public use restrictions on the Wallowa-Whitman National Forest are listed at <http://www.fs.fed.us/r6/w-w/conditions/index.shtml>.

HELLS CANYON FIRES KEEP CREWS HOPPING

Published: July 21, 2007

- Ethan Schowalter-Hay
- The Observer

Hells Canyon is presently living up to its name, as wildfires rage on both sides of the Snake River.

Stoked by Friday afternoon's high winds and low humidity, the Battle Creek Complex and Poe Cabin blazes kept fire crews in the rough breaks country busy.

On the east side of the gorge, the Poe Cabin Fire, sparked by lightning on July 18, spread to around 12,800 acres, an increase of at least 8,000 acres since Friday morning.

The fire is burning six miles southwest of White Bird, Idaho. Its coverage extends from the Snake River to the west, Highrange Ridge to the north and Deer Creek Road to the south. Firefighters were temporarily removed from the scene Friday afternoon for safety reasons.

Active fire behavior such as torching, running, and spotting has been observed, and crews expect similar volatility with today's high temperatures, erratic winds, and low

relative humidity. The fire is currently listed at 0 percent containment.

Residents in Getta Creek and Deer Creek were evacuated Friday, and structures in the Twin Creek subdivision and the Pittsburgh Landing area are undergoing protective evaluation.

Road 493 to Pittsburgh Landing is closed except to fire-related traffic. And in the Nez Perce National Forest, Boise Trail Road 420 and Crooked Road 672 are closed, as is the Bureau of Land Management's Hammer Creek Campground.

Strong winds from the southwest also enlarged Oregon's Battle Creek Complex Fire, composed of the Battle Creek, Grizzly Ridge, and Deep Creek burns. The current size listed is 27,398 acres, but the Pacific Northwest Incident Management Team reported this morning that an infrared flight late Friday "indicated a significant increase in acreage."

Wind-whipped fire spread into feeder canyons north of Saddle Creek and across the Hat Point Lookout area, although the Incident Management Team reported the lookout itself "was not lost." Along the southern boundary, fires spread into Buck Creek.

Some structures are threatened; a crew will wrap the Sand Creek Cabin today.

Crews hope to keep the fire contained within Hells Canyon proper, and thus concentrated their efforts along Summit Ridge, the long divide between the Imnaha and Snake rivers.

The Grizzly Ridge and Deep Creek fires, the smaller components of the complex, did not spread notably Friday.

Despite "unprecedented levels of (fire) intensity," the Incident Team stated that "good progress is being made and containment is expected on Aug. 20."

The complex is currently at 15 percent containment. Firefighters from 21 states are assisting.

The Trout Creek Fire, 20 miles southeast of Union in the Wallowa Mountains, is still listed at 514 acres and 45 percent containment. But a large spot fire along the South Fork Catherine Creek drainage, when mapped, will increase the coverage. Crews are expected to concentrate on this spot fire today.

The Wallowa-Whitman National Forest reports that the Cottonwood Fire about 30 miles northeast of Wallowa is now contained.

Closures remain in effect for the Wallowa-Whitman National Forest. They are listed at www.fs.fed.us/r6/w-w/conditions/orders/index.shtml.

There are currently 313,943 acres ablaze in Oregon. The largest fire remains the Egley Complex in the high desert near Burns.

Updated fire information may be accessed at www.inciweb.org.

WILDFIRES KEEP CREWS HOPPING

Published: July 17, 2007

- Mardi Ford
- The Observer

Oregon currently has the dubious distinction of leading the nation's wildfire incidents with 15 large fires burning over more than 197,000 acres.

Four of Oregon's new large fires reported Monday include two in the Wallowa-Whitman National Forest — the Trout Creek Fire and the Battle Creek Complex.

Twenty miles southeast of Union, the Trout Creek fire reportedly grew to approximately 380 acres Monday afternoon. However, Wallowa-Whitman Public Affairs Officer Judy Wing said conditions are so smoky it is hard to get an accurate report on acreage.

The fire is burning on the east side of Trout Creek and northwest of West Eagle Meadow in patchy sub-alpine fir in three drainages and on ridge tops.

Monday afternoon District Ranger Kurt Wiedenmann confirmed the fire had crossed the northeast line into the Eagle Cap Wilderness Area.

Wednesday, the Rocky Mountain Management Team will be at the fire camp situated at Taylor Green. The team will transition into management of the fire, Wiedenmann said.

The Battle Creek Complex of four fires stretches from approximately 28 miles northeast of Enterprise to southeast of Hells Canyon Dam on the Idaho side. It is reportedly at 2,945 acres with zero containment. These fires are burning in timber and grass. Hydroelectric facilities and power lines are now threatened. Base camp for the Central Oregon Type I Interagency Management Team managing the fire is at the Wallowa County Fairgrounds.

Crews from the Oregon Department of Forestry are in steep, rugged terrain about 30 miles northeast of Wallowa where the Cottonwood Creek Fire is now estimated at 3,600 acres. That fire was started by lightning Friday evening and quickly spread through grass, brush and scattered timber.

An ODF incident management team headed by Tom Savage took over management of the fire Sunday so firefighters from the Wallowa Unit could return to regular fire patrol and control responsibilities.

The team's goal is to establish and secure fire control lines and stop the fire's spread. By Monday afternoon, the fire perimeter was 15 percent contained due to the efforts of 302 personnel, including 13 hand crews, two fire engines, three bulldozers and three helicopters.

For public safety, temporary road and trail closures have been put in effect. It is anticipated more closures, including some areas, will be added near the fires. The most current closure information is can be found online at <http://www.fs.fed.us/r6/w-w/conditions/orders/index.shtml>.

AREA WILDFIRES HEAT UP

Published: July 16, 2007

- Mardi Ford
- The Observer

The smoky haze over the Grande Ronde Valley indicates just how busy fire crews were during the hot, dry weekend, as several new lightning fires grew significantly in size.

Eleven fires were reported on Saturday — one on both state and national forest land, two on land protected by Oregon Department of Forestry and the rest on land protected by the Wallowa-Whitman National Forest.

The 2,500-acre Cottonwood Creek Fire is burning at the confluence of Horse Creek and Trail Creek, 35 miles north of Enterprise.

The lightning-caused fire began Friday. Based out of the Thomason Meadows Guard Station, ODF Fire Team No. 1 began management of the fire Sunday afternoon. They report it is moving fast in steep terrain and exhibiting active fire behavior with running, torching and spotting.

Twenty miles southeast of Union, the 100-acre Trout Creek Fire is burning on the east side of Trout Creek about 2 miles northwest of West Eagle Meadow. La Grande District Forest Service crews report it is burning in patchy sub-alpine fir in drainages and on ridge tops and is moving northeast toward the Eagle Cap Wilderness.

A 30-acre fire started by lightning 10 miles southeast of La Grande was staffed by local ODF engines and crews who lined the fire Saturday and worked on mop-up Sunday.

In addition, the Battle Creek Complex of four fires totaling 2,350 acres is located southeast of Hells Canyon Dam on the Idaho side. Base camp for the Central Oregon Type I Interagency Management Team is at the Wallowa County Fairgrounds.

On the Umatilla National Forest, the 1,000-acre Juniper Canyon Fire 40 miles west of Milton-Freewater was 75 percent contained as of Sunday.

The Pendleton fire dispatch center also reports that a number of lightning-caused fires have merged into one large fire burning on 21,000 acres of Umatilla National Forest 15 miles north of Monument. And the Bear Creek Fire on the South Fork of the Walla Walla River has grown to 75 acres.

HIGHWAY 3 REOPENS AFTER BEING CLOSED BY WILDFIRE

Published: September 2, 2006

ENTERPRISE — The north end of Highway 3 in Wallowa County has been reopened to traffic, following closure because of a forest fire.

Motorists, however, are being urged to use extra care on the route because of the presence of fire crews and equipment. They were also being asked to use alternate routes when possible.

The north end of the highway was closed Tuesday afternoon near the Washington State border to protect travelers during initial fire fighting operations for the Applegate Fire. ODOT said the highway was reopened about 8:30 p.m. Thursday.

ODOT and the Oregon Forestry Department will monitor potential fire related hazards and use flaggers and pilot cars during the day when fire fighting operations are taking place and equipment may be on the highway.

Travelers are advised to plan for extra travel time while taking this highway.

Flaggers and pilot cars will be used as long as necessary to help reduce the risk to firefighters and motorists, said Mike Buchanan, ODOT District 13 manager.

ODOT advised that while the route is scheduled to be open during the Labor Day weekend, the highway could be closed again without notice, if conditions worsen.

For updated information on this highway and other current travel information throughout Oregon, visit www.tripcheck.com, or call the toll-free Oregon road report at 511, or 1-800-977-6368.

The Applegate Fire, near Flora along Highway 3, started Tuesday. By Friday, it had grown to 169 acres. At 11 a.m. Friday, it was estimated to be 70 percent contained.

SHARP'S RIDGE FIRE CUTS LOOSE

Published: August 22, 2006

A wildfire reported Saturday, burning on both Umatilla and Malheur National Forest lands, has grown to approximately 500 acres.

Believed to be a holdover from a lightning strike, the Sharp's Ridge fire is 30 miles southwest of Ukiah and 26 miles northeast of John Day.

Due to the steep terrain, heavy accumulation of dead and down trees and limited access for ground resources, the fire is zero percent contained.

With Monday's weather forecast of high temperatures, low humidity and dry lightning, forest officials are expecting significant fire behavior.

The fire is burning in the Jumpoff Joe Roadless Area and Vinegar Hill Indian Rock Scenic Area. A lookout and campground are threatened.

Roads north of the Middle Fork of the John Day River, in the Susanville area, are temporarily closed due to fire activity. Road closures in the Desolation area may impact hunters' plans for the upcoming opening weekend of archery season. Hunters should check with the appropriate Forest Service office for updated closures and restrictions before heading out.

The Malheur National Forest roads north of the Middle Fork of the John Day River, in the Susanville area, that have been temporarily closed due to fire activity include Forest Roads 45, 4550, 2090 along Big Creek, 893 along Mosquito Creek, road 914 and road 045. These roads are closed beginning at their junction with County Road 20.

Umatilla National Forest roads in the Desolation area temporarily closed due to fire activity include portions of Forest road 10 along Desolation Creek and all National Forest Road 10 collector roads along that road segment. Umatilla National Forest trail 3026 in the Desolation area is also temporarily closed.

The Central Oregon Incident Management Team No. 2 will assume management of the Sharp's Ridge fire today. Local initial attack resources will be released and made available to fight newly reported fires.

Over the weekend, three 20-person crews and two dozers were ordered to assist the two 20-person crews, smokejumpers, rappellers, two dozers and skidgen assigned to the fire Sunday.

Aerial support continues with multiple heavy air tanker and single-engine air tanker retardant drops and helicopter bucket work.

On the Wallowa-Whitman National Forest, lightning activity during the weekend started 10 small fires all less than one acre in size, except one 50-acre fire in the north end. That fire is burning four miles northwest of the Billy Meadows Guard Station.

Crews are working to establish a perimeter around the fire. Containment is expected today.

TWO SMALL WILDFIRES BURNING NORTH OF WALLOWA

Published: August 19, 2006

WALLOWA — Two wildfires are burning on either side of the Grande Ronde River north of Wallowa.

The Harlow Springs 25-acre fire is 21 miles north of Wallowa.

It was reported about 5 p.m. Thursday, and containment was estimated at about 25 percent as of Friday afternoon.

This fire on the north side of the Grande Ronde River on ODF-protected lands, along with the nearby Sickfoot Fire on the south side of the river, were caused by lightning strikes Thursday.

The fire, managed by the Oregon Department of Forestry's Wallowa Unit with assistance from other ODF resources, is mid-slope in steep terrain. On the fire Friday were eight rappellers, two 10-person inmate crews, one 10-person U.S. Forest Service hand crew, a strike team of USFS severity engines and two tenders.

Thursday, two helicopters and an air tanker, in addition to two engines, two USFS hand crews and eight rappellers, were used on the fire. Total personnel on the fire is 55.

The Sickfoot Fire, meanwhile, is 20 miles north of Wallowa along the south side of the Grande Ronde River.

The 16-acre fire on ODF-protected lands was contained at about midnight Thursday. It was reported about 4 p.m. It was managed by ODF's Wallowa Unit. Resources on the fire included a dozer, five engines, a helicopter and a 10-person inmate crew. Rural fire departments also provided assistance. Working on the fire Friday were six local severity engines, one tender and one inmate crew.

On the Wallowa-Whitman National Forest, meanwhile, firefighters have controlled the six lightning fires.

New lightning activity over Thursday night started four fires on the Wallowa-Whitman National Forest and five fires on private lands.

Fire crews reported quickly to all the fires. Two of the fires on private land were suppressed with the help of an air tanker, two helicopters, and a single engine air tanker from Oregon Department of Forestry. Firefighting resources continue suppression and mop up work on two remaining fires. The fires ranged in size from one-tenth of an acre to 20 acres.

The fire locations are:

- Imnaha River vicinity, one mile north of the Imnaha Fish Weir, Hells Canyon NRA

- Dead Horse Ridge, eight miles southwest of Imnaha, ODF-protected land
- Cayuse Flat area, off Hat Point Road, Hells Canyon NRA
- West Eagle Meadow vicinity, La Grande Ranger District
- Flora vicinity, ODF-protected land
- Eight miles west of Sled Springs, Wallowa Valley Ranger District
- Two miles south of Sled Springs, ODF-protected land

WILDFIRE THREATENS TO EXPLODE

Published: July 29, 2006

RICHLAND — Firefighters at the Foster Gulch Complex expect wind gusts up to 40 miles per hour this afternoon.

Extremely dry fine fuels and wind driven events will allow for perimeter growth in all directions, the fire incident command expects.

With high wind gusts, fire brands could be carried at least a half mile ahead of the fire, incident command says.

The Foster Gulch Complex, which includes the Foster Gulch Fire about three miles east of Richland, and the McLean Fire about 12 miles northeast of Halfway, had reached 34,487 acres early this morning.

The 600 firefighters on scene had the complex about 20 percent contained, incident command reported.

Friday, high temperatures, low humidities, large quantities of available fuel and challenging terrain contributed to active fire behavior. The Foster Gulch Fire spread farther to the northeast in the steep, broken ground west of the Snake River.

Today firefighters plan to patrol around all divisions of the fire. They will continue with Pine Creek and Oxbow Village structure protection, mopping up 300 feet around structures from Oxbow Village to Homestead. There will also be continued structure protection in the Brownlee Reservoir area and along Highway 71.

Crews are continuing to burn out and look for suppression opportunities in the timber area from Hess Saddle to the west.

The weather forecast for today is for continued warm, dry conditions.

Winds are expected to be terrain driven and switching to stronger southwest winds 12 to 17 miles per hour with possible cumulus cloud buildup.



Firefighting Supplies Asap:
Chelsea Herron, left, and Jared Blakely of La Grande and other La Grande Fire Cache personnel get a shipment of supplies headed for the Foster Complex fire in order Friday. As of this morning the Foster Complex fire, a combination of the McLain Creek and Foster Gulch fires about 70 miles east of Baker City, had burned over 34,000 acres and was listed at 20 percent containment.

Chris Baxter/The Observer

FIRE BURNS 450 ACRES NEAR MT. HARRIS

Published: August 8, 2005

Mardi Ford

Staff Writer

A wildfire that started Sunday afternoon in the Clark Creek and Indian Creek area 15 miles northeast of La Grande has burned an estimated 450 to 500 acres of grass, brush and agricultural fields, and approximately 100 acres of timber in the vicinity of Mount Harris.

The fire threatened at least three ranches, residences and numerous structures, according to Oregon Department of Forestry Northeast Oregon District Forester John Buckman.

The call for assistance to the ODF was made at 1:45 Sunday afternoon by the Imbler Rural Fire Protection District. Also responding were rural fire departments from Elgin, Cove, La Grande and Union, which provided structure protection, five dozers and several crews for line construction.

"It's too rocky in some areas to get a line in, so I don't want to say the fire has been contained, but we've stopped the spread," Buckman said.

By Sunday night, firefighters had made significant progress in limiting the spread of the fire. Aerial resources included three air tankers and three helicopters. Air tankers dropped 14 loads of retardant on the fire to keep it from spreading to nearby homes and private timber.

Buckman said it was the team effort of all those responding that kept the fire from getting out of control.

"They hit it hard and aggressive. You look to the north and you can see that column from the big fire in northeast Washington. Jumping right on it kept this one from getting out of control," Buckman said, referring to the School Fire, a wildfire 16 miles south and west of Pomeroy, which has burned over 32,000 acres.

At 7 this morning, a meeting was held at a fire camp at Imbler High School to plan the strategy for combatting the fire. According to a press release by the ODF, a Type III incident team will manage the fire with approximately 160 firefighters on the incident. The objective will be to secure the line and continue structure protection in the area. Buckman said he hoped to have the fire contained early today or tomorrow. He also said crews will be fighting this fire for two or three days before mop up begins. A helicopter will remain on the scene to provide water-bucket support.

At this point, Buckman said, the cause of the fire is still unknown, and he reminds the public that fire danger is extremely high.

Elsewhere, the Mule Peak fire in the Wallowa-Whitman National Forest shows the 1,150-acre fire is 25 percent contained. This fire is 20 miles southeast of La Grande. Mule Peak Lookout, outbuildings and endangered species habitat remain threatened. Steep terrain and heavy subalpine fuels continue to hamper containment efforts. Short fire runs with short range spotting and isolated torching continued.

Other fire activity reported by the ODF that took place this weekend included several lightning fires in Baker County as a result of a storm that moved across the area Saturday afternoon and evening and a half-acre incident in Umatilla County in the East Birch Creek area.

Weather forecast for Monday includes a red flag warning for dry lightning — increased fire potential. The public is encouraged to heed the regulated-use closure that is in effect on all private and state-protected land within the Northeast Oregon District, which includes no smoking, no open burning unless a valid burn-barrel permit is in place, no wood cutting between the hours of 1 and 8 p.m., and no campfires unless in a designated area.

MULE PEAK FIRE GROWS TO 800 ACRES

Published: August 1, 2005

Bill Rautenstrauch

Staff Writer

Wildfire continued to race through the Wallowa-Whitman National Forest today, with crews and equipment battling blazes in Union, Wallowa and Baker Counties.

The Mule Peak Fire, burning in rugged country 20 miles southeast of La Grande, has grown to over 800 acres.

In Wallowa County, meanwhile, initial attack crews were mobilized to fight seven fires ignited by lightning Sunday.

And in Baker County, crews were getting the upper hand on the Burnt River Complex.

At about 6 p.m. Saturday there was a flare-up of the Thief Valley rangeland fire near North Powder. Rural departments responded and brought the flareup under control by 8:30 p.m. The Thief Valley fire burned 3,000 acres before it was brought under control Friday.

According to reports from Wallowa-Whitman National Forest Public Affairs Specialist Angelica Johnson, a Type II Interagency Incident Management Team took command of the Mule Peak fire about 6 a.m. Sunday.

An incident command post was established at the Union High School baseball field and a spike camp was set up at Taylor Green on Forest Road 77.

Johnson said the fire, fueled by heavy subalpine fir, was burning in very steep country.

Some torching of trees and spotting was observed Sunday between 11 a.m. and 2 p.m. when the fire was most active.

By Sunday afternoon three Hot Shot crews, nine contract crews, two helicopters, two air tankers, 12 engines, two dozers, overhead personnel and camp crews had been mobilized to fight the blaze.

"Firefighters continue to make good progress in constructing fire lines," said Johnson.

Due to hazards associated with the fire, Forest Roads 77 and 7787 are closed to the public.

Forest Road 77 is closed from the junction of Highway 203 to its junction with Forest Road 7755. Forest Road 7787 is closed from the junction of Forest Road 7785 to the end at the Buck Creek Trailhead.

Forest visitors are asked to use alternate routes to the Eagles Cap Wilderness, such as East Eagle Trailhead, Main Eagle Trailhead, North Fork Catherine Creek Trailhead and the Moss Springs Trailhead.

Little information on the Wallowa County fires was available by press time this morning. Johnson said firefighting efforts were in the early stages. She said Sunday's lightning storm was accompanied by between .45 and .85 inches of rain in spots.

Meanwhile in Baker County, the Blue Mountain Interagency Fire Team is managing the Burnt River Complex under a unified command between the Wallowa-Whitman National Forest and the Oregon Department of Forestry.

Crews appear to have a handle on the fires, which are burning on about 600 acres. All the fires are contained, said Johnson.

"Control lines were built on the remaining fires Sunday, and mop-up is in progress," Johnson said.

The fires are burning in the area west of Black Mountain, Forest Road 11 and near Highway 26 west of Unity. The incident command post is located at the fairgrounds in Sumpter.

A 150-acre fire on Saw Flour Flat was of primary interest, as was a 35-40 acre Mid Fork Burnt River blaze.

One helicopter was dividing duty between the Burnt River Complex and the Mule Peak fire Sunday.

Johnson said the Burnt River Complex fires are burning in widely dispersed locations and none threaten homes, major recreation areas or communities. All recreation facilities remain open in the area.

Firefighting resources are split into day and night shifts so that suppression efforts continue around the clock.

The public is asked to watch out for fire equipment, and to use extra caution when driving on roads near the fire, including Highway 7 and Oregon Highway 26 between Unity and John Day.

In other fire-related news, the Wallowa-Whitman National Forest is monitoring one small fire in the Eagle Cap wilderness and two others in the Seven Devils Wilderness within the Hells Canyon National Recreation Area in Idaho.

Public-use fire restrictions are in effect on the Wallowa-Whitman, Malheur and Umatilla National Forests.

On the Wallowa-Whitman, the restrictions apply to the use of campfires, smoking and motorized travel.

The Oregon Department of Forestry, Northeast Oregon District, has a regulated closure in place.

Restrictions include having campfires in designated places only, no smoking outside vehicles, and a prohibition on non-industrial chainsaw use between the hours of 1 and 8 p.m. The use of ATVs is prohibited on unimproved roads.

Beginning today the Industrial Fire Precaution Level will change to Level III on the Whitman and Emily IFPL units. The Wallowa IFPL unit will remain at Level II.

IFPL restrictions apply to industrial operations.

WILDFIRE BLOWS UP

Published: July 30, 2005



The Mule Peak fire was on the march at approximately 7 p.m. Friday. The fire is a result of a Thursday morning lightning strike and is burning in the upper headwaters of the South Fork of Catherine Creek. It is approximately 1/4 mile below Mule Peak Lookout, which was evacuated Friday evening by helicopter.

U.S. FOREST SERVICE photo

T.L. Petersen

Staff Writer

By the end of the day Friday, the controlled 3,000-acre fire near Thief Valley wasn't even on the radar of Northeast Oregon firefighters.

They had much bigger problems.

According to John Denne of the Wallowa-Whitman National Forest, the Mule Peak fire, about 30 air miles from both La Grande and Baker City, had jumped from between five and seven acres early Friday, to 500 acres of moving hot wildland fire during the day.

And fire analysts expected it to keep growing today, possibly threatening the public's access into the Eagle Cap Wilderness Area.

A Type 2 incident management team, with more fire-fighting resources, was scheduled to arrive today to set up a base at the Eastern Oregon Livestock Show Grounds in Union, Denne said.

"That fire will be putting up smoke this afternoon," he warned area residents, although no private land

or residences are threatened.

Three fires reported Friday to be burning without suppression efforts in the Eagle Cap Wilderness Area, separate from the Mule Peak fire, are considered to be "producing a resource benefit," Denne said this morning, who called those fires "a management tool."

But that's not the case at Mule Peak, where two 20-person firefighting teams were at work Friday afternoon.

Also working to suppress the fire is an air tanker from the La Grande fire base dropping retardant, helicopters with water and retardant buckets, and U.S. Forest Service hot shot crews.

"It's very steep terrain," Denne said this morning. "The fire is now in the Sand Pass Creek drainage, and in the South Fork of Catherine Creek drainage, moving east, southeast."

Friday evening two people stationed at the Mule

Peak Lookout were evacuated by helicopter.

The fire is burning at elevations of 5,500 to 6,000 feet, Denne said.

With the direction the fire is moving, it is threatening access to the wilderness area in the West Eagle area, not far from the Boulder Park and Two Color public areas popular with summer campers, hikers and fishermen. Some access roads are likely to be closed during the weekend.

The Oregon Department of Forestry and the U.S. Forest Service will keep people advised of fire-related closures and smoke dangers via local radio stations, Denne said.

He advised that travelers heading to the wilderness areas keep listening to the radio.

And, "we're contacting land owners in the area" about fire danger, he said.

"People may see active fire later today," if they're watching that area, he said.

A second major concern locally, he said, is the so-called Burnt River Complex of fire, a group of about 12 smaller fires burning north, west and east of Unity.

While the fires are not threatening road closures today, there may be smoke problems along Highways 7 and 26 for travelers.

Bringing in state resources today, Denne said, is in part being done so that some local resources can be kept ready for initial attacks on new fires.

There is worry about winds, dry conditions and the threat tonight and Sunday of more hot weather — highs in La Grande are expected to be 97 today and 99 Sunday. There is a 30 percent chance of a storm moving through the area, bringing lightning and a larger area of dry lightning, Denne said.

Caution, he said, is going to be key for those outdoors in the next few days.

"The story might be significantly different by Monday morning."

CREWS MAKE GAINS ON WALLOWA COUNTY FIRES

Published: August 25, 2003



LOTS OF SMOKE: The 9,961-acre Two Corral Creek Fire two miles west of the Snake River is 20 percent contained.

Photo/USFS

JOSEPH — Firefighters have made significant gains on the Lightning Creek Complex fires but are holding their breath to see if winds of a predicted front for tonight will cause any more problems in the Wallowa County wildfires.

"We hope things will stay quiet out there," said Steve Butterworth, fire information officer of the U.S. Forest Service Blue Mountain Incident Command Team headquartered at the Joseph rodeo grounds.

The team is in charge of the 414 people assigned to the Lightning Creek Complex, four large fires in three general areas from the Harl Butte Lookout area to Hass Ridge and the Snake River. Firefighting costs so far are estimated \$1,144,121.

The 9,961-acre Two Corral Creek Fire two miles west of the Snake River is 20-percent contained.

The La Grande Hotshot Crew is working spots in timber along the northern perimeter. Structure protection is complete for Forest Service structures at the Pittsburg Administrative Site, and the Wisnor Place and Brockman Ranch on Temperance Creek, all on the Oregon side.

Two engine crews are stationed on the western perimeter. Helicopter water drops are targeted for the southern perimeter.

The 4,872-acre Hass Ridge Fire on the ridge between Lightning Creek and Horse Creek is 55 percent contained. Hand crews and several engines, with helicopter support, are working on hot spots, containment and mop-up.

The 213-acre Grouse Creek Fire and the 134-acre Butcherknife Fire are both 100 percent contained.

About 16 other spot fires have been put out or have been contained by the Wallowa-Whitman National Forest initial attack crews.

That includes two sleepers that were located over the weekend.

Crews are mopping up a one acre fire at Owl Creek on the Divide, and two rappellers are expected to finish up today on a spot fire at Mount Moriah in the Eagle Cap Wilderness.

LIGHTNING CREEK FIRES GROW TO 9,000 ACRES

Published: August 22, 2003



FIRE CAMP READIED: Chow tents were set up Thursday by Bishop Services Inc. of Goldendale, Wash., in preparation to feed the anticipated 300 people who will be staying at the fire camp situated at the Joseph rodeo grounds.

The Observer/GARY FLETCHER

By Bill Rautenstrauch

Observer Staff Writer

Cooler weather with some moisture today should help fire crews contain four wildfires burning about 9,000 acres in Wallowa County.

"We're expecting a quarter to a half inch of rain," said Nick Lunde of the U.S. Forest Service. "Most of the fires are burning in grass, so we'll probably see a slowdown."

The Blue Mountain Incident Management Team was in charge of battling the fires, which comprise the Lightning Creek Complex, Lunde said.

Those blazes include the 6,500-acre Two Corral fire in the Hells Canyon National Recreation Area; the Haas Ridge fire, a blaze estimated at between 1,500 and 2,000 acres between Horse Creek and Lightning Creek; the 120-130-acre Butcher Knife Creek fire east of Lightning Creek, and the 120-acre Grouse Creek fire.

About 320 firefighters were involved in the overall effort this morning, with more expected to check in today, Lunde said. A fire camp has been set up at the rodeo grounds in Joseph. More resources, including engines and helicopters, were being brought in.

The Two Corral Fire was burning about two miles west of the Snake River near Two Corral Creek in the Hells Canyon NRA.

The Blue Mountain Incident Management Team reported this morning that the blaze had moved south to Hominy Creek, north to the South Fork of Durham Creek, and had crossed over into the head of Summer Creek.

Two hand crews and engines were assigned to the fire today.

The Haas Ridge Fire, also in the HCNRA, grew southward Thursday. Today, six, 20-person hand crews were assigned to the fire.

The Grouse Creek fire is burning about a mile southeast of the Harl Butte Lookout in the Wallowa-Whitman National Forest. Four hand crews and engines were

doing mop-up on that blaze this morning.

An intensive effort was being mounted to protect structures on private land, especially in the area of the Haas Ridge fire. So far, no structure damage has been reported.

About eight other small fires that were staffed Tuesday and Wednesday were either contained or controlled, said Lunde.

Meanwhile, the Hazel Mountain Fire in the Eagle Cap Wilderness was being allowed to burn as a Wildland Fire Use type fire. It had grown to about 500 acres by this morning.

"It made a little movement last night but we don't think it will do much today," said Lunde.

Travelers are advised that the Hat Point Road and the Harl Butte Road are closed. The Imnaha River Road below Imnaha is closed at Fence Creek. Travel off-road in most forest areas is prohibited as well.

Campfires are forbidden on public and private lands, though they are still permitted in the Eagle Cap Wilderness. Use of chainsaws and generators is also prohibited.

Gas stoves are permitted when used on a three-foot area barren of flammable materials.

All industrial operations on the Wallowa-Whitman forest have been curtailed.

HIGHWAY 3 REOPENS AFTER BEING CLOSED BY WILDFIRE

Published: September 2, 2006

The La Grande Observer

ENTERPRISE — The north end of Highway 3 in Wallowa County has been reopened to traffic, following closure because of a forest fire.

Motorists, however, are being urged to use extra care on the route because of the presence of fire crews and equipment. They were also being asked to use alternate routes when possible.

The north end of the highway was closed Tuesday afternoon near the Washington State border to protect travelers during initial fire fighting operations for the Applegate Fire. ODOT said the highway was reopened about 8:30 p.m. Thursday.

ODOT and the Oregon Forestry Department will monitor potential fire related hazards and use flaggers and pilot cars during the day when fire fighting operations are taking place and equipment may be on the highway.

Travelers are advised to plan for extra travel time while taking this highway.

Flaggers and pilot cars will be used as long as necessary to help reduce the risk to firefighters and motorists, said Mike Buchanan, ODOT District 13 manager.

ODOT advised that while the route is scheduled to be open during the Labor Day weekend, the highway could be closed again without notice, if conditions worsen.

For updated information on this highway and other current travel information throughout Oregon, visit www.tripcheck.com, or call the toll-free Oregon road report at 511, or 1-800-977-6368.

The Applegate Fire, near Flora along Highway 3, started Tuesday. By Friday, it had grown to 169 acres. At 11 a.m. Friday, it was estimated to be 70 percent contained.

TWO SMALL WILDFIRES BURNING NORTH OF WALLOWA

Published: August 19, 2006

The La Grande Observer

WALLOWA — Two wildfires are burning on either side of the Grande Ronde River north of Wallowa.

The Harlow Springs 25-acre fire is 21 miles north of Wallowa.

It was reported about 5 p.m. Thursday, and containment was estimated at about 25 percent as of Friday afternoon.

This fire on the north side of the Grande Ronde River on ODF-protected lands, along with the nearby Sickfoot Fire on the south side of the river, were caused by lightning strikes Thursday.

The fire, managed by the Oregon Department of Forestry's Wallowa Unit with assistance from other ODF resources, is mid-slope in steep terrain. On the fire Friday were eight rappellers, two 10-person inmate crews, one 10-person U.S. Forest Service hand crew, a strike team of USFS severity engines and two tenders.

Thursday, two helicopters and an air tanker, in addition to two engines, two USFS hand crews and eight rappellers, were used on the fire. Total personnel on the fire is 55.

The Sickfoot Fire, meanwhile, is 20 miles north of Wallowa along the south side of the Grande Ronde River.

The 16-acre fire on ODF-protected lands was contained at about midnight Thursday. It was reported about 4 p.m. It was managed by ODF's Wallowa Unit. Resources on the fire included a dozer, five engines, a helicopter and a 10-person inmate crew. Rural fire departments also provided assistance. Working on the fire Friday were six local severity engines, one tender and one inmate crew.

On the Wallowa-Whitman National Forest, meanwhile, firefighters have controlled the six lightning fires.

New lightning activity over Thursday night started four fires on the Wallowa-Whitman National Forest and five fires on private lands.

Fire crews reported quickly to all the fires. Two of the fires on private land were suppressed with the help of an air tanker, two helicopters, and a single engine air tanker from Oregon Department of Forestry. Firefighting resources continue suppression and mop up work on two remaining fires. The fires ranged in size from one-tenth of an acre to 20 acres.

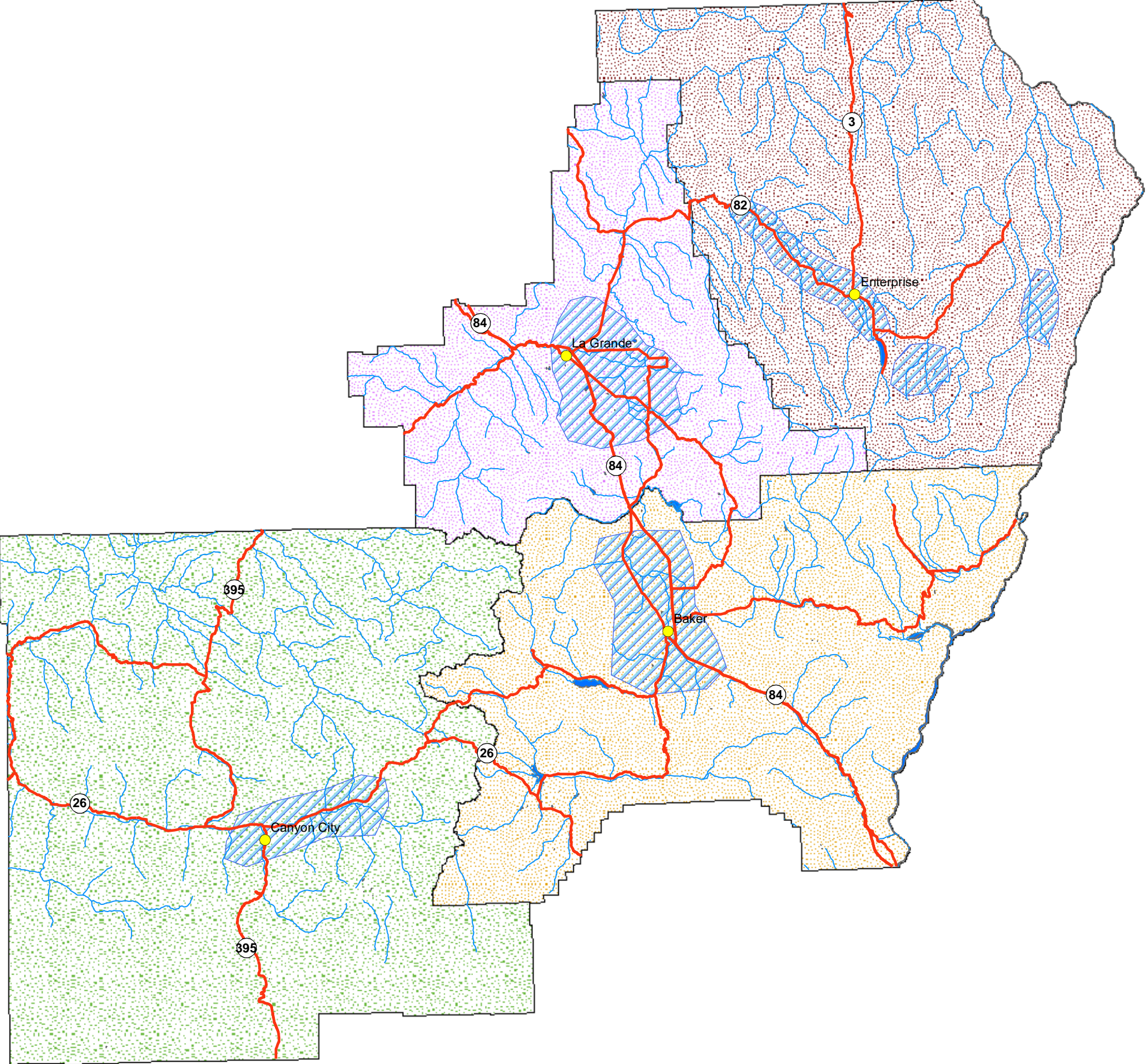
The fire locations are:

- Innaha River vicinity, one mile north of the Innaha Fish Weir, Hells Canyon NRA
- Dead Horse Ridge, eight miles southwest of Innaha, ODF-protected land
- Cayuse Flat area, off Hat Point Road, Hells Canyon NRA
- West Eagle Meadow vicinity, La Grande Ranger District
- Flora vicinity, ODF-protected land
- Eight miles west of Sled Springs, Wallowa Valley Ranger District
- Two miles south of Sled Springs, ODF-protected land

Hazard Annex

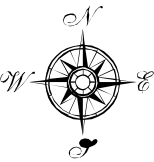
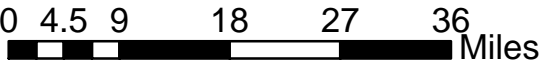
Wind Storm

Northeast Oregon Natural Hazard Risk Reduction Plan Damaging Winds



Legend

- County Seats
- Roads
- Streams
- Wind Damaged Areas
- Lakes
- Baker
- Grant
- Union
- Wallowa



Data Sources: County boundaries, county seats, streams and lakes are from the Oregon Geospatial Data Clearinghouse. Critical and Essential facility data was provided by each individual county. Roads are from Oregon Dept. of Transportation. Power lines and Airstrips are from Oregon Department of Forestry.

Maps created by Wallowa County GIS, a division of the Wallowa County Planning Department.

The information on this map was gathered from various sources. Care was taken in the creation of this map but it is provided "as is". Wallowa County cannot accept any responsibility for errors, omissions, or positional accuracy in the digital data or the underlying records. There are no warranties, express or implied, including the merchantability or fitness for a particular purpose, accompanying this product. However, notification of any errors will be appreciated.

WINDS WALLOP STATE

Published: November 13, 2006

How hard did it blow?

LG airport: 52 mph

Joseph: 65 mph

Cape Blanco: 102 mph

November threw a tantrum Sunday, sending wind gusts across Northeast Oregon that blew down trees and at least one barn.

Elsewhere, the storm buffeted the coast with wind gusts exceeding 80 mph and dumped new snow onto the Cascades. An estimated 65,000 Oregonians were without power overnight.

In Union County, the winds peaked about 7:30 p.m. when gusts reached 52 mph, according to National Weather Service readings at the airport. High winds continued through the night, however, finally abating about 5:30 a.m.



TREE STRIKES CAR IN COVE: Sunday's storm toppled trees all over Cove, but Richard Kern, shown here with his daughter Naomi Alldredge and friend Anthony Sorrells, woke up Monday to find one smashed across the 1996 Pontiac in his driveway. Though Kern says he is upset about the car, he is grateful the tree — estimated to be about 70 to 80 feet tall — didn't fall on the house.
The Observer/MARDI FORD

Sunday about 9:30 p.m., the Union County Sheriff's Office and the Oregon Department of Transportation were called out to clear downed trees along Highway 203 between Union and Medical Springs. No injuries were reported.

Trees were knocked over in other locations in the county as well.

The situation was much the same in Wallowa County Sunday, with winds causing significant property damage but no injuries.

The weather service said wind gusts reached 65 mph at the Joseph reporting station about 10 p.m. Sunday.

The Wallowa County Sheriff's Office reported this morning that a barn on Highway 82 between Lostine and Enterprise blew over, falling onto the highway.

A wind advisory is in effect for both counties until 4 p.m. today.

A road to the coast — Highway 18 — was blocked this morning by more than 100 trees that had been downed by high winds and rain-saturated soil, ODOT said.

The Tillamook County Sheriff's Office Sunday night said it had many reports of downed trees and downed power lines.

Weather stations along the Oregon Coast reported sustained winds Sunday night of 60 mph, with gusts of 102 mph at Cape Blanco; 85 mph on the Yaquina Bay Bridge; 88 mph at Lincoln City; 82 mph at Mount Hebo; and 73 mph at Florence. Wind gusts toppled trees into power lines, causing scattered power outages reported from Depoe Bay south.

STORM TIES TRAFFIC IN KNOTS

Published: January 8, 2005



SLOW GOING: Motorists plod through high winds and blowing snow on Interstate 84 near La Grande shortly before poor visibility closed the freeway Friday.
The Observer/PHIL BULLOCK

T.L. Petersen
Staff Writer

The combination of a little snow and a lot of wind Friday evening brought Northeast Oregon to a near stand-still.

The Oregon Department of Transportation closed Interstate 84 due to poor visibility late Friday afternoon. Travellers and truckers were forced to spend from several hours to the entire night in La Grande.

Early this morning, parking lots at the Flying J Truck Plaza, Eagle Freightliner and Wal-Mart were still filled with semis, although by 7:30 a.m. most lots were emptying.

The highway closure ended about 1:30 a.m.,

But many truckers apparently chose to stay parked for the night.

When the morning supervisor at Eagle Freightliner arrived at work this morning, he admits he wondered what was going on.

"When I walked in and there were trucks parked all over the place," he said, "I wondered what was going on. I couldn't believe we had that many waiting repairs."

Wal-Mart's security supervisor added early this morning that truckers had used the store's parking lot through the night.

"Neither Ladd nor Meacham were open," he said. And with the Flying J lots full, "we'll accommodate them."

He added that the company's policy is to make the parking area available when possible because "we'd rather have them out of the danger, here."

"(Our lots) were full," a Flying J employee confirmed.

But the halted truckers were moving out early this morning, she added, and the highways leading east and west were both reported in Condition A — open and clear — conditions. Neither the supervisors nor the employee would give their names to the press.

And while the wind was still blowing this morning, it hit its peak between 10 and 11 p.m. Friday, according to the Pendleton office of the National Weather Service.

Records there this morning had recorded a gust of almost 50 mph at the Union County Airport. Sustained winds at the time were blowing at about 40 mph.

For much of the evening, the wind-measuring equipment at the airport recorded gusts of up to 40 mph.

For 1,055 Oregon Trail Electric customers in southeast La Grande, the wind had more affect than just making driving difficult.

About 4:30 p.m. Friday a breaker opened at the El Paso substation near the cooperative's Cove Avenue service center.

According to Nancy VanSickle at OTEC, high winds blew two line together. The lines "slapping" each other caused the breaker to open, cutting power to customers.

The outage was short-lived, only about 10 minutes or less, VanSickle said, because the breakers could be closed so quickly and the situation hadn't damaged equipment.

But for those who had to be out Friday evening, the conditions ranged from severe to slow.

Elgin basketball players ended up staying the night in Ontario because of the interstate highway closure. But most teams were able to get to where they were going Friday night. Elsewhere in the West, the storm is proving a doozy.

According to the National Weather Service, the Pacific storm was spinning bands of moisture into the region from the southwest. Snow buried the Spokane area and fell north of Seattle, and Las Vegas got a rare snowfall on the famed strip.

As much as 10 to 15 inches of rainfall is expected in a series of three storms hitting the mountains near Los Angeles this weekend.

The National Weather Service is predicting another 8 feet of snow in the already hard hit Lake Tahoe region.

STORM DELIVERS BLOW, BUT BRINGS OUT BEST

Published: July 22, 2004

The storm cell that delivered a shocking blow to La Grande in a matter of minutes Monday afternoon wreaked havoc on trees, houses, cars and streets. Minutes after the storm, which blew in with 70 mph winds and drenching rain, people were out and about surveying the damage, beginning cleanup and putting their property back together.

Perhaps the most interesting phenomenon beyond the sudden onset and power of the storm was the way people reacted. They immediately set about cleaning up, carrying on and reaching out. Neighbors renewed acquaintances or met for the first time, offering help to each other as they cleaned up whatever effects the storm left in its wake.

For a lot of people that involved lifting, sawing and clearing away tree branches. For others it was dealing with flooded basements or helping clear streets that were blocked by downed trees and branches. In some cases, it was a matter of waiting for Oregon Trail Electric Cooperative or city or county crews to arrive to lend a hand. And lend a hand they did. OTEC crews worked through the night to restore power to the 5,600 accounts affected by the storm. City, county, ODOT and law enforcement personnel were on the spot as needs arose. All should be commended for their efforts.

Luckily, most of us rode out the storm safely. Only a couple of people found themselves actually in harm's way. One was a truck driver whose rig blew over along Interstate 84. He wasn't injured when the big rig tipped over.

The other was Doug Yearous, operations manager at the Union County Airport, who literally rode out the storm in his temporary office. The modular office, which was put in place temporarily to replace the airport office that burned to the ground a year ago, was blown across the tarmac at the airport — with Yearous in it. He figures the lightweight building rolled about four times, finally coming to rest on Ron Nash's Cessna 182. Yearous was taken to the hospital, but was home by the next morning and — thank goodness — able to talk about the experience.

The power of nature is immense. Oregonians, luckily, don't feel it as often as the people in the hurricane and tornado states do. But the threat is real. Weather and its unpredictable nature can't be taken lightly, even if some of us did when we heard the warning from the National Weather Service just minutes before the storm.

Perhaps, though, the storm's most enduring impact will be the goodwill it brought among neighbors and strangers. To every thing — even storms — there is a purpose.

Editorials in this column are the opinion of The Observer's editorial board. The board is comprised of Ron Horton, publisher; Ted Kramer, editor; Jeff Petersen, news editor; and Pierre LaBossierre, wire editor. Letters from readers, signed columns on this page and

cartoons represent the opinions of the writer/artist and do not necessarily reflect the position of the editorial board.

STORM POUNDS LA GRANDE

Published: July 20, 2004



DISASTER SCENE: Friends of Russ Bergette gather around his home at 63450 Gekeler Lane Monday to survey the damage after all of the surrounding trees snapped in half and landed on the roof of his newly remodeled home. The trees ripped out a meter base and took down telephone and power lines around the house. The Observer/LAURA MACKIE-HANCOCK

By Bill Rautenstrauch
Observer Staff Writer

A sudden severe storm cut a wide swath of destruction through the Grande Ronde Valley late Monday afternoon.

Winds estimated at 70 miles per hour sent a modular building tumbling across the grounds at the Union County Airport and upended a semi-truck on Interstate 84 east of La Grande. A house on Gekeler was pummeled by several trees, and numerous homes in La Grande were hit by falling branches.

Slightly over an inch of rain fell in about half an hour.

In the airport incident, operations manager Doug Yearous was taken by ambulance to Grande Ronde Hospital, where he was treated for injuries and later released.

The modular building has served as a temporary airport operations center since a fire destroyed the regular office last year. Yearous was inside the building when the winds took it.

"I was shutting things down and I felt the trailer slip and move," Yearous said this morning. "I got knocked out on the second hit. I remember hitting my face on the other side of the room."

Yearous said he believed the trailer rolled about four times. It came to rest upon an airplane owned by Ron Nash.

The plane was one of at least five damaged during the storm.

The semi-truck overturned in the eastbound lane of I-84 near milepost 266, about a mile from the Flying J truck stop. No injuries were reported.

The National Weather Service in Pendleton had no reliable estimate of the wind speed during the storm, though one weather spotter near Island City said winds gusted to 60-70 mph. Also at Island City, nearly an inch of rainfall was reported.

The weather service said a sensor that measures wind speed at the airport was knocked out early in the storm and did not render a reading.

The service said its network of spotters submitted numerous reports of storm damage. No spotter reported seeing a funnel cloud that would have indicated a tornado. A tornado did strike in Grant County Monday, the service said.

La Grande Public Works Director Dan Chevalier said this morning flooding occurred at several places around the city because the storm sewer system couldn't keep up with the flow of water.

A power outage caused electric pumps to shut down, adding to the problem.

Chevalier said downed trees and power lines kept his department working overtime.

"We worked until about eight o'clock last night, and this morning crews are out cleaning up," he said.

Chevalier said Bud Jackson's Sports Bar at the east end of Adams and the Golden Harvest Restaurant at the corner of Greenwood and Jefferson downtown were among buildings whose interiors were flooded.

Flooding was heaviest in the Island Avenue underpass.

Dara Decker, Union County Emergency Services officer, said drivers trying to take their vehicles through the deep waters caused some complications.

"A couple of people tried to drive through it. Their cars stalled and had to be towed out," she said.

Decker said her office received numerous reports of damage from throughout the county.

"There were multiple trees down across roads and on top of buildings, and some of the railroad crossing bars along Island Avenue were ripped off," Decker said.

Eastern Oregon University felt the impact of the storm but suffered no significant damage, said Michael Rhodes, EOU's interim physical plant facilities and planning director.

Water flowed into the ground level floors of Ackerman Hall, Pierce Library and Hoke Center. The water had to be cleaned up by crews but did not cause any damage.

Normally the water would have been caught by EOU's storm drains but they were backed up because of the storm, Rhodes said.

The storm also blew down many branches on campus. Rhodes said that crews will be cleaning up the branches for much of the next two days.

The Oregon Department of Transportation was busy cleaning up debris until late in the evening, said spokesman Tom Strandberg.

Strandberg said crews monitored the storm via radar and were ready when it struck.

"We were following it and we had people standing by, ready to go," he said.

Strandberg said there were no full highway closures during the incident, though debris caused some single-lane closures.

Damage to the valley's crops was being assessed this morning.

The weather service was in La Grande this morning, investigating the path of the storm, its wind speed, and other factors.

WILD WINDS WHIP AREA

Published: June 2, 2001

By T.L. Petersen
Observer Staff Writer

Roads closed, businesses shut down, bricks flew, power went out and trees fell.

But overall, Friday afternoon's powerful winds caused no serious injuries and a remarkably limited amount of property damage.

Many people across Union County experienced outages, while some in La Grande and the High Valley area had no electricity for almost 18 hours. A small neighborhood area along Fourth Street in La Grande, including The Observer building, saw the lights blink off at 3:48 p.m. Power was restored just before 10 this morning. A tree fell on Fourth Street, across from The Observer, causing the outage.

Little information, except the general area of outages, was available from Oregon Trail Electric Cooperative this morning, as supervisors were working with repair crews, and OTEC spokesman Steve Schauer was in Washington, D.C., for meetings.

The National Weather Service in Pendleton reported wind gusts of 50 to 60 mph late Friday afternoon, along with thunderstorms on the east side of the Blue Mountains.

Jan Michel of Cove was in the La Grande Public Library when the tree on Fourth Street fell. The tree tore down power lines around the library, which soon closed.

Michel found the downed power lines made the trip to her vehicle risky, but La Grande police officers were soon on hand to assist her.

Paul Sieders, who lives near First Street and Adams Avenue, wasn't quite as lucky. His daughter called him Friday afternoon when she came home from school to report that a tree in the front yard was now partially on a family car.

The tree brought down two power poles and their electrical lines. By late afternoon, the poles were leaning over the street.

The situation led to a radio warning Friday afternoon for people to avoid downtown La Grande where tree branches were blowing, power lines were swinging, and, along Fir Street near the railroad tracks, bricks were blowing off the top of a building and hitting nearby parked cars.

Another large tree split and fell at a recently vacated home at the corner of Grandy and Cedar streets.

Some areas were spared damage.

While Island City experienced high winds during its annual Hog Wild Days celebration, the power remained on and the Lions Club was able to move its Friday evening pork barbecue into the school.



WATCH FOR FALLING TREES:
Kory Vaughn of Charter Cable examines the damage caused by a tree that fell onto Paul Sieders' car at First and Adams, taking out the cable line with it.
The Observer/ERIN PHILLIPS

While those in La Grande appeared to take the brunt of the storm, it wasn't a good afternoon to be out driving in the valley.

Visibility was near zero along Highway 237 and Hunter Road at about 4 p.m. because of blowing dust. Both roads were reportedly briefly closed.

The rough weather, a meteorologist at the Pendleton weather station said, occurred because of a combination of factors.

Winds in the Grande Ronde Valley, she said, were already blowing at nearly 20 mph as a warm thermal trough system began pushing southeast after sitting in the region for several days.

On its heels was what the Weather Service called "a real vigorous cold front," which moved in and pushed the thermal trough closer to the ground.

"It made for a tight surface pressure gradient," the meteorologist said.

The result was strong, gusty winds and rapidly dropping temperatures.

The cold system, an upper atmosphere trough, should stay in place today and through Sunday, the Weather Service is predicting, which should cause locally breezy conditions but not a return of the violent winds.

The cool temperatures, though, are not expected to bring much, if any, precipitation.

The why of the weather wasn't of huge interest though to those having to deal with it Friday afternoon.

By the time the weather systems had collided in Union County, some of their fury was spent.

Wallowa County didn't report any outages this morning, although a power pole along Crow Creek Road fell and several trees were being removed after falling across the Imnaha highway.

WINDS WALLOP STATE

Published: November 13, 2006

How hard did it blow?

LG airport: 52 mph

Joseph: 65 mph

Cape Blanco: 102 mph

November threw a tantrum Sunday, sending wind gusts across Northeast Oregon that blew down trees and at least one barn.

Elsewhere, the storm buffeted the coast with wind gusts exceeding 80 mph and dumped new snow onto the Cascades. An estimated 65,000 Oregonians were without power overnight.

In Union County, the winds peaked about 7:30 p.m. when gusts reached 52 mph, according to National Weather Service readings at the airport. High winds continued through the night, however, finally abating about 5:30 a.m.

Sunday about 9:30 p.m., the Union County Sheriff's Office and the Oregon Department of Transportation were called out to clear downed trees along Highway 203 between Union and Medical Springs. No injuries were reported.

Trees were knocked over in other locations in the county as well.

The situation was much the same in Wallowa County Sunday, with winds causing significant property damage but no injuries.

The weather service said wind gusts reached 65 mph at the Joseph reporting station about 10 p.m. Sunday.

The Wallowa County Sheriff's Office reported this morning that a barn on Highway 82 between Lostine and Enterprise blew over, falling onto the highway.

A wind advisory is in effect for both counties until 4 p.m. today.

A road to the coast — Highway 18 — was blocked this morning by more than 100 trees that had been downed by high winds and rain-saturated soil, ODOT said.



TREE STRIKES CAR IN COVE:

Sunday's storm toppled trees all over Cove, but Richard Kern, shown here with his daughter Naomi Alldredge and friend Anthony Sorrells, woke up Monday to find one smashed across the 1996 Pontiac in his driveway. Though Kern says he is upset about the car, he is grateful the tree — estimated to be about 70 to 80 feet tall — didn't fall on the house.

The Observer/MARDI FORD

The Tillamook County Sheriff's Office Sunday night said it had many reports of downed trees and downed power lines.

Weather stations along the Oregon Coast reported sustained winds Sunday night of 60 mph, with gusts of 102 mph at Cape Blanco; 85 mph on the Yaquina Bay Bridge; 88 mph at Lincoln City; 82 mph at Mount Hebo; and 73 mph at Florence. Wind gusts toppled trees into power lines, causing scattered power outages reported from Depoe Bay south.

WALLOWA COUNTY HIT WITH BIG WINDS

Published: November 29, 2001

By Gary Fletcher

Observer Staff Writer

ENTERPRISE — Winterlike weather arrived with gusto Wednesday, but Wallowa County took the first snowstorm of the season in stride.

The temperature early Wednesday morning dipped to 12 degrees before rising to 36 by 4:30 p.m. Before the storm subsided, 14 inches of snow had been dumped on some parts of the county, and many trees had sustained severe damage or been toppled or uprooted. Some trees 30 inches in diameter were snapped off 10 to 12 feet above the ground, officials said.

Winds estimated at 70 mph to 80 mph uprooted trees, blowing snow severely limited driving visibility. The storm snapped power lines and briefly blocked roads before people pitched in to clear the trees from the roads. Evergreens crashed into one cabin at Wallowa Lake.

Vehicles slid off slick roadways, but no injuries were reported.

The lower valley around Wallowa was not as hard hit as the upper part of the county, where there was near zero visibility on Sheep Creek Hill, Prairie Creek and Imnaha Highway, virtually shutting them down. Vehicles traveling the Imnaha Highway out of Joseph could go only 5 mph.

Police were anticipating accidents today due to slick roads and the accumulation of snow in some areas.

Two inches of snow fell Wednesday morning, but by the end of the day, 14 inches had fallen in the area from Flora to Troy.

Most roads in the Wallowa Valley remained open because there was little snow on them. The exception was Highway 3 north of Enterprise, where snow drifts forced road closures intermittently throughout Wednesday.

Trees wreaked havoc at Wallowa Lake Wednesday. One tree took down the Power House Road power lines near the Flying Arrow Resort at about 10 a.m., knocking out power for the rest of Wednesday in most of the homes at the lake. At 11:30 a.m. a large red fir crashed across the same road near the Wallowa Lake General Store. That cut off telephone service until 4 p.m. Electricity at the lake was restored at 9 p.m.

A pine tree fell into a cabin on River Road in the same vicinity. Trees were reported blown down on Wallowa Mountain Loop Road near Sheep Creek Hill.

Trees were reported down on Highway 82 a mile north of Joseph, on Hurricane Creek Road and on Bicentennial Lane at Dobbin Road, where a felled tree was blown 30 feet into the roadway.

About 3 p.m., Oregon State Police Trooper Greg Retherford came across a cottonwood blocking both lanes of Highway 82 a mile north of Joseph, the OSP reported. A log truck driver produced a chain saw and he and Retherford and another volunteer cleared the road in minutes.

Schools in Joseph and Enterprise dismissed students early Wednesday since buses had to transport some to the more remote areas of Imnaha and Flora.

As the temperatures thawed, the snow and, slick ice developed on roadways late in the day, but no accidents were reported.

The storm followed the two to three inches of snow that fell Saturday, making for a busy time at Enterprise's Les Schwab Tires. Crews said it must have been a record day for putting studded tires on vehicles. By 2 p.m., they were fully booked to keep them busy well into the night. After that, customers were put on a list for today.

"The storm was just a good wake-up call to be ready for winter, said Terry Holbrook of the Wallowa County Public Works Department. "We're ready."

Hazard Annex

Winter Storm

Snow hits near-record levels in spots

Published: February 3, 2006

**By JAYSON JACOBY
Of the Baker City Herald**

Got a groundhog on your gift list this Groundhog Day?
Forget the sunglasses.
Spring for a snow shovel instead.
The weather-forecasting rodents would need to do a fair piece of digging before they could even start searching for their shadow today in Northeastern Oregon. A parade of January blizzards has pushed the region's mountain snowpack well above average — and even to an all-time record in one place.

That's Dooley Mountain, about 15 miles south of Baker City.

Federal snow surveyors first poked around in Dooley Mountain's powder in 1939. They've returned once a month every winter since, but never in those 67 years did they find more snow on Dooley Mountain than they found on Monday.

The snow surveyors' measuring pole plunged through 46 inches of snow before its sharp tip gouged the ground.

That equals a snow-depth record set twice before: on Feb. 29, 1952, and Feb. 26, 1993.

And the 46-inch figure doesn't include the remnants of the snowstorm that swept through Tuesday evening, said Travis Bloomer, who works at the U.S. Natural Resources Conservation Service's Baker City office.

That agency, formerly known as the Soil Conservation Service, tracks snowpacks across the West.

Although Dooley Mountain is the only local snow-survey site that has tied its all-time record for snow depth this winter, the current snowpack at all but one of 18 other sites in the region exceeds the long-term average.

"It's a pleasant surprise to me any time we're over 100 percent anywhere in Baker County," Bloomer said Wednesday. "We hope this will continue."

This winter has surpassed last

But even if storms start bypassing Baker County, this winter, though still short of the halfway point, already has surpassed its predecessor in the snowpack rankings.

At Anthony Lake, for instance, snow surveyors calculated a water content of 19.8 inches on Friday, Bloomer said. Friday was two blizzards ago.



Gordon Wicklander said he keeps trails open to two of his neighbors. This one heads through the back-yard area of his house and then north. He and his wife, Viola, moved to Sumpter six years ago. This winter has produced more snow than he's seen or cares to shovel.

Baker City Herald/S. John Collins

(Water content, not snow depth, is the statistic federal officials rely on to gauge the snowpack. Dooley Mountain's 46-inch snowpack had a water content of 14 inches, the second-highest total ever for that site.)

Last winter the highest water content measured at Anthony Lake was 18.7 inches — and that mark wasn't reached until early May. The water content at Anthony Lake at the end of January 2005 was a meager 9 inches.

The situation is similar throughout Northeastern Oregon.

Each of the 19 survey sites boasts a higher water content today than it did a year ago.

Much higher, in most cases.

Dooley Mountain's 14-inch water content nearly triples the 5.4-inch figure from a year ago.

The discrepancy between this winter and last looks even more dramatic at Eldorado Pass, a snow-survey site along U.S. Highway 26 between Unity and Ironside.

A year ago surveyors measured a mere .8 of an inch of water content at Eldorado Pass, 25 percent of the long-term average.

On Monday — again, before the most recent snowstorm — the water content at Eldorado Pass was 6.9 inches — more than twice the average, and an increase of 862 percent compared with a year ago.

Here's another example of how little this winter has in common with last:

Last year only one of the 19 survey sites had a water content of more than 10 inches at the dawn of February.

Today, 16 of the 19 sites exceed the 10-inch mark (and of the three sites that don't, one is at 9.9 inches).

This could be the year for irrigators

Jim Colton has dreamed about this sort of winter for several years.

Colton manages the Baker Valley Irrigation District. Much of the water that sprinkles crops on about 32,000 acres comes from Phillips Reservoir, the Powder River impoundment in Sumpter Valley, about 16 miles southwest of Baker City.

Phillips hasn't filled, though, for the past five years, a period dominated by drought rather than deluge.

In fact the reservoir has barely exceeded the half-full mark during the dry spell, and farmers and ranchers have settled for less than half the water they're entitled to.

But 2006, Colton hopes, "could be the year."

If the snowpack stays well above average well into spring, then Phillips could reach its bank-full level — 73,500 acre-feet of water — by June, Colton said.

Right now the reservoir holds about 12,700 acre-feet.

"The snowpack looks good now, but we need every bit of that and more," Colton said. "A lot of things could still happen."

A parched February, for instance.

February is, on average, the third-driest month at the Baker City Municipal Airport.

Colton, however, is counting on a soggy spring.

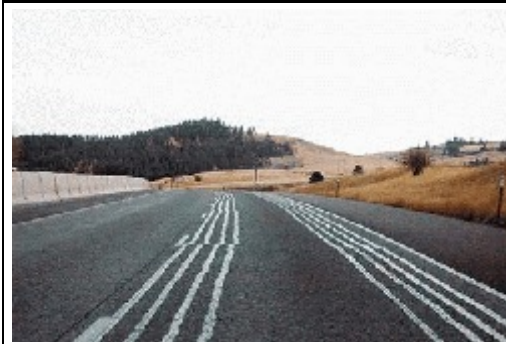
And in this case he'd relish a repeat of 2005, when the spring was much more moist than the winter.

By April it's valley rain, not mountain snow, that most benefits Phillips, Colton said.

When rain dampens farmers' fields, Colton needn't spill much water from the reservoir.

Warming up to the idea of a heated road

Published: November 9, 2005



Copper wires buried in the eastbound right lane of I-84 are designed to heat up and help prevent ice from forming on the road when the temperature is below 28 degrees. ODOT officials emphasize that the system is not an alternative to using chains or traction tires.

Baker City Herald/Kathy Orr

**By JAYSON JACOBY
Of the Baker City Herald**

Northeastern Oregon's heated highway froze briefly during its debut this week, like an actor who forgets his lines the instant the curtain rises.

But state transportation officials say the 1.2-mile section of Interstate 84 in Ladd Canyon near La Grande — the only artificially warmed freeway in Eastern Oregon — is prepared now to perform as advertised.

"We're still calibrating some sensors and tweaking the system during this testing phase, but we expect to see some benefit," Tom Strandberg, a spokesman at the Oregon Department of Transportation's regional office in La Grande, said Tuesday.

ODOT spent \$1.1 million earlier this year to bury copper wires in the eastbound right lane of I-84 from the Ladd Creek bridge to near the top of the 6-percent grade. ODOT also installed wires in the left lane of the Ladd Creek bridge.

(The narrow black parallel lines that run along the freeway in that area are made of the rubber-like material that fills the grooves in which the wires were placed.)

Strandberg emphasizes that the wires, which are heated by electricity, aren't capable of keeping the pavement bare during blizzards or when the temperatures plunges below about 24 degrees.

Nor can the wires magically melt snow or ice like the defrosters on the your car's back window.

"People need to understand that this is not an alternative to chaining up, or to driving with caution during the winter," Strandberg said.

What ODOT officials hope the wires will do, however, is help to prevent ice from forming on that one lane, and slow the accumulation of snow, when the weather isn't quite so arctic.

"Obviously the colder it is the less effective the system will be," Strandberg said. "It's just another tool to help keep the road safer and open more often than in the past."

ODOT has been testing the road-warming wires this fall, in preparation for the season's first snowstorm, he said.

When snowflakes started to fall on Monday, the system was supposed to start supplying power to the buried wires when the road surface temperature dropped to 28 degrees and there was moisture, Strandberg said.

But apparently the temperature sensors connected to the system's switch were reading a higher temperature even when other sensors showed 28, he said.

ODOT workers are inspecting and recalibrating all the sensors to ensure they're accurately measuring the road temperature, Strandberg said.

Initially, ODOT will set the sensors to heat the wires beginning at 28 degrees, and to turn off the electricity at 24 degrees, he said.

Below 24 degrees the warming wires no longer make much of a difference, Strandberg said.

He said ODOT officials might tinker with those temperature settings once they've watched how the system performs during an actual storm.

Strandberg said officials also can manually operate the wires, so if a storm is forecast, they can "pre-heat" the pavement and, they hope, prevent snow from piling up as rapidly as it would on unheated lanes.

The wires should also work well with ODOT's other main ice-fighter: liquid magnesium-chloride, which trucks spray on the freeway to inhibit ice from forming and snow from sticking.

If the wires warm the freeway by just a few degrees, the magnesium-chloride could remain effective for longer than it does on the chillier lanes.

ODOT officials picked Ladd Canyon as a test site for road-warming system in part because vehicles crash there more often in winter than most places in Oregon.

Between 1998 and 2002, police responded to an average of 31 wrecks per year on the nine-mile section of freeway that includes Ladd Canyon — four times higher than the statewide average for rural freeways.

Ladd Canyon's crash rate even exceeds that on Cabbage Hill, the notorious grade on Interstate 84 about 50 miles northwest, near Pendleton.

Snow Kidding Around

Published: December 29, 2003



Baker City's Main Street was a winter wonderland Monday morning.

Baker City Herald/S. John Collins

**By JAYSON JACOBY,
LISA BRITTON
And CHRIS COLLINS**

Of the Baker City Herald

Baker County's snowplows won't gather any dust or rust this winter.

The snowiest storm in more than a decade slammed a powdery fist into the county Saturday night, and by Monday morning the blizzard had yet to loosen its icy grip. City, county and state officials summoned every available plow to scrape from streets, roads and highways a layer of snow that exceeded one foot in many places.

"We've got every piece of equipment we have out working," Tom Fisk, Baker City's street supervisor, said this morning.

The story is identical at the Baker County Road Department.

"Everybody is out," said Kathy Hogge, who works for the department. "They've got the nose to the grindstone, or the snowplow, or whatever. They're busy trying to get things taken care of as soon as possible."

Fisk said he called in six employees — two who were on vacation — to start plowing streets Sunday.

Two other workers transferred temporarily from other departments to snow patrol, he said.

The day crew worked until about 8 o'clock Sunday night, and a fresh crew came on at midnight, Fisk said.

He expects to follow a similar schedule today.

Oregon Department of Transportation crews also worked around the clock to combat snow that occasionally closed the eastbound and westbound lanes of Interstate 84 Sunday, said ODOT spokesman Tom Strandberg.

"There weren't any major closures, just sporadic ones," he said.

Both sides of the freeway were open by this morning.

The freeway eastbound was closed from noon on Sunday to 1 a.m. this morning, and westbound lanes were temporarily closed throughout the day from noon to early this morning, he said.

"Basically vehicles were spinning out and blocking the road," Strandberg said.

Twenty-five new inches of snow fell on Ladd Canyon over the weekend, he said, and 19 inches accumulated on Meacham.

During one of those freeway closures, between Baker City and Durkee, bored motorists managed to lend some artistic levity to the situation by assembling a cast of sagebrush-armed snowmen in the highway median.

Cindy Ratterman of Baker City was among the travelers who appreciated the display. Ratterman said she and her husband, Ned, and son, Brandon, were returning to Baker City from visiting relatives in Wyoming when the freeway was closed about 3:30 Sunday afternoon.

The freeway re-opened about 90 minutes later, and Cindy Ratterman said the snowmen brightened the final leg of their journey.

"They were awfully cute," she said. "They made everyone smile after being stranded for an hour and a half."

Ratterman said she didn't see any of the snow sculptors at work.

But she has suspects.

"I'm guessing kids got really bored in the car, and their parents said 'go out and build a snowman,' " she said.

Traffic was clogged on Bridge Street at Lew Bros. Les Schwab Tire Service this morning while travelers waited their turn for chains.

"There's a line that winds through the building and cars are lined up on both sides all the way down to the corner on both sides," said Diana Brown.

Advisories recommended that motorists traveling through the Baker City area this morning carry chains or traction tires. Chains were required for all trucks traveling east and west at Ladd Canyon and Cabbage Hill.

City hardly plowed at all last winter

Regardless of what happens the rest of the season, this winter already has been busier than last for city crews, Fisk said.

Last winter the city's plows languished in their garages, getting out for just a few hours of exercise after a minor storm in early February.

The city spent \$18,000 to plow snow and to spread sand and ice on streets — less than half its annual budget of about \$46,000.

Two winters ago, by contrast, the city spent \$71,000.

As long as the snow continues, crews will concentrate on clearing the busiest streets, Fisk said.

After the flakes cease to fall so thickly, the city's plows will move into residential neighborhoods.

Fisk reminds residents that crews can't spare the time to clear everyone's driveway once the plow has passed.

However, Community Connection of Baker County and the Powder River Correctional Facility help low-income senior citizens and disabled residents keep their sidewalks and driveways clear of snow.

People who can't wield a shovel, and can't afford to pay someone to do the job, should call Community Connection at 523-6591. Community Connection maintains a list of people who need help.

Powder River officials then dispatch inmates to shovel snow — and they bring their own shovels.

Forty inmates were shoveling this morning, "trying to get people out of their houses," said Mary Calloway, work program coordinator at the minimum-security prison.

A city ordinance requires property owners to shovel sidewalks within 24 hours after a storm ends.

Fisk said that although he understands that in certain places — Main Street downtown, for example — there's no place to shovel snow except into the street, he would appreciate if residents elsewhere avoid the practice.

This morning city crews had to plow snow that had been pushed from driveways and parking lots into the street, Fisk said.

"That doesn't help," he said.

Fisk said city workers will continue the traditional practice of plowing snow into berms in the centers of several streets, including Main, Resort and Campbell.

But if those berms grow to SUV hood height, as they did two years ago, the city might load some of that snow into trucks and haul it away, he said.

Storm left hundreds without power

Heavy snow loading on power lines in the Sumpter-Granite and North Powder-Anthony Lakes areas left nearly 1,500 homes without power early this morning in separate outages.

Service to 553 customers at North Powder, Anthony Lakes and the surrounding rural area was disrupted from 1:25 a.m. to 2:50 a.m. today, said Steve Schauer, Oregon Trail Electric Cooperative members services manager.

The system was not damaged in the outages, he said. The service disruptions were the result of bouncing lines that made contact as snow loads fell from them, causing a breaker or fuse to open, he said.

The same situation occurred on the Sumpter-Granite line, which serves 924 customers. Service went down at 5:45 a.m. today, and was restored to most homes by 7:45 a.m., Schauer said. The balance was back on line by 8:15 a.m.

Lights flickered throughout the Baker service area Sunday night also because of the heavy snow falling off the lines. The force was not enough to open a breaker or fuse in those cases, Schauer said.

STORM DAMAGE

Published: November 30, 2001

WEATHER RETURNS TO NORMAL - FOR NOW

By The Observer

Life was almost back to late-November normal today in the Grande Ronde Valley after a couple of days of snow and high winds that snarled traffic, blew down trees and damaged roofs.

Highway 204 from Elgin to Tollgate has reopened, but oversize vehicles are prohibited because of road conditions. Packed snow is reported on most highways and all require motorists to carry chains or traction devices.

The calm may not last long. The National Weather Bureau today predicted high winds on Saturday, with a 40 percent chance of snow or rain showers. The winds through Ladd Canyon are again expected to gust as high as 55 mph.

Rain and snow showers are predicted to continue each day through a good part of next week.

ODOT OFFERS WINTER SURVIVAL, DRIVING TIPS ON WEB SITE

The Oregon Department of Transportation has updated its Internet "Winter Survival Travel Kit."

The Web site provides news and tips for helping the public travel Oregon's roads and highways safely during the winter months.

The site can be accessed at www.odot.state.or.us. click on News Media Center and then Winter Travel Kit.

It offers basic winter driving tips, how ODOT can help and where Snopark permits are required.



STORM DAMAGE: Dustin Anderson of Cove works on removing metal roofing from the Ascension School in Cove Thursday afternoon. The school lost 1,500 square feet of its roof and electrical service during Wednesday's storm.

The Observer/KELLY WARD

WALLOWA COUNTY READY FOR STORMS

Published: September 18, 2002

By Gary Fletcher

Observer Staff Writer

ENTERPRISE — Wallowa County is Oregon's first "StormReady" county.

In a ceremony Tuesday at the courthouse, Wallowa County Commission Chairman Mike Hayward and Commissioner Darrell McFetridge accepted certificates, plaques and road signs from officials of the National Weather Service.

A separate certificate honored Matthew Marmor, the county's emergency services director. Under Marmor's leadership Wallowa County joined more than 400 communities nationwide that became part of StormReady.

StormReady is a national program that helps local emergency management officials prepare their counties to be ready for severe weather threats.

"If a dangerous storm is headed for the area, the people who live, work or vacation in Wallowa County will be more knowledgeable and be better prepared to handle these situations," said Bruce Bauck, meteorologist in charge at the National Weather Service's office in Pendleton.

"A partnership of all levels of the community has contributed to this process," Bauck said.

Among the 20 people in the audience hearing Bauck's remarks were volunteer weather observers and spotters.

Thanks to the efforts of Wallowa County Emergency Management, schools, municipalities, amateur radio, weather spotters and law enforcement, "We have furthered our agency's mission to continue to educate citizens on how they can help protect their lives and property from the potential effects of Mother Nature's fury," Bauck said.

Weather radios are strategically placed in city offices, schools, the hospital and at Wallowa Lake State Park. They broadcast forecasts and weather observations and sound an alarm in the event of a severe weather alert. Weather radios can be purchased at various electronic stores.

As examples of Wallowa County's weather preparedness, the weather station at the Wallowa School has real-time weather data on the Internet. Volunteer weather observer Scott Hampton of Joseph has an automated weather station and the Web site www.firegone.com.

"Just click on 'Local Joseph Weather,' " Hampton said. Automatic e-mails of weather warnings can be requested from the site.

"From big cities to small towns, StormReady guidelines prepare communities with an action plan that responds to the threat of all types of severe weather," Bauck said.

"Wallowa County has established a way to better protect citizens from severe weather threats."

StormReady is a voluntary preparedness program that establishes guidelines for communities to follow. Counties adopt requirements in the areas of communications, warning reception and dissemination, public outreach, awareness and administrative planning.

"Preparedness and advance warning are vital factors in severe weather situations," said Dennis Hull, NWS warning coordination meteorologist in Pendleton. Citizens in mountainous counties that are prone to flash floods and winter storms must understand the importance of keeping safe in severe weather, he said.

The National Weather Service operates the most advanced weather and flood warning and forecast system in the world.

Each forecast office posts daily forecasts and severe weather warnings on its Web pages.

Links to NWS offices across the country are available through <http://weather.gov>.