

NOAA's NATIONAL WEATHER SERVICE Western Region Notes

March 16, 2007

REGIONAL DIRECTOR'S OFFICE

Western Region Diversity Action Committee – by Alan Haynes, Meteorologist, CNRFC Sacramento

Diversity, Affirmative Action and Equal Employment Opportunity; what's the Difference?

Diversity issues transcend race, ethnicity, gender and sexual orientation to account for people as unique individuals. The purpose of focusing on diversity is to promote an inclusive workplace where people are treated with respect, communication flows freely, and relationships are strengthened. The goal is to create an environment where people can carry out our mission more effectively, thereby increasing the likelihood of retaining quality people.

In order to attract a diverse group of quality people to our organization, we engage in several recruitment activities that target underrepresented groups in our organization. These activities are more accurately labeled as Affirmative Action than Diversity activities. Furthermore, Equal Employment Opportunity refers to the legal aspects that aim to prevent discrimination in the work force and utilize affirmative action principles.

Barriers have been identified that inhibit people from getting into the National Weather Service. One of these barriers has to do with public awareness; many people simply do not know that we exist and statistics indicate that this lack of awareness is more pervasive among minorities, including African, Asian, Hispanic and Native Americans. Another barrier is the lack of minorities entering college and/or the lack of college graduates with the necessary degrees or qualifications to be eligible to join the National Weather Service.

Another problem facing our organization is retention of quality employees, especially women, who are more likely to leave due to the quality of life issues associated with shift work and its impact on child care and raising families. However, retention could potentially be an issue with any employee who decides they are not able to fit in, fully contribute, or otherwise develop to their full career potential. Retention of quality employees is one of the primary reasons for investing in Diversity Management.

The DAC will continue to help us all distinguish between Diversity, Affirmative Action, and Equal Employment Opportunity in future WR Staff Notes articles. You can also expect further guidance on how you can utilize the principles of Diversity Management to help WR foster an inclusive, respectful environment that works for everyone.

METEOROLOGICAL SERVICES DIVISION

STATEMENT OF THE WEEK: Search and Rescue Success Story in Idaho: On Tuesday evening March 6th, WFO Pocatello forecaster Mike Cantin made a presentation to members of the Teton County, Idaho Search and Rescue (S&R). Mike underscored the ability of the NWS to support their rescue efforts with “spot” forecasts. Mike has been briefing search and rescue groups since last summer as part of an aggressive outreach campaign that includes 911 dispatch centers and hospitals, among others. The night after Mike’s visit to Teton County, S&R coordinator Jeff Battle, called the WFO Pocatello. Two snowmobilers who were stranded in remote and extreme terrain on the west side of the Big Hole Mountains. Battle spoke with lead forecaster Dawn Harmon who obtained relevant information for a spot forecast. Among these pieces of information provided by Battle were two sets of latitude and longitude representing points 1,000 feet apart with varying elevation. Dawn worked to populate the appropriate fields to generate a spot forecast for the rescuers while fellow lead forecaster Jeff Hedges worked on the forecast. They faxed the “spot” 38 minutes after the request. Ten minutes later, Battle called to confirm receipt and to discuss the finer details of the forecast. Jeff Hedges informed Battle that weather between the two “lat/lon” points would be indiscernible. Of greatest concern was a developing weather situation that included snow moving toward the stranded men and their rescuers. In fact, Jeff forecast snow to begin at the scene in 2 hours. Two hours later, rescuers reported snow. The rescue was a success. Both men were safely recovered. The next day Battle relayed to WFO Pocatello the entire S&R crew could not stop talking about the accuracy of that forecast. Great work!



WFO Reno Office Tours: WFO Reno WCM Rhett Milne describes the NDFD to a group of federal, state, and city firefighters from all across the nation and as far away as Australia during the International Association of Fire Chiefs Wildland Urban Interface Conference which was held in Reno from March 5th-8th. The WFO provided four tours lasting one and a half hours each to over 80 fire personnel.

Annual Western Nevada Regional Science and Engineering Fair: WFO Reno forecasters Alex Hoon, Mark Deutchendorf, and Wendell Hohmann participated in judging the annual Western Nevada Regional Science and Engineering Fair held at the University of Nevada Reno campus. The fair included 100 schools as far away as Ely and Tonopah with more than 1000 science projects.



Avalanche Center Visits WFO Medford: On March 4, 2007, Mount Shasta Avalanche Center Lead Climbing Ranger and Avalanche Forecaster Eric White visited the WFO Medford to shadow General Forecaster and Incident Meteorologist Brett Lütz. Eric was particularly

interested in the forecast process and how gridded and text forecasts are produced. Snow level forecasting, in particular, was a hot topic of discussion, as the Mount Shasta area experiences localized effects that result in relatively high amounts of low elevation snow. The Medford office provides support to the Avalanche Center via the Mount Shasta Recreation Forecast. This forecast is used in making Avalanche Warnings/Advisories and Climbing Advisories for hikers, snowmobilers, skiers, and climbers. The warnings and advisories are disseminated via NOAA Weather Radio and the WFO website. Visitors to the 14,162 foot mountain come from all over the world. The visit was also the beginning of the Adopt-A-County program that is spinning up at the Medford office. A partnership is being developed with the avalanche center which is expected to lead to extensive research on snowfall forecasting in the region and, in particular, in Siskiyou County.

Farm Day in Kings County: Lead Forecaster Jim Bagnall and Meteorologist Intern Chris Stachelski represented WFO San Joaquin Valley at the annual Kings County Farm Day on March 7th. Each year, third graders from across the county visit the local fair grounds for a close-up view of the agriculture industry. Over 300 students visited the NWS booth to learn about how weather impacts almost every aspect of farming. Chris is shown explaining how cold temperatures damage strawberries.



WFO Medford HMT/CPM James Bunker demonstrates the tornado-in-a-bottle to a fascinated child

WFO Medford Participates in the Medford Sportsmen's and Outdoor Recreation Show: WFO Medford staffed a booth the weekend of February 23rd through the 25th at the Medford Sportsmen's & Outdoor Recreation Show. There were a number of hands-on exhibits including a tornado chamber and an educational cubic foot of water display. The booth display had four themes: rivers, forecasting tools, NWS Internet forecasts, and NOAA weather radio. Cloud charts and Owlie Skywarn coloring books were the hand-outs in most demand. Water safety was stressed since fishing and boating were main attractions at the show.

Western Region Participates in National Severe Weather Workshop: The National Severe Weather Workshop was held Mar 1-3 in Norman, OK. The purpose of the workshop was to foster better relations and communications between the NWS, the Emergency Management community, and broadcast meteorologists. The 420 attendees were from 36 states and several foreign countries. Western Region was very well represented, with four talks - more than any other region. Stephen Parker attended as the Western Region Coordinator. The following is a summary of the WR talks, along with a few other topics that were discussed.

Todd Chambers (Forecaster, Billings), spoke on two cases of outflow winds greatly enhancing fires. He stressed the need for us to communicate information about sudden wind shifts to the fire crews. Jim Purpura (MIC, San Diego) spoke about the OKWARN program, which helps the deaf and hard of hearing receive weather alerts in a format they can use. Kim Runk (MIC, Las Vegas) described a case of a splitting supercell in the Mojave Desert, and used fantastic graphics to make supercell evolution understandable to the (largely) lay-audience. Vern Preston (WCM Pocatello) gave a talk about the usefulness of establishing a spotter network in a remote area during their record tornadic outbreak last October. A few of the other talks focused on the threats to large venues, the advantages of multipurpose phased array radar, increased use of IMETs in the new CONOPs, storm-based warnings (coming in October), and improvements to the RUC (coming in 2009).

Northern Arizona Regional Science and Engineering Fair: The National Weather Service in Flagstaff participated in the Northern Arizona Regional Science and Engineering Fair (NARSEF) on February 21st. This is one of the three large science fairs that Arizona State University organizes each year. George Howard (WCM), Michael Staudenmaier (SOO), and Thomas Clemmons (Lead Forecaster) managed the NWS exhibit this year. The exhibit included information on the atmospheric greenhouse effect, lightning, NOAA Weather Radio, radiosonde launches, cloud identification, as well as locally produced time lapse movies of clouds, and the “Teaching Tornado.”



WCM George Howard speaks to a participant in the Northern Arizona Regional Science and Engineering Fair

Sportsman’s Exposition: The International Sportsman's Exposition was held in Utah. The National Weather Service Western Region HQ and Salt Lake City Forecast Office manned a booth for the entire show. The booth provided weather service information including weather radio, personal locator beacons, safety and other weather information. 40,000 people visited the show.

Pacific Northwest WFOs Participate in the 24th Annual Northwest Aviation Conference and Trade Show: On February 24th and 25th, forecasters from WFOs Seattle, Portland, Spokane, and CWSU Auburn participated in the 24th Annual Northwest Aviation Conference and Trade Show. This is the largest non-airshow aviation event in the northwest U.S., routinely drawing over 10,000 aviation enthusiasts over the weekend, including AOPA President Phil Boyer as the regular keynote speaker. Clinton Rockey from WFO Portland and Kerry Jones and Matt Fugazzi



from WFO Spokane joined John Werth (CWSU Auburn), and Jay Albrecht, Kirby Cook, and Allen Kam from WFO Seattle in staffing the booth.



This year, participation in the conference was expanded by offering four weather seminars, one from each office. All were well attended, but Clinton Rockey took the prize on a busy Saturday morning, drawing over 100 people to a standing room only seminar on Western Washington/Oregon weather patterns and satellite interpretation. Clinton's must also have been the hottest, since the building fire alarm went off during his hour-long seminar. John Werth's seminar on 'Icing cooled things down that afternoon, but he still drew 61 attendees. Sunday is usually a slower day, but the

dynamic duo from Spokane (Matt and Kerry) captured 41 viewers with a presentation on Eastern Washington/Oregon weather. Finally, Allen Kam ended the conference with information on Interpreting Weather Charts, keeping 35 people until just before the doors closed. Positive feedback was received on all presentations. Useful contacts were made with various aviation organizations, including the Washington State DOT – Aviation Division, Washington Pilot's Association, and the 99's.

HAM Radio Licensees at BOI WFO: Six members of the BOI WFO staff, and two children of employee Stephen Parker, obtained their Ham Radio Technician Class license (WCM Paul Flatt already has his license). The group of eight students took a ham radio class on four evenings from instructor Rod Truax, then took the Ham Radio certification test. One of the



three test proctors said "Either you have one smart bunch of employees or you had one darn good instructor – I've never seen so many high scores on this test." MIC, John Jannuzzi, assured him that both statements were correct. BOI WFO will utilize the office ham radio to expand their spotter network in rural areas by enlisting the help of ham radio operators throughout the CWA.

Pictured from left to right, Logan, Stephen and Alec Parker, John Jannuzzi, Megan Themmisch, Dawn Fishler, Dave Groenert, instructor Rod Truax, and Jay Breidenbach.

HYDROLOGY AND CLIMATE SERVICES DIVISION

Offices working with Media to Promote National Flood Safety Awareness Week:

Spokane SH, Royce Fontenot and WCM, Kerry Jones, are working with their local media to promote the National Flood Safety Awareness Week held March 19-23. Royce has been working with T.V. stations in the Spokane Hydrologic Service Area to run an NWS produced 30

second public service announcement (PSA) featuring NASCAR Driver Kyle Busch discussing flood safety. A good job by Spokane getting the word out about flood safety as much as possible before their flood season begins in the inland Northwest!

Monterrey California SH, Jeff Kopps, and WCM, Dave Soroka are developing PSAs to be sent to all their media outlets for each day of National Flood Safety Awareness. The PSAs will be disseminated over AWIPS, NOAA All-Hazards Radio and via fax and e-mail to the media. In addition, they have tentative TV appearances on local morning shows and a few live radio interviews scheduled during the week. The Monterrey office has also created a Turn Around Don't Drown (TADD) PSA cooperatively with KPIX, the CBS affiliate, in San Francisco. KPIX also did a nice news story and video on TADD. The article and news clip are available at:

WR HIC/DOH Meeting Held in Tucson, Arizona: Dave Brandon and Scott Dummer from WR HCSD were in Tucson attending the WR HIC/DOH meeting. Some of the more significant items of discussion centered around QPE, the Multi-sensor Precipitation Estimator (MPE), and Daily QC software. The group discussed possible outreach activities at the RFCs, local projects and gave input on the current draft of the WR Vision for the Hydrology Program.

During this meeting the WR HICs and HCSD also met with Dr. Hoshin Gupta, Professor at the University of Arizona, Hydrology Department, and the Atmospheric Sciences Department regarding a proposed degree (M.S.) in Hydro-Meteorology.

On Friday morning WR HCSD, SSD, WFO Tucson MIC Glen Sampson, and SOO Eric Pytlak met Holly Hartmann, and Mike Crimmins who are connected to the CLIMAS RISA. The meeting discussed possible ways the CLIMAS RISAs could help the NWS WR and NOAA West in hosting partnership/customer meetings in Arizona regarding Integrated Water Resources support for NIDIS in the southwest.

HCSD and OCWWS CSD Training WFOs on L3MTO QC Procedures: Jenna Meyers from WR HCSD has taken the lead along with OCWWS Climate Services Division Contractor Annette Hollingshead to train the WFOs throughout the nation on the Local Three Month Temperature Outlook (L3MTO) Quality Control Procedures. Thus far Jenna has trained more than 113 people at 64 offices across the country. A web cast of the training is also in the works and will be made available upon its completion.



Dick Hagemeyer Award Given in Great Falls: On March 8th 2007, James Wood Jr. was presented the Dick Hagemeyer Award and a pin for 45 years of service by Great Falls Meteorologist-in-Charge Michael Mercer (left). Mr. Wood began taking data at the Loma observing station in March 1962. Since that time, he has continued to send in detailed reports of temperature, precipitation, and

wind to the National Weather Service. Mr. Wood also received the Holm Award in 1992 and the prestigious Jefferson Award in 2005. These awards are given for outstanding accomplishments in the field of meteorological observations. In 1972, Mr. Wood documented a 103 degree 24-hour temperature change in Loma, Montana, which was confirmed by the National Climate Extremes Committee, and still stands as a national record. James has published a book on weather and climate in Loma, and has participated in school talks. He is also provides reports of severe weather to the National Weather Service as a Skywarn storm spotter.

SCIENTIFIC SERVICES DIVISION

Upcoming Science Workshops

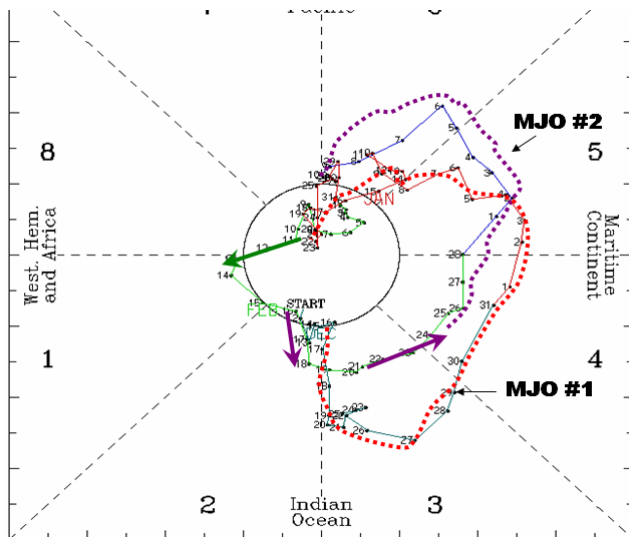
WR SOO/DOH Workshop: April 17-19 The next WR SOO/DOH Workshop proposed for April 17-19

AMS Conference: June 24-29 The AMS on Weather Analysis and Forecasting/18th Conference on Numerical Weather Prediction, will be held 24-29 June 2007 at The Yarrow Resort Hotel & Conference Center (Hotel) in Park City, Utah. The WAF conference is focused on the "Analysis and Prediction of High-Impact Weather". Authors of accepted presentations will be notified (via e-mail) by **13 April 2007**

New LMS Vendor Announced: The Department of Commerce last Friday afternoon announced that Learn.com will be the new DOC/NOAA/NWS Learning Management System vendor beginning on June 1, 2007. Learn.com will be a more robust and responsive LMS allowing a more frequent update of employee database information; establishing of WFO/RFC etc. groups and subgroups for course uploading, access, and pre-requisites; expanded customizing of Reports; more dynamic employee scheduling of classes; and a more efficient and user-friendly course authoring tool, to name a only a handful. The new system will be phased in during its first year due to the limited time for spin up before the current contract with GeoLearning expires on May 31, 2007. The first Learn.com installment on June 1st will have at a minimum, and likely more than, the same functionality as the current system.

Science Update -- Linking Large Scale changes to the WR Weather and Impacts!!

MJO#2 - latest event rapidly weakened and died!



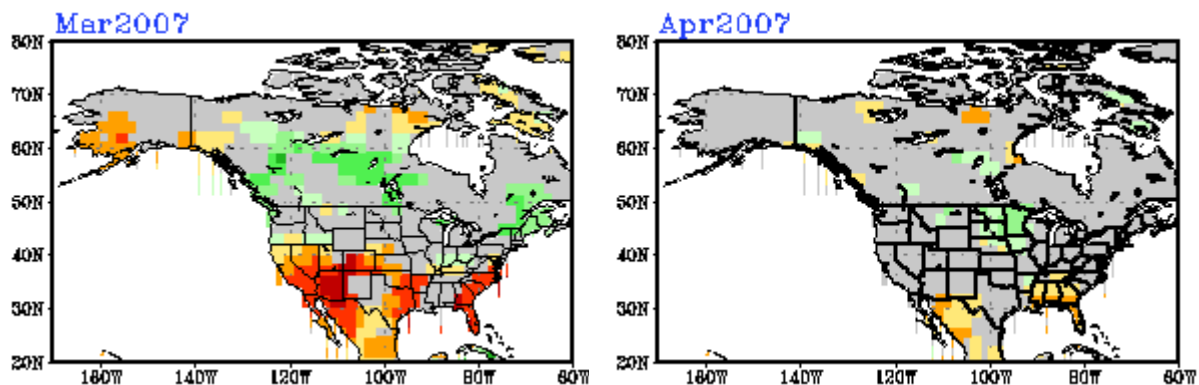
Prolonged west coast precipitation events can be triggered by an MJO. During March, a second MJO started to move out of the Indian Ocean and into the western Pacific Ocean. But it quickly died in a manner similar to the January event (MJO#1) Please remember that the Wheeler is focused on MJOs that pass by Australia, and lump most of the rest of the world in sector 1.

Link to latest Wheeler diagram

<http://www.bom.gov.au/bmrc/cffor/cfstaff/matw/maproom/RMM/phase.Last90days.gif>

Other clues to the spring forecast, what can we anticipate?

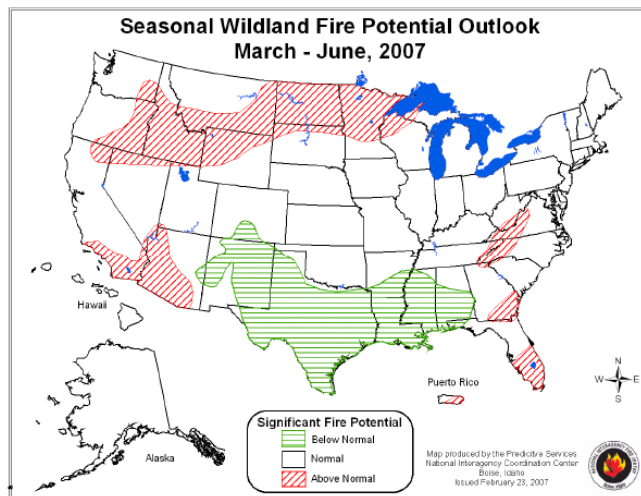
The new NOAA Climate Forecast System (CFS) is the first NCEP model to show some skill in the extended periods. The CFS is essentially the GFS model run at lower resolution, coupled with other models and run out several months. The March precipitation outlook below is bleak for the southwest.



http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/lanina/images/usPrecMonNormMask.gif

Drought and impact to WR Water Supply and Fire Threat

Western Fire Threat: NIFC produces a number of fire weather outlooks using NWS data and forecast. The spring fire outlook is below. This is the time of the year where these outlooks can change substantially. The latest outlooks can be found at: <http://www.nifc.gov/nicc/predictive/outlooks/>



New WR Technical Attachments

- [An Analysis and Summary of the July 2006 Record-Breaking Heat Wave Across the State of California](#) Daniel R. Kozlowski, California-Nevada RFC, and Laura M. Edwards, Western Region Climate Center

Training Update:

Teletraining Sessions for April: The teletraining calendar is now at: <http://rammb.cira.colostate.edu/visit/ecal.asp> Offices can register for the teletraining sessions by sending email to: visit@comet.ucar.edu.

- NEW - Basic Satellite Principles(Basic, Apr 30)
- Satellite Interpretation of Orographic Clouds / Effects (Basic, Apr 4,5,24)
- NAM-WRF Update and Performance Discussion (Basic, Apr 11,17)
- MODerate resolution Imaging Spectroradiometer (MODIS) Products in AWIPS (Basic, Apr 12,23)
- CRAS Forecast Imagery in AWIPS (Basic, Apr 16)

- Use of GOES/RSO imagery with other Remote Sensor Data for Diagnosing Severe Weather across the CONUS (RSO 3) (Intermediate, Apr 11,12,17,18)
- Water Vapor Channel Satellite Imagery (Basic, Apr 25)
- Mesoscale Analysis of Convective Weather Using GOES RSO Imagery (Basic, Apr 3)
- Enhanced-V: A Satellite Severe Storm Signature (Basic, Apr 2)
- Forecasting Convective Downburst Potential Using GOES Sounder Derived Products (Basic, Apr 11)
- GOES Sounder Data and Products (Basic, Apr 19)
- Mesoscale Convective Vortices (Basic, Apr 26)

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

IT: Network restructuring is underway in preparation for the roll out of Active Directory. A summer roll out is tentatively scheduled; and, further information will be provided regarding the Active Directory roll out.

ESA Conference: The Electronics Systems Analyst (ESA) conference was held in Salt Lake City, Utah and was a great success. We would like to thank all the ESAs for attending and the hard work they do every day to support the National Weather Service Mission. The conference covered many topics: training, property, program reviews, EMRS, safety, procurement, and accountability in the federal government. Guests included Al Wissman (WSH), Mark Paese (OPS1), Mike Miller (ROC), Joe Duran (SECO), and Than Thrinh (SECO). Joe Lachacz, Bob Diaz, and Sean Wink organized the conference.

All-Terrain Vehicle (ATV) Safety

ATVs have become popular for work and recreation. Unfortunately, reported cases of serious injury and death have increased along with their increased use. Most of these injuries and deaths can be attributed to improper use of ATVs. Make ATV safety a priority if you work or play with them.

- An ATV is not a toy. Children should not be permitted to operate ATVs without specialized training and then they should be allowed to only operate an ATV of an appropriate size. Contact the [ATV Safety Institute](#) to enroll in a course.

- ATVs with an engine size of 70cc to 90cc should be operated by people at least 12 years of age.
- ATVs with an engine size of greater than 90cc should only be operated by people at least 16 years of age.
- Wear appropriate riding gear: DOT-, Snell ANSI-approved helmet, goggles, gloves, over-the-ankle boots, long-sleeve shirt and long pants.
- Read owners manuals carefully.
- ATVs are not made for multiple riders. Never carry anyone else on the ATV.
- Any added attachments affect the stability, operating and braking of the ATV.
- Just because an attachment is available doesn't mean that it can be used without increasing your risk of being injured.
- Do not operate the ATV on streets, highways or paved roads.

Inspection

- Are tires and wheels in good condition?
- Are controls and cables operational?
- Does the chain have proper slack and is it lubricated?
- Is riding gear (including a helmet) available and worn?

ADMINISTRATIVE MANAGEMENT DIVISION

POSITION SELECTIONS

MICHAEL MCLANE has been selected for the Senior Service Hydrologist position at the WFO in Phoenix, Arizona

CHRISTOPHER SMALLCOMB has been selected for the Science Operations Officer position at the WFO in Reno, Nevada