Post Oak Savannah Groundwater Conservation District



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Gary Westbrook, General Manager

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To: Groundwater Conservation Districts located in Groundwater Management Area 12

Re: Proposed Desired Future Conditions (DFCs)

The purpose of this packet is to fulfill requirements as set forth in Section 36.108, Texas Water Code (TWC), which requires proposed DFCs to be adopted not later than May 1, 2021, and then published for public hearings by each Groundwater Conservation District (GCD) in Groundwater Management Area 12 (GMA 12). Please refer to Section 36.108, TWC, for specific requirements of this section.

Tables 1, 2, and 3 list the DFCs proposed by GMA 12 during a GMA 12 meeting held on March 18, 2021, which had been properly noticed and posted as a public meeting. Please see attached signed minutes from that meeting.

Table 1. GMA 12 DFCs proposed for the Sparta, Queen City, Carrizo, Calvert Bluff, Simsboro, and Hooper aquifers.¹ Districts may adopt Proposed DFCs within a range of 10% above or below the values in the aquifers listed in Table 1.

	Average Drawdown (ft) for Entire Aquifer						Time Deried for Average
GCD	Sparta	Queen City	Carrizo	Calvert Bluff	Simsboro	Hooper	Drawdown
Lost Pines	22	28	137	154	311	173	1/1/2010 to 12/31/2069
Brazos Valley	50	43	84	116	261	178	1/1/2000 to 12/31/2069
Post Oak							
Savannah	32	31	172	179	336	214	1/1/2010 to 12/31/2069
Mid-East Texas	25	21	49	59	81	73	1/1/2010 to 12/31/2069
Fayette County	40	65	122	na	na	an	1/1/2010 to 12/31/2069

¹ the proposed DFCs are based on Run 12 for the Updated Groundwater Availability Model for the central portion of the Sparta, Queen City, and Carrizo-Wilcox Aquifers (INTERA and others, 2020). Fayette County GCD did not propose a DFC for the Calvert Bluff, SImsboro, or the Hooper Aquifers because the district declared these three aquifers as non-relevant aquifers. Table 2. GMA 12 DFCs proposed for the Yegua-Jackson Aquifer.² Districts may adopt ProposedDFCs within a range of 10% above or below the values in the aquifers listed in Table 2.

GCD	Average Drawdown (ft) for Entire Aquifer	Time Period for Average Drawdown
Brazos Valley	61	1/1/2000 to 12/31/2069
Post Oak		
Savannah	100	1/1/2010 to 12/31/2069
Mid-East Texas	7	1/1/2010 to 12/31/2069
Fayette County	77	1/1/2010 to 12/31/2069

- ² the proposed DFCs are based on Run 2 for the Groundwater Water Availability Model for the Yegua-Jackson Aquifer (INTERA and others, 2020). Lost Pines GCD did propose a DFC for the Yegua-Jackson Aquifer because the district declared the Yegua-Jackson Aquifer as a non-relevant aquifer.
- Table 3. GMA 12 DFCs proposed for the Brazos River Alluvium.³

County	Desired Future Condition Statement
Milam County	A decrease of 5 feet in the average saturated thickness over the period
	from January 1, 2010 to December 31, 2069. The baseline average
	saturated thickness for 2010 is estimated at 24.5 feet and is based on an
	analysis of historical water level data and well depth values
Burleson County	A decrease of 6 feet in the average saturated thickness over the period
	from January 1, 2010 to December 31, 2069. The baseline average
	saturated thickness for 2010 is estimated at 38.5 feet and is based on an
	analysis of historical water level data and well depth values.
Brazos and	Percent saturation above well depth shall average at least 30 percent for
Robertson	wells located north of State Highway 21 and 40 percent for wells located
Counties	south of State Highway 21. If the percent saturation criteria are reached for
	three consecutive years then the DFC would be reached.

³the proposed DFCs remain the same as the current DFCs. The DFCs were checked with Run 2 for the Brazos River Alluvium GAM (Ewing and Jigmond, 2016)

References:

- Deeds, N.E., T. Yan, A. Singh, T.L. Jones, V.A. Kelley, P.R. Knox, and S.C. Young. 2010. Groundwater availability model for the Yegua-Jackson Aquifer: Final report prepared for the Texas Water Development Board by INTERA, Inc., 582 p.
- Ewing, J.E., and M. Jigmond. 2016. Final Numerical Model Report for the Brazos River Alluvium Aquifer Groundwater Availability Model, prepared for the Texas Water Development Board, August 2016.
- INTERA, D.B. Stephens, and Groundwater Consultants, LLC. (2020). GMA 12 Update to the Groundwater Availability Model for the Central Portion of the Sparta, Queen City, and Carrizo-Wilcox Aquifers. prepared for the Groundwater Management Area 12 Members. November, 2020.