Recent Legislative Changes Affecting the Texas Class V Injection Well Program

Don Redmond
Environmental Law Division
Lorrie Council
Radioactive Materials Division
Texas Commission on Environmental Quality

GWPC Annual UIC Conference February 2016
Disclaimer and Audience Agreement

The statements and opinions in this presentation are that of the presenter only and do not necessarily reflect the position of the Texas Commission on Environmental Quality or the State of Texas. By attending this presentation, you, the audience, do hereby agree to: 1) applaud politely; 2) refrain from hooting or jeering; and 3) forgo difficult questions.
The Texas Legislature

- meets every two years in odd numbered years
- session begins at noon on the second Tuesday in January and lasts 140 calendar days
- Governor may call special sessions to cover specific topics
- Legislative committees may meet and study issues during interim
DROUGHT IN TEXAS
October 26, 2010
(Released Thursday, Oct. 28, 2010)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

<table>
<thead>
<tr>
<th></th>
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<th>D0-D4</th>
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<tr>
<td>Current</td>
<td>57.82</td>
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Intensity:
- Yellow: D0 Abnormally Dry
- Red: D3 Extreme Drought
- Orange: D2 Severe Drought
- D1 Moderate Drought
- Dark Red: D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Eric Luebchansen
U.S. Department of Agriculture

http://droughtmonitor.unl.edu/
U.S. Drought Monitor
Texas

October 25, 2011
(Released Thursday, Oct. 27, 2011)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

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Intensity:
- **D0 Abnormally Dry**
- **D1 Moderate Drought**
- **D2 Severe Drought**
- **D3 Extreme Drought**
- **D4 Exceptional Drought**

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Author:
David Miskus
NOAA/NWS/NCDC/CPC

http://droughtmonitor.unl.edu/
U.S. Drought Monitor

Texas

October 30, 2012
(Released Thursday, Nov. 1, 2012)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

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Intensity:
- D0 Abnormally Dry
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The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
Michael Brown
NCDC/NOAA

http://droughtmonitor.unl.edu/
U.S. Drought Monitor
Texas

October 29, 2013
(Released Thursday, Oct. 31, 2013)
Valid 7 a.m. EDT

Drought Conditions (Percent Area)

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Intensity:
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Author:
Brian Fuchs
National Drought Mitigation Center

http://droughtmonitor.unl.edu/
U.S. Drought Monitor
Texas

October 21, 2014
(Released Thursday, Oct. 23, 2014)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

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</table>

Intensity:
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Author:
Michael Burrows
NCDC/NOAA

http://droughtmonitor.unl.edu/
DROUGHT 2015
Public Water Supply Systems Affected
as of January 27, 2016

Total number of Community water systems affected: 1,094
Total number of active Community water systems in Texas: 4,628

Resolved: A public water supply that has corrected production capacity deficiencies, or drought conditions for mandatory water use restrictions have alleviated.

Watch Voluntary: A public water supply that has reported problems with high water usage and production, but has not suffered a loss of distribution system pressure. Voluntary water use restrictions have been implemented.

Watch Mandatory: A public water supply that has reported problems with high water usage and production, but has not suffered a loss of distribution system pressure. Mandatory water use restrictions have been implemented.

Number of systems on map may not represent total number of affected systems due to different water sources or scale of map.

Texas Commission on Environmental Quality
Water Demand in Texas
Water user groups

- Cities > 500 pop: 971
- Utilities: 362
- County-Others: 254
- Manufacturing: 174
- Steam-Electric: 85
- Livestock: 254
- Mining: 229
- Irrigation: 239
Desalination
Class II/Class V Disposal Option

- Desalination increasing component of water management strategies in Texas Water Development Board’s (TWDB) State Water Plan
- TWDB Brackish Resources Aquifer Characterization System (BRACS) Studies
- In 2014, TWDB studied permitting and disposal options for disposal of desalination concentrate in Class II injection wells
- 2014 MOU between Oklahoma DEQ and OCC on dual permitting of Class II and Class V injection wells for disposal of DWTR
Class II/Class V Disposal Option

- HB 2230 (2015 Legislative Session)
- Authorizes dual use of Class II injection wells for injection of brine from desalination operations or injection of drinking water treatment residuals
- Railroad Commission of Texas regulates Class II injection wells
- TCEQ regulates Class V wells for injection of desalination brine or DWTR
Class II/Class V Disposal Option

● Requires TCEQ and RRC to enter into or amend a Memorandum of Understanding to implement the legislation

● Will require coordination between water system with waste disposal needs and Class II injection well operator with disposal capacity and authority

● TCEQ developing specific application, authorization, and SOPs
Aquifer Storage & Recovery
Aquifer Storage & Recovery

- Only 2 operating Aquifer Storage and Recovery (ASR) projects authorized in Texas: San Antonio Water System (SAWS) and City of Kerrville
- Texas Legislature previously passed legislation on ASR in 1995
- Addresses interacting regulatory requirements for Texas Surface Water Rights, underground injection, and groundwater withdrawal
Aquifer Storage & Recovery

- HB 655 (2015 Legislative Session)
- Amended Texas Water Rights program by eliminating requirement for a pilot project when using state appropriated surface water for ASR
- Amended Texas Injection Well Act to provide TCEQ exclusive authority to regulate ASR injection wells by rule, by general permit or individual permit
- Amended Groundwater Conservation Districts’ (GWCD) authority relating to ASR projects
TCEQ Review of ASR Projects

In authorizing an ASR project, TCEQ must consider:

- whether the injection will comply with applicable standards under the SDWA
- the extent to which the volume of injected water can be successfully recovered
- the effect of the ASR project on existing water wells
- the effect of water quality in the receiving formation
ASR Production Requirements

- All wells associated with an ASR project must be within one parcel of land with common ownership, lease, joint operating agreement, or contract.
- If project is located within a GWCD, the TCEQ will not authorize withdrawal of groundwater that exceeds the amount injected minus any formation loss.
- Any additional production would be subject to applicable requirements of the GWCD.
ASR Monitoring and Reporting

- Project operator must monitor and report: water injected for storage, water recovered for beneficial use, and annual water quality testing of water injected and recovered.

- For projects within GWCD jurisdiction, wells may be subject to registration and reporting requirements.

- ASR projects that withdraw more water than authorized by TCEQ may be subject to permitting, spacing and production requirements of GWCD.
TCEQ Implementation

- TCEQ published proposed rules to implement HB 655 on December 25, 2015
- Comment period for submitting comments ended on February 8, 2016
- Final rules required to be adopted by May 1, 2016
- TCEQ staff developing application requirements to incorporate specific requirements of HB 655 and rules
Don Redmond
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Lorrie Council
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