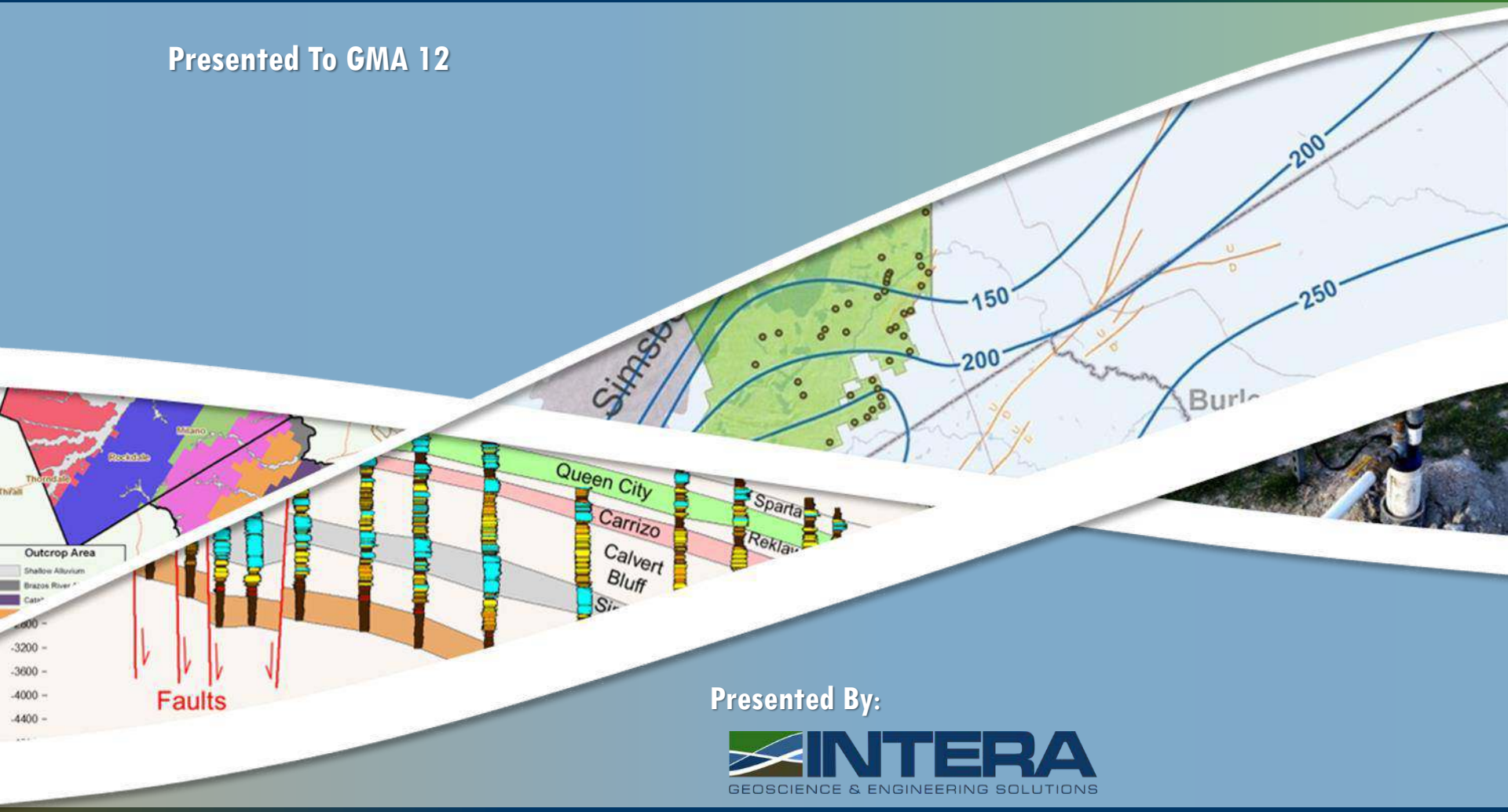
Submission of S-10* for GMA 12 Consideration

*The presentation given at the GMA 12 meeting had mistakenly labeled the Run S-9. The numbering error was mentioned during the meeting and that the presentation would be modified to reflect the correct run number S-10.

Presented To GMA 12



Presented By:

INTERA
GEOSCIENCE & ENGINEERING SOLUTIONS

January 15, 2021

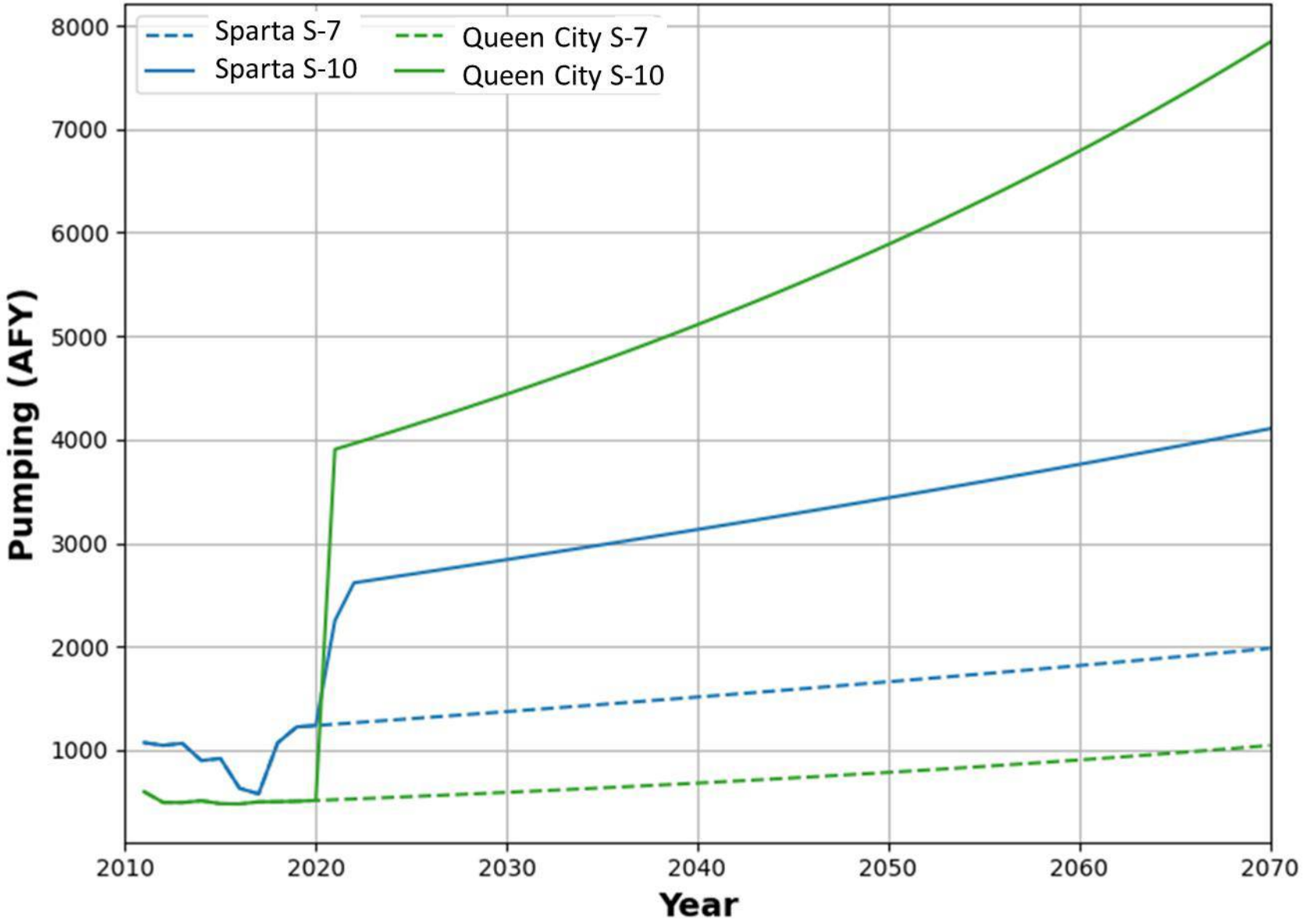
Overview of S-10

- S-10 is a Modification of S-7 in POSGCD but no change in pumping in other Districts

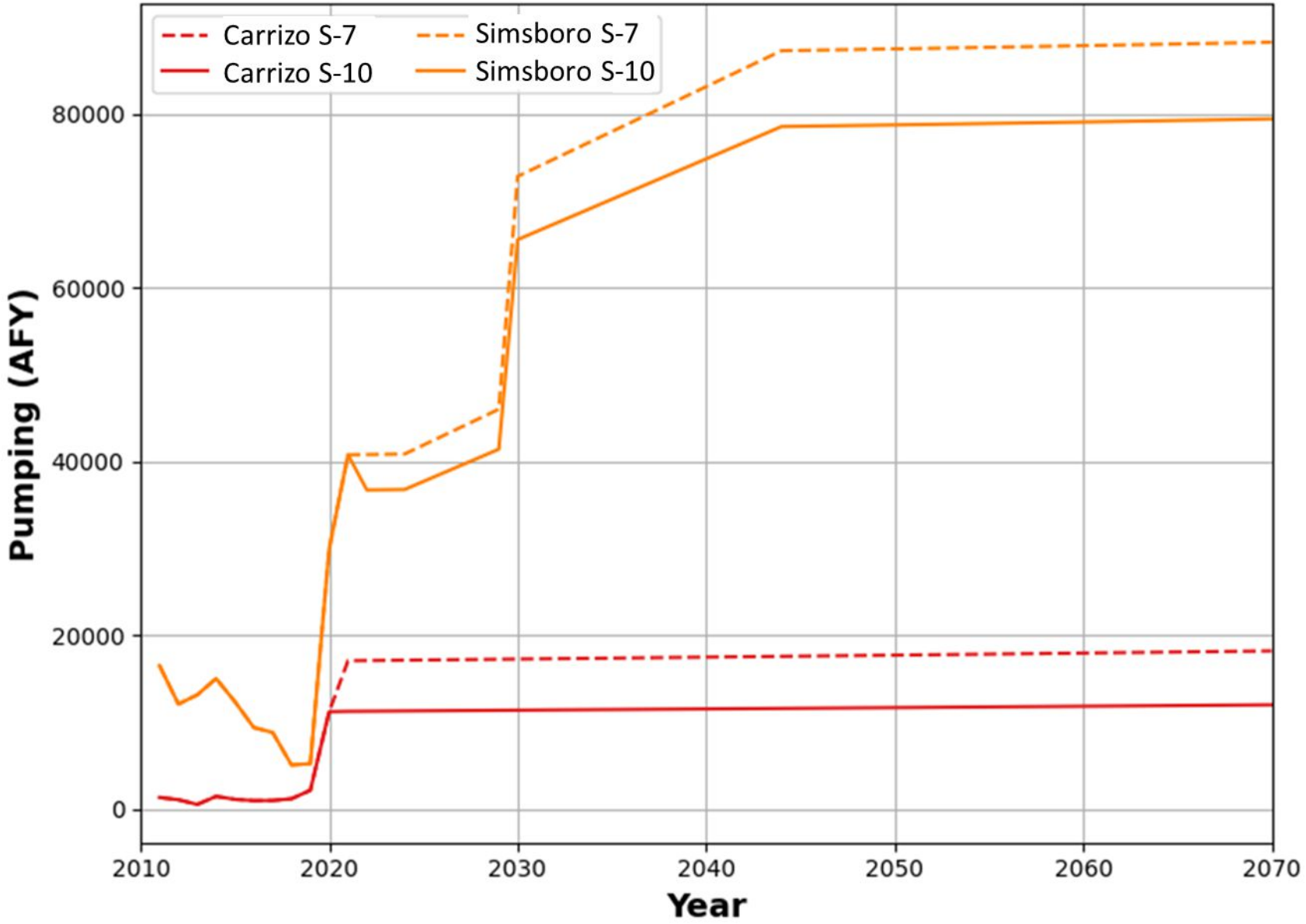
- Sparta & Queen City Pumping Increased in POSGCD
  - 2070 Sparta pumping increased from 1,983 AFY to 4,070 AFY
  - 2070 Queen City pumping increased from 1,045 AFY to 7,725 AFY

- Carrizo and Simsboro Pumping Decreased in POSGCD
  - 2070 Carrizo pumping decreased from 18,205 AFY to 12,000 AFY
  - 2070 Simsboro pumping decreased from 85,855 AFY to 79,396 AFY

Comparison of S-7 & S-10 Production Rates for POSGCD for Sparta and Queen City



Comparison of S-7 & S-10 Production Rates for POSGCD for Carrizo and Simsboro



Comparison Between S-7 & S-10 for POSGCD

POSGCD Average Drawdowns

Aquifer	Current DFC	Average Drawdown (ft) (2010 - 2070)		Range for DFC* (10% Uncertainty)
		S-7	S-10	
Sparta	28	17	31	28 - 34
Queen City	30	18	29	26 - 32
Carrizo	67	173	145	130 - 159
Calvert Bluff	149	184	169	152 - 186
Simsboro	318	352	330	297 - 363
Hooper	205	223	213	191 - 233

POSGCD Production

Aquifer	Current MAG	2070 Production (AFY)		Permitted Amount (AFY)
		S-7	S-10	
Sparta	6,735	1,983	4,070	4,115
Queen City	504	1,045	7,725	1,600
Carrizo	7,058	18,205	12,000	21,600
Calvert Bluff	1,036	4,761	4,701	2,285
Simsboro	48,503	85,855	79,396	104,147
Hooper	4,422	3,126	3,093	2,080

Comparison Between S-7 & S-10 for Adjacent Districts

Lost Pines GCD Average Drawdowns

Aquifer	Current DFC	Average Drawdown (ft) (2010 - 2070)		Range for DFC* (10% Uncertainty)
		S-7	S-10	
Sparta	5	20	21	19 - 23
Queen City	15	26	26	23 - 28
Carrizo	62	139	124	111 - 136
Calvert Bluff	100	158	150	134 - 164
Simsboro	240	322	313	281 - 344
Hooper	165	178	173	155 - 190

Brazos Valley GCD Average Drawdowns

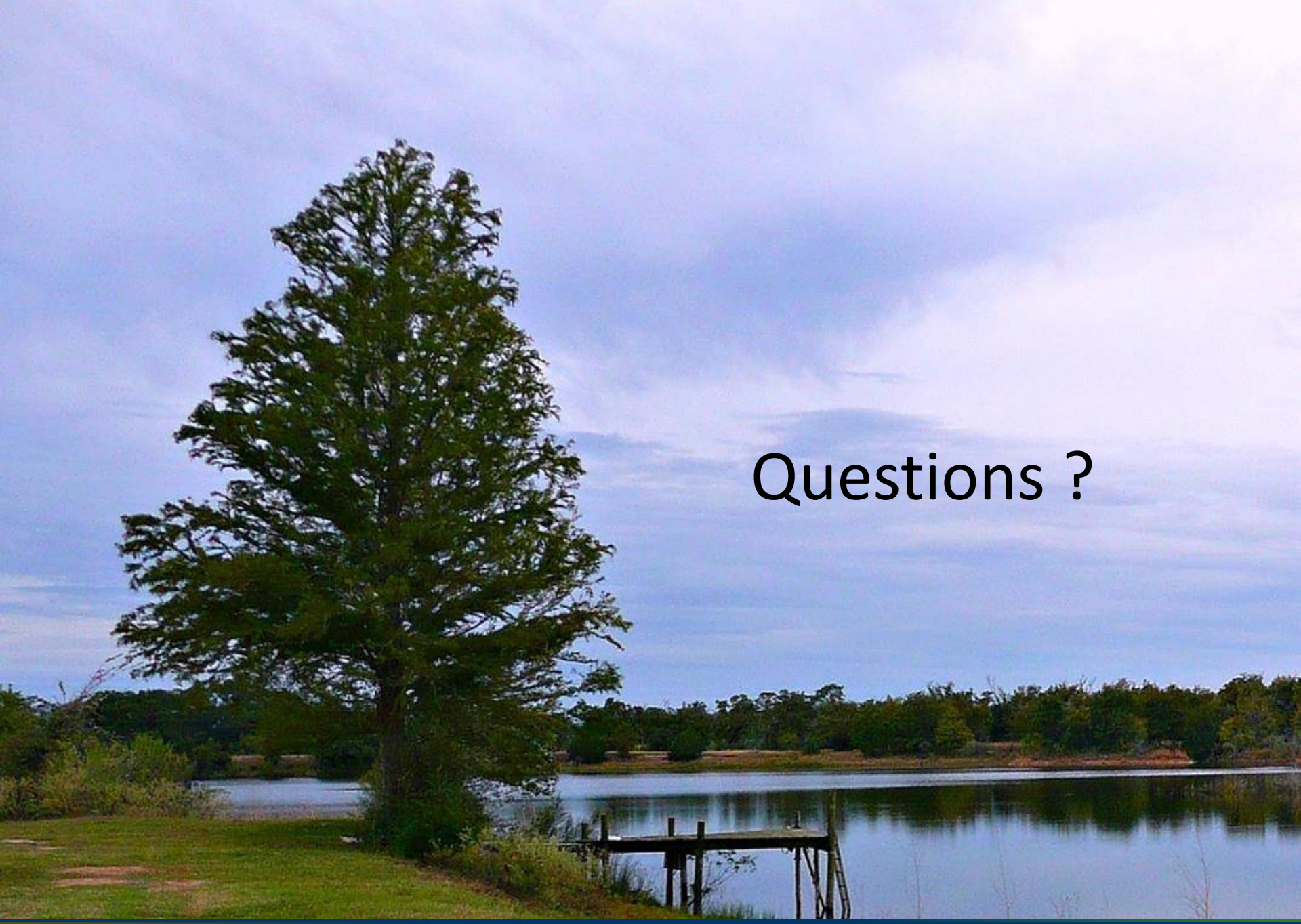
Aquifer	Current DFC	Average Drawdown (ft) (2010 - 2070)		Range for DFC* (10% Uncertainty)
		S-7	S-10	
Sparta	12	46	46	41 - 50
Queen City	12	39	39	34 - 42
Carrizo	61	76	70	62 - 76
Calvert Bluff	125	98	92	82 - 101
Simsboro	295	219	208	186 - 228
Hooper	207	155	148	133 - 162

Summary for S-10 in POSGCD and Two Adjoining

- Sparta DFC set to about 30 ft
  - Decrease current MAG by about 2,000 AFY
  - Current MAG and permitted pumping about 4,000 AFY
  - Relative to S-7, decrease 2070 drawdowns < 1 ft change in LPGCD and BVGCD
- Queen City DFC set to about 30 ft
  - Increase current MAG to about 7,000 AFY
  - Current MAG would be about 6,000 AFY greater than permitted pumping
  - Relative to S-7, decrease 2070 drawdowns < 1 ft change in LPGCD and BVGCD
- Carrizo pumping set to 12,000 AFY after 2021
  - Increase existing DFC by about 80 ft
  - Increase current MAG about 5,000 AFY
  - 2070 production is about 9,000 AFY less than permitted pumping
  - Relative to S-7, decrease 2070 drawdowns in LPGCD (15 ft) and BVGCD (6 ft)

Summary for S-10 in POSGCD and Two Adjoining Districts (con't)

- Calvert Bluff was not changed from S-7
  - 2070 drawdown decreased about 15 ft
  - 2070 production is about 1,500 above permitted pumping
  - Relative to S-7, decrease 2070 drawdowns in LPGCD (8 ft) and BVGCD (6 ft)
- Simsboro DFC set to about 320 ft
  - Increase current MAG about 30,000 AFY
  - Revised MAG would be about 24,000 AFY less than permitted pumping
  - Relative to S-7, decrease 2070 drawdowns in LPGCD (9 ft) and BVGCD (11 ft)
- Hooper was not changed from S-7
  - 2070 drawdown decreased about 6 ft
  - 2070 production is about 1,000 above permitted pumping
  - Relative to S-7, decrease 2070 drawdowns in LPGCD (5 ft) and BVGCD (7 ft)


Questions ?