

NOAA's NATIONAL WEATHER SERVICE Western Region Notes

July 13, 2006

REGIONAL DIRECTOR'S OFFICE

Leadership Corner: Defining Moments

By Brian Klimowski, WFO Flagstaff MIC

Get ready; the moment which defines your career (or life) could happen tomorrow!

We've all seen those high-profile headlines in the papers which might serve to elevate a person to a god-like status, or reduce them to an afterthought in the public eye. Many times these headlines reflect a decision that a person has made, either heroic or otherwise, that served as a defining moment in that person's career.

We were chatting about this in the office the other day. That is, how a career in the NWS is often defined (or greatly impacted) by performance during a specific event. Of course, this concept can be extended into most aspects of our lives, but as employees in the National Weather Service we have a unique opportunity to play an important role in many life-saving decisions. In some cases, hundreds, or even thousands of customers can be impacted. Some offices experience these moments (events) more frequently than others, but more than likely we will all face some event in our careers which will not only shape who we are as an NWS employee, but what we might become.

To some extent this is not anything new. We may have known this for some time and thought of it prior to joining the ranks of the NWS. But knowing this information, what are we going to do about it?

Max Mayfield. Hurricane Katrina. 911. Rudy Guiliani. One trait which separates leaders from others is their ability to prepare for what their (or their agency's) defining moment might be, and understand the ramifications of their response. Effective leaders identify the impact, influence, or expertise that they may have in some future event, and secure the knowledge and skills they need to maximize their influence on the event. They will be a player. They will make a difference.

Take a moment and think about it.

What might your defining moment/event be?

What can you do to prepare for it now?

METEOROLOGICAL SERVICES DIVISION

Statement of the Week: This week's statement of the week is a Flash Flood Warning issued by senior forecaster Brandt Maxwell of WFO San Diego. Brandt does a great job in providing specific information with regard to the location of thunderstorms as well as where the greatest threat of flooding will occur. Good job Brandt.

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BULLETIN - EAS ACTIVATION REQUESTED
FLASH FLOOD WARNING
NATIONAL WEATHER SERVICE SAN DIEGO CA
318 PM PDT TUE JUL 4 2006

THE NATIONAL WEATHER SERVICE IN SAN DIEGO HAS ISSUED A FLASH FLOOD WARNING FOR...NORTHWESTERN SAN DIEGO COUNTY IN SOUTHWEST CALIFORNIA UNTIL 415 PM PDT. AT 311 PM PDT...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED FLASH FLOODING FROM A THUNDERSTORM OVER THE WARNED AREA. LOCATIONS IN THE WARNING INCLUDE BUT ARE NOT LIMITED TO BORREGO SPRINGS.

THUNDERSTORMS WITH HEAVY RAINS WERE OCCURRING OVER THE MOUNTAINS JUST WEST OF BORREGO SPRINGS SINCE 230 PM. NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATES THAT ONE AND ONE-HALF INCHES OF RAIN HAVE FALLEN ABOUT 5 MILES WEST OF BORREGO SPRINGS OR NEAR MOUNT SAN YSIDRO. THIS WILL RESULT IN RAPID RISES OF WATER IN BORREGO PALM CANYON AND OTHER NEARBY CANYON. PEOPLE IN BORREGO PALM CANYON SHOULD CLIMB TO SAFETY.

A FLASH FLOOD WARNING MEANS THAT FLOODING IS IMMINENT OR OCCURRING. IF YOU ARE IN THE WARNING AREA MOVE TO HIGHER GROUND IMMEDIATELY. RESIDENTS LIVING ALONG STREAMS AND CREEKS SHOULD TAKE IMMEDIATE PRECAUTIONS TO PROTECT LIFE AND PROPERTY. DO NOT ATTEMPT TO CROSS SWIFTLY FLOWING WATERS OR WATERS OF UNKNOWN DEPTH BY FOOT OR BY AUTOMOBILE.

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MAXWELL

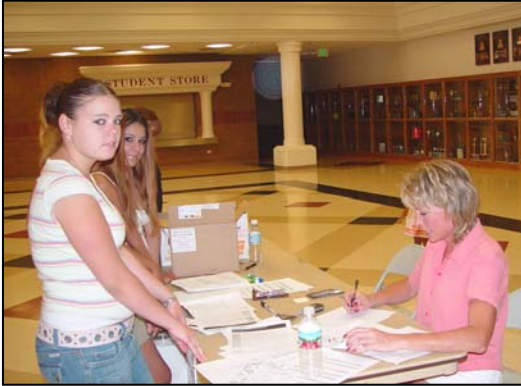
Service of the Week: During the last weekend in June, lightning from dry thunderstorms ignited numerous fires around Reno, NV, including the Balls Canyon Fire just 10 miles northwest of the city. On Monday, June 26, WFO Reno issued a Red Flag Warning for another round of dry thunderstorms. Because of critical fire weather conditions and on-going wildfires in the Reno CWA, WFO staff all assisted in fire weather support on that Monday, from helping with telephone briefings to fire crews to continuously monitoring thunderstorm downbursts and lightning strikes.

Of special note, early Monday afternoon Reno Lead Forecaster Wendell Hohmann called the Balls Canyon Fire Incident Management Team to alert them to the likelihood of strong thunderstorm outflow winds between 1 and 2 p.m. The Fire Behavior Analyst voiced great appreciation for this extra effort from WFO Reno, saying "If we had not received the 30 minutes lead time on approaching outflow winds, we likely would have lost control of the fire. A large burnout operation on one flank of the fire was just about to start when we got the call. The information was quickly passed through the incident command team and crews and the burnout was cancelled." If outflow winds had struck the burnout, spotting would likely have occurred and crews would have been placed in great danger.

This is an excellent example of an office determining "weather of the day" and subsequently working closely together to provide the most current information possible through the event. Great job WFO Reno!

Arizona Civil Air Patrol Convention Includes Weather: The Civil Air Patrol's Arizona Wing held its annual convention in Tucson June 9-10. The Arizona Wing hosts the conference for its senior (adult leaders) and cadet members from across the state. WFO Tucson participated in the vendor fair portion of the conference on June 10. Brian Francis (Senior Forecaster and Aviation Focal Point) and Tom Evans (WCM) provided information on severe thunderstorms, tornadoes, flash flooding, lightning safety and dust storms to approximately 200 conference

attendees at the NWS booth. There were several aviation-related breakout sessions during the CAP convention on June 10. Brian Francis conducted one of several aviation-related breakout sessions June 10, presenting an overview of NWS operations, as well as weather information pertinent to flight operations.



Donna Mills collects medical and personal data from community members so they are able to receive preventive care medications.

Idaho Disaster Response Exercise: Donna Mills, ASA at WFO Pocatello, recently participated in Operation Aware and Prepared Strategic National Stockpile Full-Scale Exercise in Power County, Idaho.

The Southeastern District Health Department full-scale emergency response exercise simulated an event to provide communities with medication as a preventative measure. In such an event, medications are to be deployed to Points of Distribution (POD) sites. The operation helped develop emergency response plans providing a well-coordinated, integrated response to a wide range of disaster scenarios. Donna served as clerical manager for the point-of-distribution site in American Falls, using skills similar to her job requirements at the WFO. She supervised the collection of patient forms, performed data entry, and helped the POD manager complete daily use forms and other administrative functions.



Glen Sampson, WFO Tucson MIC (right), and Tom Evans, Tucson WCM (left), present StormReady recognition materials to Oro Valley mayor Paul Loomis during a town council meeting.

New StormReady Community in Arizona: Oro Valley, AZ, has been declared the first StormReady community in Southern Arizona.

The Citizens Corps Council of the Town of Oro Valley actively promotes community safety, rapid response to hazardous weather conditions and hosts many public awareness activities. The volunteer council was developed through a national program designed to make communities safer, stronger and better prepared to respond to the threats of terrorism, crime, public health issues and disasters of all kinds. The group encouraged Oro Valley leaders to enhance their hazardous weather operations, place NOAA Weather Radios in public buildings and provide better public awareness – all requirements for StormReady recognition.



Jeffrey Savadel, WFO Elko WCM, helps a participant prepare an experiment.

WFO Elko, NV, Hosts Children's Weather Camp: WFO Elko partnered with the Elko City Parks and Recreation Department to hold a half-day weather camp for local children June 21 as part of the city's Summer Activities Program. Seven young enthusiasts ranging from 6 to 12 years old attended the camp and received a tour of the WFO, participated in weather observations, performed experiments and learned how forecasts and warnings are generated. They also learned about weather safety, including lightning and severe-storm tips. Each participant received a certificate of accomplishment at the end of the day along with various handouts. A second weather camp is set for August 2.



WFO Pendleton, OR, Employee of the Quarter: WFO Pendleton Employee of the Quarter for April-June 2006 is Administrative Assistant Diana Locke. Diana does remarkable work in her position as ASA, is involved in most of our office projects and makes significant contributions at the regional level as well. She recently developed a Western Region Point of Contact Directory and a Personal Property Guide. Diana expertly tracks her budget, and performs travel, time and attendance, and office property functions efficiently. Thanks, Diana, for the great work you do every day!



WFO Eureka, CA, Hosts Weather Classes: Students from area schools participated in three hands-on weather classes and a short lecture about the National Weather Service in their community during the June 1-2 Redwood Environmental Education Fair.

Hands-on sessions taught them about the Bernoulli effect, how to build an anemometer, and how to make a cloud in a bottle. They also participated in an experiment on lightning and thunder during which they discovered the underlying cause of thunder. More than 150 students participated in the program that was coordinated by Eureka SOO Mel Nordquist.

WFO Eureka general forecaster Eric Lau, and interns Mark Willis and Treena Hartley pose with students showing off the anemometers they made.

SCIENTIFIC SERVICES DIVISION

GS-13 Vacancy in SSD: SSD has issued a vacancy announcement for a Digital Services Program Leader Meteorologist. The position will focus on using the suite of WR gridded verification applications to provide the forecast offices with better information to:

- determine the performance of the NDFD for routine forecasts and major impact events,
- make informed decisions on which new forecast practices to adopt and how the forecasters could adjust grid editing shift priorities,
- organize local forecast improvement and model performance studies,
- introduce new analysis concepts such as distribution-oriented methodology to better highlight significant events,
- and help prepare WR for the evolving operational concept currently being proposed and vetted by the CONOPs team..

The Vacancy is open from Wednesday, July 05, 2006 to Friday, July 28, 2006. Note: be careful, there are two announcements - refer to previous AMD emails on proper category to apply for!!

The MAP vacancy announcement number is NWS-WR-2006-0274.
The DEU vacancy announcement number is NWS-WR-2006-0279.

Some Early Problems with WRF: Several WR offices in the inter-mountain west have noted that the WRF is producing abnormally high boundary layer dew points/relative humidity's, especially during surges of monsoon moisture. Also, a few offices have noted that large bodies of water are being initialized with temperatures too low and persistent .01 to .08 inch of rain is being produced in the marine stratus along the west coast. NCEP has been made aware of these issues and are working on corrections.

RTMA an Gridded MOS: NCEP (RTMA) and MDL (Gridded MOS) continue work toward preparing their respective projects for operations. NCEP announced that the RTMA was being added to the operational NCEP model data stream. MDL has begun to produce the initial gridded MOS fields for the entire CONUS. A number of serious issues were raised during the WR evaluation of gridded MOS. How these issues will be overcome is not certain, but SSD will forward any MDL plan once it is released.

Verification Project:

- **First round of dewpoint/RH cases complete:** Each office completed the first dewpoint/RH case study. A regional conference call was held on July 12 to share some of the better ideas.
- **WR Verification Project Summary:** A summary of the available training, software applications and associated documentation is provided below. This page can also be found at: http://ww2.wrh.noaa.gov/ssd/digital_services/projects/verification.php

Documentation and Training	Training Presentations	MOD Notes	Information & Frequently Asked Questions
ObsQC Tool & MatchObsAll	<p>ObsQC Tool Training:</p> <ul style="list-style-type: none"> ○ PQR Obs QC Tool Training, by Tiffani Brown (PQR) <p>Background Science Training Modules:</p> <ul style="list-style-type: none"> ○ Quality Control Basics, by Dave Myrick (SSD) ○ Representativeness Errors, by Dave Myrick (SSD) ○ Understanding How Objective Analyses Are Created, by Dave Myrick (SSD) 	<ul style="list-style-type: none"> ○ WR Mod-Note WR06-003: MesoWest Decoding Upkeep. ○ WR Mod-Note WR06-004: ObsQC Tool - First Install. 	<ul style="list-style-type: none"> ○ MesoWest Decoding Background Information. ○ How do I set my MatchObsAll to re-run over a longer period of time? ○ How do I control the Observation groupings in the Obs QC GUI?
BOIVerify	<p>BOIVerify Training:</p> <ul style="list-style-type: none"> ○ Intro training for the BOIVerify tool, by Tim Barker (BOI), Kirby Cook (SSD), and Aaron Sutula (SSD) ○ Generating some simple Impact Statistics using BOIVerify tool, by Kirby Cook (SSD) ○ Examples of how to investigate dewpoint and MaxT fields using BOIVerify, by Dave Myrick (SSD) 	<ul style="list-style-type: none"> ○ WR Mod-Note WR06-005: BOIVerify - First Install. 	<ul style="list-style-type: none"> ○ How do I add a model to BOIVerify?

Ongoing Activities	Links
Western Region Forum (ongoing)	https://internal.wrh.noaa.gov/forum
SOO/Verification Focal Point Conference Calls	<ul style="list-style-type: none"> ○ May 10, 2006 - Using the Hanford QC tool and modifying office procedures routinely do QC, led by Aaron Sutula (SSD) ○ May 18, 2006 - How to get started using the BOIVerify Application, led by Aaron Sutula (SSD) Upcoming additions/fixes/etc. to BOIVerify (Powerpoint slides), presentation by Tim Barker (BOI) ○ May 31, 2006 - How to analyze TD/RH fields for the upcoming fire weather season using BOIVerify, led by Kirby Cook (SSD) Powerpoint slides and Assignment ○ June 7, 2006 - Linear Regression/Bias Correction using BOIVer, led by Tim Barker (BOI) GoToMeeting (.wmv file)*** Powerpoint slides only <p>*** If you are having trouble viewing the GoToMeeting video (.wmv) files, you will need to install a codec download from https://www.gotomeeting.com/codec. This download should only be necessary if you are on a computer that GoToMeeting has never been run on before.</p>
Important Dates	<ul style="list-style-type: none"> ○ July 10, 2006 - Assignment Part 1 due ○ July 12, 2006 - Scheduled conference call - highlights from BOIVerify Assignment Part 1 ○ August 10, 2006 - Assignment Part 2 due ○ September 10, 2006 - Assignment Part 3 due

GOES-11 now GOES-West -- old GOES-10 heading east: GOES-11 became the new GOES-West on June 27. GOES-10 has begun to drift eastward to a planned position of 60 degree west and will serve as an imager for South America as long as the fuel remains. The GOES-11 activation is part of the normal, planned replacement of geostationary satellites as they age and run low on fuel.

USGS MMS/PRMS Modeling effort: The workshop has been targeted for August 28-30 to provide an opportunity for selected WR service hydrologist to become more familiar with the USGS hydro modeling system. For more information, contact Kevin Werner.

Upcoming Science Workshops:

NAME Workshop – August 17-18: Last year, NAME successfully conducted a field study to gather more information about how the monsoon affected the southwestern U.S. A workshop will be held August 17 and 18 in Tucson to share results to date. A few of the goals for the workshop are:

1. Synthesize scientific findings from recent and ongoing NAME research
2. Identify and prioritize NAME modeling issues to improve NAM forecasting from diurnal to seasonal time scales;
3. Outline content for a North American Monsoon COMET module.

More information can be found at: http://www.joss.ucar.edu/joss_psg/meetings/name_swg8/

10th Annual Great Divide Weather Workshop - October 3-5, 2006: The 10th Annual Great Divide Workshop will be held October 3-5, 2006 in Billings, Montana. NOAA's National Weather Service Offices in Billings and Glasgow are sponsoring this workshop focusing on the exchange of weather and hydrologic forecasting information unique to the Northern Rockies and High Plains. The workshop will be held at the Sheraton Hotel in Billings. Please submit abstracts or topics to Wr.Great.Divide.Workshop@noaa.gov by August 15th, 2006. More information can be found on the Internet at weather.gov/Billings or weather.gov/Glasgow or by contacting NOAA's National Weather Service Forecast Offices in Billings, Montana at (406) 652-0851 or Glasgow, MT at (406) 228-4042.

Training Update:

COMET: New WRF Training Modules: A new shorter version of the WRF training module targeted for the forecasters is available at http://www.meted.ucar.edu/nwp/NAMWRF_short/. A longer version targeted for the SOO and model focal points is available at <http://www.meted.ucar.edu/nwp/NAMWRF/>

Warning Decision Branch – AWOC: AWOC Winter Weather training is now available through the LMS. Please see <http://www.wdtb.noaa.gov/courses/winterawoc/index.html> for more details on the AWWT.

Teletraining Sessions for July: The Virtual Institute for Satellite Integration Training (VISIT) calendar for July is now available. Offices can register for the teletraining sessions by sending email to: 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 remaining sessions planned for July are:

- GOES Sounder Data and Products (Basic, July 17)
- Forecasting Convective Downburst Potential Using GOES Sounder Derived Products (Basic, July 19)
- The Enhanced-V: A Satellite Severe Storm Signature (Basic, July 14)
- GOES High Density Winds (Basic, July 27)

Several recorded VISIT sessions 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

Safety: Great Job Western Region! The yearly total through June 2006 for Western Region is 16 safety incidents. Eight of the incidents were recordable and 8 were reportable. The recordable incidents are what we track and have a goal to reduce by 3% from last years totals. In FY05, we were at 26 incidents (19 recordable and 7 reportable) for the same time period. This results in a decrease of nearly 39% for total incidents and a decrease of nearly 58% for recordable incidents. Think Safety First and keep up the good work.

UPS Replacement Project comes to a close: WR Facilities Engineering Technicians replaced the last Siemens UPS system in Sacramento, CA. The Siemens units were the original UPS systems delivered during modernization and were quickly reaching end of life. All WFOs are now equipped with either a Mitsubishi or APC unit, which utilize state of the art technology. This completes a multi year project which involved a great

deal of coordination and effort by many, including the WFO operations, Electronics Staff, Facilities Engineering Technicians, and especially Lee Jenson.

Lee's next major project will be the installation of a BMS (Battery Monitoring System) on the remaining Mitsubishi units (APC units have a built in BMS). The BMS will serve a vital role in protecting WFOs, providing early detection of weakening batteries and extending the life expectancy of the batteries.



NWR: Merri Richmond traveled to Blaine, WA to transport and install a High Risk NWR. This is one of 3 potential high risk NWR installations.

On Short notice Gerry Deiotte traveled to the Jackpot, NV NWR site with Jim Beavers (LKN). With a busy schedule Gerry and Jim replaced the NWR antenna and RF connector on the tower. This kept the NWR downtime to a minimum.

Joe Lachacz repaired the Laketown, UT NOAA Weather Radio on Saturday after noticing it was off air while in the area. The NWR was restored before the July 4th Holiday. (see picture at left)

Electronics KUDOS: From January through June 2006, WR Electronic Technicians installed a total 55 Program Improvement Modifications to 47 ASOS sites throughout Western Region. This includes 40 Ice Free Wind Sensors (IFWS), six DTS1 temperature/dew point sensors, five All Weather Precipitation Accumulation Gage (AWPAG) and four Processor upgrades. Also, in this same period, three legacy Upper Air (UA) systems were replaced with the Radisone Replacement System (RRS), Spokane, Flagstaff and Reno. The Spokane RRS staff experienced RF interference after the install and worked extra hard with the InterMet contractor to come up with an interim solution which has allowed the UA site to remain operational. (The Boise RRS upgrade was halted due to Radio Frequency (RF) interference and is expected to resume when InterMet comes up with a modification to resolve the RF problems.). In short, our Electronics staffs in the field are doing a great job!

Upgrade to AHPS: Over the 4th of July weekend, SOD conducted a test of the new AHPS server and on July 5th the new server was implemented. This upgrade will provide additional processing and improve the performance of the AHPS system.