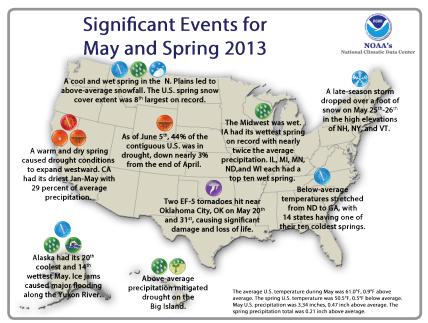
National - Significant Events for March 2013-May 2013



Highlights for the Central Region

A snowstorm from March 4 to March 7 dropped 4 to more than 10 inches of snow from the central and northern Plains to the Ohio Valley and eastward. This contributed to the 10th largest monthly snow cover extent for the contiguous United States.

Spring 2013 was the 11th coldest since 1895 for the Central Region. April was the coldest on record in North Dakota with an average temperature of 31.0°F, 9.9°F below normal. April was the second coldest on record for South Dakota and third coldest for Minnesota.

Spring 2013 was the fifth wettest since 1895 for the region. Iowa and Michigan experienced their wettest April on record. Illinois had the second wettest April, Wisconsin the third wettest, and Indiana the fifth wettest.

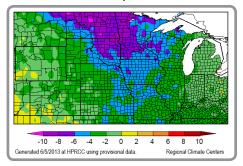
Winter weather persisted into early May. From May 1 to May 3, snow fell from Colorado to upper Michigan. One-day totals reached 15 inches, and totals for the system ranged up to 17 inches from north central lowa to the southwest shore of Lake Superior.

A windstorm on the eastern plains of Colorado in mid-April affected 100,000 acres and left behind sand 6 to 8 inches deep.

Regional - Climate Overview for March 2013-May 2013

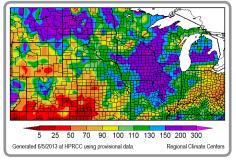
Temperature and Precipitation Anomalies

Departure from Normal Temperature (° F) March 1–May 31, 2013



Spring temperatures across the region ranged from near normal in the far western and eastern portions of the region to 10°F below normal in north-central North Dakota. Temperatures in March and April were below normal across the region, with departures as much as 15°F in North Dakota. May temperatures were near normal in the central and northern Plains, colder than normal in the central Midwest, and warmer than normal from eastern Illinois through Indiana and Michigan.

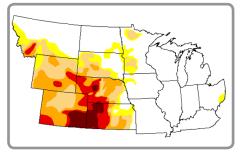
Percent of Normal Precipitation (%) March 1–May 31, 2013



Frequent precipitation during the spring erased drought conditions over the eastern half of the region. Precipitation was near to much above normal from the northern Plains to the Ohio Valley. Dry conditions persisted from western Kansas and Nebraska west through most of Colorado and Wyoming. March was drier than normal across most of the region except for the northern half of North Dakota and most of Minnesota south through Missouri. April–May precipitation was normal to 200 percent of normal except in the southwestern third of the region.

Drought in Central Region

U.S. Drought Monitor June 18, 2013





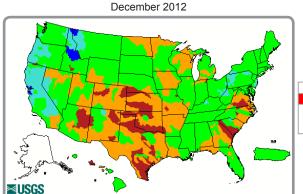
Moderate to extreme drought conditions continue over much of the western half of the region. The worst conditions are in southeastern Colorado and southwestern Kansas where exceptional drought has been persistent throughout the spring.



Regional Impacts for March 2013–May 2013

Agriculture

Frequent, heavy rain and cool soil temperatures delayed corn planting in much of the region this spring. At the end of April, planting was behind by nearly 50 percent in Illinois and Indiana. However, by the end of May, corn planting was near the five-year average in most states due to more favorable weather. Soybean planting was 20 to 30 percent behind average except in Indiana and Michigan.



Monthly Average Streamflow

Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

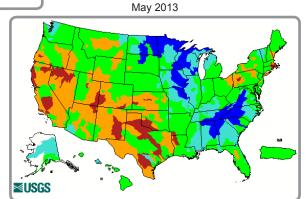
At the end of May, 45 to 60 percent

of the winter wheat in Colorado, Kansas, Nebraska, and South Dakota was in poor to very poor condition due to lingering drought and subsequent cold weather.

Transportation, Recreation

Just months after record low flows threatened navigation on the Mississippi River, heavy rain caused major flooding in April and again in late May from the Quad Cities south to the confluence of the Ohio River. Rising water threatened to close the river to barge traffic along some stretches.

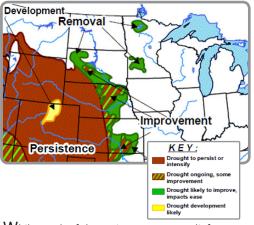
Frequent rain, snow, and freezing temperatures wreaked havoc on spring sports schedules in the region. Inclement weather resulted in the postponement or cancellation of 56 baseball games in the Midwest League through June 12. The record is 59 games in 2011.



Regional - Outlook for Summer 2013

Fire Weather

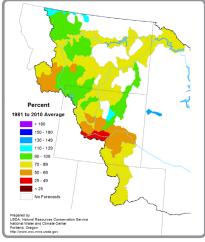
U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period Valid for June 6–August 31, 2013 Released June 6, 2013



While much of the region saw some relief from drought southern Colorado and southwest Kansas remain very dry. Snowpack deficits during the early spring were most evident in the southwest portion of Colorado where high elevation heavy fuels could pose a greater risk for fire activity this year. A small area of south central and southwestern Colorado is likely to have above normal significant wildland fire potential until the onset of the monsoon in July.

Missouri River Basin

Spring and Summer Streamflow Forecasts as of May 1, 2013



The latest seasonal drought outlook continues to show improvement in drought conditions from the Northern Plains through the eastern half of the Central Plains, but persistent drought in western Wyoming, much of Colorado, and western Kansas through the end of

Midwestern Regional Climate Center mrcc.isws.illinois.edu

Central Region Partners

High Plains Regional Climate Center www.hprcc.unl.edu

National Drought Mitigation Center drought.unl.edu

National Integrated Drought Information System

www.drought.gov

State Climatologists

www.stateclimate.org

National Weather Service Central Region www.crh.noaa.gov/crh

North Central River Forecast Center

www.crh.noaa.gov/ncrfc
Missouri Basin River Forecast Center

www.crh.noaa.gov/mbrfc
National Climatic Data Center
www.ncdc.noaa.gov

NWS Climate Prediction Center www.cpc.ncep.noaa.gov

Climate Science Program, Iowa State

climate.engineering.iastate.edu

WaterSMART Clearinghouse, U.S. Dept. of Interior

www.doi.gov/watersmart/html/index.php

Western Governors' Association westgov.org

August. The streamflow forecast for the western portion of the Missouri River basin through the summer indicates below average streamflows across the southern half of Wyoming and in northern Colorado. Streamflows on the Arkansas River in Colorado are expected to be from 35 to 70 percent of the long-term average through September. With the beginning of the summer dry season and attendant high evapotranspiration rates , and an outlook for warm and dry weather for the summer season, dry conditions in the western part of the region are not likely to improve and may worsen.



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