

THE “TERRIBLE TEENS” DROUGHT: IS THIS THE NEW DUST BOWL?

**Breaking News;
Raining in Kansas
early June!**

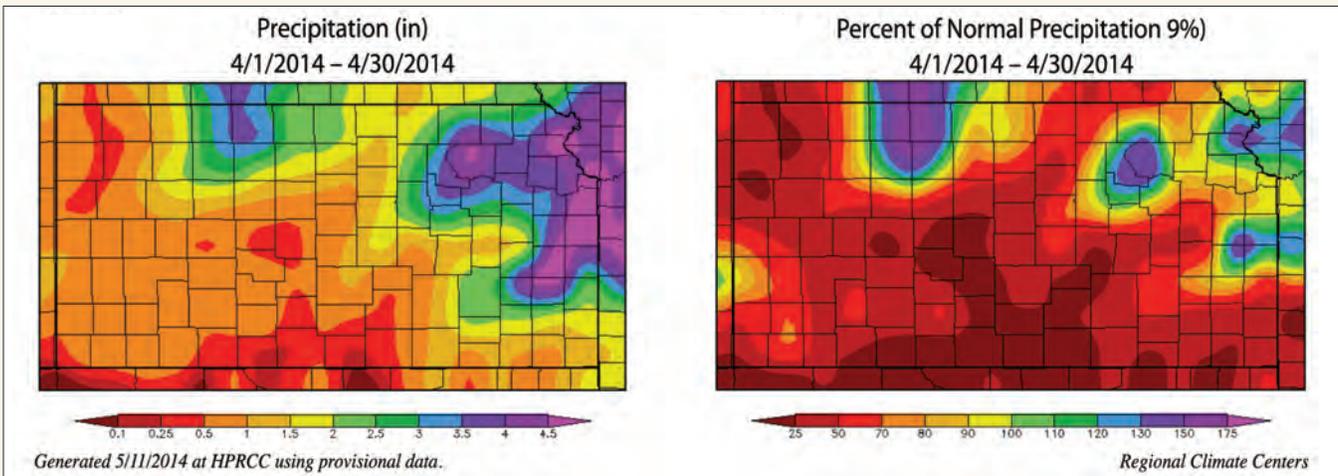


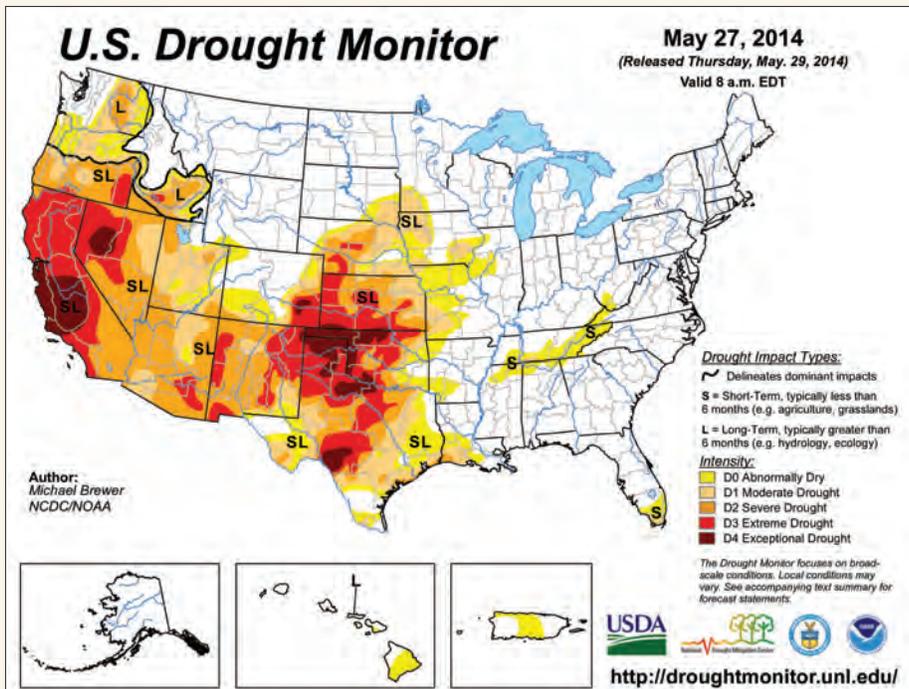
In the month of April 2014, conditions in the state of Kansas were dry, windy, and dusty. This is truly a dreadful combination that has some concerned that we are experiencing a “New Dust Bowl”. Rainfall totals (*see graphics below*) were below average for the majority of the state and massive dust storms whipped up zero-visibility conditions that caused several traffic collisions, one of them fatal, near Great Bend, and caused schools in Stanton County to cancel classes and activities on the same day. On May 6, the National Drought Mitigation Center released the U.S. Drought Monitor indicating that extreme drought (D3) conditions in Kansas have increased from 14 percent

to 25 percent of the state (*see graphic on next page*). And on April 17, the National Oceanic and Atmospheric Administration Climate Prediction Center released its Seasonal Drought Outlook, predicting that drought will persist or intensify for southwestern Kansas with some improvement possible for the northwest and east.

THIS IS TRULY A DREADFUL COMBINATION THAT HAS SOME CONCERNED THAT WE ARE EXPERIENCING A “NEW DUST BOWL”.

After months and in some cases years of below average precipitation, some public water systems are having difficulty meeting demands due to depleting sources of water. The city of Hays has been working to conserve their water supply (a mixture of groundwater pumped from the Smoky Hill Aquifer, the Big Creek Aquifer, and the Dakota Aquifer) for



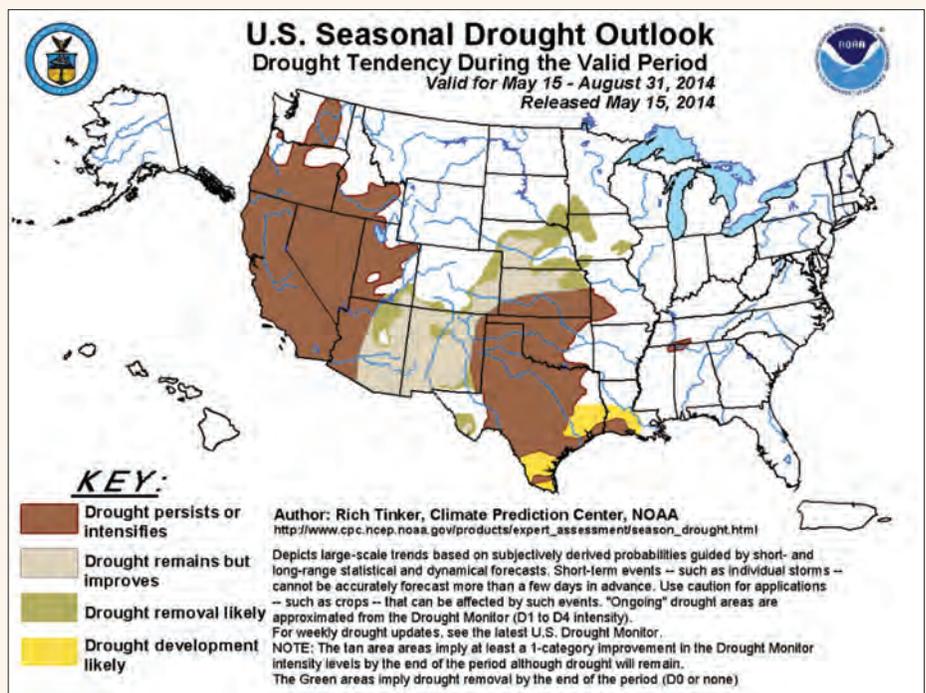


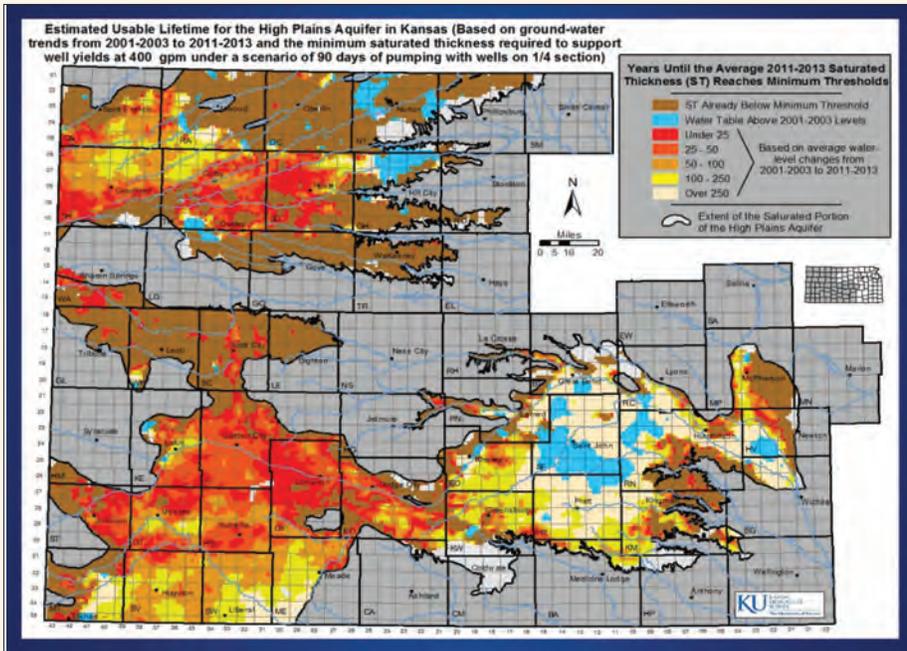
the use of water and its point of diversion. This will trigger a never before used provision called the Kansas Water Transfer Act, which applies to situations when 2,000 acre-feet of water or more are moved more than 35 miles from its source. The Act will require a public hearing and studies to justify the transfer. The hearing panel will include the state's Chief Engineer, the Director of the Kansas Water Office (KWO) and the Secretary of the Kansas Department of Health and Environment.¹

The future is uncertain for water systems in western Kansas that draw water from the Ogallala-High Plains Aquifer (HPA). The depletion of the aquifer has been a troubling topic for several years. A recent report by researchers at Kansas State University claims that 69 percent of the Aquifer's water will be gone by the year 2060. The Aquifer's natural recharge accounts for just 15 percent of the amount of water being pumped out of it. The study also projects that once the water in the aquifer is gone, it could take between 500 and 1,300 years to refill.²

many years. According to the city of Hays' Web site, in 2012 the city pumped 779,128,136 gallons of water and in 1970, the city pumped 754,342,160 gallons. There are not many communities that can say they are using a comparative amount of water they used thirty years ago. The city has also been delegated the authority to restrict private well usage as a part of the city's conservation plan by the Chief Engineer of the Kansas Department of Agriculture's Division of Water Resources (DWR). But Hays' city officials are pursuing a more viable, long-term water solution. In February 2014, the Hays City Commission unanimously agreed to pursue the development of water resources that the city owns at the R9 Ranch in Edwards County. City Manager Toby Dougherty estimated that they could obtain approximately 5,300 acre-feet of water from the ranch. Before the city can embark on the estimated \$65 million project to build a 78-mile pipeline, they must first submit an application to the DWR to change

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November 2014. The Vision will address plans to ensure a reliable water supply sufficient to meet the needs of growing population and economy. In December 2012, Gov. Brownback mailed a letter to all public water suppliers urging them to make an assessment of the current quantity of source water available. He also asked systems to develop or update their water conservation plans.

Water conservation plans

A water conservation plan is a tool for cities and rural water districts to manage their long-term water use efficiency and for short-term drought response. The drought response portion of the plan is set up in stages (usually three), each one more

A 50-Year vision

By now you've probably heard of Governor Sam Brownback's call for a 50-Year Vision for the Future of Water in Kansas. Gov. Brownback charged his administration, including the KWO, Kansas Department of Agriculture, and Kansas Water Authority to lead this one-year mission by soliciting feedback from stakeholders and the public to develop "The Vision" to be finalized by

A WATER CONSERVATION PLAN IS A TOOL FOR CITIES AND RURAL WATER DISTRICTS TO MANAGE THEIR LONG-TERM WATER USE EFFICIENCY AND FOR SHORT-TERM DROUGHT RESPONSE.

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stringent than the one before it: Stage 1 – Water Watch, Stage 2 – Water Warning, and Stage 3 – Water Emergency. The plan must include triggers for each stage and conservation practices to be implemented in order to curtail water use when necessary. The guidelines for water conservation plans are developed and maintained by the KWO. However, plans completed by water systems must be approved by the DWR. Kansas Rural Water Association (KRWA) staff provides assistance to

SUPPORT ASSOCIATE MEMBERS

When a city or rural water district needs products or services,

SHOP ASSOCIATES FIRST

For a current directory, with contact, e-mail addresses and Web site information for Associate Members, check out

www.krwa.net

(under membership)

Known Conservation Stages as of April 30, 2014

Stage 3: Water Emergency – 6 Public Water Supplies

Stage 2: Water Warning – 18 Public Water Supplies

Stage 1: Water Watch – 96 Public Water Supplies

– Provided by the Kansas Water Office

Appendix A Known Conservation Stages April 30, 2014				
Public Water Supply	County	Conservation Stage	2014 Stage ¹	Comment ²
Ellis	Ellis	Water Emergency	3	
McCracken	Rush	Water Emergency	3	July 3, 2013/Dec. 22, 2013
Medicine Lodge	Barber	Water Emergency	3	July 1, 2013
Reno RWD 01	Reno	Water Emergency	3	June 13, 2013
Russell	Russell	Water Emergency	3	Stage 4 equivalent to other Stage 3
Victoria	Ellis	Water Emergency	3	March 1, 2014, Warning April 15, 2013
Ahilene	Dickinson	Water Warning	2	Stage 2- 7/25/13, Stage 3 –level 1, 4/22/13, Stage 2
Bennington	Ottawa	Water Warning	2	
Concordia	Cloud	Water Warning	2	
Dickinson RWD 01	Dickinson	Water Warning	2	
Dickinson RWD 02	Dickinson	Water Warning	2	
Ellsworth	Ellsworth	Water Warning	2	1/6/14 chg stage 3 to 2
Eureka	Greenwood	Water Warning	2	
Goessel	Marion	Water Warning	2	
Hays	Ellis	Water Warning	2	2/27/14
Kickapoo Tribe	Brown	Water Warning	2	
Madison	Greenwood	Water Warning	2	
Oberlin	Decatur	Water Warning	2	
Otis	Rush	Water Warning	2	
Palco	Rooks	Water Warning	2	April–November
Quinter	Gove	Water Warning	2	
Russell RWD 03	Russell	Water Warning	2	
Scott City	Wichita	Water Warning	2	
Susank	Barton	Water Warning	2	

1 Corn, Mike. "City agrees to pursue water from R9." *Hays Daily News* 14 Feb. 2014: 1, 6. Print.

2 Hegeman, Roxana. "High Plains Aquifer will be 69 percent depleted in 50 years, K-State study says." *The Kansas City Star* 26 Aug. 2013: Web. 14 May 2014.

cities and rural water districts with the development of water conservation plans at no charge. Funding for this assistance is provided by the KWO as a benefit of the Clean Drinking Water Fee.

As of May 15, 2014, the Division of Water Resources has delegated the authority to require private well owners to comply with conservation practices outlined in the approved conservation plan to three municipalities: the cities of Hays, Ellis and Salina.

So are we experiencing the "New Dust Bowl"? Hopefully, the answer is no. But it is critical for public water systems to have a drought plan in place before there is a supply problem. For assistance with drought and conservation planning, contact Tina Rajala with the Kansas Water Office at 785-296-0875, or contact KRWA.

Monica Wurtz began work with KRWA in October 2013. She previously worked at the Kansas Department of Health and Environment and also worked at US EPA Region 7 for four years. Monica is considered a national expert on various drinking water regulations.



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