18. A Booming Interest in Groundwater Conservation in Kansas—Why Now?

Bill Golden **<bgolden@ksu.edu>**
<bbgolden2@earthlink.net>

Bill Golden assists farmers, policy makers, and other stakeholders throughout Kansas in developing and implementing policies associated with the State's natural resources. He also works extensively with land-water-related issues such as valuing irrigation water rights. Current research and extension efforts are evaluating producer and community impacts associated with alternative water conservation policies and the impacts of climate change.

Abstract/Summary

The Ogallala Aquifer is significantly over-appropriated. The aquifer has declined in some areas more than 60% since predevelopment. Past efforts to slow the decline and insure the future economic viability of the region have been largely unsuccessful. More recently, interest in groundwater conservation has boomed in western Kansas. With the introduction and adoption of Local Enhanced Management Areas, Water Conservation Areas, and Water Technology Farms there appears to be a great deal of motivation toward sustaining the Ogallala Aquifer. The purpose of this presentation is to review the new developments and suggest a reason for it happening now.

A Booming Interest in Groundwater Conservation in Kansas – Why Now ?

Bill Golden (Kansas State University)
Kellen Liebsch, (Kansas Department of Ag)
Jonathan Aguilar (Kansas State University)

Kansas State University
Department of Agricultural Economics
Risk & Profit Conference
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Background: Kansas Water Rights

- Water Appropriation Act 1945
- K.S.A. 82a-702 - “all water within the state of Kansas is hereby dedicated to the use of the people of the state, subject to the control and regulation of the state in the manner herein prescribed”.
- Prior Appropriation – First in time is first in right

Background: Kansas Water Rights

- There are two types of water rights in the state of Kansas. These are vested water rights and appropriation water rights. Vested water rights are based on water put to use before June 23, 1945, the date of the Water Appropriation Act. A vested right is senior to any appropriation right.

Background: Kansas Water Rights

- A Groundwater Right
  - Appropriation date
  - Authorized place of use
  - Authorized quantity (annual acre-inches)
  - Authorized rate (well capacity-gpm)

Background: Kansas Water Appropriations Act's fundamental charge to the Chief Engineer

K.S.A. 82a-706: The Chief Engineer shall enforce and administer the laws of this state pertaining to the beneficial use of water and shall control, conserve, regulate, allot and aid in the distribution of the water resources of the state for the benefits and beneficial uses of all its inhabitants in accordance with the rights of priority of appropriation.

K.S.A. 82a-706b – "It shall be unlawful for any person to prevent, by diversion or otherwise, any waters of this state from moving to a person having a prior right to use the same…"

Source: David Barfield's (DWR Chief Engineer) presentation titled "Impairment in groundwater system" presented 2/21/2017 at the KWO Water Talk series.

Carrot & Stick Motivation

The Sticks

- State mandated command and control regulation
- A top down process
- Very little input from stakeholders

The Sticks

- Intensive Groundwater Use Control Area (IGUCA)
- In 1978 the GMD Act was amended to allow IGUCAs
- KSA 82a-1038. Designation of intensive groundwater use control area; orders; review. (a) In any case where the chief engineer finds that any one or more of the circumstances set forth in K.S.A. 82a-1036, and amendments thereto, exist and that the public interest requires that any one or more corrective controls be adopted, the chief engineer shall designate, by order, the area in question, or any part thereof, as an intensive groundwater use control area.

The Sticks

- Chief Engineer may initiate proceedings for designation of an Intensive Groundwater Use Control Area (IGUCA) :
  - Recommended by GMD
  - Petition of not less than 300 or five percent of the eligible voters of a GMD, whichever is less.
- The Chief Engineer may initiate proceedings if any one or more exist:
  - Significant groundwater declines
  - Groundwater withdrawal equals or exceeds recharge
  - Preventable waste of water is occurring.
  - Unreasonable deterioration of the quality of water
  - Any other conditions which require regulation in the public interest

The Sticks

- In 1992, an IGUCA was established in the Walnut Creek Valley in central Kansas. This IGUCA was instituted to address streamflow depletions resulting from excessive withdrawals of groundwater.
- Senior water rights had their appropriation reduced between 22 percent and 33 percent. Junior rights had their appropriated quantity curtailed by 64 percent to 71 percent.

The Sticks

- Impairment Process (water right administration process)

1) Complaint
2) DWR Investigation
3) DWR Report of Findings
4) If impairment is found and action desired, complainant must file a request to secure water
5) Action by the Chief Engineer as long as required

Source: David Barfield's (DWR Chief Engineer) presentation titled "Impairment in groundwater system" presented 2/21/2017 at the KWO Water Talk series.

Groundwater Impairment investigations process

- Determine if complainant has good well/pumping plant
- Review well logs; geologic information.
- Install monitoring equipment (pumping rate/quantity; well depths)
- Pump test
- Review/analysis data to determine local aquifer properties; extent of direct well to well interference
- Prepare initial report, provide to GMD and neighbors for comment
- Final report

Source: David Barfield's (DWR Chief Engineer) presentation titled "Impairment in groundwater system" presented 2/21/2017 at the KWO Water Talk series.

Haskell County impairment (Garetson)

- 2005 – Garetson files impairment compliant with the Chief Engineer
  - Expressed interest in an IGUCA to address concerns
- 2007 - Compliant withdrawn
- 2012 - Garetson files an impairment compliant in District Court
  - K.S.A. 82a-716/717a – Allows water right holders to file directly to District Court to seek redress
  - K.S.A. 82a-725- Allows Court to appoint chief engineer as referee
- 2014 – District Court grants temporary injunction
- 2015 - KS Court of Appeals upholds
- 2017 – District Court grants permanent injunction

Source: David Barfield's (DWR Chief Engineer) presentation titled "Impairment in groundwater system" presented 2/21/2017 at the KWO Water Talk series.

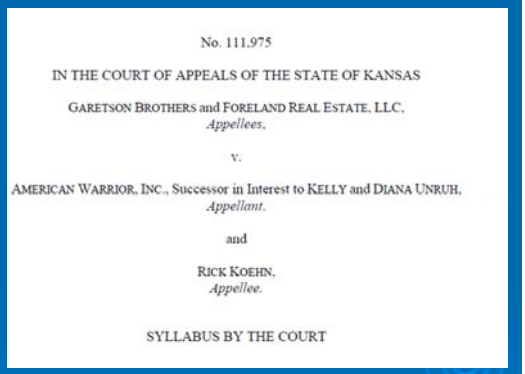
The Sticks

- Wells that interfere with HS3

Source: David Barfield's (DWR Chief Engineer) presentation titled "Impairment in groundwater system" presented 2/21/2017 at the KWO Water Talk series.

Court of appeals decision

- K.S.A. 2014 Supp. 82a-707(c) provides that the first person to divert water from any source and use it for beneficial purposes has prior right thereto. In other words, "the first in time is first in right."
- K.S.A. 82a-716 and K.S.A. 82a-717a afford a senior water right holder the right to seek injunctive relief—and in some cases monetary damages—in order to protect his or her prior right against a junior water right holder.
- Looking to the plain and unambiguous language of K.S.A. 82a-716 and K.S.A. 82a-717a, it is apparent that the legislature intended that the holder of a senior water right may seek injunctive relief to protect against a diversion of water by a holder of a junior water right when that diversion does or would diminish, weaken, or injure the prior right.



No. 111,975

IN THE COURT OF APPEALS OF THE STATE OF KANSAS

GARETSON BROTHERS and FORELAND REAL ESTATE, LLC,
Appellees,

v.

AMERICAN WARRIOR, INC., Successor in Interest to KELLY and DIANA UNRUH,
Appellant.

and

RICK KOEHN,
Appellee.

SYLLABUS BY THE COURT

Source: David Barfield's (DWR Chief Engineer) presentation titled "Impairment in groundwater system" presented 2/21/2017 at the KWO Water Talk series.

The Carrot

- Voluntary Incentive-based regulations that result in an absolute reduction in groundwater use, that are controlled by local stakeholders.

Local Enhanced Management Areas (LEMAs)

- The LEMA concept developed from the IGUCA. LEMA establishes a process (SB 310 in 2012) that allows local communities of producers to collectively decide their future by initiating the implementation of conservation plans that meet their local goals within their groundwater management district.
- The program is voluntary – but once passed becomes law.

Local Enhanced Management Areas (LEMAs)

- The rules and regulations associated with the LEMA are negotiated between the State, local GMD, and stakeholders.
  - Who gets to vote
  - Amount of groundwater use reduction and how it is calculated
  - Duration of program
  - Modifications to existing water rights
  - Penalties for over pumping
  - Who is exempt

LEMAs

- Sheridan #6 LEMA (GMD#4)
  - Process started in 2006
  - 2010 – 2011 needed more flexibility than an IGUCA allowed
  - LEMA legislation enacted in 2012 (K.S.A. 82a-1041
  - Sheridan #6 LEMA started in 2013
- GMD #4 District Wide LEMA
- GMD #1 District Wide LEMA
- Finney County LEMA (GMD#3)
- http://agriculture.ks.gov/divisions-programs/dwr/managing-kansas-water-resources/local-enhanced-management-areas

Question

- Would the Haskell County impairment (Garetson) have resulted in the total shutoff of 5 pivots if they had formed a LEMA?

Water Conservation Areas (WCAs)

- In April 2015, Kansas Governor Sam Brownback signed into law a bill allowing for WCAs, a simple, streamlined and flexible tool that allows any water right owner or group of owners the opportunity to develop a management plan to reduce withdrawals in an effort to extend the usable life of the Ogallala-High Plains Aquifer.
- Currently 6 have been formed
- http://agriculture.ks.gov/divisions-programs/dwr/managing-kansas-water-resources/wca

Wichita County WCA

Wichita County
Water Conservation Area

FOUR INCREMENTAL STEPS

29%	**FROM 2017 TO 2023**
36%	**FROM 2024 TO 2030**
43%	**FROM 2031 TO 2037**
50%	**FROM 2038 TO 2044**

Source: "Feb 2, 2017 WCA Presentation" presented 2/21/2017 at the KWO Water Talk series

Water Technology Farms (WTF)

- Water Technology Farms have been created recently in response to public input and identified in the Kansas Water Vision. They are demonstration farms that allow the installation and testing of the latest irrigation technologies on a whole field scale.
- Currently 5 have been formed
- Manufacturers are supplying a lot of the equipment

WTF Technology Example

- Mobile Drip Irrigation

WTF Technology Example

- Soil probe field day

Why Now?

- Governor Brownback made conserving and extending the life of the Ogallala Aquifer a priority
  - 7/21/2011 held Ogallala Summit
    - Charged KSU Research & Extension with the task of reducing groundwater use and to grow the economy
  - Fall of 2011 – Governor's Conference on the Future of Water in Kansas
  - Modification of existing laws

Why Now?

- At the 2013 Governor's Conference on the Future of Water in Kansas, Governor Brownback issued a call to action to address the need for a **Vision for the Future of Water in Kansas** that meets the state's needs now and in the future.
- *"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

Why Now?

- The Governor built and mobilized a team
  - Kansas Department of Agriculture
  - Kansas Water Office
  - K-State Research and Extension
  - Kansas Geological Survey
  - USDA RMA
  - USDA NRCS
  - Other state agencies and stakeholders

  - This is not a complete list

Why Now?

- Since the Governor's Call to Action for a State Wide Water Vision there have been more than 500 public meetings and input from more than 15,000 Kansans
- The 50 Year Water Vision has been completed – now we are in the implementation phase

Why Now?

- Brownback told about 600 water conference attendees in Manhattan that the time has come to make changes to extend the life of the underground Ogallala Aquifer
- Brownback said "We know this aquifer. You can't say, 'No, we need to study it more.' Now is the time."

Additional Information

- Kansas Water Talk Series https://drive.google.com/open?id=0Bxh0IAZWR_IGQXFVaWQ2a2I0dnc
- http://www.kwo.org/
- http://agriculture.ks.gov/divisions-programs/dwr

Questions