



# NOAA's NATIONAL WEATHER SERVICE Western Region Notes

December 15, 2005

## REGIONAL DIRECTOR'S OFFICE



**LIFT Team Takes Off:** The 2005 Leadership and Innovation For Tomorrow (LIFT) class kicked off their training with a week-long meeting in Portland on December 4-9. Fifteen class members from around the region attended, along with a group of MICs, HICs, and WRH staff who served as LIFT facilitators.

Class sessions were presented by the facilitators, Norma Barr (Meyers-Briggs evaluations), and Jim Campbell (retired WR Deputy Director). Each session promoted lively discussions among the class members on topics such as servant leadership, innovation, values, communication, leading change, and mentoring. As part of the workshop, participants traveled to the Bonneville Power Administration (BPA) for a leadership case study. Based on customer needs, BPA recently went through some significant change. LIFT participants learned about BPA's process for change and barriers they faced. The field trip was organized by Craig Schmidt, a member of the first LIFT class.

LIFT participants will soon be paired with mentors to begin the next phase of LIFT training. They will complete projects and continue with various leadership training over the next year.



**Photo of the Week:** WFO Reno was recently recognized with the Department of Commerce Silver Medal Award during the 57<sup>th</sup> Annual Department of Commerce Awards ceremony. They received the award for outstanding performance during an extreme Sierra snowstorm in January 2005.

Tom Cylke (left), WFO Reno Lead Forecaster, and Jim Fischer (right), WFO Reno SOO, pose with Vice Admiral Conrad C. Lautenbacher, Under Secretary of Commerce for Oceans and Atmosphere and NOAA Administrator.

## METEOROLOGICAL SERVICES DIVISION

**Statement of the Week:** This week's Statement of the Week is an excellent outlook for heavy rain and snow in the Sierra Nevada Range written by forecaster Brian Brong of WFO Reno. The statement preceded watches and warnings and verified with winds gusts to 90 mph, 36 inches of snow at the Mr.

Rose Ski area, and widespread rainfall amounts of two to three inches at lower elevations, as forecast.  
Nice work Brian!

SPECIAL WEATHER STATEMENT  
NATIONAL WEATHER SERVICE RENO NV  
304 AM PST TUE NOV 29 2005

CAZ070>073-NVZ001>005-300000-  
SURPRISE VALLEY CALIFORNIA-LASSEN-EASTERN PLUMAS-... (etc) -  
INCLUDING THE CITIES OF...CEDARVILLE...EAGLEVILLE... (etc)  
304 AM PST TUE NOV 29 2005

...NEXT PACIFIC SYSTEM WILL REACH THE SIERRA AND WESTERN NEVADA ON THURSDAY...

ANOTHER LOW PRESSURE SYSTEM WILL MOVE SOUTH FROM THE GULF OF ALASKA ON WEDNESDAY AND REACH THE PACIFIC NORTHWEST COAST ON THURSDAY. AHEAD OF THIS STORM WARM AND MOIST AIR WILL MOVE INTO THE SIERRA AND KEEP THE SNOW LEVELS ABOVE 7000 FEET. RAIN AND HIGH ELEVATION SNOW WILL AFFECT THE SIERRA AND NORTHEAST CALIFORNIA THROUGH THURSDAY NIGHT. AT THIS TIME SIGNIFICANT SNOW ACCUMULATIONS ARE POSSIBLE ABOVE 7500 FEET... WITH LITTLE TO NO ACCUMULATION BELOW 7000 FEET. SNOW LEVELS ARE EXPECTED TO LOWER TO 6000 FEET LATE THURSDAY NIGHT AND AFTER THE HEAVY PRECIPITATION ENDS.

WINDS WILL ALSO INCREASE WITH THIS APPROACHING SYSTEM. GUSTS OVER THE SIERRA CREST COULD EXCEED 80 MPH. FOR WESTERN NEVADA...SOUTHWEST WINDS WILL INCREASE THURSDAY MORNING WITH STRONG GUSTS POSSIBLE ON THURSDAY AFTERNOON. THESE WINDS COULD CAUSE DIFFICULT TRAVEL CONDITIONS FOR HIGH PROFILE VEHICLES.

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BRONG

**Aviation Program:** It is important that offices keep up with the schedule for The Impacts of Weather on Air Traffic Management Course. The due date for completion is December 31, 2005. Below is a listing of how each office is progressing with the training (as of December 5):

<b><u>Office</u></b>	<b><u>% completion</u></b>		
CWSU Fremont	<b>100</b>	WFO Spokane	94
WFO Missoula	<b>100</b>	WFO Seattle	93
CWSU Auburn	<b>100</b>	WFO Pocatello	88
WFO Medford	<b>100</b>	WFO Portland	83
WFO Phoenix	<b>100</b>	WFO Boise	82
WFO Great Falls	<b>100</b>	WFO Reno	81
CWSU Palmdale	<b>100</b>	WFO Los Angeles	80
WFO Eureka	<b>100</b>	WFO Flagstaff	79
WFO San Diego	<b>100</b>	WFO Elko	77
WFO Billings	<b>100</b>	WFO Las Vegas	77

WFO Pendleton	72	WFO San Joaquin Valley	58
WFO Tucson	71	WFO San Francisco	54
WFO Sacramento	71	WR MSD	33
WFO Glasgow	67	CWSU Salt Lake City	25
WFO Salt Lake City	62		

**Pocatello’s Digital Forecasts Support Emergency Operations During Cold Outbreak:** During a recent cold spell on December 7-8, Caribou County, Idaho experienced a widespread power outage when a high voltage power line snapped in extremely cold weather. The power line fell onto other feeder lines and caused multiple transformers to fail. The outage affected communities of Grace, Bancroft, Henry, and Wayan. Caribou County opened their Emergency Operations Center (EOC), and the State of Idaho’s operations center was partially activated. Idaho Bureau of Homeland Security Area Field Officer Ken Fagnant was called to the Caribou EOC. Having worked directly with the Pocatello staff before, he knew they could provide the support needed to get through this situation successfully. He requested a spot forecast in three hour increments to assist with their decision making. Forecasters Bill Wojick and Dawn Harmon used gridded forecasts to provide the needed information to emergency management staff. The data assisted in the opening of warm shelters in remote areas of the county, where many homes were without power. The staff kept in contact with Caribou EOC through the evening, providing updates on falling temperatures, including Wayan, Idaho, which dropped to -26 F by 8 pm. The WFO received thanks and praise for their efforts from Dave Jackson of the Idaho Bureau of Homeland Security: "Thanks for the forecast. It's exactly what I needed."

**SkyWarn Recognition Day Activities In Western Region:** Several WFOs across Western Region participated in SkyWarn Recognition Day on December 2-3. SkyWarn Recognition Day was developed in 1999 by the National Weather Service and the American Radio Relay League. It celebrates the contributions that volunteer SkyWarn amateur radio operators make to the National Weather Service. Over a 24-hour period, many local amateur radio clubs set up in local NWS offices and attempt to contact as many other radio operators as possible, including other NWS offices around the United States. Offices participating in Western Region included WFOs Glasgow, Billings, Seattle, Las Vegas, Elko, Reno, Spokane, Eureka, and Missoula.



*Valley County Amateur Radio Club operators set up equipment outside WFO Glasgow*

In Glasgow, the Valley County Amateur Radio Club braved snow and ice, and wind chills of 12 degrees below zero to set up their equipment. They had a total of 248 contacts, including 54 NWS offices, and earned the SkyWarn “F3 Tornado” endorsement. Operators at the Seattle office reported their highest number of contacts ever. Elko SkyWarn participants had 525 total contacts in 44 states (including 50 NWS offices, Japan, and Saipan. In Billings, members of the Yellowstone Radio Club, along with some of the WFO staff, made contacts ranging as far as the National Hurricane Center in Florida and Caribou, Maine. WFOs Las Vegas and Eureka both reported 61 contacts. Congratulations to all for the fine work and cooperation!

**Las Vegas Forecaster Shadows Local TV Meteorologist:** WFO Las Vegas forecaster Charles Bell recently spent an afternoon shadowing local television station Fox 5’s Meteorologist Darren Peck. The goal was to gain a better understanding of the local media's needs for weather information. The WFOs Outreach Team, which is charged with creating opportunities for positive interactions between

operational employees and the office's customers and partners, arranged for six Las Vegas meteorologists to shadow at local TV stations in recent weeks. Among the things learned from the local television staff are the importance of the WFOs "Area Forecast Discussions" and digital forecasts. Conversely, the "Zone Forecast's" importance has been diminishing. Future shadowing or familiarization trips planned by the office Outreach Team include visits to the FAA at McCarran International Airport, "familiarization floats" on Lake Mead with the Nevada Department of Wildlife, and a possible visit to a nearby prescribed burn.



**Pocatello WCM Presents on Lewis and Clark Expedition:**

Pocatello WCM Vern Preston provided the keynote speech at this year's Idaho Governor's Preparedness Conference in Lewiston, Idaho. He gave an animated presentation on the weather, water, and climate of the Lewis and Clark Expedition, which passed through Idaho 200 years ago. The presentation outlined the general history of the Expedition, and the top ten events which shaped their journey. An in-depth overview was given concerning the weather hazards experienced by the expedition while traversing Idaho, including major snow storms

in the Bitterroot Mountains, spring flooding in the Clearwater River, freezing temperatures in Lemhi County, and the loss of their last thermometer on the Lost Trail Pass. The evening's talk finished with a comparison of the winters of 1804-06 and 2004-05, and the Climate Prediction Center's seasonal forecast for this winter. Several Emergency Coordinators have asked Vern to provide a similar talk to their communities.



**Pacific County, Washington Receives TsunamiReady**

**Designation:** On December 13, WFO Portland conducted a TsunamiReady recognition ceremony in South Bend, Washington to designate Pacific County as both TsunamiReady and StormReady. Pacific County became the third county in the continental U.S. and the 24<sup>th</sup> community in the nation to receive the TsunamiReady designation. Pacific County is located in coastal southwest Washington State with a population of approximately 22,000 people. The county has four incorporated communities--Raymond, South Bend, Long Beach and Illwaco, which also includes the Long Beach Peninsula, a very popular tourist destination. The peninsula is approximately 25 miles long with a maximum elevation of 20 feet above sea level. The Cascadia Subduction Zone is located

approximately 50 miles offshore and a known source of earthquakes that can produce tsunamis. In the event of a large earthquake near this subduction zone, a major tsunami would be likely within 30 minutes. The increased awareness, education activities, and hazard preparation by this county could very well provide the edge needed to save lives.

**Television Forecaster Learns from Pocatello Forecast Staff:** Mike Rogers, forecaster at KMVT in Twin Falls, Idaho, paid a visit to WFO Pocatello on December 5 (during the midnight shift) to enhance his knowledge and weather skills. Forecasters Ken Simosko and Dawn Harmon reviewed their methodology for the extended range forecast, collaboration procedures with adjacent WFOs, model interpretation, and how national guidance information (from HPC) is used to help determine "the model of choice" for the period of interest. He also learned how the staff forecasts high and low temperatures

and how the Area Forecast Discussion is composed. Mr. Rogers is currently taking weather courses through the College of Southern Idaho. He was very appreciative of the WFO staff's efforts to help him learn about NWS forecast procedures. His drive and enthusiasm for understanding meteorology, and the role of weather in the media make him a valued partner in Pocatello's local forecast and warning program.

**Roosevelt County (MT) and Fort Peck Tribe Declared StormReady:** Congratulations to officials in Roosevelt County, MT, and the Fort Peck Tribe, for becoming the newest StormReady communities in Western Region. A ceremony was held to recognize both the County and the Tribe on December 12. Excellent work by all!



*L to R: Jim Shanks, Gary MacDonald, Vickie Delger (Roosevelt County Commissioners); Bob Diaz (WRH SOD Chief), Julie Adolphson, (MIC, Glasgow), and Dan McGowan (Montana Disaster and Emergency Services Administrator)*



*Fort Peck Tribal Council with Tribal Chairman John Morales (center, holding sign). Other names not available.*



**WFO San Diego Fire Weather Outreach:** On December 5, WFO San Diego SOO Ivory Small conducted a familiarization visit for Di Mortier from the Cleveland National Forest, Monte Vista Interagency Communication Center. Di also sat in for part of that day's fire weather shift, which was especially informative, since there was a red flag warning in effect. Ms. Mortier plans to use insights gleaned from her visit to help make the spot forecast request process run more efficiently for both the NWS and the Forest Service. Ms. Mortier's visit was part of an on-going program which will allow all employees of the dispatch center to

visit WFO San Diego prior to next year's fire season.

## **HYDROLOGY AND CLIMATE SERVICES DIVISION**

**CBRFC / SLC-WFO Visit to PHX:** On Tuesday November 29th Greg Smith, HAS Forecaster (CBRFC) and Brian McInerney, Sr. Service Hydrologist (WFO SLC) spent the day at the Phoenix WFO to discuss and install an experimental Flash Flood Potential Index developed at the CBRFC. They met with Tony Haffer (MIC), Tom Zickus (Sr. Service Hydrologist, Doug Green (SOO), and several other staff members. Greg gave a presentation about the development of the Index, current status, and future direction. Brian gave a presentation about how the SLC WFO has utilized the Index along with output from the FFMP in their flash flood warning program. Greg and Brian installed the necessary files and spent some one on one time with staff members demonstrating how to access the FFPI files in ArcView

and ArcExplorer. This index is still experimental but the concept has gained the interest of the National AHPS Flash Flood Services Team. The Phoenix WFO has expressed strong interest in this product and feedback from them is considered very valuable in assessing the future direction of this project.



*Kevin Bolton, WRH SOD, programs an automated rain gage.*

**Western Region HSCD and SOD Test Portable Rain Gages:**

Two portable rain gages with automated GOES telemetry were successfully tested at Western Region Headquarters on December 5. The gages can be used anywhere in Western Region where a temporary observation platform would be useful such as in a burn scar where heavy rain may trigger flash flooding or debris flows into a populated area.

In addition to precipitation data, temperature observations are also transmitted. Other sensors may be added in the future if necessary making a complete portable weather station.

## SCIENTIFIC SERVICES DIVISION

**HMT:** The first field season for NOAA's HydroMeteorology Test bed (HMT) begins December 1 and runs through March 23, 2006. The Sacramento RFC HAS and WFOs Sacramento and Reno are participating. One very good precipitation event for the American River Basin has been captured so far.

**IFPS Verification:** Kirby Cook has packaged the system developed by Tim Barker into a mod-note. It is currently being tested at the WR DMST offices.

**Gridded MOS:** 5km Gridded MOS is now flowing to Medford. Dennis Gettman is conducting an initial evaluation that will be shared with the DMST in a few weeks.

**Winter Storm Reconnaissance Program:** The Monterey Forecast Office is again serving as the Western Region Focal Point for this season's Winter Storms Reconnaissance (WSR) Program. The basic idea of the program is to deploy spatially and temporally targeted dropsondes well out over the Pacific from aircraft flying out of Honolulu and Anchorage -- with the objective of improving the NCEP model forecasts in critical weather situations and when there is significant model disagreement or uncertainty. For the western U.S., the constraints of the program are such that the forecast event of interest would typically have to be identified 60-96 hours in advance (for a request to be made for targeted obs). The procedure to follow if we receive such a request from any WR office: Requests must be sent to the SDM at NCEP before 9:30 am EST (6:30 am PST).

The Winter Storms Program for 2005 will conclude on or before 15 March.

For significant additional detailed information on the current WSR program, see: <http://www.emc.ncep.noaa.gov/gmb/targobs/target/wsr2005.html>

## Upcoming Science Workshops

**Annual AMS Meeting - Jan 29-Feb 2:** The Annual meeting of the American Meteorological Society (AMS) will be held January 29 to February 2 in Atlanta. Please refer to the web site [www.ametsoc.org/meet/annual](http://www.ametsoc.org/meet/annual) for details. WR attendance is restricted to those who have been pre-approved.

**Pacific Northwest Weather Workshop - March 3-4:** The Pacific Northwest Weather Workshop will be held Friday and Saturday, March 3 and 4 2006, at the NOAA Western Regional Center campus at Sand Point in Seattle, Washington. This annual conference, sponsored by the National Weather Service, University of Washington, and Puget Sound Chapter of the American Meteorological Society, covers recent developments in weather forecasting and observational technologies, major weather events of the past year, and topics dealing with Western U.S. meteorology.

Pre-registration is required for all attendees. You are encouraged you to visit the web site at: [www.atmos.washington.edu/~cliff/PNW2006.html](http://www.atmos.washington.edu/~cliff/PNW2006.html) for latest information and on-line registration. **ABSTRACTS MUST BE RECEIVED BY 1 January 2006.** For more information contact: Brad Colman, NWS Forecast Office (206.526.6095 x 224/222, [brad.colman@noaa.gov](mailto:brad.colman@noaa.gov) or [chris.hill@noaa.gov](mailto:chris.hill@noaa.gov)), or Clifford Mass, Dept of Atmospheric Sciences, Box 351640, University of Washington, Seattle WA 98195 (206.685.0190, [cliff@atmos.washington.edu](mailto:cliff@atmos.washington.edu)).

**Climate Prediction Applications Science Workshop – March 21-24:** The National Weather Service Climate Services Division, in conjunction with the University of Arizona Climate Assessment for the Southwest and Arizona Cooperative Extension is hosting the Fourth Climate Prediction Applications Science Workshop (CPASW) at the Westward Look Resort in Tucson, Arizona, on March 21-24, 2006. The deadline for abstracts is December 20, 2005 and on-line registration is February 1, 2006. <http://cals.arizona.edu/climate/CPASW2006/index.htm>

## New WR Science Publications

WR TA-Lite 05-13

**[The Case of the Follow-On Short Wave: A WES Case from the March 2-5, 2004 Winter Storm](http://www.wrh.noaa.gov/wrh/talite0513.pdf)**, by Erik Pytlak (WFO Tucson)  
<http://www.wrh.noaa.gov/wrh/talite0513.pdf>

WR TA-Lite 05-14

**[January 2005 Banded Snow Event Using the Weather Event Simulator](http://www.wrh.noaa.gov/wrh/talite0514.pdf)**, by Mike W. Johnson and Eugene Petrescu (WFO Missoula)  
<http://www.wrh.noaa.gov/wrh/talite0514.pdf>

## Training Update

**Postgres Update:** Two deliverables in Postgres -- both are accessible through the postgres link at <http://www.nwstc.noaa.gov/nwstrn/index.html>.

- The introduction to PostgreSQL course has been completed and is now available on the web site.

- Training Center instructors, Randy Schupbach and Jim Totesek, also developed a server that allows NWS personnel to access an AWIPS OB6 Beta 10 Postgres database. Their exciting innovation provides a way for those without operational Postgres access to experiment with Postgres. This was intentionally established only for folks to experiment on and there is no separate training associated with it.

**AWIPS Builds Update:** As a preliminary step to NWSTC development of AWIPS systems admin build (delta) training, NWSTC has chartered a team to determine the build training priorities as well as provide input on level of detail needed and approaches. The 11-member team was coordinated with the SOD chiefs and has 3 NWSTC instructors, 1 NWSHQ rep, 3 WFO reps, and 4 regional headquarters reps.

**Aviation Module:** Reminder, the Aviation module is required to be completed by **December 31, 2005**.

**COMET Module:** The COMET "NWS Support During Hazardous Materials Emergencies" is required to be completed by **April 30, 2006**. Please refer to memo sent to each WR MIC and HIC for more information. The COMET module is available through the NOAA E-Learning system at <http://e-learning.doc.gov/noaa/>.

**WDTB AWOC:** The AWOC Winter Track is required to be completed by **November 30, 2006**. Please refer to the memo sent to each MIC and HIC for more details

**Teletraining Sessions for January:** The Virtual Institute for Satellite Integration Training (VISIT) calendar for January is now available. Offices can register for the teletraining sessions by sending email to: [visit@comet.ucar.edu](mailto:visit@comet.ucar.edu). The teletraining calendar is now at: <http://rammb.cira.colostate.edu/visit/ecal.asp>

The teletraining planning calendar with other sessions is at: <http://rammb.cira.colostate.edu/visit/planning.html>

The current sessions planned for January are:

- NEW - GOES Sounder Data and Products (Basic, Jan 31)
- GOES High Density Winds (Basic, Jan 9,19,23)
- Cyclogenesis: Analysis Utilizing Geostationary Satellite Imagery (Basic, Jan 10)
- Utilizing GOES Imagery within AWIPS to Forecast Winter Storms Part 1 (Intermediate, Jan 17)
- Utilizing GOES Imagery within AWIPS to Forecast Winter Storms (Intermediate, Jan 18)

Several recorded VISIT session are available via LMS: <http://e-learning.doc.gov/coursecatalog/index.cfm>. Then, go to NATIONAL WEATHER SERVICE COURSES and search on VISIT.



All previous sessions including those with recorded instructor audio and annotations are available at: <http://rammb.cira.colostate.edu/visit/ts.html>

## SYSTEMS OPERATIONS DIVISION



### **Miramar Upper Air Gets New Paint Job:**

Facilities Engineering Technicians James Maclellan & Michael Belarde painted the Miramar California Upper Air Station during the week of December 4. Before and after pictures really demonstrate the difference a fresh coat of paint makes!

**Mail Servers Update:** Western Region has made the decision to move to NOAA Messaging Operations Center (MOC) mail servers. WR has asked the MOC to schedule a migration date. It is expected that the soonest this migration will take place is January 2006.

**AWIPS Training Meeting:** Sean Wink, Electronics & Facilities Branch Chief, attended a 2 ½ day Field Requirements Team meeting to discuss AWIPS delta training. The team focused on the highest priority training needs for system administrators in conjunction with the most significant changes to the AWIPS baseline.

**Flagstaff Assistance:** Gar Nelson, WRH AWIPS RMS, assisted WFO Flagstaff with AWIPS modification notes 25 and 27. Gar also assisted the ESA with a priority 1 ASOS outage in Page, Arizona.