

IN THE FIELD...

Incident Meteorologists (IMETs)

Even with Planning, Trend and Spot forecasts, there are times when a wildfire or HAZMAT incident is enough of a threat where the Incident Commander feels that they need weather updates on site. In these instances, an Incident Meteorologist is dispatched to the scene to provide support. Along with their valuable weather expertise, an IMET, equipped with a laptop computer and satellite dish is able to access most if not all the data they would have if they were within the forecast office itself...even in the most remote areas!



Remote Automated Weather Stations (RAWS)

These permanent weather stations are placed throughout Southeast Arizona providing forecasters with observations from isolated and remote locations where there normally wouldn't be any data. In addition, an IMET on site can order a portable RAWS station to aid in his forecasting duties while out on an incident! These observations can greatly influence the forecaster's decisions in making the Fire Weather Forecasts.

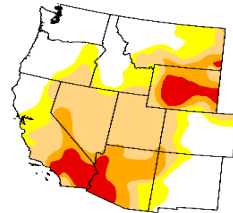
Did You Know...

Prolonged drought conditions can lead to enhanced frequency and intensity of wildfires due to an increase in dry and cured fuels. The Drought Monitor is updated weekly and incorporates data such as precipitation and soil moisture. You can find links to this and much more at our website! Visit us at:

<http://www.wrh.noaa.gov/firewx/?wfo=twc>

U.S. Drought Monitor March 27, 2007
Valid 7 a.m. EST

Drought Conditions (Percent Area)	None					
	D0-D1	D1-D2	D2-D3	D3-D4	D4	D5
Current	34.6	65.4	49.7	20.8	8.1	0.0
Last Week (3/20/2007 map)	36.7	63.3	34.7	19.7	8.1	0.0
3 Months Ago (1/10/2007 map)	51.2	48.8	25.8	9.4	4.0	0.0
Start of Calendar Year (3/1/02/2007 map)	51.2	48.9	25.8	9.4	4.0	0.0
Start of Water Year (1/1/02/2006 map)	43.5	56.5	33.5	16.9	5.2	0.0
One Year Ago (3/28/2006 map)	60.4	39.6	25.4	15.1	5.0	0.0



Intensity:
 D0 Abnormally Dry
 D1 Drought - Moderate
 D2 Drought - Severe
 D3 Drought - Extreme
 D4 Drought - Exceptional
 D5 Drought - Exceptional

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://drought.unl.edu/dm>

USDA, NWS, and other agency logos.
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 Author: Brad Rippey, U.S. Department of Agriculture

Fire Prevention Tips:

- Avoid driving or parking vehicles in grassy areas where tall, dry grass comes into contact with hot engine components.
- Attend outdoor fires until they are completely safe and extinguished. Most wildfires are caused by careless people!
- Properly dispose of cigarettes and other smoking materials.



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WHAT IS FIRE WEATHER?

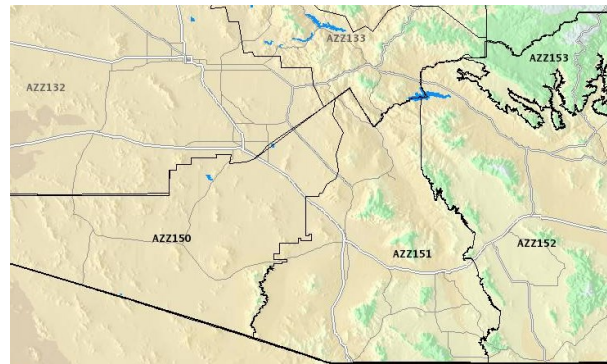
Weather is a critical ingredient in the development and behavior of both wildfires and prescribed burns. High winds, low humidities and dry lightning are the main weather factors that affect the potential for fire ignition and behavior. Taking these factors into account, National Weather Service forecasters can provide fire weather forecasts that



are useful for operational decision-making and can be vital to land management personnel should critical conditions arise. The National Weather Service works around the clock 365 days a year providing support to fire management personnel through observational data, forecasts and warnings. The fire weather program exists to ensure that the fire community receives timely and informative products geared specifically for them.

Fire Weather Planning Forecasts

The National Weather Service produces two types of forecasts for the fire community; Planning and Trend forecasts. The Planning forecast, while containing features common to all weather forecasts such as high and low temperatures, weather conditions and chance for precipitation, also includes details important to fire fighters, such as 20 foot winds, ventilation data, maximum and minimum relative humidity, lightning activity level and the Haines Index. The Trend forecast looks at specific sites in south-east Arizona and compares their present conditions to what is expected at those sites 24 hours later. Together, these forecasts prove invaluable to planning and suppression efforts to fire fighters in Southeast Arizona.



WFO Tucson's Fire Weather Zones

Spot Forecasts

Sometimes the routine products issued by the Forecast Office are not specific enough. Given that the zones cover large areas in the Fire Weather Planning forecast, sometimes to aid in suppression efforts, Incident Commanders need more detail. In these instances, they submit a request for a Spot Forecast. The Spot Forecast takes the features found in the Fire Weather Planning forecast and fine tunes them down to the specific area the requesting official is interested in.

THE RED FLAG PROGRAM

A Fire Weather Watch or Red Flag Warning carry just as much weight to the fire community as a Severe Thunderstorm Watch or Warning carries to the general public. The purpose of a Red Flag is to warn the fire community of extremely dry and windy conditions. When a Red Flag Warning is issued, forecasters feel that there is a significant threat for extreme and erratic fire behavior which can nurture the creation of new fires or cause explosive growth in existing fires!

RED FLAG CRITERIA

- **Relative Humidity values are expected to fall below 15%.**
- **Sustained Wind Speeds at ASOS stations are expected to exceed 25 MPH (20 MPH at RAWS stations) or gusts are expected to exceed 35 MPH.**
- **The Fire Danger Rating must exceed "HIGH".**

THESE CRITERIA MUST BE MET FOR 3 HOURS WITHIN THE TIME THAT THE WARNING IS IN EFFECT!

