NOAA's NATIONAL WEATHER SERVICE

Western Region Notes

October 1, 2009

REGIONAL DIRECTOR'S OFFICE

Loss of Western Region Staff Members: It is with great sadness that we say goodbye to three members of our Western Region staff. I know they will be sorely missed by their colleagues.

Sandra Otrugman: Sandy passed away September 4, 2009 after fighting a battle with cancer. Sandy was the Administrative Assistant at WFO Portland and worked for the National Weather Service since May of 2006. Prior to her position with the National Weather Service she held a number of positions with the U.S. Government including working for Homeland Security and the U.S. Foreign Service in Europe and Southeast Asia. Sandy is survived by her daughter Melissa.

Richard Moulton: Rick passed away September 10, 2009 in Elko, Nevada. Rick was the Information Technology Officer at the National Weather Service in Elko, Nevada since 2001. He started in the NWS in 1984, and spent time at WRH and WFO Salt Lake City as the ESA. He is survived by his son Jason and mother Genevieve.

Dave Willson: Dave passed away September 16, 2009 after fighting a long battle with cancer. Dave was a Lead Forecaster at WFO Portland. Dave served his country in both the Air Force and the National Weather Service for over 43 years. Dave obtained his meteorology degree while working as a Meteorological Technician at the Salt Lake City ARTCC Radar office. He then worked as a meteorologist intern at WSFO Salt Lake City, UT, as a Fire Weather Meteorologist at WSO Medford, OR and as both a Journey and Lead Forecaster at WFO Portland, OR. Dave is survived by his wife, three daughters and four grandchildren.

Featured Decision Support Service: Late on the afternoon of September 3, a wildfire was reported west of Columbus, MT, threatening homes in two subdivisions and also I-90. Within the hour, county officials contacted WFO Billings for a short term forecast for the wildfire area to support the initial attack on the fire by local responders. The county quickly evacuated 100 nearby homes as the wildfire continued to spread and I-90 was closed as the fire spread across the interstate. By Friday morning the wildfire had grown to 1000 acres, but no spot weather forecasts were requested by the firefighters. Concerned that there may be some communication challenges as this incident spun up, the WFO Billings operations staff initiated calls to the county and local interagency fire dispatch to determine the potential need for spot forecasts for the incident. The staff was concerned about a cold front passage in the next 48-60 hours and the critical nature of the wind forecasts with the urban interface issues. Following the containment of the fire 4 days later, the Plans Chief for the incident stopped by the WFO to express his appreciation (and that of the Incident Commander) for the support

provided by WFO Billings. He indicated that the support was extremely helpful, particularly the WFOs local knowledge of terrain induced wind regimes in the area. Great job being proactive, WFO Billings!

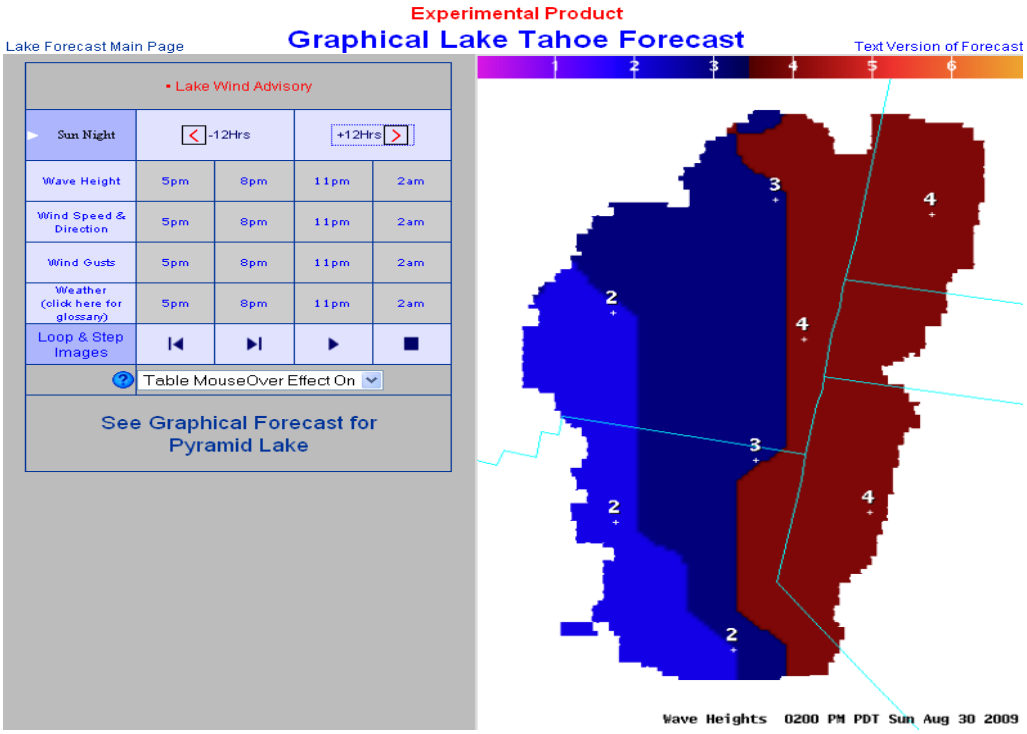
METEOROLOGICAL SERVICES DIVISION

Southern California Rip Current Research Project for Beach Safety Workshop: The Weather Forecast Offices in San Diego and Los Angeles, along with the NOAA National Weather Service, Office of Science & Technology (OST) Meteorological Development Laboratory (MDL) co-sponsored a Southern California Rip Current Research Project for Beach Safety Workshop. The workshop was held on July 15, 2009 at the Encinitas City Hall, Encinitas, California. The meeting focused on new rip current prediction techniques resulting from an ongoing 2-year research project headed by Dr. Chung Sheng Wu and Dr. Stephan Smith, both of MDL. The results of the pilot project between WFO San Diego and MDL resulted in an expansion of the project this year to include Manhattan Beach in the WFO Los Angeles forecast area. The observations are being used in a computer program, with the goal of improving the science behind rip currents, and more timely and accurate rip current forecasts. During the meeting, Mayor Maggie Houlihan and the city of Encinitas, as well as Encinitas Lifeguard Captain Larry Giles were given awards for their cooperation and great partnership with the National Weather Service.

Pictured: Julie Thomas (SIO), Andrew MacArthur (WFO LOX/MDL), Dr. Bill O'Reilly (SIO), Dr. Chung-Sheng Wu (OST), Michael Khuat (WFO SGX), Ivory Small (WFO SGX), Mayor Maggie Houlihan (City of Encinitas), Noel Isla (WFO SGX), Dr. Stephan Smith (OST), Captain Larry Giles (Encinitas Lifeguards), Jason Taylor (OST), Dave Reins (San Diego County Lifeguards).

WFO Reno Develops New Graphic Lake Forecasts: Lake Tahoe and Pyramid Lake are the two most visited recreational areas during the summer months in WFO Reno's forecast area. There are thousands of boaters, kayakers, and people swimming in Lake Tahoe and Pyramid Lake on any given weekend during the summer. Marine Focal Points, Lead Forecaster Jim Wallman and Forecaster Alex Hoon saw a great opportunity for NWS Reno to provide enhanced forecast products to ensure the safety of those recreating on Lake Tahoe and Pyramid Lake.

WFO Reno developed high-resolution, web-based Graphical Lake Forecasts to better meet the needs of those visiting Lake Tahoe and Pyramid Lake. The graphics consist of lake wind speeds, wind gusts, wave heights, and weather conditions, updated at least twice daily. In addition to the numerous outreach visits to marinas, boat rental companies, and parks along the lakes, Jim and Alex have also made important Marine contacts with the U.S. Coast Guard and Coast Guard Auxiliary--Lake Tahoe, and companies that assist in vessel assistance emergencies.



Example of the high resolution web based Graphical Lake Forecasts produced in GFE.

Washington Weather Radio Awareness Campaign: Washington State Emergency Management and the WFOs in Seattle, Spokane, Pendleton and Portland teamed up to create a Weather Radio Awareness Month campaign in Washington during the month of September. The campaign's goal was to have a weather radio in homes and businesses across the state. Washington State Emergency Management hosted the campaign web site at emd.wa.gov (this link will remain active). A number of weather radio vendors and manufacturers offered consumer incentives to people in Washington. A point of focus for the campaign was that people who obtain weather radios typically need to program them before putting them to use. Some people are challenged when it comes to programming their new weather radio. To help them with this need, a number of "How To Program Your Weather Radio" slide show presentations were created in partnership with the manufacturers. Visit the emd.wa.gov web site to view these Articulate slide shows.

New Wind Sensors for WFO Hanford: With the support of Western Region Headquarters through the Decision Support Services funds, the NWS in Hanford, CA, recently installed a mesonet station in Avenal, CA. This is the first among a planned series of sensors across the western San Joaquin Valley, an area notorious for hazardous dust storms and high wind events. These mesonet stations are fully supported and quality checked by the local WFO staff.

NWS staff at Tamarack Elementary School, pictured from left to right are: HMT Bill Peterson, ET's Tim Johnson and Marc Ganey and LF Jim Dudley

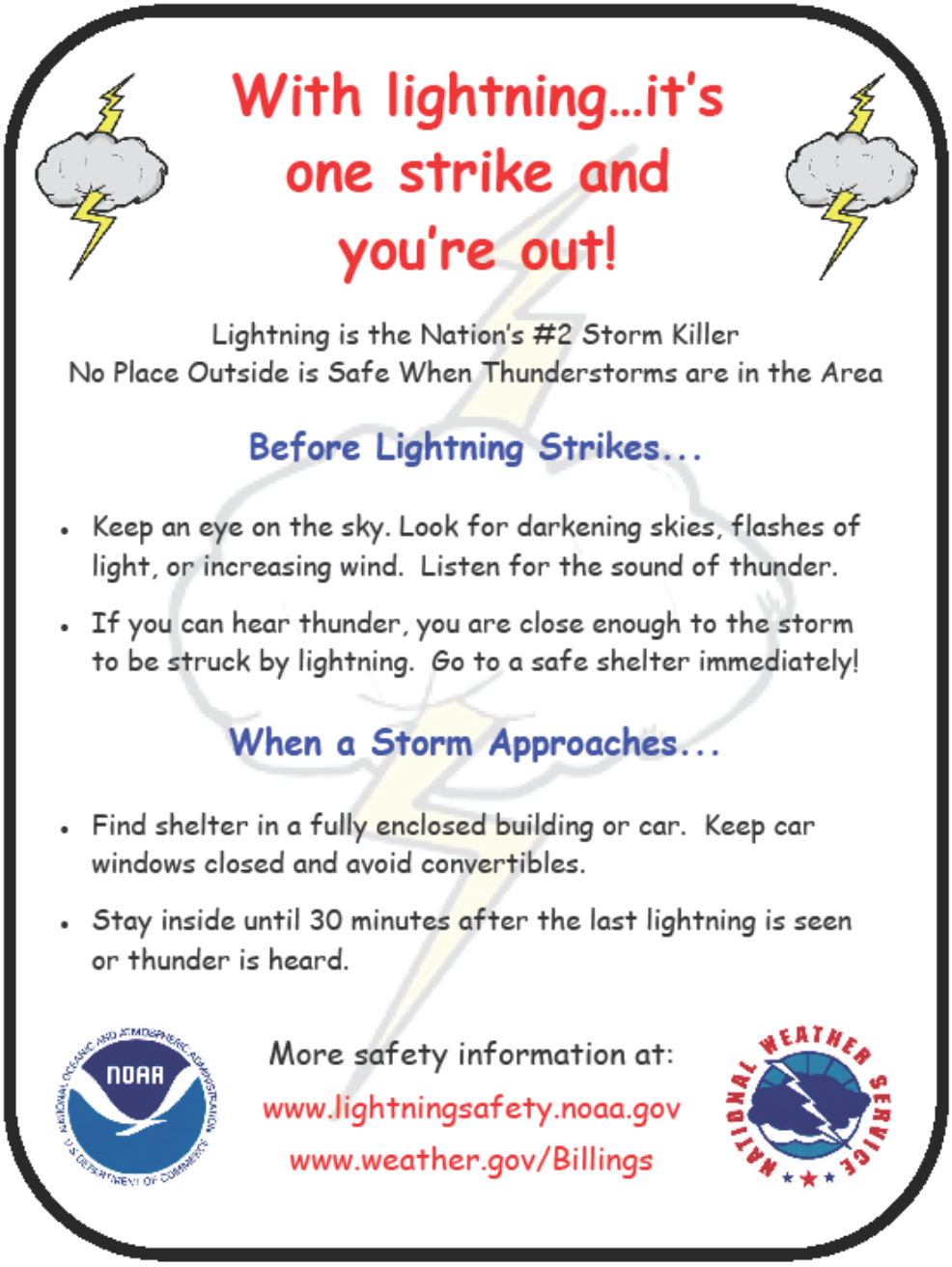
One such wind storm occurred in January 2008 in the town of Avenal. The wind storm, which peaked with winds estimated at 75 mph, was responsible for millions of dollars in property damage. Local emergency management declared 90% of every structure in the town sustained some form of damage. One of the sites heavily hit was the high school that lost part of the roof over the gymnasium.

Avenal, a relatively small and economically depressed San Joaquin Valley town of about 16,000 residents, previously had no weather stations nearby which could be properly integrated into NWS warning operations and data systems. With an improved mesonet across this region, WFO Hanford will have the capability to better predict wind events in the western valley and provide alerts with greater lead time.

WFO Billings Plays Ball: On August 3, 2009, WFO Billings General Forecasters Kurt Hooley, Matt Solum and Observing Program Leader Carolyn Willis staffed a National Weather Service booth at the Billings Mustangs baseball game. The night was promoted as Severe Weather Awareness Night. Throughout the evening, around 250 fans stopped by the booth. Kurt, Matt, and Carolyn discussed severe weather safety with emphasis on lightning safety.

Pictured: Kurt Hooley throwing out the first pitch

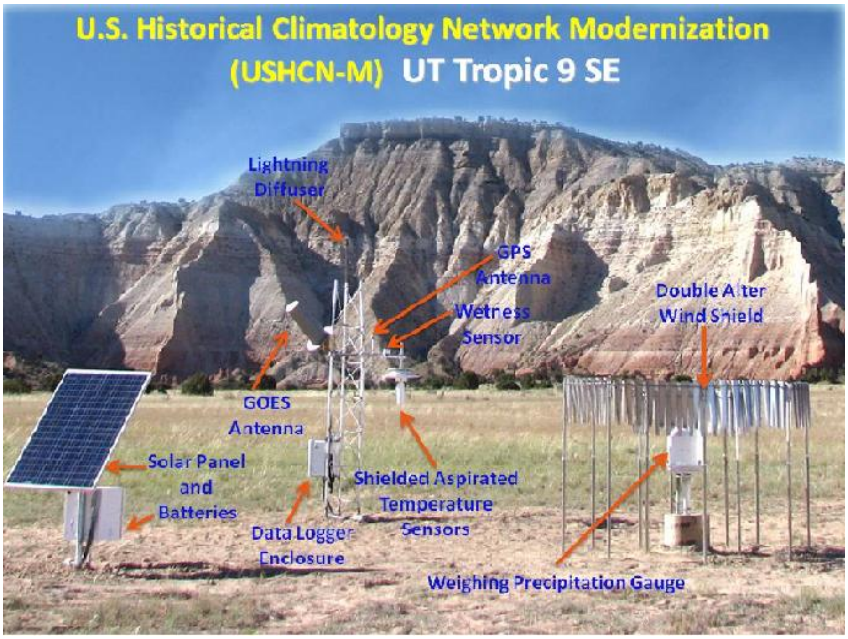
Various handouts on weather safety and education were distributed during the game. In addition, several drawings were held for rain gauges and a NOAA Weather Radio. The Billings Mustangs organization also printed a full-page advertisement on lightning safety that was in the game program throughout the season.



HYDROLOGY AND CLIMATE SERVICES DIVISION

BAER Team Participation: On September 4, 2009 WFO Salt Lake City Senior Service Hydrologist Brian McInerney was deployed to the Mill Flat fire as part of a Burn Area Response Team (BAER). The Mill Flat Fire was located just southwest of Cedar City in the Pine Valley Mountains. Brian's role with the team was to primarily assess the flash flood/debris flow threat after the fire and assist in placement and configuration of an early warning weather station in the burn scar. The team chose a location at the headwaters of Straight Canyon, 4 miles up from the mouth of the drainage. The station is now operational and is part of the MesoWest network. The data is transmitted via satellite in the form of one-hour data, with additional transmissions programmed when 0.20 inches of rainfall in 15 minutes is recorded. The debris flow threat to New Harmony will remain for up to 3 years time, and to a lesser extent, up to 5 years time. Typically, past debris flows have occurred after the drainages received many days of moderate rainfall, followed by an intense thunderstorm kicking off the debris flow. However, with the watershed in such poor condition, it is probable that an intense thunderstorm alone will produce a debris flow flowing into the town of New Harmony.

HCN-M Modernization Progress: Ten HCN-M pilot sites currently deployed will begin transmitting data in October. Eight more are in the queue for deployment in October that will begin transmitting at installation. By the end of October, data will be transmitting from approximately 18 USHCN-M stations in the Southwest Pilot region (Utah, Arizona, Colorado, New Mexico). Western Region currently has two installed HCN-M stations: UT Tropic 9 SE (Kodachrome Basin) and AZ Holbrook 17 ESE (Petrified Forest).

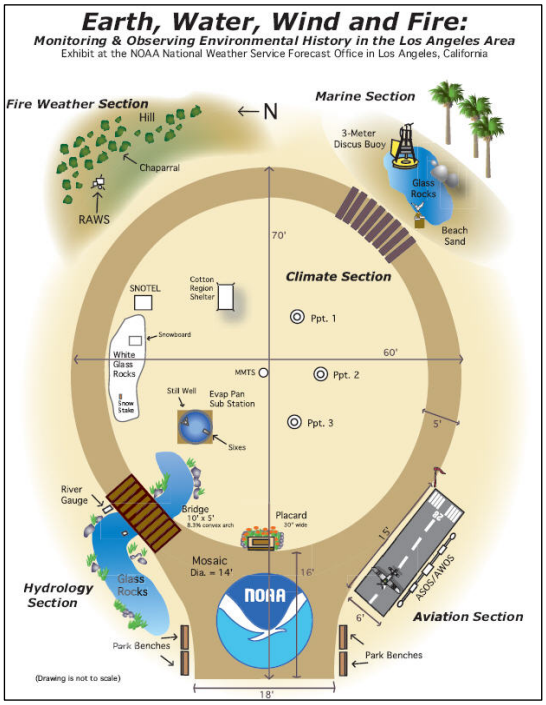


<u>Global Monitoring Exhibit at WFO Oxnard</u>: Kathy Hoxsie, WCM at WFO Sacramento, visited Southern California to volunteer her help on the "NOAA NWS Global Monitoring Exhibit." The project – led by WFO Oxnard's Dessa Emch – was made possible and is fully supported by NOAA and the Preserve America Initiative (PAIG), which is part of *Preserve America*, a federal initiative aimed at preserving, protecting and promoting our Nation's rich heritage. Kathy spent her entire day at the WFO assisting volunteer Steve Woodruff (Construction and Design Project Manager) in refurbishing the weather monitoring equipment to be displayed at the exhibit. Jamie Stern, a hydrology SCEP employee at WFO Oxnard, has also volunteered on the project.

Kathy Hoxsie works on the footbridge that resides in the exhibit's hydrology section.

This science education and outreach project is being constructed on the WFO Oxnard property. The equipment on display encompasses five focus areas: Fire Weather, Marine, Aviation, Climate and Snow, and Hydrology.

In addition to demonstrating the tremendous diversity of atmospheric and oceanic observations needed to accomplish our mission, the outdoor weather monitoring exhibit will help inspire the youth of our local communities to become interested in environmental sciences and monitoring engineering. The exhibit will also provide an opportunity for the NWS to integrate the history and critical role of global weather monitoring to our weather, water, and climate services.



With much of the equipment donated from partnering agencies, the exhibit demonstrates the importance of collaborative partnerships between the NWS and NOAA, other Federal, State, and County agencies, and the local community. A plaque recognizing and acknowledging these partnerships will be prominently displayed at the front of the exhibit. The project is expected to be completed in November of 2009.

SCIENTIFIC SERVICES DIVISION

Upcoming Science Meetings

- **AMS Symposium on Fire and Forest Meteorology** – October 13-15, Kalispell, MT, additional information available on the AMS web site
- **Great Divide Workshop** – October 19-21, Missoula, MT, contact Chris Gibson or http://www.wrh.noaa.gov/tfx/greatdivide.php?wfo=mso for more information
- **AMS Annual Meeting** – January 17-21, Atlanta, GA

Activities

WR Verification Project Important Dates:

- **October 25** - DFO/DFM Verification Assignment Due
- **October 28** - 10 AM MT / 9 AM PT - SOO Verification Call - Review DFO/DFM assignment, discuss how to proceed with DFM

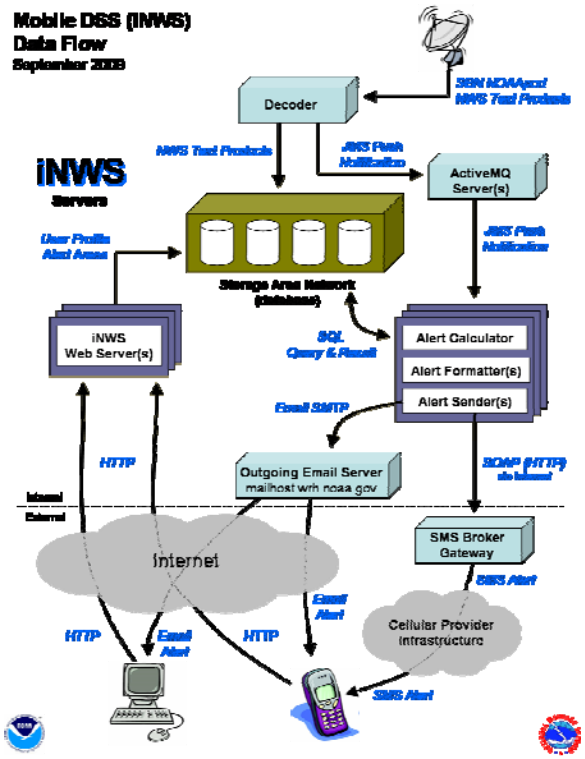
iNWS update: Aaron Sutula, Mike Doney, and Andy Edman (WR/SSD) are on a NWSH RITT team to migrate iNWS Alerts from prototype to eventually become one of the NWS operational services. This will happen is phases over the next 2 years.

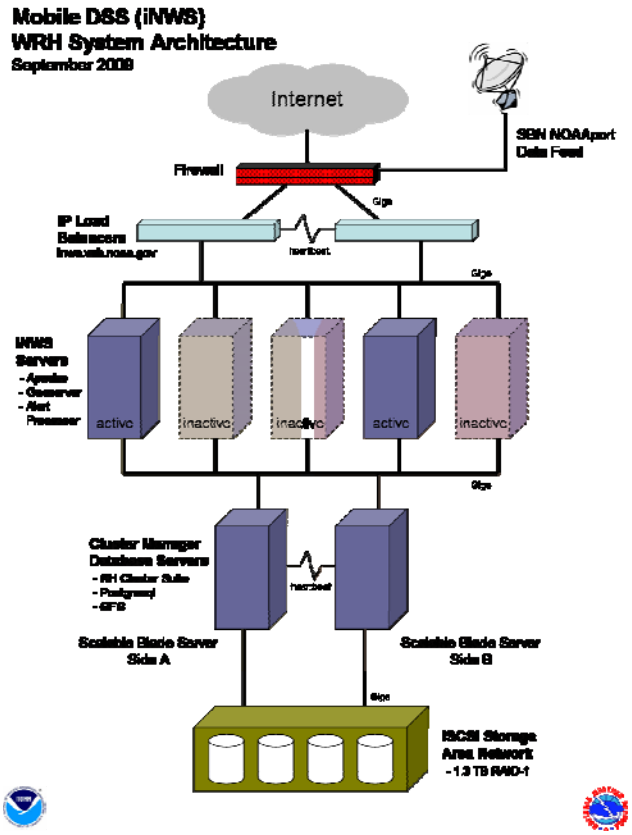
iNWS alerts, designed for Local Community Decision Leaders, will vary depending on how local towns/cities/counties are organized. The SMS alert is a SMS text message composed of two parts; within the 140 characters is the "headline", i.e. severe thunderstorm warning issued, plus a "short hyper link" which uses common browser protocols. The hyperlink opens the door for NWWS to combine several pieces of information together to improve decision support. Social scientists tell us our current text warnings tend only to alert people. The typical "next" action of a user is to seek "more information". With the hyperlink, we can combine graphics, imagery and text with the goal that we provide enough information for people to take action.

The SMS message is an industry standard which you can access from cell (with a data service) and traditional desktops. With cell phones, we can now reach critical local community leaders -- any place -- any time.

iNWS alerts are the **first step.** Andrew Murray (HCSD) is working on the hydro SMS version. We have a HPCC award to work with OAR on a next generation Hysplit prototype.

There has been a lot of behind the scenes work done already. The two graphics below show our current infrastructure and data flow.





Training Updates:

NWSTC updates:

- **FY10 Class Schedule**
- New Data Acq. course
- New WSR-88D course

WDTB Updates -- Winter Weather Advanced Warning Operations Course (AWOC)

Below is a description of the training package and all its various offerings. WTBD will offer several GoToMeeting orientation sessions scheduled to orient you to this year's Course. The Orientation meeting times are located at the bottom of this announcement.

Course Title: AWOC Winter 2009/2010

Target Audience: These courses are intended for **all NWS staff with winter weather forecasting and warning responsibilities.** Three different Development Plans, as well as individual courses within those Plans, are available based on your specific training needs. **Note: The ONLY significant change to content for AWOC Winter 2009/2010 is the course (IC 3): "User Needs to Mitigate Societal Impacts - Road Weather."**

Enrolling. If you want to make use of the Winter Weather AWOC for some (or all) of your staff:

1. **Development Plan: WDTB AWOC Winter FY10 Full**
   - Requires completion of 25 web-based courses (no optional lessons or exercises)
   - Requires End of Course Test
   - Appropriate for DLOC FY09 Graduates
   - Requires WES Simulation
   - Baseline for NWS Forecasters since 2006
2. **Development Plan: WDTB Road Weather FY10**
   - Contains only IC 3: User Needs to Mitigate Societal Impacts – Road Weather
   - Contains 5 Lessons, Multiple Parts
   - Redesigned for FY10
3. **Development Plan: WDTB AWOC Winter FY10 "PLATINUM Edition"**
   - Requires completion of ALL (27) web-based courses including optional lessons IC 5.6, IC 5.7, and 15 WES Job Sheet Exercises (listed as ILT sessions in the LMS)
   - Requires End of Course Test
   - Requires WES Simulation
   - Special Recognition for Completion

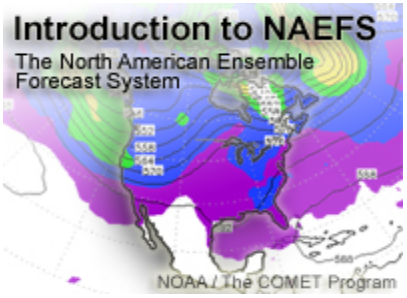
LMS Access: The AWOC Winter course is available on the NOAA/NWS Learning Management Center (LMS)..

Orientation Webinars. As we stated in the enrollment section, after assigning a staff member a Winter Weather AWOC Development Plan, the student's facilitator should attend an Orientation session in order to be able to administer AWOC Winter to their students. The next training session is:

Friday, October 2, 2009, 14 – 15 UTC
https://www1.gotomeeting.com/register/476241729

New COMET Releases: You can access all COMET modules through the LMS.

- Writing TAFS for Winter Weather
- S-290 Unit 3: Fuels
- Introduction to the North American Ensemble Forecast System (NAEFS)
- Distributed Hydrologic Models for Flow Forecasts - Part 1
- Satellite Feature Identification: Blocking Patterns



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

October 2009						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6	7 GOES Low Cloud Base Product 11:00 AM MDT 17:00 UTC	8 Utility of GOES Imagery for Severe Weather 9:30 AM MDT 15:30 UTC	9	10
11	12	13 Basic Satellite Principles 3:00 PM MDT 21:00 UTC	14 Interpreting Satellite Signatures 3:00 PM MDT 21:00 UTC	15	16	17
18	19	20 CRAS Forecast Imagery in AWIPS 10:00 AM MDT 16:00 UTC	21 Convective Downbursts 11:00 AM MDT 17:00 UTC	22 Cyclogenesis 9:30 AM MDT 15:30 UTC CYS, BUF	23	24
25	26	27	28	29 TROWAL Identification 3:00 PM MDT 21:00 UTC CYS	30	31
<-- View September | View November -->						

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

Energy Awareness Month: October is energy awareness month. October is also the month when the WR SOD Facility Program Manager will unveil a Western Region Energy Efficiency Program. A number of FY10 Annual Operating Plan milestones will be developed and will be key goals in moving Western Region forward in energy awareness, using renewable energies, and seeking energy efficiencies.

This program will consist of familiarizing people with the current status of energy usage and reduction efforts to date, followed by a general plan that will include facility directed efforts to modify and retrofit existing forecast offices to operate more efficiently. A more detailed look at the facilities reveals the potential to reduce consumption in the 40 - 50% range equating to as much as $400,000 in savings annually if our goals are realized.

Beyond the facility modifications the individuals working in the buildings can do their share in energy reduction. For instance, employees can reduce general lighting and use task lighting, set temperatures at appropriate settings (3% extra energy per degree), purchase energy star appliances, optimize computer room ventilation, and shut down computers when not needed. We plan to kick this program off in early October by sending out additional information via email and mail. Stay tuned, more to come.

Team Work: The Western Region RMS team visited WFO Great Falls and worked with the office on a number of electronic projects and tasks. Rex Bernhart and Jim Hall, ET WFO TFX, performed an end-to-end alignment along with solving several nagging radar problems. Son Nguyen installed the HF SHARE's radio and HF antenna at the office. We have just 4 HF installations left region wide. Gerry Deiotte, Jim Hall and Rex Bernhart then relocated the Great Falls NWR to another facility which now includes back-up power and a higher tower. Some "on the spot" electrical wiring was also performed. The generator was installed by the Western Region facilities team earlier in the year. KUDOS to the WFO TFX electronics staff and to the WR SOD RMS team on several jobs well done!

Safety: There are several documented hazards associated with driving and cell phone usage and other portable in-car devices (radios, CD players, GPS, etc.). First, many drivers become distracted with the operation of the device. Removing your eyes from the road, just for a short period of time could cause a potentially fatal accident. The biggest problem is that drivers are not paying attention to the needs of their driving. Instead, many people are absorbed with their cell phone conversations rather than directing their attention to driving.

Don't use your cell phone when you are driving

Here are a few interesting things to consider:

1. The number-one cause of work-related fatalities is vehicle accidents.
2. Several studies show cell phones are a leading cause of car crashes.
3. It is estimated that cell phone distracted drivers are 4 times more likely to be in a car wreck.

4. According to a Harvard University study, cell phones cause over 200 deaths and half a million injuries each year**.**
5. The distracting effect of the telephone call lasted even after the call was completed.
6. Texting is now a growing cause of vehicular accidents.

So, is it worth it? Is it worth picking up your cell phone, while driving, to send a simple text message that can wait? Is it worth picking up your cell phone to dial and speak to someone? Is impatient carelessness worth your life, your friend's life or the life of the person driving in the next lane?

Next time you're driving and you hear that familiar text message ditty or your favorite ring tone, remember it's not worth increasing your risk of being in an accident or maybe worse. Pull off at an exit, a town, or quick stop and make your call or complete your text. Don't use your cell when you're driving!

Know What to Do About the Flu:

- Cover your cough or sneeze
- Wash your hands frequently
- If you have a fever, stay home for at least 24 hrs after that fever has ended whether or not you are taking medicine
- Get a vaccine when it becomes available
- Stay informed by checking flu.gov

ADMINISTRATIVE MANAGEMENT DIVISION

National Hispanic Heritage Month: Spotlight on Sonia Sotomayor

By Carol Ciliberti
Western Region Hispanic SEPM/Senior Meteorologist, WFO Eureka

National Hispanic Heritage month is celebrated each year in the United States beginning on September 15th. In the United States, the term Hispanic refers to Spanish-speaking people of any race, encompassing a large and diverse group of people who may identify with a Hispanic, Latino or Spanish heritage. People of this heritage bring a rich and varied cultural background to the United States where, as of the year 2000, more than 35 million people self-identified as “Hispanic” or “Latino”.

During the coming month, many people across the United States may take the time to reflect upon the contributions of Hispanic people to our cultural, political and economic history. Recent political influence includes the appointment of Sonia Sotomayor to the position of Associate Justice of the United States Supreme Court. This former lawyer and judge will be the first Latina and third woman Supreme Court Justice for the United States. Her election has sparked enormous pride in Latino communities and among Latino-serving media outlets. Many leading political analysts and politicians support her election and tout it as being a strongly positive change for the court as well as for the nation. Vermont Senator Patrick Leahy said of Sotomayor “Hers is a truly American story, and what a story, and what a model this is going to be for others in America."

Prior to her nomination, Tom Goldstein, attorney and advocate before the Supreme Court, made the compelling statement “to Hispanics, the nomination would be an absolutely historic landmark. It really is impossible to overstate its significance. The achievement of a lifetime appointment at the absolute highest levels of the government is a profound event for that community, which in turn is a vital electoral group now and in the future.”

Sotomayor was raised by Puerto Rican parents in the South Bronx of New York City. (The Bronx contains the poorest congressional district in the United States). Her father, who worked

as a laborer and attended school only through third grade, died when she was nine years old, a year after she was diagnosed with diabetes. Despite problems with her health, and coming from a lower income home, Sotomayor went on to attend Princeton and Yale Law School. After graduating she worked as an assistant district attorney for the State of New York and as a commercial litigator. A former clerk stated that while Sotomayor was a demanding boss, her disadvantaged background made her committed to pragmatism and fairness in her work. “She sees the law as an instrument that can accomplish (fairness) for other people, a system that, if administered fairly, can give everyone the break they deserve, regardless of who they are.”

If Sotomayor brings these qualities to bear in her work on the Supreme Court, she will be a champion of diversity, seeking fairness in the law regardless of a person’s sex, race, or economic background. She exemplifies modern diversity in that she is both female and Latino, grew up at an economic disadvantage, and has contended with a disabling disease for most of her life. While she has widespread support in the political community, detractors have expressed doubts about her temperament, judicial craftsmanship and intellectual caliber. However, it cannot be denied that her appointment is an unprecedented step forward for the United States, in a direction that honors a diverse and open society where each individual has an equal opportunity to succeed. Sonia Sotomayor has said that as a child she was first inspired by the strong-willed book character Nancy Drew. She will provide inspiration herself in the coming years for children throughout the United States and the world.