MEMORANDUM

To: Board of Directors of Bluebonnet GCD, Brazoria Co. GCD, Lower Trinity GCD, and Southeast Tex. GCD

From: Lone Star Groundwater Conservation District (LSGCD)

Re: Information Supporting LSGCD's Proposed Desired Future Conditions

Date: February 18, 2026

Thank you for your continued commitment to conserve and protect groundwater. As part of the joint planning process under section 36.108 of the Texas Water Code, LSGCD provides the following information supporting LSGCD's proposal to maintain the existing metric of 70 percent median available drawdown remaining in 2080 as the desired future conditions for the fourth round of joint planning.

1. Growth Trends in Montgomery County

Lone Star Groundwater Conservation District (LSGCD) recognizes that meeting long-term water demands requires a comprehensive approach that includes evaluating alternative water supplies and engaging in proactive, forward-looking planning that involves balancing the feasibility of alternative supplies with the availability, costs and technical challenges that come with continued groundwater production particularly in deeper formations such as the Jasper or Catahoula aquifers. Where available and cost-effective, surface water and other alternative supplies should be prioritized.

LSGCD represents Montgomery County, which is the 11th largest county in Texas. Montgomery County's current population is approximately 818,149. Montgomery County's population is expected to increase 140% from 2020 to 2060 with an expected 2.1 million population in 2060. As a rapidly growing county with numerous developments and capital improvement projects underway, a reliable and viable water supply is essential to support residents, businesses, and municipal operations.

In 2024, Montgomery County utilized approximately 82,000 acre-feet of groundwater from the Gulf Coast Aquifer, or roughly 87,000 acre-feet when including pumping from the Catahoula Aquifer. The current Region H water plan projects Montgomery County's total water demand to increase to approximately 225,000 acre-feet per year by 2080 as population growth continues. LSGCD has permitted approximately 150,000 acre-feet per year.

2. Available Water Supply Options by Service Area

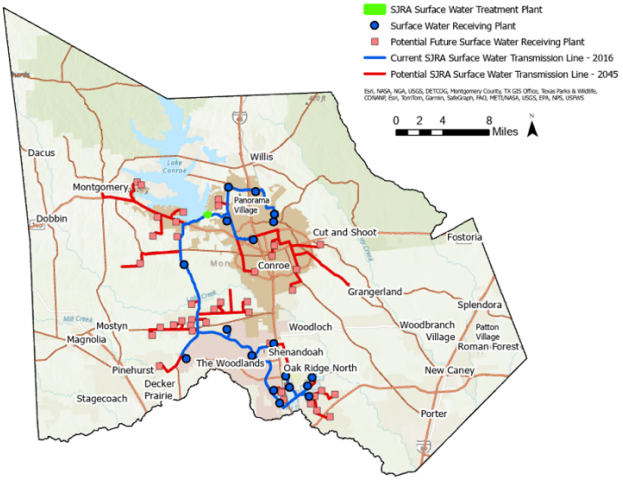
The majority of water demand in Montgomery County is for municipal use. LSGCD has issued over 1,500 permits, the majority of which support municipal use by approximately 360 public

water supply systems. The current water supply options in Montgomery County are very limited and include the following:

- Six public water suppliers currently receive surface water from Lake Conroe through the San Jacinto River Authority's (SJRA) Groundwater Reduction Plan. The excess capacity in the existing surface water treatment plan is slated to provide a few other public water suppliers with surface water in the next 5-10 years. In all instances, these public water suppliers are using surface water in conjunction with groundwater. Groundwater will continue to play a critical role for these few public water suppliers who have some access to surface water.
- Some areas of Montgomery County, who currently only have groundwater and limited reclaim available, *may* have access to surface water in the future. Surface water from Lake Conroe may become available in these areas at an undetermined future date only if additional transmission lines and treatment plants are constructed. Until that time, the population and development demands for these areas can only be met with groundwater. LSGCD promotes conservation and the responsible use of groundwater.
- In other areas of the county, SJRA has reported that surface water from Lake Conroe will never be available given the yield of the lake and the full build-out plans. Since surface water will not reach these service areas, groundwater remains the sole viable source to meet existing and future demands.

Surface Water Availability in Montgomery County

- SJRA Surface Water is currently provided to six entities in Montgomery County
- Additional water providers have expressed interest in obtaining surface water from SJRA
- The 2045 potential SJRA surface water transmission lines extend the availability of surface water, but do not reach all parts of Montgomery County
- Montgomery County water demand projections demonstrate the need for conjunctive use to meet future demands



Based on Maps Provided By SJRA, 8/18/2025

Please note the east and southeast portions of Montgomery County where the expansion is not expected to reach even upon full build-out. This is "East County," which is currently one of the fastest growing portions of Montgomery County. Other parts of the county are also not slated to receive any surface water from Lake Conroe (for example, Willis to the north and Magnolia and Dobbin to the west).

3. Desired Future Conditions for GMA 14 Joint Planning

With respect to the proposed Desired Future Conditions (DFCs) developed in coordination with the joint planning process for GMA 14, the LSGCD Board supports maintaining the existing metric of 70 percent median available drawdown remaining in 2080 that would allow for an increase in groundwater production up to 200,000 acre-feet per year in Montgomery County through 2080. After investing millions in an extensive drilling, coring, and laboratory study of subsidence since 2023, the LSGCD Board does not support a subsidence metric at this time. LSGCD will continue to monitor subsidence and is evaluating where additional GPS monitoring stations may be appropriate in the county.

By comparison, Harris County, despite its closer proximity to the coast and lower land surface elevations has allowed additional subsidence to occur by supporting continued growth on groundwater until alternative water supplies become available. Fort Bend County continues to grow on groundwater as demand increases and has no immediate plans for surface water conversion. LSGCD believes Montgomery County should be afforded the same opportunity to meet current and future demands through responsible groundwater use while planning for alternative resources. Furthermore, LSGCD believes that the subsidence study, in conjunction with the updated groundwater model, confirm that the proposed level of production and predicted drawdown is practicable for the aquifer through 2080.

Harris and Fort Bend Counties are not regulated by a groundwater conservation district and do not have desired future conditions. Despite their closer proximity to the coast and lower land surface elevations, the Harris-Galveston and Fort Bend Subsidence Districts do not manage to a subsidence metric or any quantifiable aquifer condition. LSGCD will continue to monitor conditions and reevaluate the need for a subsidence metric in future joint planning cycles.

4. Regional Comparisons Within GMA 14

Montgomery County represents approximately 48 percent of the GCDs' total population within GMA 14 and is requesting DFC that yields a Modeled Available Groundwater (MAG) value of 200,000 acre-feet per year under a worst-case growth scenario. The Texas Water Development Board defines the MAG as the estimated average annual amount of groundwater production that can be produced to achieve a DFC. LSGCD's 2021 MAG is approximately 97,000 acre-feet per year. LSGCD is currently permitted to about 150,000 acre-feet per year and the projected water demand for Montgomery County in 2080 is about 225,000 acre-feet per year. When compared to other counties within GMA 14, Montgomery County's requested pumping allowance is consistent and reasonable.

- Assuming that Fort Bend County is relying solely on future groundwater development, the County is projected to pump up to approximately 232,650 acre-feet per year by 2080. Additionally, Fort Bend County's projected groundwater use of 232,650 acre-feet per year is applicable to a coverage area of approximately 885 square miles, while Montgomery

County's projected use of 200,000 acre-feet per year is applicable to a coverage area of approximately 1,077 square miles.

- Harris County is projected to pump up to approximately 287,900 acre-feet per year by 2080, assuming future demands are met with groundwater after 2025. A majority of this pumping is projected to occur in the north and west areas of the County, which has a land area roughly comparable to Montgomery County.
- The 2021 MAG value for Grimes, Walker, Waller, and Austin Counties (Bluebonnet Groundwater Conservation District) is about 196,000 acre-feet per year. While Bluebonnet GCD represents four counties, it only accounts for about 13.2 percent of the total population within GCDs in GMA 14.
- The 2021 MAG for Hardin, Tyler, Jasper, and Newton Counties (Southeast Texas Groundwater Conservation District) is about 183,000 acre-feet per year. While Southeast Texas GCD represents four counties, it only accounts for about 7.4 percent of the total population within GCDs in GMA 14.

Summary of GMA 14 Modeled Available Groundwater, Pumping and Population by Groundwater Conservation District

Groundwater Conservation District	2021 GMA 14 Modeled Available Groundwater (acre-feet per year)	2022 GMA 14 TWDB Reported Groundwater Pumping (acre-feet per year)	2026 GMA 14 Population by Groundwater Conservation District	Percent of Total GMA 14 Groundwater Conservation District Population
Brazoria County	54,886	45,829	436,828	25.9
Bluebonnet	196,085	43,222	223,085	13.2
Lone Star	96,873	92,153	818,149	48.5
Lower Trinity	75,874	8,939	84,208	5.0
Southeast Texas	182,985	64,311	125,159	7.4

Data Source: Texas Water Development Board & https://worldpopulationreview.com/us-counties/texas

These comparisons demonstrate that Montgomery County's request aligns logically with regional growth projections and does not represent an unreasonable or disproportionate demand. Furthermore, the simulated aquifer impacts are practicable through 2080 and result in less simulated subsidence then has occurred historically in HGSD.

5. Conservation and Proactive Planning Efforts

Montgomery County is making substantial and proactive efforts to advance water conservation through reclaim initiatives, rainwater harvesting programs, and alignment with the SJRA to encourage maximum use of surface water as it becomes available. These efforts underscore the

County's commitment to responsible groundwater management and long-term viability of the aquifers.

6. Summary

The available science demonstrates that groundwater resources are sufficient to support pumping of 200,000 acre-feet per year from the Gulf Coast Aquifer in Montgomery County and still meet the current DFC of 70 percent median available drawdown remaining in 2080. Given the uncertainty surrounding future surface water availability, LSGCD supports management policies and proposed DFCs that allow for continued growth while ensuring groundwater resources are responsibly regulated, monitored, and managed.