

NWS FORM E-5 (11-88) (PRES. by NWS Instruction 10-924)	U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL WEATHER SERVICE	HYDROLOGIC SERVICE AREA (HSA) Tulsa, Oklahoma (TSA)
	MONTHLY REPORT OF RIVER AND FLOOD CONDITIONS	
TO: Hydrometeorological Information Center, W/OH2 NOAA / National Weather Service 1325 East West Highway, Room 7230 Silver Spring, MD 20910-3283		REPORT FOR: MONTH YEAR February 2009
		SIGNATURE Steven F. Piltz (Meteorologist-in-Charge)
		DATE March 3, 2009

When no flooding occurs, include miscellaneous river conditions, such as significant rises, record low stages, ice conditions, snow cover, droughts, and hydrologic products issued (NWS Instruction 10-924)

X No flood stages were reached in this HSA during the month above.

Normal precipitation in February ranges from 1.8 inches in Osage County to 3.2 inches in Choctaw County. In the Ozark region of northwest Arkansas, the normal monthly precipitation is 2.9 inches.

The first in a series of storm systems to affect the region came early on February 9th. Showers and thunderstorms developed along a dryline across western Texas on the 8th and moved eastward during the overnight hours. By the morning of the 9th, showers moved across eastern OK, with line segments along the leading edge bringing wind gusts of 40 to 50 mph. The shower activity weakened as it spread into northwest AR. This round of precipitation brought up to one half inch of rain to the entire area, with portions of west central AR receiving around 1 inch of rain.

The afternoon of February 10th brought a round of severe weather, including an EF0 tornado near Pawnee and hail to the size of softballs, in addition to some heavy rainfall to the region (see Fig. 1). Most locations received at least 0.75 inches of rain, with many areas receiving over 1.5 inches. Isolated locations across primarily Wagoner, Mayes, and Craig Counties had over 3 inches of rain. Flash flooding occurred with this event, with reports of water over county roads in Osage, Pawnee, Washington, and Nowata Counties. An additional 0.10 to around 1 inch of rainfall fell on the morning of the 11th across northeast OK and far northwest AR as the system was departing. Since the area has been abnormally dry in recent months, no river flooding occurred as a result of this storm system. However, the Illinois River near Tahlequah did crest above action stage on the evening of February 12, though remained below flood stage. A utility crew working on power lines near the river became stranded in the middle of the Illinois River near Tahlequah as the waters rose. The workers were able to safely wade out with some assistance.

A series of cold fronts brought additional rounds of precipitation to the region. Around half an inch or less of rain fell over eastern OK and northwest AR southeast of an Okemah, OK to Bentonville, AR line on the 14th and 17th. Very light rain, less than one tenth of an inch, fell on the 20th and 21st southeast of an Antlers, OK to Berryville, AR line. On the 26-27th, counties along and east of the Oklahoma/Arkansas state line received up to half an inch of rain, with isolated areas receiving around 1 inch of rain. Hail up 1.75 inches and wind gusts to around 60 mph also accompanied this storm system. As a cold short wave trof moved across the region on the 28th, light snow fell across northeast OK and northwest AR. Snow accumulations of around 1 inch led to slick roads across Benton, Carroll, and Washington Counties in northwest AR.

Using the radar-derived observed precipitation from the RFCs (Fig. 2a.), much of the Tulsa HSA received rainfall totals of 1 to 3 inches in February 2009, with some locations receiving 3 to 5 inches. The radar-derived departure-from-normal graphics from the RFCs (Fig. 2b.), indicates that portions of far northeast OK and some locations across northwest AR ended February 2009 near to above normal. However, the majority of the area only received 50% to 75% of the normal February precipitation. Far southeast OK still remains the driest, receiving only 25% of normal February rainfall this month.

Tulsa, OK (TSA): 2/11/2009 1-Day Observed Precipitation
Valid at 2/11/2009 1200 UTC- Created 2/12/09 11:32 UTC

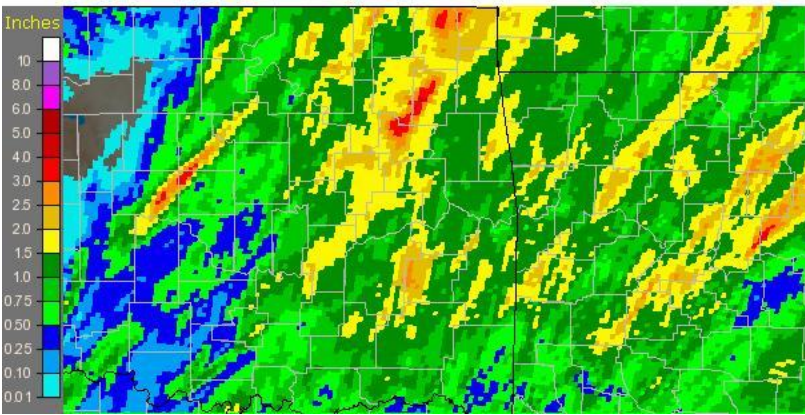


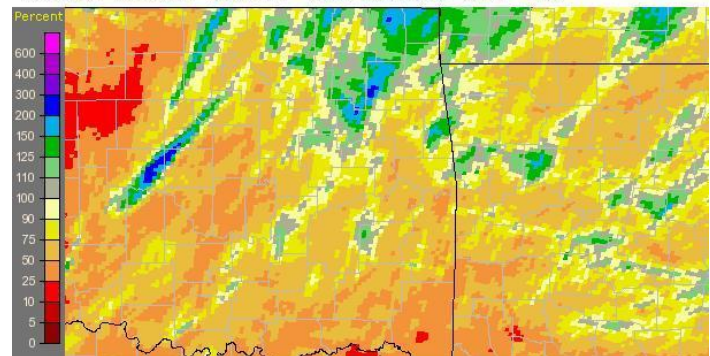
Fig. 1. RFC rainfall estimates for February 10, 2009.

Tulsa, OK (TSA): February, 2009 Monthly Observed Precipitation
Valid at 3/1/2009 1200 UTC- Created 3/1/09 23:43 UTC



Fig. 2a. Observed Precipitation for Feb. 2009

Tulsa, OK (TSA): February, 2009 Monthly Percent of Normal Precipitation
Valid at 3/1/2009 1200 UTC- Created 3/1/09 23:47 UTC



2b. Departure from Normal Precipitation for Feb. 2009

Some of the larger precipitation reports for February included:

Pryor OK (meso)	4.05	Westville OK (meso)	3.99	Inola OK (meso)	3.78
Mountainburg AR 2NE (coop)	3.30	Porter OK (meso)	3.03	Haskell OK (meso)	2.99
Natural Dam AR (coop)	2.89	Okmulgee OK (mesonet)	2.67	NW AR Region Airport (ASOS)	2.66

According to statistics from the Oklahoma Climatological Survey (OCS), northeast OK ranked as the 23rd wettest February since records began in 1921, receiving 108% of its normal rainfall. However, due to the wet period during the first half of 2008, the past 12 months rank as the 5th wettest for northeast OK. East central OK was the 40th wettest February on record, ending the month with 92% of normal February rain, and ranked as the 18th wettest for the past 12 months. Finally, southeast OK was the 20th driest February, receiving 53% of normal rainfall, and is 31st wettest for the past 12 month period.

According to the U.S. Drought Monitor (USDM) issued February 24th, drought conditions had significantly improved across eastern OK and northwest AR, with only abnormally dry conditions still ongoing across Pittsburg County and the western portions of Latimer, Pushmataha, and Choctaw Counties. However, since dead grasses and other fuels can quickly dry out this time of year, fire danger remains a concern across eastern OK. As of March 2, 12 counties in eastern OK were under active county declared burn bans (Fig. 3).

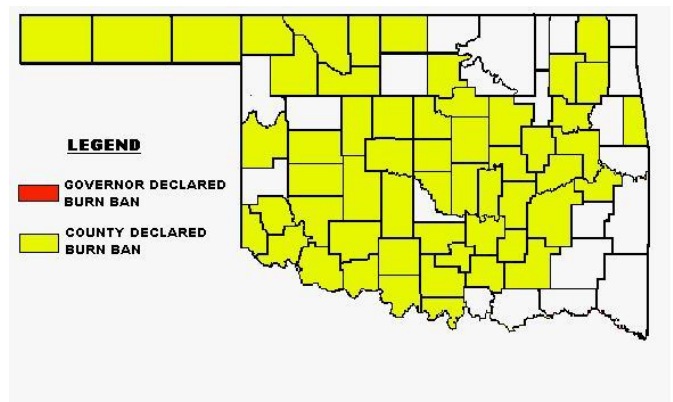


Fig. 3. Oklahoma burn bans in effect as of March 2, 2009.

The major reservoirs in the HSA were at 100% of their conservation pools by March 2, 2009, with several area reservoirs reporting levels up to 3% of their flood control pools.

The Climate Prediction Center (CPC) outlook for March 2009 (issued February 28, 2009) indicates a slightly enhanced chance for below normal precipitation for eastern OK and an enhanced chance for above normal temperatures across the entire HSA. For the 3-month period Mar-Apr-May 2009, CPC is outlooking an equal chance for above, near, and below normal temperatures and precipitation (outlook issued February 19, 2009). La Niña is ongoing, and these conditions are expected to continue through the upcoming spring. CPC used the La Niña expected conditions, as well as 10-15 year trends and computer models, to develop these outlooks.

Nicole M^cGavock,
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WFO Tulsa

Products issued:

- 0 River Flood Warnings
- 0 River Flood Statements
- 4 River Statements
- 0 Hydrologic Outlooks
- 1 Drought Information Statements