



WATER CONSERVATION PLAN
for
Retail and Wholesale
Water Supply

City of Sugar Land
P.O. Box 110
Sugar Land, Texas 77487

CCN # 10724

PWS # 0790005

PWS # 0790354

PWS # 0790253

PWS # 0790296

Wholesale to PWS # 0790498

Wholesale to PWS # 0790553

Adopted April 2019

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CITY OF SUGAR LAND

WATER CONSERVATION PLAN

I. INTRODUCTION

This Water Conservation Plan is presented by the City of Sugar Land pursuant to the requirements of the Texas Water Development Board (TWDB) and the Texas Commission on Environmental Quality (TCEQ), pertaining to the water and wastewater services provided in the area served by the four City of Sugar Land Public Water Systems:

1. Sugar Land – Main System PWS # 0790 005
2. Sugar Land – RiverPark PWS # 0790 354
3. Sugar Land – New Territory PWS # 0790 253
4. Sugar Land – Greatwood PWS # 0790 296

The City of Sugar Land also provides wholesale water and wastewater services to two municipal utility districts located in the city's extra territorial jurisdiction. Wholesale water supply and wastewater collection and treatment are provided to Fort Bend County MUD 128 (PWS # 0790 498) and Fort Bend County MUD 192 (PWS # 0790 553). The Water Supply and Wastewater Services Agreement between the city and each MUD stipulates the terms of service and requires the MUD to adopt a water conservation plan equal to or more stringent than the city's Water Conservation Plan.

This Plan represents the current status of the city's water and wastewater utilities and includes a profile of water use patterns, a description of current and future water conservation efforts, and an evaluation of potential water efficiency opportunities.

The city, guided by the Water Conservation Policy (Policy) adopted by its Council, recognizes the importance of water conservation as a tool for wise and efficient management of our water resources. Under the guidance of the Policy, the city adopts this plan to guide and coordinate various water conservation programs drawn from established Best Management Practices (BMPs). Conservation programs are routinely evaluated and amended when necessary to meet the city's water management goals.

This document was prepared by the Water Conservation Manager of the City of Sugar Land's Public Works Department. The Water Conservation Manager manages and implements the programs detailed herein, including submission of annual reports. Programming is under the direction of the Director of Public Works, and is conducted in coordination with other city departments and staff.

Contact Information

The City of Sugar Land Public Works Department can be reached at:

Phone: 281-275-2900 / 281-275-2465 (fax)

Email: WaterUtilities@sugarlandtx.gov

Address: City of Sugar Land
P.O. Box 110
Sugar Land, TX 77487-0110

II. SYSTEM DESCRIPTION

City of Sugar Land

The City of Sugar Land is a home-rule municipality located in Fort Bend County, on the southwest edge of the greater Houston metropolitan area. The city and county have experienced dramatic growth in the last three decades. The city's developmental path has been oriented toward single family residential with growing emphasis on commercial and light industrial development. The customer base for the city's water and wastewater utilities reflects that pattern. The eastern part of the city is primarily built out with some remaining infill development expected. The bulk of new growth is occurring in the city's western side which will be the primary drivers of increased potable water demand in the near future.

In 2017, the city annexed two mature master-planned residential communities (Greatwood and New Territory) reducing the size of the city's extra-territorial jurisdiction (ETJ). The city's ETJ areas encompass one large partially developed master-planned residential community, two smaller residential communities, as well as undeveloped tracts of land.

The Brazos River skirts the city's southwest edge, and Upper Oyster Creek meanders through the top two thirds of the city proper. The city falls within the jurisdiction of the Fort Bend Subsidence District (FBSD), Groundwater Management Area 14, and Region H of the state's Regional Water Planning groups.

Surface Water Conversion

The city, in conjunction with the communities in its ETJ, local Homeowner's Associations (HOAs) and private well owners, has an approved Groundwater Reduction Plan detailing how we are meeting this regulatory mandate. To adhere to Fort Bend Subsidence District's (FBSD) Regulatory Plan requirements, the city converted greater than 30% of its total water demand to non-groundwater sources and will convert an additional 30% before the FBSD's 2025 conversion requirement.

Water Resources Planning - Integrated Water Resources Plan

The city's aggressive comprehensive planning process includes updating the Water Master Plan every 5 years. The Water Master Plan builds upon the city's Comprehensive Plan that defines the city's overarching visions and goals. Delving deeper into management of water resources, the City completed an Integrated Water Resources Plan (IWRP) in 2019. The focus of the IWRP was to provide strategic direction in meeting future water demands while continuing to comply with Fort Bend Subsidence District (FBSD) regulations. Increased FBSD groundwater restrictions are scheduled for 2025, which prompted the need for a thorough examination of the City's available

alternative water supplies including expansion of the SWTP, expansion of the City's reclaimed water system, and implementing demand management measures.

Public Water Systems

The area served by the four City of Sugar Land potable water systems roughly corresponds to the city limits, with only a small piece of the northeastern area of the city served by a neighboring entity. (See Service Area Map, **Appendix A**).

The city is a wholesale provider of potable water and wastewater services to Fort Bend County MUD 128 and Fort Bend County MUD 192. The city's Main System (PWS 0790005) serves Fort Bend County MUD 128, the Riverstone development, located in the city's ETJ directly south of the city's southern boundary and north of the Brazos River. The Greatwood System (PWS 0790296) serves Fort Bend County MUD 192, Greatwood Lake development, that is southwest of the city. The other communities in the city's ETJ own and operate their respective public water systems. The city tracks water use by wholesale customers through monthly reporting of water and wastewater volumes; including non-revenue water.

The city's potable water production, treatment and distribution are handled by the Water Utilities Division of the Public Works Department. The city's water use patterns follow a seasonal use pattern characteristic of the area, with significant irrigation demand in the warmer months. Residential use, including residential irrigation, accounts for approximately 65% of the average annual potable demand. The projections of demand and subsequent supply and infrastructure planning for the city are incorporated into the routinely updated Water Master Plan.

The city's potable water (described in greater detail in the Utility Profile, attached as **Appendix B**) is supplied by 23 groundwater wells and surface water from the Brazos River through the Oyster Creek canal system. The twelve city-owned ground water plants produce water from the Chicot and Evangeline aquifer components of the Gulf Coast aquifer system. Well production meters are calibrated annually to assure accurate measurements.

Surface water treated at the city's surface water plant is supplied under water supply agreements with Gulf Coast Water Authority and the Brazos River Authority and the city's Oyster Creek water right (Certificate of Adjudication number 5170). The volume of surface water diverted from each of these supplies is accurately measured (within 5%), recorded, and reported as required by agreement and regulations. The treated surface water is pumped to existing groundwater plants in the Main System, blended with groundwater to assure proper control before distribution through the city's Main System.

Raw Water Systems

The city has several non-potable surface water supply pump stations. The city substitutes raw surface water for uses that do not require potable quality water (amenity lake maintenance and irrigation). On average, approximately 1 to 2 MGD of untreated surface water is used in the city's water planning area. The supply infrastructure for these projects is a mix of city and privately owned stand-alone surface water pumps, unconnected to the city's potable water system. The volume of surface water diverted from each pump stations is accurately measured (within 5%), recorded, and reported as required by agreement and regulations.

Reclaimed Water Systems

Two independent reclaimed water systems supply non-potable water in the city's service area. The city owned reclaimed water treatment facility utilizes wastewater effluent from the city's South wastewater treatment plant (WWTP) to supply amenity lakes and irrigation in the Riverstone development (MUD 128). Irrigation of public areas and amenity lake fill in the New Territory Development is now served with reclaimed water from the city's West WWTP. The reclaimed plant and transmission lines in New Territory are owned and operated by Fort Bend Levee Improvement District 7. Conversion to reclaimed water supply removes the irrigation demands from the city's potable supply and better utilizes the city's available water resources. The volume of water delivered from each facility is accurately measured (within 5%), recorded, and reported as required by agreement and regulations.

Wastewater Systems

The sanitary sewer and wastewater treatment systems (as described in greater detail in the Utility Profiles, attached as **Appendix B**) for the City of Sugar Land is comprised of four Wastewater Treatment Plants. The North Plant is located roughly in the middle of the city and receives flows from pretreatment program facilities in the city's northern industrial zone, as well as residential flows. The South Plant is located in the southern portion of the city and receives residential and light commercial flows from the southern portion of the city and the Riverstone development (MUD 128) in the city's ETJ. Flows within the RiverPark development and New Territory development are treated at the city's West Plant located on the far west side of the city. Wastewater from the Greatwood development and the Greatwood Lake development (MUD 192) is treated at the Greatwood Plant.

All plants are owned by the city and operated by the city's contractor, the Brazos River Authority. The majority of new flows are projected to come from undeveloped areas in the western third of the city and the city's ETJ. The city anticipates diverting future flows from the North Plant to the South and West Plant.

Water Conservation Utility Profile

A Water Conservation Utility Profile for the city's public water systems and both wholesale systems are attached as **Appendix B**. The information the profile is based on the best available data as of January 30, 2019. The demand projections, system descriptions and other data are drawn primarily from the city's Water and Wastewater Master Plans and Integrated Water Resource Plan to ensure continuity between city planning documents and efforts.

III. WATER CONSERVATION PROGRAMMING

Water Conservation Policy

By Council policy (please refer to **Appendix C: Water Conservation Policy**), the City of Sugar Land confirms the value of water conservation as a tool for managing our water resources, and as an important component in our future water supply. Towards that end, the city has committed itself to finding fiscally responsible ways to reduce water use, prevent water loss, and promote water conservation among our residents and community organizations. The city's Water Conservation Policy identifies eight core areas of opportunity in which the city will seek to maintain or expand its water conservation efforts:

- 1) Continued refinement and implementation of a comprehensive, citywide Water Conservation Program;
- 2) Continued and enhanced supply-side management of the City's public water utility infrastructure;
- 3) Promotion of community involvement through public-private partnership opportunities and programs
- 4) Continued development and expansion of City's educational outreach on water issues
- 5) Requiring efficient irrigation systems for City facilities, as is feasible
- 6) Re-evaluation of our irrigation incentives programs
- 7) Consideration of water conservation goals in City landscape installation and maintenance
- 8) Promotion of water conservation practices with new development

Current Water Conservation Programs

The city currently employs an array of individual water-conservation oriented programs and efforts. The traditional focus of these program elements has been on curtailing supply-side water loss with a significant emphasis on community education addressing the city's conversion to surface water. The following is a brief description of the city's current efforts, as well as elements being considered as future additions:

Metering Devices

A metering device is located at each supply source (production wells, surface water diversion points, and reclaimed distribution points) to effectively track water production and diversion. Meters are calibrated annually and if necessary repaired or replaced to assure accuracy within 5%.

Universal Metering, Meter Testing, Repair and Replacement

Metering of all retail and wholesale potable water customers provides the means for accurate accounting of water uses throughout the system. The city meters all water users, including municipal buildings, parks, and public use facilities. All meters are installed and maintained in accordance with all applicable local, state and federal regulations and standards. Surface water supplied by the city through non-potable water supply contracts is also metered.

The city maintains an aggressive and proactive meter testing, repair and replacement program for its customer, production, and diversion meters. Customer meters sized 5/8" to 1" are replaced every 10 years. Meters 2" and larger are tested annually. Any meters found to be outside the AWWA accuracy guidelines is repaired or replaced.

Unaccounted Water Use, Leak Detection, and Water Loss Prevention

Unaccounted for water can typically be attributed to firefighting, unauthorized water use, inaccurate metering of customer use and distribution system leaks. The city maintains a proactive stance in maintaining its utility system assets to minimize leaks and water loss due to old or failing infrastructure. The city operators currently conduct routine inspections for leaks and illegal water use and monthly water audits. Customers are notified if water use is abnormally high and encouraged to check their home for possible leaks. Sudden decreases in usage or cessation of reported use also triggers an investigation of the meter in question.

The city utilizes a comprehensive work order system utilizing geographic information system (GIS) component detailing the city's utility infrastructure. Data is captured and analyzed to support in rehabilitation and loss prevention efforts. Infrastructure rehabilitation needs are reviewed annually for inclusion in the city's robust 5-year Capital Improvements Projects planning and budgeting process.

As detailed above, aggressive inspection and repair programs by the city staff minimize the losses due to meter inaccuracies, system leaks, and illegal connections. Transient meters are required for all temporary uses from the city's hydrants or other access points to curtail unauthorized water use. The transient meters are colored distinctively to aid in identifying potential unauthorized users. Flushing volumes are recorded and tracked to account for water used to maintain the system and water quality. The city completes water loss audits annually using both the TWDB and American Water Works Association formats. Results are benchmarked in the city's performance measures.

Plumbing Codes and New Development

The city has adopted the UPC, which matches the AWWA standards. These standards guard against inefficient water technologies. The city's Policy directs the city to continue to consider water conservation goals in the adoption or modification of codes and ordinances. Additionally, the city works to encourage water conservation goals in new development. While house-specific technologies like graywater reuse systems are not the most feasible option, the city targets irrigation system efficiency to reduce outdoor water use.

Conservation-Oriented Rate Structure

A conservation-oriented water rate structure usually takes the form of an increasing block rate. In this structure the price per unit of water increases in steps or blocks as customer use levels are reached. Price increases at the higher use levels are intended to discourage the use of large quantities of water. The city has a straight block water rate structure with an increasing rate base charge dependent upon on meter size. Additionally, the rate structure includes separate rates for irrigation water, and increases those rates in the summer months to deter excessive irrigation during times of peak water usage. This rate structure is reviewed and evaluated on a routine basis. Detailed information on the city's current water rate structure can be found in **Appendix D**.

Water Use Analysis

Water data is collected from production and individual customer meters and used in monthly desk top water loss audits and annual water use reporting. The city is exploring tools and methods to perform deeper analysis of water use data by customer class (residential, commercial, industrial, and institutional) and water end-use (consumption and irrigation) to help in targeting water conservation programming and communicate water use to customers.

Water Cost-Share Program

The city works with several of its Homeowner's Associations (HOAs) to encourage responsible irrigation of HOA-maintained city rights-of-ways (ROW) to meet specification of our Streetscape Policy. The city rebates a portion of the cost of water used. To encourage conservation, the rebate is limited to a set volume per square foot.

Education

The city places an emphasis on education as an important tool in promoting water conservation. The following is a list of the city's current educational activities.

- Through the Fort Bend Subsidence District's *Learning to be WaterWise* program, the city sponsors water conservation education in local schools, including the distribution of water efficient technology and multimedia education kits to children in grades 4 and 5. The kits are complemented by in-school educational seminars and curriculum components.
- The city maintains a water conservation education program, in which water conservation literature, hand-outs, on-line web information, and other water conservation materials available to its residents and new customers. The Water Conservation Division makes presentations and visits at a variety of community and school functions to promote water conservation and water stewardship. Past visits have included classroom quarterly HOA representative meetings, monthly and annual resident meetings, and community groups like the Lions Club, Boy Scouts, Girl Scouts and environmental clubs. The city also teams with local organizations (Keep Sugar Land Beautiful and AgriLIFE Extension) to bring information and hands on workshops to the community.
- The city provides residential irrigation system evaluations as an education tool for residents to adopt better landscape irrigation practices and make improvements to aging, inefficient systems.
- The Water Conservation Division participates in events at which water conservation information and activities can be highlighted. Past events have included the annual Earth Day Celebration coordinated by Keep Sugar Land Beautiful, the City Hall open house and information night, HOA resident forums, and school science nights.

Raw Surface Water Supply to Non-Potable Water Projects

The city supplies up to 2 MGD raw, untreated surface water to four HOAs for irrigation and amenity lake maintenance. This supply replaces groundwater or potable water supply used for non-potable applications and supports the city's groundwater reduction efforts.

Reclaimed Water Use

The city utilizes WWTP effluent for non-potable demands in two residential areas. Effluent from the city's south WWTP is treated at a city-owned reclaimed plant and used for irrigation and lake fill in the Riverstone development. The city's west WWTP supplies effluent to a LID 7-own reclaimed system that supplies non-potable water for all public space irrigation and amenity lake fill within New Territory HOA's jurisdiction. Utilizing wastewater effluent to meet non-potable demands is an example of the city's commitment to efficient water management and reducing groundwater withdrawals.

City Facility Design and Maintenance

An opportunity identified by the city is the potential to consider water conservation goals in the design and maintenance of new city facilities, parks, and irrigation. City managed

roadway landscape design integrates water conserving drip irrigation for plant beds and trees; turf grass is not irrigated.

Potential Future Additional Conservation Programs

There are several opportunities, as identified in the city's Policy, for the city to expand its current water conservation efforts. Some currently identified and potential projects have been given as examples in the preceding subsections. The city will be continuing to evaluate the feasibility of adding these and other elements to the selection of tools it may employ to achieve its water conservation goals. The majority of these projects are drawn from the Best Management Practices recommended by the TWDB. Some of the BMPs have been evaluated for possible implementation:

- Increase water use communication with customers
- SMART irrigation controller initiative for residential and commercial systems
- Plumbing retrofit programs for residential
- Water survey for single-family and multi-family customers
- Landscape irrigation incentives
- Water wise landscape design and conservation programs
- Rain barrel distribution to encourage rainwater harvesting
- Golf course conversion to non-potable supply
- Park and athletic field conversion to non-potable supply

In general, the city plans to maintain or expand its current supply-side programs while continuing to explore and evaluate demand-side opportunities to broaden the scope of our water conservation efforts. The intent is to incorporate voluntary projects and mutually beneficial partnership programs to the greatest extent practicable, while continuing enhanced community education. In subsequent annual reports, the city will detail new program elements evaluated and/or added to its current suite of water conservation efforts.

The City does not own or utilize a reservoir and therefore does not require a reservoir systems operations plan.

IV. FIVE- AND TEN-YEAR TARGETS AND GOALS

The City of Sugar Land continues to pursue a multi-faceted approach to encouraging water conservation and combating water loss. With continuing and improved educational efforts, continued efforts to induce water savings via rate structures, and continued vigilance in preventative maintenance and active efforts to reduce losses, we expect to increase per capita savings in water use. The following sections contain specific targets and goals for water conservation savings and water loss reduction. The specific percentage and actual gallon reductions are based on best currently available data and may not reflect outcomes that are impacted by unforeseen funding and schedule changes, shifting water use patterns, efficacy of untested programs or changing developmental trends. The goals are broken out between those relating to water conservation savings and those regarding water loss reduction.

Conservation Savings and Goals

While these goals are provisional due to levels of precipitation, general weather conditions, and a host of other factors that along with conservation efforts, help determine per capita use, the City of

Sugar Land is committed to pursuing these courses of action. For those factors within our control, we feel the aforementioned range of conservation strategies will continue to trend toward the targets described.

Five Year Target Goal:

In the next five years, the city expects continued population growth and development. The city targets a 1% reduction in current per capita usage. Based on a five-year total potable consumption average of 174 gpcd, this translates to an approximate per capita reduction of 1.74 gpcd and 172 gpcd at the five-year target mark. Based on a five-year potable residential consumption average of 94 gpcd, this translates to an approximate per capita reduction of 0.94 gpcd and 93 gpcd at the five-year target mark.

Ten-Year Target Goal:

Building on the efforts and factors discussed in the five-year target goal, the city targets a continued decrease in per-capita water use. The target goal is a 2% reduction in per capita consumption after 10-years. Based on a five-year total potable consumption average of 174 gpcd, this translates to an approximate per capita reduction of 3.48 gpcd and 170 gpcd at the ten-year target mark. Based on a five-year potable residential consumption average of 94 gpcd, this translates to an approximate per capita reduction of 1.88 gpcd and 92 gpcd at the ten-year target mark.

Water Loss Reduction Goals

While these goals are provisional due to the effects of aging infrastructure, development, and a host of other factors, the City of Sugar Land is committed to reducing water loss. For those factors within our control, we feel the aforementioned range of strategies will continue trends toward the target goals.

Five Year Target Goal:

In conjunction with the water conservation efforts outlined above, the city is also focusing strongly on reducing water loss in its system. Water loss prevention efforts, such as our meter replacement program, are a priority for our utility.

The city's water utility has maintained an average water loss of 12% over the past 5 years. Continuing current efforts to curb water loss, the city targets to maintain a water loss of less than 13% during the next five years.

Ten-Year Target Goal

Building on the efforts and factors discussed in the five-year target goal, the city targets to maintain a water loss of less than 13% through the next 10-year period.

V. IMPLEMENTATION AND EVALUATION

Implementation

The goals and projected strategies detailed in this Water Conservation Plan are administered by the Water Conservation Manager, under the direction of the Director of Public Works. The implementation schedules for the city's water conservation efforts are reviewed every year, but may change from year to year based on available funding, economic conditions, and workload. The

city's current intent is to continue current supply-side and educational water conservation efforts and evaluate additional programs for implementation.

Evaluation

The city will evaluate this Water Conservation Plan on a yearly basis when compiling data for the TWDB Annual Report. Annual reviews may prompt the city to shift the suite of programs and strategies to achieve the water conservation goals in this plan.

VI. PUBLIC PARTICIPATION

Public Meetings

The City of Sugar Land conducts regularly scheduled public meetings twice a month. The City Council meetings are open to the public, and citizens are free to offer public comment. The city's Resolution adopting the Water Conservation Plan was brought before the City Council for approval, at which time citizens had an opportunity to voice their opinion on the items.

In addition to these meetings, the city is open to comment from its citizens at all times and maintains an active education and outreach program, including public appearances and information dissemination at local events.

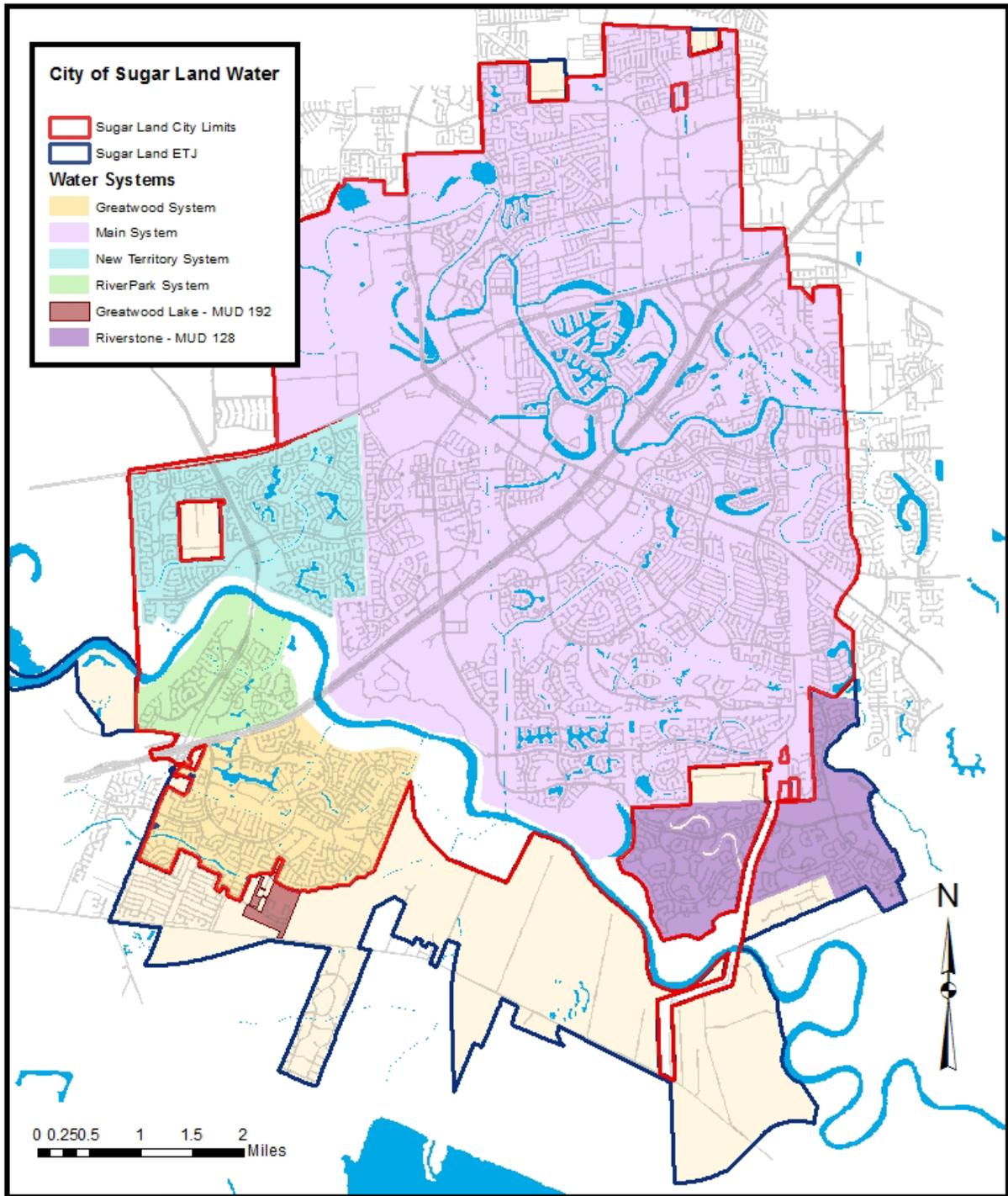
VII. ADOPTION OF PLAN

On April 16, 2019, the Water Conservation Plan for the City of Sugar Land was presented at the City Council meeting as a proposed resolution of the City of Sugar Land to adopt the aforementioned Plan. The City Council agenda which included the Plan was advertised as part of the normal dissemination of the City Council Agenda. The public has the opportunity to provide comments on any City Council agenda item and no comments were presented for the Plan. At that time, the City Council took action, as the duly elected governing body of the City of Sugar Land, and formally adopted the Plan by resolution. The resolution adopting the Water Conservation Plan was passed, and a copy of said resolution can be found in **Appendix E** of this Document.

VIII. REGIONAL WATER PLANNING GROUP NOTIFICATION

In accordance with the TWDB and TCEQ requirements for Water Conservation Plans, the city has notified Region H that we have filed a Plan, and forwarded a copy to their representative. A copy of the letter of notification is attached as **Appendix F**.

APPENDIX A: Utilities Service Area Map



City of Sugar Land
Public Water Systems

APPENDIX B Utility Profiles



Texas Commission on Environmental Quality

Water Availability Division

MC-160, P.O. Box 13087 Austin, Texas 78711-3087

Telephone (512) 239-4691, FAX (512) 239-2214

Utility Profile and Water Conservation Plan Requirements for Municipal Water Use by Retail Public Water Suppliers

This form is provided to assist retail public water suppliers in water conservation plan assistance in completing this form or in developing your plan, please contact the Conservation staff of the Resource Protection Team in the Water Availability Division at (512) 239-4691.

Water users can find best management practices (BMPs) at the Texas Water Development Board's website <http://www.twdb.texas.gov/conservation/BMPs/index.asp>. The practices are broken out into sectors such as Agriculture, Commercial and Institutional, Industrial, Municipal and Wholesale. BMPs are voluntary measures that water users use to develop the required components of Title 30, Texas Administrative Code, Chapter 288. BMPs can also be implemented in addition to the rule requirements to achieve water conservation goals.

Contact Information

Name of Water Supplier: City of Sugar Land- Main Potable Water System

Address: P.O. Box 110, Sugar Land TX 77479

Telephone Number: (281) 275-2450 Fax: ()

Water Right No.(s): Certificate of Adjudication 05170

Regional Water Planning Group: Region H

Water Conservation Coordinator (or person responsible for implementing conservation program): Colleen Spencer Phone: (281) 275-2450

Form Completed by: Colleen Spencer

Title: Water Conservation Manager

Signature: _____ Date: / /

A water conservation plan for municipal use by retail public water suppliers must include the following requirements (as detailed in 30 TAC Section 288.2). If the plan does not provide information for each requirement, you must include in the plan an explanation of why the requirement is not applicable.

Utility Profile

I. POPULATION AND CUSTOMER DATA

A. Population and Service Area Data

1. Attach a copy of your service-area map and, if applicable, a copy of your Certificate of Convenience and Necessity (CCN).
2. Service area size (in square miles): 32 sq. mi.
(Please attach a copy of service-area map)
3. Current population of service area: 85,384
4. Current population served for:
 - a. Water 85,384
 - b. Wastewater 85,384
5. Population served for previous five years:

<i>Year</i>	<i>Population</i>
2014	82,119
2015	83,372
2016	84,327
2017	85,207
2018	85,384

6. Projected population for service area in the following decades:

<i>Year</i>	<i>Population</i>
2020	94,655
2030	95,838
2040	95,903
2050	95,903
2060	95,903

7. List source or method for the calculation of current and projected population size.

Current Data from City of Sugar Land planning staff; projected data from City of Sugar Land Water Master Plan

B. Customer Data

Senate Bill 181 requires that uniform consistent methodologies for calculating water use and conservation be developed and available to retail water providers and certain other water use sectors as a guide for preparation of water use reports, water conservation plans, and reports on water conservation efforts. A water system must provide the most detailed level of customer and water use data available to it, however, any new billing system purchased must be capable of reporting data for each of the sectors listed below. More guidance can be found at: <http://www.twdb.texas.gov/conservation/doc/SB181Guidance.pdf>

1. Quantified 5-year and 10-year goals for water savings:

	<i>Historic 5-year Average</i>	<i>Baseline</i>	<i>5-year goal for year 2024</i>	<i>10-year goal for year 2029</i>
Total GPCD	174	174	172	170
Residential GPCD	95	95	94	93
Water Loss GPCD	23	23	23	23
Water Loss Percentage	12%	12%	12%	12%

Notes:

Total GPCD = (Total Gallons in System ÷ Permanent Population) ÷ 365

Residential GPCD = (Gallons Used for Residential Use ÷ Residential Population) ÷ 365

Water Loss GPCD = (Total Water Loss ÷ Permanent Population) ÷ 365

Water Loss Percentage = (Total Water Loss ÷ Total Gallons in System) x 100; or (Water Loss GPCD ÷ Total GPCD) x 100

2. Current number of active connections. Check whether multi-family service is counted as Residential or Commercial?

<i>Treated Water Users</i>	<i>Metered</i>	<i>Non-Metered</i>	<i>Totals</i>
Residential	27,844	0	27,844
Single-Family	24,959	0	24,959
Multi-Family	61	0	61
Commercial	1,574	0	1,574
Industrial/Mining	38	0	38
Institutional	1,212	0	1,212
Agriculture	0	0	0
Other/Wholesale	1	0	1

3. List the number of new connections per year for most recent three years.

Year	2016	2017	2018
<i>Treated Water Users</i>			
Residential	1322	153	78
Single-Family	1322	153	78
Multi-Family	0	0	0
Commercial	367	110	49
Industrial/Mining	0	0	0
Institutional	0	0	0
Agriculture	0	0	0
Other/Wholesale	0	0	0

4. List of annual water use for the five highest volume customers.

<i>Customer</i>	<i>Use (1,000 gal/year)</i>	<i>Treated or Raw Water</i>
Fort Bend MUD 128 Wholesale	457,638	Treated
Nalco	126,961	Treated
Crown Cork and Seal	74,448	Treated
Schlumberger	26,388	Treated
Baker Petrolite	12,382	Treated

II. WATER USE DATA FOR SERVICE AREA

A. Water Accounting Data

- List the amount of water use for the previous five years (in 1,000 gallons).

Indicate whether this is diverted or treated water.

<i>Year</i>	2014	2015	2016	2017	2018
<i>Month</i>					
January	361,491	332,143	380,601	366,138	336,467
February	302,980	321,335	391,974	364,193	286,375
March	355,422	338,020	443,286	431,917	443,109
April	467,032	378,529	433,061	486,665	475,108
May	574,668	407,132	451,487	571,538	615,478
June	550,360	470,555	471,839	528,178	644,991
July	578,502	717,682	684,549	621,535	661,872
August	619,671	744,652	597,598	560,334	679,035
September	468,544	567,835	518,238	512,529	464,097
October	478,203	605,216	611,075	558,190	459,989
November	396,444	402,094	490,603	489,661	376,747
December	365,894	379,487	391,378	384,479	361,372
Totals	5,492,211	5,644,690	5,865,689	5,865,689	5,804,640

- Describe how the above figures were determined (e.g, from a master meter located at the point of a diversion from the source or located at a point where raw water enters the treatment plant, or from water sales).

Metered at Source

3. Amount of water (in 1,000 gallons) delivered/sold as recorded by the following account types for the past five years.

<i>Year</i>	2014	2015	2016	2017	2018
<i>Account Types</i>					
Residential	2,751,705	2,719,190	4,594,175	4,654,099	4,859,291
Single-Family	2,751,705	2,719,190	2,689,074	2,798,826	2,881,248
Multi-Family	126,738	139,701	167,697	149,490	140,501
Commercial	1,526,624	791,420	827,851	822,310	989,056
Industrial/Mining	270,028	235,844	236,274	232,824	246,100
Institutional	222,600	679,219	673,277	650,648	602,387
Agriculture	0	0	0	0	0
Other/Wholesale	237,704	335,053	387,713	479,490	457,638

4. List the previous records for water loss for the past five years (the difference between water diverted or treated and water delivered or sold).

<i>Year</i>	<i>Amount (gallons)</i>	<i>Percent %</i>
2014	626,568,654	11.4%
2015	764,260,067	13.5%
2016	883,800,980	15.1%
2017	741,766,546	12.6%
2018	487,711,300	8.4%

B. Projected Water Demands

1. If applicable, attach or cite projected water supply demands from the applicable Regional Water Planning Group for the next ten years using information such as population trends, historical water use, and economic growth in the service area over the next ten years and any additional water supply requirements from such growth.

Data from the City's Water Master Plan

City Main Planning Areas	2018	2025	Ultimate
Equivalent Single Family Connections	49,289	54,590	57,728
Water Demand (million gallons/day)	19.7	21.8	23.0

III. WATER SUPPLY SYSTEM DATA

A. Water Supply Sources

- List all current water supply sources and the amounts authorized (in acre feet) with each.

<i>Water Type</i>	<i>Source</i>	<i>Amount Authorized</i>
Surface Water	Cert Adj 05170	18,159
Surface Water	Contracts with GCWA and BRA	28,791
Groundwater	Self-Supplied	45,388
Other		

B. Treatment and Distribution System (if providing treated water)

- Design daily capacity of system (MGD): 51.4 MGD
- Storage capacity (MGD):
 - Elevated 6.2
 - Ground 15.23
- If surface water, do you recycle filter backwash to the head of the plant?
 Yes No If yes, approximate amount (MGD):

IV. WASTEWATER SYSTEM DATA

A. Wastewater System Data (if applicable)

- Design capacity of wastewater treatment plant(s) (MGD): 13.5
- Treated effluent is used for on-site irrigation, off-site irrigation, for plant wash-down, and/or for chlorination/dechlorination.

If yes, approximate amount (in gallons per month): 16,131,600
- Briefly describe the wastewater system(s) of the area serviced by the water utility. Describe how treated wastewater is disposed. Where applicable, identify treatment plant(s) with the TCEQ name and number, the operator, owner, and the receiving stream if wastewater is discharged.

The Brazos River Authority operates the City’s wastewater treatment plants.
 Sugar Land Regional Wastewater Treatment Plant (North Plant)
 16451 Southwest Freeway
 Sugar Land, TX 77479
 EPA I.D. No. TX0058114
 WQ0011317001
 Discharges to Ditch D to Brazos River

Sugar Land South Wastewater Treatment Plant
 4802 Oilfield Road
 Sugar Land, TX 77479
 EPA I.D. No. TX0096881
 WQ0012833002
 Discharges to Steep Bank Creek to Brazos River

Sugar Land South Reclaimed Water Facility
 4802 Oilfield Road
 Sugar Land, TX 77479
 R12833002
 Effluent delivered to Riverstone MUD 128 for irrigation and amenity lake filling

B. Wastewater Data for Service Area (if applicable)

1. Percent of water service area served by wastewater system: 100%
2. Monthly volume treated for previous five years (in 1,000 gallons):

<i>Year</i>	2014	2015	2016	2017	2018
<i>Month</i>					
January	237,765	262,781	258,156	281,257	271,113
February	216,550	215,086	228,325	228,406	257,987
March	232,612	268,272	261,450	268,596	259,516
April	231,100	270,022	281,891	240,758	241,123
May	267,815	316,567	290,159	254,355	253,093
June	245,083	252,080	267,686	274,981	256,291
July	248,338	253,515	259,690	252,946	255,832
August	247,270	257,430	277,093	419,717	259,889
September	256,975	257,408	254,135	253,525	263,233
October	244,046	284,541	240,568	246,327	265,749
November	235,243	253,671	248,112	232,429	252,771
December	258,320	270,741	257,231	263,397	267,368
Totals	2,921,116	3,162,113	3,124,496	3,2016,695	3,103,964



Texas Commission on Environmental Quality

Water Availability Division

MC-160, P.O. Box 13087 Austin, Texas 78711-3087

Telephone (512) 239-4691, FAX (512) 239-2214

Utility Profile and Water Conservation Plan Requirements for Municipal Water Use by Retail Public Water Suppliers

This form is provided to assist retail public water suppliers in water conservation plan assistance in completing this form or in developing your plan, please contact the Conservation staff of the Resource Protection Team in the Water Availability Division at (512) 239-4691.

Water users can find best management practices (BMPs) at the Texas Water Development Board's website <http://www.twdb.texas.gov/conservation/BMPs/index.asp>. The practices are broken out into sectors such as Agriculture, Commercial and Institutional, Industrial, Municipal and Wholesale. BMPs are voluntary measures that water users use to develop the required components of Title 30, Texas Administrative Code, Chapter 288. BMPs can also be implemented in addition to the rule requirements to achieve water conservation goals.

Contact Information

Name of Water Supplier: City of Sugar Land- RiverPark Potable Water System

Address: P.O. Box 110, Sugar Land TX 77479

Telephone Number: (281) 275-2450 Fax: ()

Water Right No.(s): _____

Regional Water Planning Group: Region H

Water Conservation Coordinator (or person responsible for implementing conservation program): Colleen Spencer Phone: (281) 275-2450

Form Completed by: Colleen Spencer

Title: Water Conservation Manager

Signature: _____ Date: / /

A water conservation plan for municipal use by retail public water suppliers must include the following requirements (as detailed in 30 TAC Section 288.2). If the plan does not provide information for each requirement, you must include in the plan an explanation of why the requirement is not applicable.

Utility Profile

I. POPULATION AND CUSTOMER DATA

A. Population and Service Area Data

1. Attach a copy of your service-area map and, if applicable, a copy of your Certificate of Convenience and Necessity (CCN).
2. Service area size (in square miles): 1.4 sq. mi.
(Please attach a copy of service-area map)
3. Current population of service area: 3,647
4. Current population served for:
 - a. Water 3,647
 - b. Wastewater 3,647
5. Population served for previous five years:

<i>Year</i>	<i>Population</i>
2014	2,392
2015	3,600
2016	3,496
2017	3,586
2018	3,647

6. Projected population for service area in the following decades:

<i>Year</i>	<i>Population</i>
2020	4,143
2030	4,143
2040	4,143
2050	4,143
2060	4,143

7. List source or method for the calculation of current and projected population size.

Current Data from City of Sugar Land planning staff; projected data from City of Sugar Land Water Master Plan.

B. Customer Data

Senate Bill 181 requires that uniform consistent methodologies for calculating water use and conservation be developed and available to retail water providers and certain other water use sectors as a guide for preparation of water use reports, water conservation plans, and reports on water conservation efforts. A water system must provide the most detailed level of customer and water use data available to it, however, any new billing system purchased must be capable of reporting data for each of the sectors listed below. More guidance can be found at: <http://www.twdb.texas.gov/conservation/doc/SB181Guidance.pdf>

1. Quantified 5-year and 10-year goals for water savings:

	<i>Historic 5-year Average</i>	<i>Baseline</i>	<i>5-year goal for year 2024</i>	<i>10-year goal for year 2029</i>
Total GPCD	174	174	172	170
Residential GPCD	95	95	94	93
Water Loss GPCD	23	23	23	23
Water Loss Percentage	12%	12%	12%	12%

Notes:

Total GPCD = (Total Gallons in System ÷ Permanent Population) ÷ 365

Residential GPCD = (Gallons Used for Residential Use ÷ Residential Population) ÷ 365

Water Loss GPCD = (Total Water Loss ÷ Permanent Population) ÷ 365

Water Loss Percentage = (Total Water Loss ÷ Total Gallons in System) x 100; or (Water Loss GPCD ÷ Total GPCD) x 100

2. Current number of active connections. Check whether multi-family service is counted as Residential or Commercial?

<i>Treated Water Users</i>	<i>Metered</i>	<i>Non-Metered</i>	<i>Totals</i>
Residential	1,304	0	1,304
Single-Family	1,304	0	1,304
Multi-Family	0	0	0
Commercial	54	0	54
Industrial/Mining	0	0	0
Institutional	28	0	28
Agriculture	0	0	0
Other/Wholesale	0	0	0

3. List the number of new connections per year for most recent three years.

Year	2016	2017	2018
<i>Treated Water Users</i>			
Residential	27	52	56
Single-Family	27	52	56
Multi-Family	0	0	0
Commercial	19	0	0
Industrial/Mining	0	0	0
Institutional	7	2	3
Agriculture	0	0	0
Other/Wholesale	0	0	0

4. List of annual water use for the five highest volume customers.

<i>Customer</i>	<i>Use (1,000 gal/year)</i>	<i>Treated or Raw Water</i>
Memorial Hermann Hospital	36,407	Treated
RiverPark HOA	16,487	Treated
BRA RC RiverPark SCTX LP	12,303	Treated
City of Sugar Land	10,628	Treated
Sugarland POB1	2,321	Treated

II. WATER USE DATA FOR SERVICE AREA

A. Water Accounting Data

- List the amount of water use for the previous five years (in 1,000 gallons).

Indicate whether this is diverted or treated water.

<i>Year</i>	2014	2015	2016	2017	2018
<i>Month</i>					
January	12,394	11,237	12,635	12,807	13,441
February	11,304	11,418	15,432	12,637	11,288
March	12,679	12,149	14,717	14,875	17,669
April	17,220	13,299	15,246	16,707	19,411
May	21,990	16,041	17,411	22,140	27,228
June	23,537	18,557	18,951	22,792	27,804
July	22,948	27,260	29,959	25,382	27,697
August	22,391	27,849	24,098	23,714	27,765
September	20,330	19,354	19,841	21,775	19,462
October	16,012	20,065	21,705	22,591	16,071
November	12,955	13,177	16,630	17,603	13,836
December	11,932	13,388	14,189	14,843	12,942
Totals	205,692	203,794	220,814	227,866	234,614

- Describe how the above figures were determined (e.g, from a master meter located at the point of a diversion from the source or located at a point where raw water enters the treatment plant, or from water sales).

Metered at Source

3. Amount of water (in 1,000 gallons) delivered/sold as recorded by the following account types for the past five years.

<i>Year</i>	2014	2015	2016	2017	2018
<i>Account Types</i>					
Residential	128,567	142,677	122,586	125,400	135,589
Single-Family	128,567	142,677	122,586	125,400	135,589
Multi-Family	0	0	0	0	0
Commercial	34,224	26,212	30,453	34,827	31,505
Industrial/Mining	0	0	0	0	0
Institutional	31,596	29,612	38,501	59,609	64,635
Agriculture	0	0	0	0	0
Other/Wholesale	0	0	0	0	0

4. List the previous records for water loss for the past five years (the difference between water diverted or treated and water delivered or sold).

<i>Year</i>	<i>Amount (gallons)</i>	<i>Percent %</i>
2014	11,306,050	5.5%
2015	5,292,767	2.6%
2016	29,275,200	13.3%
2017	8,030,900	3.5%
2018	2,894,700	1.2%

B. Projected Water Demands

1. If applicable, attach or cite projected water supply demands from the applicable Regional Water Planning Group for the next ten years using information such as population trends, historical water use, and economic growth in the service area over the next ten years and any additional water supply requirements from such growth.

Data from the City's Water Master Plan

RiverPark Planning Areas	2018	2025	Ultimate
Equivalent Single Family Connections	2,042	2,583	2,976
Water Demand (gallons/day)	816,800	1,033,200	1,190,400

III. WATER SUPPLY SYSTEM DATA

A. Water Supply Sources

- List all current water supply sources and the amounts authorized (in acre feet) with each.

<i>Water Type</i>	<i>Source</i>	<i>Amount Authorized</i>
Surface Water	_____	_____
Surface Water	_____	_____
Groundwater	Self-Supplied	3,797
Other	_____	_____

B. Treatment and Distribution System (if providing treated water)

- Design daily capacity of system (MGD): 3.4 MGD
- Storage capacity (MGD):
 - Elevated 0
 - Ground 0.72
- If surface water, do you recycle filter backwash to the head of the plant?
 Yes No If yes, approximate amount (MGD):

IV. WASTEWATER SYSTEM DATA

A. Wastewater System Data (if applicable)

- Design capacity of wastewater treatment plant(s) (MGD): 2.2
- Treated effluent is used for on-site irrigation, off-site irrigation, for plant wash-down, and/or for chlorination/dechlorination.

 If yes, approximate amount (in gallons per month): 6,123,900

- Briefly describe the wastewater system(s) of the area serviced by the water utility. Describe how treated wastewater is disposed. Where applicable, identify treatment plant(s) with the TCEQ name and number, the operator, owner, and the receiving stream if wastewater is discharged.

The Brazos River Authority operates the City's wastewater treatment plants. The Reclaimed Water Facility is owned by Fort Bend County LID 7, and operated by Si Environmental.

Sugar Land West Wastewater Treatment Plant- Receives flow from River Park and New Territory Systems
 4050 U.S. Highway 90A
 Sugar Land, TX 77479
 EPA I.D. No. TX0111872
 WQ0013628001
 Discharges to FBC LID 7 Ditch to Brazos River

B. Wastewater Data for Service Area (if applicable)

- Percent of water service area served by wastewater system: 100%
- Monthly volume treated for previous five years (in 1,000 gallons):

<i>Year</i>	2014	2015	2016	2017	2018
<i>Month</i>					
January				46,292	36,101
February				38,140	35,690
March				43,165	37,047
April				40,724	35,613
May				44,055	41,998
June				44,341	38,599
July				41,565	38,182
August				65,648	37,875
September				38,986	36,915
October				36,468	32,014
November				41,910	30,007
December				35,965	32,575
Totals				517,259	432,616



Texas Commission on Environmental Quality

Water Availability Division

MC-160, P.O. Box 13087 Austin, Texas 78711-3087

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Utility Profile and Water Conservation Plan Requirements for Municipal Water Use by Retail Public Water Suppliers

This form is provided to assist retail public water suppliers in water conservation plan assistance in completing this form or in developing your plan, please contact the Conservation staff of the Resource Protection Team in the Water Availability Division at (512) 239-4691.

Water users can find best management practices (BMPs) at the Texas Water Development Board's website <http://www.twdb.texas.gov/conservation/BMPs/index.asp>. The practices are broken out into sectors such as Agriculture, Commercial and Institutional, Industrial, Municipal and Wholesale. BMPs are voluntary measures that water users use to develop the required components of Title 30, Texas Administrative Code, Chapter 288. BMPs can also be implemented in addition to the rule requirements to achieve water conservation goals.

Contact Information

Name of Water Supplier: City of Sugar Land- New Territory Potable Water System

Address: P.O. Box 110, Sugar Land TX 77479

Telephone Number: (281) 275-2450 Fax: ()

Water Right No.(s): _____

Regional Water Planning Group: Region H

Water Conservation Coordinator (or person responsible for implementing conservation program): Colleen Spencer Phone: (281) 275-2450

Form Completed by: Colleen Spencer

Title: Water Conservation Manager

Signature: _____ Date: / /

A water conservation plan for municipal use by retail public water suppliers must include the following requirements (as detailed in 30 TAC Section 288.2). If the plan does not provide information for each requirement, you must include in the plan an explanation of why the requirement is not applicable.

Utility Profile

I. POPULATION AND CUSTOMER DATA

A. Population and Service Area Data

1. Attach a copy of your service-area map and, if applicable, a copy of your Certificate of Convenience and Necessity (CCN).
2. Service area size (in square miles): 3 sq. mi.
(Please attach a copy of service-area map)
3. Current population of service area: 16,589
4. Current population served for:
 - a. Water 16,589
 - b. Wastewater 16,589
5. Population served for previous five years:

<i>Year</i>	<i>Population</i>
2014	
2015	
2016	
2017	16,572
2018	16,589

6. Projected population for service area in the following decades:

<i>Year</i>	<i>Population</i>
2020	16,001
2030	16,001
2040	16,001
2050	16,001
2060	16,001

7. List source or method for the calculation of current and projected population size.

Current Data from City of Sugar Land planning staff; projected data from City of Sugar Land Water Master Plan. Please note this system was annexed by the City of Sugar Land in December 2017.

B. Customer Data

Senate Bill 181 requires that uniform consistent methodologies for calculating water use and conservation be developed and available to retail water providers and certain other water use sectors as a guide for preparation of water use reports, water conservation plans, and reports on water conservation efforts. A water system must provide the most detailed level of customer and water use data available to it, however, any new billing system purchased must be capable of reporting data for each of the sectors listed below. More guidance can be found at: <http://www.twdb.texas.gov/conservation/doc/SB181Guidance.pdf>

1. Quantified 5-year and 10-year goals for water savings:

	<i>Historic 5-year Average</i>	<i>Baseline</i>	<i>5-year goal for year 2024</i>	<i>10-year goal for year 2029</i>
Total GPCD	174	174	172	170
Residential GPCD	95	95	94	93
Water Loss GPCD	23	23	23	23
Water Loss Percentage	12%	12%	12%	12%

Notes:

Total GPCD = (Total Gallons in System ÷ Permanent Population) ÷ 365

Residential GPCD = (Gallons Used for Residential Use ÷ Residential Population) ÷ 365

Water Loss GPCD = (Total Water Loss ÷ Permanent Population) ÷ 365

Water Loss Percentage = (Total Water Loss ÷ Total Gallons in System) x 100; or (Water Loss GPCD ÷ Total GPCD) x 100

2. Current number of active connections. Check whether multi-family service is counted as Residential or Commercial?

<i>Treated Water Users</i>	<i>Metered</i>	<i>Non-Metered</i>	<i>Totals</i>
Residential	5,086	0	5,086
Single-Family	4,582	0	4,582
Multi-Family	504	0	504
Commercial	46	0	46
Industrial/Mining	0	0	0
Institutional	23	0	23
Agriculture	0	0	0
Other/Wholesale	0	0	0

3. List the number of new connections per year for most recent three years.

Year	2016	2017	2018
<i>Treated Water Users</i>			
Residential			0
Single-Family			0
Multi-Family			0
Commercial			0
Industrial/Mining			0
Institutional			0
Agriculture			0
Other/Wholesale			0

4. List of annual water use for the five highest volume customers.

<i>Customer</i>	<i>Use (1,000 gal/year)</i>	<i>Treated or Raw Water</i>
NTRCA	59,204	Treated
Alliance Residential Company	33,660	Treated
Fort Bend ISD	8,150	Treated
Peterson Group	4,033	Treated
JP Morgan Chase Bank	2,339	Treated

II. WATER USE DATA FOR SERVICE AREA

A. Water Accounting Data

- List the amount of water use for the previous five years (in 1,000 gallons).

Indicate whether this is diverted or treated water.

<i>Year</i>	2014	2015	2016	2017	2018
<i>Month</i>					
January	52,417	50,679	47,068	51,339	48,691
February	47,086	47,203	55,085	48,402	42,783
March	53,653	52,286	59,115	59,143	59,727
April	85,704	52,029	57,589	71,387	75,315
May	101,802	58,279	66,327	88,888	98,272
June	101,167	78,405	68,715	76,574	87,526
July	84,262	106,756	118,147	90,879	93,032
August	91,832	110,307	90,471	82,995	100,966
September	58,685	68,252	74,839	78,139	51,807
October	59,920	85,051	96,339	86,715	48,683
November	45,936	42,024	60,499	56,716	37,434
December	39,579	39,696	41,665	75,184	37,897
Totals	728,253	712,625	799,074	866,361	721,142

- Describe how the above figures were determined (e.g, from a master meter located at the point of a diversion from the source or located at a point where raw water enters the treatment plant, or from water sales).

Metered at Source

3. Amount of water (in 1,000 gallons) delivered/sold as recorded by the following account types for the past five years.

<i>Year</i>	2014	2015	2016	2017	2018
<i>Account Types</i>					
Residential				663,939	560,335
Single-Family				663,939	560,335
Multi-Family				20,185	0
Commercial				108,845	19,539
Industrial/Mining				0	0
Institutional				0	84,315
Agriculture				0	0
Other/Wholesale				0	0

4. List the previous records for water loss for the past five years (the difference between water diverted or treated and water delivered or sold).

<i>Year</i>	<i>Amount (gallons)</i>	<i>Percent %</i>
2014		
2015		
2016		
2017	73,392,300	8.5%
2018	82,181,000	10.5%

B. Projected Water Demands

1. If applicable, attach or cite projected water supply demands from the applicable Regional Water Planning Group for the next ten years using information such as population trends, historical water use, and economic growth in the service area over the next ten years and any additional water supply requirements from such growth.

Data from the City's Water Master Plan

New Territory Planning Areas	2018	2025	Ultimate
Equivalent Single Family Connections	5,592	5,603	5,619
Water Demand (gallons/day)	2,935,800	2,941,470	2,949,975

III. WATER SUPPLY SYSTEM DATA

A. Water Supply Sources

1. List all current water supply sources and the amounts authorized (in acre feet) with each.

<i>Water Type</i>	<i>Source</i>	<i>Amount Authorized</i>
Surface Water	_____	_____
Surface Water	_____	_____
Groundwater	Self-Supplied	12,411
Other	_____	_____

B. Treatment and Distribution System (if providing treated water)

1. Design daily capacity of system (MGD): 11.1 MGD
2. Storage capacity (MGD):
- a. Elevated: 0
 - b. Ground: 2
3. If surface water, do you recycle filter backwash to the head of the plant?
- Yes No If yes, approximate amount (MGD):

IV. WASTEWATER SYSTEM DATA

A. Wastewater System Data (if applicable)

1. Design capacity of wastewater treatment plant(s) (MGD): 2.2
2. Treated effluent is used for on-site irrigation, off-site irrigation, for plant wash-down, and/or for chlorination/dechlorination.
- If yes, approximate amount (in gallons per month): 6,123,900

3. Briefly describe the wastewater system(s) of the area serviced by the water utility. Describe how treated wastewater is disposed. Where applicable, identify treatment plant(s) with the TCEQ name and number, the operator, owner, and the receiving stream if wastewater is discharged.

The Brazos River Authority operates the City's wastewater treatment plants. The Reclaimed Water Facility is owned by Fort Bend County LID 7, and operated by Si Environmental.

Sugar Land West Wastewater Treatment Plant- Receives flow from River Park and New Territory Systems
 4050 U.S. Highway 90A
 Sugar Land, TX 77479
 EPA I.D. No. TX0111872
 WQ0013628001
 Discharges to FBC LID 7 Ditch to Brazos River

B. Wastewater Data for Service Area (if applicable)

1. Percent of water service area served by wastewater system: 100%
2. Monthly volume treated for previous five years (in 1,000 gallons):

<i>Year</i>	2014	2015	2016	2017	2018
<i>Month</i>					
January				46,292	36,101
February				38,140	35,690
March				43,165	37,047
April				40,724	35,613
May				44,055	41,998
June				44,341	38,599
July				41,565	38,182
August				65,648	37,875
September				38,986	36,915
October				36,468	32,014
November				41,910	30,007
December				35,965	32,575
Totals				517,259	432,616



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Utility Profile and Water Conservation Plan Requirements for Municipal Water Use by Retail Public Water Suppliers

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Water users can find best management practices (BMPs) at the Texas Water Development Board's website <http://www.twdb.texas.gov/conservation/BMPs/index.asp>. The practices are broken out into sectors such as Agriculture, Commercial and Institutional, Industrial, Municipal and Wholesale. BMPs are voluntary measures that water users use to develop the required components of Title 30, Texas Administrative Code, Chapter 288. BMPs can also be implemented in addition to the rule requirements to achieve water conservation goals.

Contact Information

Name of Water Supplier: City of Sugar Land- Greatwood Potable Water System

Address: P.O. Box 110, Sugar Land TX 77479

Telephone Number: (281) 275-2450 Fax: ()

Water Right No.(s): _____

Regional Water Planning Group: Region H

Water Conservation Coordinator (or person responsible for implementing conservation program): Colleen Spencer Phone: (281) 275-2450

Form Completed by: Colleen Spencer

Title: Water Conservation Manager

Signature: _____ Date: / /

A water conservation plan for municipal use by retail public water suppliers must include the following requirements (as detailed in 30 TAC Section 288.2). If the plan does not provide information for each requirement, you must include in the plan an explanation of why the requirement is not applicable.

Utility Profile

I. POPULATION AND CUSTOMER DATA

A. Population and Service Area Data

1. Attach a copy of your service-area map and, if applicable, a copy of your Certificate of Convenience and Necessity (CCN).
2. Service area size (in square miles): 3 sq. mi.
(Please attach a copy of service-area map)
3. Current population of service area: 12,498
4. Current population served for:
 - a. Water 12,498
 - b. Wastewater 12,498
5. Population served for previous five years:

<i>Year</i>	<i>Population</i>
2014	
2015	
2016	
2017	12,504
2018	12,498

6. Projected population for service area in the following decades:

<i>Year</i>	<i>Population</i>
2020	13,455
2030	13,455
2040	13,455
2050	13,455
2060	13,455

7. List source or method for the calculation of current and projected population size.

Current Data from City of Sugar Land planning staff; projected data from City of Sugar Land Water Master Plan. Please note this system was annexed by the City of Sugar Land in December 2017.

B. Customer Data

Senate Bill 181 requires that uniform consistent methodologies for calculating water use and conservation be developed and available to retail water providers and certain other water use sectors as a guide for preparation of water use reports, water conservation plans, and reports on water conservation efforts. A water system must provide the most detailed level of customer and water use data available to it, however, any new billing system purchased must be capable of reporting data for each of the sectors listed below. More guidance can be found at: <http://www.twdb.texas.gov/conservation/doc/SB181Guidance.pdf>

1. Quantified 5-year and 10-year goals for water savings:

	<i>Historic 5-year Average</i>	<i>Baseline</i>	<i>5-year goal for year 2024</i>	<i>10-year goal for year 2029</i>
Total GPCD	174	174	172	170
Residential GPCD	95	95	94	93
Water Loss GPCD	23	23	23	23
Water Loss Percentage	12%	12%	12%	12%

Notes:

Total GPCD = (Total Gallons in System ÷ Permanent Population) ÷ 365

Residential GPCD = (Gallons Used for Residential Use ÷ Residential Population) ÷ 365

Water Loss GPCD = (Total Water Loss ÷ Permanent Population) ÷ 365

Water Loss Percentage = (Total Water Loss ÷ Total Gallons in System) x 100; or (Water Loss GPCD ÷ Total GPCD) x 100

2. Current number of active connections. Check whether multi-family service is counted as Residential or Commercial?

<i>Treated Water Users</i>	<i>Metered</i>	<i>Non-Metered</i>	<i>Totals</i>
Residential	4,214	0	4,214
Single-Family	4,214	0	4,214
Multi-Family	0	0	0
Commercial	403	0	403
Industrial/Mining	0	0	0
Institutional	58	0	58
Agriculture	0	0	0
Other/Wholesale	1	0	1

3. List the number of new connections per year for most recent three years.

Year	2016	2017	2018
<i>Treated Water Users</i>			
Residential			0
Single-Family			0
Multi-Family			0
Commercial			0
Industrial/Mining			0
Institutional			0
Agriculture			0
Other/Wholesale			0

4. List of annual water use for the five highest volume customers.

<i>Customer</i>	<i>Use (1,000 gal/year)</i>	<i>Treated or Raw Water</i>
Greatwood CAI	74,063	Treated
LSREF Golden Ops	6,522	Treated
Vistas at Greatwood HOA	2,897	Treated
Fairway Vista at Greatwood	1,893	Treated
Greatwood Shops Partners, LLC	1,688	Treated

II. WATER USE DATA FOR SERVICE AREA

A. Water Accounting Data

- List the amount of water use for the previous five years (in 1,000 gallons).

Indicate whether this is diverted or treated water.

<i>Year</i>	2014	2015	2016	2017	2018
<i>Month</i>					
January	41,095	37,007	36,459	51,339	38,463
February	35,257	36,011	45,821	48,402	31,933
March	42,226	39,387	54,305	59,143	55,361
April	66,038	44,930	54,773	71,387	35,895
May	83,349	43,253	59,020	88,888	99,649
June	80,074	59,951	66,736	76,574	90,022
July	84,262	106,756	118,147	90,879	93,032
August	91,832	110,307	90,471	82,995	100,966
September	58,685	68,252	74,839	78,139	51,807
October	59,920	85,051	96,339	86,715	48,683
November	45,936	42,024	60,499	56,716	37,434
December	39,579	39,696	41,665	75,184	37,897
Totals	728,253	712,625	799,074	866,361	721,142

- Describe how the above figures were determined (e.g, from a master meter located at the point of a diversion from the source or located at a point where raw water enters the treatment plant, or from water sales).

Metered at Source

3. Amount of water (in 1,000 gallons) delivered/sold as recorded by the following account types for the past five years.

<i>Year</i>	2014	2015	2016	2017	2018
<i>Account Types</i>					
Residential				625,237	508,174
Single-Family				625,237	508,174
Multi-Family				0	0
Commercial				58,238	23,646
Industrial/Mining				0	0
Institutional				0	80,221
Agriculture				0	0
Other/Wholesale				0	0

4. List the previous records for water loss for the past five years (the difference between water diverted or treated and water delivered or sold).

<i>Year</i>	<i>Amount (gallons)</i>	<i>Percent %</i>
2014		
2015		
2016		
2017	41,135,700	5.2%
2018	90,796,200	12.6%

B. Projected Water Demands

1. If applicable, attach or cite projected water supply demands from the applicable Regional Water Planning Group for the next ten years using information such as population trends, historical water use, and economic growth in the service area over the next ten years and any additional water supply requirements from such growth.

Data from the City's Water Master Plan

Greatwood Planning Areas	2018	2025	Ultimate
Equivalent Single Family Connections	4,599	4,599	4,599
Water Demand (gallons/day)	2,414,475	2,414,475	2,414,475

III. WATER SUPPLY SYSTEM DATA

A. Water Supply Sources

- List all current water supply sources and the amounts authorized (in acre feet) with each.

<i>Water Type</i>	<i>Source</i>	<i>Amount Authorized</i>
Surface Water	_____	_____
Surface Water	_____	_____
Groundwater	Self-Supplied	10,328
Other	_____	_____

B. Treatment and Distribution System (if providing treated water)

- Design daily capacity of system (MGD): 9.2 MGD
- Storage capacity (MGD):
 - Elevated 0
 - Ground 1.5
- If surface water, do you recycle filter backwash to the head of the plant?
 Yes No If yes, approximate amount (MGD):

IV. WASTEWATER SYSTEM DATA

A. Wastewater System Data (if applicable)

- Design capacity of wastewater treatment plant(s) (MGD): 1.35
- Treated effluent is used for on-site irrigation, off-site irrigation, for plant wash-down, and/or for chlorination/dechlorination.
 If yes, approximate amount (in gallons per month):
- Briefly describe the wastewater system(s) of the area serviced by the water utility. Describe how treated wastewater is disposed. Where applicable, identify treatment plant(s) with the TCEQ name and number, the operator, owner, and the receiving stream if wastewater is discharged.

The Brazos River Authority operates the City’s wastewater treatment plants.
 Sugar Land Greatwood Wastewater Treatment Plant
 902 Tara Boulevard
 Richmond, TX 77469
 EPA I.D. No. TX0101915
 WQ0013355001
 Discharges to Rabbs Bayou to Brazos River

B. Wastewater Data for Service Area (if applicable)

1. Percent of water service area served by wastewater system: 100%
2. Monthly volume treated for previous five years (in 1,000 gallons):

<i>Year</i>	2014	2015	2016	2017	2018
<i>Month</i>					
January				31,401	35,361
February				26,018	30,348
March				32,133	30,027
April				30,429	29,542
May				31,755	30,447
June				34,098	30,288
July				30,784	30,256
August				45,194	29,685
September				29,936	31,049
October				33,948	31,100
November				31,159	28,921
December				33,789	32,820
Totals				390,644	369,844



Texas Commission on Environmental Quality

Water Availability Division

MC-160, P.O. Box 13087 Austin, Texas 78711-3087

Telephone (512) 239-4691, FAX (512) 239-2214

Utility Profile and Water Conservation Plan Requirements for Wholesale Public Water Suppliers

This form is provided to assist wholesale public water suppliers in water conservation plan development. If you need assistance in completing this form or in developing your plan, please contact the Conservation staff of the Resource Protection Team in the Water Availability Division at (512) 239-4691.

Water users can find best management practices (BMPs) at the Texas Water Development Board's website <http://www.twdb.texas.gov/conservation/BMPs/index.asp>. The practices are broken out into sectors such as Agriculture, Commercial and Institutional, Industrial, Municipal and Wholesale. BMPs are voluntary measures that water users use to develop the required components of Title 30, Texas Administrative Code, Chapter 288. BMPs can also be implemented in addition to the rule requirements to achieve water conservation goals.

Contact Information

Name: City of Sugar Land- Potable Water System provider for MUD 128 Riverstone

Address: P.O. Box 110, Sugar Land TX 77479

Telephone Number: (281)275-2450 Fax: ()

Water Right No.(s): Certificate of Adjudication 05170

Regional Water Planning Group: Region H

Person responsible for implementing conservation program: Colleen Spencer Phone: (281) 275-2450

Form Completed By: Colleen Spencer

Title: Water Conservation Manager

Signature: _____ Date: / /

A water conservation plan for wholesale public water suppliers must include the following requirements (as detailed in 30 TAC Section 288.5). If the plan does not provide information for each requirement, you must include in the plan an explanation of why the requirement is not applicable.

Utility Profile

I. WHOLESALE SERVICE AREA POPULATION AND CUSTOMER DATA

A. Population and Service Area Data:

1. Service area size (in square miles): 2.7 sq. mi.

(Please attach a copy of service-area map)

2. Current population of service area:

9,308

3. Current population served for:

- a. Water 9,308

- b. Wastewater 9,308

4. Population served for previous five years:

<i>Year</i>	<i>Population</i>
2014	3,742
2015	5,682
2016	6,347
2017	7,011
2018	9,308

5. Projected population for service area in the following decades:

<i>Year</i>	<i>Population</i>
2020	14,126
2030	14,126
2040	14,126
2050	14,126
2060	14,126

6. List source or method for the calculation of current and projected population size.

Current Data from City of Sugar Land planning staff; projected data from City of Sugar Land Water Master Plan

B. Customer Data

List (or attach) the names of all wholesale customers, amount of annual contract, and amount of annual use for each customer for the previous year:

<i>Wholesale Customer</i>	<i>Contracted Amount (Acre-feet)</i>	<i>Previous Year Amount of Water Delivered (acre-feet)</i>
MUD 128, Riverstone	2030.6	1404.4

II. WATER USE DATA FOR SERVICE AREA

A. Water Delivery

Indicate if the water provided under wholesale contracts is treated or raw water and the annual amounts for the previous five years (in acre feet):

<i>Year</i>	<i>Treated Water</i>	<i>Raw Water</i>
2014	729.5	0
2015	1028.2	0
2016	1189.8	0
2017	1471.5	0
2018	1404.4	0
Totals	5823.5	0

B. Water Accounting Data

- Total amount of water diverted at the point of diversion(s) for the previous five years (in acre-feet) for all water uses:

<i>Year</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>
<i>Month</i>					
January	1,109	1,019	1,168	1,124	1,033
February	930	986	1,203	1,118	879
March	1,091	1,037	1,360	1,326	1,360
April	1,433	1,162	1,329	1,494	1,458
May	1,764	1,249	1,386	1,754	1,889
June	1,689	1,444	1,448	1,621	1,979
July	1,775	2,202	2,101	1,907	2,031
August	1,902	2,285	1,834	1,720	2,084
September	1,438	1,743	1,590	1,573	1,424
October	1,468	1,857	1,875	1,713	1,412
November	1,217	1,234	1,506	1,503	1,156
December	1,123	1,165	1,201	1,180	1,109
Totals	16,855	17,323	18,001	18,001	17,814

2. Wholesale population served and total amount of water diverted for **municipal use** for the previous five years (in acre-feet):

<i>Year</i>	<i>Total Population Served</i>	<i>Total Annual Water Diverted for Municipal Use</i>
2014	3,742	729.5
2015	5,682	1028.2
2016	6,347	1189.8
2017	7,011	1471.5
2018	9,308	1404.4

C. Projected Water Demands

If applicable, project and attach water supply demands for the next ten years using information such as population trends, historical water use, and economic growth in the service area over the next ten years and any additional water supply requirements from such growth.

Data from the City’s Water Master Plan

Riverstone Planning Areas	2018	2025	Ultimate
Equivalent Single Family Connections	2,776	4,427	4,427
Water Demand (gallons/day)	1,110,264	1,770,720	1,770,720

III. WATER SUPPLY SYSTEM DATA

A. Projected Water Demands

List all current water supply sources and the amounts authorized (in acre feet) with each.

<i>Water Type</i>	<i>Source</i>	<i>Amount Authorized</i>
Surface Water	Cert Adj 05170	18,159
Surface Water	Contracts with GCWA and BRA	28,791
Groundwater	Self-Supplied	45,388
Other		

B. Treatment and Distribution System (if providing treated water)

1. Design daily capacity of system (MGD): 51.4
2. Storage capacity (MGD):
 - a. Elevated 6.2
 - b. Ground 15.23
3. Please attach a description of the water system. Include the number of treatment plants, wells, and storage tanks

The Main System includes 6 groundwater plants for a total of 14 wells, and 1 surface water treatment plant. There are 20 total storage tanks, including 5 elevated storage tanks and 15 ground storage tanks.

IV. WASTEWATER SYSTEM DATA

A. Wastewater System Data (if applicable)

1. Design capacity of wastewater treatment plant(s) (MGD): 13.5
2. Briefly describe the wastewater system(s) of the area serviced by the wholesale public water supplier. Describe how treated wastewater is disposed. Where applicable, identify treatment plant(s) with the TCEQ name and number, the operator, owner, and the receiving stream if wastewater is discharged.

The Brazos River Authority operates the City's wastewater treatment plants.
Sugar Land Regional Wastewater Treatment Plant (North Plant)
16451 Southwest Freeway
Sugar Land, TX 77479
EPA I.D. No. TX0058114
WQ0011317001
Discharges to Ditch D to Brazos River

Sugar Land South Wastewater Treatment Plant
4802 Oilfield Road
Sugar Land, TX 77479
EPA I.D. No. TX0096881
WQ0012833002
Discharges to Steep Bank Creek to Brazos River

Sugar Land South Reclaimed Water Facility
4802 Oilfield Road
Sugar Land, TX 77479
R12833002
Effluent delivered to Riverstone MUD 128 for irrigation and amenity lake filling

B. Wastewater Data for Service Area (if applicable)

1. Percent of water service area served by wastewater system: 100%
2. Monthly volume treated for previous five years (in 1,000 gallons):

<i>Year</i>	2014	2015	2016	2017	2018
<i>Month</i>					
January	237,765	262,781	258,156	281,257	271,113
February	216,550	215,086	228,325	228,406	257,987
March	232,612	268,272	261,450	268,596	259,516
April	231,100	270,022	281,891	240,758	241,123
May	267,815	316,567	290,159	254,355	253,093
June	245,083	252,080	267,686	274,981	256,291
July	248,338	253,515	259,690	252,946	255,832
August	247,270	257,430	277,093	419,717	259,889
September	256,975	257,408	254,135	253,525	263,233
October	244,046	284,541	240,568	246,327	265,749
November	235,243	253,671	248,112	232,429	252,771
December	258,320	270,741	257,231	263,397	267,368
Totals	2,921,116	3,162,113	3,124,496	3,2016,695	3,103,964



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This form is provided to assist wholesale public water suppliers in water conservation plan development. If you need assistance in completing this form or in developing your plan, please contact the Conservation staff of the Resource Protection Team in the Water Availability Division at (512) 239-4691.

Water users can find best management practices (BMPs) at the Texas Water Development Board's website <http://www.twdb.texas.gov/conservation/BMPs/index.asp>. The practices are broken out into sectors such as Agriculture, Commercial and Institutional, Industrial, Municipal and Wholesale. BMPs are voluntary measures that water users use to develop the required components of Title 30, Texas Administrative Code, Chapter 288. BMPs can also be implemented in addition to the rule requirements to achieve water conservation goals.

Contact Information

Name: City of Sugar Land- Potable Water System provider for MUD 192 Greatwood Lake

Address: P.O. Box 110, Sugar Land TX 77479

Telephone Number: (281)275-2450 Fax: ()

Water Right No.(s): Certificate of Adjudication 05170

Regional Water Planning Group: Region H

Person responsible for implementing conservation program: Colleen Spencer Phone: (281) 275-2450

Form Completed By: Colleen Spencer

Title: Water Conservation Manager

Signature: _____ Date: / /

A water conservation plan for wholesale public water suppliers must include the following requirements (as detailed in 30 TAC Section 288.5). If the plan does not provide information for each requirement, you must include in the plan an explanation of why the requirement is not applicable.

Utility Profile

I. WHOLESALE SERVICE AREA POPULATION AND CUSTOMER DATA

A. Population and Service Area Data:

1. Service area size (in square miles): 0.15 sq. mi.

(Please attach a copy of service-area map)

2. Current population of service area: 300

3. Current population served for:

- a. Water 300

- b. Wastewater 300

4. Population served for previous five years:

<i>Year</i>	<i>Population</i>
2014	
2015	
2016	
2017	172
2018	300

5. Projected population for service area in the following decades:

<i>Year</i>	<i>Population</i>
2020	430
2030	735
2040	735
2050	735
2060	735

6. List source or method for the calculation of current and projected population size.

Current Data from City of Sugar Land planning staff; projected data from City of Sugar Land Water Master Plan. Please note the Greatwood system was annexed in December 2017, and therefore MUD 192 became a wholesale customer of the City in 2017.

B. Customer Data

List (or attach) the names of all wholesale customers, amount of annual contract, and amount of annual use for each customer for the previous year:

<i>Wholesale Customer</i>	<i>Contracted Amount (Acre-feet)</i>	<i>Previous Year Amount of Water Delivered (acre-feet)</i>
MUD 192, Greatwood Lakes	112	56.1

II. WATER USE DATA FOR SERVICE AREA

A. Water Delivery

Indicate if the water provided under wholesale contracts is treated or raw water and the annual amounts for the previous five years (in acre feet):

<i>Year</i>	<i>Treated Water</i>	<i>Raw Water</i>
2014	0	0
2015	0	0
2016	0	0
2017	55.8	0
2018	56.1	0
Totals	111.9	0

B. Water Accounting Data

- Total amount of water diverted at the point of diversion(s) for the previous five years (in acre-feet) for all water uses:

<i>Year</i>	<i>2014</i>	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>
<i>Month</i>					
January	126	114	112	158	118
February	108	111	141	149	98
March	130	121	167	182	170
April	203	138	168	219	110
May	256	133	181	273	306
June	246	184	205	235	276
July	259	328	363	279	286
August	282	339	278	255	310
September	180	209	230	240	159
October	184	261	296	266	149
November	141	129	186	174	115
December	121	122	128	231	116
Totals	2235	2187	2452	2659	2213

2. Wholesale population served and total amount of water diverted for **municipal use** for the previous five years (in acre-feet):

<i>Year</i>	<i>Total Population Served</i>	<i>Total Annual Water Diverted for Municipal Use</i>
2014		
2015		
2016		
2017	172	55.8
2018	300	56.1

C. Projected Water Demands

If applicable, project and attach water supply demands for the next ten years using information such as population trends, historical water use, and economic growth in the service area over the next ten years and any additional water supply requirements from such growth.

Data from the City's Water Master Plan

Greatwood Lake Planning Areas	2018	2025	Ultimate
Equivalent Single Family Connections	100	150	250
Water Demand (gallons/day)	40,000	60,000	100,000

III. WATER SUPPLY SYSTEM DATA

A. Projected Water Demands

List all current water supply sources and the amounts authorized (in acre feet) with each.

<i>Water Type</i>	<i>Source</i>	<i>Amount Authorized</i>
Surface Water		
Groundwater	Self-Supplied	10,328
Other		

B. Treatment and Distribution System (if providing treated water)

1. Design daily capacity of system (MGD): 9.2
2. Storage capacity (MGD):
 - a. Elevated 0
 - b. Ground 1.5
3. Please attach a description of the water system. Include the number of treatment plants, wells, and storage tanks

The Greatwood System includes 2 groundwater plants for a total of 4 well. There are 2 ground storage tanks.

IV. WASTEWATER SYSTEM DATA

A. Wastewater System Data (if applicable)

1. Design capacity of wastewater treatment plant(s) (MGD): 13.5
2. Briefly describe the wastewater system(s) of the area serviced by the wholesale public water supplier. Describe how treated wastewater is disposed. Where applicable, identify treatment plant(s) with the TCEQ name and number, the operator, owner, and the receiving stream if wastewater is discharged.

The Brazos River Authority operates the City's wastewater treatment plants.
Sugar Land Greatwood Wastewater Treatment Plant
902 Tara Boulevard
Richmond, TX 77469
EPA I.D. No. TX0101915
WQ0013355001
Discharges to Rabbs Bayou to Brazos River

B. Wastewater Data for Service Area (if applicable)

1. Percent of water service area served by wastewater system: 100%
2. Monthly volume treated for previous five years (in 1,000 gallons):

<i>Year</i>	2014	2015	2016	2017	2018
<i>Month</i>					
January				31,401	35,361
February				26,018	30,348
March				32,133	30,027
April				30,429	29,542
May				31,755	30,447
June				34,098	30,288
July				30,784	30,256
August				45,194	29,685
September				29,936	31,049
October				33,948	31,100
November				31,159	28,921
December				33,789	32,820
Totals				390,644	369,844

APPENDIX C: Water Conservation Policy

RESOLUTION NO. 09-03

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SUGAR LAND, TEXAS, ADOPTING A CITY COUNCIL POLICY ON THE PROMOTION OF WATER CONSERVATION IN THE CITY OF SUGAR LAND.

WHEREAS, the City is currently under an unfunded mandate to convert to surface water; and

WHEREAS, the City is required by the Texas Water Development Board and Texas Commission on Environmental Quality to maintain an active water conservation program; and

WHEREAS, the City wishes to implement and promote conservation of its water resources; and

WHEREAS, water conservation can help reduce the costs of the surface water conversion process while promoting wise use of our natural resources; and

WHEREAS, the City wishes to coordinate the various city functions related to water conservation efforts as a comprehensive, united approach; NOW, THEREFORE,

BE IT RESOLVED BY THE CITY COUNCIL
OF THE CITY OF SUGAR LAND, TEXAS:

Section I. That the City Council adopts the following policy:

CITY COUNCIL POLICY
Promotion of Water Conservation in the City of Sugar Land

PURPOSE

The City's mandated conversion to surface water will result in increased costs to produce potable water. At the same time, water resources are becoming scarcer and more valuable. In an effort to reduce the costs to the City's customers by reducing the volume of surface water needing to be treated, and to implement and promote wise water use patterns in line with the City's focus on environmental stewardship, the City sets forth this policy as direction toward the promotion and coordination of comprehensive water conservation efforts in and by the City of Sugar Land.

SCOPE

This Policy applies to all City Departments and external partners engaged in activities related to water conservation.

City means the City of Sugar Land.

Efficient Irrigation Systems means irrigation technology, practices, or controls that provide more efficient irrigation than traditional irrigation systems (e.g. “smart” controllers, rain sensors, drip irrigation, et al.).

Water Conservation Program means the comprehensive program, maintained by the Utilities Department that guides, coordinates, implements, and evaluates water conservation activities in the City of Sugar Land.

POLICY

The City will seek to promote water conservation through the following:

I) **Water Conservation Program**

The Utilities Department, in consultation with other Departments, will create and maintain a comprehensive water conservation program, help coordinate water conservation activities within the City and with external partners, and report to regulatory agencies on the City’s water conservation efforts as required.

II) **Utility System Conservation**

The Utilities Department will manage its system to promote water conservation by making all feasible efforts to prevent water loss and maintain its infrastructure.

III) **Community Involvement**

The City shall promote water conservation with its community by seeking partnership opportunities with residents, homeowners associations, local and regional government and non-profit groups, and local businesses and industries.

IV) **Education**

The City shall require the promotion of water conservation education through various community outreach programs, partnerships and sponsorship opportunities.

V) **Efficient Irrigation**

The City shall require efficient irrigation in new City facilities and parks and consider retrofitting existing systems, as is feasible.

VI) Cost Share Program

The Cost Share Program seeks to incentivize responsible irrigation of privately owned and maintained landscaping in rights of way. The City shall investigate ways to increase or further promote efficient irrigation through this program.

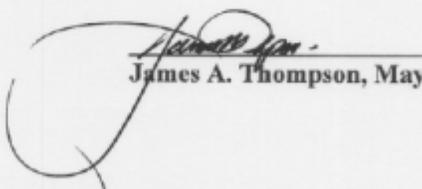
VII) Landscape Installation

The City shall require water conservation goals to be an integral part of all its urban beautification efforts, as is fiscally responsible.

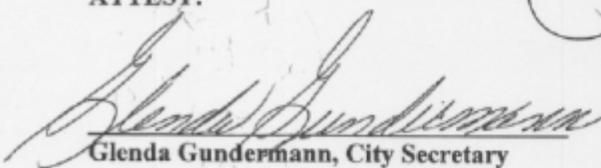
VIII) Development and Code Enforcement

The City shall consider water conservation goals when working with new development and adopting new or revised codes, ordinances and standards, as is feasible.

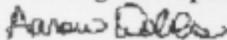
APPROVED ON February 03, 2009.


James A. Thompson, Mayor

ATTEST:


Glenda Gundermann, City Secretary

Reviewed for Legal Compliance:



APPENDIX D: Water and Wastewater Rate Structure

City of Sugar Land
2019 Water & Wastewater Rates

Water					
Meter Size	Base Charge	Volume Charge			
		Up to 3,000 Gallons	3,001 to 10,000	10,001 to 20,000	over 20,000
5/8" & 3/4"	\$ 7.98	\$0.90	\$1.05	\$1.43	\$1.64
1"	\$ 12.46				
1.5"	\$ 33.11				
2"	\$ 51.54				
3"	\$ 111.26				
4"	\$ 307.77				
6"	\$ 602.51				
8"	\$ 752.65				

Wastewater		Volume Charge
Meter Size	Base Charge	Up to Winter Average Consumption
5/8" & 3/4"	\$ 12.40	\$2.90
1"	\$ 20.11	
1.5"	\$ 55.75	
2"	\$ 86.97	
3"	\$ 188.54	
4"	\$ 525.43	
6"	\$ 1,033.78	
8"	\$ 1,291.80	

Surface Water	Volume Charge
Surface Water Fee	\$1.88

APPENDIX E: Resolution Adopting a Water Conservation Plan

RESOLUTION NO. 19-11

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SUGAR LAND, TEXAS,
ADOPTING A RETAIL AND WHOLESALE WATER CONSERVATION PLAN.**

WHEREAS, by May 1, 2019, the City is required to file a Retail and Wholesale Water Conservation Plan with the Texas Commission on Environmental Quality and the Texas Water Development Board; and

WHEREAS, the City council is required to adopt the Retail and Wholesale Water Conservation Plan by resolution; NOW, THEREFORE,

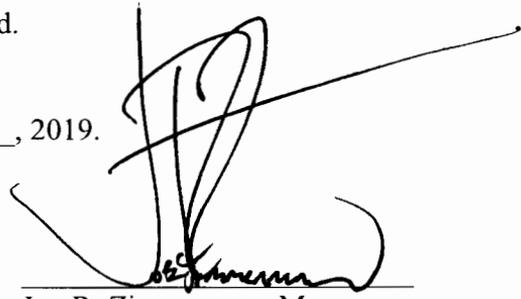
**BE IT RESOLVED BY THE CITY COUNCIL
OF THE CITY OF SUGAR LAND, TEXAS:**

Section 1. That it adopts the findings and recitals set forth in the preamble of this Resolution.

Section 2. That it adopts the Retail and Wholesale Water Conservation Plan attached to and made a part of this Resolution as Exhibit A.

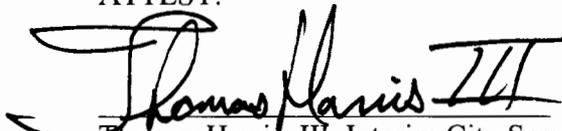
Section 3. That Resolution No. 14-12-A is repealed.

APPROVED on April 16, 2019.



Joe R. Zimmerman, Mayor

ATTEST:



Thomas Harris, III, Interim City Secretary

APPROVED AS TO FORM:

DAnn Shea Smith

Attachments: Exhibit A – Retail and Wholesale Water Conservation Plan

APPENDIX F: Region H Notification Letter



CITY OF SUGAR LAND
Public Works

April 30, 2019

Mr. Mark Evans, Chair
Region H Water Planning Group
C/O San Jacinto River Authority
P.O. Box 329
Conroe, Texas 77305-0329

Re: Water Conservation Plan – Retail and Wholesale Supply

Dear Mr. Evans:

This letter is to notify you that the City of Sugar Land (PWS ID 0790005, PWS 0790354, PWS 0790253 and PWS 0790296) has adopted a Water Conservation Plan for Retail and Wholesale Water Supply. This notice is in accordance with Texas Water Development Board and Texas Commission on Environmental Quality rules. The Plan and any additional information you'd care to receive are available on request.

Please contact the Public Works Department with inquiries: 281-275-2450.

Respectfully,

A handwritten signature in cursive script that reads "Colleen M. Spencer".

Colleen Spencer
Water Conservation Coordinator