ANNUAL REPORT

LONE STAR GROUNDWATER CONSERVATION DISTRICT

2021

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Creation

In 2001, the 77th Texas Legislature, through House Bill 2362, authorized the creation of the Lone Star Groundwater Conservation District (LSGCD). Montgomery County voters then confirmed the District's creation on November 6, 2001, with 73.85 percent of the vote.

Since its creation, LSGCD has carried out its statutorily-mandated functions to conserve and protect groundwater resources in Montgomery County, and has developed a system to ensure that the groundwater supply in Montgomery County will remain a sustainable resource for years to come.

Location & Extent

The Lone Star Groundwater Conservation District is located in Montgomery County, in southeastern Texas. Its boundaries are coterminous with the boundaries of Montgomery County, Texas. The District is bordered by Walker County to the north, San Jacinto and Liberty Counties to the east, Harris County to the south, and Waller and Grimes Counties to the west.

Peach Creek is the boundary with San Jacinto County, and Spring Creek forms most of the boundary with Harris County. LSGCD comprises an area of approximately 1,090 square miles.

Mission

The Lone Star Groundwater Conservation District's Board of Directors adopted a new District Management Plan in March 2019. In doing so the mission statement was revised to properly align with the elected Board's commitment to protecting both public interest and private property rights.

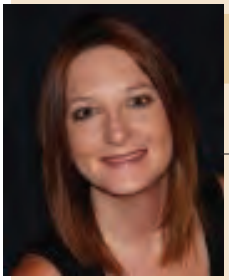
The mission of the Lone Star Groundwater Conservation District includes honoring and protecting private property rights by affording an opportunity for a fair share to every owner of each common, subsurface reservoir underlying Montgomery County. The District is also committed to providing a regulatory program that encourages the best conservation and development practice for the groundwater resources of the county.

District Office

655 Conroe Park North Drive
Conroe, Texas 77303
(p) 936-494-3436
(f) 936-494-3438

www.LoneStarGCD.org

Management



SAMANTHA REITER

General Manager

Samantha Reiter was born and raised in Round Rock, Texas. She moved to Montgomery County in 2010 and began her career with Lone Star Groundwater Conservation District. Ms. Reiter earned both an associate degree from Blinn College in Bryan and a Bachelor of Arts degree from Texas A&M University. Ms. Reiter has held a variety of positions with the District, getting her start in 2010 as the Executive Administrative Assistant to the General Manager then, working her way up to Permitting Director in 2012.

Ms. Reiter was promoted to Assistant General Manager in 2017, and continued to manage the permitting department and oversee the District's GIS and online permitting database.

In 2019, following Kathy Turner Jones resignation, Ms. Reiter was named General Manager of Lone Star Groundwater Conservation District. She serves on several committees, including: Member of Region H Water Planning Group and GMA 14 Joint Planning Group.

Ms. Reiter prides herself on being well versed on the District's rules and regulations, as well as staying in tune with legislative changes to groundwater laws in Texas.

LETTER FROM THE DISTRICT

"Perseverance and resilience only come from having been given the chance to work through challenging times. We will either find a solution or make one"

As the citizens of Texas move beyond 2021, we continue to rebuild and grow with resilience that became essential for handling our new reality. Our Board of Directors and staff continue to focus on serving the public by working to find a balance in providing fair and equitable access to groundwater production and conservation of groundwater resources throughout Montgomery County.

Staff continued to adapt to the lingering effects of the pandemic throughout the year. The permitting department successfully reissued permits to over 1,500 permit holders across Montgomery County. The District's new rules, effective September 8, 2020, changed how permits are reviewed and issued, which includes a switch to perpetual permit terms, modified spacing rules, and permitting by aquifer. Designated information on reissued permits include the aquifer formation from which each well is producing from, the horsepower of each well pump, and the maximum pumping rate. The newly adopted requirements aim to preserve existing wells and decrease drawdown effects on neighboring wells.

Subsidence remains an important factor in the District's commitment to protect the natural resources of Montgomery County. In June 2021, the Board of Directors approved the start of Phase 2 of the Lone Star GCD's Subsidence Study. In this innovative second phase, the District will focus on detailed technical evaluation of data and modeling, including an assessment of the distribution and thickness of the aquicludes underlying the county.

2021 was a year of resilience through collaboration and despite the challenging times, the District's mission remains crucial for Montgomery County. Lone Star Groundwater Conservation District remains devoted to science, education, public engagement and community outreach as the foundation for serving the public's interest and best practice for groundwater management.

Board of Directors

Harry Hardman
President

Represents City of Conroe |
Term Expires
Dec. 01, 2024

Stuart Traylor
Vice President

Represents County Precinct #1 |
Term Expires
Dec. 01 2024

Larry Rogers
Secretary

Represents The Woodlands Township |
Term Expires
Dec. 01, 2022

Jim Spigener
Treasurer

Represents County At-Large |
Term Expires
Dec. 01 2024

Janice Thigpen
Director

Represents County Precint #2 |
Term Expires
Dec. 01, 2022

Jon Paul Bouche
Director

Represents County Precinct #3 |
Term Expires
Dec. 01, 2022

Jonathan Prykryl
Director

Represents County Precinct #4 |
Term Expires
Dec. 01, 2022

In 2017, the passage of House Bill 1982 by the 85th Texas Legislature Session amended Lone Star Groundwater Conservation District's enabling legislation, changing the previously nine member appointed board to a seven member elected board. Four of the directors are elected from each county commissioner's precincts (Place No. 1-4), one director is elected by the voters at large (Place No. 5), one director is elected from the City of Conroe (Place No. 6) and one director is elected from the Woodlands Township (Place No. 7).

The newly elected Board of Directors were sworn in on November 16, 2018 under the new board structure in which the permanent directors serve in staggered four-year terms and prohibit a director from serving more than three full terms. The LSGCD's Board of Directors serve to protect private property rights, while developing and promoting strategies to both conserve and utilize groundwater resources in Montgomery County.

Board Committee Assignments

Budget & Finance Committee
Jim Spigener, Chair
Janice Thigpen
Larry Rogers

DFC & Technical Committee
Stuart Traylor, Chair
Jon Paul Bouche
Larry Rogers

Communication Committee
Harry Hardman, Chair
Jonathan Prykryl
Jim Spigener

Legislative Committee
Harry Hardman, Chair
Jon Paul Bouche
Stuart Traylor

Rules, Bylaws & Policies Committee
Larry Rogers, Chair
Jonathan Prykryl
Janice Thigpen

Successful Achievement of 2021 Management Goals

The 75th Texas Legislature in 1997 enacted Senate Bill 1 (SB1) to establish a comprehensive statewide water planning process. In particular, SB1 contained provisions that required groundwater conservation districts to prepare management plans that identify the water supply resources and water demands, which will shape the decisions of each district. SB1 designed the management plans to include management goals for each district to manage and conserve the groundwater resources within their boundaries.

Each year, the District is charged with providing evidence of the District's progress in achieving the management goals set forth in the District's Groundwater Management Plan. The evidence of the District's progress toward each goal is included in this Annual Report and made available to the public after adoption by the board of directors. This report is intended to fulfill the requirement of the District's Groundwater Management Plan in complying with the achievement of management goals as outlined herein.

GOAL 10.1: Efficient Use Of Groundwater

Management Objective 1

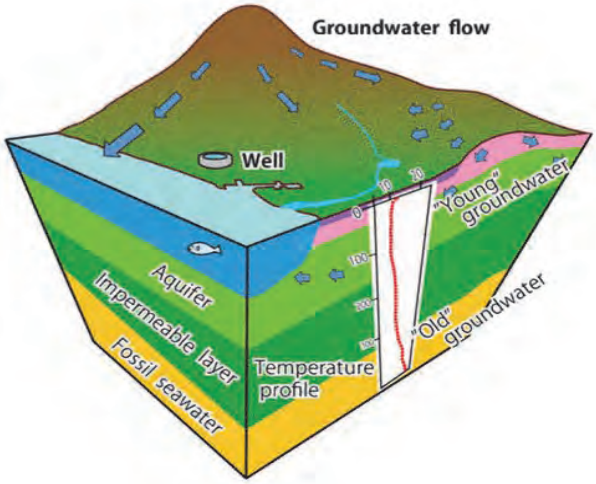
The District will maintain a monitoring well network to provide coverage across aquifers and measure water levels at least once every calendar year. A written analysis of the water level measurements from the monitoring wells will be made available through a presentation to the Board of Directors at least once every three years.

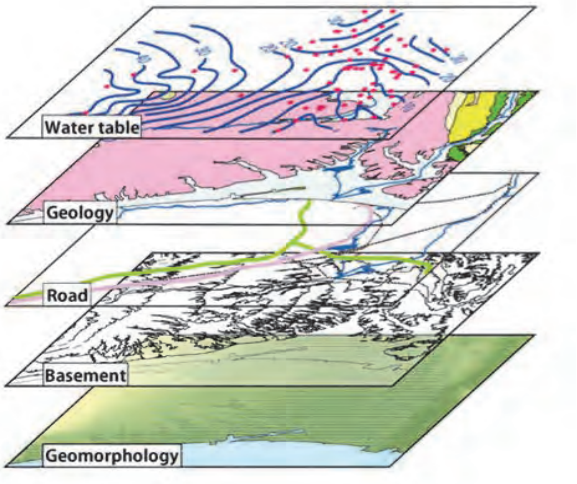
Performance Standard 1

Maintain a monitoring well network and its criteria, and measure monitoring wells at least once every calendar year and perform site inspections as necessary.

Status

Primary withdrawal of public water supply occurs from the Evangeline and Jasper Aquifers. The USGS, in cooperation with the District, have worked together to monitor and assess the Gulf Coast Aquifer System by conducting yearly synoptic water level measurements, evaluations and continuous real time data collection within the Montgomery County region. A link to the District's well data can be found on the District's website.





MANAGEMENT
OBJECTIVE 2

The District will continue to support the activities of the Gulf Coast/Montgomery County Water Efficiency Network, WaterWise Program, and the Home Water Works, and maintains a technical library of information providing guidance on the efficient use of water.

PERFORMANCE
STANDARD 2

Program updates, notifications of monthly meetings and links to improve efficiency will be posted on the District website.

STATUS

The District continues to support water conservation throughout Montgomery County. The District sponsored the Gulf Coast Water Conservation Symposium held on October 28, 2021. The theme was focused on Resilent Water Infrastructure and Conservation Solutions for the Future.

MANAGEMENT
OBJECTIVE 3

The District will provide educational leadership to citizens annually through at least one printed brochure, and/or by speaking at service organizations and public schools as provided for by the District's public education program.

PERFORMANCE
STANDARD 3

Each year a summary of the publications and speaking appearances done by the District's public education program will be included in the Annual Report provided to the Board of Directors.

STATUS

The District provides live water conservation education opportunities for students in classrooms throughout Montgomery County. A multifaceted program is implemented with hands-on learning utilizing the District's Mobile Lab and classroom curriculum following TEKS guidelines.

2021 Education & Outreach

Public education is critical to encouraging and promoting conservation. By way of the District's Education and Conservation Outreach Coordinator, the District can attend numerous speaking engagements, tours and events throughout the county, allowing staff to directly interact with the public. Below are a few of the public interaction opportunities in which staff was involved:

- Earth Kind Landscaping Workshop
- 10th Annual Gulf Coast Water Conservation Symposium
- Digital Now for Natural Resource Professionals Training
- Bell County Water Symposium
- Low-Impact Development Watershed Workshop
- NGWA Virtual Groundwater Summit
- Texas Watershed Coordinator Roundtable
- 2021 TWCA/TRWA 2021 Water Law Seminar
- Rainwater Harvesting 101 at Post Oak Savannah Groundwater Conservation District
- WaterSense Partner Webinar: Creative Pivoting
- Montgomery County Day at the Capital 2021
- 35th Annual Economic Outlook Conference
- Texas 4-H Water Ambassadors Advisory Committee
- USGS National Water Dashboard
- Milam & Burleson Counties Groundwater Summit
- The Woodlands Area Chamber Executive Leadership Council Meeting
- Going Green Sustainability Workshop
- Exploring State and Local Water Innovations Webinar
- Texas Groundwater Annual Summit
- Montgomery Junior High School Mobile Lab visit

4H Water Ambassadors at Canyon Lake Gorge

Milam & Burleson Counties Grounwater Summit

Lone Star GCD Water Education Program Kit

Texas Groundwater Summit

MANAGEMENT OBJECTIVE 4

Each year, the District will require all new exempt or permitted wells that are constructed within the boundaries of the District to be registered or permitted with the District in accordance with the District Rules.

PERFORMANCE STANDARD 4

Each year the District will accept, process, and review applications for the permitted use of groundwater in the District in accordance with the permitting process established by District Rules. The number and type of applications made for the permitted use of groundwater in the District and the number and type of permits issued by the District will be included in the Annual Report submitted to the Board of Directors.

STATUS

To demonstrate completion of Performance Standard 4, the number of exempt and permitted (non-exempt) wells registered with the District for 2021 is provided in Table 1. Table 2 is included to reference the type and number of applications for permitted use received by the District.

TABLE 1: NUMBER OF EXEMPT AND PERMITTED WELLS REGISTERED OR PERMITTED BY THE DISTRICT FOR 2021

Number of Exempt Wells Registered	514
Number of Non-Exempt Wells Permitted	72
Number of Non-Exempt Catahoula Wells Permitted	0
TOTAL	**586**

TABLE 2: NUMBER AND TYPE OF APPLICATIONS FOR THE PERMITTED USE OF GROUNDWATER IN 2021

Amendment to an Existing Operating Permit or Historical Use Permit Application*	154
New Operating Permits**	62
Amendment to an Existing Alternative Water Source Permit*	2
New Alternative Water Source Permit**	0
TOTAL	**218**

**Applications for Permit Amendments may not reference a specific well.*

***Applications for new operating permits may include more than one well.*

MANAGEMENT OBJECTIVE 5

The District will maintain qualified staff and technical consultants necessary to execute and maintain the District's well registration and permitting system. This effort includes the timely processing and technical reviews of permit applications. Each year, the District will regulate the production of groundwater within the boundaries of the District in accordance with the District's rules.

continued on page 10

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Performance Standard 5

The District maintains a qualified staff to assist water users in protecting, preserving, and conserving groundwater resources. The Board of Directors has in the past and continues today to base its decisions on the best data available to treat all water users as equitably as possible. Once data is collected, the District utilizes a wide variety of forums to provide important information to water users throughout the District so that sound decisions regarding the efficient use of groundwater can be made.

Status

The District will evaluate and monitor groundwater conditions and regulate production consistent with District Rules. Production will be regulated, as needed, to conserve groundwater and protect groundwater users, with consideration of private property owner's rights.

GOAL 10.2: Controlling and Preventing Waste of Groundwater

Management Objective 1

The District operates a waste prevention outreach strategy that focuses on enhancing the use of the District's website to provide resources applicable to the prevention of groundwater waste. The District website provides a routinely updated link containing a Best Management Practices Guide (published by the Texas Water Conservation Advisory Council in partnership with the TWDB). The District will work to identify outreach opportunities with regional and local water providers so as to increase public awareness for the prevention of groundwater waste.

Performance Standard 1

The District provides and will routinely update the link on the District's website to Best Management Practices, which includes helpful tips to control and prevent the waste of groundwater.

Status

The District maintains a link on its website to the most recent version of the *Best Management Practices Guide* by the Water Conservation Advisory Council. Additional helpful links on conservation are also available, including Best Management Practice mini-guides specific to Agriculture, Commercial and Institutional, Industrial, Municipal and Wholesale.

Management Objective 2

Each year, the District will apply a water use fee structure to the permitted use of groundwater in the District to encourage the elimination and reduction of waste of groundwater.

Performance Standard 2

Each year, with the exception of wells exempt from permitting, the District will apply a water use fee to the permitted use of groundwater in the District pursuant to District Rules. The amount of fees generated by the water use fee structure and the amount of water used for each type of permitted use of groundwater will be included in the Annual Report submitted by the General Manager to the Board of Directors of the District.

Status

See tables 3 & 4 on page 11

cont'd from page 10

Table 3: The Amount Of Water Use Fees Generated By The District In 2021

Water Use Type	Permitted Amount	Fee Rate	Fee Amount
*HUP / Operating Permits	**28,768,625,196**	$0.085/1,000 gallons	**$2,445,331.43**
AG Permits/Applications	**531,149,288**	$1.00 per acre foot	**$1,673.81**
Catahoula AWS Production Permits	**2,894,640,000**	$0.06/1,000 gallons	**$173,678.40**
Total	**32,194,414,484**		**$2,620,683.64**

**May include water transported out of the District but not subject to transportation*

Table 4: Amount Of Water Reported To District As Pumped For Each Type Of Permitted Groundwater Use

Commercial	166,170,117
Industrial	492,147,895
Irrigation	683,967,289
Irrigation (Agriculture)	136,086,098
Public Supply	95,843,190
Public Supply (PWS)	20,442,701,374
*AWS-CRAF	1,443,628,800
****Total**	**23,460,544,763**
Grand Total	**22,016,915,963**

** AWS-Catahoula Restricted Aquifer Formation | **Data received as of March 17, 2022. The reported pumping for 2021 is incomplete due to incomplete reporting by a small number of permittees | † Less AWS Pumping*

Management Goal 10.3

GOAL 10.3: Controlling and Preventing Subsidence

Management Objective 1

The District, shall in cooperation with the Harris-Galveston Subsidence District, monitor in real-time and maintain a network of 6 subsidence monitor stations to continually measure subsidence.

Performance Standard 2

Results from the subsidence monitor stations will be noted in the summary of the joint conference on subsidence and included in the Annual Report submitted by the General Manager to the District Board of Directors.

Status

In 2021, LSGCD continued to collect data from the 6 subsidence monitoring stations throughout Montgomery County. The results of the data collected to date from all stations are available for viewing by the public on the District's website.

Management Objective 2

Each year, the District shall participate in a joint conference with the neighboring groundwater conservation or subsidence districts focused on sharing information regarding subsidence.

Performance Standard 2

Each year, a summary of the joint conference on issues regarding subsidence will be included in the Annual Report submitted by the General Manager to the Board of Directors.

Status

The joint planning process by Groundwater Management Area 14 focuses on a primary objective of determining desired future conditions (DFCs) for relevant aquifers underlying the 21 counties within GMA 14. Throughout 2021, GMA 14 representatives met to continue their work to develop reasonable DFCs.

At the February GMA 14 Joint Planning Meeting, a GMA 14 consultant gave a presentation which included modeled subsidence using the three different scenarios being considered.

Management Objective 3

Issues regarding subsidence will be addressed in the review and processing of permits as authorized in Chapter 36 and District Rules, and in setting desired future conditions for the common reservoirs insofar as groundwater withdrawal may be found to cause subsidence.

Performance Standard 3

The District will continue its subsidence study and provide updates on the results of the study in the Annual Report provided to the Board of Directors. The subsidence study consists of 4 phases, and is currently in the second phase.

Status

Updates and results of the subsidence study phases will be made available to the Board and public upon being presented by the District technical consultants at the monthly Board meetings.

To view more on the subsidence study, see page 13.

District Subsidence Study Phase II

For Phase II of the Lone Star GCD Subsidence Study, District consultants are focusing on the continued investigation of specific issues identidied during Phase I of the study. Phase II centers on a Detailed Technical Evaluation of Data and Modeling and is divided into three tasks to allow for additional assessment of past subsidence data and further future monitoring efforts.

Task 1 - Technical Evaluations of Existing Data and Recent Study: A previously identified study: Subsidence Risk Assessment and Regulatory Considerations for the Brackish Jasper Aquifer (Kelley and others, 2018) is being reviewed and analyzed to assess whether the particular methodology and final conclusions should be applicable to assessing subsidence within Montgomery County from the underlying Jasper Aquifer. The methodology used in this study will purportedly be applied for the development of the Gulf Coast Land Subsidence and Groundwater Flow Model (GULF 2023). Anticipated work associated with this task includes review of data used in Kelly and other (2018) report, evaluation and consideration of variables that may influence parameter estimates, assessment of methodology application to the Jasper Aquifer and preparation of a technical evaluation of this work.

Proposed completion date March 2022

Task 2 - Geologic Structure: As stated in the Phase I Final Report, irregularities in the existing datasets were identified that portrayed the geologic surface and information within Montgomery County. Work during Task 2 will focus on calculating the distribution and thickness of the clay layers underlying the county. The goal is to improve the mapping of the elevation of the sub-surface formations while studying the thickness of the sand and clay intervals within the formations. Anticipated work associated with Task 2 includes review of previous geophysical log evaluations, review of selected State Well Reports, interpolating surfaces of geologic formations and lithologic units, and preparation of a technical summary of this work.

Proposed completion date May 2022

Task 3 - Reporting, Recommendations, and Presentations: Succeeding the completion of Task 1 and Task 2, a writting comprehensive Phase II Final Report will be presented to the Board of Directors and public. The final report will include some recommendations, conceptual plans and budgetary estimates for subsequent project phases.

Proposed completion date August 2022

The potential for land subsidence due to compaction of the subsurface formations is an important consideration for the Lone Star Groundwater Conservation District Board of Directors with regard to managing the groundwater resources within Montgomery County. When working to manage Montgomery County's groundwater resources, Directors must consider subsidence and several other important regional and local factors as the District works to find a balance between providing fair and equitable access to groundwater production and conservation of groundwater resources as described in Chapter 36 of the Texas Water Code.

Management Goal 10.4.

GOAL 10.4: Conjunctive Surface Water Management Issues

Management Objective 1

Each year, the District's designated representative will participate in the regional planning process by attending at least one of the Region H Regional Water Planning Group meetings annually.

Performance Standard 1

The participation and attendance of the District's designated representative at each Region H Regional Water Planning Group Meeting will be noted in the Annual Report submitted by the General Manager to the Board of Directors.

Status

The District's representative, the General Manager, continued to participate in the regional planning process by attending 75 percent of the Region H meetings. Attendance at the meetings provides the District with the opportunity to provide valuable input regarding the role of groundwater in overall regional planning and to encourage the development of surface water supplies and conjunctive use to help meet the needs of water user groups in the District.

Management Objective 2

The District will review the State Water Plan in **Appendix B** and coordinate with public water suppliers, other stakeholders and surface water management entities on conjunctive use.

Performance Standard 1

Each year the District will include a summary of the District's review of the State Water Plan and meeting summaries on the conjunctive use in the Annual Report to the Board of Directors of the District.

Status

The District works to address conjunctive surface water management issues by participating in regional joint planning through GMA 14 and the Region H Regional Planning Group. As a means to facilitate conjunctive use discussions within Montgomery County, the District is considering hosting an annual meeting with Montgomery County public water suppliers, surface water management entities and other stakeholders to discuss the various strategies that could be implemented to meet water demands in the future or in times of groundwater shortages.

Region H Water Planning Group Attendance

February 3, 2021

Samantha Reiter

April 7, 2021

Samantha Reiter

July 7, 2021

Samantha Reiter

November 3, 2021

Samantha Reiter

GOAL 10.5: Natural Resource Issues

Management

Objective 1

The District will monitor permit applications and permit amendment applications for Class II injection wells filed with the Railroad Commission of Texas and Class I and Class V injection well permit applications and permit amendment applications filed with the Texas Commission on Environmental Quality. District staff will review these notices and brief the Board of Directors as appropriate. A summary of injection well permit activity and any action taken by the District in the response will be included in the Annual Report submitted by the General Manager to the Board of Directors of the District.

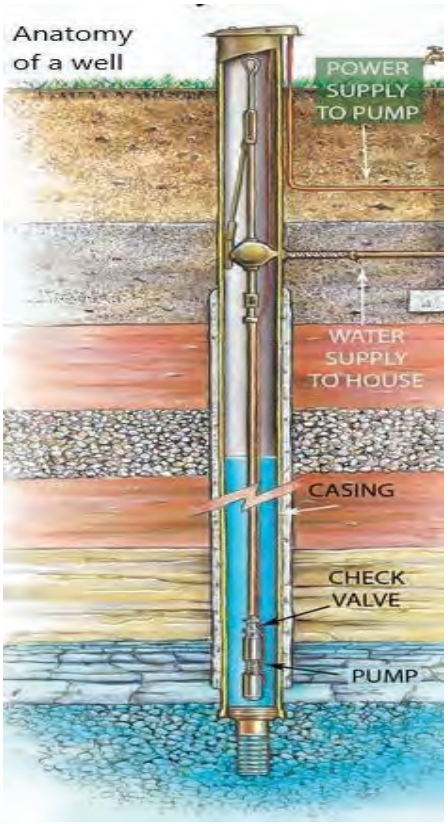
Performance Standard 1

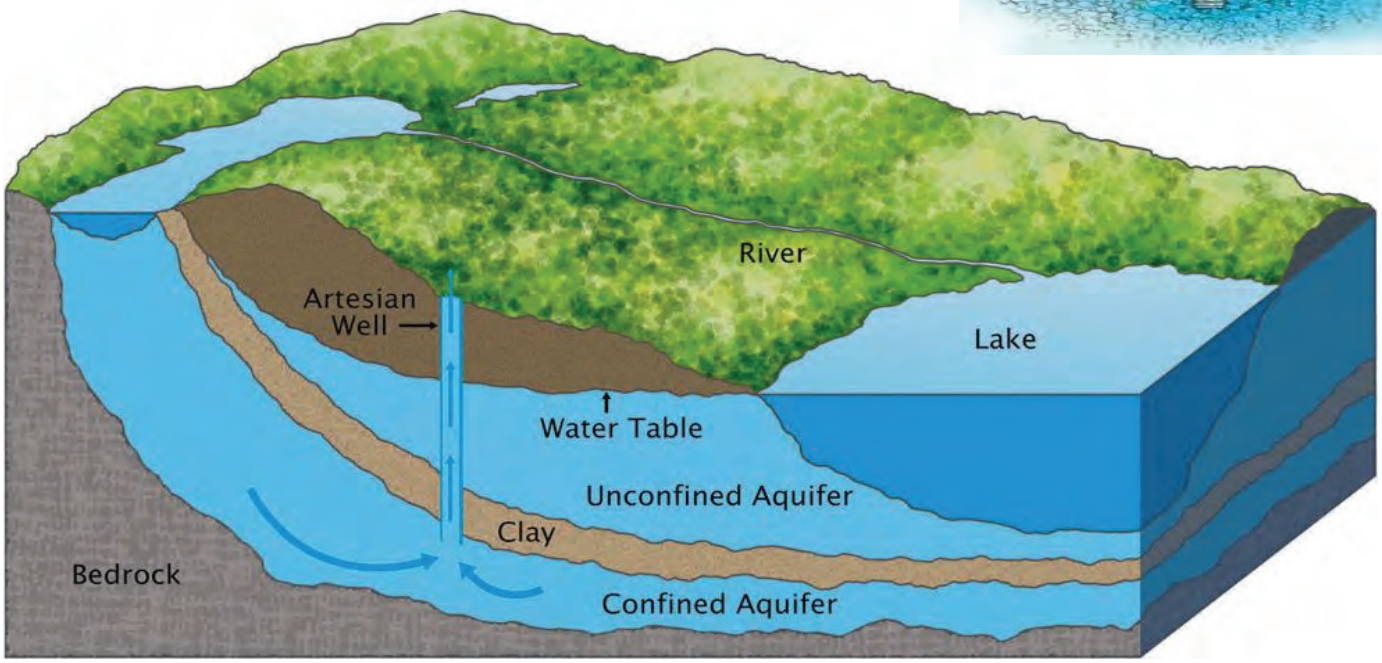
Beginning with the 2014 Annual Report, a summary of injection well permit activity at the Railroad Commission of Texas and the Texas Commission on Environmental Quality along with any actions taken by the District in response will be included in the Annual Report submitted by the General Manager to the Board of Directors of the District.

Status

The District received a copy of two applications for injection well permits filed by Denbury Onshore, LLC with the Railroad Commission of Texas. The District's legal counsel identified a couple areas of concern and the General Manager timely filed a protest of both applications.

The District's legal counsel worked with Denbury's counsel and Denbury filed amended applications addressing the District's concerns.





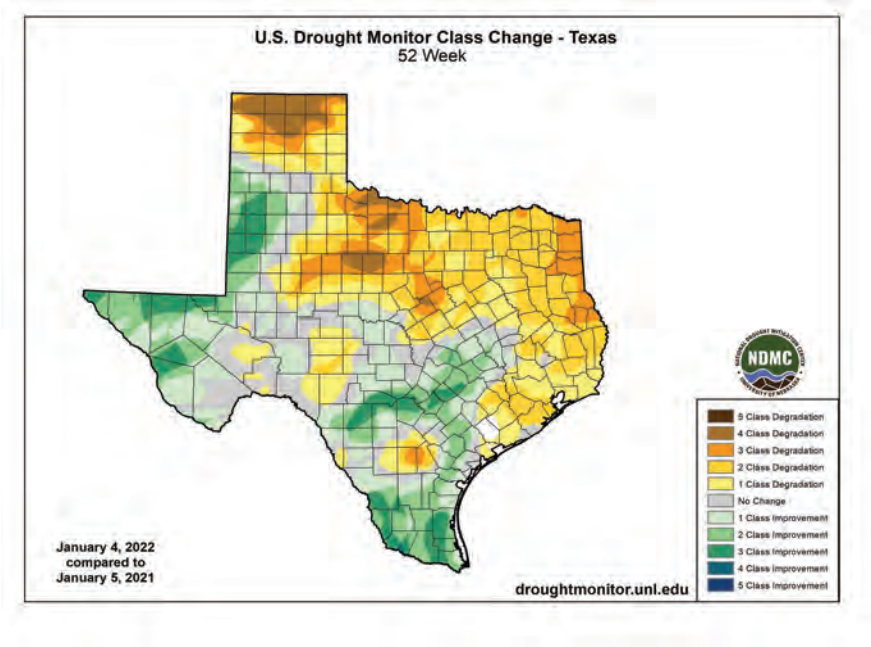
GOAL 10.6: Drought Conditions

Management Objective 1

An important objective of the District is to provide ongoing and relevant drought related meteorological information. Beginning in 2014, the District began making available through the District's website easily accessible drought information with an emphasis on developing drought and current drought conditions. At least one of the following links will be provided: updates on the US Drought Monitoring Map for the region, the Drought Preparedness Council Situation Report, and the TWDB Drought page.

Performance Standard 1

Current drought condition information from at least one of the following will continue to be available to the public on the District's website and noted in the Annual Report submitted to the Board of Directors: the US Drought Monitor map for the region, the Drought Preparedness Council Situation Report, or the TWDB Drought page.



Local Precipitation

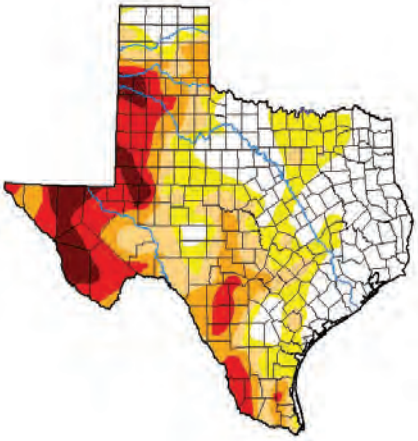
According to precipitation data collected from the weather station located at **Conroe-North Houston Regional Airport (station ID# USW0053902) 2021's annual rainfall total equaled 51.81 inches, 11.9 inches more than 2020's total precipitation (39.91 inches).**

Four months of the year saw rainfall totals greater than 5 inches- April, May, September, and October. While May was recorded as the wettest month of the year, with 9.64 inches of rainfall, in February we experienced the driest month of the year receiving only 0.64 inches of rain.

Status

Links to the US Drought Monitor maps and situation reports can be found on the District website.

U.S. Drought Monitor
Texas



January 12, 2021
(Released Thursday, Jan. 14, 2021)
Valid 7 a.m. EST

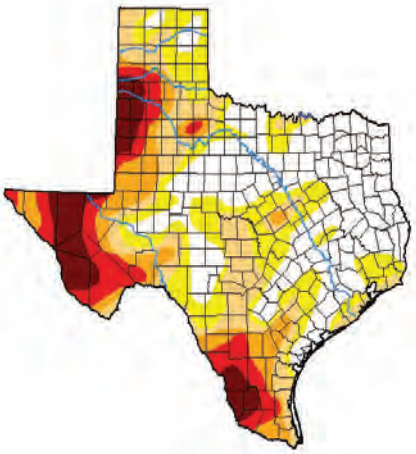
Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	31.28	68.71	48.01	32.25	18.61	5.97
Last Week 01-07-2021	17.36	82.63	58.34	37.80	19.24	8.20
3 Months Ago 10-13-2020	52.46	47.54	36.22	23.76	13.67	3.29
Start of Calendar Year 12-31-2020	8.80	91.19	81.10	50.33	30.09	13.03
Start of Water Year 10-01-2020	57.34	42.65	31.96	20.91	12.02	3.29
One Year Ago 01-16-2020	44.69	55.30	36.79	10.76	1.29	0.00

Intensity:
- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

U.S. Drought Monitor
Texas



May 11, 2021
(Released Thursday, May. 13, 2021)
Valid 8 a.m. EDT

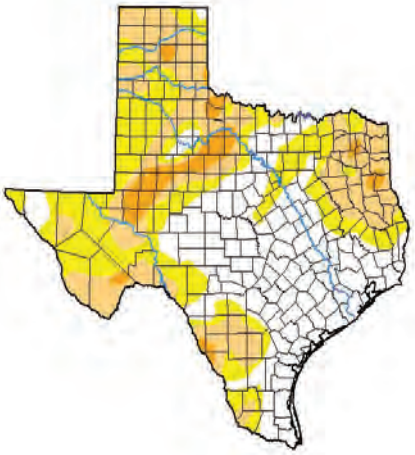
Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	34.32	65.68	44.28	27.69	16.88	7.85
Last Week 05-04-2021	33.23	66.77	45.00	27.61	16.73	7.85
3 Months Ago 02-09-2021	25.73	74.27	46.98	30.24	18.16	5.56
Start of Calendar Year 12-29-2020	8.80	91.20	81.11	50.33	30.09	13.03
Start of Water Year 09-29-2020	57.35	42.65	31.96	20.91	12.02	3.29
One Year Ago 05-12-2020	54.69	45.31	14.65	5.44	1.99	0.00

Intensity:
- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

U.S. Drought Monitor
Texas



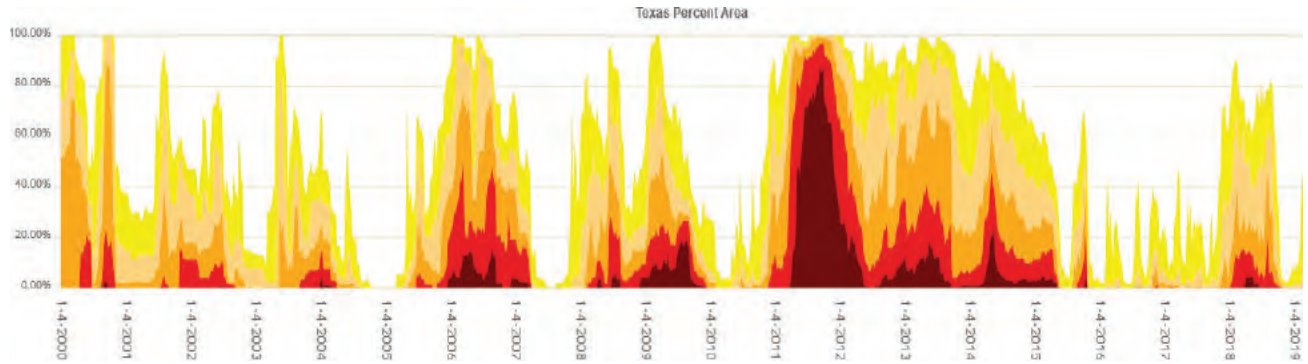
November 9, 2021
(Released Thursday, Nov. 11, 2021)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	38.58	61.42	32.22	5.62	0.00	0.00
Last Week 11-02-2021	38.20	61.80	32.90	6.44	0.00	0.00
3 Months Ago 08-10-2021	92.04	7.96	1.35	0.00	0.00	0.00
Start of Calendar Year 12-29-2020	8.80	91.20	81.11	50.33	30.09	13.03
Start of Water Year 09-28-2021	45.57	54.43	7.26	0.27	0.00	0.00
One Year Ago 11-10-2020	15.71	84.29	56.86	30.67	19.33	8.61

Intensity:
- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx



Management Goal 10.7.

GOAL 10.7: *Conservation, Recharge Enhancement, Rainwater Harvesting, Precipitation Enhancement, or Brush Control Where Appropriate and Cost Effective*

Conservation and rainwater harvesting have been determined to be appropriate goals for the District. As part of the effort, the District is sponsoring and participating in water conservation programs such as the Gulf Coast/Montgomery County Water Efficiency Network, Texas WaterWise Program and the Home Water Works.

A visit to the District's headquarters is all that is required to realize the commitment of the District to rainwater harvesting. The entire comprehensive water conservation demonstration facility was designed as a demonstration to the citizens of Montgomery County on the positive benefits of rainwater harvesting in reducing water consumption from the Gulf Coast Aquifer. The design and subsequent construction techniques integrated into the District headquarters have not only caught the attention of local residents, but also the 2010 Texas Water Development Board for the innovation demonstrated by the design of the new comprehensive water conservation demonstration facility.

After review by the Board of Directors, the General Manager and the District's technical consultants, it has been determined that the recharge enhancement, precipitation enhancement, and the brush control are not appropriate groundwater management strategies for the District. This evaluation is based on cost of operating and maintaining these programs, lack of neighboring programs in which to participate, and probable lack of effectiveness of these programs due to the climate, hydrogeology, and philosophy of the District.

MANAGEMENT OBJECTIVE 1

The District seeks to promote water conservation through an active water conservation awareness program As part of this program, the District will maintain links to recognize water conservation awareness programs such as the Gulf Coast/Montgomery Water Efficiency Network, WaterWise Program, and the Home Water Works programs on the District's website.

PERFORMANCE STANDARD 1

Links to at least one of the water conservation awareness programs such as the Gulf Coast/ Montgomery County Water Efficiency Network, Water-Wise Program, and the Home Water Works Program will be provided on the District's website and noted in the Annual Report submitted by the General Manager to the Board of Directors.

STATUS

The District website contains valuable conservation links as well as references to outside expert resources. There is a "Consumer Tips" and "Resources" page, which can be accessed through the Programs and Education page, which contains practical information on ways to conserve at home, both indoors and outside. Also on the "Resources" page, there are links to outside resources, including Texas Agrilife Earth Kind Plant Selector, the Gulf Coast/ Montgomery County Water Efficiency Network, WaterIQ, Water-Use It Wisely and the Home Water Works website.

MANAGEMENT OBJECTIVE 2

Educational materials specific to rainwater harvesting have been developed to highlight various water conservation techniques that are incorporated into the design of the District's headquarters. Information will be available at the main entrance of the District for visitors to take and review for homes and businesses in Montgomery County.

PERFORMANCE STANDARD 2

Information on the District's headquarters and rainwater harvesting capabilities will be made available during regular business hours for use by visitors to the facilities. A summary of educational opportunities will be included in the Annual Report submitted to the Board of Directors of the District.

STATUS

The Lone Star GCD facilities serve as real-life examples of conservation at work. The general public is welcome to visit the District during normal business hours. Upon arrival, visitors will see the arroyo (dry river bed) upon entering. The purpose of this feature is to convey any parking lot rainwater runoff into a 15,000 gallon-capacity underground tank. The majority of the roof downspouts are directed into four stand-alone, 2,500-gallon above-ground cisterns. The collected rainwater is used to irrigate the District's landscaping, which features native plants and grasses.

This award-winning system also has corresponding educational materials framed inside the District lobby, which tells the story and shows construction photos. This enables visitors to see the underground tanks which provides perspective on how much rainwater is being utilized.

Visitors to District offices do not go away empty-handed. There is an abundance of educational material about conservation, water supply and the purpose of the District. For those interested in installing a rainwater harvesting system at their home or business, there is a rain harvesting manual available on CD USB flash drives. The manual describes all types of systems, ranging from small home systems to more elaborate ones. An additional 500-gallon rainwater harvester was added in 2017 on the backside of the District's building, to expand the building's total rainwater harvesting capacity.

MANAGEMENT OBJECTIVE 3

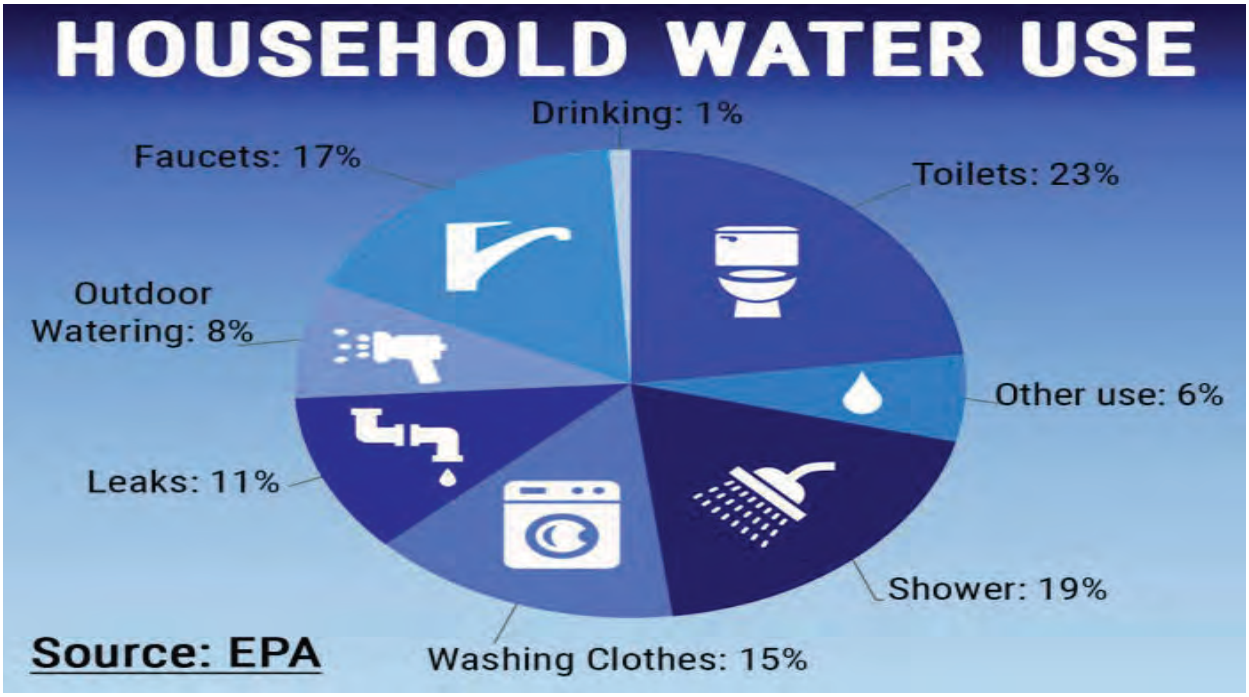
The District added an important tool at its comprehensive demonstration facility that will collect weather data 24/7 in collaboration with Texas A&M Agrilife Extension experts. The objective of installing this equipment was to generate an Evapotranspiration ("ET") estimate to help residents use their irrigation systems more efficiently by knowing the ideal amount of water needed to sustain a healthy lawn. The District will roll out information from the program to enable commercial and residential "users" to regulate their irrigation system controllers so that they deliver only the amount of water necessary. Current measurements of ET will be maintained on the District's website.

PERFORMANCE STANDARD 3

Lawn watering guidance is based on current measurements of ET and will continue to be maintained on the District's website throughout the active growing season each year and noted in the Annual Report submitted by the General Manager to the Board of Directors of the District.

STATUS

In 2021, The District continued to monitor weather conditions on a daily basis and posted weekly landscape watering advisories on its website under the heading, "Watering Recommendations". Montgomery County citizens can sign up thru the website to receive emails weekly directly to their inbox. Each week during irrigation season, working in conjunction with Texas A&M/AgriLife staff, the District compiles evaporation and transpiration information based on relative humidity, temperature, wind speed, and radiation levels as measured by the weather station located at its facilities. The water losses calculated are then compared to the amount of rainfall for the same period determining how much water should be applied to make up the difference and maintain a healthy lawn while using as little water as possible. To account for the significant variations in the amount of rainfall that occurs across an area as large as Montgomery County, rainfall amounts for the previous seven days are obtained from rain gauges across the county.



GOAL 10.8: *Desired Future Conditions*

Management Objective 1

The District is committed to continually work with the other members of GMA 14 to adopt, and to achieve the most appropriate DFC's for each relevant groundwater reservoir identified in the joint planning process. The DFC's adopted by the District will support the District's regulatory mission to afford an opportunity for a fair share to each owner of a common subsurface reservoir. Because future use and landowner's choices are uncertain, in addition to hydrologic variability and uncertainty, the actual conditions of the reservoirs in the future may change.

Performance Standard 1

Draft rules, public meetings, and hearing announcements, and available supporting materials will be included prior to rulemaking activities by the District on the District's website.

Status

All postings, notices, and hearing announcements, and available supporting materials will be included prior to rulemaking activities by the District on the District's website at lonestargcd.org.

Management Objective 2

The District will adopt well spacing and production allocation rules to implement the goals in this plan.

Performance Standard 2

At least once every two years, the District will include discussion of the evaluation of the District's rules and the determination of whether any amendments to the rules are recommended.

Status

The District has adopted rules to regulate groundwater withdraw by means of well spacing as authorized in Chapter 36. The District will continue to consider whether acreage based rules are appropriate.

Management Objective 3

At least once every two years, the District will collect and examine monitoring well data for the Chicot, Evangeline and Jasper aquifers from all available resources including the USGS monitoring well network and the TWDB groundwater database, and analyze the historical data.

Performance Standard 3

A summary of any amendments to District rules that are adopted throughout the calendar year will be included in the Annual Report submitted by the General Manager to the Board of Directors.

Status

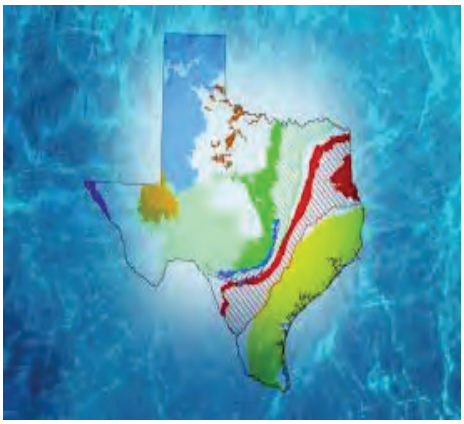
The District will maintain a monitoring well that will be used by the District to monitor aquifer conditions over time.

Performance Standard 4

Based on collected monitoring and reported pumping data demonstrating trends in reservoir conditions, the District will review annually whether: (i) the current plan and rules are working effectively; and (ii) specific amendments need to be made to this plan and/or rules; or (iii) amendments are needed to meet the management goals of the District; (iv) a combination of (ii) and (iii). The collected data may be shared with GMA 14 districts and used to inform possible amendments to the adopted desired future conditions.

Status

The District will make regular assessments of water levels and aquifer conditions and report those conditions, as appropriate, during public Board meetings or public announcements. Production will continue to be regulated to protect users and conserve groundwater in a manner not to adversely limit production and to achieve the "Desired Future Conditions."



Groundwater Management Area 14

The process for joint planning by Groundwater Conservation Districts (GCDs) in Groundwater Management Areas (GMAs) was originally established by House Bill 1763 in 2005 and substantially amended by Senate Bill 660 in 2011. One of the primary objectives of GMAs is to determine "desired future conditions " (DFCs) for relevant aquifers located within each GMA. Desired future conditions are defined as the desired, quantified condition of groundwater resources (such as water levels, spring flows, or volumes) within a GMA at one or more specified future times as defined by participating GCDs within a GMA as part of the joint planning process. There are 16 GMAs in Texas, and Montgomery County is in GMA 14. In September 2018, Southeast Texas GCD's General Manager, John Martin, was appointed to serve as Chair of GMA 14 for the next planning cycle. There are five GCDs in GMA 14 representing 13 of the 21 counties in GMA 14. Three other counties are represented by subsidence districts; five counties are not represented by any type of district. GMAs are currently in the third-round of the joint planning process, which runs from 2016-2021, with final adoption to occur by January 2022.

Mile Markers

January 20, 2021

Bluebonnet Groundwater Conservation District Consultant, Bill Hutchinson, gave a presentation on Comparison of Measured and Simulated Drawdown in GMA 14. His presentation reported that all GCDs in GMA 14 are on track to achieve DFCs. Following Mr. Hutchinson's presentation, Samantha Reiter discussed results from a Lone Star GCD survey on water costs in Montgomery County. Wade Oliver technical consultant for GMA 14, gave a presentation on the feasibility of achieving DFCs, fault movement, and groundwater pumping. Ms. Reiter requested GMA 14 representatives review of the DFC factors and proposed DFC scenarios and plan for a discussion at the February 24th GMA 14 meeting.

February 24, 2021

Lone Star General Manager, Samantha Reiter, requested additional time prior to the GMA 14 representatives taking a vote on the proposed DFCs. Lone Star GCD was in the process of holding Montgomery County stakeholder meetings to enable a continued dialogue between interested stakeholders and the District.

April 9, 2021

Several motions were made to GMA 14 by Ms. Reiter on behalf of Lone Star GCD as drawn from the District's April 7th Special Board Meeting. No motions were passed. The GMA 14 released a proposed DFC statement without a resolution, as follows "no less than 70% median of available drawdown remaining in 2080 and no more than 1.0 additional foot of average subsidence between 2009 and 2080". A 90-day public comment period began.

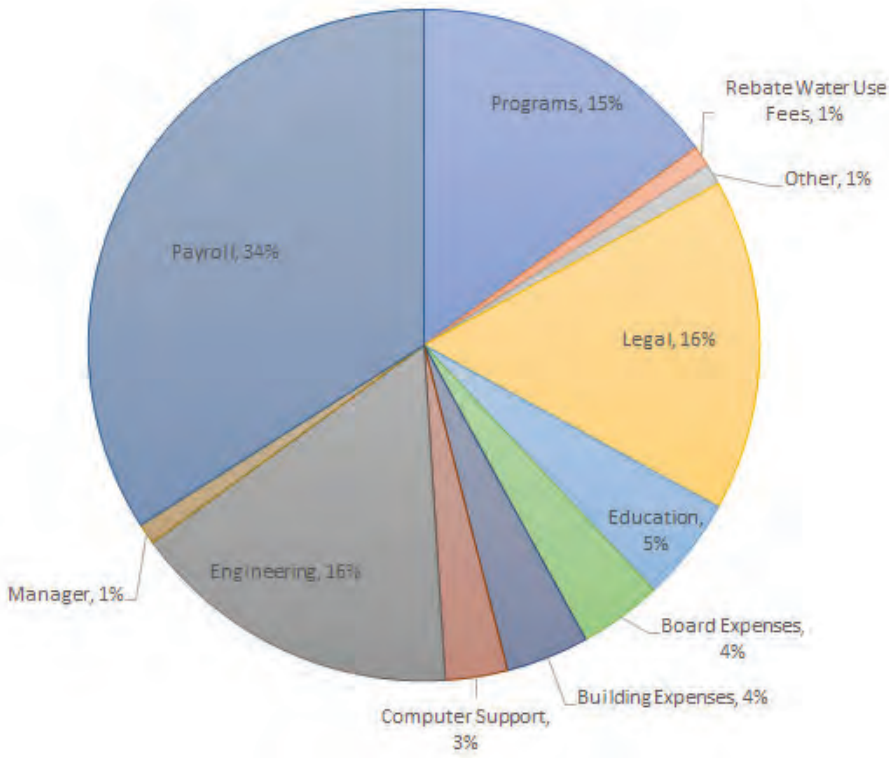
October 5, 2021

While no official action was taken by the GMA 14, a resolution was approved for the proposed DFC to include Lone Star GCD's requested amendment to change the "and" to "or" with the proposed DFC statement of "no less than 70 percent median available drawdown remaining in 2080 or no more than an average of 1.0 additional subsidence between 2009 and 2080." The motion passed 4-1, with one member abstaining as authority to vote was not given to the Southeast Texas GCD representative.

A future GMA 14 meeting in January 2022 is scheduled with planned action to approve the DFCs.

$2.49M
2021 Total Income

$1.72M
2021 Total Expense



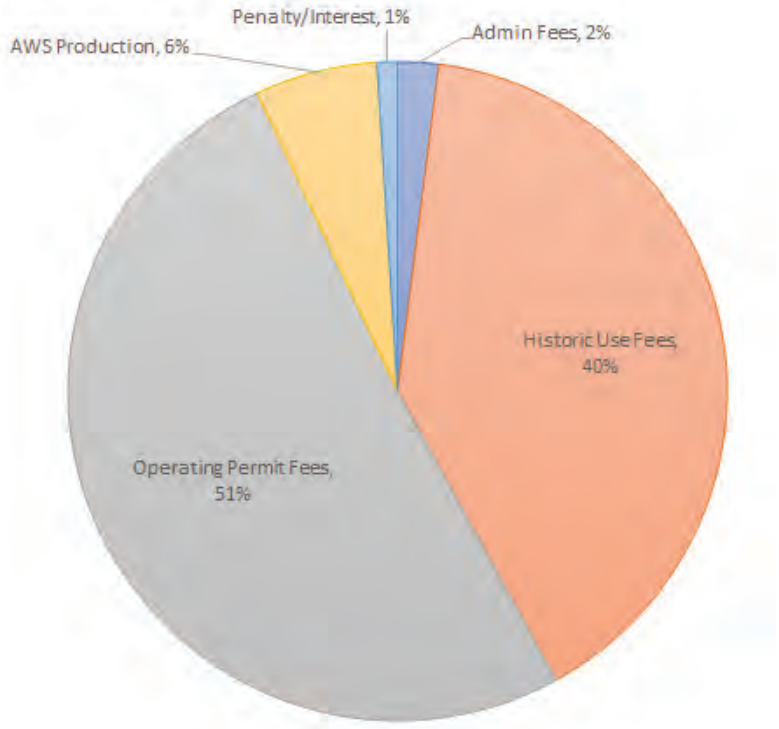
Financial Summary[1]

For the calendar year ending December 31, 2021, the District's total cash increased by $1,798,579 and the District's current liabilities increased by $40,035.

The District's net position for 2021 increased by $337,953.

The District's total net position increased by 15% compared to 2020.

[1]*These amounts are per the audited financial statements for the year that ended on December 31, 2021.*



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