



The Inland Northwest Informer

Information For Storm Spotters, Cooperative Observers And Everyone

A Publication Of WFO Pendleton, Oregon

Spring/Summer 2012 - Volume 10

Massive Winter Storm Of 2012

By Mary Wister, Science and Operations Officer

While reflecting on the weather events during the 2011-2012 winter season, one may claim that the winter was not incredibly active across eastern Washington and eastern Oregon. Indubitably, the one exception was the major winter storm that brought heavy snow and ice to most of Washington State and the northern half of Oregon on January 17 through 19. Damaging winds were also observed in central Oregon. In the course of several days, numerous record snowfall and precipitation amounts were measured. Some of the major highways and interstates were closed due to the extremely icy conditions. National Weather Service spotters called in to report snow and ice accumulations, road conditions, and wind speeds. As always, we appreciate your reports, especially during critical weather conditions that affect your community.



Figure 1. Freezing rain fell for several days. This resulted in the formation of ice at least a quarter inch thick on many surfaces including roads, power lines and trees. Photo by R. Cloutier

On January 17, the Pacific Northwest was hit hard as two back-to-back frontal systems off the eastern Pacific invaded the region in a moist westerly flow aloft. The east slopes of the Washington Cascades had already received heavy snow on the 15th and 16th, and heavy snow was relentless on January 17. A weather spotter seven miles north-northwest of Easton measured 11 inches of new snow on the 16th, then the spotter called back with an additional 18 inches of snow by the morning of January 17. Many other areas

along the east slopes of the Washington Cascades and the Simcoe Highlands received one to two feet of snow in 24 hours, including Trout Lake, White Salmon, and Goldendale. One weather spotter located nine miles northwest of Roslyn called on the morning of the 18th to report 48 inches of snow in three days!

Record precipitation and snowfall accumulations were reported throughout the area on January 17-18. Most of the precipitation fell as snow. The table (Figure 2) on page 2 lists the snowfall records for January 17. A complex weather pattern developed on January 18-19, resulting in a wide variety of winter precipitation. At the surface, a stationary front developed very close to the Washington-Oregon border. Meanwhile, in the upper atmosphere, a moist southerly flow increased snow levels over eastern Oregon and southeast Washington.

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Let's recap the massive winter storm of January 17-19, 2012.

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Moist warm air aloft and cold air trapped in the Lower Columbia Basin made for a very icy situation with widespread snow, sleet, and freezing rain. Based on the observations at the Hermiston Airport, there were 13 straight hours of freezing rain. Ice as thick as one-half of an inch coated roadways and surfaces. Almost the entire county warning area reported heavy snow or ice accumulations on January 18-19.

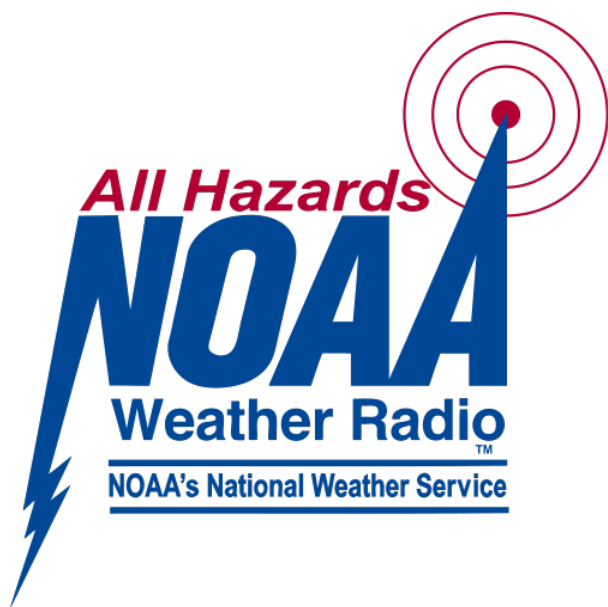
High winds were reported in central Oregon on January 18 as higher winds aloft were forced to the surface. A weather station located five miles south-southeast of Black Butte Ranch

in Oregon reported a wind gust of 80 mph during the early morning hours. During the afternoon, a weather station eight miles north-northwest of Clarno, Oregon, reported a wind gust to 66 mph.

Forecasters at the National Weather Service in Pendleton relied heavily on surface and upper air observations and—of course—observations taken by cooperative observers, CoCoRaHs, and weather spotters during this event. I think everyone will agree that this major winter storm was definitely one for the record books! ❖

Figure 2 - Snowfall records (inches) for January 17, 2012

CITY	PREVIOUS RECORD	NEW RECORD
Condon, OR	4.0 IN 1962	15.4
Ione, OR	3.0 IN 1937	4.0
La Grande, OR	1.2 IN 2002	6.0
Moro, OR	3.0 IN 1937	7.5
Pendleton EXP STN, OR	6.0 IN 1937	6.0 (TIED)
Bickleton, WA	6.0 IN 1954	10.5
Glenwood, WA	5.0 IN 1999	10.0
Goldendale, WA	10.0 IN 1913	12.0
Satus Pass, WA	3.0 IN 1972	13.0
Whitman Mission, WA	0.2 IN 1987	1.2
Walla Walla, WA	3.0 IN 1969	4.7
Yakima, WA	3.0 IN 1973	6.0



Changes to NOAA Weather Radio

Due to the end of the Chemical Stockpile Emergency Preparedness Program (CSEPP) at the Umatilla Chemical Depot, changes have been made to the NOAA Weather Radio (NWR) programming. The NWR transmitter at Umatilla broadcasting as 162.500 MHz has been removed. This transmitter had been providing forecast and warnings for southern Benton County in Washington, which is now available at 162.425 MHz from Sillusi Butte near Plymouth.

Also, the Ukiah NWR transmitter frequency was changed to 162.475 MHz to prevent interference with the Sillusi Butte transmitter. The Ukiah NWR serves Umatilla County and northern Grant County from Carney Butte near Battle Mountain.

The Powell Butte NWR which serves Bend, Redmond and Prineville areas has been transmitting with a noticeable hum for several months. The National Weather Service plans to replace this transmitter in the near future with a refurbished NWR transmitter which was formerly at Umatilla. ❖

NWS Pendleton Holds Customer Workshop

By Michael Vescio, Meteorologist In Charge

The National Weather Service in Pendleton held a Customer Workshop on May 1st at the Pendleton Emergency Operations Center. NWS Western Region Director Vickie Nadolski was present and delivered the keynote address on “Weather Ready Nation” (WRN). For more information on WRN visit the [website: www.nws.noaa.gov/com/weatherreadynation/](http://www.nws.noaa.gov/com/weatherreadynation/). Many of our customers gave presentations on their vocation and how they use NWS information and forecasts. There was also a panel discussion where several questions relevant to the NWS’ mission were

explored. The purpose of the workshop was for the staff at WFO Pendleton to determine customer needs, strengthen existing partnerships and form new ones, and to identify service gaps. A common theme that emerged was that our customers rely heavily on the NWS to make critical weather related decisions, and the more personal interaction that they have with us the better prepared they are to make the right choices. The Pendleton staff learned a lot from the attendees and wish to thank all those who participated. ❖



Mary Wister, NWS Science and Operations Officer, conducted a panel discussion with some of the users. Photo by A.Adams

Dennis Hull, NWS Warning Coordination Meteorologist, provided an overview of topics to be discussed and introduced speakers. Photo by A.Adams



Summer 2012 Outlook

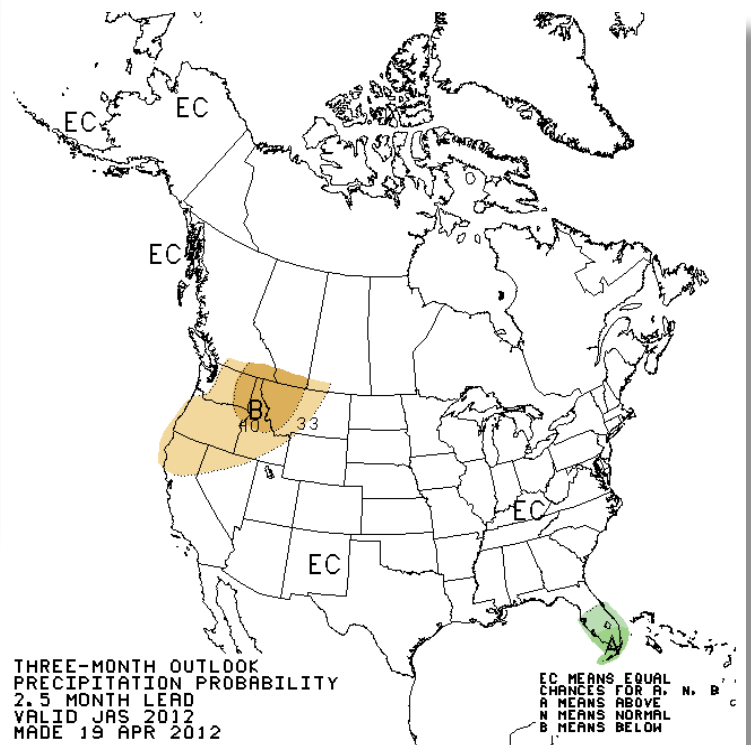
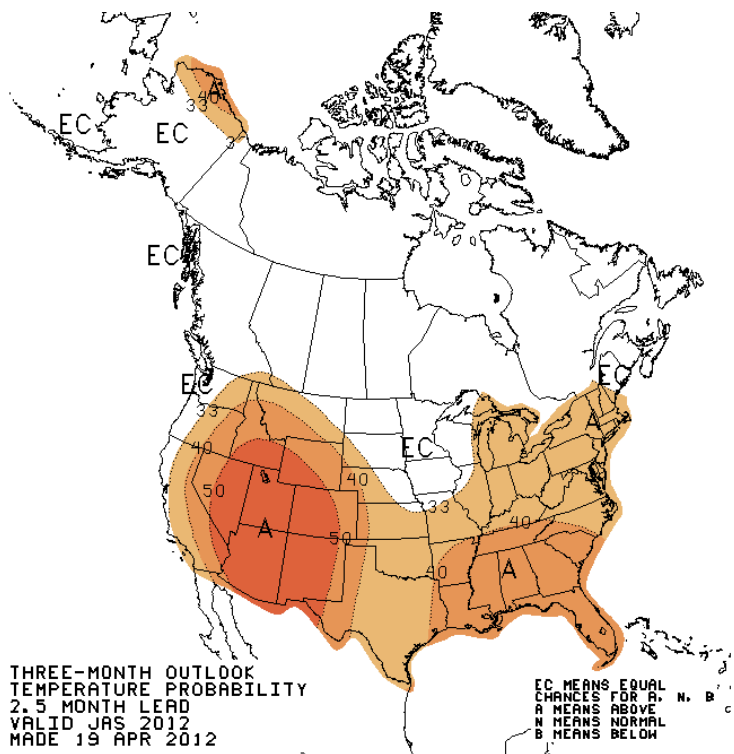
By Diana Hayden, Meteorologist

The last two winters, the ocean and atmospheric conditions indicated that a La Niña was in place. Recent observations of sea-surface temperature have indicated that conditions are returning to a neutral state. The Climate Prediction Center models are indicating that neutral conditions are expected through the spring and summer months.

The Climate Prediction Center's three-month temperature outlook for the time period July-August-September indicates a greater chance of above normal temperatures for most of the region. This does not necessarily mean we will see above normal temperatures all summer, this just means that there is a greater probability of seeing above normal average summer temperatures. The contours represent probabilities, with most of the area seeing between a 33% and 40% chance of above

normal temperatures. These graphics are based on three categories, with equal chances representing 33.3% in the above, near and below normal categories. When there is an increased probability in the above normal category (such as this summer), there is a decreased probability in the below normal category.

The three-month precipitation outlook for the time period July-August-September indicates a greater chance of below normal precipitation for the Pacific Northwest. Another thing to keep in mind is that the day-to-day weather can still vary throughout the summer. For information on the day-to-day weather including watches, warnings and advisories, please refer to our website or NOAA weather radio for details. ❖



Water Year Precipitation October 2011 - April 2012

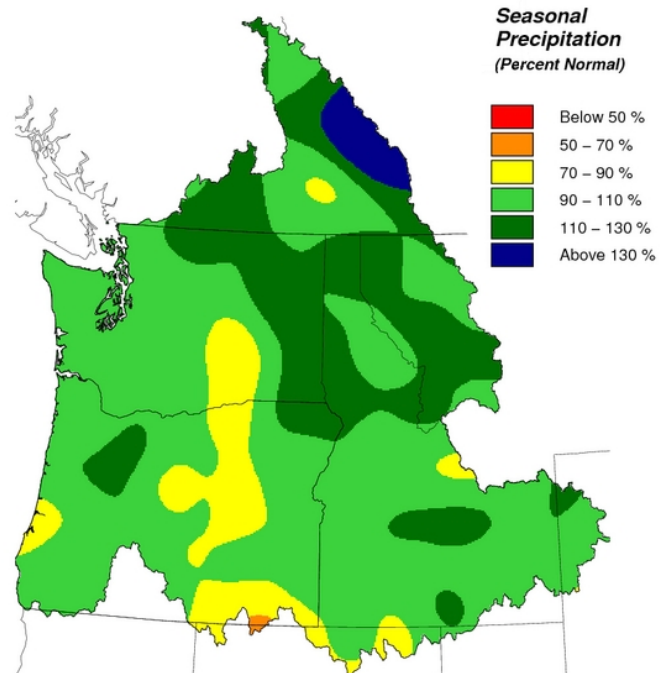
By Marilyn Lohmann, Service Hydrologist

Location	Amount In Inches	Percent of Normal
Bend.....	8.07.....	97%
Condon.....	10.49.....	102%
Dufur.....	9.75.....	90%
Heppner.....	8.49.....	88%
John Day City.....	5.73.....	72%
Joseph.....	9.09.....	97%
Madras.....	5.86.....	78%
Meacham.....	28.85.....	115%
Mitchell.....	6.81.....	106%
Moro.....	8.44.....	97%
Pelton Dam.....	6.93.....	83%
Pendleton Airport.....	9.64.....	94%
Pilot Rock.....	8.64.....	91%
Prineville.....	6.83.....	93%
Redmond Airport.....	5.98.....	103%
Wallowa.....	14.30.....	128%
Wickiup Dam.....	15.52.....	92%
Cle Elum.....	18.75.....	102%
Dayton.....	16.86.....	118%
Ellensburg.....	6.10.....	91%
Hanford.....	4.05.....	79%
Mill Creek Dam.....	16.84.....	123%
Mt Adams RS.....	46.36.....	114%
Selah.....	6.16.....	100%
Sunnyside.....	4.63.....	84%
Whitman Mission.....	10.92.....	104%
Yakima Airport.....	5.93.....	95%

The mountain snowpack, at the end of December was also well below normal with values 40 to 80 percent of normal. January had near to above normal precipitation. In February, the storm track moved north with Washington seeing near to above normal precipitation, while central Oregon saw amounts of only 40 to 60 percent of normal. March had above normal precipitation and cooler than normal temperatures, with April having well above normal precipitation. ❖



Seasonal Precipitation
October 2011 – April 2012



Creation Time: Thu, May 3, 2012

Northwest River Forecast Center

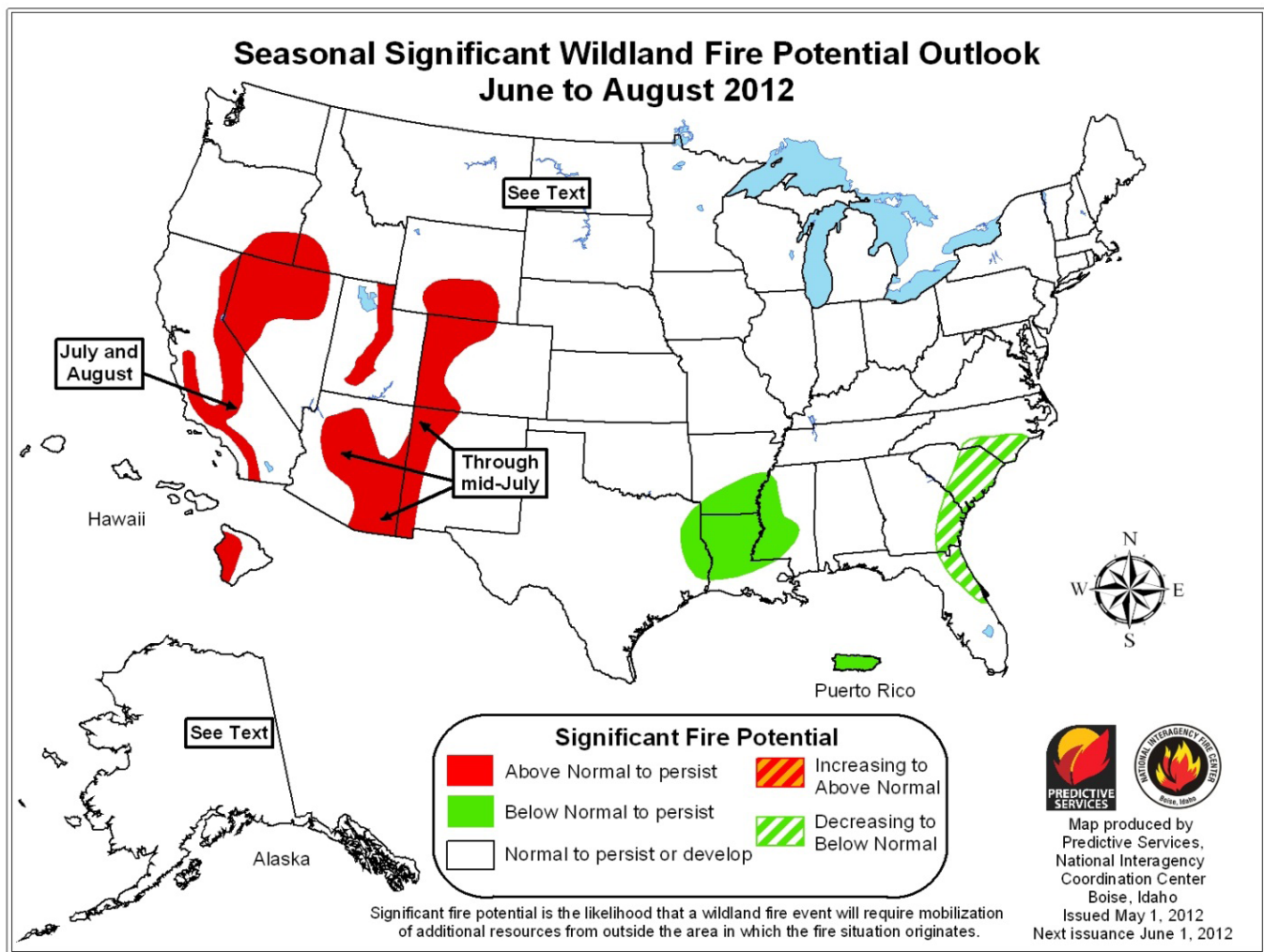
October saw near normal temperatures and slightly above normal precipitation, with the month of November having cooler than normal temperatures and below normal precipitation. The first half of November was very dry with more typical winter weather moving into the region by the middle of the month. December had well below normal precipitation amounts as high pressure was in place for much of the month.

2012 Projected Fire Season

By Rachel Trimarco, Incident Meteorologist / Fire Weather Program Leader

La Niña has ended and ENSO Neutral conditions will soon bring a relatively warm, dry summer to the Inland Northwest. Yet there is also a possibility of a transition to El Niño conditions by the end of summer, which would favor slightly above normal summer rainfall on the east side, while the west side of the Cascades would be drier. Given this uncertainty, fire season activity becomes difficult to predict. However, since this spring has already been warmer and drier than the past several years, and much of winter's snow pack has already melted, it is reasonable to conclude that

summer will also be warmer and drier. So unlike last year, the fire season will likely start on time in Eastern Washington and a week to 10 days earlier than usual in Eastern Oregon. On an average year fire season usually starts in mid-June. And although 2012's fire season will be more active than the past few years, the Northwest Interagency Coordination Center (NWCC) Predictive Services does not anticipate an unusually busy fire season. For more information about fire weather and wildland fire management please visit NWCC's website at www.nwccweb.us. ❖



For information on ways to help protect your home, property or community from wildland fires, check out www.firewise.org

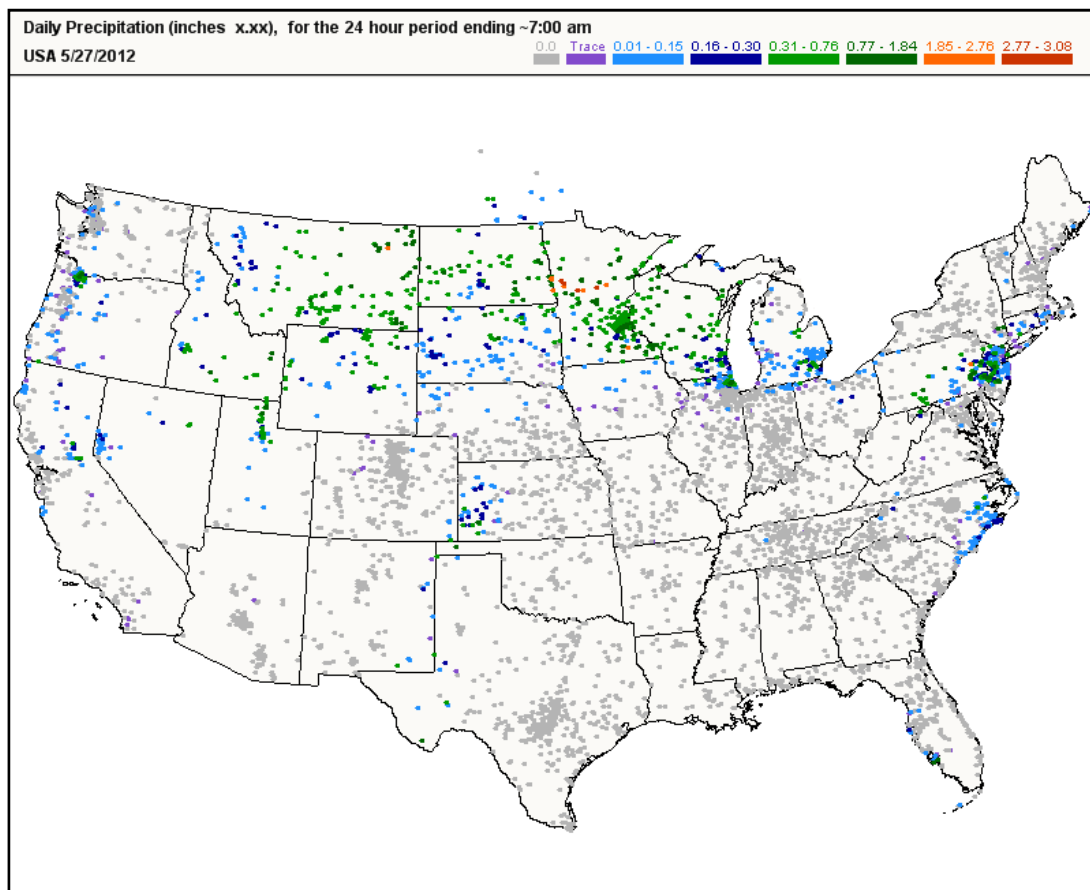
CoCoRaHS Observers Needed

By Rachel Trimarco , Meteorologist

Need a new hobby? Be a rainfall reader! CoCoRaHS (the Community Collaborative Rain, Hail and Snow network) is looking for more weather enthusiasts to join their ever-growing network of volunteer rain, hail and snow recorders. There are currently around 1600 volunteer observers in Oregon and Washington, but most of them live west of the Cascades or in populated areas. We desperately need more observers in rural areas to be our eyes and measure rain and snow during active weather.

What are the benefits of being a CoCoRaHS observer? Well, we don't offer a pay check, but one of the neat things about

participating in the CoCoRaHS network is walking away with the feeling that you are making an important contribution that helps others. By providing your daily precipitation data, you truly help in filling in "a piece of the puzzle" that affects many in your part of Oregon or Washington in one way or another—whether it's farmers and ranchers, emergency management personnel or the National Weather Service as they study the long term climate record. CoCoRaHS also provides a great way to learn more about weather and water by participating collaboratively with many local scientists. If you already record rain and snow, or want to start, please visit www.cocorahs.org for more information. ❖



Cooperative Program Highlights



A 45 year Length of Service Award was presented to John Duckworth of Wallowa, Oregon on May 2, 2012. Pictured from left, Mike Vescio, Meteorologist In Charge at Pendleton, John Duckworth, Vickie Nadolski, Regional Director NWS Western Region Headquarters. Also present for the award was Jim Smith, Observations Program Leader. Photo by A. Adams

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