

NOAA's NATIONAL WEATHER SERVICE Western Region Notes

November 3, 2005

REGIONAL DIRECTOR'S OFFICE



Great Divide Workshop: I had the opportunity to attend the 9th annual Great Divide Workshop in Great Falls, MT last week. One advantage of such workshops is the opportunity to share ideas and learn from each other, always with an emphasis on improved products and services. There were many excellent presentations and training provided by Western Region staff as well as attendees from outside the region. Some of the non-Western Region attendees providing presentations included: staff

from HPC, MDL, SPC, WFO Dodge City, and the National Drought Mitigation Center.

The banquet was a big hit and featured Dr. C. David Whiteman, University of Utah, who shared with us unique weather phenomena from across the globe. I was also pleased to have the opportunity to spend time with NWS employees in special session to discuss NOAA's NWS and our future.

Thanks to the WFO Missoula/WFO Great Falls workshop planning team led by WFO Missoula lead forecaster Michelle Mead and WFO Great Falls lead forecaster John Blank for putting on this successful workshop.

Regional Themes for FY2006: As part of the planning and goal setting process for FY06, WRH leadership developed six regional themes. These themes will be used to focus WRH activities for the year and serve as overarching guidance for the WFOs and RFCs to develop their office goals and plans. An expanded description, including the vision and goals, will be developed by a WRH lead for each theme. Once these descriptions are developed (early November), WRH, in partnership with NWSEO, will seek interested individuals/offices to help the region move forward in these areas.

The Western Region Themes for FY06 are:

1. Expand environmental services in collaboration with other NOAA offices and external partners.
2. Demonstrate enhanced outreach capabilities locally, regionally, and nationally, leveraging new dissemination technologies with an emphasis on hazard analysis and environmental impact.
3. Explore opportunities to build partnerships for improving and expanding water resource services to include demonstrating new hydrologic services, leveraging research to operations collaborations.
4. Establish leadership and professional development program(s) to prepare our employees for their own future and to better prepare them to address current and future agency needs.

5. Continue to seek efficiencies and standardize practices in digital services through the regional digital services management team.
6. Expand the regional climate services program through new and enhanced partnerships that serve the needs of the west.

In addition to these overarching themes, WRH will be placing emphasis on verification and IT regional organization and support.

METEOROLOGICAL SERVICES DIVISION

Statement of the Week: Our Statement of the Week comes from WFO Salt Lake City. As part of Winter Weather Preparedness Week in Utah, the WFO collaborated with the Utah Department of Transportation (UDOT) to provide valuable winter driving information and tips. The statement below emphasizes the importance of anticipating winter's poor road conditions, and to slow down accordingly. Nice work!

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PUBLIC INFORMATION STATEMENT
NATIONAL WEATHER SERVICE SALT LAKE CITY UT
600 AM MST TUE NOV 1 2005

...UDOT WANTS MOTORISTS TO HEED WINTER WEATHER PREPAREDNESS WEEK...

IN RESPONSE TO GOVERNOR HUNTSMAN'S DECLARATION OF WINTER WEATHER PREPAREDNESS WEEK...THE UTAH DEPARTMENT OF TRANSPORTATION ADVISES MOTORISTS TO REMEMBER TO ADJUST DRIVING BEHAVIORS DURING WINTER WEATHER.

WHEN THE FIRST SNOWSTORMS HIT THE VALLEY...WE TYPICALLY SEE A HIGH NUMBER OF CRASHES...BECAUSE PEOPLE JUST ARE NOT USED TO ADJUSTING THEIR DRIVING BEHAVIORS FOR WINTER CONDITIONS...SAID ROBERT HULL...DIRECTOR OF TRAFFIC AND SAFETY FOR UDOT. SNOW...SLEET AND ICE ON THE ROAD REQUIRE DRIVERS TO BE MORE DILIGENT...ATTENTIVE AND CAUTIOUS. WINTER WEATHER CONDITIONS CAN TURN SMALL MISTAKES INTO SERIOUS PROBLEMS. THE SAFETY AND MOBILITY OF MOTORISTS DURING THE WINTER MONTHS IS A PRIMARY CONCERN AT UDOT. HOWEVER...UDOT SNOWPLOW DRIVERS FREQUENTLY TALK ABOUT THE RISKY DRIVING BEHAVIOR THEY SEE WHILE THEY ARE OUT PLOWING UTAH'S ROADWAYS. THE FOLLOWING TIPS WILL HELP MOTORISTS STAY SAFE ON THE ROADS THIS WINTER.

NEVER ATTEMPT TO PASS A SNOWPLOW. LET THEM GO AHEAD OF YOU WHILE THEY CLEAR THE ROAD FOR YOU AND OTHER MOTORISTS.

DO NOT GET BETWEEN SNOWPLOWS WHEN THEY ARE PLOWING IN TANDEM.

STAY AT LEAST 200 FEET BEHIND A SNOWPLOW.

SLOW DOWN AND BE COURTEOUS.

REMOVE SNOW AND ICE FROM ALL OF YOUR WINDOWS BEFORE YOU GET ON THE ROAD.

INCREASE YOUR FOLLOWING DISTANCE BEHIND OTHER VEHICLES.

MINIMIZE LANE CHANGES.

CHECK COMMUTERLINK.UTAH.GOV TO SEE ROAD CONDITIONS VIA REAL-TIME TRAFFIC CAMERAS.

CALL 511 TO HEAR ABOUT ROAD CONDITIONS ON YOUR ROUTE.

DID YOU KNOW...

UDOT HAS POP-UP SPRINKLERS ALONG KNUDSENS CORNER...WHICH IS PRONE TO ICY CONDITIONS. THESE DEVICES HAVE BUILT-IN SENSORS THAT SPRAY THE ROAD WITH AN ICE INHIBITOR WHEN THE ROADWAY GETS TO A CERTAIN CONDITION. THIS TREATMENT MAKES THE ROAD SAFER BY PREVENTING ICE FROM FORMING.

UDOT ACTIVELY MONITORS MINUTE-TO-MINUTE WEATHER CONDITIONS VIA WEATHER STATIONS ALONG HIGHWAYS ACROSS THE STATE. THESE WEATHER STATIONS MEASURE VALUABLE INFORMATION SUCH AS PAVEMENT TEMPERATURE...PRECIPITATION (DIFFERENTIATING BETWEEN SNOW AND RAIN)...WIND SPEED AND AIR TEMPERATURE. THIS INFORMATION IS THEN RELAYED TO THE TRAFFIC OPERATIONS CENTER AND TO SNOW PLOW DRIVERS...SO THE RIGHT RESOURCES CAN BE DIRECTED TO THE MOST CRITICAL AREAS.

UDOT USES STATE-OF-THE-ART SNOWPLOWS EQUIPPED WITH VIDEO CAMERAS MOUNTED ON THE SIDE OF THE TRUCK. A SMALL VIDEO MONITOR INSIDE THE CAB HELPS THE DRIVER BE MORE AWARE OF APPROACHING VEHICLES...THE PLOW ANGLE AND HIS SURROUNDINGS.

UDOT CREWS START THE SNOW REMOVAL PROCESS BEFORE THE SNOW EVEN FALLS. CREWS SPRAY SALT BRINE ON THE ROADS BEFORE A SNOWSTORM HITS. IF FORECASTERS PREDICT A SNOWSTORM WILL HIT THE VALLEY WITHIN 24 HOURS...UDOT CREWS PRE-TREAT THE ROAD WITH THIS WATERY SOLUTION. WHILE MANY PEOPLE THINK THAT SPRAYING A WATERY SOLUTION ON THE ROADS WILL MAKE THEM ICY OR SLICK...THE SALT BRINE ACTUALLY LOWERS THE FREEZING POINT OF THE ROADS...MAKING THE SNOW LESS LIKELY TO STICK TO THE ROADS.

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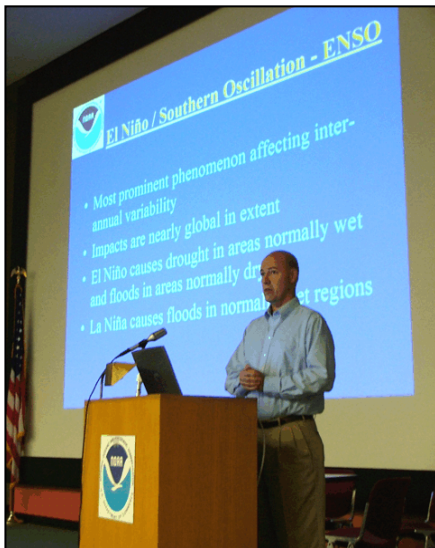
Clallam County, WA Recognized as Second

TsunamiReady County in the Nation:

Clallam County (Washington) was recognized on September 27 as the first TsunamiReady county in Washington, and only the second in the nation. Located in far northwestern Washington, Clallam County is especially susceptible to tsunamis. The nearby Cascadia Subduction Zone provides an especially heightened threat of tsunamis. If a major earthquake were to generate a tsunami in this area, it would hit the coast in just minutes, so the proactive actions taken by Clallam County and WFO Seattle to make this county TsunamiReady will go a long way in

helping this area to be ready. Congratulations, and great work!

(L-R): Clallam County Sheriff Joe Martin, Clallam County Commissioner Michael C. Chapman, Clallam County Commissioner Stephen P. Tharinger, WFO Seattle MIC Chris Hill, Clallam County Commissioner Howard V. Doherty, Jr., Washington State Emergency Management Earthquake/Tsunami/Volcano Program Manager George Crawford, Clallam County Emergency Management Division Manager Joe Ciarlo



Seattle SOO Brad Coleman addresses workshop participants.

Seattle Holds Media and Emergency Management Workshops:

WFO Seattle held its annual Media and Emergency Management Workshops on October 17-18. Over 150 people attended this year's workshops, including public and private sector emergency management officials, school district officials, health agency officials, transit agencies, road departments, the U.S. Coast Guard, U.S. Coast Guard Auxiliary, energy utilities, and area media and weathercasters.

SOO Brad Colman was the keynote speaker, presenting the latest winter weather outlook. The agenda also included Kevin Berghoff, from NWRFC, and Hydrologic Program Manager Brent Bower, addressing the latest in flood warning services. In addition, Mark Moore and Kenny Kramer, from the NW Weather and Avalanche Center, and WCM Ted Buehner presented the latest in NWS products and services for this winter. Feedback from the crowd attending the two 2-hour workshops was very positive. Office tours were also provided.

Winter Weather Awareness Week in Montana: The week of October 17-21 marked Winter Weather Awareness Week in Montana. The four Montana Weather Forecast Offices (WFOs) teamed up to provide television, radio, and newspaper interviews spreading the word about the hazards of winter weather in the state. Meanwhile, a record breaking early season winter storm affected a great deal of eastern Montana bringing quite an interest by local media. WFO Glasgow reports *The Ranger Review* in Glendive ran an extra series in its paper about awareness along with their reporting of the winter storm and the aftermath. They also handed out copies of the “*Montana Winter Survival Guide*” at the Francis Mahon Deaconess Health Fair and had several requests from the public and Disaster and Emergency Services staff for this publication and also FEMA’s preparedness publication, “*Are You Ready?*”

In Billings, WCM Jim Scarlett arranged for the four Montana WCMs to participate in a live radio talk show, aired statewide on the “Northern Ag Network.” He also set up the semi-annual siren test in Yellowstone County and taped daily weather awareness themes on radio station KBLG. Daily Public Information Statements were posted on the Billings web site detailing winter weather safety.



WFO Missoula forecaster Patrick Gilchrist discusses weather safety with a teacher at the Montana State Educator's Conference.

WFO Great Falls conducted 25 interviews with local radio, television and newspaper entities, 14 of which were live. The three television networks serving central Montana provided five days of winter weather awareness coverage.

In Missoula, Peter Felsch, Michelle Mead, and Patrick Gilchrist staffed a booth at the two-day Montana State Educator's Conference. Teachers from all over Montana attend this annual conference to participate in workshops and courses to supplement their teaching skills. The emphasis of the NWS booth was to provide educational resources and promote tours of NWS offices and presentations to schools. Hot items from the booth were ice scrapers with the NOAA logo, cloud charts/posters, and “Owlie Skywarn” booklets. WFO Missoula also provided interviews on radio station KSRN's community outreach weekend program.



(L to R) San Diego Forecaster Brandt Maxwell meets with Turkish State Meteorological Office official.

San Diego Forecaster Visits Turkey's Meteorological Service: Brandt Maxwell, a meteorologist at WFO San Diego, visited the Turkish State Meteorological Service (TSMS) in Ankara, Turkey on September 27 while on vacation. Brandt's account of his visit follows:

TSMS issues a number of forecast products, including public (both text and graphical, though not gridded), aviation, marine, air pollution, and fire weather forecasts. Like many foreign counterparts (especially Europe), they produce forecasts for both the public (with government funding) and for private entities (for a fee), despite being a government agency.

Their use of the MM5 model was quite impressive. TSMS runs the MM5 at a 2.3-km (nested) resolution on a local scale (for heavily-populated areas) and at a 7-km resolution on a national scale, and they use the MM5 not only for MOS (for about 200 stations) but also as automated input for other predictors, like air pollution forecasts and clear air turbulence.

The meteorologists were extremely engaged during their map discussion and appeared to make their forecasting decisions more as a team than as individuals. During the visit, there was a storm system over the western part of the Black Sea heading towards Istanbul, and the meteorologists were very focused on this storm because Istanbul is overwhelmingly the #1 priority. One person commented that if they miss a forecast for Istanbul, they get in big trouble.

However, Turkey has limited radar data. Despite Turkey having slightly more land area than Texas, they only have 4 radars (though all Dopplers), mostly covering the NW part (note that Istanbul, their largest city and most critical forecast point, is in the northwest). None of eastern or southern Turkey (even some populated areas that receive heavy rain in winter, like Antalya on the Mediterranean coast) has radar coverage.

Their weather radio was much different than NOAA Weather Radio. It was on the commercial part of the FM dial (92.4 in Ankara) and alternated between Turkish pop music (YES! Music on Weather Radio!) and weather information.

Brandt recommends that anyone with either international meteorology interests or just wanting to view a different forecasting perspective should visit a meteorological office in another country. Be prepared not only to ask many questions but also to be asked many questions about predicting the weather back home!



Skagit County, Washington Designated StormReady:

Skagit County, Washington, located in the Puget Sound region of northwest Washington, was recently designated StormReady. Congratulations!

Pictured L to R: Skagit County Commissioner Don Munks, WFO Seattle WCM Ted Buehner, County Commissioner Ted Anderson, City of Sedro-Woolley Mayor Sharon Dillon, County Commissioner Ken Dahlstedt, WFO Seattle MIC Chris Hill, and Town of La Conner Mayor Wayne Everton.

SCIENTIFIC SERVICES DIVISION

Twelfth Annual Workshop on Weather Prediction in the Intermountain West: The Twelfth Annual Workshop on Weather Prediction in the Intermountain West was held on November 3, 2005 at the Desert Research Institute (DRI) in Reno, Nevada. These annual workshops are designed to foster interaction between applied meteorologists, research scientists and others who rely on operational weather forecasts or data. The workshop is held in alternate years at DRI and the University of Utah, and this year the workshop was hosted by the DRI / NOAA Cooperative Institute for Atmospheric Sciences and Terrestrial Applications (CIASTA).

This year's workshop agenda had two primary focus areas: Transportation Weather and Air Quality Forecasting and Impacts, with emphasis on the operational prediction methods, monitoring networks and management challenges specific to the Intermountain West.

HPC Winter Weather Program Update: HPC's Winter Weather Desk is now experimentally producing 5km renditions of a combined snow/sleet accumulations. Please refer to - <http://www.hpc.ncep.noaa.gov/wwd/internal/> and scroll down to the menu section generated especially for Intermountain Region WFOs.

These are only available on the WWD internal page (and are intended to serve as a product to enhance collaboration between WFOs and HPC). The Intermountain Region accumulation graphics are available

at the same time the preliminary accumulation graphics are available for the eastern 2/3rds of the CONUS (Day 1 by 0500Z/1700Z, Day 2 by 0545/1745Z, and Day 3 by 0615/1815Z). Notification messages are sent on 1-2 Planet by the HPC WWD forecaster when the images are available.

These 5km renditions are the WWD 40km accumulations downscaled using PRISM data. Please contact Pete Manousos (peter.manousos@noaa.gov) if you need more information concerning these images.

Reminder – Please contact Pete regarding WWD VISIT training for your WFO (as a number of WFOs have already participated in this season).

Training Update

NWSTC Management and Supervision Course Postponement: The NWSTC Management and Supervision Course scheduled for December 5-16, 2005 has been postponed due to 1st Quarter OCWWS budget constraints. NWSTC is currently working on rescheduling the course and will provide the new dates as soon as possible.

WDTB AWOC Update: According to Ed Mahoney (WDTB), the upcoming AWOC winter weather training modules will be ready by the April/May 2006 time period. The current plan will be to require AWOC winter training next summer/fall in preparation for the following winter. More information will be coming as we receive updates.

Recently Released COMET Module: The COMET® Program released a new interactive learning module, "NWS Support During Hazardous Materials Emergencies." Threats such as terrorist incidents and accidental hazardous releases have made atmospheric transport and dispersion modeling an increasingly prominent area of service and support for NOAA's National Weather Service. The new National Response Plan has redefined the National Weather Service role as part of an evolving and increasingly coordinated emergency response system. In addition to providing weather information and meteorological expertise, WFOs are now called upon to support atmospheric transport and dispersion modeling efforts, both within the National Weather Service and in coordinating agencies.

"NWS Support During Hazardous Materials Emergencies" will help forecasters develop operational competence with atmospheric dispersion support by teaching the types of weather data inputs required for the short-range dispersion models typically used by emergency managers:

1. What types of weather data inputs are required for the medium- and long-range dispersion models run by outside agencies (that is, not by the emergency managers themselves)
2. What required and supplemental data inputs should or can be supplied to NCEP Central Operations for special HYSPLIT runs
3. The types and scales of events that are appropriate and inappropriate for modeling by NCEP's HYSPLIT model

4. What key uncertainties can cause misleading dispersion model forecasts
5. The processes and limitations of CAMEO/ALOHA and HYSPLIT, the main two dispersion models NWS forecasters will likely have contact with on the job
6. How to read and interpret CAMEO/ALOHA and HYSPLIT output

The module takes 2-3 hours to complete.

The URL for "NWS Support During Hazardous Materials Emergencies" is http://www.meted.ucar.edu/dispersion/disp_ops/. For NOAA employees, it is also available through the NOAA E-Learning system at <http://e-learning.doc.gov/noaa/>.

If you have any questions please contact Dr. Tim Spangler (tspang@ucar.edu), Dr. Greg Byrd (byrd@comet.ucar.edu), or Dwight Owens (dowens@ucar.edu).

Teletraining Sessions for November: The Virtual Institute for Satellite Integration Training (VISIT) calendar for November 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 current sessions planned for November are:

- Using GOES to Forecast Winter Storms Part 1 (Nov 1, 14)
- Using GOES to Forecast Winter Storms Part 2 (Basic, Nov 2, 15)
- GOES High Density Winds (Nov 7, 17, 21)
- Convective Downbursts (Nov 8)
- Cyclogenesis (Nov 9)
- Lake-Effect Snow II (Nov 12)

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>

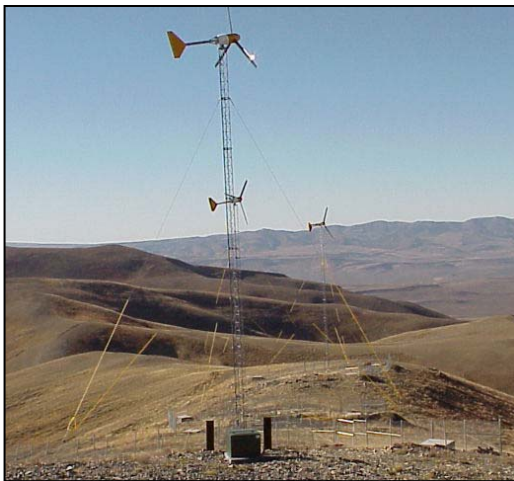
VTEC and Western Region Web Pages: VTEC became operational for a select group of NWS watch/warning products on November 1, 2005. New software to process VTEC code in order to display watches and warnings on Western Region web pages will become operational later this week. WFOs and RFCs are asked to monitor their web pages closely over the next few weeks and report any problems to Aaron Sutula, WRH SSD.

SYSTEMS OPERATIONS DIVISION

Congratulations to Jeff Walker: Jeff has completed and received his credentials for CISSP Certification. This is an international Gold Standard and is the first credential accredited by ANSI in the field of information security. The Certified Information Systems Security Professional (CISSP®) certification provides information security professionals with not only an objective measure of Knowledge but a globally recognized standard of achievement. The CISSP credential demonstrates competence in 10 different domains. This is a huge accomplishment and congratulations to Jeff for attaining this highly regarded and very difficult certification!

Mount Ashland Radar: Son Nguyen along with the Medford Electronics team replaced the Klystron at the Mount Ashland Radar.

Project Management Class: Joe Lachacz and Harold Knocke attended Project Management class in Las Vegas, NV. The class covered all aspects of project management along with the COTR requirement. The class was put on by the USDA Graduate School.



NWR Transmitters: The Ellen D Mountain transmitter (WNG-700) is on air. This is Western Regions first wind powered site. The transmitter was purchased by the State of Nevada. The transmitter is maintained and was installed by the Elko electronics staff and Merri Richmond.

In addition, Merri Richmond assisted the Seattle electronics staff with the installation of the Neah Bay NWR transmitter. The team installed a complex Intermod Panel and identified a problem with the audio levels that provide the NWR programming. Merri also installed an Intermod Panel at the recently upgraded Astoria transmitter. This was done with the assistance of Portland ETs Tim Smith and Doug Birck.



New Tower Installs:

Two new Ewing tip down towers were installed, replacing aging Rohn style towers and eliminating two more climbing hazards. Facilities Engineering Technicians Tom Page and Jim MacLellan installed one tower at the Pt. Blunt (Angle Island) observation site. Facilities Engineering Technician Dan Clark installed the other tower at the Samoa observations site.