

## **Item 7 – Update of Draft Simsboro Artesian Reduction Methodoloy**

John Seifert will be here to update the Board on which wells are going to be used consistently to determine the average artesian reduction in the Simsboro Aquifer. Alternative wells (backup wells) will also be identified. It is important that the Board and the public know exactly which wells are being measured, when data is being collected, and where the average aquifer level stands annually.



# Approach for DFC Monitoring for Simsboro Aquifer

Presented to  
BVGCD Board of Directors  
by LBG-Guyton Associates



March 10, 2016





# APPROACH

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- DFC based on drawdowns that span 2000 to 2070
- Average drawdown estimated for Simsboro Aquifer is part of tracking DFCs for all aquifers with DFCs



## APPROACH (cont'd)

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- Continue development of a network of as evenly spaced as possible observation wells, spread over the district to add to existing observation wells. With Simsboro screened wells 700 to 3,000 feet, depend on using wells constructed by public and private entities.
- Add about five additional observation wells in areas void of them by converting abandoned oil or gas wells to observation wells



## APPROACH (cont'd)

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- Measure the static water in each well at least four times per year. Will measure static water level in extra wells as an observation well may be unavailable in the future.
- Calculate average drawdown over area while equally weighing the well water-level measurements based on those collected during the winter months



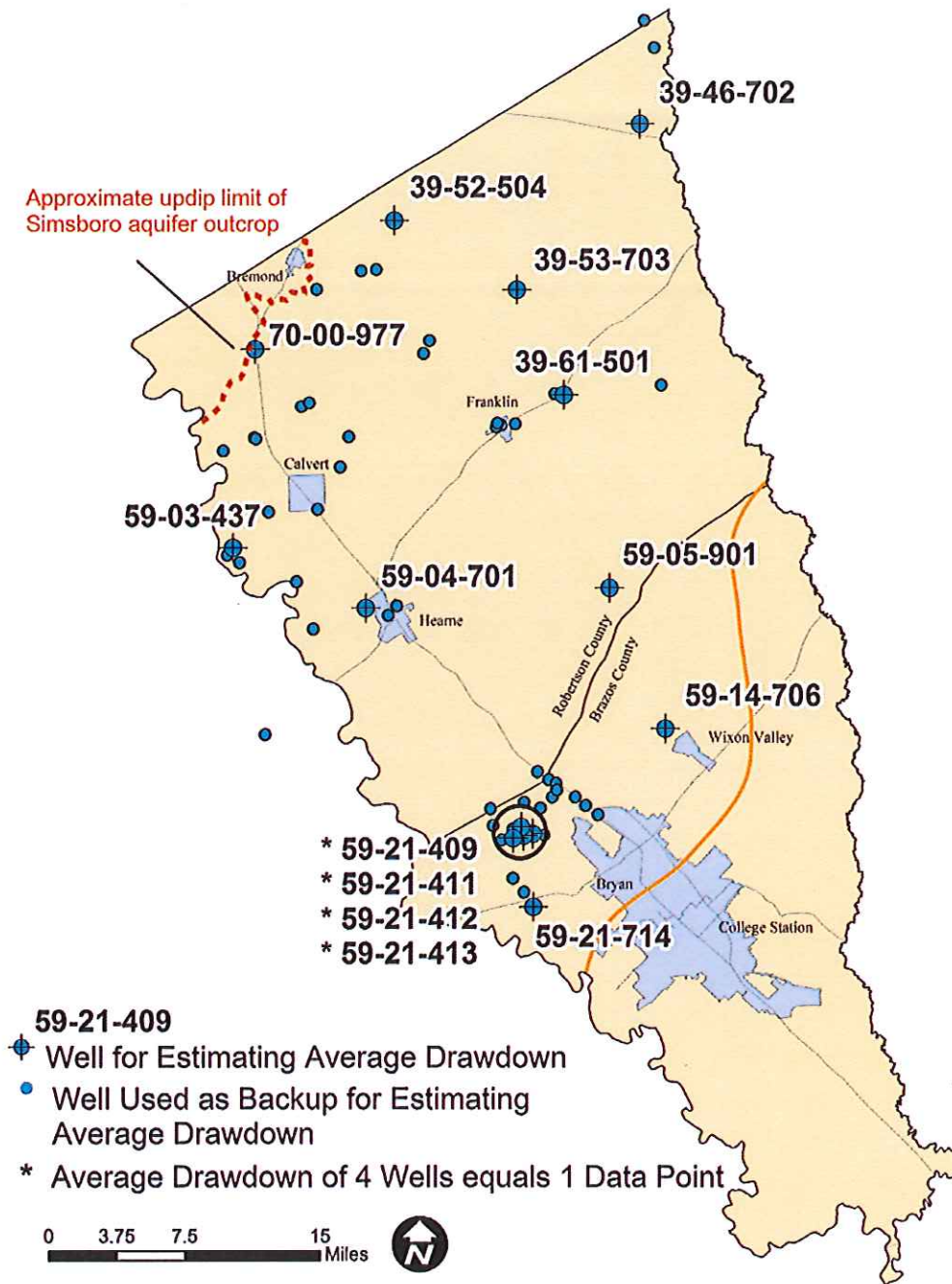
# APPROACH (cont'd)

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- Utilize the GAM to estimate average drawdown in areas of south Brazos County from 2000 to 2010

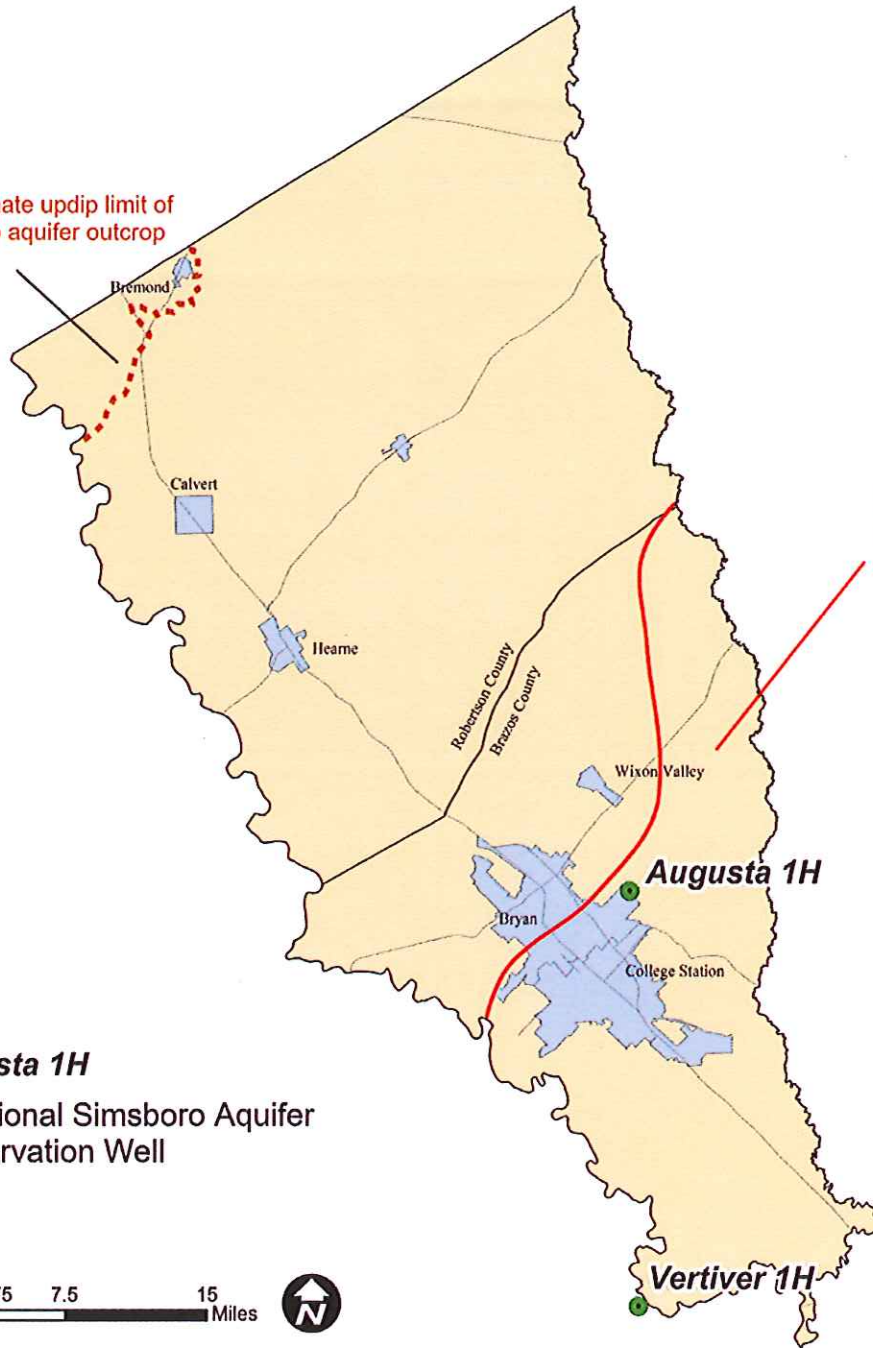


# Wells Selected for Monitoring and Tracking DFC Status



# Additional Simsboro Aquifer Observation Wells by Converting Oil Wells

Approximate updip limit of  
Simsboro aquifer outcrop



Additional observation wells to be added in  
this area, most likely, converted oil wells

**Augusta 1H**

● Additional Simsboro Aquifer  
Observation Well

0 3.75 7.5 15  
Miles



3/10/2016



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Average drawdown = total of amount of drawdown measured in all DFC wells / number of wells

- Collect water-level data in wells located in surrounding counties
- Monitor/inventory groundwater pumping in surrounding counties
- Use data to help evaluate changes in average drawdown in BVGCD





Thank you!

Questions?

