

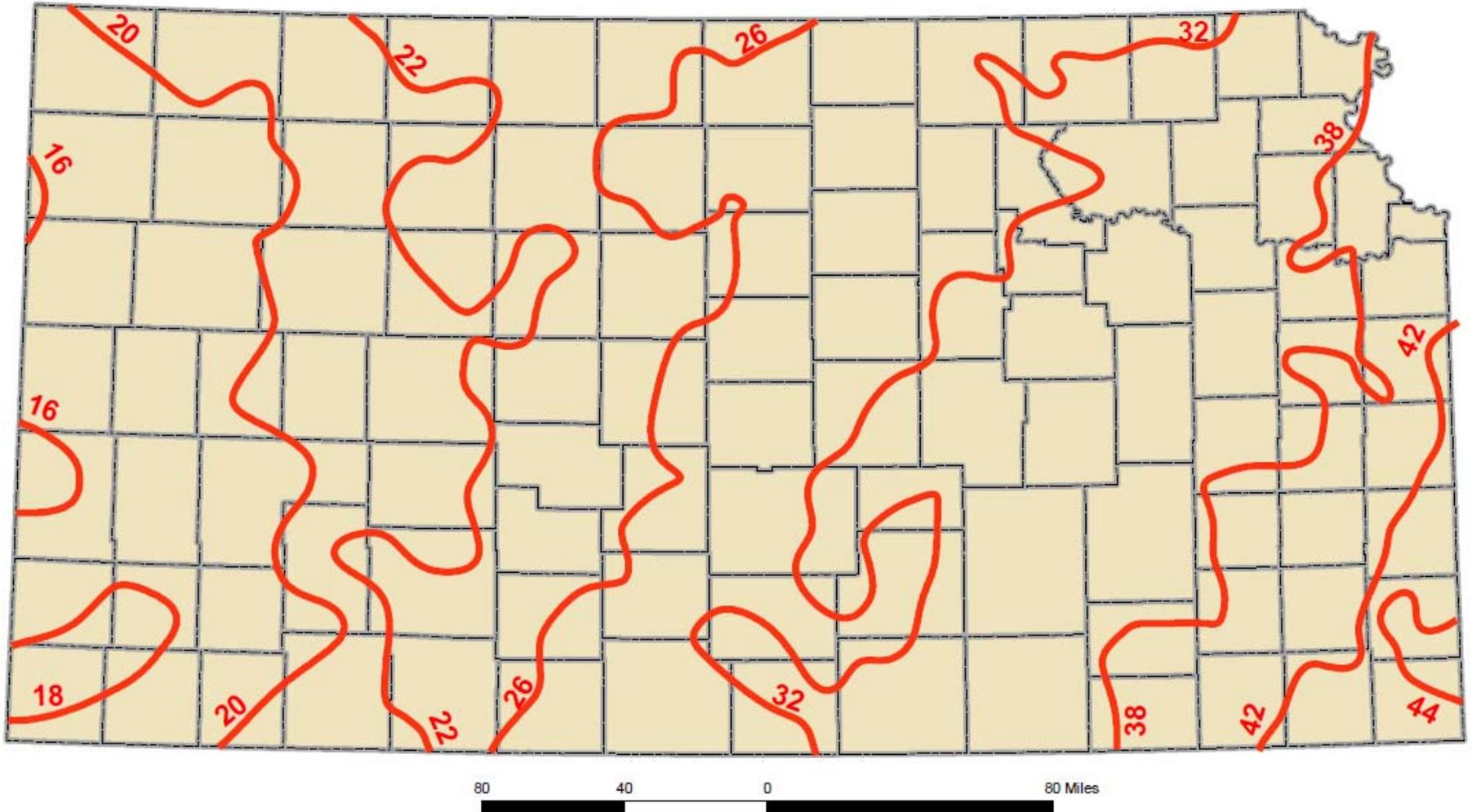
“Vision for the Future of Water in Kansas”
Bobbi Luttjohann, Kansas Water Office

Kansas Water Symposium

Dyck 
Arboretum
of the Plains

Hesston, KS
March 7, 2015

Kansas Precipitation

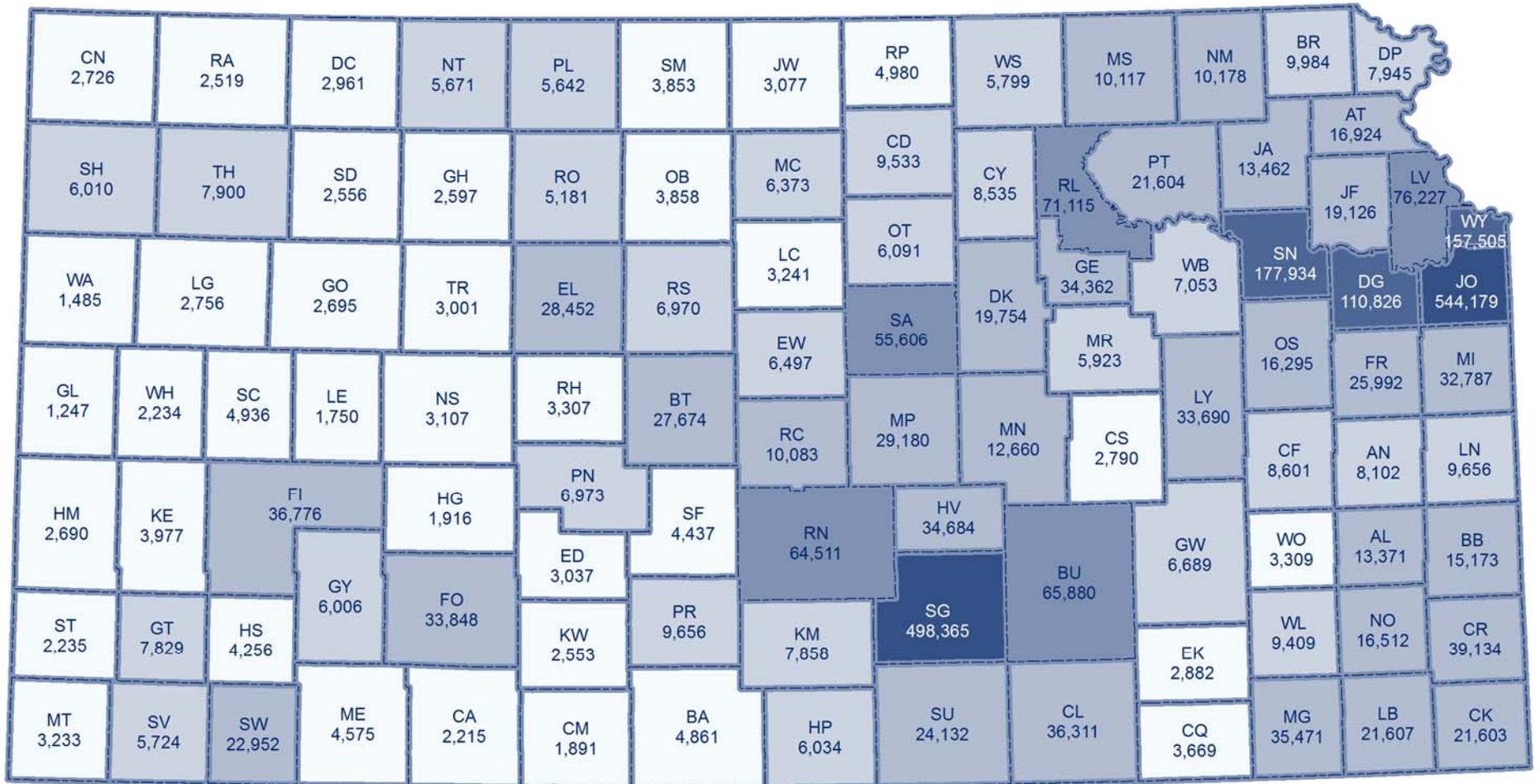


 Precipitation Contour

Data Source: National Climate Data Center (NCDC)
Prepared for Kansas Water Plan 2008

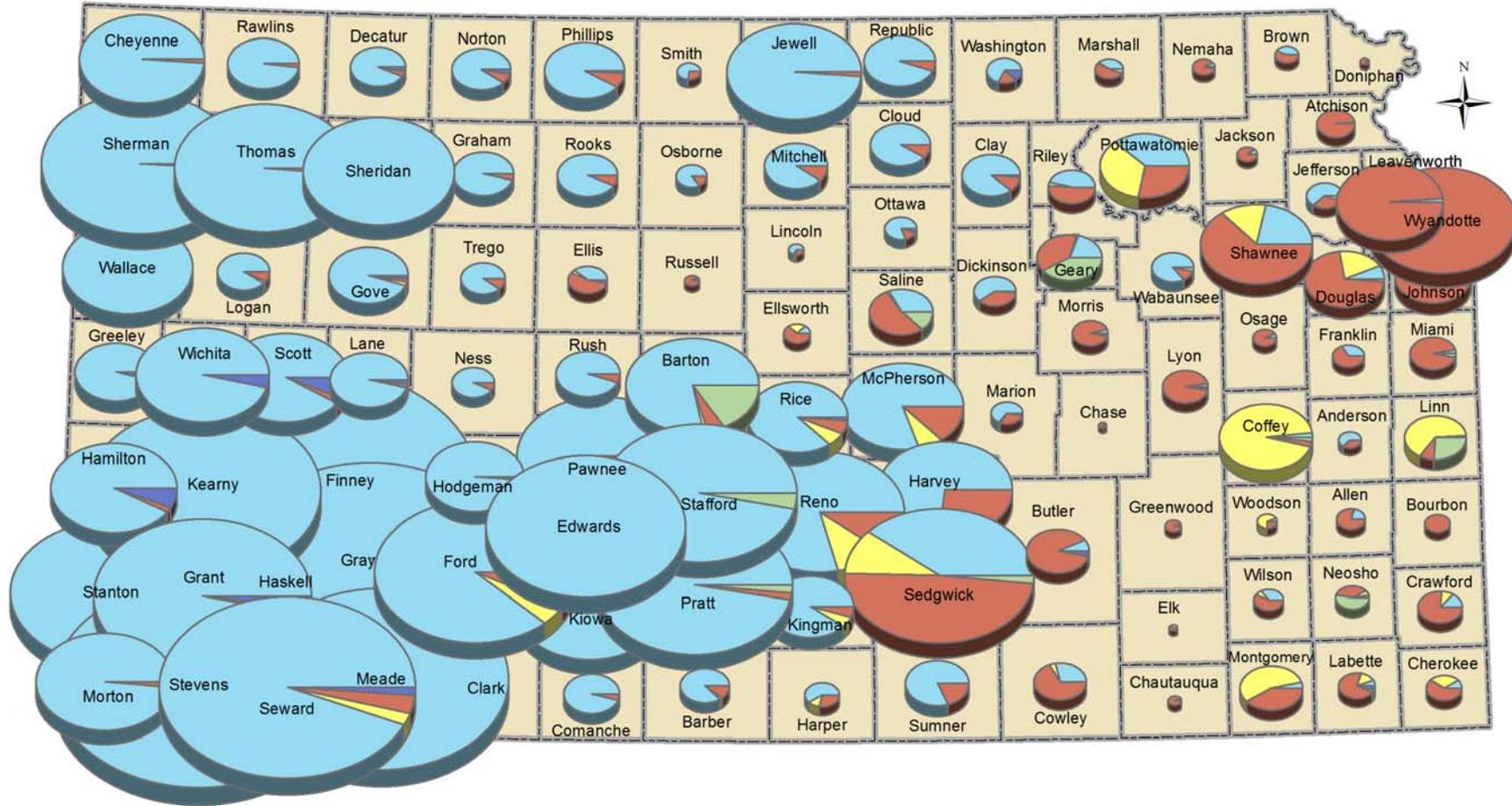
Kansas

2010 Population by County

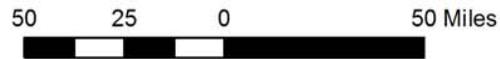


Data Sources:
U.S. Bureau of the Census

2011 Water Use By County



Data Sources:
 Division of Water Resources, Water Use Program
 Kansas Water Office, Water Marketing Program

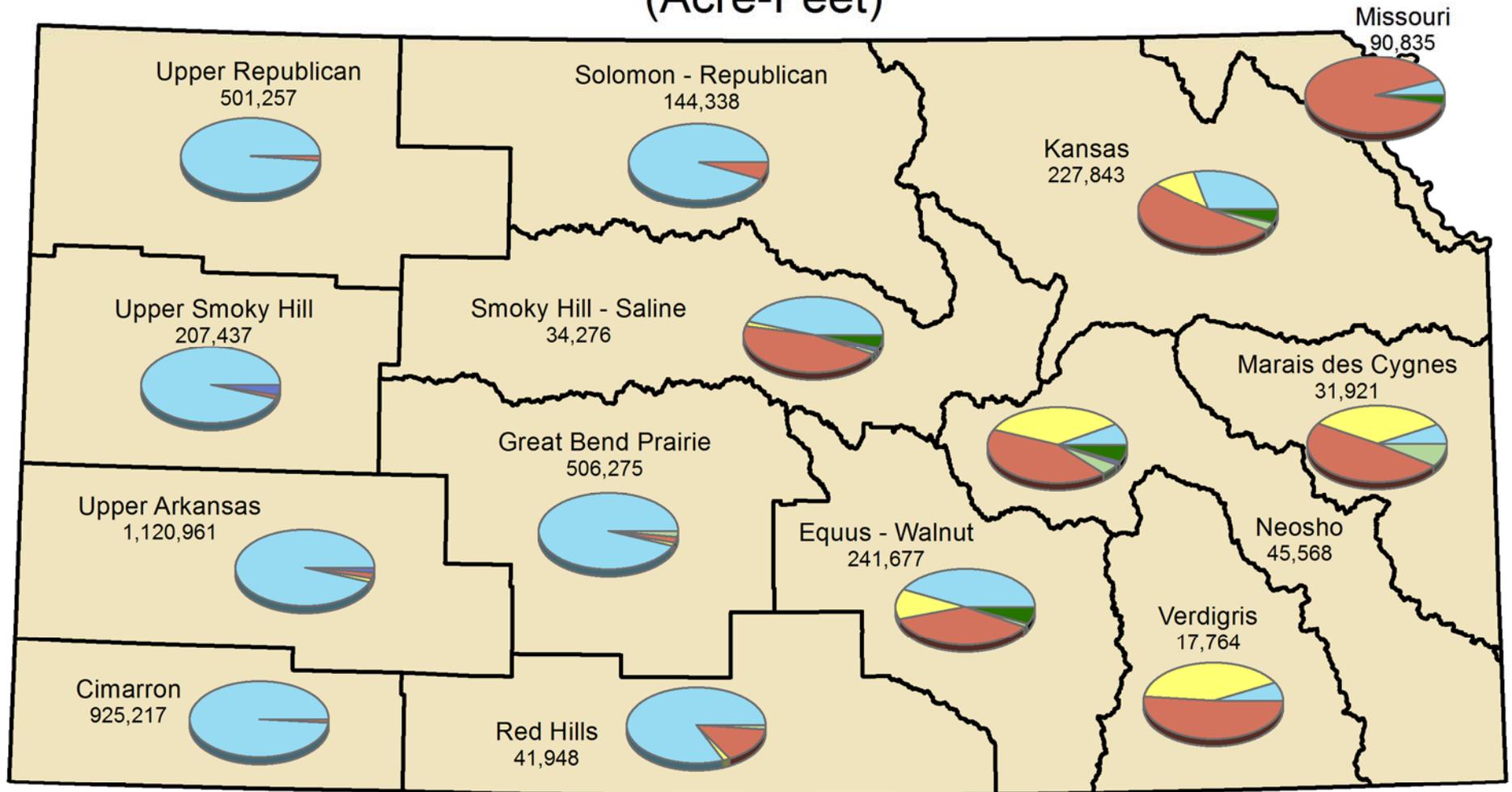


Kansas Water Office May 2013

Water Use by Type of Use

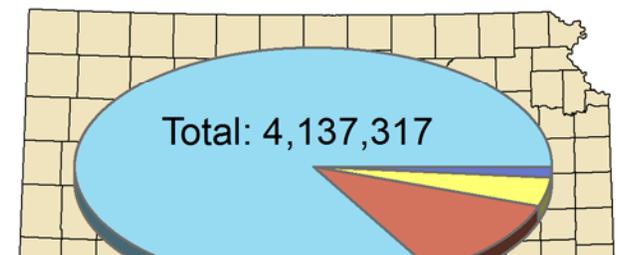
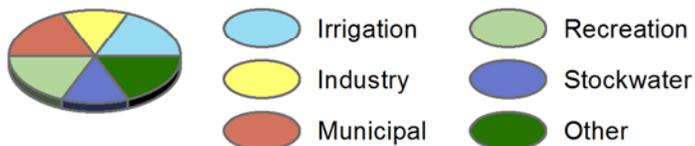


2013 Water Use By Regional Planning Area (Acre-Feet)

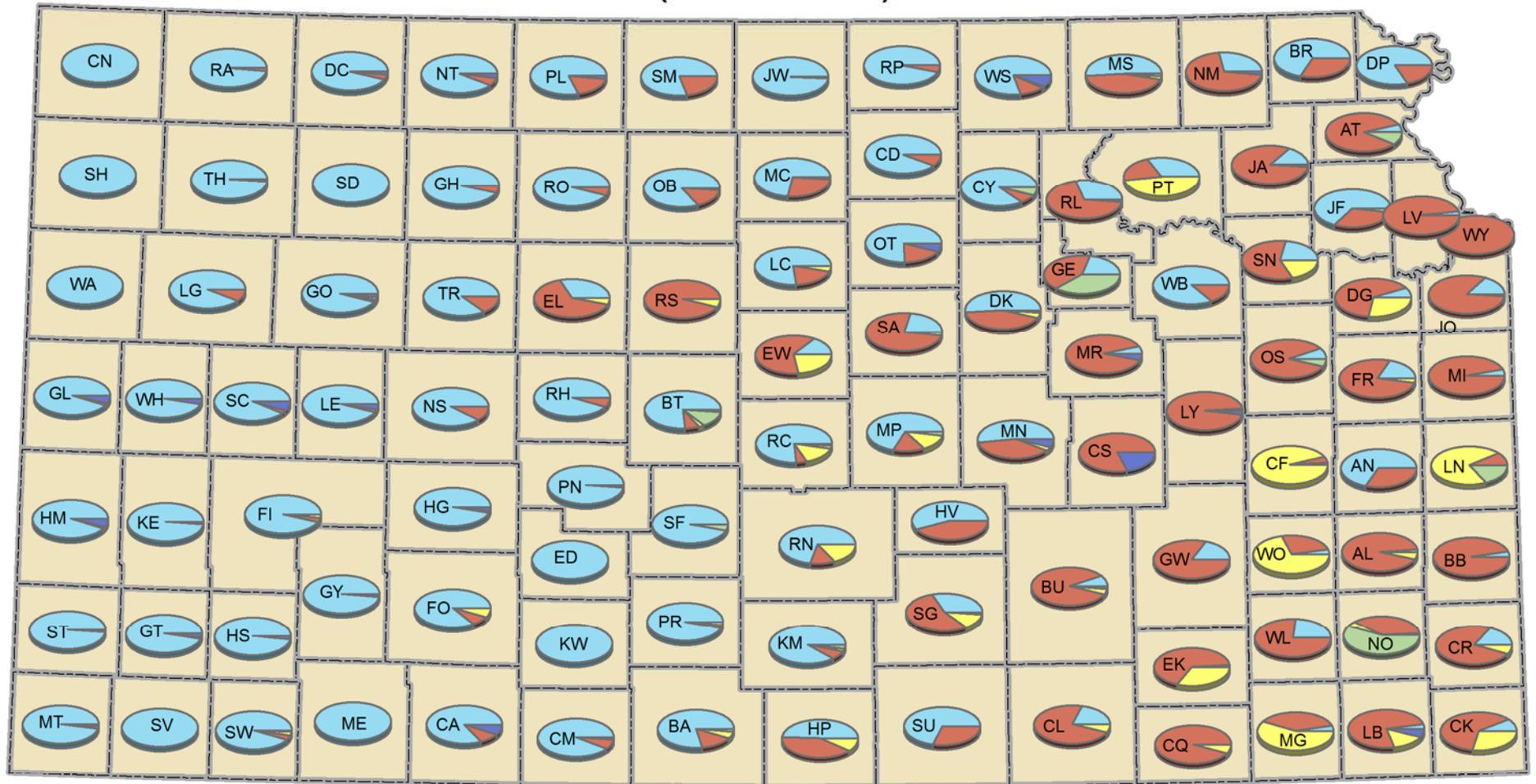


Kansas Water Office January 2015

Water Use by Type

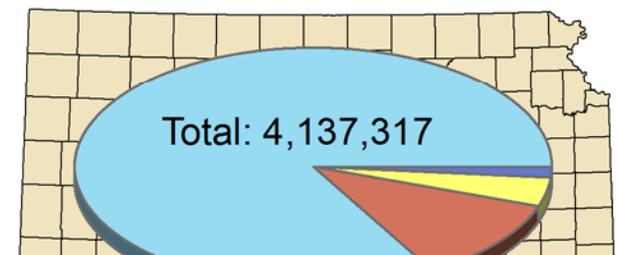
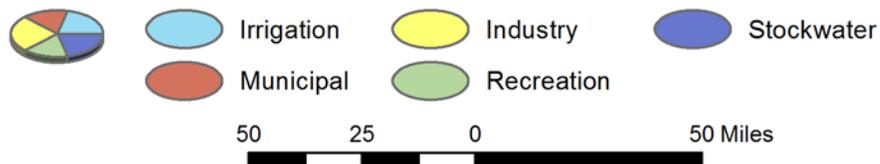


2013 Water Use By County (Acre-Feet)

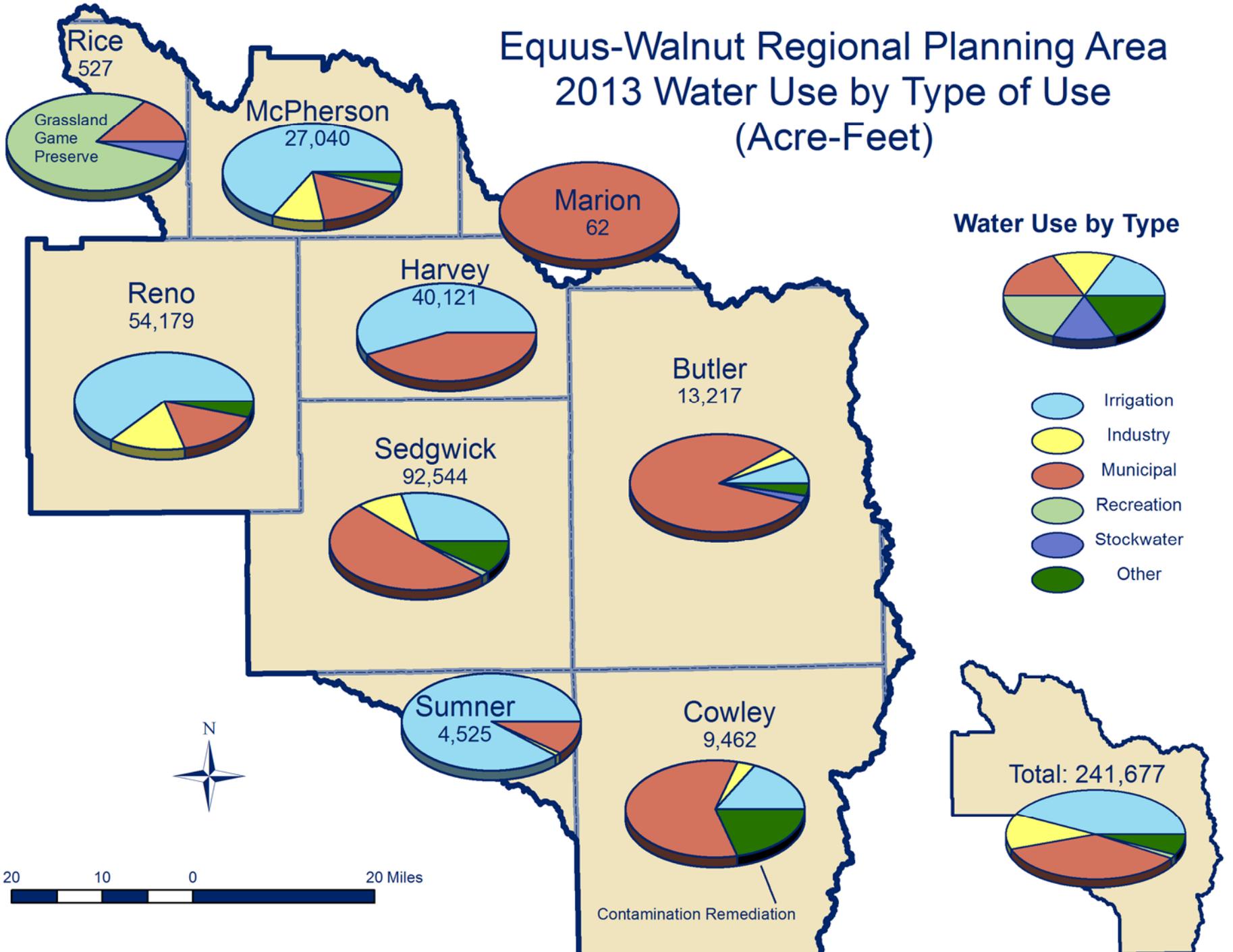


Kansas Water Office December 2014

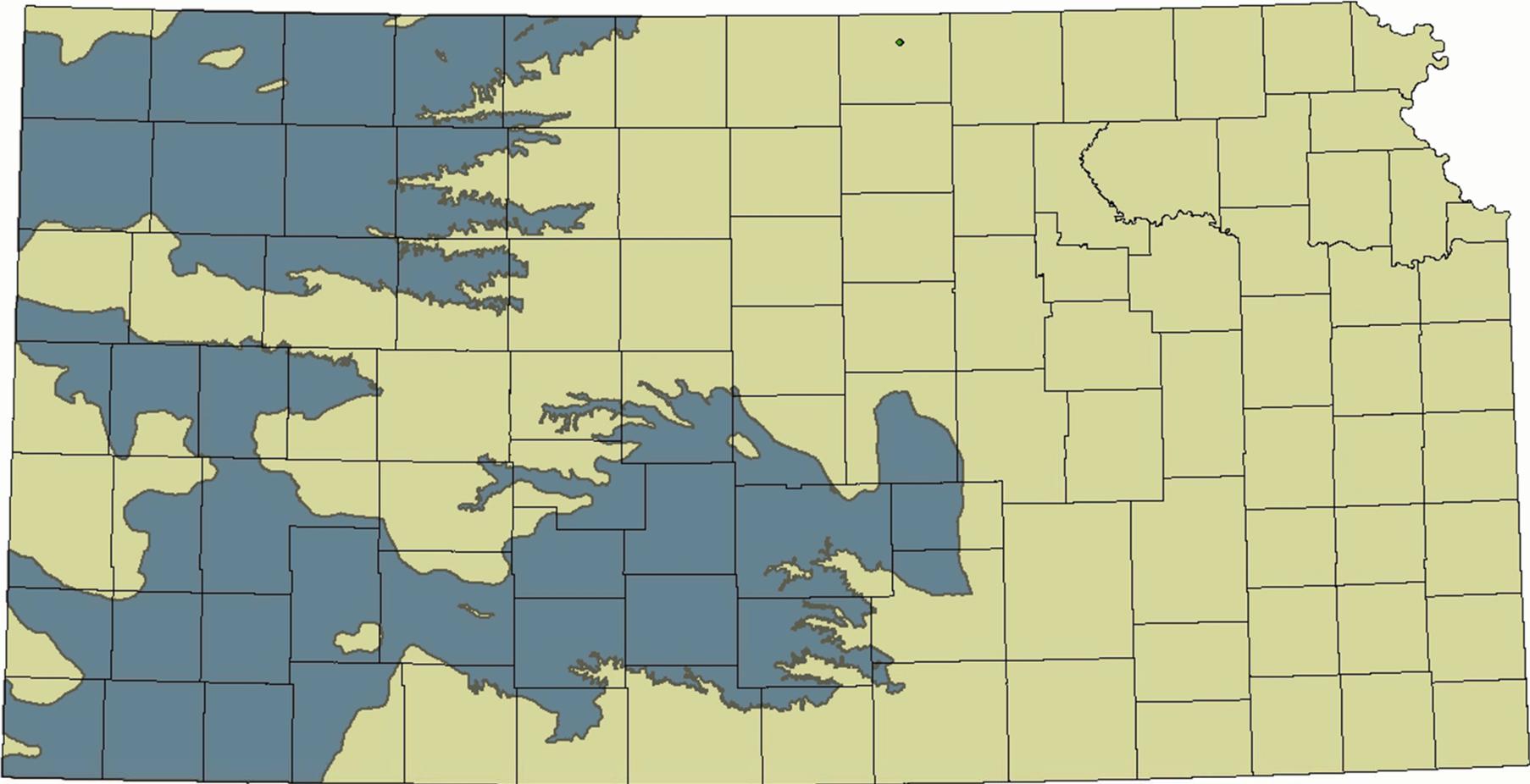
Water Use by Type



Equus-Walnut Regional Planning Area 2013 Water Use by Type of Use (Acre-Feet)

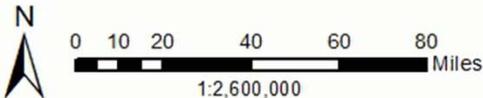


Kansas Water Right Development: Points of Diversions in 1940



Legend

- ◆ Kansas PODs
- High Plains Aquifer (Saturated Extent)
- Kansas Counties

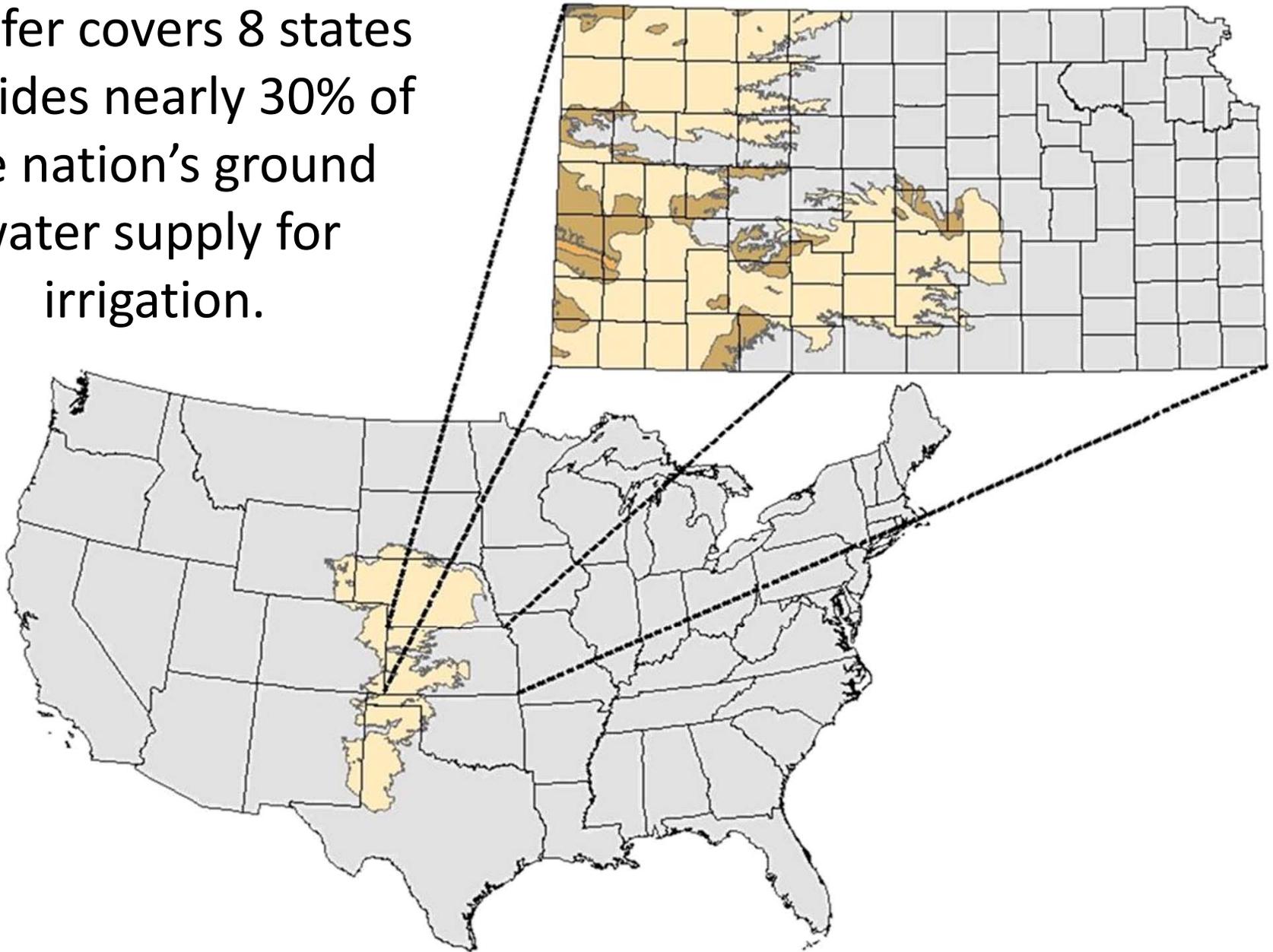


KU KANSAS
GEOLOGICAL
SURVEY

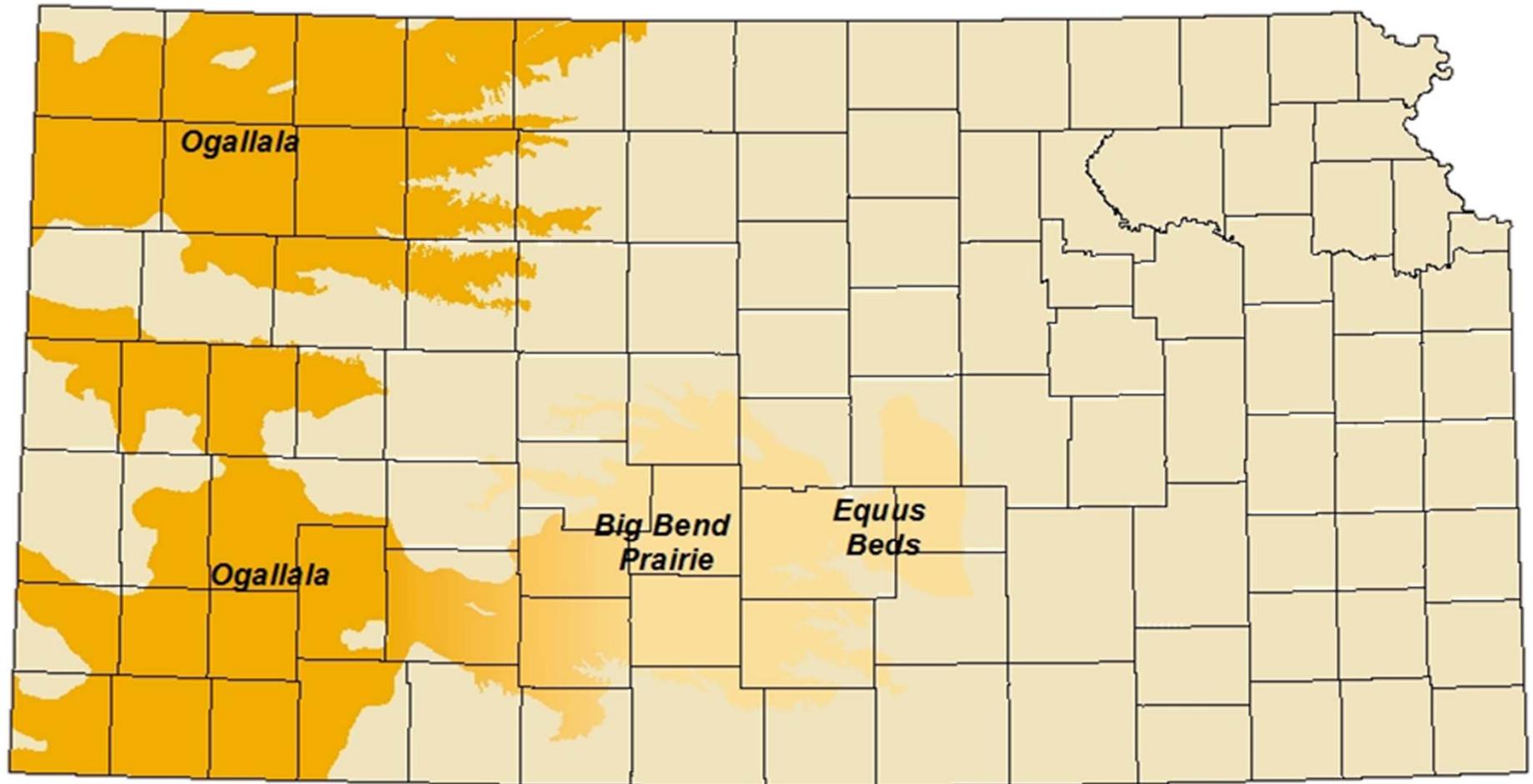
The University of Kansas

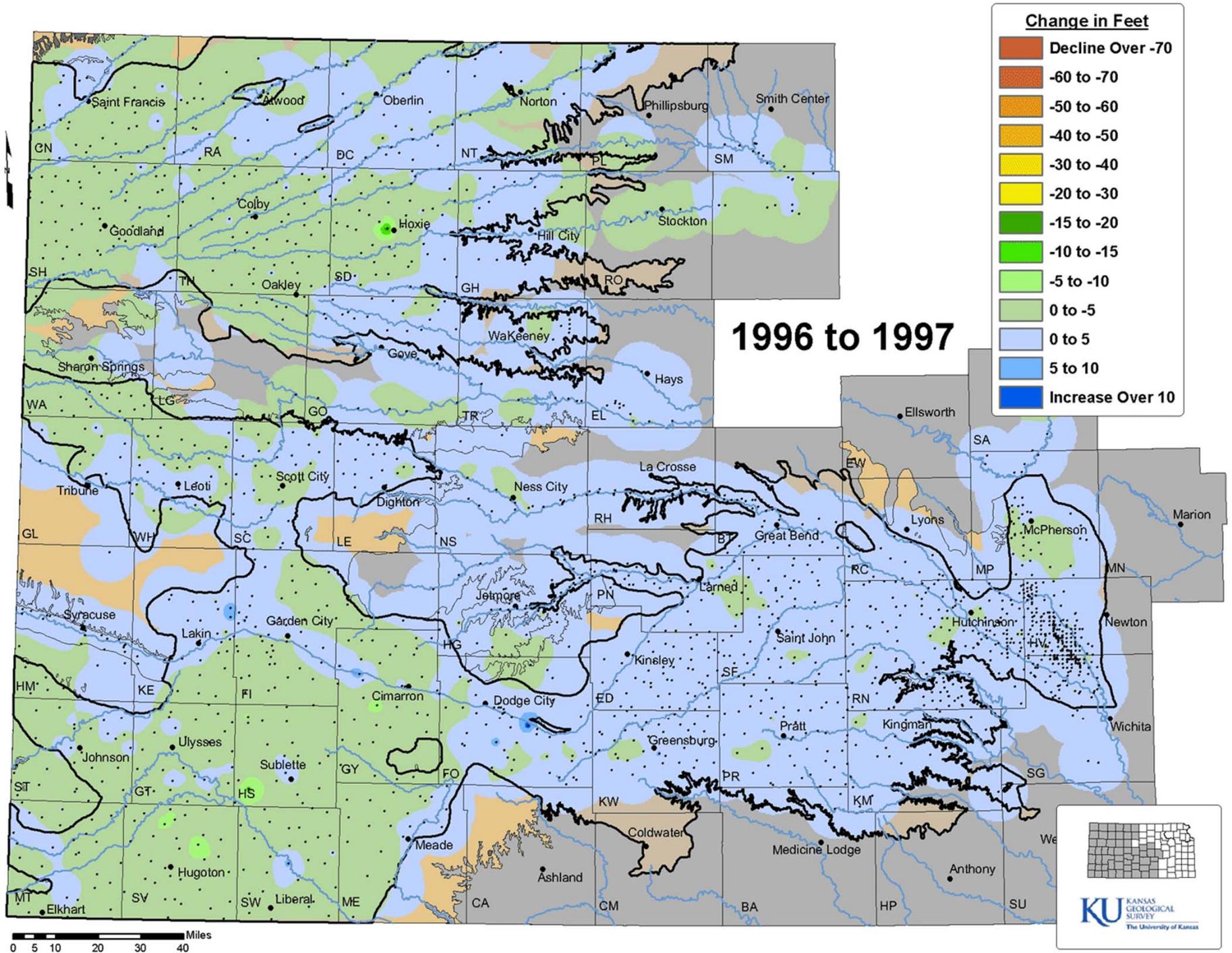
Kansas Geological Survey – Geohydrology
University of Kansas – Lawrence, KS
Water Rights from KS Dept of Agriculture:
Division of Water Resources 09 Jun 2011
NAD 1983 UTM Zone 14 02 Aug 2012

Ogallala-High Plains
Aquifer covers 8 states
provides nearly 30% of
the nation's ground
water supply for
irrigation.



Ogallala-High Plains Aquifer in Kansas

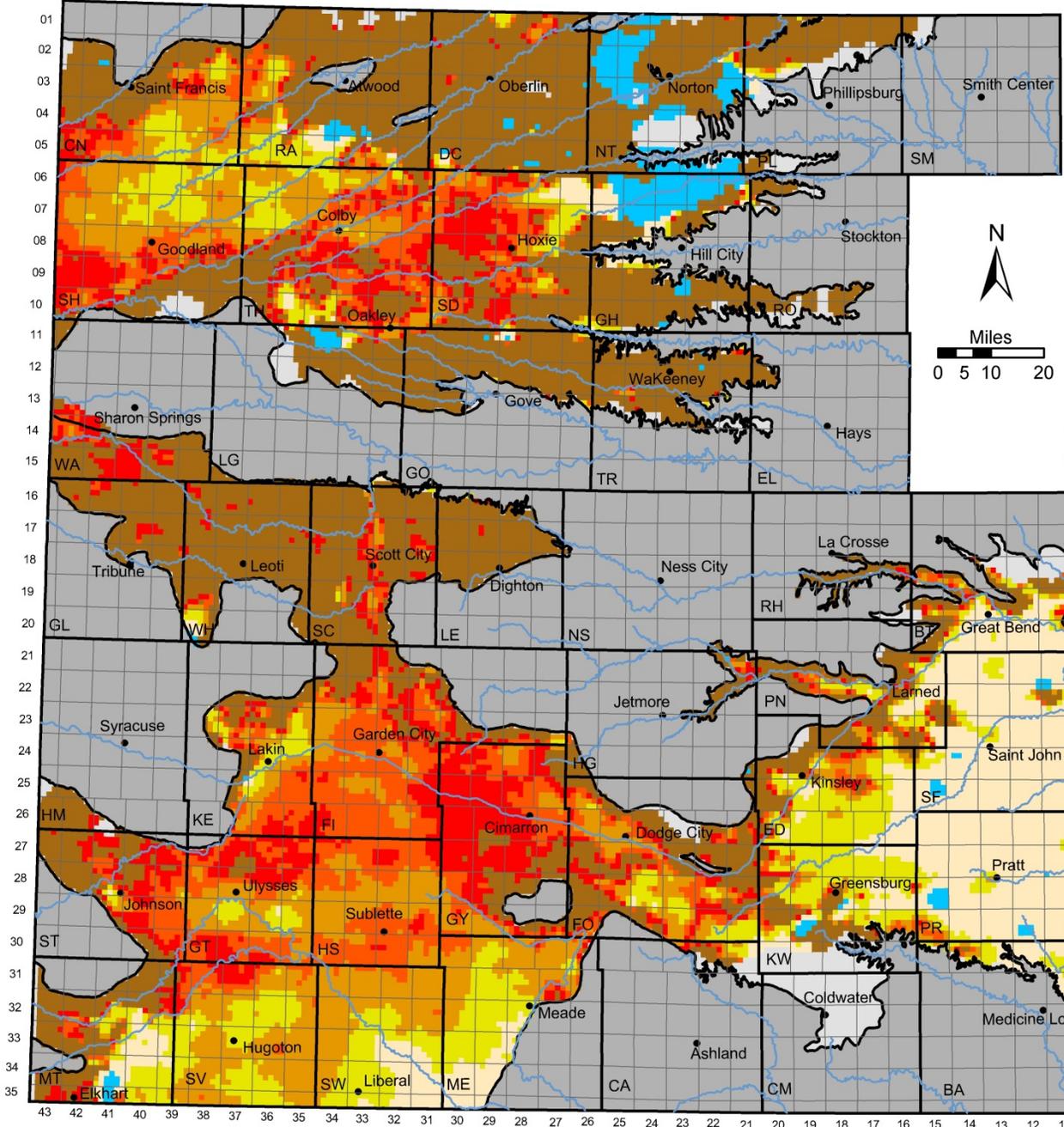
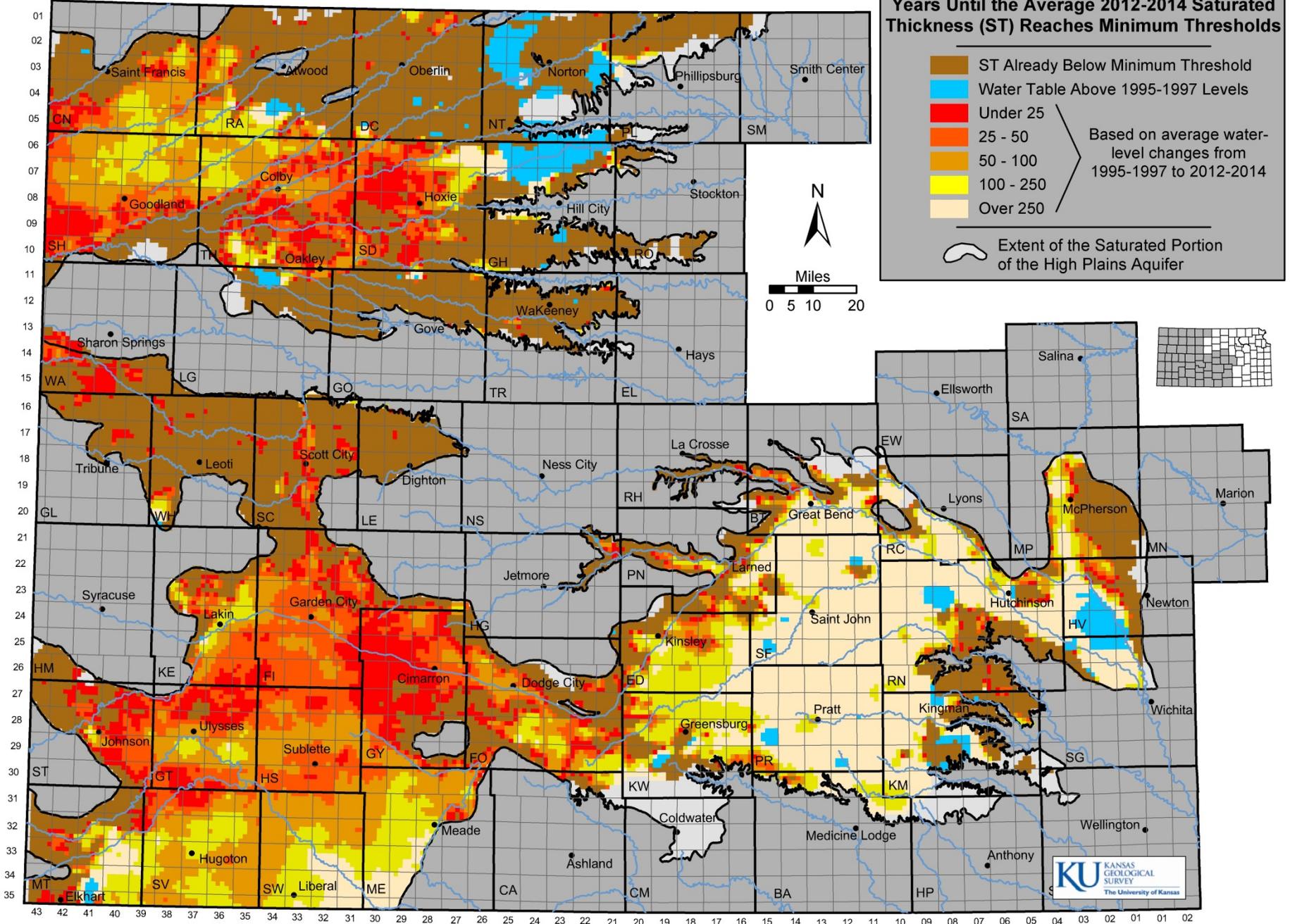




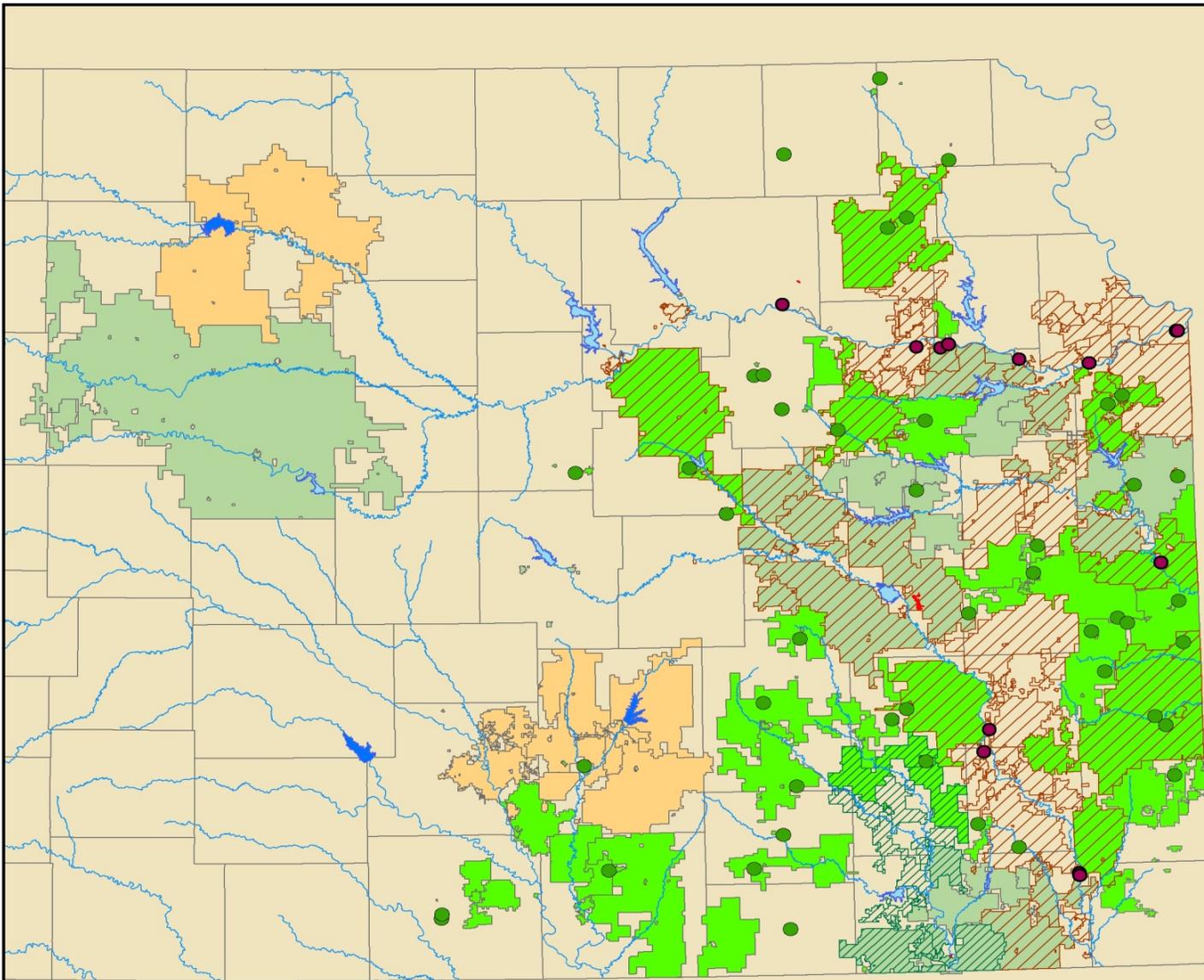
0 5 10 20 30 40 Miles



Estimated Usable Lifetime for the High Plains Aquifer in Kansas (Based on ground-water trends from 1995-1997 to 2012-2014 and the minimum saturated thickness required to support well yields at 400 gpm under a scenario of 90 days of pumping with wells on 1/4 section)



Federal Lake Water Supply Storage Customers and PWS Served by Multipurpose Small Lakes and Municipal Lakes



Legend

- MPSL or City Lake
- AD Industry
- Stream
- Market/AD Lake
- Other Contract Lake
- Water Marketing Industry*
- Verdigris MOA
- Water Assurance District
- MPSL / City Lake User
- Water Marketing
- Other Contracts
- County

*Elk City, John Redmond,
and Milford Lakes

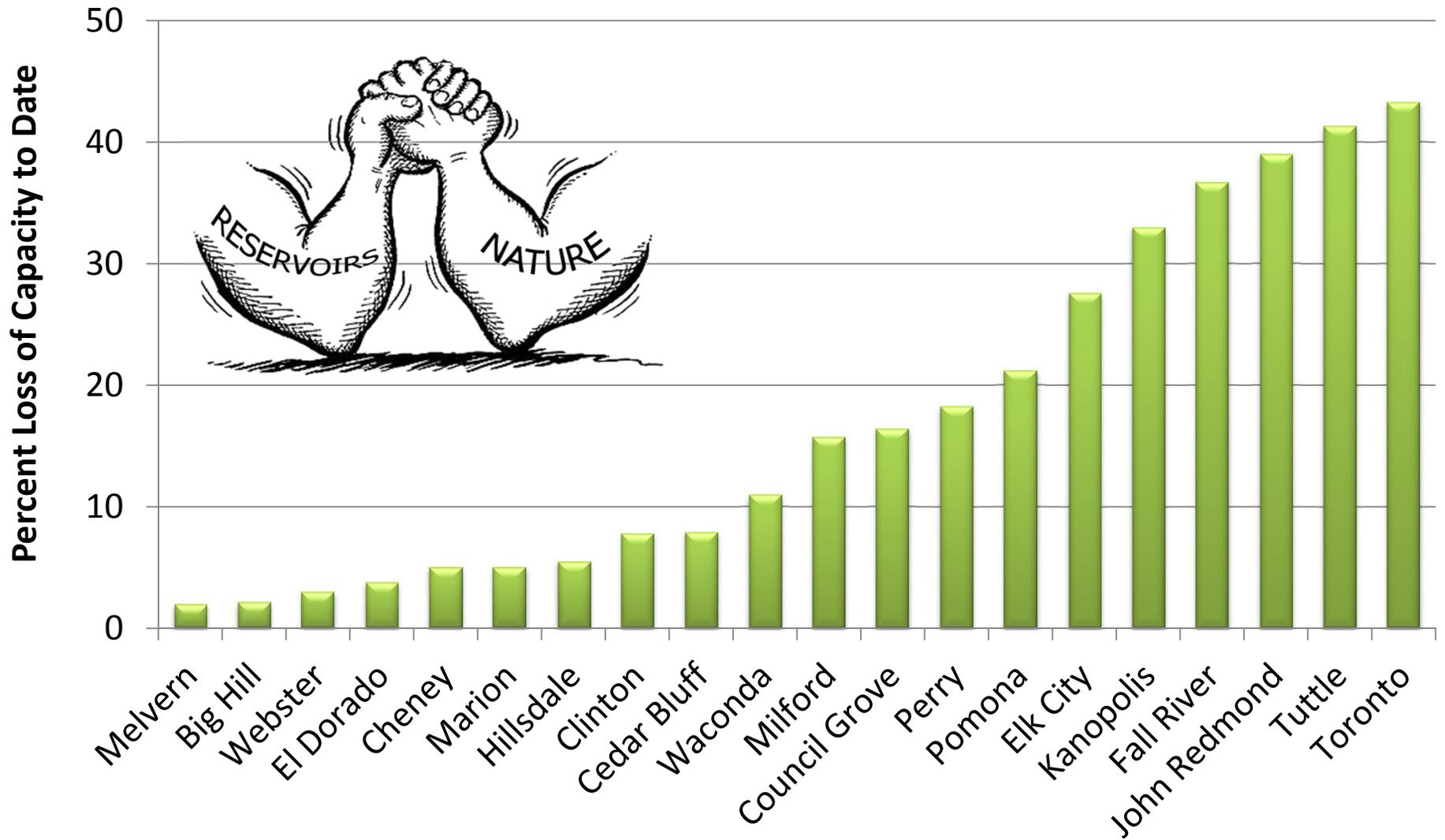


Reservoir Water Use and Energy Production

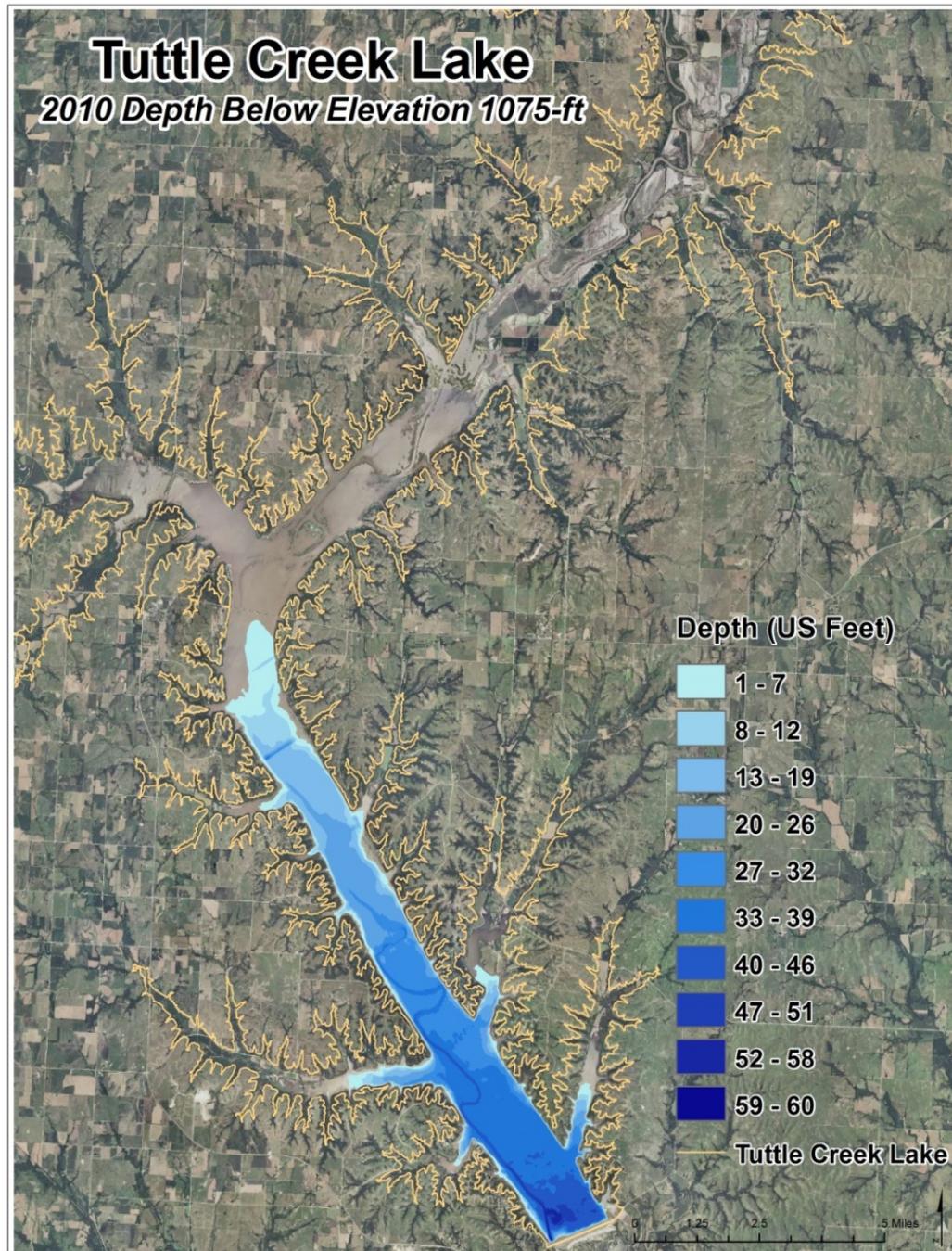
Kansas Power Plant Energy Production	11821.5 MW
Power Plant Energy production through Reservoir water use	6785.5 MW
% Power Plant w/Reservoir Use	57.40%



Kansas Reservoir Loss of Capacity



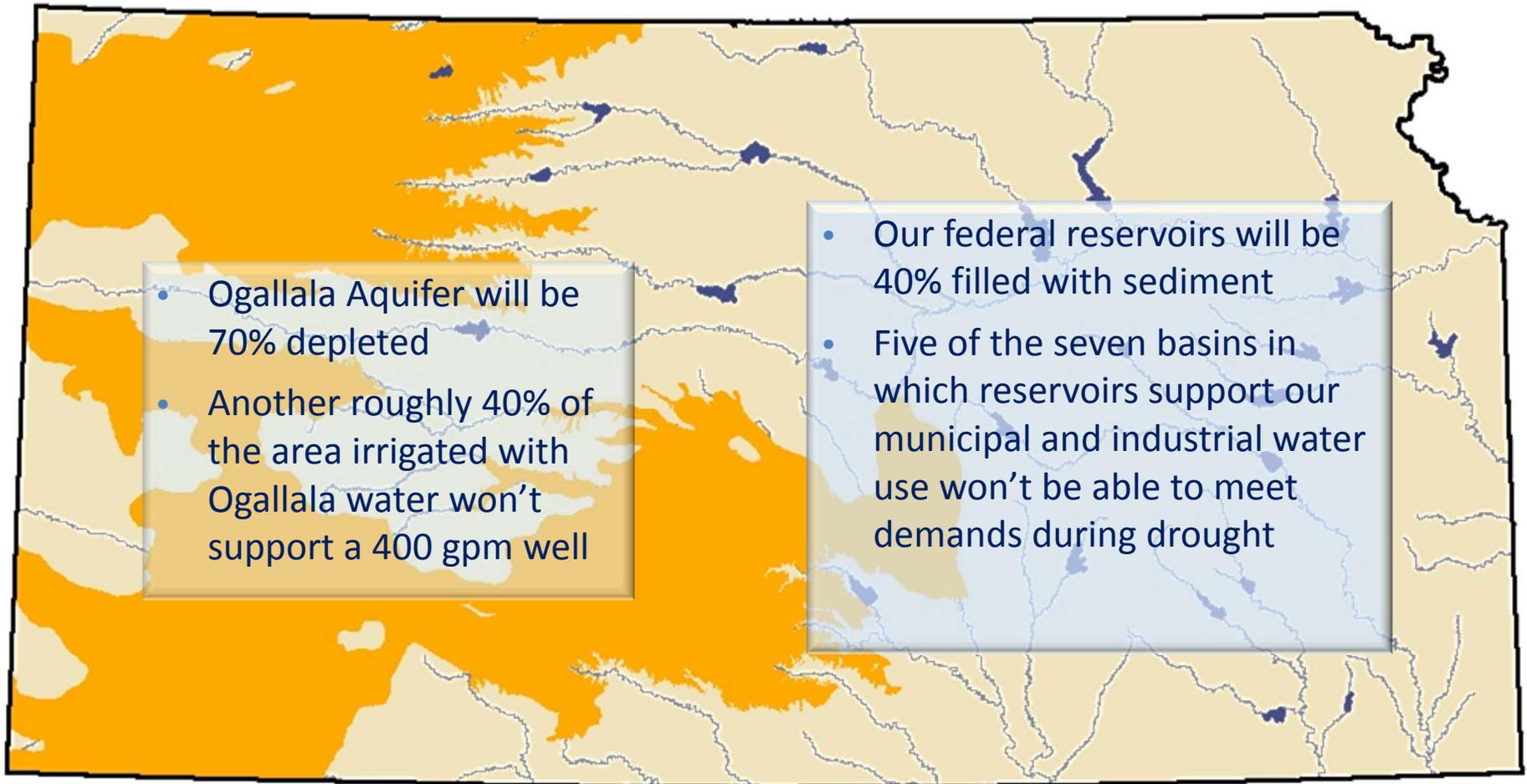
Tuttle Creek Reservoir has lost more than 40% of its storage to sedimentation



CALL TO ACTION

“Water and the Kansas economy are directly linked. Water is a finite resource and without further planning and action we will no longer be able to meet our state’s current needs, let alone growth.” –
Governor Sam Brownback

In the next 50 Years if we take no action....



VISION

Kansans act on a shared commitment to have the water resources necessary to support the state's social, economic and natural resource needs for current and future generations.

MISSION

Provide Kansans with the framework, policy and tools, developed in concert with stakeholders, to manage, secure, and protect a reliable, long-term state-wide water supply while balancing conservation with economic growth.

GUIDING PRINCIPLES

- Locally driven solutions have the highest opportunity for long-term success.
- Policies and programs should not unintentionally penalize those who have already demonstrated good stewardship with the state's water resources; and
- Voluntary, incentive and market-based water conservation and land management activities are the preferred tools for ensuring a reliable state-wide water supply.

Themes and Strategies

Water Conservation



Water Management



Technology & Crop Varieties



Additional Sources of Supply





QUESTIONS & DISCUSSION