



Texas Alliance Of
Groundwater Districts

Understanding Groundwater Issues and Challenges Across the State

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Bell County Water Symposium

November 16, 2016



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TAGD=Texas Alliance of Groundwater Districts





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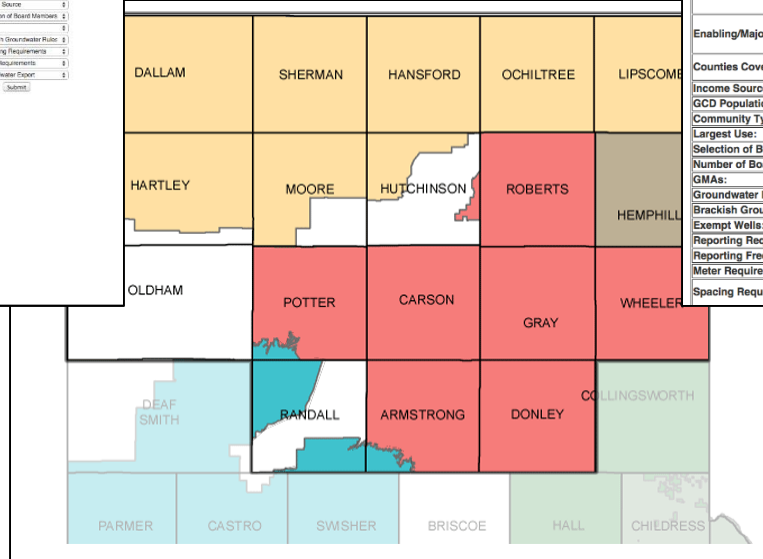
What does TAGD do?

- Educational and technical training
- Tracks legislation & agency rulemaking
- Serves as a resource for districts, the public, lawmakers, and state agencies
- Facilitates communication among GCDs
- Collects data on GCDs



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TAGD's GCD Index



North Plains Groundwater Conservation District	
Contact:	Steve Mathur General Manager 603 East First Street Dumas, Texas 79029 (808) 555-5401 http://www.npgcd.org
Enabling/Major Legislation:	Acts 1965, 54th R.S., ch. 498, General and Special Laws of Texas; Acts 1985, 69th R.S., ch. 63, General and Special Laws of Texas; Acts 1993, 80th R.S., ch. 760, General and Special Laws of Texas; Acts 1999, 76th R.S., ch. 1152, General and Special Laws of Texas
Counties Covered:	All of Lipscomb, Ochiltree, Hansford, Sherman and Dallam Counties; parts of Hartley, Moore, and Hutchinson Counties
Income Source:	Both
GCD Population:	50,001-100,000
Community Type:	Rural
Largest Use:	Agriculture
Selection of Board Members:	Elected
Number of Board Members:	7
GMAs:	GMA 1
Groundwater Export:	Yes
Brackish Groundwater Rules:	No (encompassed within current regulations of all groundwater)
Exempt Wells:	Chapter 36 exemptions only
Reporting Requirements:	Yes, for all permitted wells
Reporting Frequency:	Annually
Meter Requirements:	Yes, for all permitted wells
Spacing Requirements:	Wells must be at least 100 yards from property lines; additional spacing requirements are based on well capacity.



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What does Lloyd Gosselink do?



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GCD Powers & Responsibilities

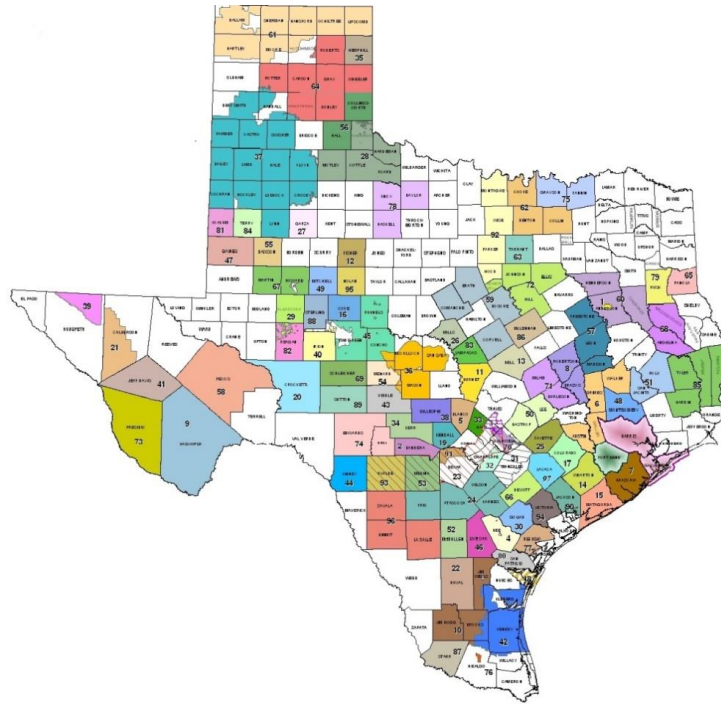
Groundwater Issues

Legislative Outlook



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GCD=Groundwater Conservation Districts





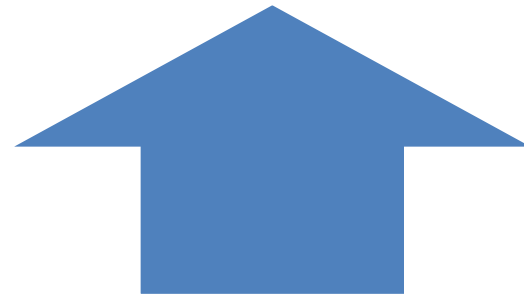
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Balancing Act



Conservation, preservation, protection,
recharging and prevention of waste of
groundwater

Rights of Landowners and
the highest practicable
level of groundwater
production





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Aquifer Management

GCD's regulate in the following ways:

- Well spacing regulations
- Acreage-based regulations
- Use-based regulations

Exemptions from permitting requirements include:

- Wells specifically exempted by the board of directors
- Certain domestic and livestock wells
- Certain wells related to oil and gas or mining activities



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Operational Components of a GCD

Well
Permitting and
Enforcement

Well
Monitoring

Public
Education

Research &
Science

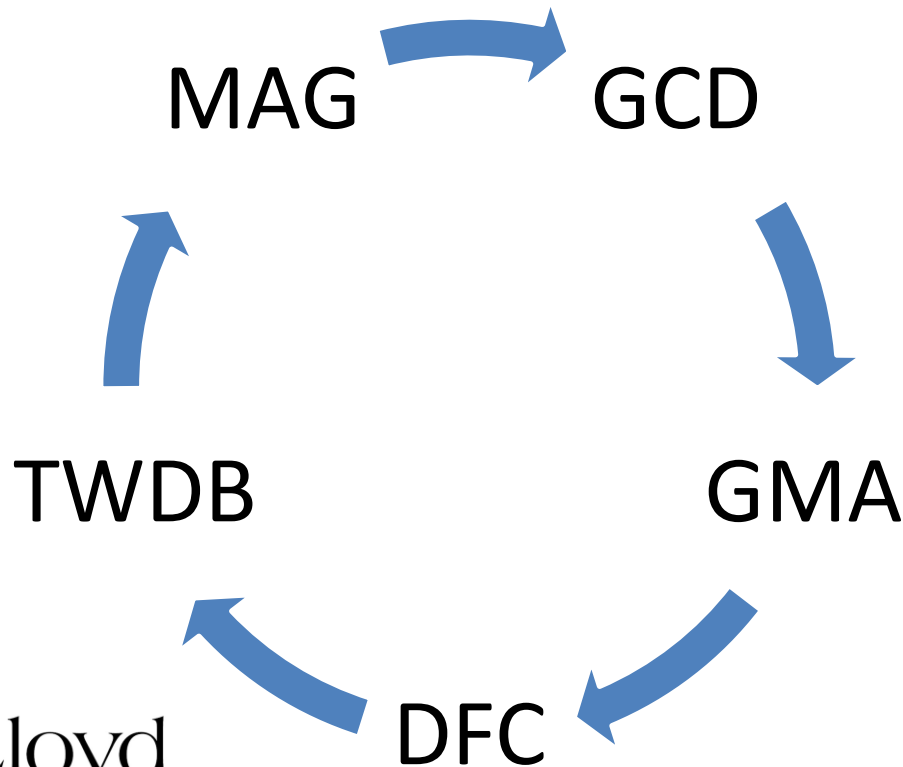
Regional
Planning

Water Quality



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Joint Planning





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DFC=Desired Future Condition

- Desired future condition = quantifiable future groundwater metric (what aquifer will look like in future); overall management objective
- GCDs must implement a balancing test and consider:

Aquifer Uses
or Conditions

State Water
Plan

Hydrological
Conditions

Private
Property
Rights

Impacts on
Subsidence

Socioeconomic
Impacts

Environmental
Impacts

Feasibility of
achieving DFC

Any other
relevant
information



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Important Roles of GCDs

Investment in Science



GCDs are investing significant amounts of money to generate regional and site-specific hydrogeologic information

Data Collection

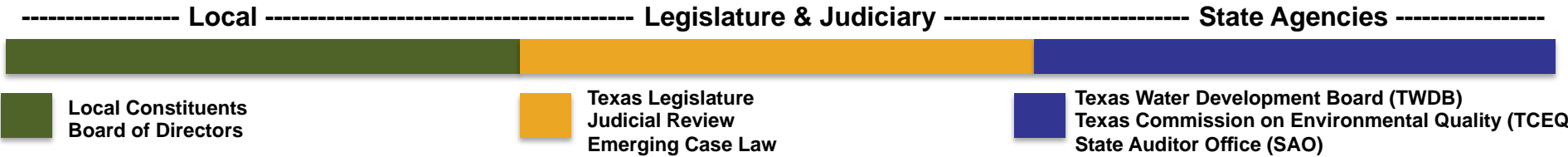


Creating baseline groundwater information that will be used for years to come

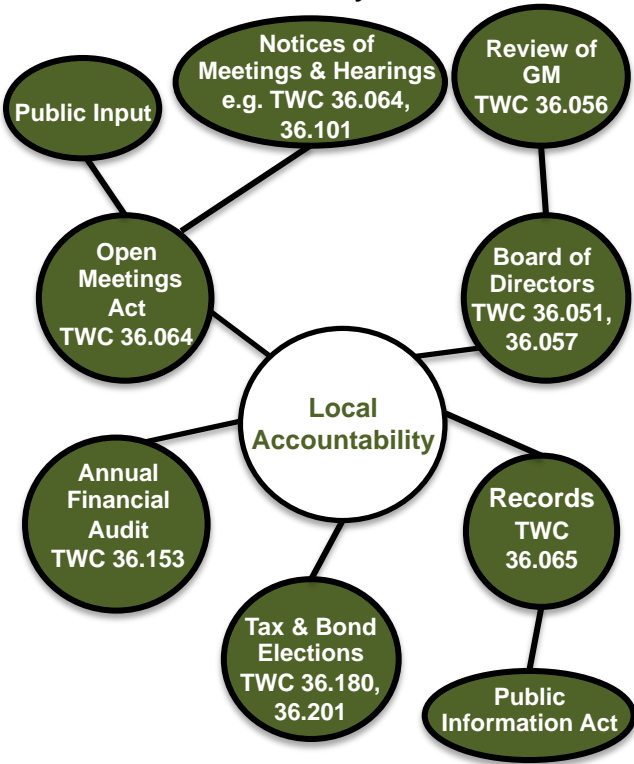
Current GCD Accountability Metrics

A review of accountability mechanisms in effect

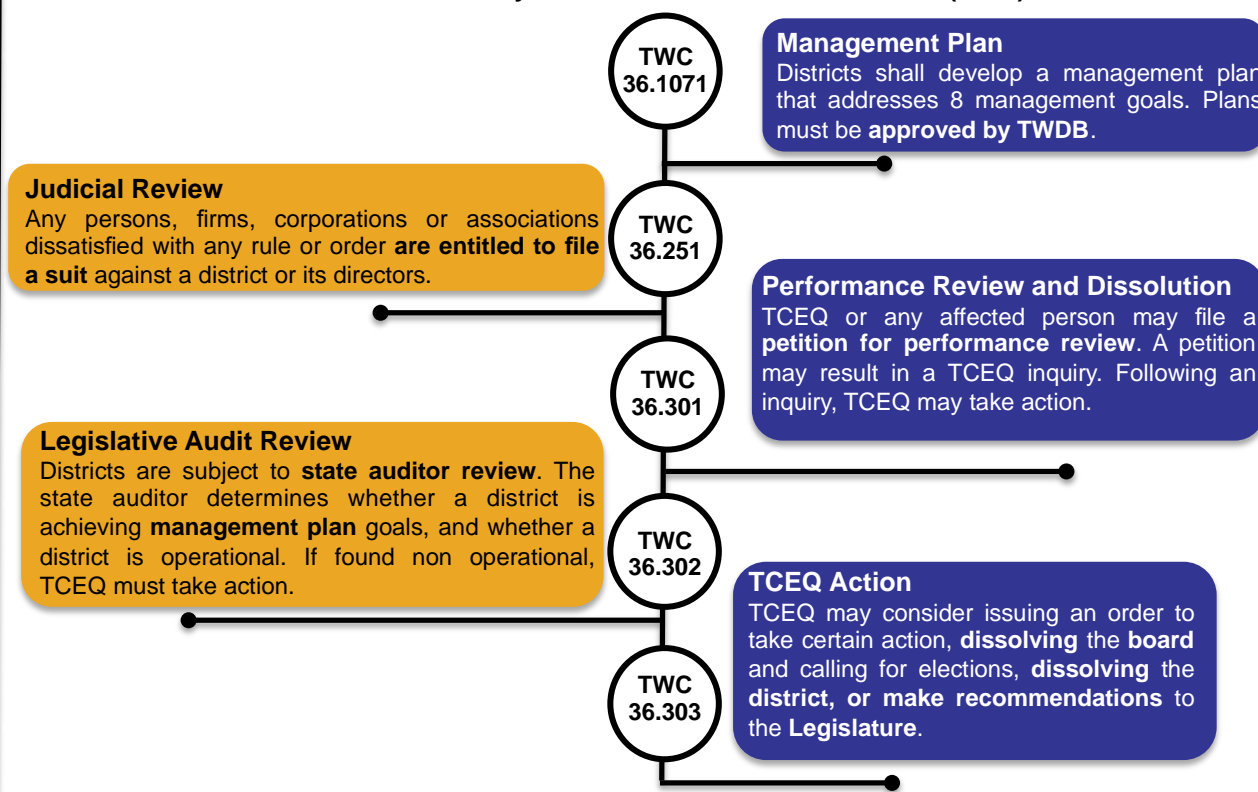
A summary of current accountability mechanisms is provided to improve the dialogue on Groundwater Conservation District (GCD) performance. Current evaluation methods ensure statutory compliance and accountability on three levels: local, legislative & judiciary, and state agencies.



Local Accountability Mechanisms



Accountability Provisions in Texas Water Code (TWC)



Opportunities

Consider importance of board & stakeholder education

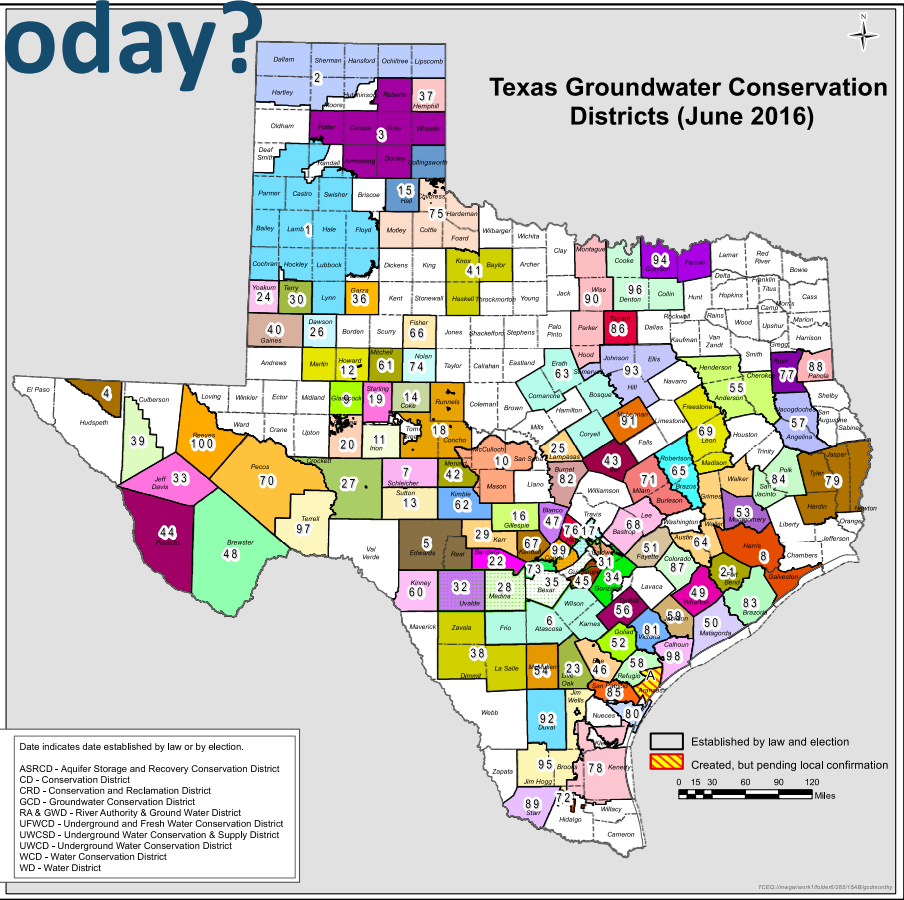
Consider improvements to legislative audit review process

Consider difference between statutory compliance and performance metrics

Where are Groundwater Conservation Districts today?

- 1 Hidalgo WCD - 9/29/1951
- 2 North Plains GCD - 1/2/1950
- 3 Panhandle GCD - 1/21/1956
- 4 Hudspeth County UWCD No. 1 - 10/5/1957
- 5 Real-Edwards C and R District - 5/30/1959
- 6 Evergreen UWCD - 8/30/1965
- 7 Plateau WWC and Supply District - 3/4/1974
- 8 Harris-Galveston Subsidence District - 4/23/1975
- 9 Glasscock GCD - 8/22/1981
- 10 Hickory UWCD No. 1 - 8/14/1982
- 11 Irion County WCD - 8/2/1985
- 12 Permian Basin UWCD - 9/21/1985
- 13 Sutton County UWCD - 4/5/1986
- 14 Coke County UWCD - 11/4/1986
- 15 Mesquite GCD - 11/4/1986
- 16 Hill Country UWCD - 8/8/1987
- 17 Barton Springs-Edwards Aquifer CD - 8/13/1987
- 18 Lipan-Kickapoo WCD - 11/3/1987
- 19 Sterling County UWCD - 11/3/1987
- 20 Santa Rita UWCD - 8/19/1989
- 21 Fort Bend Subsidence District - 8/28/1989
- 22 Bandera County RA & GWD - 11/7/1989
- 23 Live Oak UWCD - 11/7/1989
- 24 Sandy Land UWCD - 11/7/1989
- 25 Saratoga UWCD - 11/7/1989
- 26 Mesa UWCD - 1/20/1990
- 27 Crockett County GCD - 1/26/1991
- 28 Medina County GCD - 8/26/1991
- 29 Headwaters UWCD - 11/5/1991
- 30 South Plains UWCD - 2/8/1992
- 31 Plum Creek CD - 5/1/1993
- 32 Uvalde County UWCD - 9/1/1993
- 33 Jeff Davis County UWCD - 11/2/1993
- 34 Gonzales County UWCD - 11/2/1994
- 35 Edwards Aquifer Authority - 7/28/1994
- 36 Garza County UWCD - 11/5/1996
- 37 Hemphill County UWCD - 11/4/1997
- 38 Wintergarden GCD - 1/17/1998
- 39 Culberson County GCD - 5/2/1998
- 40 Llano Estacado UWCD - 11/31/1998
- 41 Rolling Plains GCD - 1/26/1999
- 42 Menard County UWCD - 8/14/1999
- 43 Clearwater UWCD - 8/21/1999
- 44 Presidio County UWCD - 8/31/1999
- 45 Guadalupe County GCD - 11/14/1999
- 46 Bee GCD - 1/20/2001
- 47 Blanco-Pedernales GCD - 1/23/2001
- 48 Brewster County GCD - 11/6/2001
- 49 Coastal Bend GCD - 11/6/2001
- 50 Coastal Plains GCD - 11/6/2001
- 51 Fayette County GCD - 11/6/2001
- 52 Comal County GCD - 11/6/2001
- 53 Lone Star GCD - 11/6/2001
- 54 McMullen GCD - 11/6/2001
- 55 Neches & Trinity Valleys GCD - 11/6/2001
- 56 Pecan Valley GCD - 11/6/2001
- 57 Pineywoods GCD - 11/6/2001
- 58 Refugio GCD - 11/6/2001
- 59 Texana GCD - 11/6/2001
- 60 Kinney County GCD - 11/2/2002
- 61 Lone Wolf GCD - 2/2/2002
- 62 Kimble County GCD - 5/3/2002
- 63 Middle Trinity GCD - 5/4/2002
- 64 Bluebonnet GCD - 11/5/2002
- 65 Brazos Valley GCD - 11/5/2002
- 66 Clear Fork GCD - 11/5/2002
- 67 Cow Creek GCD - 11/5/2002
- 68 Lost Pines GCD - 11/5/2002
- 69 Mid-East Texas GCD - 11/5/2002
- 70 Middle Pecos GCD - 11/5/2002
- 71 Post Oak Savannah GCD - 11/5/2002
- 72 Red Sands GCD - 11/5/2002
- 73 Trinity Glen Rose GCD - 11/5/2002
- 74 Wes-Tex GCD - 11/5/2002
- 75 Gateway GCD - 5/3/2003
- 76 Hays Trinity GCD - 5/3/2003
- 77 Rusk County GCD - 6/5/2004
- 78 Kennedy County GCD - 11/2/2004
- 79 Southeast Texas GCD - 11/2/2004
- 80 Corpus Christi ASRCD - 6/17/2005
- 81 Victoria County GCD - 8/5/2005
- 82 Central Texas GCD - 9/24/2005
- 83 Brazoria County GCD - 11/8/2005
- 84 Lower Trinity GCD - 11/7/2006
- 85 San Patricio County GCD - 5/12/2007
- 86 Northern Trinity GCD - 5/15/2007
- 87 Colorado County GCD - 11/6/2007
- 88 Panola County GCD - 11/6/2007
- 89 Starr County GCD - 11/6/2007
- 90 Upper Trinity GCD - 11/6/2007
- 91 Southern Trinity GCD - 6/19/2009
- 92 Duval County GCD - 7/25/2009
- 93 Prairielands GCD - 9/1/2009
- 94 Red River GCD - 9/1/2009
- 95 Brush Country GCD - 11/3/2009
- 96 North Texas GCD - 12/1/2009
- 97 Terrell County GCD - 11/6/2012
- 98 Calhoun County GCD - 11/4/2014
- 99 Comal Trinity GCD - 6/17/2015
- 100 Reeves County GCD - 11/3/2015

Pending Confirmation
A - Aransas County GCD



Texas Commission on Environmental Quality

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Map printed June 1, 2016.



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GCD Powers & Responsibilities

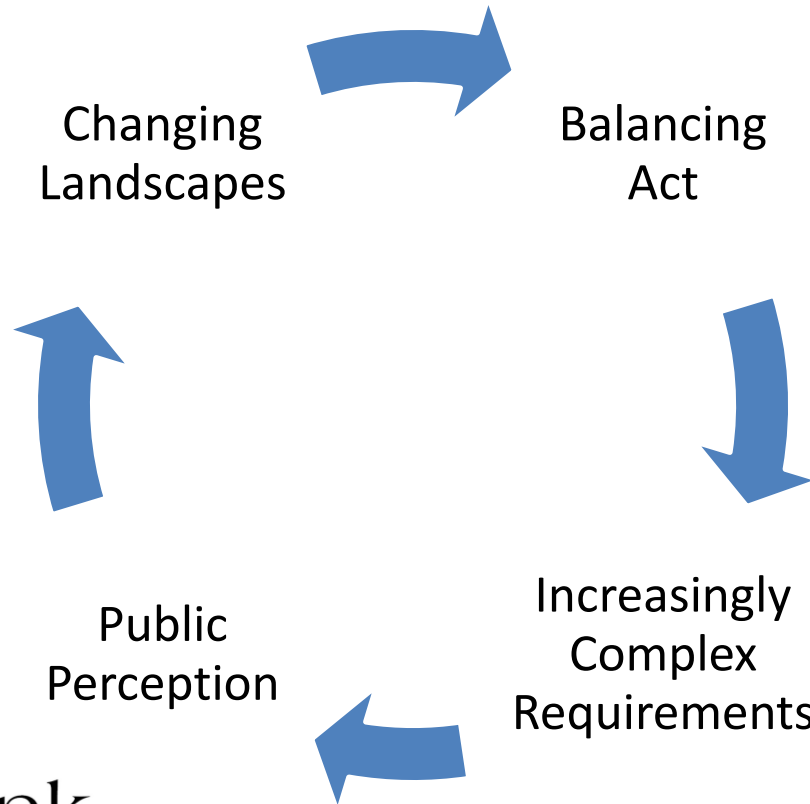
Groundwater Issues

Issues & Legislative Outlook



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Management Challenges





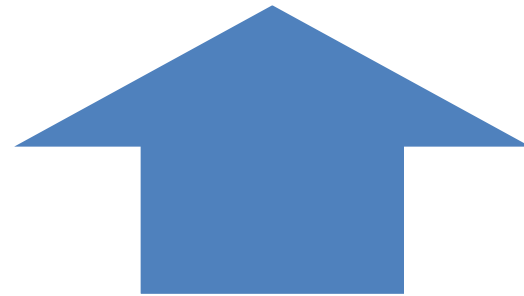
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Balancing Act

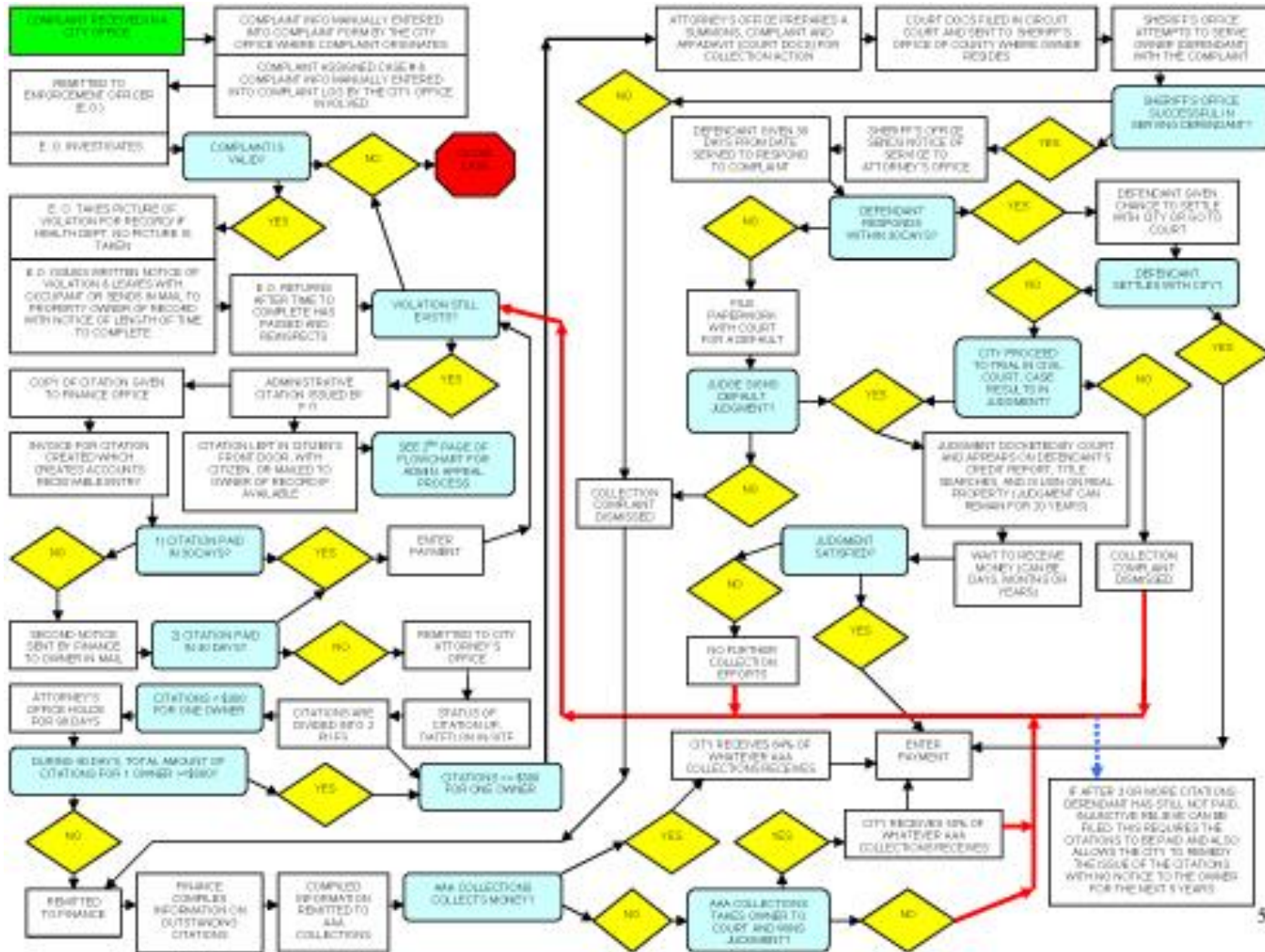


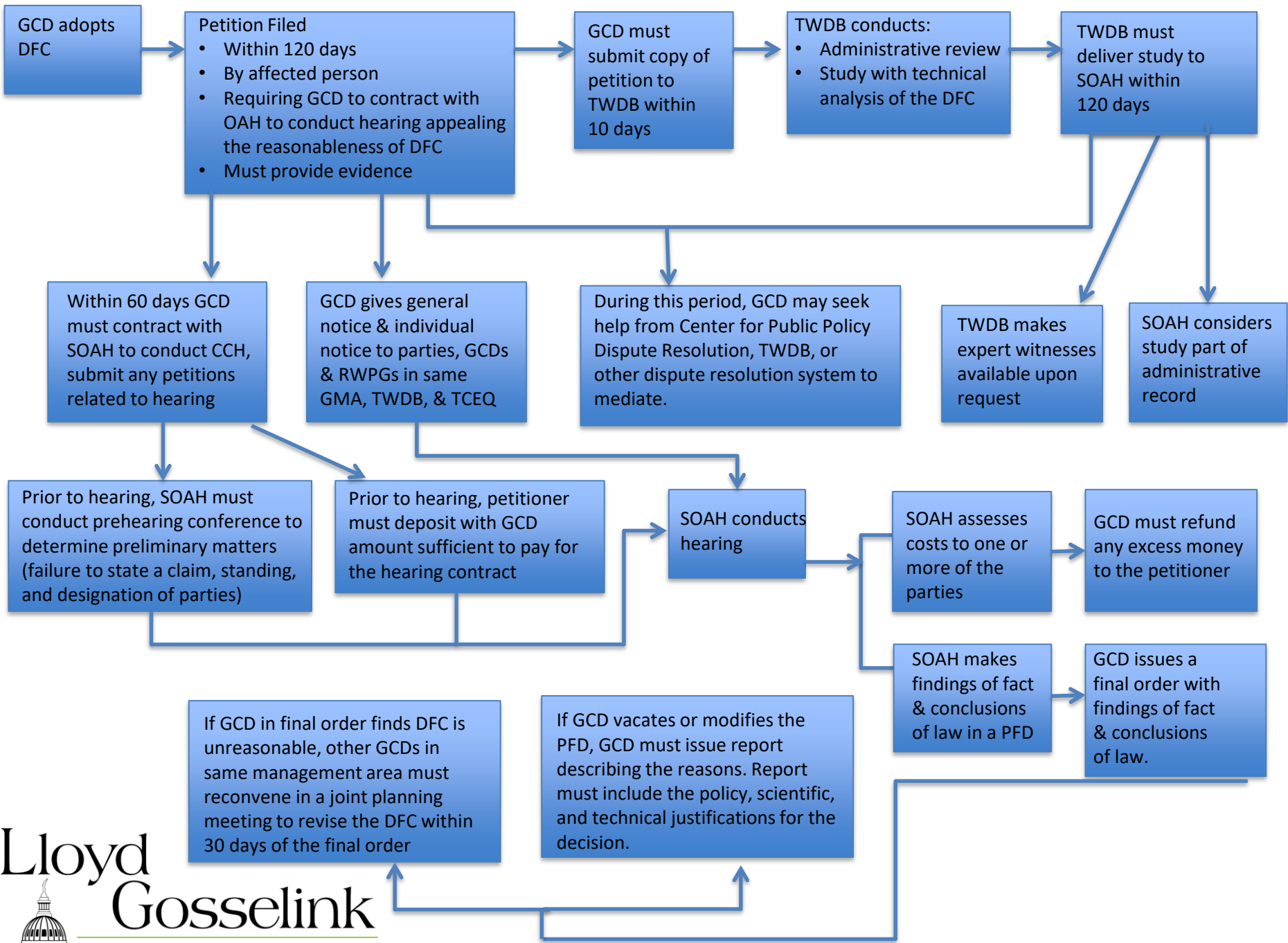
Conservation, preservation, protection,
recharging and prevention of waste of
groundwater

Rights of Landowners and
the highest practicable
level of groundwater
production



Increasingly Complex Requirements







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Changing Landscapes: Policy drivers in Texas Groundwater



Legislation + Agency Rulemaking
Case Law
Emerging Technologies
Environmental Factors
Population Dynamics



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Public Perception

Best Available Science

Policy Decisions

-
- Population Dynamics
 - Aquifer Conditions
 - Forecasting
 - Local Industry
 - Socio Economic Considerations



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So what are the main Groundwater Issues?

- Uniformity
- Performance
- Groundwater Availability
- Permitting



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GCD Powers & Responsibilities

Groundwater Issues

Legislative Outlook



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Texas Legislature 101

- Meets 140 days every other year in Regular Session.
- Will meet again in January 2017
- 181 State Legislators
 - 150 State Representatives in Texas House
 - State Representatives represent approximately 167,000 citizens
 - 31 State Senators in Texas Senate
 - State Senators represent approximately 806,000 citizens



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Legislative Dates of Interest

- General Election – November 8, 2016
- Bill Pre-filing begins – November 14, 2016
- 1st Day of Regular Session – January 10, 2017
- 60-Day Bill Filing Deadline – March 10, 2017
- Adjournment / Sine Die – May 29, 2017
- Post-Session 20 deadline for Governor Action – June 18, 2017



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Past Significant Bills

- HB 200 – DFC Appeals
- HB 655 – Aquifer Storage and Recovery
- HB 30 – Brackish Groundwater Production Zones
- SB 854 – Permit Renewals with GCDs
- HB 3163 – GCD Board Member Liability
- HB 930 – Water Well Driller & Pump Installer Apprenticeship Program



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Past Significant Bills

- HB 1221 – Disclosure of GCD by Seller of Property
- HB 2179 – GCD Permitting Decisions and Contested Cases
- HB 2767 – Chapter 36 Clean-Up
- HB 1232 – TWDB Aquifer Mapping
- HB 2647 – Power Generation Permitting Exception **VETOED**
- SB 1336 – GCD Enabling Act Clean Up
- HB 950 – State Auditor Review of GCDs



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Groundwater Legislative Issues

- Statewide or Aquifer-Wide Management of Groundwater
- Correlative Rights
- Application of Oil and Gas Legal Principles to Groundwater
- GCD Permitting Process
- Groundwater Management Area (GMA) / DFC Process
- Export Permits
- Authorization of GCDs to use On-Line Banking
- State Auditor Oversight of GCDs



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Questions?

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