

**D. Compliance with the Adopted 2021 DFCs**

Under TWC §36.108.31, TAC 356.52(a)(1)(H) and TWC §36.1071(a)(8), it is incumbent upon the District to remain in compliance with the adopted Desired Future Conditions (DFCs). The measurement period for evaluating the DFCs is currently 2000-2070. The District is to remain within the adopted DFC for each of the managed aquifers throughout the 70-year period. District Rules provide that a DFC is non-compliant and curtailment procedures listed in the rules are to be implemented once the adopted DFC has been exceeded in three (3) consecutive years. The average artesian head decline for the three (3) most recent years for each managed aquifer, artesian head decline at the beginning of DFC calculations assumed to be zero, and the adopted DFC for each managed aquifer are listed below in *Table 2*. For the Brazos River Alluvium the matrix is a percent of saturation of the aquifer with the number being either 30 or 40 percent of saturation of the aquifer depending on the location within the District.

**Table 2. Average Artesian Head Decline compared to Adopted DFC from 2021 Cycle of GMA 12 Planning (ft)**

<b>Aquifer</b>	<b>2000</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>Adopted DFC, Ave Feet of Decline</b>
Sparta	0	9	12		53
Queen City	0	13	7		44
Carrizo	0	7	11		84
Calvert Bluff	0	+3	+4		111
Simsboro	0	34	43		262
Hooper	0	14	6		167
Yegua-Jackson	0	+11	+8		67
Brazos River Alluvium, average percent saturation			65		

**9. Implement Strategies to Assess, Control, and Prevent Subsidence**

**9a. Objective** - The District will monitor changes in water levels in its monitoring wells with due consideration to the potential for land subsidence. At least once every three years, the District will assess the potential for land subsidence for areas where water levels have decreased more than 100 feet since the year 2000. The District will review the sections in "Identification of the Vulnerability of the Major and Minor Aquifers of Texas to Subsidence with Regard to Groundwater Pumping" report (TWDB Contract Number 1648302062, by LRE Water) when discussing subsidence within the Districts aquifers. Those aquifers can be found on page 4-5, 4-104, 4-187, 4-207, and 4-229 of the report.

➤ **Performance Standard** – Within three years of the approval of this plan and every three years thereafter, the District will map any region where more than 100 feet of drawdown has occurred since the year 2000 and assess the potential for land subsidence. The results of the assessment will be discussed in a District Board meeting and be documented in a presentation or a report.

➤ **Performance Standard** – As outlined in TWC Ch. 36.108 (d), The District will take into consideration the "Identification of the Vulnerability of the Major and Minor Aquifers of Texas to Subsidence with Regard to Groundwater Pumping" when considering subsidence during GMA 12 joint planning.

**B. Management Goals Determined Not to be Applicable to the Brazos Valley Groundwater Conservation District**

**1. Controlling and Preventing Subsidence:**

~~The Carrizo, Simsboro and Brazos River alluvium are aquifers in the District that have and will continue to provide moderate to large amounts of water to wells. The formations that compose the aquifers are principally sand or some gravel for the Brazos River alluvium, with only minor amounts of clay in the Carrizo or Simsboro aquifers and surficial clays for the Brazos River alluvium. With the minor amounts of clay or surficial clays in the formations that compose the aquifers, there is not a significant risk of subsidence occurring due to groundwater pumping. The report "Controlling and Preventing Subsidence" prepared by the Texas Water Development Board was reviewed while considering the potential for significant subsidence occurring due to groundwater pumping.~~