RESOLUTION #16-006

RESOLUTION FOR THE ADOPTION OF THE DESIRED FUTURE CONDITIONS FOR THE GULF COAST AQUIFER THAT APPLY TO THE LONE STAR GROUDNWATER CONSERVATION DISTRICT

LONE STAR GROUNDWATER CONSERVATION DISTRICT

THE STATE OF TEXAS §

COUNTY OF MONTGOMERY §

WHEREAS, the Lone Star Groundwater Conservation District ("Lone Star") was created by the Legislature of the State of Texas by the Act of May 17, 2001, 77th Leg., R.S., ch. 1321, 2001 Tex. Gen. Laws 3246, as amended (the "Enabling Act"), as a groundwater conservation district operating under Chapter 36, Texas Water Code, and the Enabling Act; and

WHEREAS, pursuant to § 35.151 of the Texas Water Code, the Texas Water Development Board ("TWDB") has designated groundwater management areas that, together, cover all major and minor aquifers in the state, and, through Title 31 Texas Administrative Code §356.21, the TWDB has designated the area encompassing all of Austin, Brazoria, Chambers, Fort Bend, Galveston, Grimes, Hardin, Harris, Jasper, Jefferson, Liberty, Montgomery, Newton, Orange, Polk, San Jacinto, Tyler, Walker, Waller, and Washington counties as Groundwater Management Area No. 14 ("GMA 14"); and

WHEREAS, Lone Star and four other groundwater conservation districts, Bluebonnet Groundwater Conservation District, Brazoria Groundwater Conservation District, Lower Trinity Groundwater Conservation District, and Southeast Texas Groundwater Conservation District, (collectively referred to herein as the "Districts") are located wholly or partially within GMA 14; and

WHEREAS, the Districts are authorized by Chapter 36, Texas Water Code, to engage in joint planning activities for the coordinated management of the aquifers located in GMA 14, and in that regard, the Districts are required to establish desired future conditions ("DFCs") for the relevant aquifers within GMA 14; and

WHEREAS, Section 36.108 of the Texas Water Code requires representatives from the Districts to hold joint planning meetings for the consideration of DFC options, the proposal of DFCs for adoption, and after the contemplation of comments and suggested revisions provided by the public and Districts, the adoption of DFCs for each relevant aquifer in GMA 14 and the submission of an explanatory report to the TWDB for approval of the DFCs adopted; and

WHEREAS, as set forth in the attached Resolution for the Approval of Desired Future Conditions for All Aquifers in Groundwater Management Area 14 (the "Resolution"), attached hereto as Attachment A and incorporated by reference for all intents and purposes, the District representatives for GMA 14 have complied with the requirements provided by statute in Section 36.108, Texas Water Code, and on April 29, 2016, the District representatives for GMA 14 took final action to adopt the DFCs for the relevant aquifers in GMA 14 by approving the attached Resolution and the submission of the Desired Future Conditions Explanatory Report to the TWDB and the Districts as required by Section 36.108(d-3) of the Texas Water Code; and

WHEREAS, the DFCs adopted by the District representatives of GMA 14 are described in terms of acceptable drawdown levels for each subdivision of the Gulf Coast Aquifer, including the Chicot, Evangeline, Burkeville, and Jasper, for each county located within GMA 14, or in land surface subsidence, as applicable, and the DFCs were also adopted on aquifer-wide scales within GMA 14 for each of those aquifer subdivisions, which do not differ substantively in their application from the county-scale numbers; and

WHEREAS, the acceptable levels of drawdown for each subdivision of the aquifer underlying Montgomery County are measured in terms of water level drawdowns over the proposed current planning cycle measured in feet from 2009 estimated water levels; and

WHEREAS, Section 36.108(d-4) of the Texas Water Code provides that as soon as possible after a district receives the DFCs resolution and explanatory report under Subsection (d-3), the district shall adopt the DFCs in the resolution and report that apply to the district; and

WHEREAS, TWDB rules at Title 31, Texas Administrative Code §356.34 provide that as soon as possible after a district receives notice from the Executive Administrator of the TWDB that the DFC Submission Package submitted to the TWDB has been determined to be administratively complete, the district shall adopt the DFCs that apply to the district; and

WHEREAS, at this time, Lone Star has received a copy of the Resolution, as provided herein as Attachment A, and the Desired Future Conditions Explanatory Report prepared by GMA 14, and the Lone Star Board seeks to adopt the DFCs in the Resolution and the Explanatory Report that apply to Lone Star; and

WHEREAS, Lone Star received a letter from the TWDB, dated July 12, 2016, notifying Lone Star that the DFC Submission Package provided to the TWDB by the GMA 14 Districts has been determined to be administratively complete by the Executive Administrator of the TWDB, and therefore it is now appropriate for Lone Star to proceed with the adoption of the DFCs that apply to Lone Star in compliance with TWDB rules as set forth in Title 31, Texas Administrative Code §356.34; and

WHEREAS, the Board finds that the DFCs provided herein for adoption are reasonable and necessary for the effective and prudent management of groundwater resources within Montgomery County, and have otherwise been developed in accordance with, and do satisfy the obligations imposed by Chapter 36 of the Texas Water Code and all other applicable laws of the State of Texas; and

WHEREAS, the Board also finds that all notice requirements for a meeting, held this day, to take up and consider the adoption of the DFCs described herein that apply to Lone Star have been, and are, satisfied;

NOW, THEREFORE, be it resolved by the Board of Directors of the Lone Star Groundwater Conservation District that the following DFCs are hereby established for the Gulf Coast Aquifer as the DFCs that apply to Lone Star:

- From estimated year 2009 conditions, the average draw down of the Chicot Aquifer in Montgomery County should not exceed approximately 26 feet after 61 years;
- From estimated year 2009 conditions, the average draw down of the Evangeline Aquifer in Montgomery County should not exceed approximately -4 feet after 61 years;
- From estimated year 2009 conditions, the average draw down of the Burkeville confining unit in Montgomery County should not exceed approximately -4 feet after 61 years;
- From estimated year 2009 conditions, the average draw down of the Jasper Aquifer in Montgomery County should not exceed approximately 34 feet after 61 years; and
- The Board also adopts as applicable to Lone Star the aquifer-wide scale average draw down numbers within GMA 14 for the Chicot Aquifer, Evangeline Aquifer, Burkeville confining unit, and the Jasper Aquifer as specifically set forth in the attached Resolution for the Approval of Desired Future Conditions for All Aquifers in Groundwater Management Area 14 (Attachment A).

AND IT IS SO ORDERED.

PASSED AND ADOPTED on this 9th day of August, 2016.

LONE STAR GROUNDWATER CONSERVATION DISTRICT

By: _____
Richard J. Tramm, Board President

ATTEST:

_____
Rick Moffatt, Secretary

ATTACHMENT A

RESOLUTION FOR THE APPROVAL OF DESIRED FUTURE CONDITIONS FOR ALL AQUIFERS IN GROUNDWATER MANAGEMENT AREA 14

Whereas, pursuant to Section 35.004 of the Texas Water Code, the Texas Water Development Board ("TWDB") has designated groundwater management areas that, together, cover all major and minor aquifers in the state; and

Whereas, each groundwater management area was designated with the objective of providing the most suitable area for the management of groundwater resources; and

Whereas, through Title 31, Section 356.21 of the Texas Administrative Code, the TWDB has designated the area encompassing all of Austin, Brazoria, Chambers, Fort Bend, Galveston, Grimes, Hardin, Harris, Jasper, Jefferson, Liberty, Montgomery, Newton, Orange, Polk, San Jacinto, Tyler, Walker, Waller, and Washington counties as Groundwater Management Area No. 14 ("GMA 14"); and

Whereas, GMA 14 includes all or portions of areas subject to groundwater regulation by Bluebonnet Groundwater Conservation District (Austin, Grimes, Walker, and Waller counties), Brazoria County Groundwater Conservation District (Brazoria County), Lone Star Groundwater Conservation District (Montgomery County), Lower Trinity Groundwater Conservation District (Polk and San Jacinto counties), and Southeast Texas Groundwater Conservation District (Hardin, Jasper, Newton, and Tyler counties) (the "Member Districts"); and

Whereas, the Member Districts are authorized by Chapter 36, Texas Water Code, to engage in joint planning activities for the coordinated management of the aquifers located in GMA 14, and in that regard, shall establish desired future conditions ("DFCs") for the relevant aquifers within GMA 14; and

Whereas Fort Bend Subsidence District (Fort Bend County), Harris-Galveston Subsidence District (Galveston and Harris counties), and other stakeholders within GMA 14 from Chambers County, and Washington County also contributed to the development of DFCs for GMA 14; and

Whereas, Section 36.108 of the Texas Water Code requires the Member Districts in GMA 14 to consider groundwater availability models and other data or information for the management area and vote on a proposal for the adoption of DFCs for each relevant aquifer within GMA 14 by May 1, 2016; and

Whereas, the Member Districts within GMA 14 secured hydrogeologic and engineering consulting services to provide technical support in their efforts to establish requisite DFCs; and

Whereas, in developing the proposed DFCs for the relevant aquifers within GMA 14, the Member Districts in GMA 14 considered the nine statutory factors set forth in Section 36.108(d) of the Texas Water Code:

- aquifer uses or conditions within the management area, including conditions that differ substantially from one geographic area to another,
- the water supply needs and water management strategies included in the state water plan,
- hydrological conditions, including for each aquifer in the management area the total estimated recoverable storage as provided by the executive administrator, and the average annual recharge, inflows, and discharge,
- other environmental impacts, including impacts on spring flow and other interactions between groundwater and surface water,
- the impact on subsidence,
- socioeconomic impacts reasonably expected to occur,
- the impact on the interests and rights in private property, including ownership and the rights of management area landowners and their lessees and assigns in groundwater as recognized under Section 36.002,
- the feasibility of achieving the desired future condition, and
- any other information relevant to the specific desired future conditions; and

Whereas, pursuant to Section 36.108(d-2), the Member Districts also considered in their development of proposed DFCs the balance between the highest practicable level of groundwater production and the conservation, preservation, protection, recharging, and prevention of waste of groundwater and control of subsidence in the management area; and

Whereas, the Member Districts used this information to developed proposed DFCs for the portions of the northern segment of the Gulf Coast Aquifer that occurs within the bounds of GMA 14; and

Whereas, TWDB conducted an evaluation of the Houston Area Groundwater Model ("HAGM") and adopted it as the updated Northern Gulf Coast Groundwater Availability Model ("GAM"); and

Whereas, the Members Districts conducted a model run of the updated Northern Gulf Coast GAM specifically identified as GAM Run 2 for the purpose of evaluating drawdown in the Northern Gulf Coast Aquifer; and

Whereas, the TWDB has prepared a report for GAM Task 10-052 MAG for the Carrizo-Wilcox Aquifer; and

Whereas, the TWDB has prepared a report for GAM Task 10-053 MAG for the Queen City Aquifer; and

Whereas, the TWDB has prepared a report for GAM Task 10-054 MAG for the Sparta Aquifer; and

Whereas, the TWDB has prepared a report for GAM Task 10-055 MAG for the Yegua-Jackson Aquifer; and

Whereas, the TWDB has prepared a report for Aquifer Assessment Task 10-30 MAG for the Brazos River Alluvium Aquifer; and

Whereas, the TWDB has prepared a report for Aquifer Assessment Task 10-31 MAG for the Navasota River Alluvium Aquifer; and

Whereas, the TWDB has prepared a report for Aquifer Assessment Task 10-32 MAG for the San Bernard River Alluvium Aquifer; and

Whereas, the TWDB has prepared a report for Aquifer Assessment Task 10-33 MAG for the San Jacinto River Alluvium Aquifer; and

Whereas, the TWDB has prepared a report for Aquifer Assessment Task 10-34 MAG for the Trinity River Alluvium Aquifer; and

Whereas, during joint meetings noticed and conducted pursuant to Section 36.108(e) of the Texas Water Code, the Member Districts considered GAMs and other data and information relevant to the development of DFCs for GMA 14, including input and comments from stakeholders within GMA 14; and

Whereas, the Member Districts find that all notice requirements for a meeting, held this day, to take up and consider the approval of the proposed DFCs as described herein for GMA 14 have been, and are, satisfied; and

Whereas, Texas Water Code Section 36.0015(b), as amended by House Bill 200 during the 84th Texas Legislature states that "(b) In order to provide for the conservation, preservation, protection, recharging, and prevention of waste of groundwater, and of groundwater reservoirs or their subdivisions, and to control subsidence caused by withdrawal of water from those groundwater reservoirs or their subdivisions, consistent with the objectives of Section 59, Article XVI, Texas Constitution, groundwater conservation districts may be created as provided by this chapter. Groundwater conservation districts created as provided by this chapter are the state's preferred method of groundwater management in order to protect property rights, balance the conservation and development of groundwater to meet the needs of this state, and use the best available science in the conservation and development of groundwater through rules developed, adopted, and promulgated by a district in accordance with the provisions of this chapter"; and

Whereas, the Member Districts find that the proposed DFCs provided herein for establishment are each merited and necessary for the effective and prudent management of groundwater resources within GMA 14, and have otherwise been developed in accordance with, and do satisfy the obligations imposed by, Chapter 36 of the Texas Water Code and all other applicable laws of the State of Texas.

Now, therefore, be it resolved by the Member Districts of GMA 14 that the following DFCs are each hereby established:

Formations of the Gulf Coast Aquifer

DFCs for the Gulf Coast Aquifer are hereby adopted, as documented by and incorporating herein GAM Run 2, at two scales, which do not differ substantively in their application; the first being for GMA 14 in its entirety, and also, to better facilitate the management and conservation of groundwater resources at the individual groundwater conservation district level after considering the statutory criteria set forth under Section 36.108(d), Water Code, on a county-by-county basis. DFCs for GMA 14 for the Gulf Coast Aquifer are as follows:

- From estimated year 2009 conditions, the average draw down of the Chicot Aquifer should not exceed approximately 28.3 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Evangeline Aquifer should not exceed approximately 23.6 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Burkeville confining unit should not exceed approximately 18.5 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Jasper Aquifer should not exceed approximately 66.2 feet after 61 years.

Austin County (BGCD)

- From estimated year 2009 conditions, the average draw down of the Chicot Aquifer should not exceed approximately 39 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Evangeline Aquifer should not exceed approximately 23 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Burkeville confining unit should not exceed approximately 23 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Jasper Aquifer should not exceed approximately 76 feet after 61 years.
- From estimated year 1890 conditions, the maximum subsidence in Austin County should not exceed approximately 2.83 feet by the year 2070.

Brazoria County (BCGCD)

- From estimated year 2009 conditions, the average draw down of the Chicot Aquifer should not exceed approximately 23 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Evangeline Aquifer should not exceed approximately 27 feet after 61 years.

Chambers County

- From estimated year 2009 conditions, the average draw down of the Chicot Aquifer should not exceed approximately 32 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Evangeline Aquifer should not exceed approximately 30 feet after 61 years.

Grimes County (BGCD)

- From estimated year 2009 conditions, the average draw down of the Chicot Aquifer should not exceed approximately 5 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Evangeline Aquifer should not exceed approximately 5 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Burkeville confining unit should not exceed approximately 6 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Jasper Aquifer should not exceed approximately 52 feet after 61 years.
- From estimated year 1890 conditions, the maximum subsidence in Grimes County should not exceed approximately 0.12 feet by the year 2070.

Hardin County (STGCD)

- From estimated year 2009 conditions, the average draw down of the Chicot Aquifer should not exceed approximately 21 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Evangeline Aquifer should not exceed approximately 27 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Burkeville confining unit should not exceed approximately 29 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Jasper Aquifer should not exceed approximately 89 feet after 61 years.

Jasper County (STGCD)

- From estimated year 2009 conditions, the average draw down of the Chicot Aquifer should not exceed approximately 23 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Evangeline Aquifer should not exceed approximately 41 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Burkeville confining unit should not exceed approximately 46 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Jasper Aquifer should not exceed approximately 40 feet after 61 years.

Jefferson County

- From estimated year 2009 conditions, the average draw down of the Chicot Aquifer should not exceed approximately 15 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Evangeline Aquifer should not exceed approximately 17 feet after 61 years.

Liberty County

- From estimated year 2009 conditions, the average draw down of the Chicot Aquifer should not exceed approximately 27 feet after 61 years.

- From estimated year 2009 conditions, the average draw down of the Evangeline Aquifer should not exceed approximately 29 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Burkeville confining unit should not exceed approximately 25 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Jasper Aquifer should not exceed approximately 120 feet after 61 years.

Montgomery County (LSGCD)

- From estimated year 2009 conditions, the average draw down of the Chicot Aquifer should not exceed approximately 26 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Evangeline Aquifer should not exceed approximately -4 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Burkeville confining unit should not exceed approximately -4 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Jasper Aquifer should not exceed approximately 34 feet after 61 years.

Newton County (STGCD)

- From estimated year 2009 conditions, the average draw down of the Chicot Aquifer should not exceed approximately 35 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Evangeline Aquifer should not exceed approximately 45 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Burkeville confining unit should not exceed approximately 44 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Jasper Aquifer should not exceed approximately 37 feet after 61 years.

Orange County

- From estimated year 2009 conditions, the average draw down of the Chicot Aquifer should not exceed approximately 14 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Evangeline Aquifer should not exceed approximately 16 feet after 61 years.

Polk County (LTGCD)

- From estimated year 2009 conditions, the average draw down of the Chicot Aquifer should not exceed approximately 26 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Evangeline Aquifer should not exceed approximately 10 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Burkeville confining unit should not exceed approximately 15 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Jasper Aquifer should not exceed approximately 73 feet after 61 years.

San Jacinto County (LTGCD)

- From estimated year 2009 conditions, the average draw down of the Chicot Aquifer should not exceed approximately 22 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Evangeline Aquifer should not exceed approximately 19 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Burkeville confining unit should not exceed approximately 19 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Jasper Aquifer should not exceed approximately 108 feet after 61 years.

Tyler County (STGCD)

- From estimated year 2009 conditions, the average draw down of the Chicot Aquifer should not exceed approximately 42 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Evangeline Aquifer should not exceed approximately 35 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Burkeville confining unit should not exceed approximately 30 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Jasper Aquifer should not exceed approximately 62 feet after 61 years.

Walker County (BGCD)

- From estimated year 2009 conditions, the average draw down of the Evangeline Aquifer should not exceed approximately 9 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Burkeville confining unit should not exceed approximately 4 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Jasper Aquifer should not exceed approximately 42 feet after 61 years.
- From estimated year 1890 conditions, the maximum subsidence in Walker County should not exceed approximately 0.04 feet by the year 2070.

Waller County (BGCD)

- From estimated year 2009 conditions, the average draw down of the Chicot Aquifer should not exceed approximately 39 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Evangeline Aquifer should not exceed approximately 39 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Burkeville confining unit should not exceed approximately 40 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Jasper Aquifer should not exceed approximately 101 feet after 61 years.
- From estimated year 1890 conditions, the maximum subsidence in Waller County should not exceed approximately 4.73 feet by the year 2070.

Washington County

- From estimated year 2009 conditions, the average draw down of the Evangeline Aquifer should not exceed approximately 1 foot after 61 years.
- From estimated year 2009 conditions, the average draw down of the Burkeville confining unit should not exceed approximately 16 feet after 61 years.
- From estimated year 2009 conditions, the average draw down of the Jasper Aquifer should not exceed approximately 48 feet after 61 years.

Formations in Fort Bend, Galveston, and Harris counties

Groundwater Management Area 14 (GMA 14) efforts to determine DFCs is primarily an aquifer water-level based approach to describe the regional and local desires for the aquifer beneath them. The GMA process requires Groundwater Conservation Districts (GCDs) to determine the DFCs for the entire GMA, regardless of whether each county is included within a GCD. The Fort Bend Subsidence District (FBSD) and the Harris-Galveston Subsidence District (HGSD), operating in Fort Bend County and Harris and Galveston counties, respectively, regulate groundwater for the purpose of ending land surface subsidence within their jurisdiction. They are not GCDs and operate considerably different from the typical GCD. Therefore, in an official context these three counties are "unrepresented" but the GCDs within GMA-14 must still determine the DFC for these counties.

Both FBSD and HGSD have participated in an unofficial role to aid the GCDs within GMA-14 with their evaluation of Fort Bend, Galveston and Harris County information. The groundwater pumpage within these three counties even though regulated is still greater than the sum of all other counties within GMA-14. FBSD and HGSD recognize that the projected groundwater pumpage from these three counties will impact the decisions of GMA-14 throughout a large portion of the area. FBSD and HGSD have provided considerable historical and projected groundwater pumpage data and details of regulations to assist GMA-14 in incorporating these counties in the overall GMA-14 DFCs. FBSD and HGSD cannot however, present DFCs for these three counties in terms of aquifer water-level changes over time. The FBSD and HGSD regulations do not specifically address water-levels nor do they designate a specific pumping limit, rather the regulations are based on limitations of groundwater as a percentage of total water demand. The percentage of groundwater to total water demand is decreased over time, as total water demand increases.

The goal of both FBSD and HGSD is to end land surface subsidence that is caused by man's pumpage of groundwater. There is a clearly established link between the over-pumpage of groundwater and land surface subsidence. The DFCs within the aquifer beneath Fort Bend, Galveston, and Harris counties has no easily defined relationship to water-levels. The DFC for FBSD and HGSD is the reduction and halting of the compaction of clay layers within the aquifer caused by the over-pumpage of groundwater. Stated more simply, the DFC for these three counties is that future land surface subsidence be avoided. That stated, HGSD and FBSD have adopted regulations, most recently in 2013, that require the reduction of

groundwater pumpage and the conversion to alternate water sources, while balancing with the realistic ability of the permittees to achieve compliance with these regulations. This effort was accomplished with the aid of computer models and information specific to the missions of FBSD and HGSD and outside of the revised Northern Gulf Coast GAM (NGCGAM) adopted by the TWDB.

Within HGSD, from central to southeastern Harris County and all of Galveston County (Regulatory Areas 1 and 2), virtually all permittees have achieved compliance with previous and current HGSD regulations. Subsidence has been halted and water-levels within the aquifer have risen dramatically in these areas. However, in northern and western areas of Harris County (Regulatory Area 3), the HGSD regulations have allowed groundwater pumpage to continue until the required reductions in 2010, 2025, and 2035. With these scheduled reductions in groundwater pumpage, subsidence will slow dramatically and even be halted with water-levels stabilizing and in later years rising.

Within FBSD, from central to northern and eastern Fort Bend County (Regulatory Area A), the regulations call for reductions of groundwater pumpage in 2014/2016, and 2025. Similar to HGSD's Regulatory Area 3, subsidence within FBSD Regulatory Area A will slow dramatically and even be halted with water-levels stabilizing and in later years rising.

In both HGSD and FBSD, because of the percentage based approach to regulations, groundwater pumpage will increase until scheduled reductions in milestone years (ex: 2010, 2014/2016, 2025, and 2035). In between milestone years, groundwater pumpage will increase with the assumed increase in total water demand from an assumed increase in population. In order to demonstrate the DFC of these three counties using water-level changes, the area of previous groundwater-to-alternative water conversions must be separated from future conversions AND each annual time step must be depicted.

The HGSD and FBSD have submitted to GMA-14 their current regulations and projected groundwater pumpage projections through the year 2070. This data has been divided into the grid cells/layers relative to the NGCGAM and utilized by the GCDs in development of their DFCs.

Groundwater pumpage within GMA-14 from Fort Bend, Galveston, and Harris counties is regulated by FBSD and HGSD, non GCD governmental agencies (the only GMA in Texas with this occurrence) and the missions of HGSD and FBSD are vastly different from GCDs and do not fit well with a water-level designed DFC process). The groundwater pumpage projections developed in recognition of the HGSD and FBSD regulatory plans have been utilized without adjustment by GMA14 in the DFC process. Therefore, the DFCs adopted by GMA-14 are consistent with the HGSD and FBSD regulatory plans.

Carrizo Sand Aquifer

Grimes County (BGCD)

- The portion of the Carrizo Sand Aquifer occurring in Grimes County is declared non-relevant.

Walker County (BGCD)

- The portion of the Carrizo Sand Aquifer occurring in Walker County is declared non-relevant.

Queen City Aquifer

Grimes County (BGCD)

- The portion of the Queen City Aquifer occurring in Grimes County is declared non-relevant..

Walker County (BGCD)

- The portion of the Queen City Aquifer occurring in Walker County is declared non-relevant..

Sparta Aquifer

Grimes County (BGCD)

- The portion of the Sparta Aquifer occurring in Grimes County is declared non-relevant..

Walker County (BGCD)

- The portion of the Sparta Aquifer occurring in Walker County is declared non-relevant.

Yegua-Jackson Aquifer

Grimes County (BGCD)

- The portion of the Yegua Jackson Aquifer occurring in Grimes County is declared non-relevant..
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Jasper County (STGCD)

- The portion of the Yegua-Jackson occurring in Jasper County is declared non-relevant.

Newton County (STGCD)

- The portion of the Yegua-Jackson occurring in Newton County is declared non-relevant.

Polk County (LTGCD)

- The portion of the Yegua-Jackson occurring in Polk County is declared non-relevant.

Tyler County (STGCD)

- The portion of the Yegua-Jackson occurring in Tyler County is declared non-relevant.

Walker County (BGCD)

- The portion of the Yegua Jackson Aquifer occurring in Walker County is declared non-relevant..

Washington County

- The portion of the Yegua Jackson Aquifer occurring in Washington County is declared non-relevant..

River Alluvium Aquifers

Austin County (BGCD)

- The portion of the Brazos River Alluvium occurring in Austin County is declared non-relevant.
- The portion of the San Bernard River Alluvium occurring in Austin County is declared non-relevant.

Grimes County (BGCD)

- The portion of the Brazos River Alluvium occurring in Grimes County is declared non-relevant.
- The portion of the Navasota River Alluvium occurring in Grimes County is declared non-relevant.

Walker County (BGCD)

- The portion of the San Jacinto River Alluvium occurring in Walker County is declared non-relevant.
- The portion of the Trinity River Alluvium occurring in Walker County is declared non-relevant.

Waller County (BGCD)

- The portion of the Brazos River Alluvium occurring in Walker County is declared non-relevant.

Washington County

- The portion of the Brazos River Alluvium occurring in Washington County is declared non-relevant.

And it is so ordered and passed this 29th day of April, 2016.

Signed _____

Mr. Zach Holland Bluebonnet Groundwater Conservation District

Signed _____

Mr. Kent Burkett Brazoria County Groundwater Conservation District

Signed _____

Ms. Kathy Turner Jones Lone Star Groundwater Conservation District

Signed _____

Mr. Gary Ashmore Lower Trinity Groundwater Conservation District

Signed _____

Mr. John Martin Southeast Texas Groundwater Conservation District