



# Harris - Galveston Subsidence District

1660 West Bay Area Boulevard  
Friendswood, Texas, 77546

March 11, 2019

Board of Directors  
Lone Star Groundwater Conservation District  
655 Conroe Park North Drive  
Conroe, Texas 77303

RE: Draft Groundwater Management Plan

Dear Lone Star Groundwater Conservation District Directors,

Thank you for the opportunity to review and provide comments on the Draft Groundwater Management Plan posted on February 19, 2019. The Harris-Galveston Subsidence District (“Subsidence District”) has worked collaboratively with the Lone Star Groundwater Conservation District (LSGCD) since you were enacted in 2001, to share information in the development of our management plans considering the regional nature of the problems of water-level decline and subsidence. I understand that the proposed management plan is a work in progress; the Subsidence District is willing to continue to work with you as you develop this important plan for our region.

Subsidence is the lowering of the land surface elevation which can contribute to flooding and damage to infrastructure. The subsidence measured at the surface is caused by the compaction clay deposits in the aquifer due to groundwater usage. Generally, as groundwater development increases in the aquifer, the potentiometric water-level decreases causing a depressurization in the clay deposits resulting in compaction. The Subsidence District has worked cooperatively with the LSGCD, the National Geodetic Survey, and the University of Houston to monitor the surface deformation caused by groundwater development in Montgomery County.

The LSGCD management plan, as proposed, in the section titled Controlling and Preventing Subsidence under-represents the amount of subsidence that has occurred in Montgomery County. The total amount shown in the draft management plan disregards the historical amount of

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Michael J. Turco - General Manager

subsidence that occurred in southern Montgomery County from 1906-2000, adding an additional 1-2 feet to the amount specified in the proposed plan. Additionally, the management objective that discusses the prevention of future subsidence lacks mention of the current 30% groundwater reduction requirement or other water management strategies that could be utilized that would stabilize the pressure in the system and prevent subsidence. Information should be added to designate the continuation of the LSGCD conversion requirement in Montgomery County or the process by which the management criteria of subsidence prevention will be addressed.

Currently, the Water Authorities in Harris and Fort Bend County and the City of Houston are working in earnest to develop infrastructure and diversify source waters to reduce groundwater pumpage, stabilize aquifer water-levels, and prevent future subsidence. They have already been required to reduce groundwater use by 30%, and are in the development of additional infrastructure to reduce groundwater use by 60% before the year 2025. Harris County will further reduce groundwater use to 80% of the total water demand by the year 2035. Considering this on-going effort, it is important that the LSGCD Management Plan adequately reduce groundwater withdrawal in Montgomery County where any additional withdrawal could cause pressure declines in Northern Harris County and additional subsidence.

I look forward to seeing how the LSGCD management plan and rules evolve over the coming months. I encourage you and your staff to reach out to the Subsidence District to continue the long history of collaboration and cooperation in the management of our groundwater resources.

Sincerely,



Michael J. Turco  
General Manager

