

Lightning Activity Levels (LALs)

Dry lightning can often act as an ignition source for wildfires. Included in the Fire Weather Forecast, Lightning Activity Levels are valuable guidance tools to aid in the preparation for possible fire initiation from cloud-to-ground lightning.

LAL 1 – No thunderstorms.

LAL 2 – Isolated thunderstorms. Light rain will occasionally reach the ground. Lightning is very infrequent, 1 to 5 cloud-to-ground strikes in a 5 minute period.

LAL 3 – Widely scattered thunderstorms. Light to moderate rain will reach the ground. Lightning is infrequent, 6 to 10 cloud-to-ground strikes in a 5 minute period.

LAL 4 – Scattered thunderstorms. Moderate rain is commonly produced. Lightning is frequent, 11 to 15 cloud-to-ground strikes in a 5 minute period.

LAL 5 – Numerous thunderstorms. Rainfall is moderate to heavy. Lightning is frequent and intense, greater than 15 cloud-to-ground strikes in a 5 minute period.

LAL 6 – Dry lightning (same as LAL 3 but without the rain). This type of lightning has the potential for extreme fire activity and is normally highlighted in fire weather forecasts with Red Flag Warning.

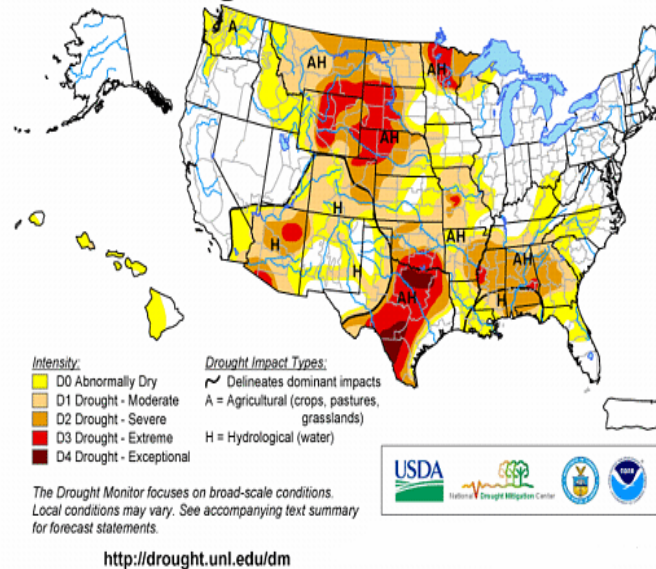


© 2001 Scott Blair

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.

For details on the latest drought information for your area, see: <http://www.cpc.noaa.gov/>

U.S. Drought Monitor



Did you know...

- ◆ An average of 106,400 wildfires break out across the United States each year.
- ◆ As a result, 4,083,000 acres are consumed with 9 out of 10 fires ignited by humans.

National Weather Service

Goodland Weather Service Forecast Office
920 Armory Rd.
Goodland, KS 67735
Phone: (785) 899-6412
Web: www.weather.gov/gld

Fire Weather Fire Weather



National Weather Service National Weather Service



What is Fire Weather?

Weather is a critical ingredient in the development and behavior of both wildfires and prescribed burns. High winds, high temperatures, low humidities, and dry lightning are the critical weather variables that affect the potential for fire ignition and fire behavior. A detailed knowledge of the fire weather forecast is useful for operational decision-making, and can be vital to land management personnel if critical conditions are forecasted. The National Weather Service works around the clock 365 days a year to ensure the most accurate forecasts, warnings, and data are readily deployed to fire management personnel. The Weather Service hosts a fire weather program that produces timely and informative products geared specifically to the fire community.



Haines Index

Measuring the stability and dryness of the air over a fire, the Haines index provides users with a value to judge the potential for wildfire intensity and growth. This index has been shown to be correlated with large fire growth and development in cases where surface winds do not dominate the fire behavior. The Haines Index is scaled between values of "2" and "6".

- 2: Very Low Potential
- 3: Very Low Potential
- 4: Low Potential
- 5: Moderate Potential
- 6: High Potential

Fire Weather Planning Forecasts

Participating National Weather Service offices issue standardized products known simply as Fire Weather Planning Forecasts (FWF). These brief and intuitive forecasting products portray a wealth of meteorological variables forecasted through the next seven days. The product begins with a short text discussion of the ongoing weather pattern followed by a tabular 1 to 3 day forecast of cloud cover, precipitation, temperatures, relative humidity, winds, and other fire weather indices. Finally, the product includes a concise text format weather outlook for the next four to seven days. Fire management and dispatch teams across the nation rely heavily on the Fire Weather Planning Forecast (FWF) as a daily guide and planning tool for crucial fire weather operations.

Spot Forecasts

Prescribed or planned burning is done frequently throughout federal and state lands to clear away brush, debris, and other potentially hazardous fire fuels. Spot Forecasts are "point specific" forecasts created to inform land agencies and associated burn officials of forecasted weather conditions during these expected burn times. These highly scientific and meticulous products are drafted on request by meteorologists at the National Weather Service. Spot forecasts may also be requested for ongoing wildfires at specific locations. Spot forecasts for prescribed burns and wildfire control can both be requested online from the National Weather Service web page or via phone from your local Weather Service office. At the user's discretion, these products are quickly drafted and disseminated back to the user via fax or online.

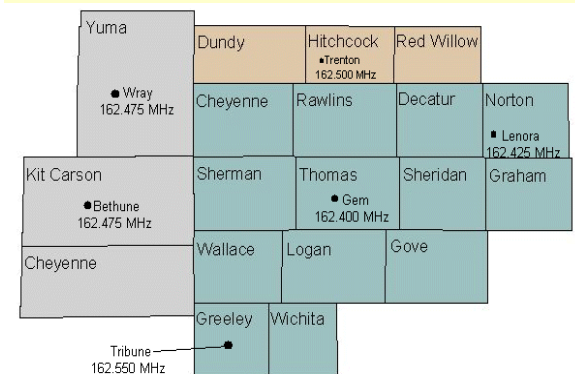
Fire Prevention Tips:

- ◇ 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.



The Red Flag Program

The Red Flag Program was developed to warn fire fighters and other related fire management officials of the potential for large fire growth and other hazardous burning conditions. When dry fuels or cured vegetation exists with critical fire weather, the Red Flag program will alert users of life threatening fire conditions by the issuance of a Fire Weather Watch or a Red Flag Warning. This Watch/Warning program is driven primarily by high winds combined with low humidities, two critical elements leading to a dangerous fire environment. Other factors may also warrant the issuance of a Fire Weather Watch or Warning such as dry lightning, strong wind shifts, or generally hot and dry conditions. The Red Flag program can aide in fire safety, preparation, and control methods. If a Red Flag warning is issued for your area, listen to your local NOAA Weather Radio broadcast for further information.



Goodland Tri-State Forecast Area