Peak to Valley Weather

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National Weather Service Grand Junction

2844 Aviators Way

Wireless Emergency Alerts (WEA)

By Jim Pringle, Warning Coordination Meteorologist

Beginning the latter part of June 2012 smartphone users may have received warning messages automatically posted to their phones. This warning notification service, known as Wireless Emergency Alerts (WEA), is the result of a partnership between FEMA, the Federal Communications Commission (FCC), and wireless (cell phone) carriers, to enhance public safety. The following links contain additional information about **FEMA's Integrated Public Alert & Warning System** and **WEA**.

WEA is designed to send geographically targeted, text-like, warning notifications to the public. This all-hazards warning notification system relays a variety of weather warnings issued by the National Weather Service, as well as non-weather emergency messages, such as Amber Alerts, which are issued by authorized agencies. There is no charge for this WEA service. Also, WEA uses SMS-Cell Broadcast (SMS-CB), a one-to-many service, which simultaneously delivers messages to multiple recipients in a specified area.

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Ch-Ch-Ch-Ch- Changes in Grand Junction!

By Dea Bridge, ASA and Ben Moyer, MIC

The Grand Junction Weather Forecast Office (WFO) recently said farewell to **Doug Crowley**, the Meteorologist-in-Charge (MIC) for 12 years. Crowley retired after 27 years as a meteorologist with the National Weather Service. (*Looks happy cutting that cake, doesn't he?*) In October, **Ben Moyer**, from Glasgow, Montana, will officially move into the MIC position.

GETTING TO KNOW BEN: *I was born in Hollywood, CA, but spent my childhood years through high school growing up in Raleigh, NC. Central North Carolina offered a diversity of weather which spurred my interest in meteorology by the time I became a teenager. I have a particular fascination with snow which started at a young age when unexpected heavy snow would shut down Raleigh and leave the streets to sledders for days because there weren't enough snow plows to clear them. I believe in including and developing others, and providing an atmosphere for collaboration, innovation and progress. I greatly anticipate working with the*

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CoCoRaHS - Strange Name / Excellent Program

By Jim Pringle, Warning Coordination Meteorologist

CoCoRaHS? Yes, CoCoRaHS, which is simply the acronym for "Community Collaborative Rain, Hail and Snow Network", a unique, non-profit, community-based network of volunteers of all ages and backgrounds working together to measure and map precipitation (rain, hail and snow).

CoCoRaHS observers provide precipitation reports on a daily basis, with volunteers in all fifty states and Canada. The precipitation data is used by meteorologists, hydrologists, climatologists, emergency managers, city utility personnel, insurance adjusters, the USDA, engineers, mosquito control personnel, ranchers and farmers, outdoor & recreation interests, teachers, students, and many others.

It's easy to become a volunteer CoCoRaHS observer. All you need to do is register on the CoCoRaHS website and obtain a 4 inch cylindrical rain gauge. User friendly training on how to accurately measure rain, snow, and hail can also be found on the CoCoRaHS website. *It usually only takes a few minutes each day to take the precipitation measurements and post the readings online.*

One of the goals of CoCoRaHS is to have as dense of an observation network as possible. This helps people who use the precipitation reports to better understand the spatial variability of rainfall, snowfall or hail accumulations.

School Participation in CoCoRaHS

Teachers who participate in CoCoRaHS provide an ideal educational experience for their students to better understand how precipitation is measured and reported. The online training presentations are an excellent classroom resource.

Changing of the (Fire) Guard

By Dea Bridge, Administrative Support Assistant

The National Weather Service (NWS) has a cadre of about 70 meteorologist that are specially trained to go to wildfires and other incidents to provide weather briefings to incident responders. Their forecasts ensure the safety of operations and allow responders to plan operations, taking into account one of the most unpredictable aspects of an incident, the weather. This group, known as the Incident Meteorologists (IMETs), has been protecting the nation's incident responders for nearly 90 years.

IMET yurt, Nineteen Mile fire, near Butte, MT 2012. *Photo: NWS*

The Grand Junction IMETs have been dispatched to **nine** fires so far this season. As of September 18, there have been 155 IMET dispatches nationwide, making 2012 the sixth busiest season since recordkeeping began in 1987.

The Grand Junction office bids farewell to IMET, Mike Chamberlain, who has been a National Weather Service Meteorologist for over 30 years, and an IMET for 15 years. During this time, he deployed to approximately 40 wildland fires. Chamberlain's long-standing knowledge of wildland fire behavior and mountainous terrain has made him a valuable resource in the world of Incident Meteorology. The most rewarding aspect of the IMET position, says Chamberlain, is "Job satisfaction in the form of immediate feedback from the customers I serve while on a fire. You don't always see that when working in the forecast office."

Recently retired from the Grand Junction IMET team, but still a current member of the meteorological staff, is veteran Journey Forecaster Joe Ramey. Ramey has been with the Grand Junction weather office for 14 years and provided IMET services for eight of those years. He has a passion for climatological studies and provides a winter weather presentation annually for the folks of the Colorado Avalanche Information Center.

Recently taking the reins for Grand Junction's IMET staff is Jeff Colton, a Lead Forecaster, with 20 years of NWS service across three western U.S. offices. As a meteorologist, he has received regional attention in both forecasting and leadership. His primary motivation in becoming an IMET is the opportunity to provide a weather forecast that aides hundreds of firefighters and impacts every aspect of wildfire suppression. Colton is excited to add incident meteorology to his notable NWS career.

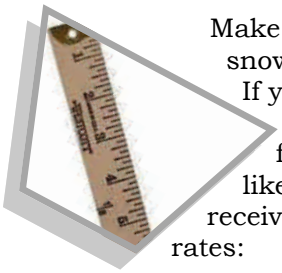
Rain Gauge Winterization, Snow Reports

By Travis Booth, Meteorologist Intern

As the winter season approaches don't forget to protect your rain gauge. Cold temperatures can cause collected water to freeze at the bottom, resulting in a cracked and unusable gauge.

Plastic wedge-shaped gauges must be brought indoors once temperatures start falling below freezing to avoid damage.

If you have the Standard Rain Gauge (8-inch) or the cylindrical plastic (4-inch) rain gauge, you can leave your gauge outside during the winter months. However, make sure you bring the inner cylinder and funnel indoors to avoid breakage from freezing water. The 4-inch gauge will be useful this winter for measuring snow water equivalent.



Make sure you have your yard stick handy for measuring snowfall, as the winter season is just around the corner! If you need a little refresher on proper snow measurement, there are some training slideshows from CoCoRaHS, and a training video. We would like to hear from you as soon as possible whenever you receive the following snowfall accumulations and snowfall rates:

Lower elevations: 2 inches or more new snow within 2 hours
Mountains: 4 inches or more new snow within 2 hours

For every snowfall event, storm total snowfall reports are greatly appreciated.

WEA *continued from page 1*

Implementation of the WEA service is being rolled out gradually across the United States. All major cell phone carriers, as well as hundreds of smaller carriers, are participating on a voluntary basis. As with all new cellular services, it will take time for upgrades in infrastructure, coverage, and handset technology to allow WEA alerts to reach all cellular customers.

The WEA system relies on "best-effort" networks, so delivery of alerts at a given place and time is not guaranteed. The new alert system is not a replacement for other alert systems, such as **NOAA Weather Radio** or the **Emergency Alert System (EAS)**. Rather, WEA is an additional warning notification resource, which is an important concept, since multiple sources of emergency information maximize the chance to receive warning notifications. A weather alert sent through WEA is a brief notification indicating that a warning has been issued and additional information should be accessed. **Note**: *Not all phones are capable of receiving Wireless Emergency Alerts.*

Cell service customers can opt out of weather alerts, but we strongly discourage you from doing so. These weather alerts are a vital public service that ultimately help America become a more **Weather-Ready Nation**. Armed with late-breaking weather warnings, people will have the timely information they need to make smart decisions about how to protect themselves, their families, their friends and neighbors, and their personal property.

The new weather text alerts will include tornado warnings. *Credit: NOAA*

To find out if your phone is WEA-capable and when the alert system will be available in your area, please contact your wireless carrier today or visit CTIA, the Wireless Association.

Eagle NOAA Weather Radio "ON THE AIR"

By Jim Pringle, Warning Coordination Meteorologist

The Eagle All-Hazards NOAA Weather Radio (NWR) transmitter located at an elevation just below the 11,000 foot level near Eagle, Colorado, began broadcasting on July 19, 2012. The broadcast signal originates from the National Weather Service office in Grand Junction. The radio frequency is 162.450 Megahertz on the Weather Band, the power output is 300 watts, and the station ID is WZ-2518.

The Eagle NWR broadcast covers much of Eagle County, including a significant section of Interstate 70, as well as much of southern Routt County and small portions of some adjacent counties. You can look at the computer generated broadcast coverage map to get a perspective of the reception areas.

The same broadcast can also be heard on CDOT's 107.9 FM station in the Eagle-Gypsum area, and on 530 AM in the Edwards area.

Additionally, the Eagle NWR broadcast is also being provided by volunteer partners via the web.

In addition to providing weather forecasts, weather warnings, current weather observations, and other weather-related information, the Eagle NWR transmitter can also warn for Non-Weather Emergency Messages, such as a Hazardous Materials Warning.

When a life-threatening warning is broadcast, weather radio receivers are designed to automatically activate with alarms and the warning message. The Emergency Alert System (EAS) is also activated by NOAA Weather Radio on commercial radio and TV bands.

If you have any comments or suggestions about the Eagle All-Hazards NOAA Weather Radio broadcast, including quality of the broadcast signal or program content, please contact our webmaster or call our office at 970-243-7007.

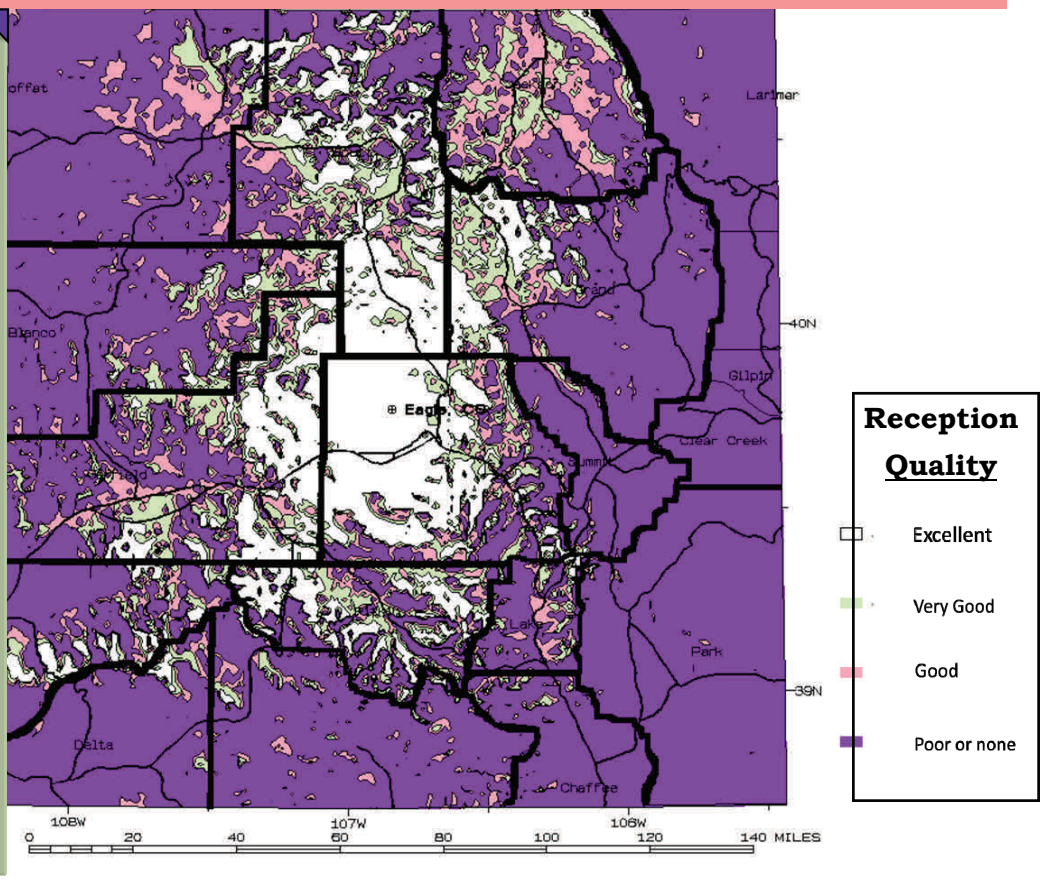
Eagle NOAA Weather Radio Broadcast Coverage

Radio Frequency
162.450 Megahertz

Station ID:
WZ-2518

Eagle-Gypsum, CO
CDOT's 107.9 FM

Edwards, CO
CDOT's 530 AM



USA Pro Cycling Challenge Returned to Colorado

By Travis Booth, Meteorologist Intern

For the second year in a row, cyclists weaved their way through Colorado as part of the seven stage 2012 USA Pro Challenge Race held August 20-26th. Sections of the first four stages stretched across the Grand Junction National Weather Service (NWS) forecast area, with our office providing weather support, aka Decision Support Services (DSS) during those days. With the mission of the NWS being the protection of life and property, DSS is a natural offshoot.

What is DSS? As one definition states, it is "specific, mission-based, situational information, including our expert interpretation and explanation, provided in formats and language our users understand". DSS is basically providing the end user with the timely information they need and in a format they can understand and then implement.

How did our DSS look in action? Well ahead of the race time we asked emergency managers and other decision makers involved what they most needed for weather information to help make this a successful and safe event. This translated into morning briefings via conference calls, a continual weather watch of the race route with phone call notifications of possible hazardous conditions, as well as spot forecasts (special forecasts issued to fit the time, topography, and weather of a specific incident).

What were the results of our DSS? For much of the Grand Junction section of the race, our office experienced significant radar outages, making the monitoring of the race route for showers and thunderstorms a little tricky. Without the radar, we used a mixture of satellite and lightning data, surface observations, spotter reports, computer models, web cams, and knowledge of local terrain influences to provide the forecasts that were needed.

Considering the race took place during an active phase of the summer thunderstorm season, the racers were fortunate to miss out on most of the hazardous weather, only experiencing occasional showers. All told, the information and support provided by the Grand Junction office was well-received by the decision makers of the event. Quoting the incident commander for the event, "The [weather] reports have been comprehensive, accurate and a key part of our operational decision making process. It is clear that your team at the Grand Junction NWS office understands the value of partnership and collaboration."

staff of professionals at NWS Grand Junction, learning about the weather impacts in western Colorado and eastern Utah, meeting our customers, and facilitating changes to our business that result in improved products and services for our customers.

PROFESSIONAL EXPERIENCE/EDUATION:

I was a high school volunteer for the NWS WFO in Raleigh, NC, then was hired by the NWS in 1994 as a Student Intern while in college - also at the NWS WFO in Raleigh, NC. After graduating from Penn State University with a B.S. in Meteorology (1995), I went to work immediately for the National Weather Service as a Meteorologist Intern at a spin-up Weather Forecast Office in Greenville-Spartanburg, SC. I was promoted to a General Forecaster at the same office in 1998. In early 2001, I obtained a Senior Meteorologist position at the NWS WFO in Oxnard, CA – serving the Los Angeles area. Feeling the need to further broaden my operational experience, I secured a Senior Meteorologist position at the NWS WFO in Des Moines, IA in 2006. In 2010, I was selected to participate in NOAA's 18-month Leadership Competencies Development Program, and graduated in October 2011. During this period, I was promoted to be the Meteorologist-In-Charge at the NWS WFO Glasgow, MT in August 2010.

AREAS OF PROFESSIONAL INTEREST/EXPERTISE:

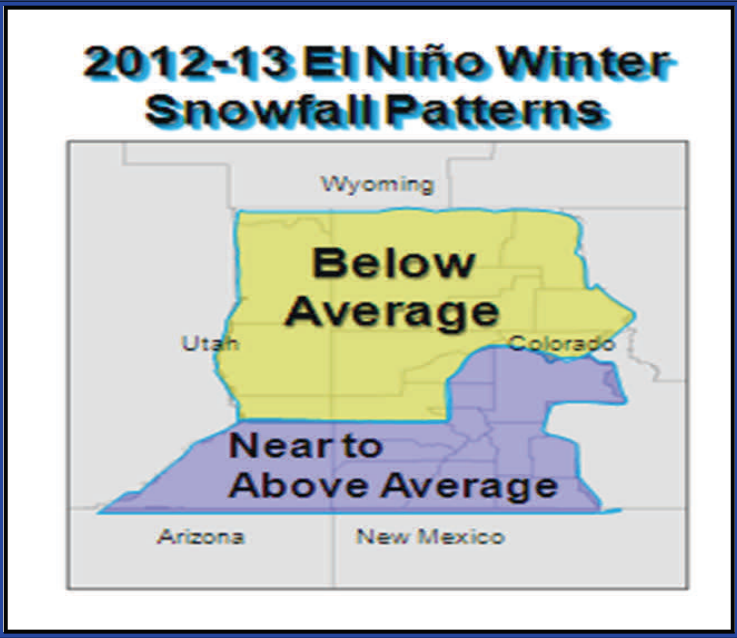
Winter and severe weather warning operations and case studies, GIS applications, interacting with NWS partners to learn how to provide better service, and helping others achieve their goals.

AREAS OF PERSONAL INTEREST/EXPERTISE: *Family-time and parenting, spirituality, being outdoors, travel, triathlons, baseball (Los Angeles Dodgers), Penn State football, landscaping, music.*

Welcome to Grand Junction, Ben!

What Does Old Man Winter Have in Store?

By Joe Ramey, Meteorologist

SEASONAL OUTLOOK for the upcoming winter.

Click HERE for a more detailed explanation.