



National Weather Service Dodge City, KS



Wild West Weather

Winter 2011/2012

This newsletter was produced by your National Weather Service office in Dodge City, KS. Comments and suggestions can be sent to:

w-ddc.webmaster@noaa.gov

National Weather Service Dodge city can be found on the web at <http://weather.gov/ddc>.

We are also on Facebook



<http://www.facebook.com/US.NationalWeatherService.DodgeCity.gov>

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

Newsletter Editors:

Jesse Lee and Scott Reiter

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2011-2012 Winter Outlook

By Meteorologist Kelly Sugden

What will the winter of 2011-2012 be like for southwest Kansas?

Meteorologists can examine large scale climate signals to get a hint of what the upcoming winter season will be like. One major signal that has implications worldwide is ENSO (El Niño/Southern Oscillation). The ENSO cycle consists of El Niño, Neutral, and La Niña base states. Recently, the Climate Prediction Center (CPC) issued a La Niña Advisory for the winter season. This means that La Niña conditions are expected to strengthen and continue through the winter months. So what exactly is La Niña? Anomalously cool sea surface temperatures in the central equatorial Pacific ocean mark the presence of La Niña. The image below summarizes La Niña and the related sea surface temperature anomalies.

So What Is Exactly La Niña?

- La Niña focuses on SST temperature anomalies in the equatorial Pacific Ocean
- These temperature deviations impact where thunderstorms form and ultimately result in shifts in the jet stream

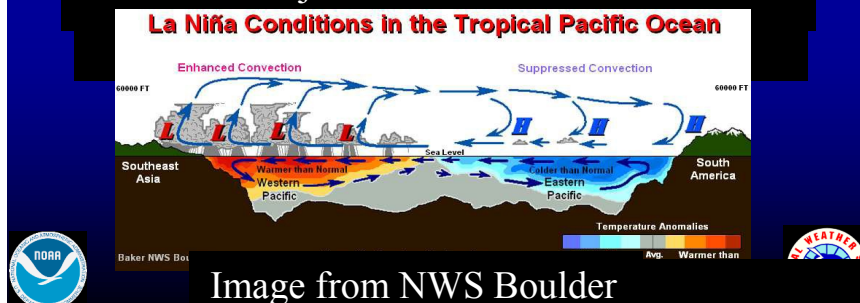
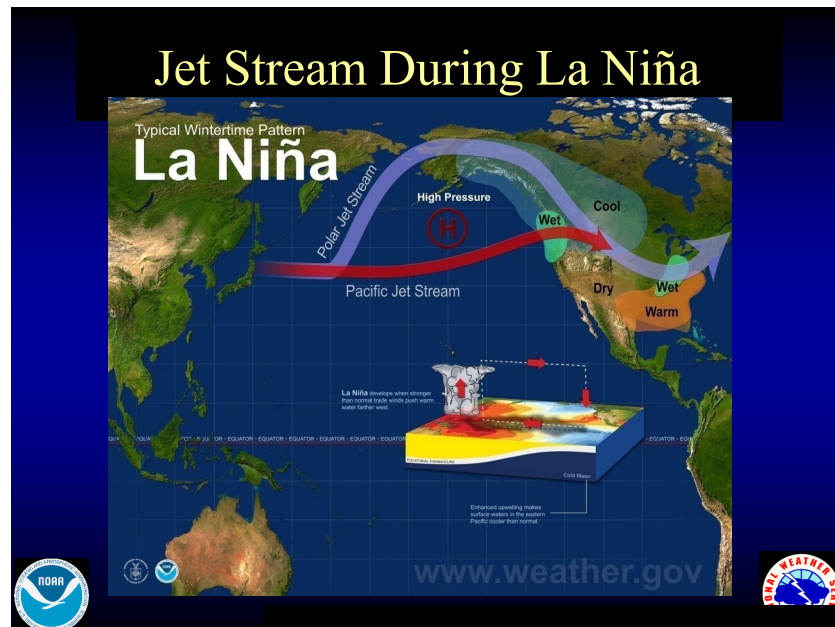


Image from NWS Boulder

Believe it or not, sea surface temperatures and thunderstorms over the equatorial Pacific do impact Kansas weather; what happens in the tropics has feedback into mid latitude storm systems. The main impact from La Niña is a shift in the jet stream. The jet stream drives weather systems across the United States. The typical jet pattern during La Niña is shown in the following image.

La Niña Explained...

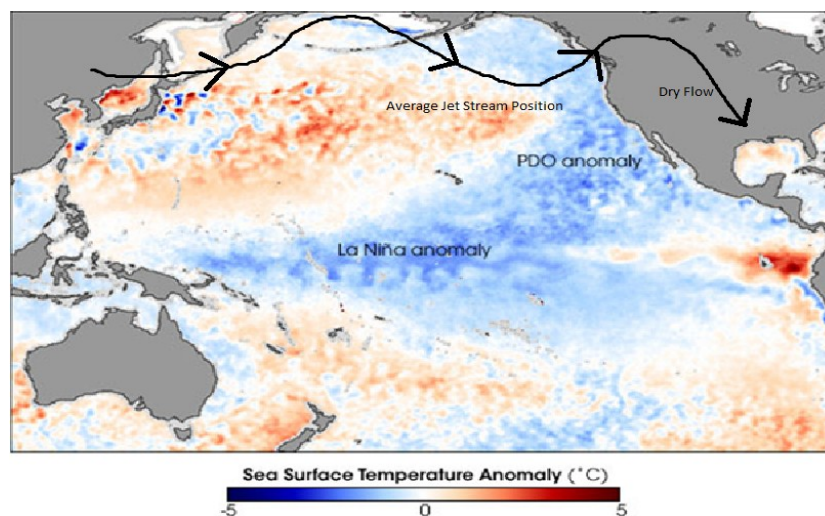


As you can see, Kansas lies on the warm side of the Polar jet. This configuration typically favors warmer and drier conditions throughout the winter season for SW Kansas.

Wait...There is More Than Just La Niña

Climatologists also look at other indices to provide insight into what the upcoming seasonal weather pattern will be. The other two indices that are used are the Pacific Decadal Oscillation (PDO) index and the North Atlantic Oscillation (NAO) index.

The PDO is a long term event where the index changes very slowly over time (~10-20 years or so). We are expected to be in the cool phase of the PDO through winter, which favors upper level ridging over the Rockies. This flow pattern is not conducive in bringing moisture back to Kansas, and weather systems typically bring lighter precipitation amounts to the region. The image below depicts the average jet stream position associated with the cool phase of the PDO.



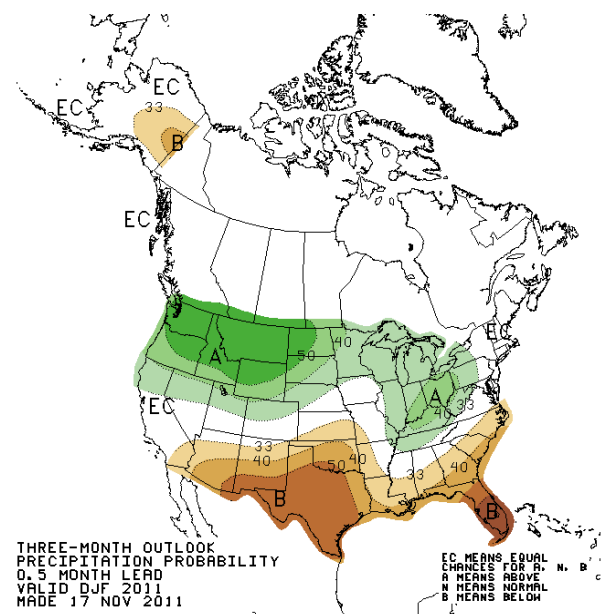
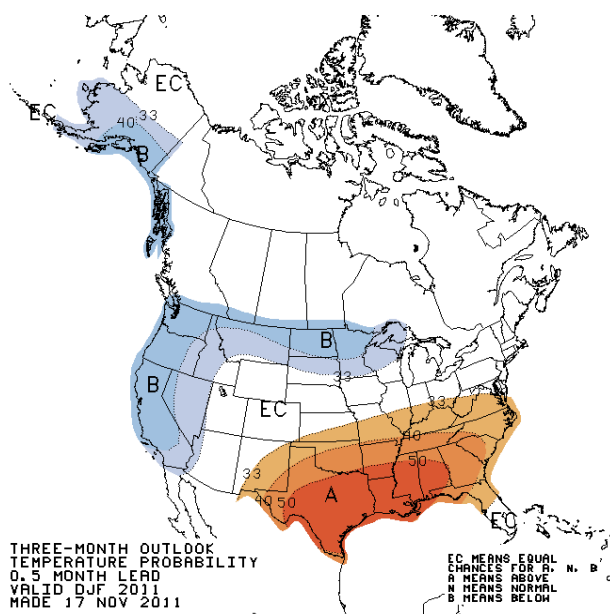
ENSO, NAO, PDO... Oh My!

The NAO is a short term event (typically ~2 weeks), and the index changes more rapidly from the positive phase to the negative phase. Typically, the negative phase allows for the invasion of Arctic air into the eastern two thirds of the United States. There is low skill in forecasting the NAO index beyond two weeks. Below is an image showing the two phases of the NAO. We do expect the index to become negative at times, and Kansas could see very cold temperatures as a result.



Using the three indices allows meteorologists to get a better picture of what the weather will be like this winter across SW Kansas. For example, with a cool phase PDO and negative phase NAO, we could see some light wintry precipitation events along with very cold temperatures across the Sunflower state.

Below is the official three month temperature and precipitation probability forecast from the CPC. To summarize the two images, near to slightly above normal temperatures and near to slightly below normal precipitation are expected for SW Kansas from December through February. This includes a higher probability for below normal snowfall as well. Periodic Arctic outbreaks with a few moderate to heavy snow events are possible this winter, however, the overall climatic signal favors a drier and warmer than average winter season.



Coop Observer Info and Awards

STATION VISITS

All of the station visits have been completed. If you need any supplies or need equipment moved or worked on, give us a call at 1-800-824-9943. Ask for Jesse Lee or Duane Wolfe. If neither one of us are here please leave a message and we will get back to you. My e-mail address is jesse.lee@noaa.gov and Duane's is duane.wolfe@noaa.gov.



In the Photo: **Larry Ruthi, Brenda and David Van Meter**

AWARDS

David and Brenda Van Meter were presented with a 25 year length of service award on July 28th. Brenda is the primary observer. Congratulations to Brenda and David.

EDWIN ENGEL Passed Away: Former cooperative observer Edwin Engel of Loretta passed away on September 29th. Edwin was the primary observer in Loretta for 50 years from 1958 until 2008. He was honored with the John Campanius Holm Award in 2002. This is the 2nd highest award that a cooperative observer can receive.

WXCODER

For those who do not use the weather coder program, you can use it if you have a computer with internet and want to report your weather data every day. This is an online database into which you can enter your data and from which we can extract observations for incorporation into our daily temperature and precipitation reports. If you are interested in using this program please give us a call and we will set you up with an account. For those who routinely use the program and still mail in their weather forms, you do not have to mail in the form. We can download the form at our office. At the end of the month when you are done, check over your data to see if you have any missing temperature, precipitation or snow data entries. If any data are missing, please enter an M.

RAIN GAGES

If you have not done so already, you may remove the funnel and the inner tube from the rain gage for the upcoming winter. To measure frozen precipitation that falls into the rain gage, melt the frozen precipitation and pour it into the inner tube. Use the measuring stick to see what the amount is as you normally would for rainfall. This will be your precipitation amount.

ENVELOPES: For those who still mail their forms, we will mail out envelopes by the 15th of December.

Weather radios can be purchased at stores such like Radio Shack and Wal-Mart. *(The NWS can not endorse any particular brand of weather radio)*



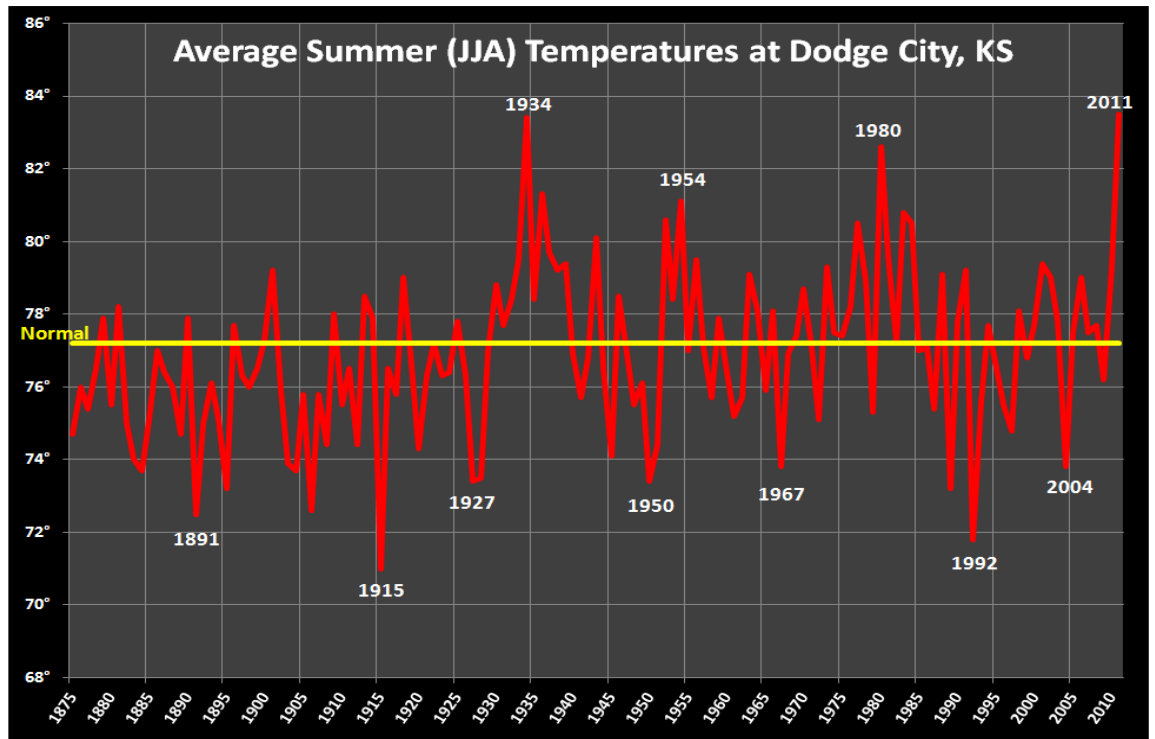
Meet our Administrative Services Assistant (ASA), Cheri Lininger!

I grew up in Madison, Junction City and Chanute in eastern Kansas but I have lived longer in Bucklin and Dodge City. My father worked on and sold TVs early in my life, and he continued in the electronics field until he retired. After graduating High School, I completed the Accounting Clerk Program at Dodge City Community College. I am married to Robert Lininger. We have 2 girls (Tammy and Leigh) and 1 son (Neil). We also have 3 grandsons (Devon, Riley and Braylen) and 1 granddaughter (Faith). Ten years prior to joining the NWS, I worked at a home improvement company doing billing, answering the phone and working in the stock room. I've been the ASA for The National Weather Service in Dodge City since December 2009.

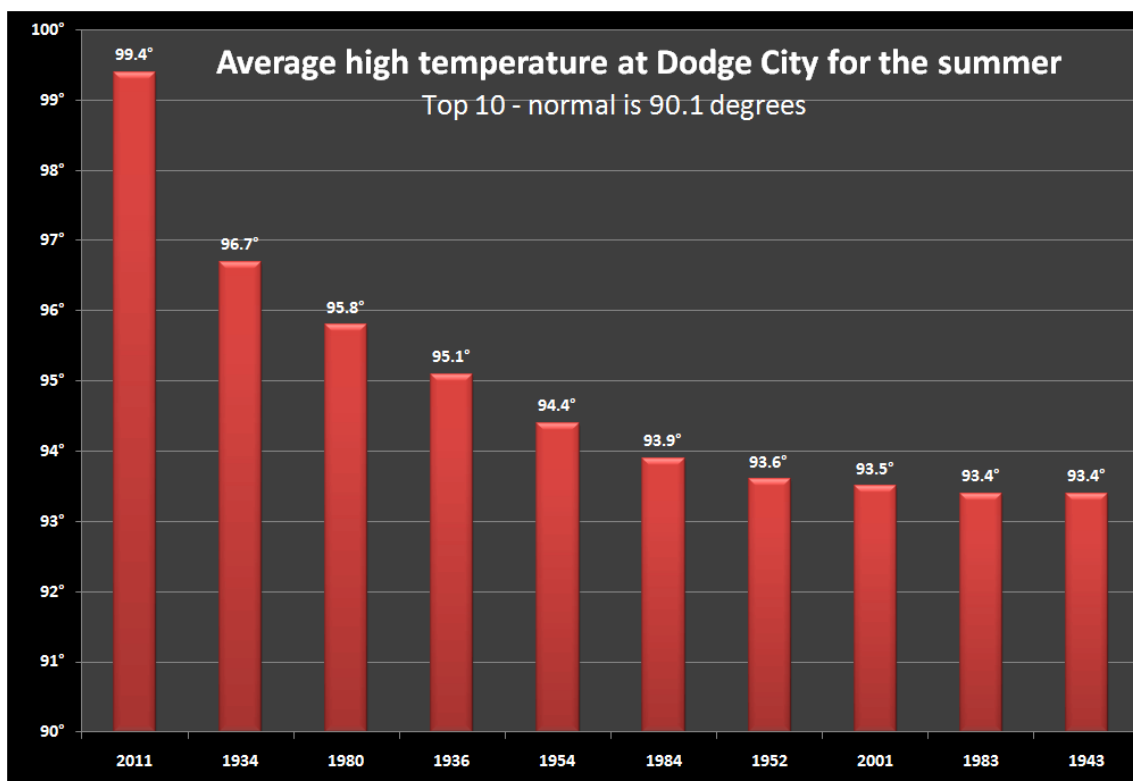
Updated Information on the Severe Drought and Heat

by Warning Coordination Meteorologist Jeff Hutton

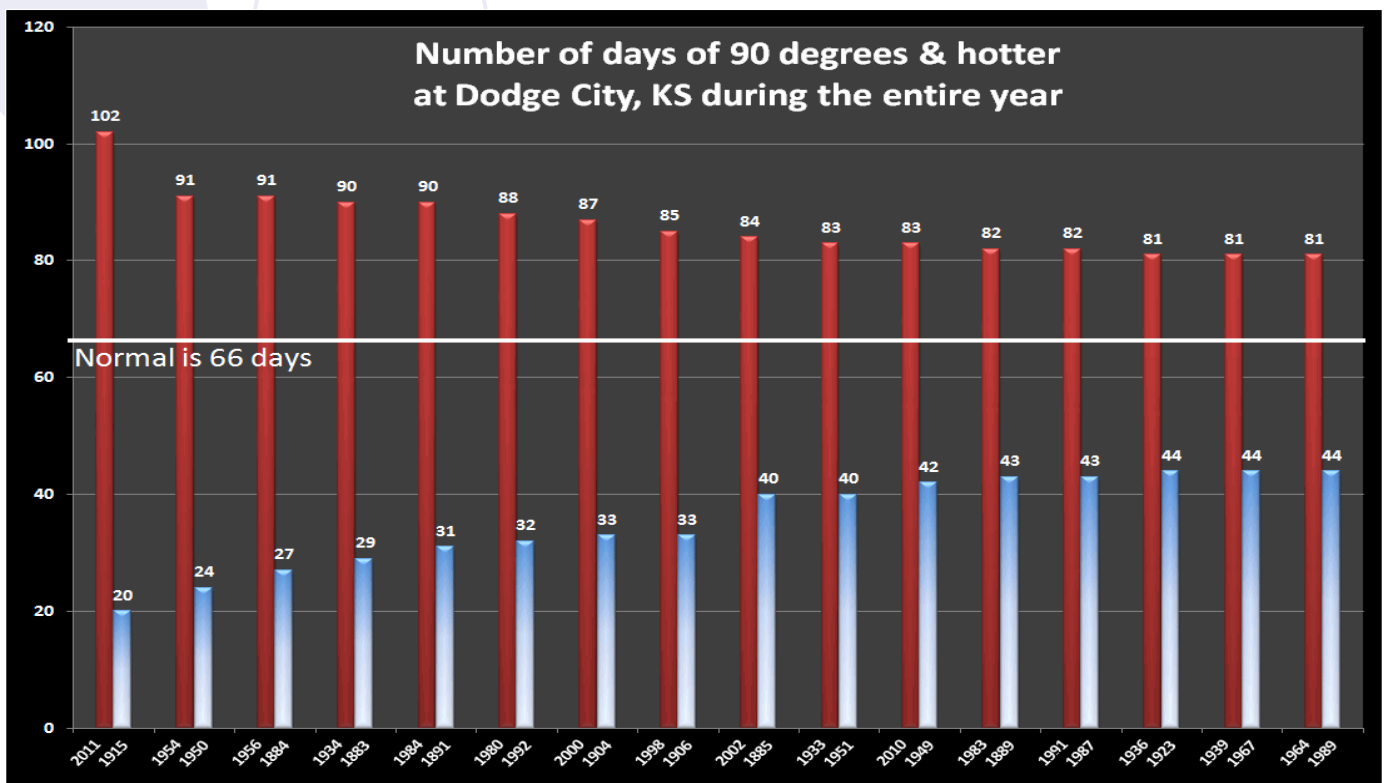
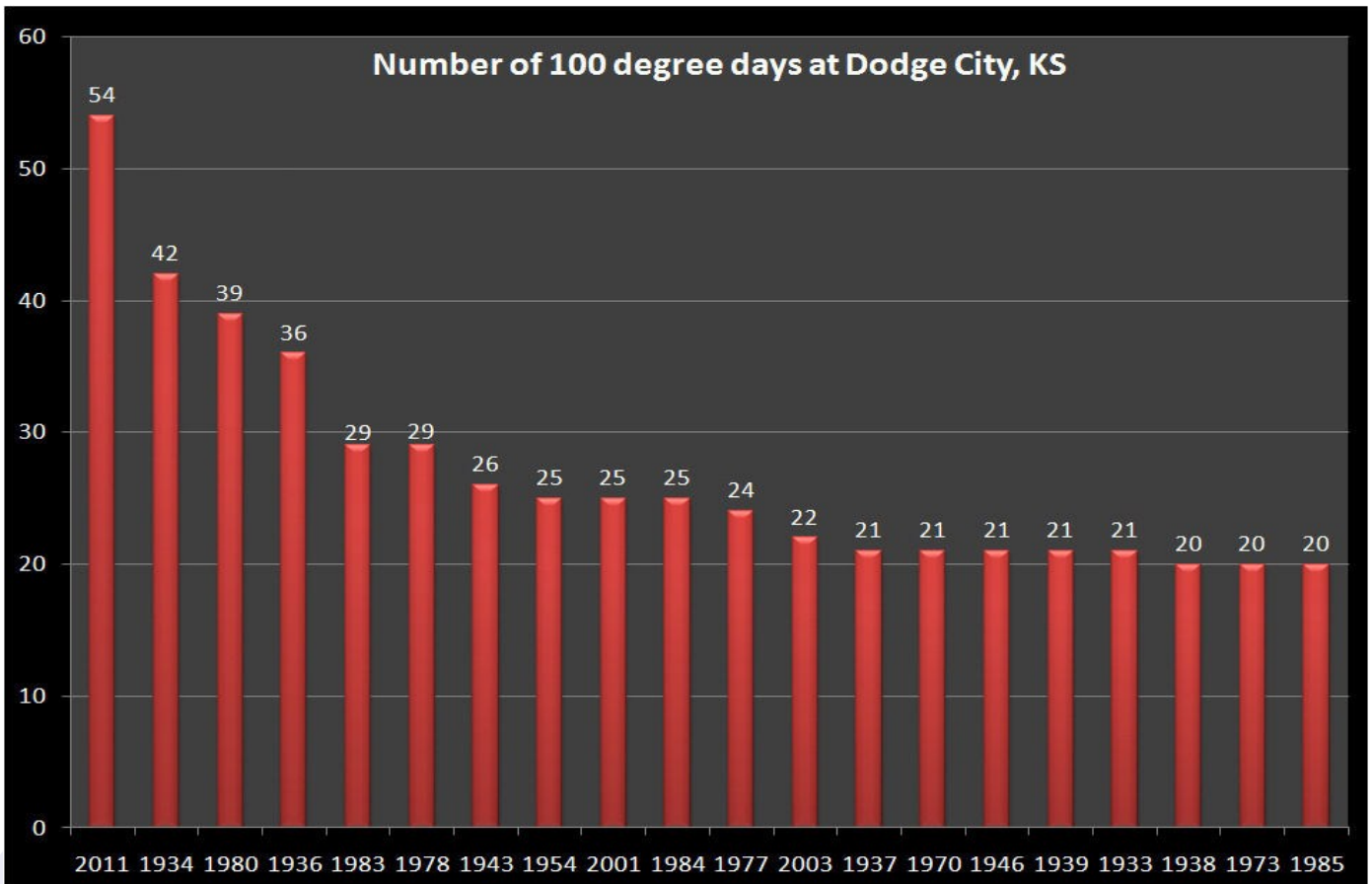
Like much of western and south central Kansas, the extreme drought continued as the meteorological summer ended at Dodge City. In addition, the extreme heat experienced during the summer did not let up even into September. Meteorological summer includes June, July and August. For these three months, daily high temperature records at the Dodge City airport were broken 14 times and tied 7 times. There were 9 daily high temperature records broken or tied in August alone. Since January 1st of this year, daily high temperature records were broken or tied 27 times! The average daily temperature for the summer at Dodge City was 83.5 degrees and this is the hottest on record (since 1875), well above the normal of 77.2 degrees.



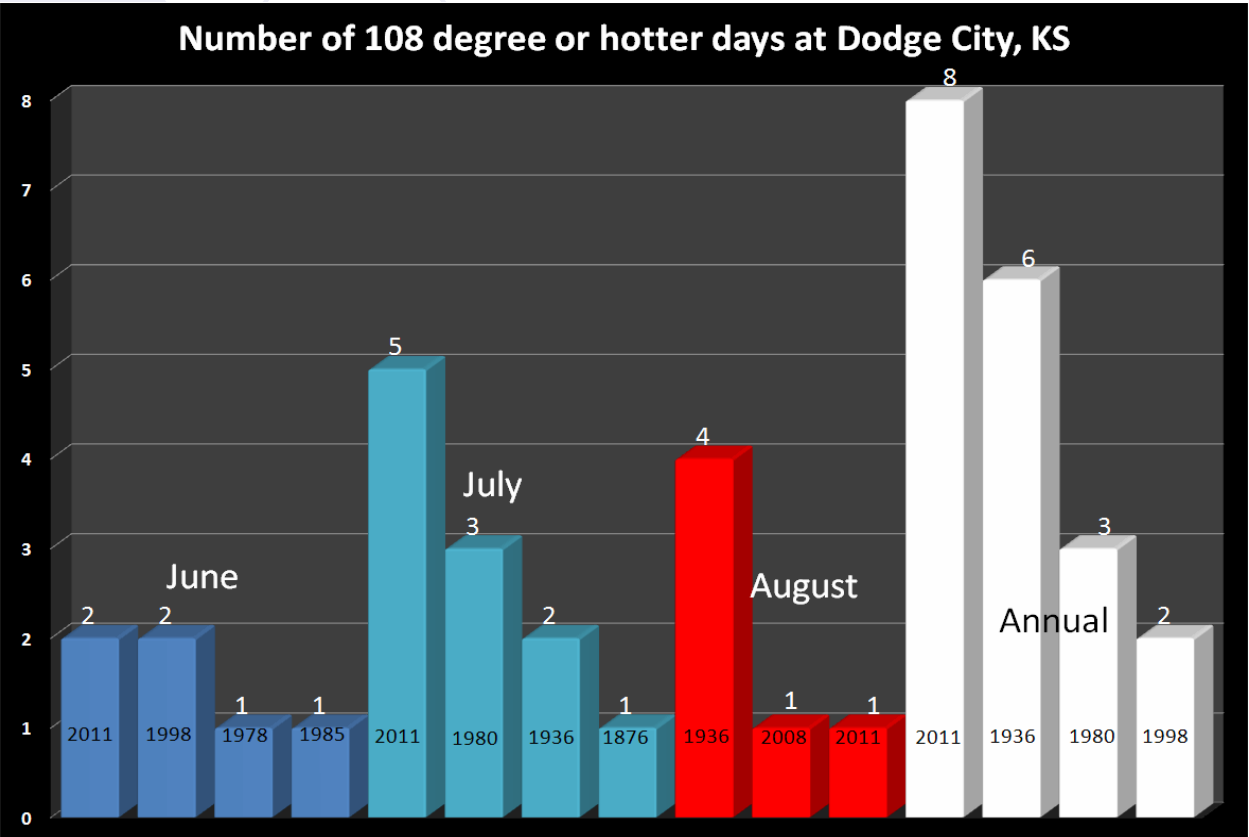
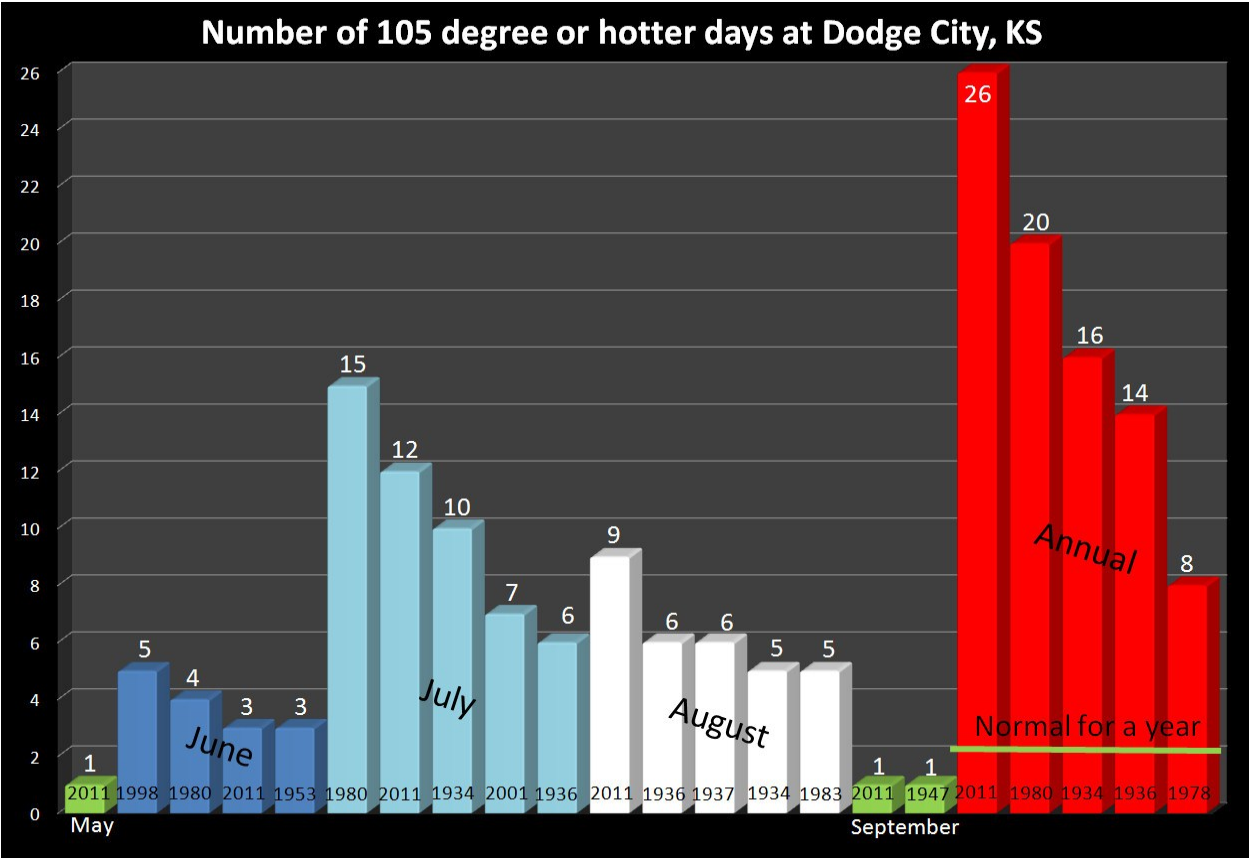
At Dodge City, the average high temperature for the summer was an astonishing 99.4 degrees, well above the previous record of 96.7 degrees set in 1934. The normal high temperature averaged throughout the summer is 90.1 degrees.



Normally during the summer we can expect 13 or 14 days with highs of 100 degrees or hotter at Dodge City. However, this year Dodge City reached 100 degrees or higher on 54 days which obliterates the previous number of 42 set in 1934! Another record? How about the number of 90 degree days? Yes, that was also a record, not only for the summer, but also for the year.



It wasn't only the number of 100 degree days, it was also the number of times the mercury got to 105 degrees and hotter and 108 degrees and hotter!

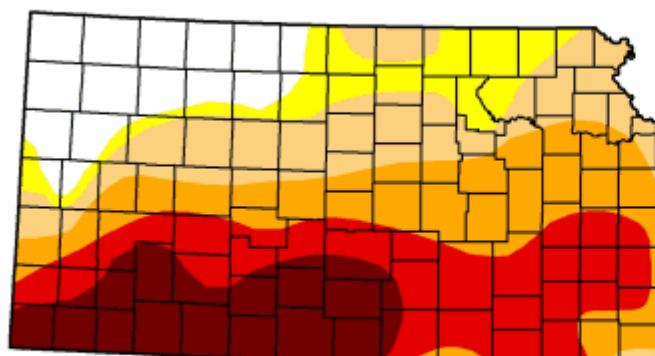


The heat wasn't the only story for the summer. The drought across much of the area reached the exceptional category. As of November 22, the following map depicts where the drought was occurring.

U.S. Drought Monitor

November 22, 2011

Valid 7 a.m. EST



Intensity:

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

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

<http://droughtmonitor.unl.edu>



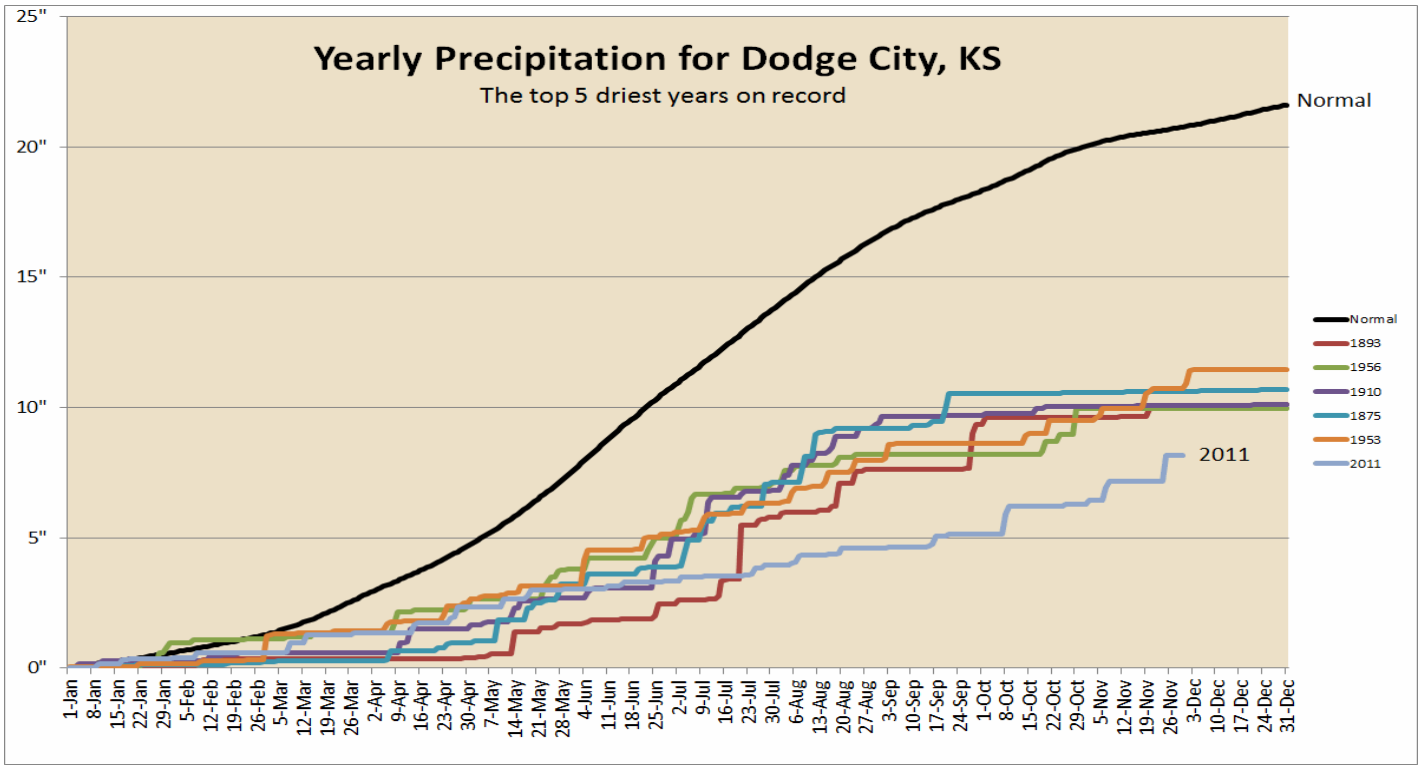
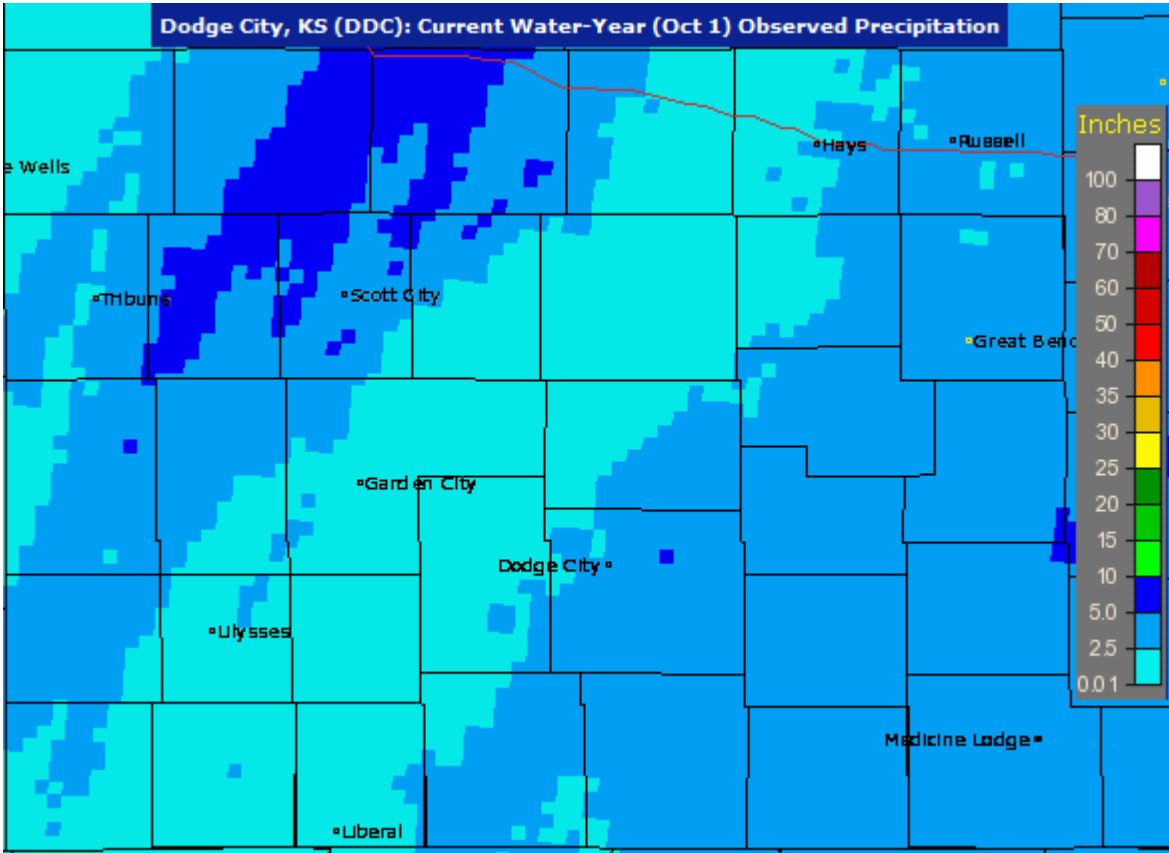
Released Wednesday, November 23, 2011
Anthony Artusa, NOAA/NWS/CPC

Precipitation for the water year ending September 30, 2011

An even more impressive story on the dryness extends back to last fall and is summarized in water year data (Oct-Sep). From October 1, 2010 through September 30, 2011 there was only 4.49" of precipitation measured at the observing site 7 miles west-southwest of Sublette. In fact many locations had much less than 10 inches of precipitation.

2011	Oct10_Sep11	2011	Oct10_Sep11
SUBLETTE 7 WSW	4.49	RANSOM 2 NE	11.97
ELKHART	6.00	COLDWATER	12.08
MONTEZUMA	6.52	MEDICINE LODGE	12.29
KALVESTA 1 W	6.93	MEADE	12.36
ULYSSES 3 NE	7.50	TROUSDALE 1NE	12.62
GCK Airport	7.52	CEDAR BLUFF	12.63
DODGE CITY Airport	7.53	SYRACUSE	12.68
RICHFIELD 10 WSW	7.59	KINSLEY 1 SE	12.99
RICHFIELD	7.67	GREENSBURG	13.20
KALVESTA 13 NW	7.80	SCOTT CITY	13.31
CIMARRON	7.89	SUN CITY	13.72
DODGE CITY NWS	7.97	HUDSON	13.76
JOHNSON	8.21	MCCRACKEN	13.77
BIG BOW 4 WSW	8.61	OFFERLE 5 S	14.52
Dodge City - 2.5 NW	9.80	SUN CITY 6 S	14.86
LIBERAL	9.99	HEALY	15.05
GCK Exp. Station	10.11	LARNED	15.35
HUGOTON	10.55	HAYS 1 S	15.45
BELLEFONT 3 SW	10.63	UTICA	15.57
WILMORE 16 SE	10.67	KIOWA	15.78
LAKIN	10.87	PRATT	15.98
NESS CITY	11.07	ALEXANDER	16.08
BUCKLIN	11.10	WAKEENEY	16.29
BURDETT 1 NW	11.17	HAYS Water Plant	16.54
COLLYER 10 S	11.40	ELLIS	18.54
SANFORD 1 NW	11.63	BISON 3 NW	20.38
ASHLAND	11.71	LORETTA	21.64
JETMORE 8 NNW	11.86		

Fortunately there were 3 or 4 storms that produced rain and snow in October and November, some of which produced significant amounts of precipitation which at least eased the effects of the drought.



Winter Weather Safety

By Lead Meteorologist Ray Burgert

A wide range of weather conditions can occur across western Kansas during a winter storm. Snow, sleet and ice are commonly thought of during the winter months but strong winds can lead to blowing and drifting snow as well as dangerous wind chill readings.

Before a Winter Storm:

1. Keep your vehicle gas tank near full to reduce the potential for ice accumulation in the tank and fuel lines.
2. Winterize your vehicle. Keep antifreeze fresh and assure you have a strong car battery. Extreme cold decreases battery performance, and a weak battery will fail when you need it most. Be sure antifreeze concentration is sufficient to provide protection during the coldest expected conditions.
3. Winterize your home by installing adequate insulation and caulking. Weatherstrip doors and windows.
4. Assemble a winter weather survival kit which should contain the following items:
 - **For Your Home**
 - ◇ First aid kit, including prescription medicines
 - ◇ Heating fuel
 - ◇ Emergency heating source
 - ◇ Fire extinguisher and smoke detectors
 - ◇ Flashlight and extra batteries
 - ◇ Canned food and can opener (not electric)
 - ◇ Bottled water (a 3-day supply—include one gallon per person per day)
 - ◇ One change of clothing and footwear per person
 - ◇ Extra blankets and/or sleeping bags
 - ◇ Emergency tools, including a NOAA Weather Radio, battery-powered radio, flashlight and extra batteries
 - ◇ An extra set of car keys and credit card or cash
 - ◇ Any special items for infants, the elderly, or disabled family members
 - **For your Car**
 - ◇ Extra blankets and/or sleeping bags
 - ◇ First aid kit
 - ◇ Flashlight and extra batteries
 - ◇ High-calorie...non-perishable food
 - ◇ Knife
 - ◇ Small can and water-proof matches to melt snow for drinking
 - ◇ Bag of sand or cat litter
 - ◇ Shovel
 - ◇ Windshield Scraper and brush
 - ◇ Booster cables
5. If traveling, let someone know your schedule along with primary and alternate routes. Carry a cellular telephone.
6. Avoid traveling alone.
7. Move animals to sheltered areas.
8. Always check the weather forecast and postpone outdoor activities if storms are imminent. Winter weather warnings provide detailed information about expected adverse weather conditions.
9. Check road conditions through Department of Transportation web sites or telephone recordings before leaving on a trip.

During a Winter Storm:

1. Listen to NOAA Weather Radio, local radio or television, or use National Weather Service websites for the latest weather reports and emergency information.
2. Stay Inside.
 - If using an alternate heat from a fireplace, wood stove, space heater, etc., use fire safeguards and properly ventilate.
 - If no heat use towels or rags to stuff into cracks and under doors.
3. If you must go outside, dress to fit the conditions. Wear loose, lightweight, warm clothes in layers and avoid over exertion.
4. If your vehicle becomes stranded in the snow while you are traveling, stay with your vehicle. Do not leave your vehicle to summon help or search for a residence in the middle of a snow storm and/or strong winds. It is extremely easy to become disoriented during a blizzard even in familiar surroundings. It is better to run the vehicle's engine and heater, but make sure at least one window is cracked and the exhaust system is not clogged with snow.

The National Weather Service in Dodge City broadcasts weather information over seven transmitters. The following is a list of the transmitters:

WXK93 Dodge City

WNG534 Belvidere

WXM35 Hays

WNG535 Dighton

WNG555 Meade

WWG22 Tribune

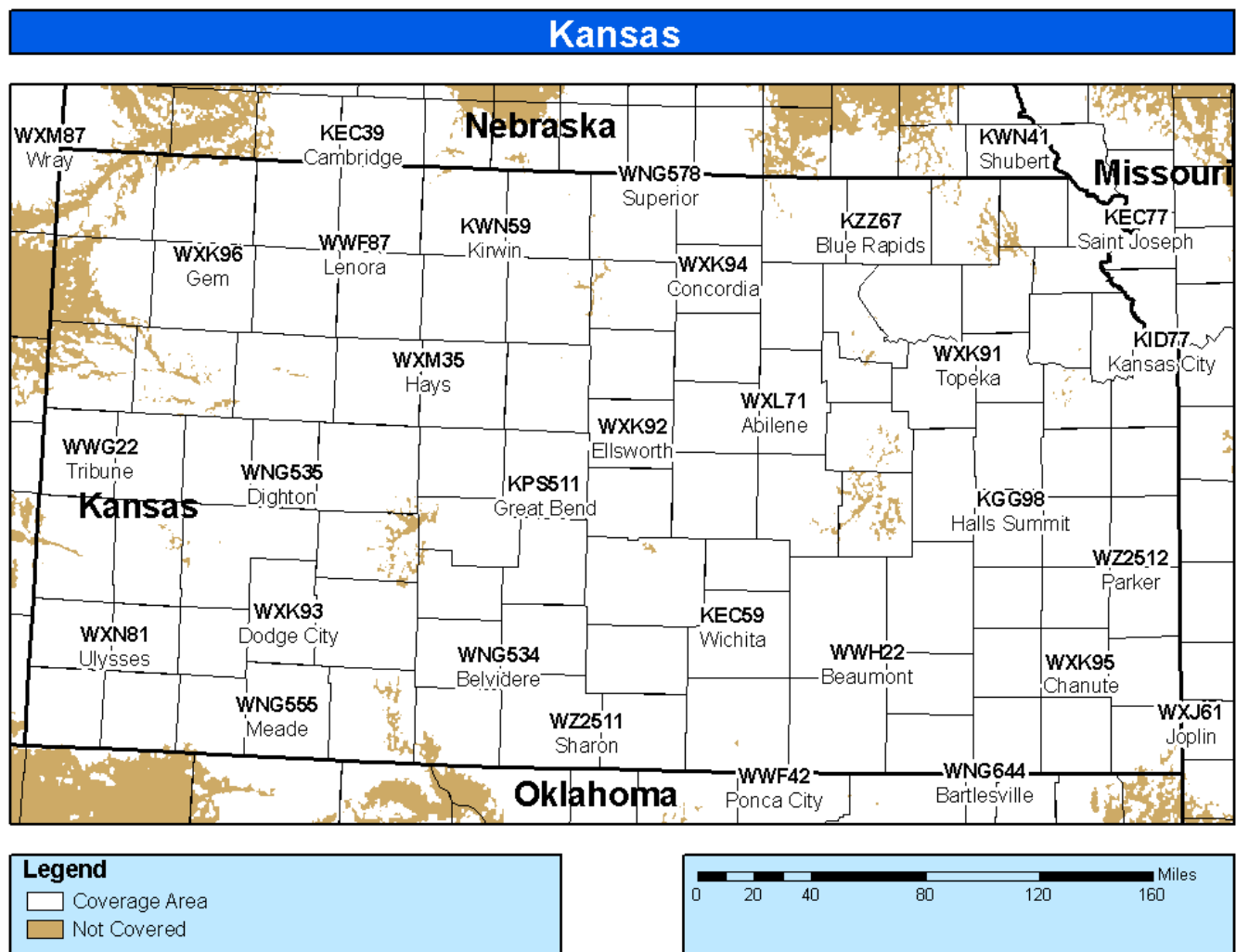
WXN81 Ulysses

The following link is information on different kinds of weather radios and a list of manufacturers:

<http://www.nws.noaa.gov/nwr/nwrrcvr.htm>

The following link is a list of all the Kansas counties with SAME code information, frequencies and county maps that show radio coverage:

<http://www.nws.noaa.gov/nwr/CntyCov/nwrKS.htm>



National Weather Service Dodge City

104 Airport Rd.
Dodge City, KS 67801

Phone: 620-225-6514
Recorded Forecast 620-227-3311
Fax: 620-227-2288
<http://www.weather.gov/ddc>



Your National Weather Service provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas, for the protection of life and property and the enhancement of the national economy. NWS data and products form a national information database and infrastructure which can be used by other governmental agencies, the private sector, the public, and the global community.

Severe Weather and Snowfall
Reporting Only:
1-800-824-9943

Wild West Weather



Photo By Scott M. Reiter 3/28/2009