

Item #5 – Methodology for Brazos River Alluvium DFC

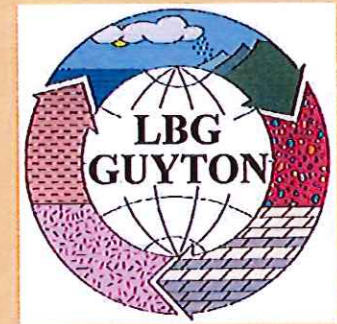
John Seifert will be available to assist Board in making a decision as to the possible method for determining a Desired Future Condition for the Brazos River Alluvium Aquifer (BRA). This is a necessary process due to the 2014 Board approval making the BRA relevant during the 2016 GMA 12 planning process.

The slide presentation in this folder is a presentation given to the Board during the 2010 DFC planning process that ultimately ended by declaring the BRA non-relevant. This action led to no MAG being established.

John's presentation at the June 11, 2015 Board meeting was followed by table the item until a later time so further consideration could be made.

UPDATE REGARDING POTENTIAL DFC FOR BRAZOS RIVER ALLUVIUM

Presented during
Brazos Valley
Groundwater Conservation
District Board Meeting



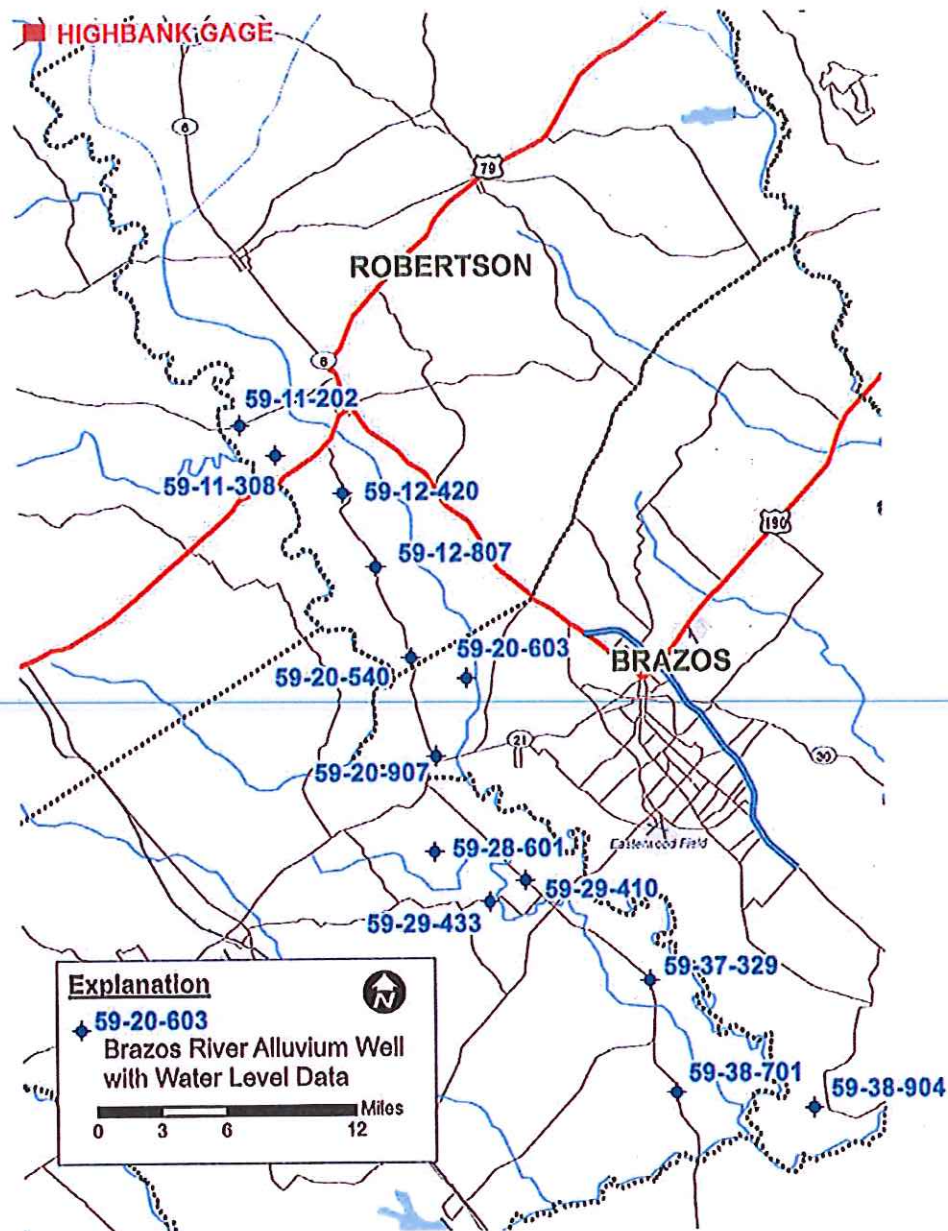
June 11, 2015

BRAZOS RIVER ALLUVIUM

- Irrigation, stock and limited domestic pumping has occurred for decades
- Pumping in Brazos, Burleson and Robertson Counties
- DFC for Brazos River Alluvium could be needed

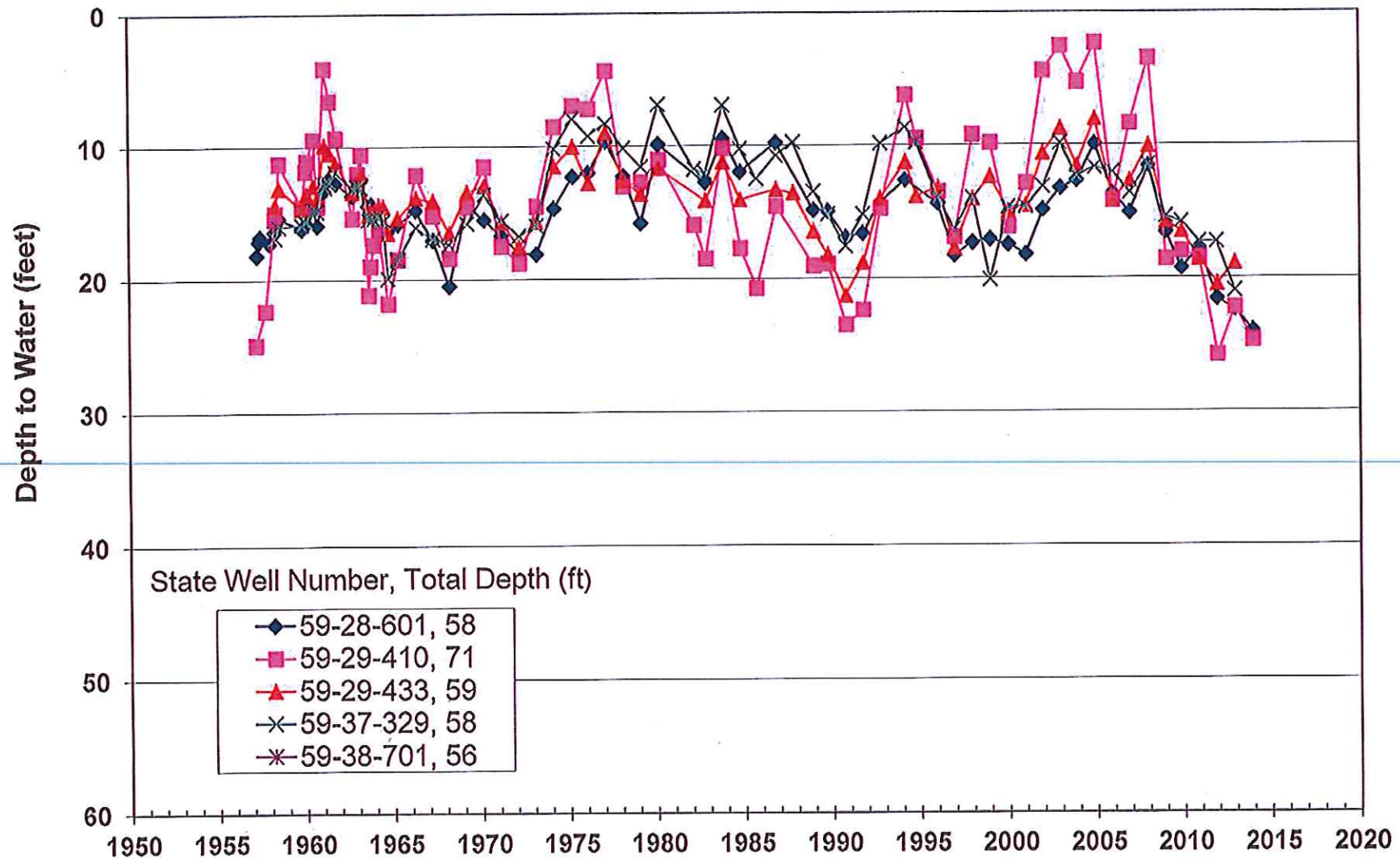
BRAZOS RIVER ALLUVIUM (cont'd)

- Develop a reasonable approach for DFC
- Consider maintaining a percentage of saturation of Brazos River Alluvium
- Brazos River Alluvium somewhat self regulating

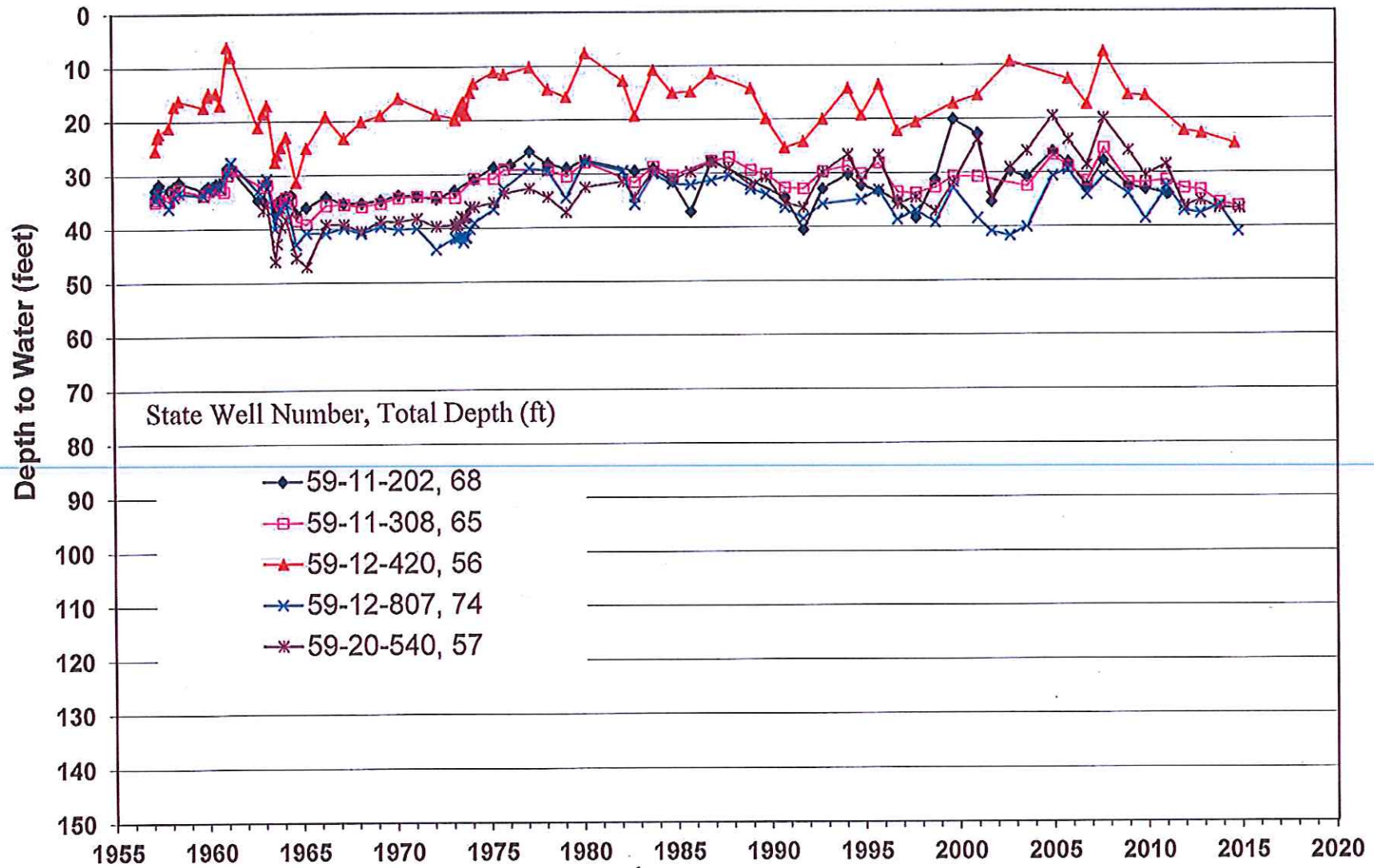


**Brazos River Alluvium Well
Hydrograph Locations**

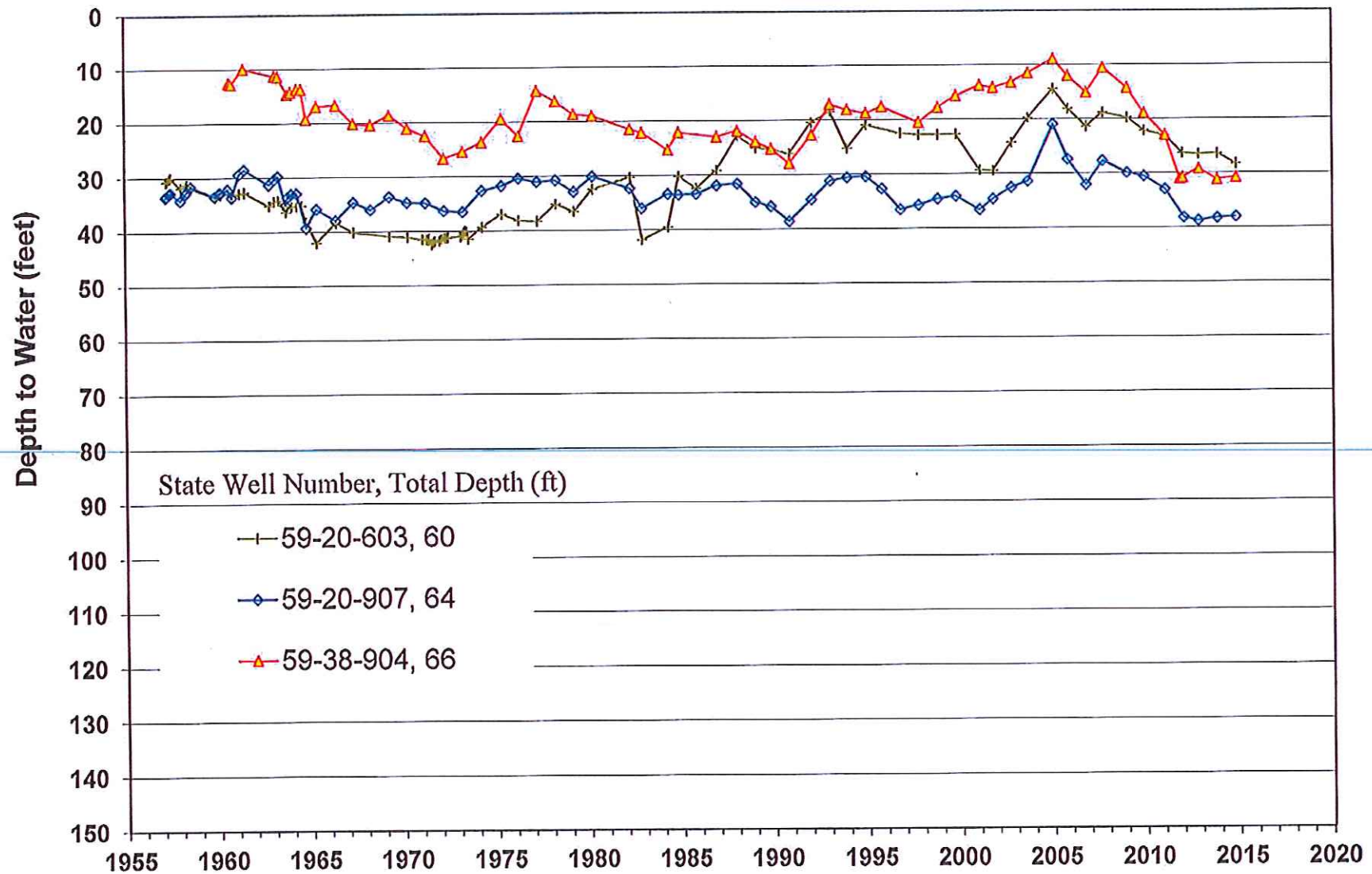
TWDB Brazos River Alluvium Water Level Data - Burleson County



TWDB Brazos River Alluvium Water Level Data - Robertson County

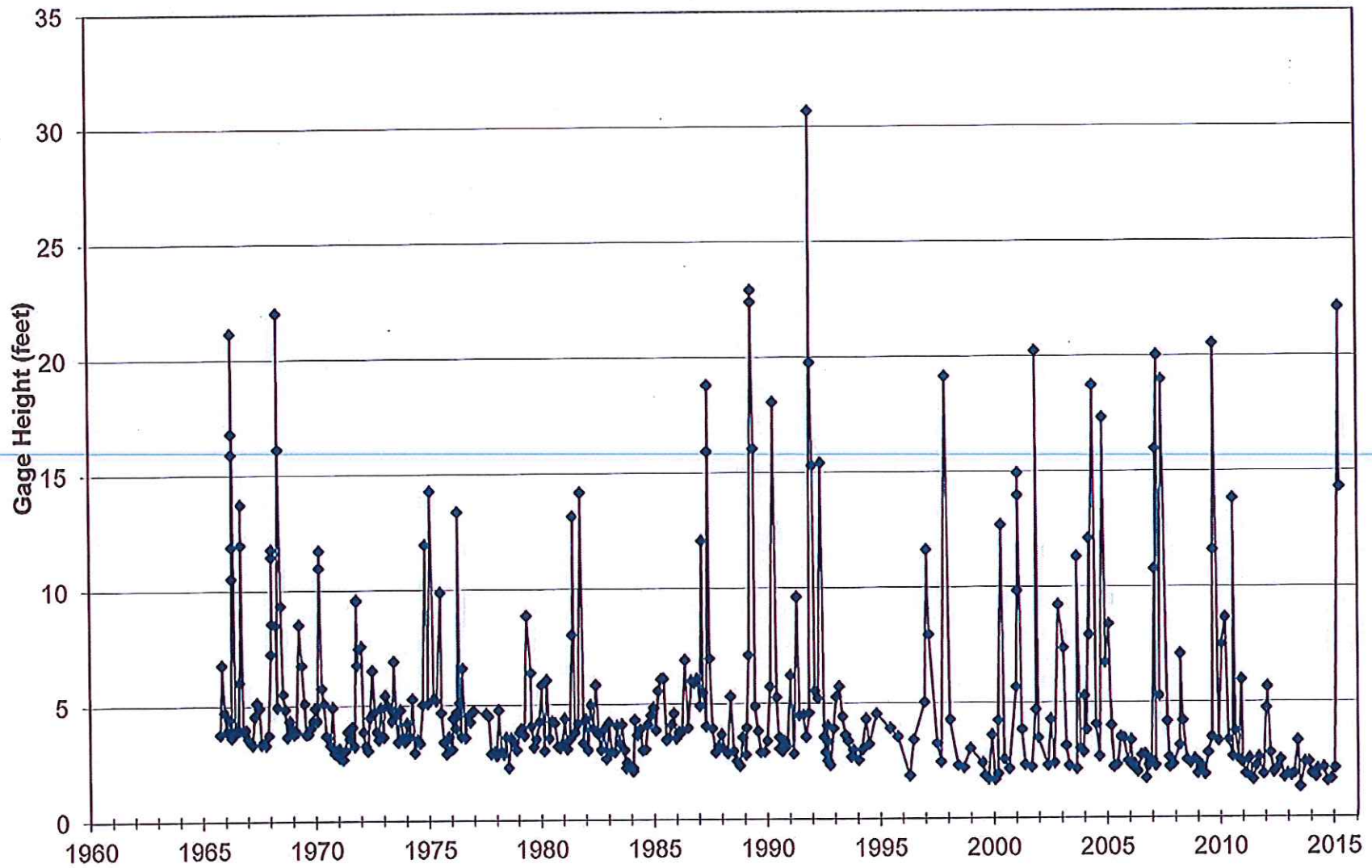


TWDB Brazos River Alluvium Water Level Data - Brazos County

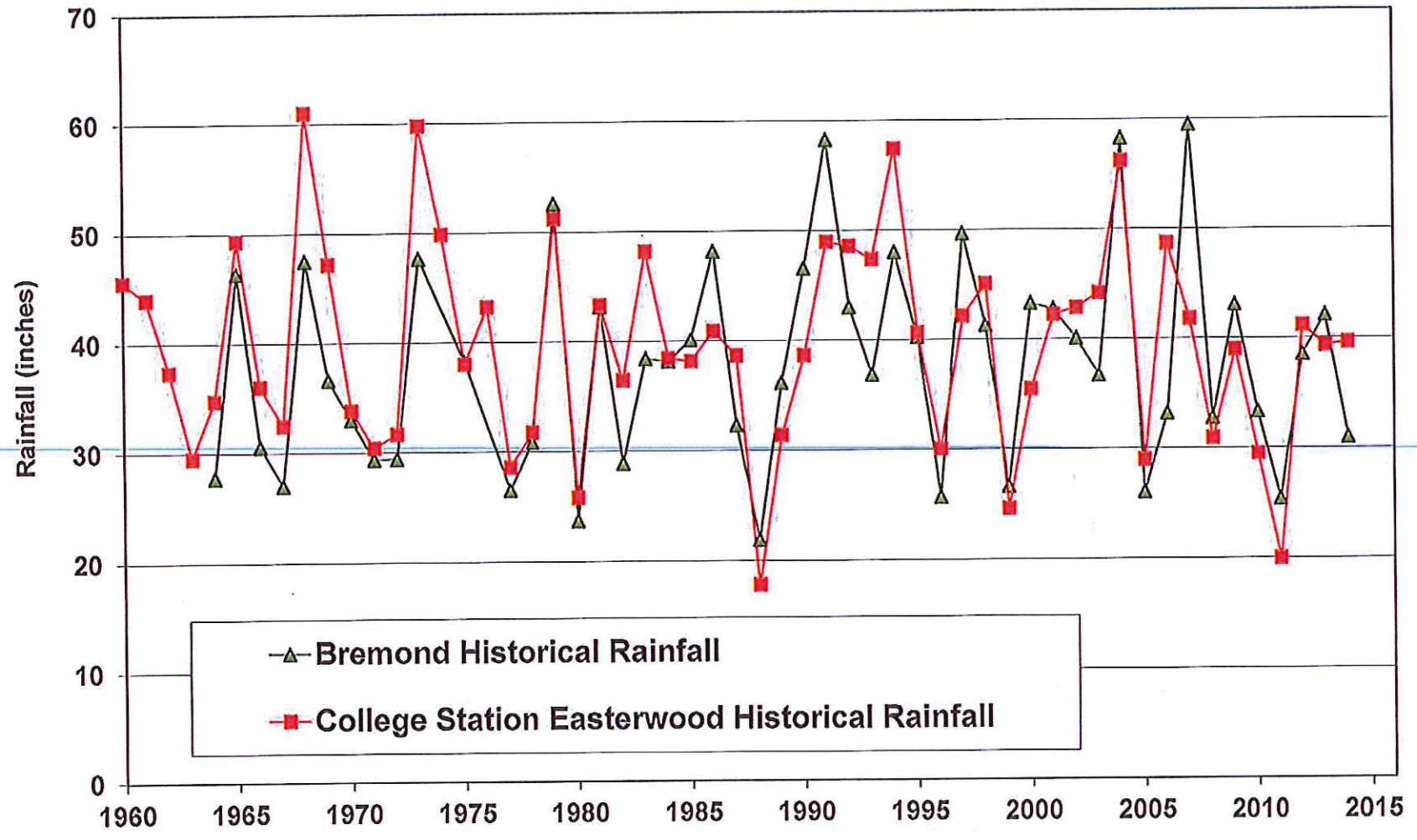


USGS 08098290 Brazos River Near Highbank, TX

(USGS, 6/10/2015)



Bremond and College Station Historical Rainfall



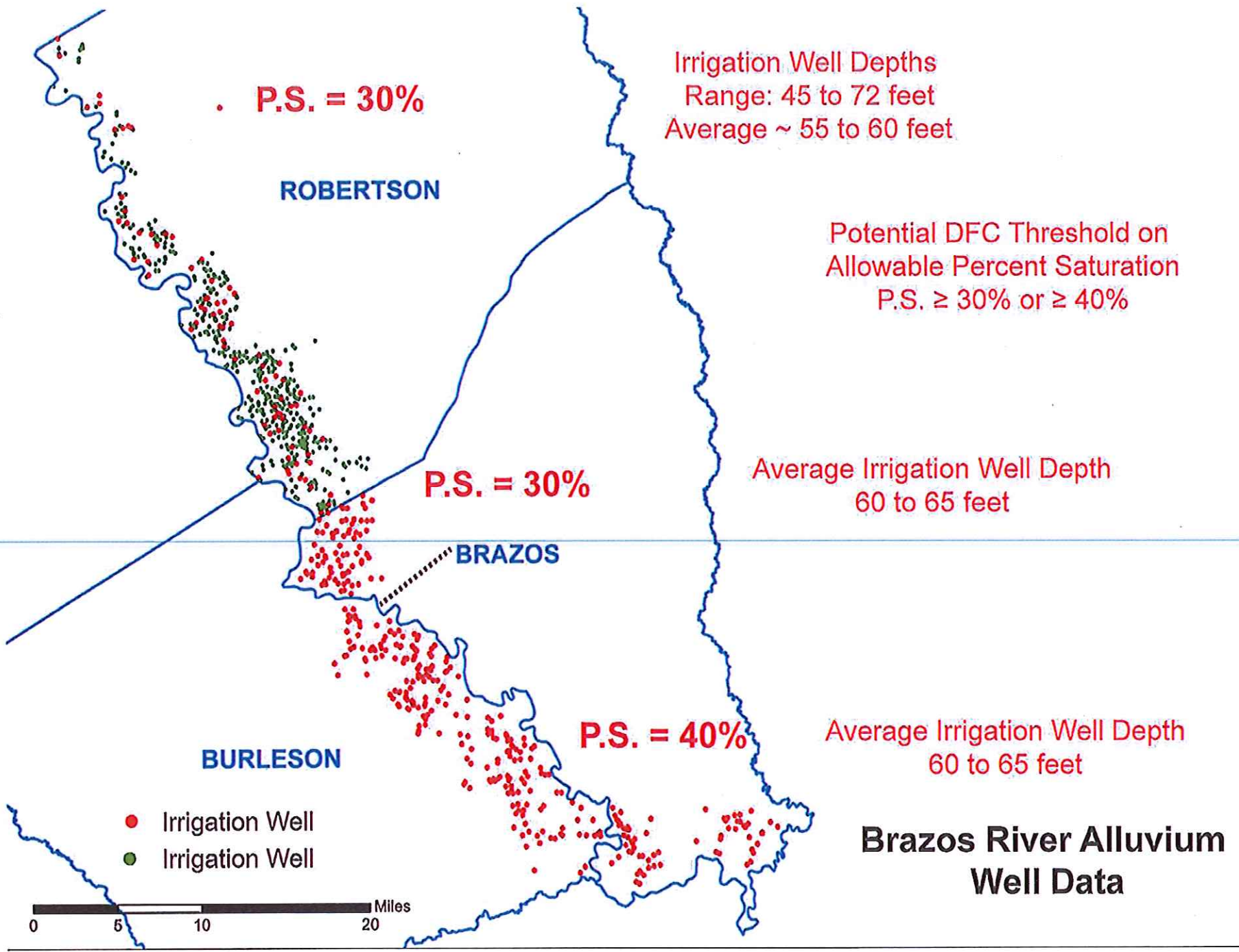
Potential DFC Percent of Aquifer Saturation

WD = Well Depth, ft

DTW = Depth to Water, ft

$$\text{Percent Saturation (PS)} = \frac{\text{WD} - \text{DTW}}{\text{WD}}$$

Static water-level data to estimate PS would be collected during the winter months following the irrigation season. To reach a DFC the average PS for all wells measured would have to be below the applicable PS for three consecutive years.





Thank you!

Questions?