

High and Dry
LEAD

Date: 30 March 2015

SUGGESTED LEAD-IN:

Water has always been...and still is...the key to survival in western Kansas. Farmers there are in the midst of an historic drought. University of Kansas Journalism Professor David Guth has been traveling in the region and conducting interviews for a book about communities facing declining populations. In this report, Guth says there's agreement on the need to conserve water... but little agreement on how to do it.

SFX:

Traffic on bridge (UP AND UNDER)

NARRATOR:

As you drive just south of Garden City on U-S 83... a bridge spans the Arkansas (ARE-Kansas) River. As bridges go... this one is unremarkable. But beneath the bridge lies a different story: Dirt...sand...brush...rocks – and no water. The river has run dry.

SFX: Out

NARRATOR:

Kansas and the Southern High Plains are in the grips of a drought – and it's lasted longer than the devastating drought of the 1930s – the Dust Bowl Days. While few are suggesting a return to the Dirty Thirties...Lane County farmer Vance Ehmke knows that he has been farming on Mother Nature's margins...

EMKE-DUST

Boy, if it doesn't rain this fall, you will be seeing our dust in Douglas County. OK? (Laughs) I'm not kidding you. We are on the edge here.

NARRATOR:

Since that interview in June 2014...western Kansas has enjoyed some rain. However the National Drought Mitigation Center says the region remains under severe to extreme long-term drought. The conditions are most dire in the northwest and southwest corners of the state.

How well individuals are faring during this drought largely depends on what they grow and how they grow it. Vance Ehmke is a dry-land farmer. He and his wife

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Louise runs a 10-thousand acre seed farm between Scott City and Dighton. The Ehmke Seed Company provides wheat, rye and hybrid seeds for several hundred customers throughout the Central Plains. In the face of this long-term drought, Ehmke and other dry-land farmers have changed their business and farming practices.

EHMKE-SURVIVAL:

Well they say the market is there to weed out the inefficient. You know, it is as ruthless as you can get. But that is the way it is. You know, if you can figure out how to adapt to the situation or innovate your way out of it, you'll survive.

NARRATOR:

While dry-land farmers depend on rain for water...others irrigate their crops by tapping into the Ogallala Aquifer – the vast underground basin that runs under western Kansas and parts of seven other states, from South Dakota to Texas. William Ashworth, author of *Ogallala Blue*, says the aquifer contains enough water to fill nine Lake Eries. Since the introduction of center-pivot irrigation in the late Forties...farmers have been pumping out Ogallala water at a rate of five trillion gallons a year. Much of this goes toward growing very profitable and water-intensive corn...a crop that otherwise would not survive in the region's dry landscape. Other industries – oil and gas and livestock ranching – also use a lot of Ogallala water. Ashworth says the equivalent of one Lake Erie has already been drained from the aquifer.

Rex Buchanan is the interim director the Kansas Geological Survey. The K-G-S is a research arm of the University of Kansas. One of its major jobs is monitoring the state's groundwater wells. He says it is hard to tell corn farmers they should grow something else.

BUCHANAN

If you have a conversation with an irrigator and they see a decline, one of the first responses you'll get from them is 'well, that Ogallala water is not doing anybody any good under the ground.'

NARRATOR

Buchanan adds that it is hard to tell someone that they shouldn't pump water that they have a right to use. It's also important to remember that each year, corn adds \$3 billion to the state's economy and provides vital resources for the state's livestock and dairy industries.

Farmers seem to understand the problem. Many conserve water through improved tilling and more efficient irrigation. Some have gone a step farther.

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Farmers in a 99-square mile section of Sheridan and Thomas counties have formed the state's first LEMA or Local Enhanced Management Area. In a LEMA...the farmers agree to a voluntary reduction of water use over a five-year period. In the case of the Sheridan-Thomas LEMA, that's about a 15 percent reduction. Northwest Kansas Groundwater District Manager Katherine Durham says the program allows farmers to meet these goals in the manner in which they choose.

DURHAM

You know, you have to think really hard into the build of these communities – there is a lot of pride, there is a lot of history and there's a lot of family heritage. And so to give that flexibility and that power back to them from a sociological perspective is really, really important when you are trying to do any sort of conservation work.

NARRATOR:

The LEMA idea is relatively new...and many are skeptical. Despite expressions of confidence by elected officials, local water rights holders defeated a proposed five-county LEMA in the Scott City area in 2014. Proponents say they face the challenge of overcoming farmer fears and misinformation. As Lane County Water Management board member Alan James told one newspaper...Some farmers feel it is their water and they can pump until it's dry.

It's hard to estimate just how long the Ogallala Aquifer will last. Some think of the Ogallala as an underground bathtub – if someone takes a drink in Goodland, someone else in Great Bend goes thirsty. But it really isn't. It is more like the bottom of an egg carton with varying depths and saturation. The water is deeper in some areas than others and some aquifer zones have already run dry. And in those places, it will take thousands of years for natural rainfall to replenish the system. One thing is certain: water is being pumped out of the Ogallala much faster than it's being replaced. And that's been true for decades.

For Kansas Public Radio News...I'm David Guth

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