

# GCDs

## What they do, why they matter & 1917 Conservation Amendment

Sarah Rountree Schlessinger

Nov. 15, 2017

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# 1917 Conservation Amendment

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## GCD Powers & Responsibilities

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### Why they matter

Who is TAGD?



**TAGD**

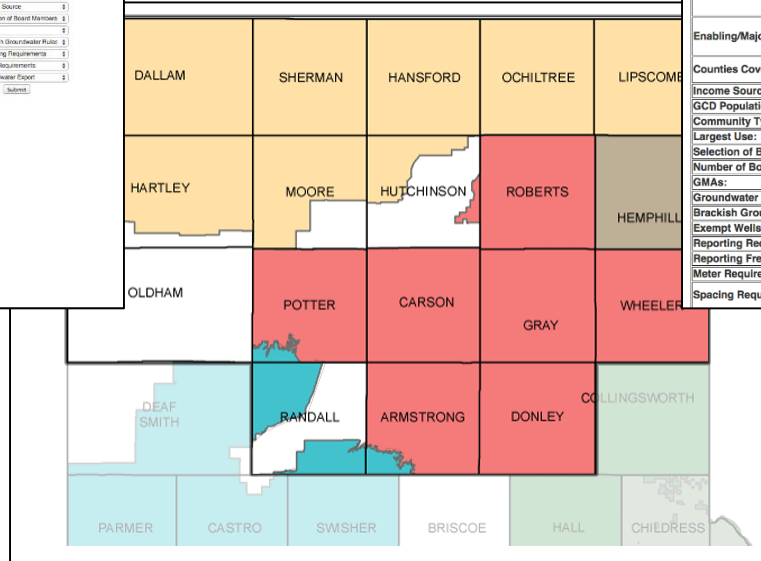
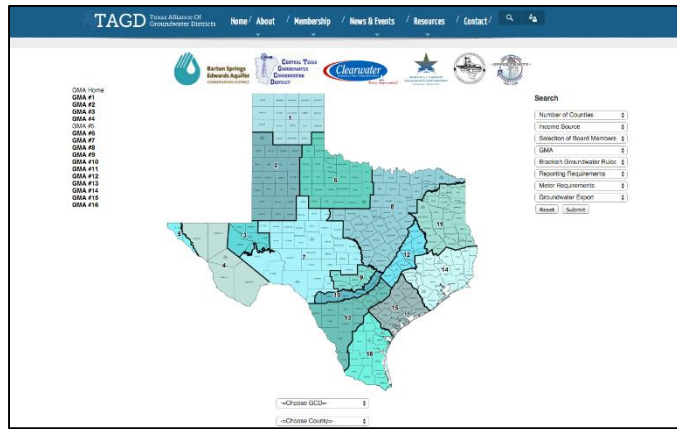
TEXAS ALLIANCE OF  
GROUNDWATER DISTRICTS

# What does TAGD do?

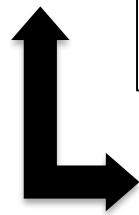
- Educational and technical training
- Tracks legislation & agency rulemaking
- Serves as a resource for districts, the public, lawmakers, and state agencies
- Facilitates communication among GCDs
- Collects data on GCDs



# TAGD's GCD Index



TAGD Texas Alliance of Groundwater Districts	
North Plains Groundwater Conservation District	
Contact:	Steven Withour General Manager 603 East First Street Dumas, Texas 79029 (806) 935-6401 <a href="http://www.npgcd.org">http://www.npgcd.org</a>
Enabling/Major Legislation:	Acts 1955, 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 1983, 68th 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
GMA:	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.



[www.texasgroundwater.org](http://www.texasgroundwater.org)

# Groundwater Conservation Districts

## FAQs



### What is a Groundwater Conservation District?

GCDs are political subdivisions of the state created to protect and balance private groundwater interests with the conservation, preservation, protection, recharging, and prevention of waste of groundwater, and the control of subsidence caused by withdrawal.

### What does a GCD do?

- Establish rules for the spacing and drilling of all water wells
- Consider and permit non-exempt water wells
- Maintain records of non-exempt wells in a district
- Submit management plans to Texas Water Development Board for approval
- Collaborate regionally in joint planning for the establishment of DFCs
- Collect water level and water quality data on aquifers
- Educate stakeholders on water conservation
- Work to prevent harm to the aquifer due to pumping or contamination



### How do GCDs allocate their budgets?



Education & Outreach



Science & Research



Operations



Conservation



Regional Planning

### How many GCDs are there in Texas?

Currently, there are **98** GCDs plus 2 subsidence districts.

### What rules must a GCD follow?

GCDs are governed by Chapter 36 of the Texas Water Code. As political subdivisions of the state, they are also subject to Chapter 49 of the Texas Administrative Code. Based on the rules established by the State, each GCD creates policies to accomplish the goals of their District.

### Do I have to register my well with my GCD?

Yes, state law requires all wells to be registered with the GCD. This does not mean that all wells require a permit. All domestic wells and livestock wells that produce less than 25,000 gallons per day are exempt from permits. A GCD has the ability to exempt others in their rules.



## More GCD FAQs

### What is a management plan?

A management plan outlines a GCD's goals and course of action to achieve those goals. The management plan is submitted to TWDB for approval, and rules necessary to implement the management plan are adopted by each district.

### What is a Desired Future Condition?

The desired future condition is a metric that is established during the joint planning process by GCDs in a common Groundwater Management Area (GMA). The DFCs provide for consistency in groundwater management in the GMA and a balance between groundwater protection and production.

### How are GCDs funded?

GCDs are funded through property taxes, permitting fees and/or usage fees.

## Groundwater Terms

### Aquifer

An underground geological formation able to store and yield water in useable amounts. Aquifers in Texas can consist of sand, gravel, limestone, granite, and many other rock types that have pores or spaces for water to pass through.

### Aquitard

An aquitard, or confining layer, is a zone within the earth that restricts the flow of groundwater.

### Total Dissolved Solids (TDS)

TDS refers to the total concentration of dissolved constituents in solution. A TDS level of less than 1000 ppm is often considered freshwater, although many Texans' drinking water has a higher TDS.

### Cone of Depression

A cone of depression is a conically shaped area of decreased water level (or pressure) that occurs when water is withdrawn from an aquifer. If wells are too close to each other, these cones may overlap and cause interference resulting in abnormally low water levels in those wells. In areas that withdraw more water than is recharged or flows to that area, a semi-permanent regional cone of depression may occur.

## Abandoned Wells & Water Quality

There is a high environmental risk associated with abandoned or deteriorated wells, as they are a direct conduit from the surface to our groundwater resources. Because of this risk, it is highly recommended to have abandoned or deteriorated wells plugged. Some GCDs have established programs to assist landowners in plugging abandoned wells.



### How often should I have my well water tested?

It is recommended that well owners have their water professionally tested annually or when an observed change in water quality occurs.

### Who can disinfect my well water?

It is recommended to contact a licensed water well driller or a pump installer to professionally disinfect your well.

[texasgroundwater.org](http://texasgroundwater.org)

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# 1917 Conservation Amendment

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## GCD Powers & Responsibilities

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Why they matter

- In 1913, it started raining...

# 1904

- Texas passed a constitutional amendment that allowed the creation of water management districts that could accrue debt equal to a quarter of the value of the property of the district

# 1917 Conservation Amendment

- The Texas Conservation Districts Amendment (Proposition 1) was a legislatively referred constitutional amendment
- Approved by Texas voters on August 21<sup>st</sup>, 1917
- Article 16, Section 59 of the Texas Constitution
- Enabled the creation of conservation and reclamation districts able to accrue unlimited debt and levy taxes to finance management

# Conservation Amendment proclaims:

“The conservation and development of all of the natural resources of this State {lists uses} and the preservation and conservation of all such natural resources of the State are each and all hereby declared public rights and duties; and the Legislature shall pass all such laws as may be appropriate thereto”

# How has it impacted us?

- Foundation of State's public policy on water management, and its right to use it
- Allowed legislature to create laws to regulate and tax natural-resource management
- Paved the way for the RA's and GCDs



UNDERGROUND WATER CONSERVATION DISTRICTS—  
ORGANIZATION—POWERS

CHAPTER 306

H. B. No. 162

An Act amending Chapter 25, Acts of the Regular Session, Thirty-ninth Legislature, 1925, by adding a Section thereto providing for the creation and organization of underground water conservation districts to provide for the conservation, preservation, protection and recharging and the prevention of waste of underground water; prescribing the powers, functions and limitations of such districts; defining terms and prescribing standards to govern the operation of such districts and the adoption, promulgation and enforcement of rules and regulations thereof; recognizing individual ownership of underground water; authorizing the State Board of Water Engineers to designate underground water reservoirs and subdivisions thereto; providing for appeals from orders, rules, regulations and acts hereunder; containing a saving clause; and declaring an emergency.

*Be it enacted by the Legislature of the State of Texas:*

Section 1. That Chapter 25, Acts of the Regular Session of the Thirty-ninth Legislature of the State of Texas, 1925, be and the same is hereby amended <sup>24</sup> by adding thereto Section 3c to provide as follows:

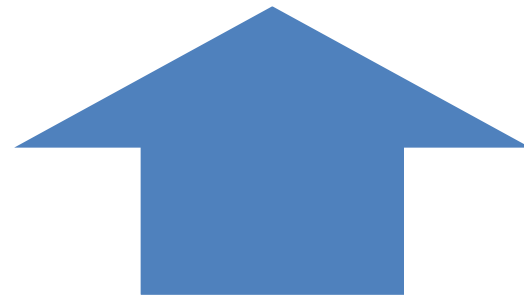
# GCD Mandate



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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# 1917 Conservation Amendment

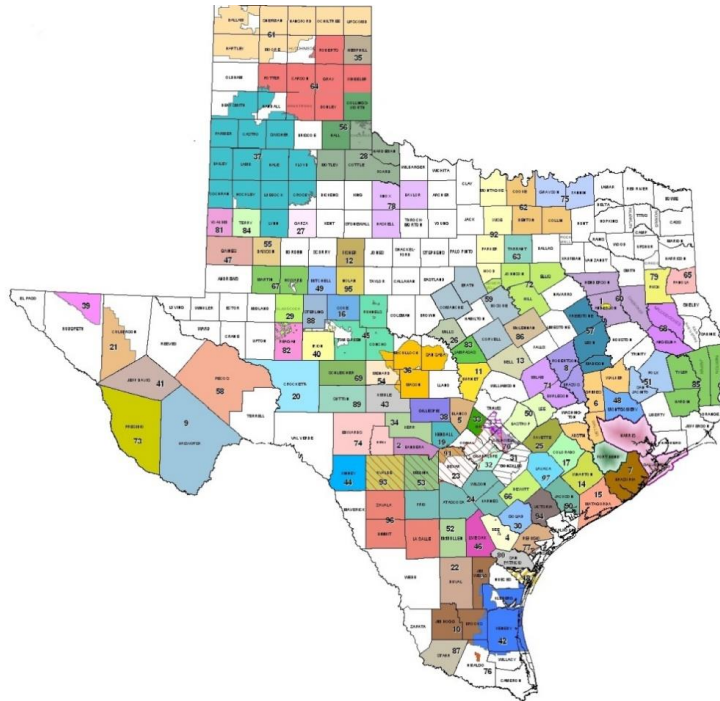
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## GCD Powers & Responsibilities

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Why they matter

# GCD=Groundwater Conservation Districts



General Statutory Authority + Specific Enabling Legislation

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## Powers and Duties

Participate in Joint Planning & establish a DFC

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Develop & adopt a Mgmt Plan

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Develop Rules to implement Mgmt Plan & achieve DFC

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Use Chapter 36 Toolbox to determine well spacing, permitting structure, production limits on wells, etc.

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Issue permits, register wells, and ensure proper drilling completion

# Balancing Act



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



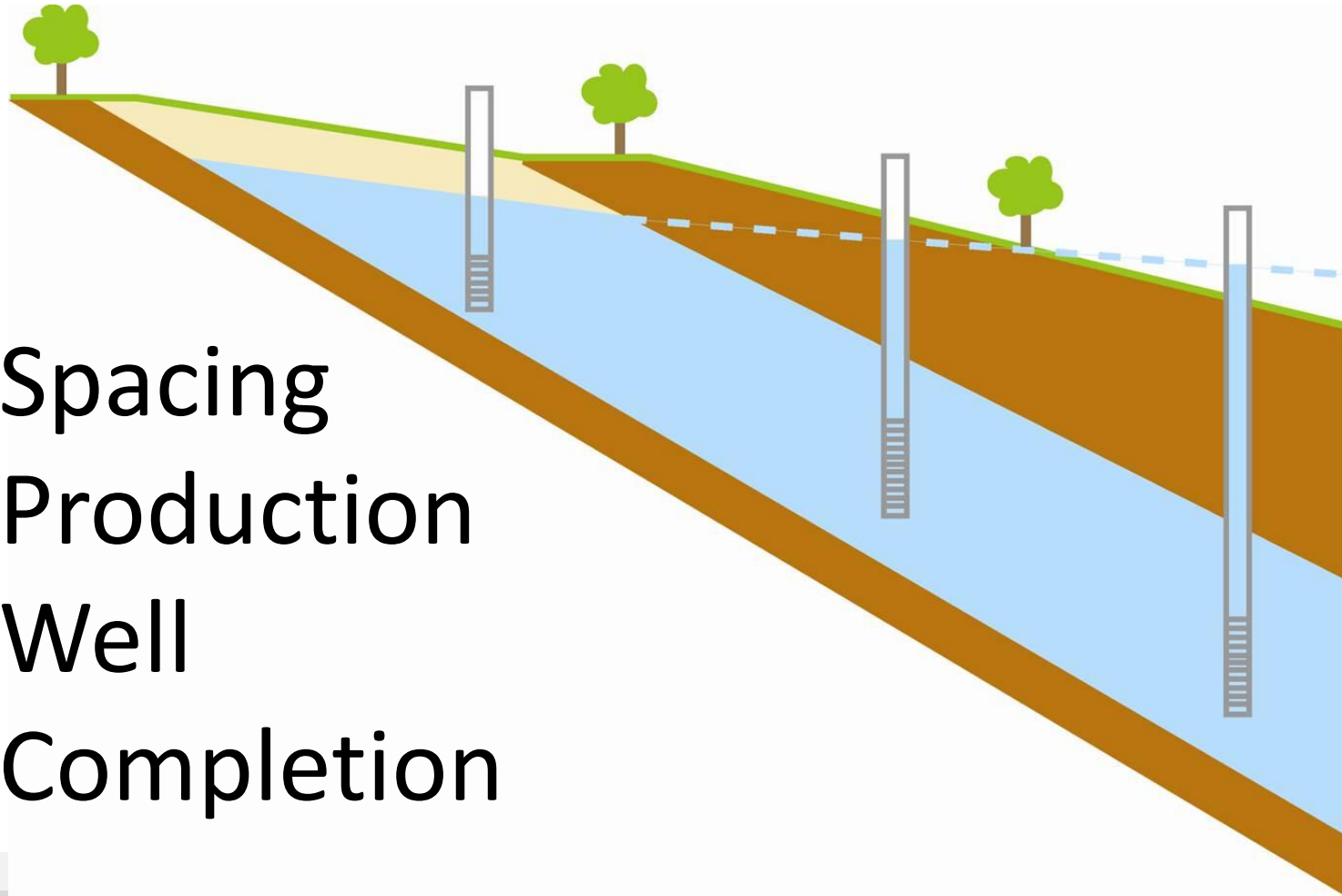
Rights of Landowners and  
the highest practicable  
level of groundwater  
production



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GROUNDWATER DISTRICTS

# Groundwater Wells



1. Spacing
2. Production
3. Well Completion

# Operational Components of a GCD

Well Permitting and  
Enforcement

Regional Planning

Research & Science

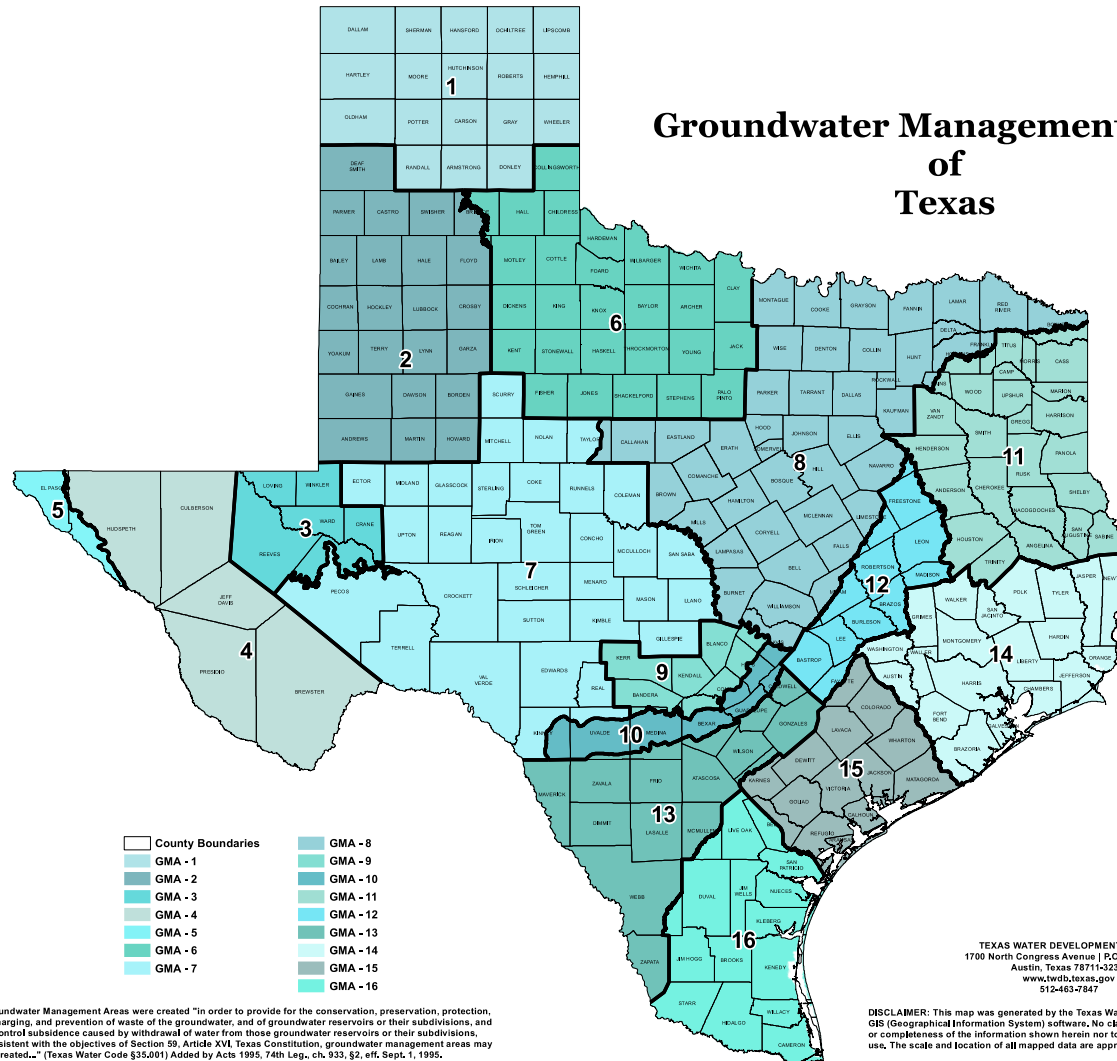
Well Monitoring

Public Education

Water Quality



# Groundwater Management Areas of Texas



Groundwater Management Areas were created "in order to provide for the conservation, preservation, protection, recharging, and prevention of waste of the groundwater, and of groundwater reservoirs or their subdivisions, and to control subsidence caused by withdrawal of water from those groundwater reservoirs or their subdivisions, consistent with the objectives of Section 59, Article XVI, Texas Constitution, groundwater management areas may be created..." (Texas Water Code §35.001) Added by Acts 1995, 74th Leg., ch. 933, §2, eff. Sept. 1, 1995.

The responsibility for Groundwater Management Area delineation was delegated to the Texas Water Development Board (Section 35.004, Chapter 35, Title 2, Texas Water Code). The initial Groundwater Management Area delineations were adopted on December 15, 2002 (56.23, TWDB Rules).

TEXAS WATER DEVELOPMENT BOARD  
1700 North Congress Avenue | P.O. Box 13231  
Austin, Texas 78711-3231  
[www.twdb.texas.gov](http://www.twdb.texas.gov)  
512-463-7847

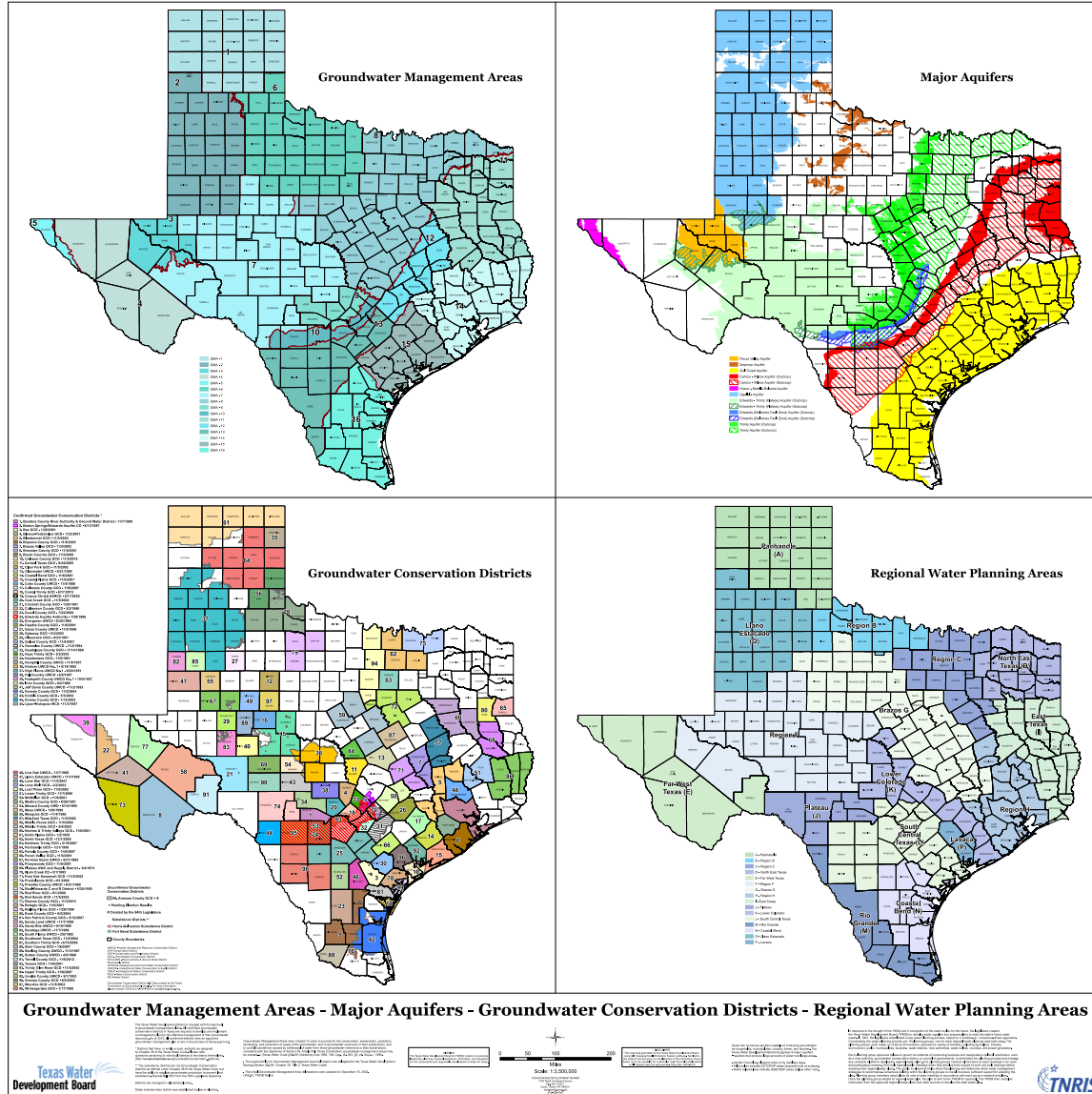
DISCLAIMER: This map was generated by the Texas Water Development Board using GIS (Geographical Information System) software. No claims are made to the accuracy or completeness of the information shown herein nor to its suitability for a particular use. The scale and location of all mapped data are approximate. Map date: JULY 2015

MISSION: The Texas Water Development Board's (TWDB) mission is to provide leadership, planning, financial assistance, information, and education for the conservation and responsible development of water for Texas.

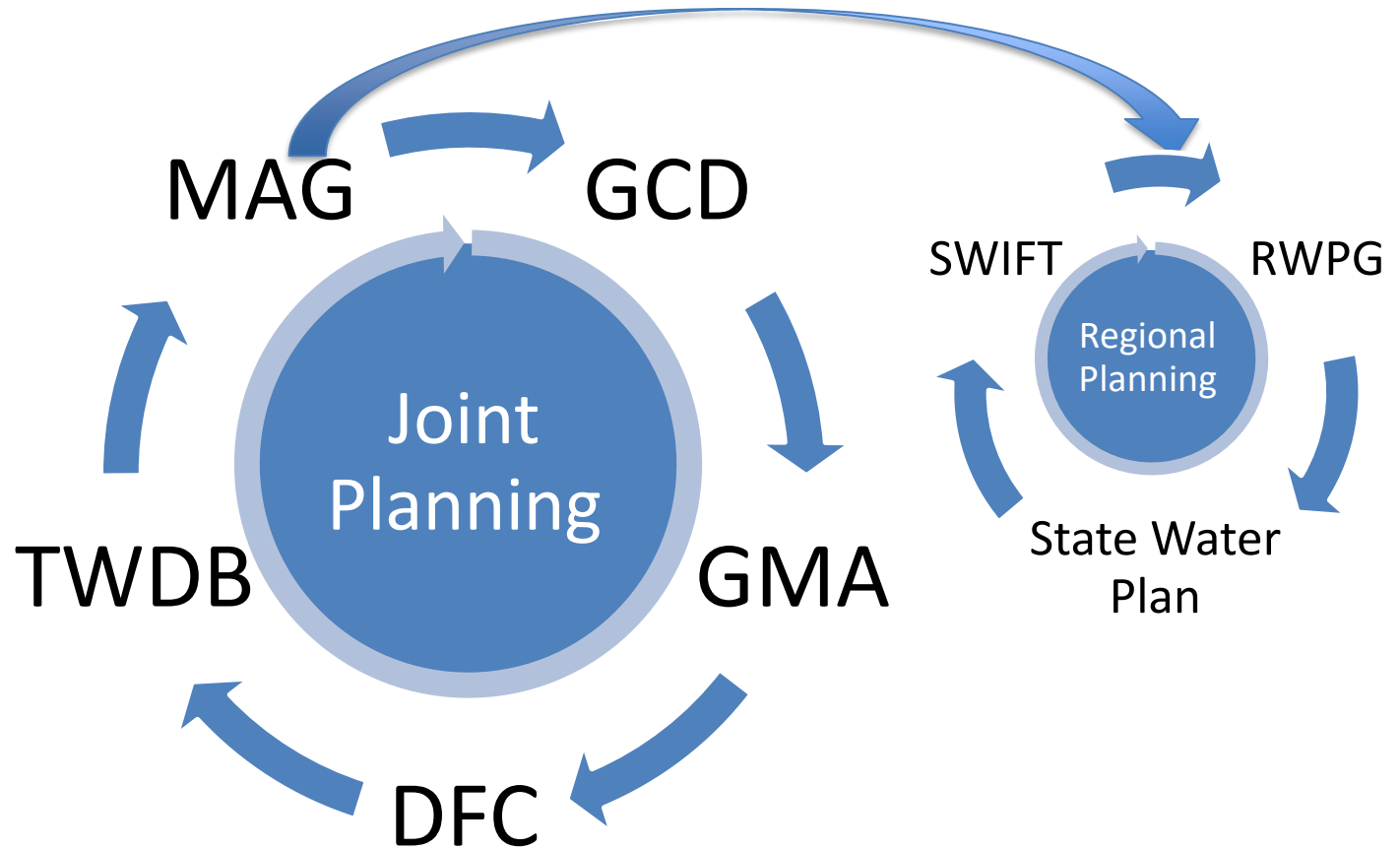
**Texas Water  
Development Board**



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GROUNDWATER DISTRICTS



# Regional & Joint Planning



# Science & Policy

MAG

DFC

Groundwater Science

Groundwater Policy



Physical Expression of  
Aquifer Capacity

Aquifer Uses or Conditions	State Water Plan	Hydrological Conditions
Private Property Rights	Impacts on Subsidence	Socioeconomic Impacts
Feasibility of achieving DFC	Any other relevant information	Environmental Impacts



Policy Decision of  
Aquifer Conditions



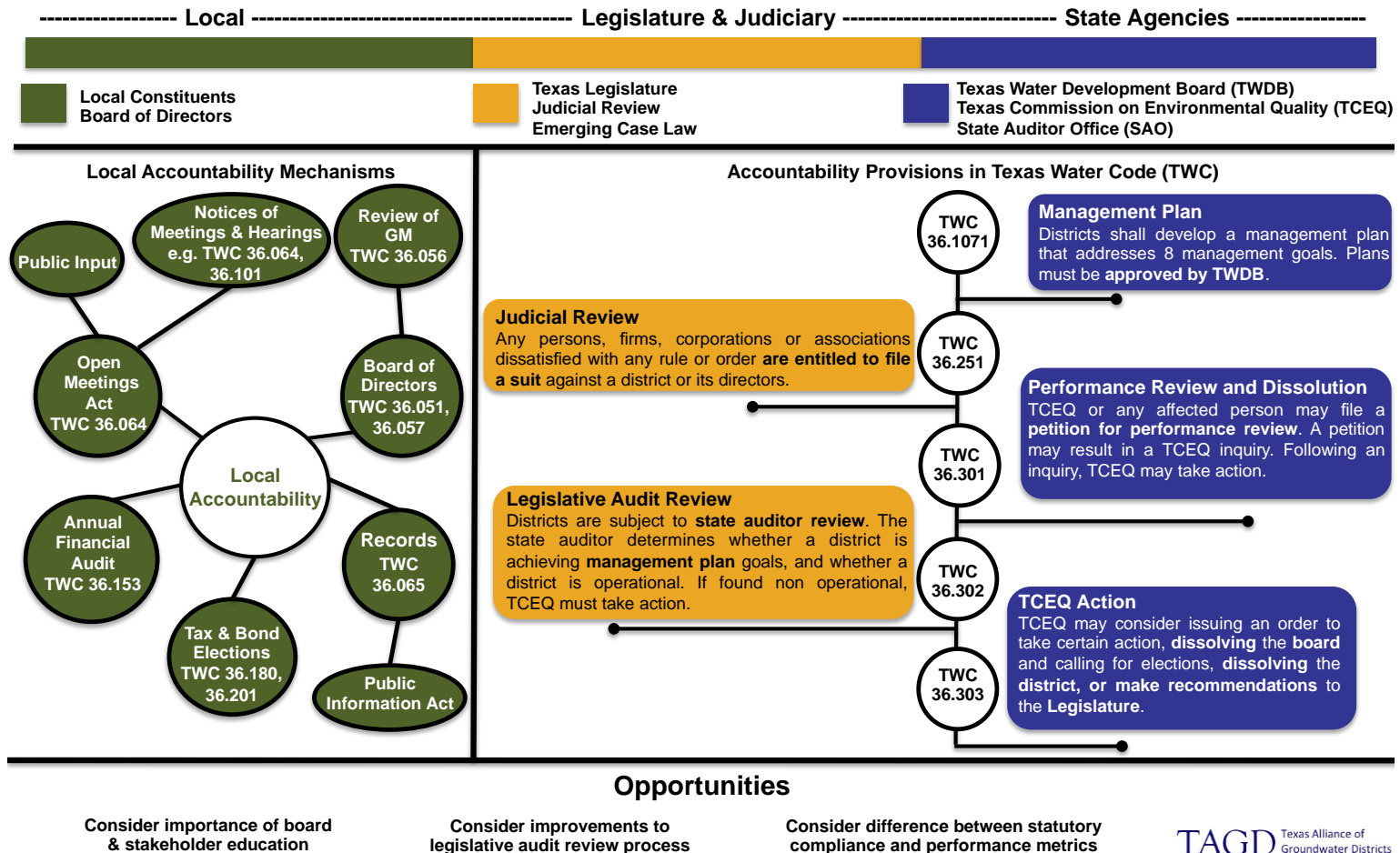
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# Current GCD Accountability Metrics

A review of accountability mechanisms in effect

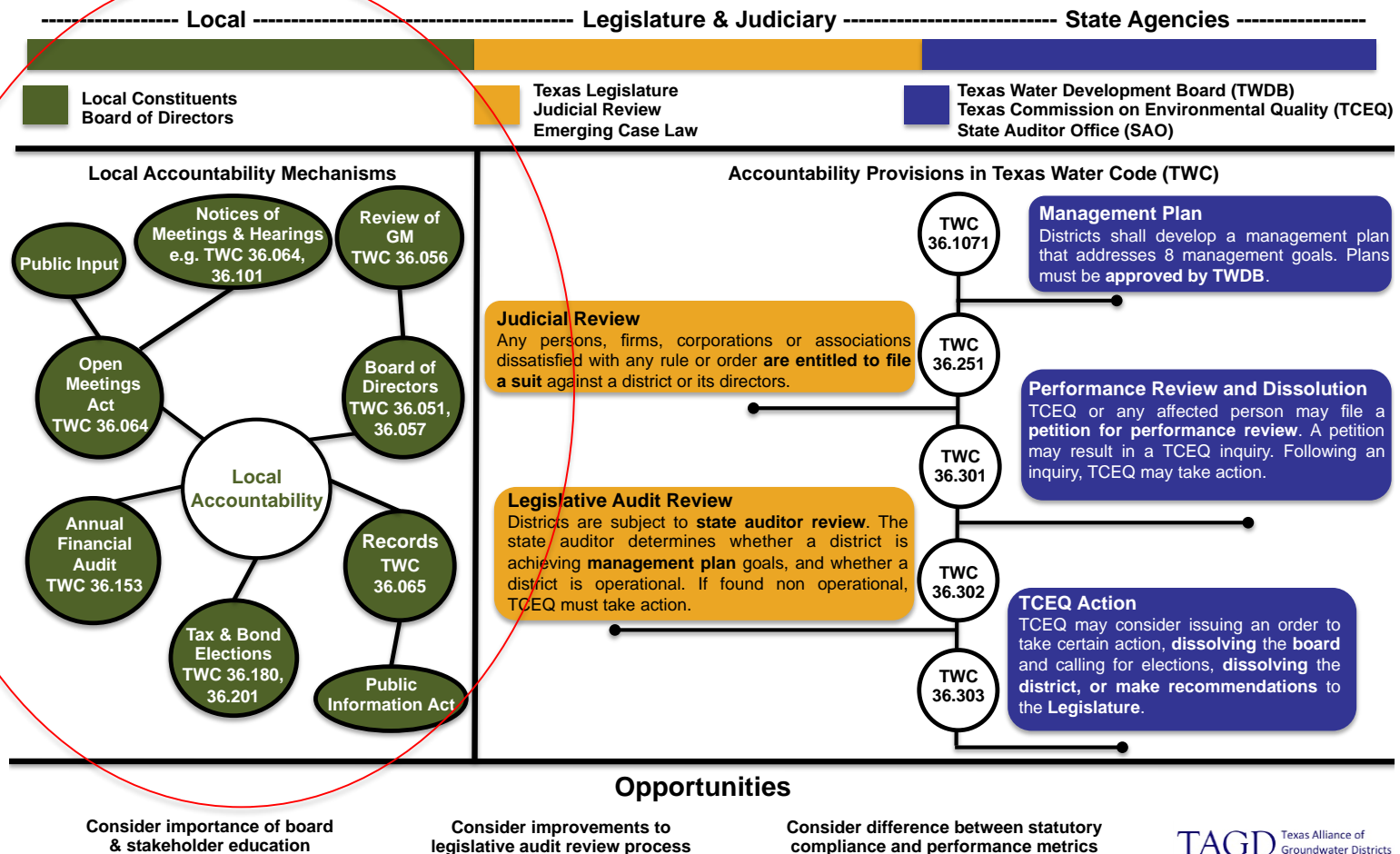
A summary of current accountability mechanisms is provided to improve the dialogue on Groundwater Conservation District (GCD) performance. Current evaluation methods ensure statutory compliance and accountability on three levels: local, legislative & judiciary, and state agencies.



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Why they matter

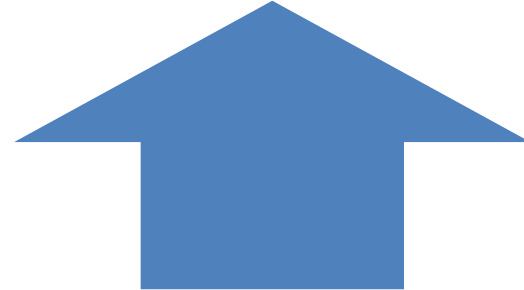
# GCDs maintain the balance



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

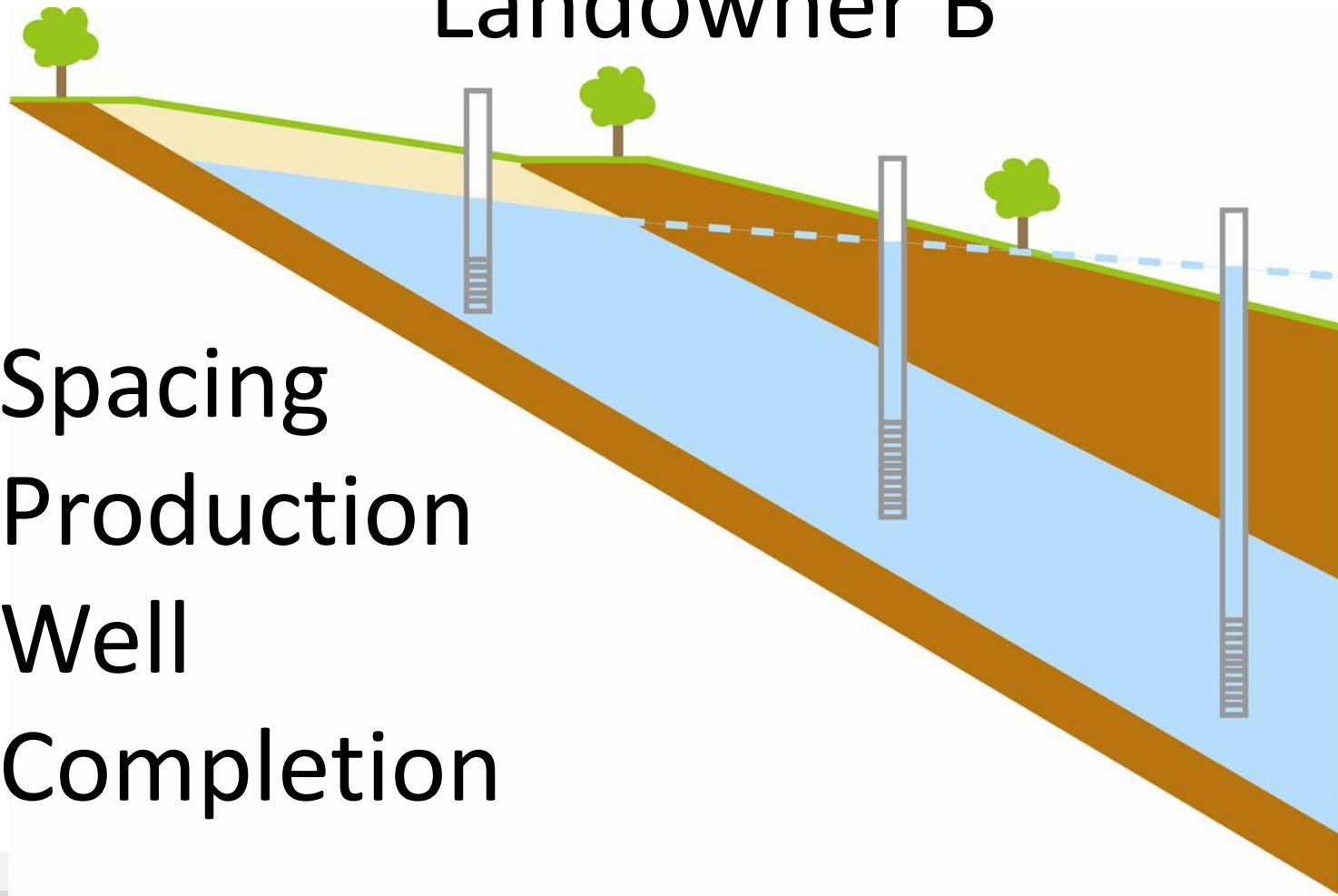


Rights of Landowners and  
the highest practicable  
level of groundwater  
production





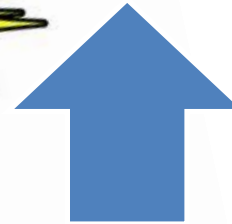
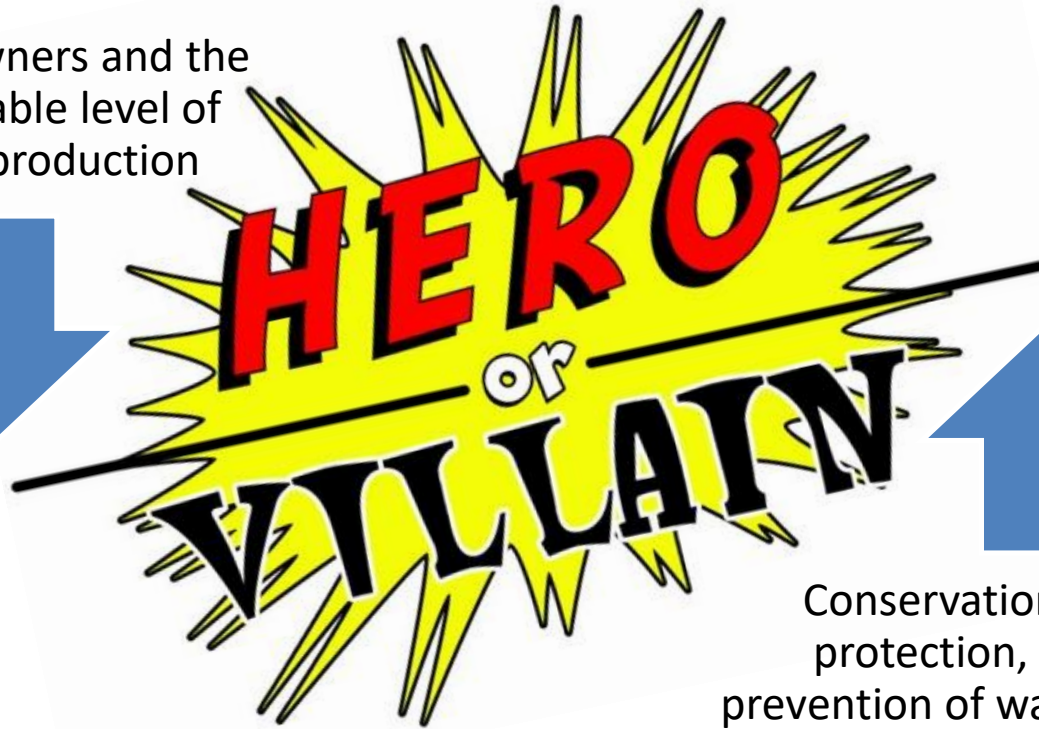
# Protecting Landowner A from Landowner B



1. Spacing
2. Production
3. Well Completion

# GCD Challenge: Public Perception

Rights of Landowners and the  
highest practicable level of  
groundwater production



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

# GCDs Respond to Changing Landscapes



Legislation + Agency  
Rulemaking

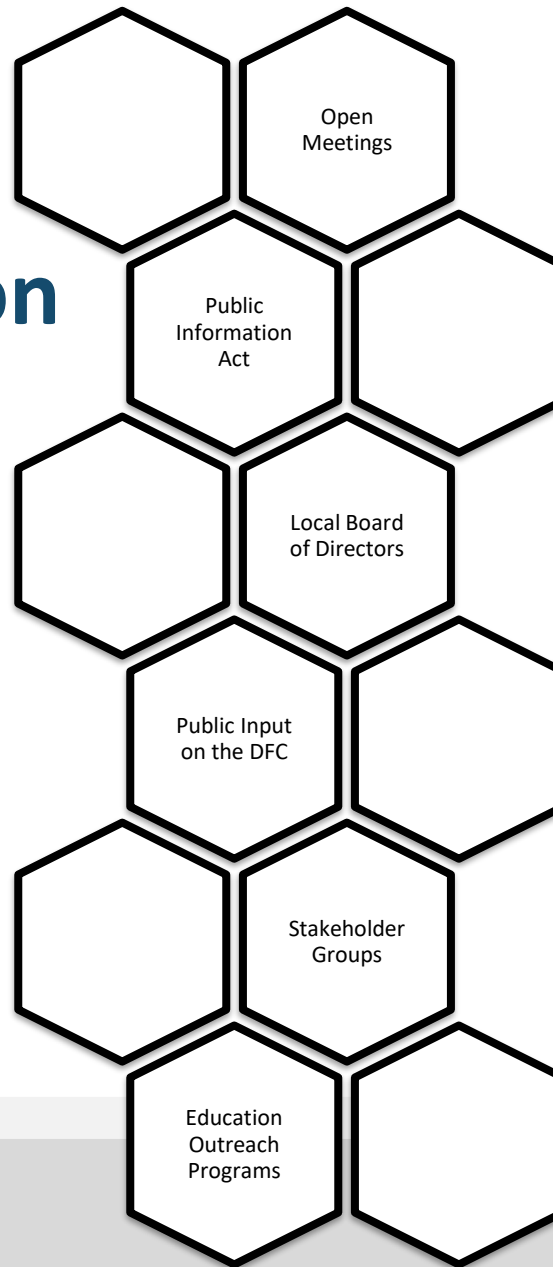
Case Law

Emerging Technologies

Environmental Factors

Population Dynamics

# Public Participation



# Questions?

Sarah Rountree Schlessinger [sarah@texasgroundwater.org](mailto:sarah@texasgroundwater.org)



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