



## Shareholders Report

# 2017

Welcome to the second annual Shareholders Report. The purpose of this report is to highlight specific activities your local National Weather Service office was engaged in during 2017 as a part of our core mission and desire to provide high quality weather information and education. The National Weather Service values its relationship with its core partners and the communities it serves, and we want to continue to enhance our products and services to meet your needs. National Weather Service, Grand Junction

## NOTE FROM THE STATION MANAGER

#### BEN MOYER, METEOROLOGIST-IN-CHARGE

The National Weather Service (NWS) office in Grand Junction, CO continued a multi-year process of evolving its products and services in order to improve the quality, accuracy and consistency of information that is delivered to you, to support critical decisions that you need to make to protect the citizens of eastern Utah and western Colorado.

We tested operational changes, such as using a common starting point for the forecast at all NWS offices across the country, then adjusting for localized phenomena when it's most impactful to you, our partners. We refined methods for communicating and delivering impact-based decision support services. As this report highlights, the NWS Grand Junction staff provided remote and on-site support to public safety and land management officials for a wide range of events and projects. Staff also participated in numerous local government hazard mitigation planning meetings, table-top exercises and other emergency exercises. These activities offered opportunities for NWS Grand Junction staff to interact with core partners and understand how to better serve you. The professional staff at our office wants to continue to work with you to ensure the information you receive from us is timely, useful and meets your needs.

There are several other concepts that will be tested over the next several years such as flexible staffing, embedding staff with our partners, Situation Reports, Enhanced Hazardous Weather Outlooks, and probabilistic forecasts of impactful weather. As we test these concepts and services, we will ask you, our partners, to provide valuable input and feedback on these tests.

We look forward to continued collaboration and communication with you as we evolve the NWS to better serve you and your ever-growing needs. If you have any concerns or questions, please contact me (benjamin.moyer@noaa.gov). I am happy to meet with you to discuss our services and any changes that we are considering.

Cover photo and article header photo provided by Mike Charnick, General Forecaster at WFO Grand Junction

## PROVIDING DECISION SUPPORT SERVICES FOR GRAND JUNCTION AIRSHOW

#### JIM PRINGLE, WARNING COORDINATION METEOROLOGIST

Forecasters from Grand Junction Weather Forecast Office (GJT WFO) promoted weather safety at their NWS booth and provided Decision Support Services (DSS) for airport and military personnel during the Air Show at the Grand Junction Regional Airport, September 30th and October 1st. Weather briefings were provided each morning prior to the air show events by NWS forecasters. Situational awareness and



Air Force Thunderbirds by Mt Garfield. Photo courtesy Mike Charnick

updated weather information was relayed by GJT WFO staff to airport personnel throughout both days of the air show.

About 10,000 people attended the air show, which was lower than anticipated because of cancellation midway through the first day of the air show due to thunderstorms which came as no surprise since GJT WFO staff accurately forecasted their time of onset more than 24 hours in advance. GJT WFO forecasters also contacted airport personnel to warn them of the approaching thunderstorms about 30 minutes prior to arrival, which resulted in

a safe and orderly evacuation of attendees, performers, and exhibitors to safe shelters. The timely notification also allowed sufficient opportunity for those at the air show to protect property, including multimillion-dollar aircraft.

NWS Grand Junction provided specific weather information to public safety officials at other large outdoor events in 2017, including:

- 2017 ESPN Winter X-Games
- 2017 World Cup Finals Aspen
- Gypsum Dayz
- 2017 Jeep Safari Moab
- Ironhorse Bicycle Classic
- JUCO World Series
- 2017 GoPro Mountain Games
- Telluride Bluegrass Festival
- Eagle Flight Days
- Gunnison River Festival
- KOTO Ride Festival (Telluride)
- Olathe NightVision Concert
- Routt County Fair
- Animas Valley Balloon Rally



GJT WFO meteorologist Scott Stearns (left) and MIC Ben Moyer (right) present weather safety information and resources for obtaining forecasts and warnings. Photo courtesy Jim Pringle.

## PROVIDING DAILY DECISION SUPPORT FOR SNOWEX YEAR 1 CAMPAIGN

#### JULIE MALINGOWSKI, GENERAL FORECASTER

SnowEx, a five-year long NASA-led research field campaign, began its first operational period this February on the Grand Mesa and at Senator Beck Basin in western Colorado. The researchers of SnowEx are improving techniques to quantify how much water is stored in snowcovered regions globally using weather stations, ground measurements, LIDAR and radiometers, as well as several airplanes, including the Naval Research Lab P-3. The ultimate goal of SnowEx is to figure out optimal instrument combinations that would be deployed on a satellite dedicated to snow research. The project ran from February 6th through February 24th in western Colorado, and had teams of about 50 researchers at a time stationed at Grand Mesa and Senator Beck Basin.

The National Weather Service in Grand Junction worked with the project leaders of SnowEx beginning in November 2016 to establish decision support needs and delivery options for SnowEx planning and operations. The Grand Junction Forecast Office provided daily email and phone



Scientists digging snowpits to assess the snowpack structure on the Grand Mesa. Photo Courtesy C. Hiemstra

briefings to the SnowEx crew, as well as on-demand morning phone calls for last minute safety deployment decisions for ground and air operations. The project operations were highly dependent on cloud cover due to the different aircraft's flight levels and vertical visibility requirements. SnowEx project leaders invited the NWS Grand Junction up for their media day to learn about the different instruments and visit the field sites.



NWS Grand Junction staff from left to right visiting the Grand Mesa SnowEx sites: Forecasters Dennis Phillips, Matt Aleksa, and Mike Charnick, Ben Moyer (MIC), and Mike Meyers (SOO). Photo courtesy Ben Moyer

### FIRE WEATHER

INTERAGENCY SUPPORT

#### CHRIS CUOCO, SENIOR FORECASTER

It was a busy year for WFO Grand Junction's fire weather program. Through the course of the year WFO forecasters continued to provide direct weather support through spot weather forecasts for law enforcement and emergency managers, as well as the traditional land use agencies. WFO Grand Junction supported more Search and Rescue operations through spot weather forecasts than any other NWS forecast office in the nation. Our office ranked 10<sup>th</sup> in the nation for spot weather forecasts issued in support of HAZMAT incidents and for those requested by public safety officials, and ranked 7<sup>th</sup> in the nation for the total number of spot forecast issued- 647.



One of the prescribed burns WFO Grand Junction supported in 2017. Photo courtesy USFS Gunnison.



Prescribed burn during Fall of 2017. Photo courtesy USFS Gunnison.

WFO forecasters also continued to support the growing Wildland Fire Management program at Western Colorado Community College. Forecasters presented several training and informational sessions to students, including teaching the weather units to fire behavior and basic fire fighter training programs, and overviews of National Weather Service fire weather operations.

The WFO also continued to expand its outreach to nontraditional fire weather customer agencies by visiting local county sheriffs, fire and police departments, and county emergency managers in periodic planning and coordination meetings.

## FIRE WEATHER

#### FIRE SITE INCIDENT METEOROLOGY

#### JEFF COLTON, SENIOR FORECASTER

It was another busy year for our Incident Meteorologist (IMET) as he was deployed to three wildfires in three separate states. The table below shows the dispatches:

Name of Wildfire	Bonita	Lolo Peak	Jones
Location	Near El Rito, NM	Near Missoula, MT	Near Dexter, OR
Dates	June 19-27	July 22-31	Aug. 25 to Sep.18
Number of days on the Incident, including travel	9	10	25
Total Hours of OT worked by the IMET	69.5	100	223.5
Total hours of OT worked by the office during the IMET's absence while dispatched	56	38.75	160

Most days start off with a morning briefing for the camp and crews. Here's a picture from the Jones Fire showing one of the early briefings.

The IMETs generally work in tent-like structures called Yurts, setting up laptops, a printer, and sometimes an extra screen if they have room in their luggage or vehicle. Sometimes, they work out of the back of their vehicles (before camps are ready to go) or even from a picnic bench when camps are being moved! Here's a few more pictures showing two such scenarios.



There are times when the IMET will go out into the field to take weather observations and to monitor the fire from a distance; watching how the winds interact with the terrain.

And finally, traveling across America can allow them to see some interesting sites, such as the Mars Polar Lander in El Rito, NM!



## OUR LATEST AVIATION ADDITION: GUNNISON-CRESTED BUTTE REGIONAL AIRPORT

#### THOMAS RENWICK, SENIOR FORECASTER

The Grand Junction Weather Forecast Office now leads the pack in the Central Region of the National Weather Service when it comes to Terminal Aerodrome Forecasts (TAF). But first, what's a TAF? A TAF is a concise forecast of expected meteorological conditions at an airport during a specified period (24 to 36 hours). In other words, it's a weather forecast for an airport. The biggest weather concerns for pilots are precipitation, cloud heights and visibilities as they affect whether a plane can land at an airport. Back in 2013, our office added Canyonlands, Durango, and Telluride airports to our TAF services which tied us with the Riverton, WY Weather Forecast Office at 9 TAFs a piece. As of August 2017, after a request from the Gunnison airport manager, we added a TAF for the Gunnison airport. The airport manager said, "One of the major challenges we have, especially during the winter months when most of our flights are generated, is the availability of trending weather information for the airlines and operators who make their decision to dispatch their flights based on the weather. This either causes delays and or cancellations by the airlines. TAFs will improve the situational awareness of all operating crews thereby helping to improve the airlines performance." Other reasons for TAF support include the airport being close to:

- Crested Butte Mountain Ski Resort
- Black Canyon of the Gunnison National Park
- Curecanti National Recreation Area
- Gunnison National Forecast
- A number of Bureau of Land Management Recreational Areas
- Hartman Rocks

With the addition of the Gunnison TAF, we now issue 10 TAFs, four times a day which puts us as the only office in Central Region that issues TAFs for 10 different airports.

While most people think of the National Weather Service as only producing forecasts and weather watches and warnings, we also help the aviation community. And now we've increased this support yet again. For any questions about our aviation support, please contact Tom Renwick at Thomas.Renwick@noaa.gov. You can also see our current TAFs at www.crh.noaa.gov/gjt/?n=aviation.





## **2017 HYDROLOGY RECAP**

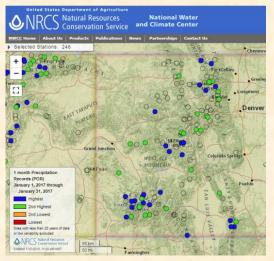
#### ALDIS STRAUTINS, SERVICE HYDROLOGIST

Snow pack for the 2017 water year was well above normal in many places over west central Colorado and northeastern Utah.

Early in the year and the snow accumulation season of 2017 a record wet January resulted in a significant increase in the snowpack. March was dry and warm with a late month storm only adding a minimal rebound to the snowpack. April was also dry. A cold mid-winter like storm decreased snowmelt runoff and added to the snowpack. A significant warmup starting in late May lasting into June helped increase the snowmelt runoff. This complicated meteorological and hydrological scenario challenged many reservoir operators and water resource managers.

The Service Hydrologist from the Grand Junction National Weather Service provided expert advice and worked with both water resource managers and local emergency management to protect life and property.

During May and June the Upper Green, Duchesne and Uinta Rivers in eastern Utah ran near or slightly above bankfull. Rivers in western Colorado that were near or slightly above bankfull included the Gunnison, East, Taylor, Dolores, Mancos, San Miguel, Eagle, Roaring Fork and Crystal. Coordination and conference calls along with onsite visits were made by the hydrologist with local, state and federal partners, emergency management officials and the Colorado Basin River Forecast Center (CBRFC). Public advisories from the National Weather Service in Grand Junction were also issued for many of these rivers in eastern Utah and western Colorado.



January 2017 SNOTEL precipitation records (POR). Graphic from the NRCS.



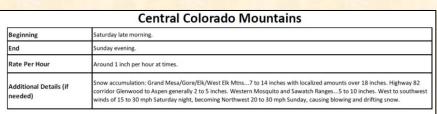
Gunnison River in Delta County below the Uncompahgre River confluence. North bank of the river. Photo courtesy Aldis Strautins.

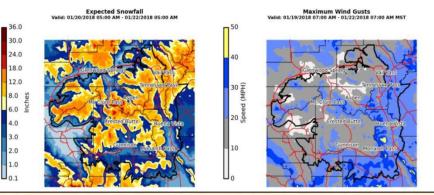
## ADVANCING WEATHER SERVICES THROUGH GIS

#### DENNIS PHILLIPS, GENERAL FORECASTER

The Boulder, Grand Junction and Pueblo National Weather Service Forecast Offices, in a partnership with the Colorado **Department of Transportation** (CDOT), improved the process of collaborating potentially hazardous weather and road conditions. Our office contributed in this process by developing a GIS based map of partner defined boundaries. Behind the scenes, this approach helped gather a large quantity of weather metadata to produce an end product or

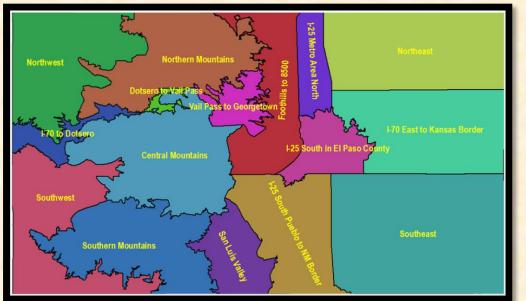
forecast. The NWS Boulder





An example of our statewide briefing email coordinated with WFO Boulder and WFO Pueblo for CDOT operations.

office has provided an efficient way for the three NWS offices to simultaneously merge these forecasts across the state into one product for CDOT. The Colorado NWS offices continued to evaluate and improve the scientifically-based approach to snow level and snow to liquid ratio forecasting. This will ultimately improve our forecasts and our partner's decision-making for protecting lives and property



across the State of Colorado.

Left: The GIS shapefile used to divide Colorado into regions for CDOT weather briefings.

## GOES-16

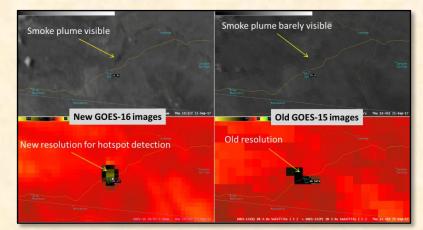
#### A NEW AGE IN WEATHER SATELLITE TECHNOLOGY

#### MICHAEL CHARNICK, GENERAL FORECASTER

GOES-16, the first in a series of new-generation weather satellites, was launched on November 19<sup>th</sup>, 2016. Throughout 2017, meteorologists at NWS Grand Junction got a first look at data from GOES-16's 'Advanced Baseline Imager' while the satellite was in test-mode. The improvements were dramatic and immediately applicable to day-to-day forecast operations.

Some of the notable improvements in GOES-16 data over past satellites included:

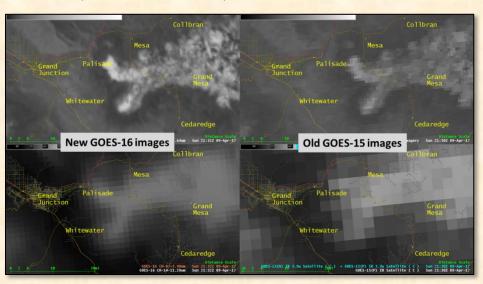
- Twice the image resolution
- Three times faster refresh rates
- 'Mesoscale' sectors with up to 30-second refresh rates
- New fire detection products
- New 'false color' imagery, allowing for better detection of fog and snow



In the image above, our new GOES-16 imagery is shown on the left and our former GOES-15 imagery is on the right. The top row shows a 'visible' image, where you can clearly see the shadow of a smoke plume from a fire near Elk Springs, Colorado on September 21<sup>st</sup>. Note the improvements in the infrared 'hotspot' imagery – twice as many pixels mean fires of only 13 acres can now be detected from space!

The image below shows a similar comparison of resolution improvements over the Grand Mesa. Snow

cover is more easily detected in the visible imagery in the top row, while cooler temperatures on the Grand Mesa are displayed in much higher resolution on the bottom row. This imagery is from April of 2017, when mountain snowpack was near its seasonal maximum.



## COOPERATIVE OBSERVER PROGRAM

#### JOHN KYLE, DATA ACQUISITION PROGRAM MANAGER

The National Weather Service (NWS) Cooperative Observer Program (COOP) is the Nation's weather and climate observing network of, by and for the people. More than 8,700 volunteers take observations from various locations nationwide. In western Colorado and eastern Utah there are approximately 80 of these observers. The data are truly representative of where people live, work and play.

Cooperative observer data supports the NWS climate program and field operations. The program responsibilities are accomplished by the local Data Acquisition Program Manager and include:

- Selecting data sites
- Recruiting, appointing and training of observers
- Installing and maintaining equipment
- Keeping and updating station and observer documentation
- Collecting data and its delivering it to users
- Maintaining data quality control
- Managing fiscal and human resources required to accomplish program objectives



John & Carolyn Sundberg receiving their 45 year Length of Service Award, The Dick Hagemeyer Award. Photo courtesy John Kyle.

A cooperative station is a site where observations are taken or other services rendered by volunteers. Observers generally record temperature and precipitation daily, and electronically send those reports to the NWS and the National Centers for Environmental Information (NCEI). Many cooperative observers provide additional hydrological or meteorological data, such as evaporation. Data can also be transmitted via telephone, computer or mail. Equipment used at NWS cooperative stations may be owned by the NWS, the observer, or by a company or other government agency, as long as it meets NWS equipment standards.

2017	Length	of Service	Awards

Observer(s)	Location	Length of Service Award	
Multiple	Old Fort Lewis	100 years	
John & Carolyn Sundberg	Hayden	45 years	
John Ey	Lemon Dam	40 years	
Max Altenbern	De Beque 14NW	25 years	
Jim Andrus	Cortez	20 years	
Jim Hook	Bluff	15 years	
Leonard Kreuger	Cochetopa Creek	15 years	

## EXPANDING OUR PARTNERSHIP WITH BROADCAST MEDIA

#### MEGAN STACKHOUSE, GENERAL FORECASTER

In an effort to strengthen the National Weather Service's (NWS) relationship with the broadcast media, two NWS forecasters invited all local TV meteorologists to take part in a new outreach initiative. Beginning in December 2016, General Forecasters Julie Malingowski and Megan Stackhouse met with the various morning, weekend, and evening meteorologists from the local stations that cover the Western Slope: KREX, KJCT8, and KKCO11 News. All of these broadcasters have different responsibilities at their respective stations. To better understand these responsibilities, Julie and Megan decided to visit the TV stations to become familiar with the broadcasters' computer software and resources. During these meetings, several of the broadcast meteorologists expressed an interest in learning more about NWS operations. The hospitality was reciprocated and a visit to the Grand Junction Weather Forecast Office was scheduled.

Over the course of 2017, great strides were made to enhance the partnership between the NWS and broadcast media. Besides becoming educated on the typical schedule and workday of a TV meteorologist, Julie and Megan also discussed how the NWS could better serve the broadcast community. They discovered which products the broadcasters heavily relied on, identified what broadcasters look for in the NWS as a partner, and shared various methods and tools to collaborate. Finally, and perhaps most importantly, they exchanged ideas on how to effectively communicate with the public and ensure clarity and continuity in messaging.



Greg Rule at KREX giving an on-air weather briefing. Photo courtesy Megan Stackhouse.

Several short term goals came about as a result of these meetings and one of these goals was to create a new briefing tool. This briefing tool would be



NWS Forecaster Julie Malingowski (left) with KREX Meteorologist Rebecca Hykin (right). Photo courtesy Megan Stackhouse.

distributed ahead of and during significant events, and include a "media assistance requested" section to utilize the reach of the media. For instance, the NWS starts receiving reports of freezing rain, travel along Interstate 70 is crippled, and Ice Storm Warnings are issued. The quickest way to get this information to the public would be through the media and this briefing tool would help accomplish this goal. We anticipate this outreach initiative will be ongoing and continually expanding to best serve the public and our partners.

## **2017 ELECTRONICS REPORT**

#### CHRIS KORNKVEN, ELECTRONIC SYSTEMS ANALYST

It has been a very busy year for the electronics staff at WFO Grand Junction since our last Shareholders Report. Over 1065 maintenance actions have been completed on our equipment to keep it running in top condition and ensure its availability to forecasters when they need it.

Highlights of these actions include:

- activation of our OneNWSnet network connection for improved data flow
- replacement of our WFO generator fuel tank
- upgrading the transmitter backplane as a part of the Service Life Extension Program for the radar
- replacement of the klystron in the radar
- repairing a failed rotary joint in the radar pedestal

Service to our community was greatly improved by installing an Interactive Voice Recorder system providing automated weather products to calls from the public. This new system is menu driven and provides significantly more weather products to callers from throughout our County Warning Area. In addition, the NOAA Weather Radio transmitter in Vernal, UT was replaced with a new 300 watt transmitter replacing an obsolete 100 watt transmitter.

Other actions throughout the year included preventive maintenance and hardware or software modifications to:

- WSR-88D NEXRAD radar with 2 software updates and 1 hardware modification
- Advanced Weather Interactive Processing System (AWIPS) with 11 software updates or patches and 5 hardware modifications
- Upper Air system with 1 software update

Our electronics staff was also busy with preventive maintenance and repairs on our 10 Automated Surface Observation Systems and 29 Upper Colorado River Project systems located throughout western Colorado, eastern Utah





Top: Vernal, UT NWR transmitter being replaced. Bottom: NWS Technicians installing Klystron for radar. Photos courtesy Chris Kornkven.

and northern New Mexico, as well as attending 6 - training sessions at the National Weather Service Training Center in Kansas City, MO.

## WEATHER BALLOONS

THE DATA IN THE FORECAST

#### JOHN KYLE, DATA ACQUISITION PROGRAM MANAGER

The National Weather Service in Grand Junction has taken upper air observations with radiosondes since

May of 1944. The radiosonde is a small, expendable instrument package just smaller than a shoe box that is suspended below a large balloon inflated with helium gas. As the radiosonde rises at a rate of 1,000 feet per minute, sensors on the radiosonde transmit pressure, temperature, relative humidity and GPS position data each second, along with GPS-derived wind speed and direction. The balloon expands as it rises until it bursts, then falls back to earth under a small, orange colored parachute.



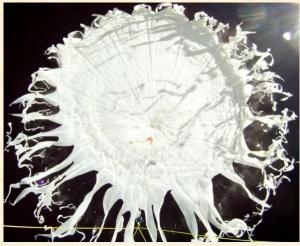
The late Larry Smith launching an evening balloon from Grand Junction. Photo courtesy John Kyle.

Radiosondes are the primary source of

data that are ingested into supercomputers for weather prediction models, with output that forecasters adjust for accuracy as needed. These supercomputers run at speeds of nearly six quadrillion operations per second! Occasionally, when severe weather is expected, additional soundings may be taken in support of the area threatened. For example, the NWS in Grand Junction has done additional soundings in support of Hurricane Irene and Superstorm Sandy. Other radiosonde data applications include air pollution and fire weather models.

Worldwide, there are over 800 upper-air observation stations; NWS takes observations at 92 stations; 69 in the conterminous United States, 13 in Alaska, nine in the Pacific, and one in Puerto Rico. Observations are taken twice a day, at the same time each day, 365 days a year.

An example of a high wind balloon launch from the NWS Grand Junction can be seen at https://www.youtube.com/watch?v=PfYky94HycA



A balloon after it has popped at the end of its flight.

## WEATHER READY NATION AMBASSADORS

#### JIM PRINGLE, WARNING COORDINATION METEOROLOGIST

Several years ago, after much study by social scientists following devastating weather events in our nation, it was determined that a critical component in reducing storm casualties and damage to property was to improve and more widely promote weather safety education for the public. It was also concluded that weather safety education would be much more effective and reach many more people if the National Weather Service (NWS) was assisted by other organizations to accomplish this activity.

Therefore, the <u>NWS Weather-Ready Nation (WRN) Ambassador program</u> was established a few years ago to recruit organizations to help promote weather safety information to those within their organization and to those who are served by their organization.

As of the end of 2017, there were 64 WRN Ambassador organizations helping to promote weather safety information within the Grand Junction NWS forecast office's area of responsibility. Among those WRN Ambassadors in eastern Utah and western Colorado are county, tribal, and municipal emergency management agencies, broadcast and print media, government land management agencies, commercial businesses, law enforcement agencies, fire departments, and many others.

<u>Any</u> organization can become a WRN Ambassador and help promote weather safety information through their website, social media posts, signage, newsletters, etc. The NWS provides many <u>weather</u> <u>safety resources</u> for WRN Ambassadors to use. There are no strict guidelines, and the NWS only asks that the WRN Ambassador organization pledge to help promote weather safety information as they are able. Many more WRN Ambassadors are needed, and the NWS WRN Ambassador website provides a <u>link</u> where any organization can quickly and easily sign up to become a WRN Ambassador and help the NWS in their mission to protect lives and property.



A glimpse of the WRN Ambassador wall at NWS Grand Junction. Photo courtesy Jim Pringle.



Rio Blanco County emergency exercise. Photo courtesy Jim Pringle.

## WEATHER READY NATION AMBASSADORS

#### **GRAND JUNCTION WEATHER FORECAST OFFICE**

#### OUR WEATHER-READY NATION AMBASSADORS as of December 31, 2017

AMTRAK	KRAI Radio (Craig)	
Anasazi Heritage Center	KREX-TV NewsChannel 5 (Grand Junction, CO)	
Aspen Science Center	KWUF Radio (Pagosa Springs)	
Canyonlands Field Airport	Lower Valley Fire Protection District (Fruita, CO)	
City of Grand Junction (Emergency Management)	Meeker Chamber of Commerce	
CoCoRaHS (National - Recruited by GJT WFO)	Mesa County RACES - Emergency Communications	
Colorado Avalanche Information Center (Statewide)	Mesa County (CO) Sheriff's Office	
Colorado Dept. of Transportation (CDOT)	Mesa Verde National Park	
Colorado Division of Homeland Security &	Moffat County	
Emergency Management		
Colorado National Monument	Naturita Library	
Colorado Parks & Wildlife, Montrose Service Center	Naturita, Town of	
Colorado River Fire and Rescue	Pagosa Springs Sun (CO) Newspaper	
Craig Daily Press	Paradox Valley School & Library	
Craig Fire & Rescue	Pine River Times Newspaper (Bayfield)	
Daggett County	Rio Blanco County (CO) Office of Emergency Management	
Dolores County	Routt County (CO) OEM	
Eagle County (CO) Emergency Management	San Juan County (UT) Emergency Management	
FedEx (National)	Southern Ute Tribe	
Fruita Police Department (CO)	Starbucks Coffee (National)	
Garfield County (CO) Sheriff's Office	Steamboat Springs Fire & Rescue	
Grand County (UT) Emergency Management	Summit Canyon Mountaineering	
Grand Junction (CO) Fire Department	Thompson Springs Visitors Center	
Grand Junction (CO) Visitors Center	Uinta Basin Standard & Vernal Express Newspapers	
Gunnison County (CO) Emergency Management	U.S. Federal: Moab Interagency Fire Center	
Home Depot (National)	U.S. Federal: Uintah Basin Interagency Fire Center	
JUCO World Series	U.S. Federal: US Forest Service - White River	
	National Forest	
KAFM (Grand Junction, CO)	US Forest Service-Grand Mesa, Uncompahgre,	
	and Gunnison National Forests	
KBCR Radio (Steamboat Springs, CO)	Utah Division of Emergency Management (statewide)	
KJCT NEWS 8 (Grand Junction, CO)	Utah Statewide Information & Analysis Center (SIAC)	
KJOL Radio (GJ & Delta)	Western Colorado Contractors Association (WCCA)	
KKCO 11 News (Grand Junction, CO)		





# NATIONAL WEATHER SERVICE 2844 AVIATORS WAY GRAND JUNCTION, COLORADO 81506

Email: wxgjt@noaa.gov

Phone: (970) 243-7007

Fax: (970) 257-0452

#### Grand Junction Forecast: (970) 243-0914



weather.gov/gjt

twitter.com/NWSGJT

facebook.com/NWSGrandJunction

youtube.com/NWSGrandJunction

over & banner photos: Michael Charnick, NWS GJT