KDA Division of Water Resources and water conservation initiatives

Kansas Ag Growth Summit
August 23, 2018

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Introduction

My focus: regulatory tools for water conservation under the Kansas Water Appropriation Act and GMD Act

Why talk about regulatory tools at an Ag Growth Summit?
• In areas of declining groundwater supply or conflict, water conservation today provides more water for our future and reduces conflict.
• In the Ogallala, the reality is: the benefits of conservation do not travel far. Water conservers get to keep their conserved water.
Kansas Water Appropriation Act, 1945

- "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."

- Based on prior appropriation (first in time, first in right)
- Groundwater and surface water in single priority system

Charges chief engineer to oversee:
- **Allocation** of water supply, allowing for orderly development of the state’s water resources
- **Regulation** of water supply in times of shortage.
  - In surface water systems, priority administration is routine.
  - Groundwater conflicts more complicated

Legislative acts to encourage groundwater management

- 1972: GMD Act allow for the creation of GMDs to lead in local water conservation efforts
- 1978: GMD Act amended to allow for Intensive Groundwater Use Control Areas (IGUCAs).
- 2012: Local Enhanced Management Areas (LEMA’s) allowed
- 2012: Eliminating abandonment of groundwater rights in closed areas
- 2015: Water Conservation Areas (WCA’s) allowed
- 2015: Requirement for chief engineer to give due consideration of past voluntary conservation in all conservation programs
Intensive Groundwater Use Control Areas

• Water management tool that works in conjunction with the Kansas Water Appropriation Act
• Allows for more flexible solutions, taking into account the area and aquifer
• Provides alternatives to strict administration of water rights by priority
• Formal public hearings are held
• Decision by chief engineer based on hearing record
Northwest Kansas GMD 4 Seeks Enhanced Management

• “Sheridan 6” High Priority Area wanted to cut use by 20%, but not via priority administration, (2010-11)
• NW Kansas GMD No. 4 Board discusses and rejects IGUCA option
• Manager outlines new approach requiring new legislation
• Results in LEMA statute, 2012
• Sheridan 6 LEMA designation 2013-17 and 2017, **20% reduction in use**

Local Enhanced Management Areas (LEMA), 2012

• Like IGUCAs, requires demonstrated problem: groundwater declines, dropping rates, etc.
• Similar tools as IGUCAs: allocations, rotation of use, etc.
• Like IGUCAs, due process required via hearings (as adjusting water rights)
• LEMA Plan to include conservation measures to address specific water resource problems.
• Hearings before the Chief Engineer to adopt, reject or return plan to the GMD
• Chief Engineer decision: is it consistent with state law; does it address the problem appropriately?
Sheridan 6 success: Significantly reduced groundwater use

- Blue line = reported water use
- Orange line = estimated water use based on climate factors (2000-12 data used to develop)
- 2013-2016 estimated use based on climate is 0.6 inches lower than 2000-12
- 2013-2016 reported use is 4.4 inches lower than estimated (32% reduction vs. 20% reduction goal)

Sheridan LEMA success, reduced groundwater declines
GMD#4 District Wide LEMA

- GMD 4 determined rate of decline by township
- Sets 5-year allocations in inches/acre based principally on NIR for corn
  - Highest decline areas (red): 13-14 inches
  - Second highest decline (yellow): 15-16 inches
  - Purple township, 18 inches
  - Blue/Green: no restrictions
- No additional flexibilities, encourages WCAs

GMD 4 District-wide LEMA, Process

- Plan developed by GMD 4, working with members over 2015-17
- GMD’s LEMA Plan sent to chief engineer June 8, 2017
- Initial hearing held August 23, 2017; positive decision
- Second hearing held November 14, 2017
  - a group of intervenors granted expanded “due process”
  - Significant public comment provided
- On February 23, 2018, order of decision issued, returning it to District with recommended changes to improve plans administration.
- GMD accepted the recommended changes.
- On April 13, 2018, the Order of Designation issued.
GMD 4 District-wide LEMA legal challenges

• In Gove County District Court (Friesen vs. Barfield), petition for judicial review filed, challenges the process to develop the LEMA order and the validity of K.S.A. 82a-1041 (the LEMA statutory provisions), particularly allowing allocations that do not consider priority.

• In Thomas County, a petition for judicial review filed seeking review of the LEMA order, esp. as related to GMD’s authority to make final decisions on allocation appeals.
2015 Legislation: Water Conservation

*K.S.A. 82a-745. Water conservation areas; establishment procedures; duties of chief engineer; notice; orders; consent agreement; review.*

(a) Any water right owner or a group of water right owners in a designated area may enter into a consent agreement and order with the chief engineer to establish a water conservation area. The water right owner or group of water right owners shall submit a management plan to the chief engineer.

What is a WCA?

- A Water Conservation Area (WCA) is a designated area with an approved management plan developed by a water right owner(s) with the consent of the chief engineer to reduce water withdrawals while maintaining economic value via water right flexibility.
- Benefits:
  - Extending the usable lifetime of the local aquifer
  - Flexibilities such as multi-year allocations, exceed annual authorized quantities and/or allowing for new uses of the water when no impairment.
  - No hearings; streamlined process
- WCAs do not make a permanent change in the water right
- Can be limited in duration to allow water right owners to try out control
WCA’s (outside Wichita County)

- Current status:
  - 16 plans approved
  - 24,797 acres enrolled
  - 125 Water rights / 132 wells enrolled
  - 3,690 acre-feet of annual water savings
- Many more in process

*Note: WCA allocation held to historical average giving due consideration of past conservation per K.S.A. 82–3745.*
Wichita County WCA proposal development

• Unique, county-wide WCA that producers can enroll in
• Extensive process to develop proposal, driven by a local committee, initiated August 2016
• Plan approved March 2017

Wichita County WCA

• Four 7-year milestones beginning in 2017 and ending in 2045. Conservation factor from recent historic use, beginning at 29% and increasing to 50% by the last 7-year planning period
• Can use their allotment for any use made of water on any land
• Current status:
  • 24 consent agreements approved
  • 2226 acre-feet of annual water savings (first 7 years)
  • 10,673 acres enrolled (in excess of 15% of irrigated acres in county)
  • 61 wells enrolled
• WC committee asking GMD to propose WCA plan as a LEMA
Discussions initiated among water users, fall 2016 (as WCA)
Significant public process by stakeholders
Discussion moves to LEMA
Lack of consensus, LEMA stalled
6 WCAs in the area to get started: 13,848 acres, 1832 AF/year of savings

Value of Water Conservation Areas

- Water savings (generally under estimated as water users reluctant to commit to more savings than they are comfortable with)
- Flexibilities allow water users to maintain profitability
- Demonstration to others
- Discussions leading to consideration of additional LEMAs
Questions