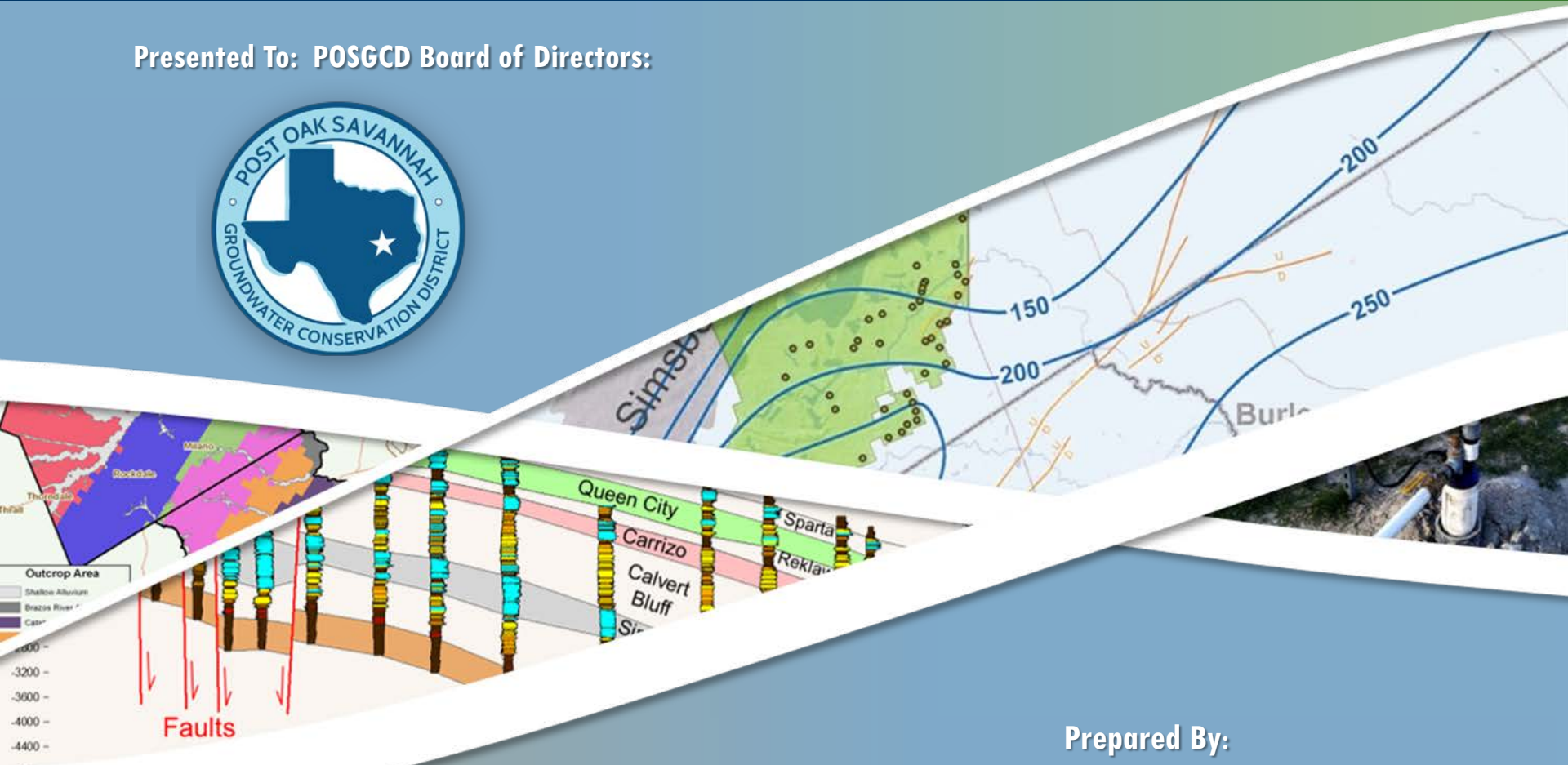


Update for GMA 12 Desired Future Conditions

Presented To: POSGCD Board of Directors:



Prepared By:



February 9, 2021

Agenda

- Schedule for Proposing and Adopting DFCs
- Yegua Jackson
- Brazos River Alluvium
- Sparta, Queen City, Carrizo-Wilcox

GMA 12 Schedule

- Discussion of Nine Factors
 - Aquifer uses or conditions
 - Water supply needs and management strategies
 - Hydrological conditions
 - Environmental impacts
 - Impact on subsidence
 - Socioeconomic impacts
 - Impact on private property rights
 - Other relevant information
 - Feasibility of achieving the DFC
- GMA 12 Proposes DFCs no later than May 1, 2021
- 90-day public comment period for each proposed DFCs
- GMA 12 Adopts DFCs no later than January 5, 2022

Yegua-Jackson

- DFC
 - 100 ft average drawdown from 2010 to 2070 (current)
 - 61 ft average drawdown from 2010 to 2070 (proposed by GMA 12 on Jan 15, 2021)
- Reasons for Change in DFC
 - Previous DFC Run (YJ-PS1) historical pumping from 2010 to 2018 was too high and has been adjusted based on best estimates for pumping
 - Revised maximum POSGCD pumping rates reduced from 14,000 AFY to about 10,000 AFY

Brazos River Alluvium

- DFC
 - Current (2010 to 2059)
 - 5 ft average drawdown in Milam County
 - 6 ft average drawdown in Burleson County
 - Anticipated to be Proposed by GMA 12 on February 12 (2010-2070)
 - 5 ft average drawdown in Milam County
 - 6 ft average drawdown in Burleson County

Sparta, Queen City, and Carrizo-Wilcox Aquifers

Table 7-1. Adopted DFCs for the Queen City, Sparta, Carrizo and Wilcox aquifers

Aquifer	2010 Joint Planning	2015 Joint Planning
	Average Drawdown between January 2000 and December 2059 (ft)	Average Drawdown between January 2000 and December 2069 (ft)
Sparta	30	28
Queen City	30	30
Carrizo	65	67
Upper Wilcox (Calvert Bluff Fm)	140	149
Middle Wilcox (Simsboro Fm)	300	318
Lower Wilcox (Hooper Fm)	180	205

Sparta, Queen City, and Carrizo-Wilcox Aquifers (DFC Model Runs S-7, S-10, S-11*)

S-7 Input Pumpage in 2070						
Aquifer	Sparta	Queen City	Carrizo	Calvert Bluff	Simsboro	Hooper
LPGCD	2,766	1,774	12,982	5,563	125,967	3,274
POSGCD	1,983	1,045	18,206	4,761	88,259	3,126
BVGCD	13,162	1,269	5,499	1,726	147,246	2,139
METGCD	3,381	1,616	10,529	4,222	6,870	5,252
FCGCD	2,853	2,813	5,155	0	0	0

S-10 Input Pumpage in 2070						
Aquifer	Sparta	Queen City	Carrizo	Calvert Bluff	Simsboro	Hooper
LPGCD	2,766	1,774	12,982	5,563	125,967	3,274
POSGCD	4,105	7,838	12,000	4,761	79,433	3,126
BVGCD	13,162	1,269	5,499	1,726	147,246	2,139
METGCD	3,381	1,616	10,529	4,222	6,870	5,252
FCGCD	2,853	2,813	5,155	0	0	0

S-11 Input Pumpage in 2070						
Aquifer	Sparta	Queen City	Carrizo	Calvert Bluff	Simsboro	Hooper
LPGCD	2,766	1,774	12,982	5,563	125,967	3,274
POSGCD	4,105	7,838	18,206	4,761	79,433	3,126
BVGCD	13,162	1,269	5,499	1,726	147,246	2,139
METGCD	3,381	1,616	10,529	4,222	6,870	5,252
FCGCD	2,853	2,813	5,155	0	0	0

S-7 discussed Sept 2019

- presented by GMA consultants

S-10 discussed Jan. 2021

- presented by POSGCD

S-11 to be presented Feb. 2021

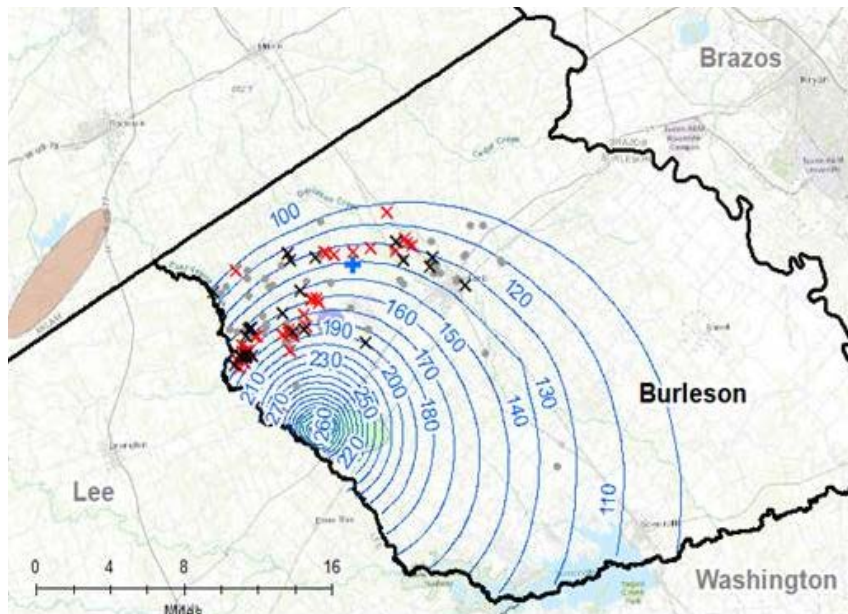
- requested by BVGCD

* Values checked by LPGCD

 S-7 values changed

Impacts of Carrizo Pumping on Well Water Levels

GWAP Report : Estimated Pumping Impacts on Water Levels Above Pump Settings



DFC Committee: Sensitivity of Number of Impacted Wells to POSGCD Carrizo Production

POSGCD Carrizo Production (AFY)	Impacted* Wells		
	2029	2039	2049
18,200	71	114	141
12,200	36	69	97

* Impacted define as water level drops to less than 15 feet above pump setting

Sparta, Queen City, and Carrizo-Wilcox Aquifers (DFC Model Runs S-7, S-10, S-11*)

S-7 Drawdowns in 2070						
Aquifer	Sparta	Queen City	Carrizo	Calvert Bluff	Simsboro	Hooper
LPGCD	20	26	139	158	322	178
POSGCD	17	18	173	184	352	223
POSGCD (DFC)	28	30	67	149	318	205
BVGCD	46	39	76	98	219	155
METGCD	25	21	49	60	82	74
FCGCD	40	65	123	151	258	145

S-10 Drawdowns in 2070						
Aquifer	Sparta	Queen City	Carrizo	Calvert Bluff	Simsboro	Hooper
LPGCD	21	26	123	148	308	171
POSGCD	31	29	145	169	333	212
BVGCD	46	39	70	93	212	150
METGCD	25	21	48	59	80	73
FCGCD	39	63	116	143	246	140

S-11 Drawdowns in 2070						
Aquifer	Sparta	Queen City	Carrizo	Calvert Bluff	Simsboro	Hooper
LPGCD	22	27	137	154	310	172
POSGCD	32	31	171	178	335	213
BVGCD	47	40	75	95	213	150
METGCD	25	21	49	59	81	73
FCGCD	40	65	122	147	248	140

Percentage Change Relative to S-7

	>5%
	>10%
	>15%

21 – bold indicates an increase from S-7

* Values checked by LPGCD

A scenic landscape featuring a large, lush green tree on the left side of the frame. In the foreground, a wooden dock extends into a calm body of water. The background shows a dense line of trees under a sky filled with soft, white clouds. The overall atmosphere is peaceful and natural.

Questions ?