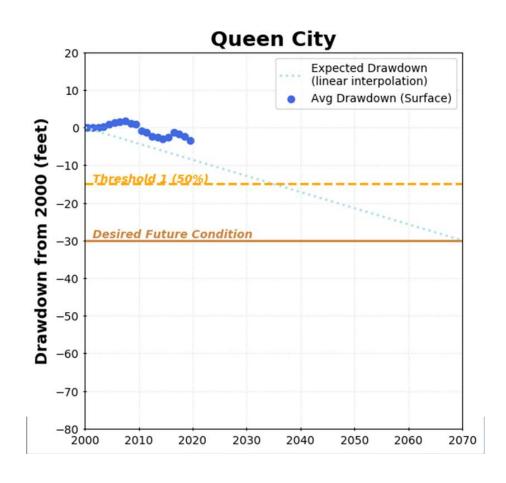
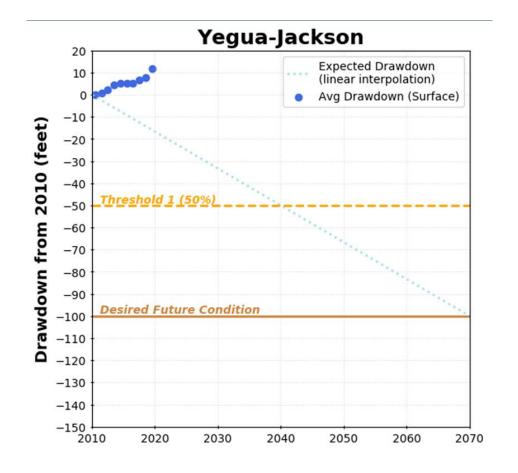
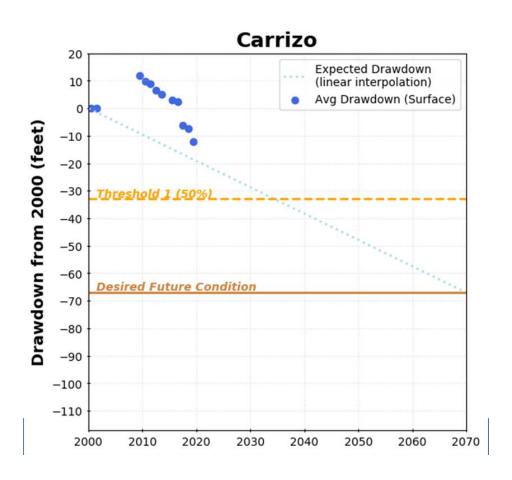
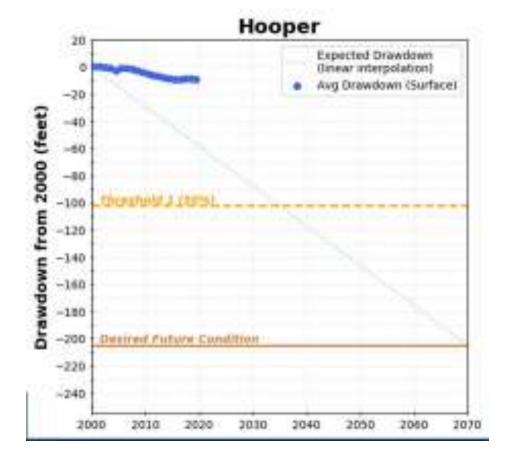
# Groundwater Monitoring Update

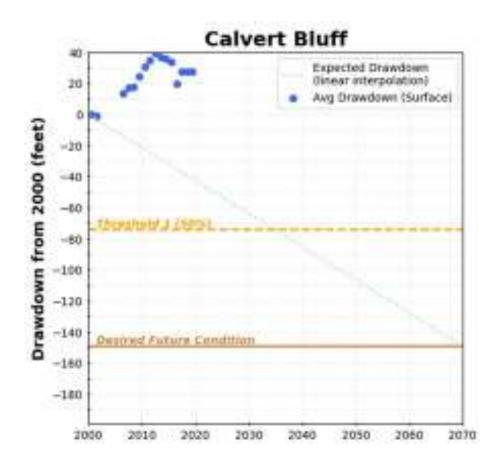


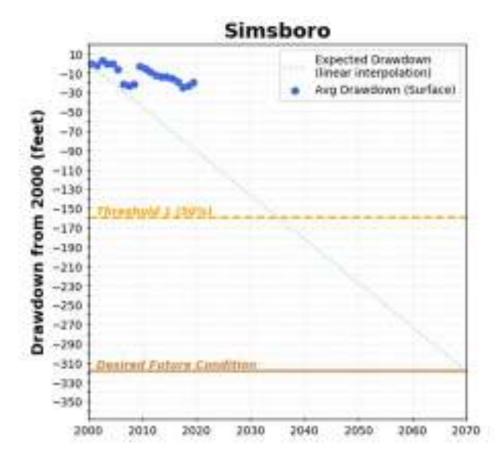


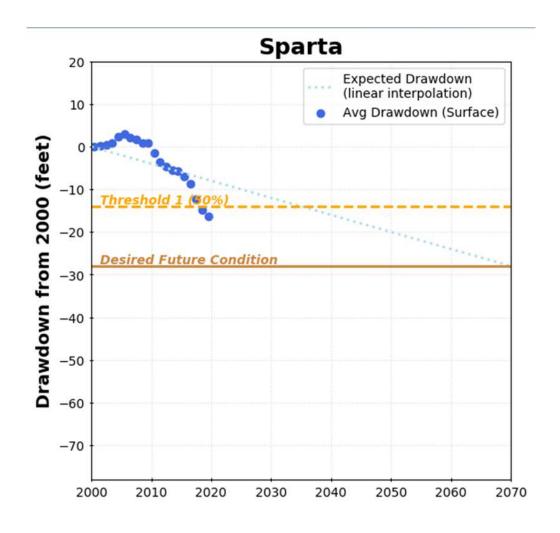






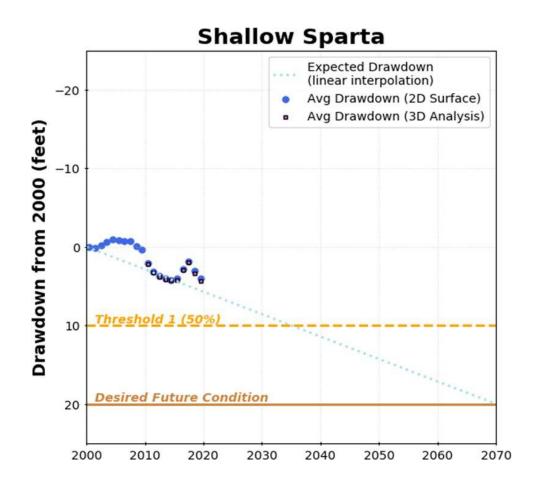


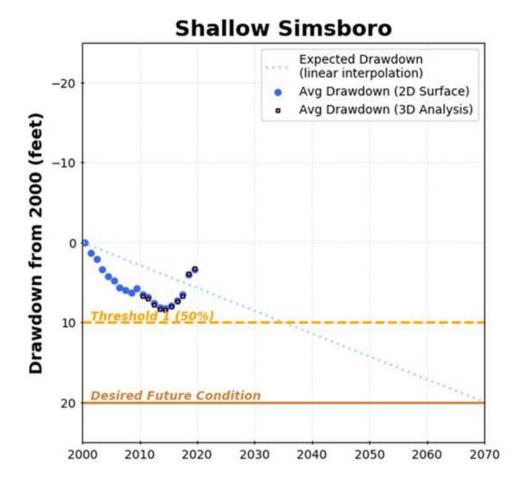




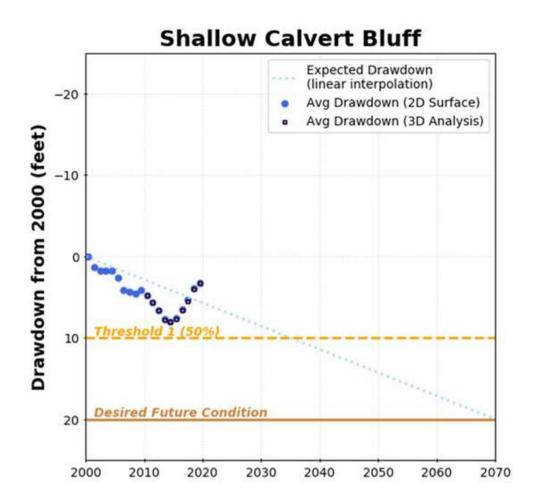
- Check how well model represents behavior in Sparta
- Determine amounts & locations of POSGCD Sparta pumping (Royalty Pecan, Somerville, Snook, Tunis, Lyons)
- Test sensitivity of model to Sparta pumping changes inside & outside POSGCD
- Report findings

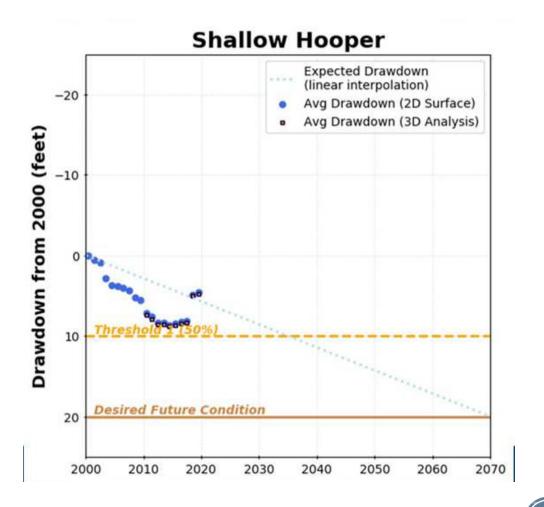
# PDL Compliance



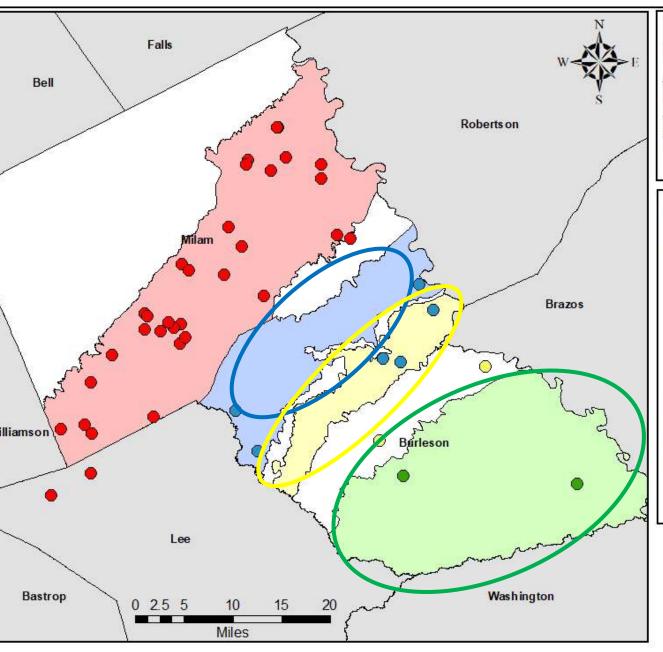


# PDL Compliance





#### District Monitoring Wells - Shallow (<400) Management Zone



This map illustrates the wells in the District's Monitoring Network that are identified to be in the shallow management zone set for 400 feet. The District makes an effort to make management decisions that are supported through best available science, In an effort to improve this science, more wells are needed to increase the quantity and quality of data. While the Carrizo-Wilcox has been prioritized there is a strong need for some shift towards the minor aquifers in regards to number of shallow monitoring wells. This document is for DRAFT ONLY.

#### Legend

#### Monitor Wells <400

- Carrizo-Wilcox
- Queen City
- Sparta
- Yegua Jackson
  - Carrizo-Wilcox Outcrop
  - Queen City Outcrop
  - Sparta Outcrop
  - Yegua-Jackson Outcrop



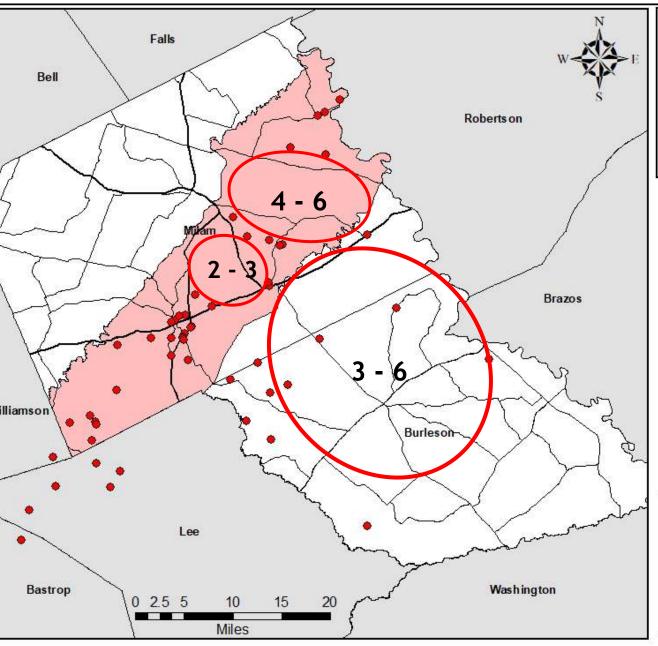
## Shallow Monitoring Wells

The areas circled represent areas within the District where additional "shallow" wells (<400 ft) are needed to improve Protected Drawdown Limits (PDLs) and Modeling efforts.

Each Minor aquifer within the District, except Brazos Alluvium, are lacking sufficient shallow monitoring wells.

Efforts are also continuing in the Carrizo-Wilcox to locate shallower wells in order to compress the "Shallow" management zone down to closer represent the unconfined aquifer.

#### District Monitoring Wells - Simsboro Management Zone



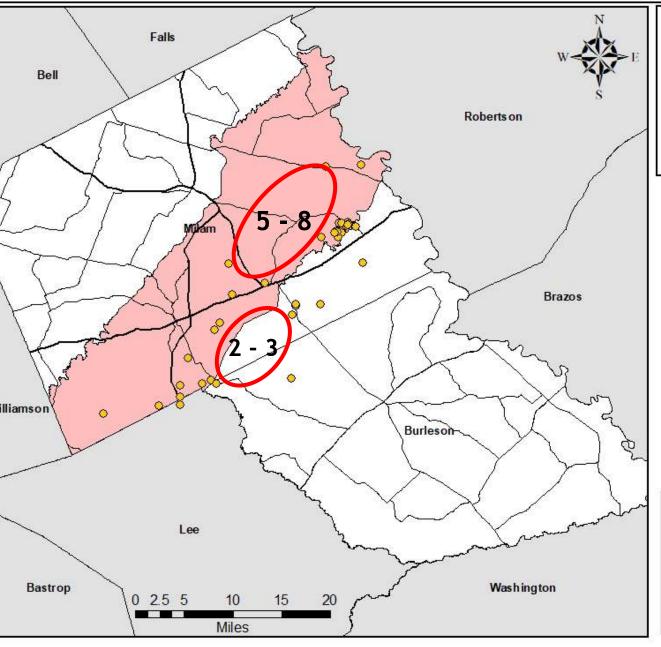
This map illustrates the wells in the District's Monitoring Network that are identified to be in the Simsboro Management Zone. The District makes an effort to make management decisions that are supported through best available science, In an effort to improve this science, more wells are needed to increase the quantity and quality of data. While the Carrizo-Wilcox has been prioritized there is a strong need for some shift towards the minor aquifers in regards to number of shallow monitoring wells. This document is for DRAFT ONLY.



# Legend Aquifer Simsboro Carrizo-Wilcox Outcrop

# Simsboro Management Zone

#### District Monitoring Wells - Calvert Bluff Management Zone



This map illustrates the wells in the District's Monitoring Network that are identified to be in the Calvert Bluff Management Zone.

The District makes an effort to make management decisions that are supported through best available science, In an effort to improve this science, more wells are needed to increase the quantity and quality of data. While the Carrizo-Wilcox has been prioritized there is a strong need for some shift towards the minor aquifers in regards to number of shallow monitoring wells. This document is



#### Legend

#### Aquifer



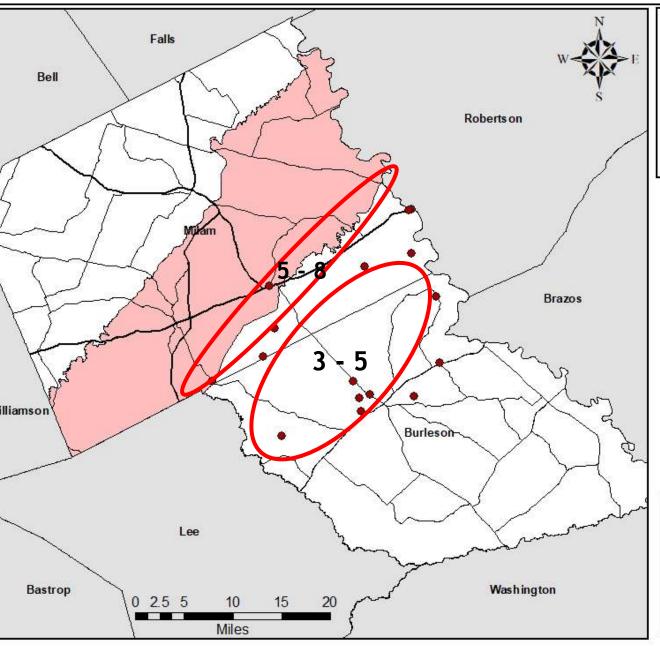
Calvert Bluff



Carrizo-Wilcox Outcrop

# Calvert Bluff Management Zone

#### District Monitoring Wells - Carrizo Management Zone



This map illustrates the wells in the District's Monitoring Network that are identified to be in the Carrizo Management Zone.

The District makes an effort to make management decisions that are supported through best available science, In an effort to improve this science, more wells are needed to increase the quantity and quality of data. While the Carrizo-Wilcox has been prioritized there is a strong need for some shift towards the minor aquifers in regards to number of shallow monitoring wells. This document is for DRAFT ONLY.



#### Legend

#### Aquifer



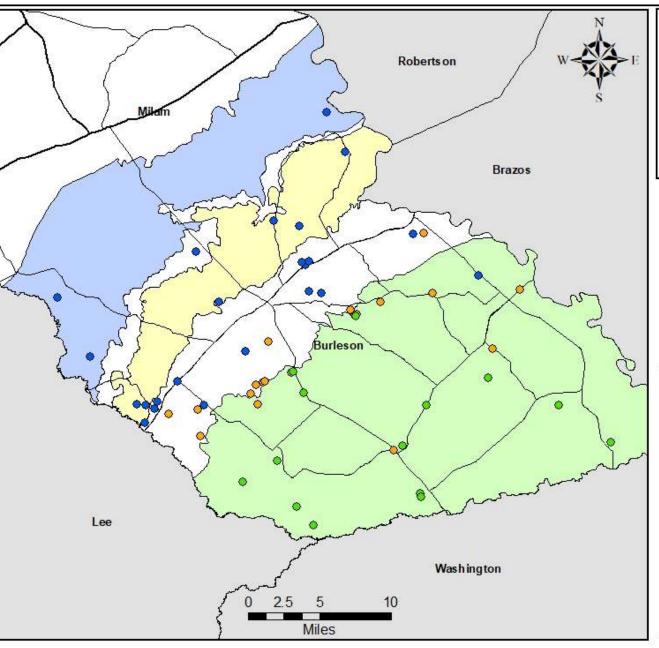
Carrizo



Carrizo-Wilcox Outcrop

# Carrizo Management Zone

#### District Monitoring Wells - Minor Aquifers



This map illustrates the wells in the District's Monitoring Network that are identified to be in the State's Minor Aquifers.

The District makes an effort to make management decisions that are supported through best available science, In an effort to improve this science, more wells are needed to increase the quantity and quality of data. While the Carrizo-Wilcox has been prioritized there is a strong need for some shift towards the minor aquifers in regards to number of shallow monitoring wells. This document is



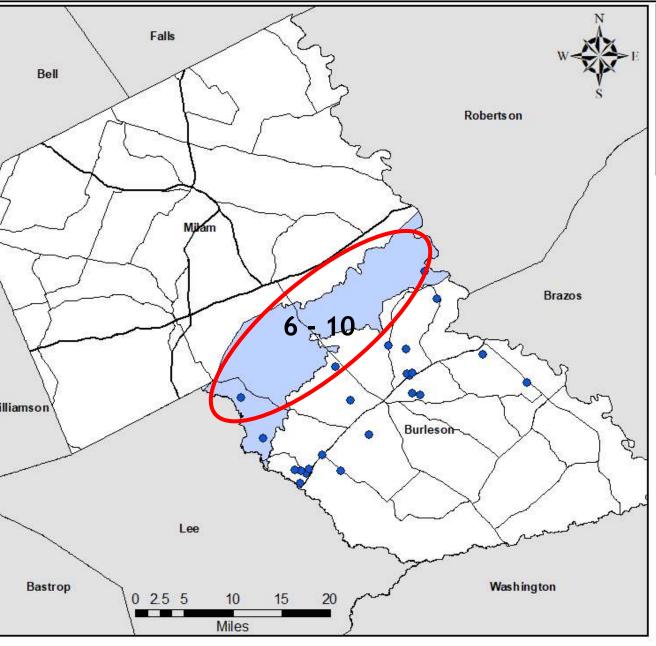
# Legend Aquifer Queen City Sparta Yegua - Jackson Queen City Outcrop Sparta Outcrop Yegua-Jackson Outcrop

# Minor Aquifers

This map depicts the distribution of monitoring wells in the Minor Aquifers within the District.

Illustrated is the difficulty of locating shallow wells within these formations due to well owner's priority of locating "drinkable" water when drilling.

#### District Monitoring Wells - Queen City Management Zone



This map illustrates the wells in the District's Monitoring Network that are identified to be in the Queen City Management Zone. The District makes an effort to make management decisions that are supported through best available science, In an effort to improve this science, more wells are needed to increase the quantity and quality of data. While the Carrizo-Wilcox has been prioritized there is a strong need for some shift towards the minor aquifers in regards to number of shallow monitoring wells. This document is

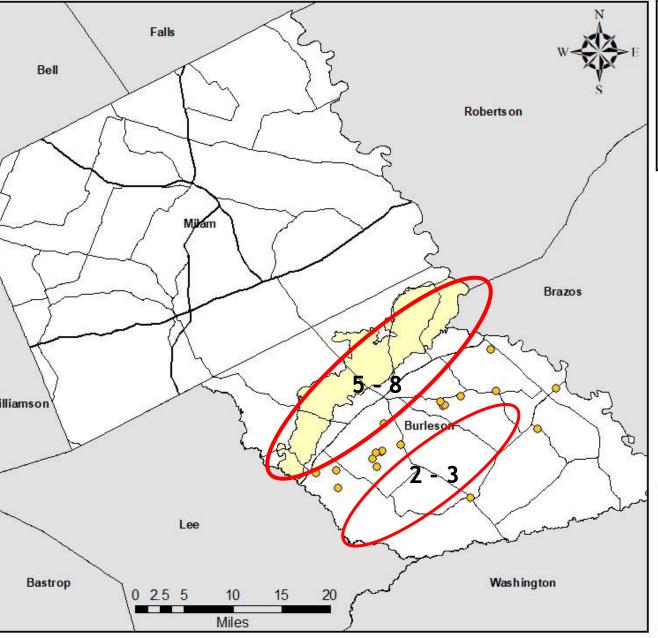
for DRAFT ONLY.



# Legend Aquifer Queen City Queen City Outcrop

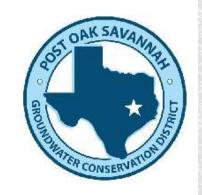
## Queen City Management Zone

#### District Monitoring Wells - Sparta Management Zone



This map illustrates the wells in the District's Monitoring Network that are identified to be in the Sparta Management Zone.

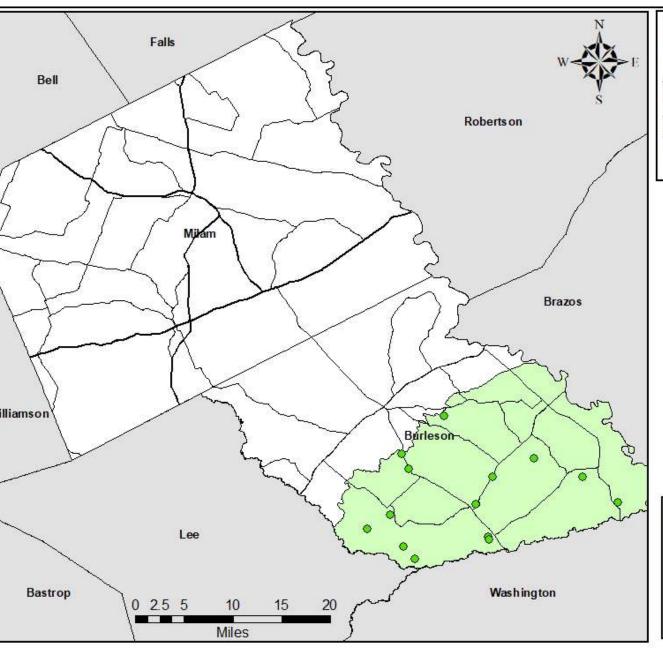
The District makes an effort to make management decisions that are supported through best available science. In an effort to improve this science, more wells are needed to increase the quantity and quality of data. While the Carrizo-Wilcox has been prioritized there is a strong need for some shift towards the minor aquifers in regards to number of shallow monitoring wells. This document is for DRAFT ONLY.



# Legend Aquifer Sparta Sparta Outcrop

# Sparta Management Zone

#### District Monitoring Wells - Yegua-Jackson Management Zone



This map illustrates the wells in the District's Monitoring Network that are identified to be in the Yegua-Jackson Management Zone.

The District makes an effort to make management decisions that are supported through best available science, In an effort to improve this science, more wells are needed to increase the quantity and quality of data. While the Carrizo-Wilcox has been prioritized there is a strong need for some shift towards the minor aquifers in regards to number of shallow monitoring wells. This document is



#### Legend

#### Aquifer



Yegua - Jackson



Yegua-Jackson Outcrop

### Yegua-Jackson Management Zone

The priority for this management zone is to locate wells throughout the formation due to the inconsistent nature of the aquifer.