



Department of Agriculture  
Division of Water Resources

**Regulating water for oil and gas operations**  
**Joint Committee on Energy and Environmental Policy,**  
**November 19, 2012**

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Chief Engineer

## **Kansas Water Appropriation Act**

K.S.A. 82a-728 requires a permit from DWR for all uses of surface water or groundwater except:

- Domestic Use
- Salt water or brine produced incidental to operating an oil/gas well
- **Use of less than 15 acre-feet stored in any reservoir with a total volume of less than 15 acre-feet.**
- Withdrawal of water under contract with the State of Kansas from federal storage (generally municipalities)



## What is a water right in Kansas?

- A water right is a real property right
- A water right does not constitute ownership of the water, but rather ownership of a right to use water for the specifically authorized purpose
- Water may not be pumped for oil/gas production under the water rights authorizing a different use of water (except municipal).



## Water Use for Hydraulic Fracturing

- Each hydraulic fracturing project takes approximately 8 to 10 acre-feet per project
- We have received approx. 200 hydraulic fracturing applications in 2012
- 200 projects x 10 acre-feet = 2000 acre-feet (or 650,000,000 gallon)
- 2000 acre-feet is equivalent to about 9 fully irrigated center pivots in Western Kansas
- Approx. 0.05% of total water use in Kansas

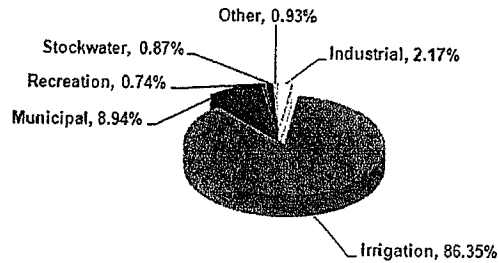


## 2011 Kansas Water Use Summary

As reported to the Division of Water Resources, Kansas Department of Agriculture  
All quantities in acre-feet  
Ditch Rights and Districts included

2011 Water Use By Use Made of Water		
Industrial	107,294	2.17%
Irrigation	4,263,898	86.35%
Municipal	441,257	8.94%
Recreation	36,498	0.74%
Stockwater	43,138	0.87%
Other	45,898	0.93%
<b>Total</b>	<b>4,937,983</b>	<b>100.00%</b>

2011 Reported Water Use  
by Type of Use



## K.S.A. 82a-727 - Temporary Permits

- Formally limited to 1.0 million gallons for up to 6 months
- Designed primarily for traditional oil/gas field operations
- No permanent water right developed
- One application per project
  - Single point of diversion and place of use
  - **Must not impair existing users**
- Not transferable

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## K.S.A. 82a-708c - Term Permits

- Allows larger quantities of water and longer periods of use up to 5 years
  - Proposed quantity and time frame must be reasonable for the proposed use
- No permanent water right is developed  
Also not subject to safe yield requirements
- Must not impair existing users

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## Use of Water from Municipal Suppliers

- Water may be obtained from a city or rural water district if they have the water to sell
- Water supply **cannot** be obtained through the use of effluent from public water suppliers
  - Consumptive use, once established, cannot be increased under any water right. (K.A.R. 5-5-3)
  - Place of use for municipal use is tied to the common distribution system
  - Effluent stream is not part of the common distribution system

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## Regulatory change in 2012

- Amended temporary permit regulation to increase limit to 4.0 million gallons (12 acre-feet) to accommodate hydraulic fracturing
- This approach allows greater control over water use at individual projects than term permits
  - One application per project, non-transferable
  - Single point of diversion and place of use
  - Shorter authorized time frames
  - Meter record keeping requirement

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## Current discussions

- GMDs 2 & 5 have requested regulations to require offsets for temporary permits of more than 1 million gallons.
  - Requiring offsets would complicate and lengthen permitting times
  - Considering legislation to facilitate short-term transfers from existing water rights
- How to deal with those not getting permits?

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**Questions?**

