

Water Conservation Plan

for

**San Jacinto River Authority
GRP Division**

Prepared by

San Jacinto River Authority

Adopted: February 28, 2019

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Section 1. Introduction

In 1996, severe drought conditions affected every region of the State. Water systems throughout the State were forced to cope with water shortages or system capacity problems. In response to the 1996 drought, the 75th Texas Legislature enacted Senate Bill 1, which directed the State to take a regional approach to water planning. One of the provisions of the legislation required the Texas Commission on Environmental Quality (TCEQ) to adopt rules requiring wholesale and retail public water suppliers to develop water conservation and drought contingency plans.¹

Water conservation and drought contingency plans work together to help Texans manage short-term and long-term water shortages. The goal of a water conservation plan is to achieve lasting, long-term improvements in water use efficiencies using strategies to reduce the amount of water withdrawn from a particular source, and to ensure that the water withdrawn is used in an efficient manner. Drought contingency plans are short-term in nature, using temporary supply and demand management measures in response to temporary and potentially recurring water shortages and other emergencies.

The San Jacinto River Authority (SJRA), as a water right holder and wholesale water supplier, is required to submit a Water Conservation and Drought Contingency Plan to the TCEQ and Texas Water Development Board (TWDB). SJRA was created by the Texas Legislature in 1937 to:

“Provide water for domestic, municipal, commercial, industrial and mining purposes within and without the watershed of [the San Jacinto River], including water supplies for cities, towns and industries, and in connection therewith to construct or otherwise acquire water transportation, treatment and distribution facilities and supplemental sources of water.”²

The SJRA watershed includes all of Montgomery County and portions of Waller, Grimes, Walker, San Jacinto, Fort Bend, and Liberty Counties (Figure 1-1). The SJRA also serves customers and is authorized to operate in east Harris County through an agreement with the City of Houston.

SJRA is governed by a seven-member board. The General Manager oversees approximately 170 employees and all facilities across five divisions: Lake Conroe, Highlands, Groundwater Reduction Plan (GRP), Woodlands, and Flood Management. The following is provided as the Water Conservation Plan (including utility description, service area description, and customer data) for the GRP Division (the Division). The Division’s Drought Contingency Plan is provided under a separate cover.

¹ Senate Bill 1, 75th Legislature, Section 12.1272 of the Texas Water Code.

² House Bill No. 832, 45th Legislature, Regular Session, Austin, TX, 1937.

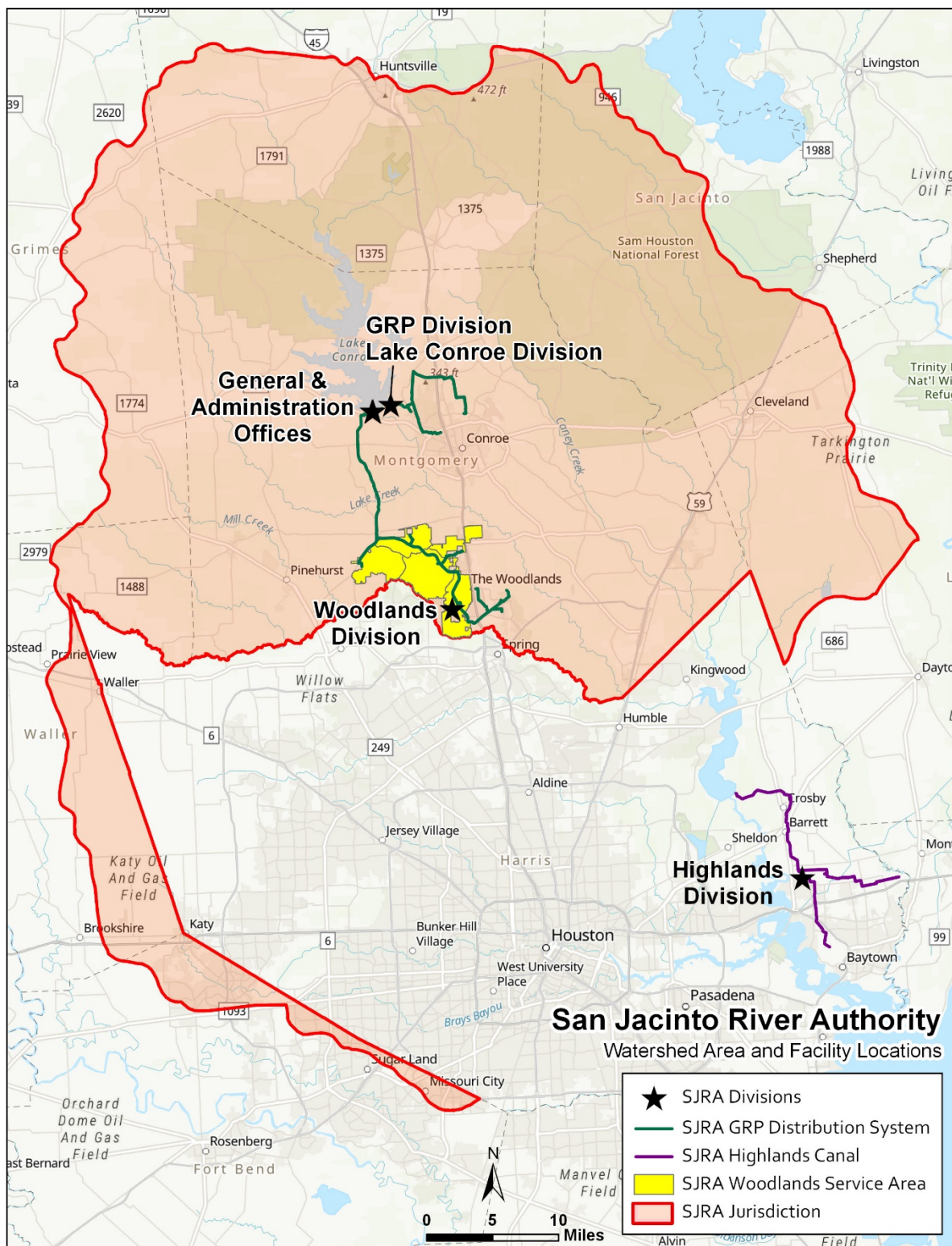


Figure 1-1. Watershed Area and Facility Locations

Section 2. Utility and Service Area Description

2.1 Utility Description

The Division's goal is to provide treated surface water to its GRP Participants in such a way that allows the GRP Participants to meet the groundwater reduction requirements mandated by Phase II (B) of the Lone Star Groundwater Conservation District (LSGCD) District Regulatory Plan (DRP). Through their research and permitting efforts, LSGCD determined that groundwater production in Montgomery County exceeded the sustainable recharge rate and in response established certain requirements to reduce groundwater use. Phase I of the LSGCD DRP, which was adopted in 2006, established a target for sustainable production. DRP Phase II (A) was adopted in 2008 and required entities or groups of entities permitted to produce 10 million gallons per year of groundwater (Large Volume Groundwater Users, or LVGUs) to assess future water needs and potential alternative supplies. Phase II (B) of the DRP required that all LVGUs either individually or in conjunction with others reduce their groundwater production to not more than 70% of their year 2009 permitted production (Total Qualifying Demand) no later than January 2016.

In order to achieve this goal, the Division treats and distributes water to over-convert certain selected GRP Participants to surface water in order to achieve the overall target reduction for the GRP service area while other GRP Participants continue to utilize groundwater to meet the entirety of their water needs. This approach ensures the most cost-effective solution to the problem of groundwater reduction. Infrastructure required to serve selected GRP Participants, including a surface water treatment plant and distribution pipeline system, has been developed. The Division began to actively provide surface water on a wholesale basis in September 2015 in order to meet LSGCD requirements. Although not all GRP Participants receive surface water from the Division, this water conservation plan will be applied equally to all GRP Participants.

SJRA operates Lake Conroe, one of two major surface water supply reservoirs located in the San Jacinto River Basin. Completed in 1973, Lake Conroe is owned by SJRA and the City of Houston. SJRA owns one-third (33,333 ac-ft./yr.) and the City of Houston owns two-thirds (66,667 ac-ft./yr.) of the total 100,000 ac-ft./yr. of permitted water rights from the lake under Certificate of Adjudication (COA) 10-4963. Lake Houston, which is owned by the City of Houston, is the other surface water supply reservoir in the basin.

SJRA's portion of the Lake Conroe water right plus a long-term water supply contract with the City of Houston for its water in Lake Conroe will be used by the Division to meet the needs of its GRP Participants. The SJRA's water right for Lake Conroe (33,333 ac-ft./yr.) is permitted for multiple uses. The Division serves municipal customers by supplying wholesale surface water.

2.2 Service Area Description

The approximately 2,453 square mile area of SJRA's jurisdiction within the San Jacinto River Basin is bounded on the north and the east by the Trinity River Basin and the Trinity-San Jacinto Coastal Basin, on the west by the Brazos River Basin, and on the south by Harris County. However, the GRP Participants are located in Montgomery County (approximately 1,077 square miles). A map of the Division, showing the location of the Participants, is provided below (Figure 2-1). Prior to the LSGCD conversion deadline of January 1, 2016, the Division began to supply select GRP Participants with water from Lake Conroe, with additional GRP Participants served with Lake Conroe supplies for subsequent conversion phases of implementation. Other GRP Participants will continue to utilize their current groundwater sources. Some GRP Participants may potentially also utilize other alternative water sources (Catahoula Formation groundwater, reuse, etc.) in conjunction with existing groundwater supplies or treated surface water. The Division does not own or operate wastewater infrastructure.

Prior to the surface water conversion, SJRA did not actively provide treated surface water to GRP Participants. Table 2-1 summarizes GRP Participant water use by source for 2018. It is anticipated that total GRP Participant water demand was 53.51 MGD, of which 12.74 MGD was met by SJRA treated surface water.

The Division's service area is distributed across an extensive portion of Montgomery County, encompassing a large number of the communities south and east of Lake Conroe. The Division's infrastructure reaches GRP Participants through a phased development process, with the first phase of water distribution pipelines installed and operational prior to the LSGCD conversion deadline of January 1, 2016. The first phase provides treated Lake Conroe water supplies to the City of Conroe, The Woodlands, and several adjacent entities. Additional GRP Participants will be served in future phases by expansion of the transmission system. As of 2018, the Division included 151 GRP Participants. The largest Participants are The Woodlands and the City of Conroe.

The Woodlands is a master-planned community located in southern Montgomery County, Texas on IH-45 just north of the Harris County line. The Woodlands is made up of eleven individual Municipal Utility Districts (MUDs) ("The Woodlands Districts"), ten of which are operated and managed through The Woodlands Joint Powers Agency (WJPA), along with Harris-Montgomery County MUD No. 386 which is not part of the WJPA. The WJPA provides retail water and wastewater services to The Woodlands community. The Woodlands Districts purchases wholesale groundwater and wastewater treatment services from SJRA through the SJRA Woodlands Division. While The Woodlands started receiving treated surface water from the GRP Division by the LSGCD conversion deadline of 2016, The Woodlands MUDs have continued to be wholesale groundwater customers of the SJRA Woodlands Division.

The City of Conroe is the county Seat of Montgomery County and is located southeast of Lake

Conroe near the intersection of IH-45 and Hwy 105. Conroe has grown rapidly in recent years, increasing in population from 56,207 in Year 2010 to an estimated 72,901 in 2018. Other GRP Participants include the cities of Cut and Shoot, Magnolia, Oak Ridge North, Splendora, Willis, and Woodbranch, as well as numerous MUDs, water utilities, and communities.

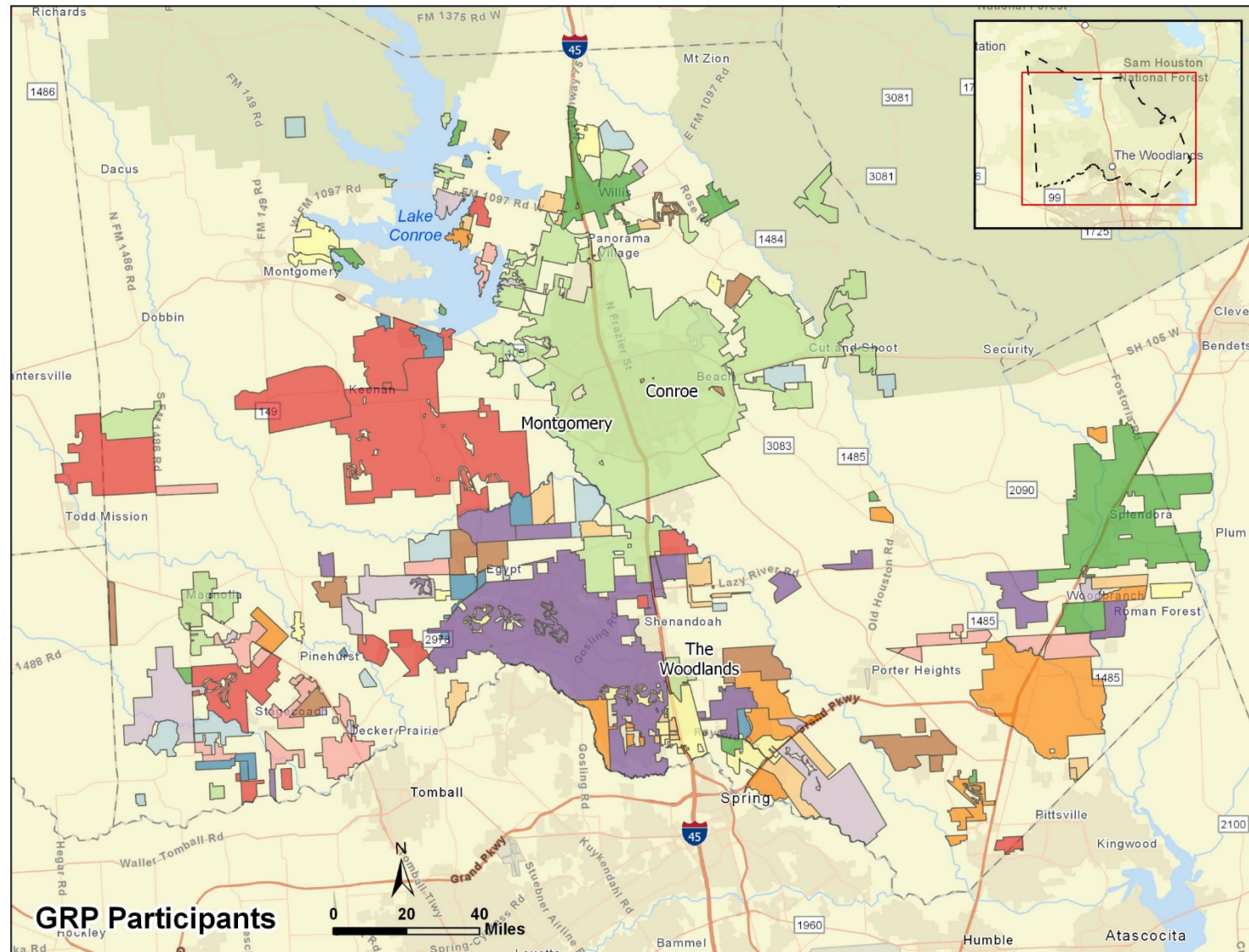


Figure 2-1. GRP Division Customers

Table 2-1. 2018 GRP Participant Water Production

Use Type	Treated Surface Water (MGD)	Groundwater (MGD)	Brackish Groundwater (MGD)	Reuse (MGD)	Total
Municipal	12.74	38.87	1.38	0.51	53.51
Industrial	0.00	0.00	0.00	0.00	0.00
Agricultural	0.00	0.00	0.00	0.00	0.00
Total	12.74	38.87	1.38	0.51	53.51

A full description of the Division's customer information can be found in Appendix A, (GRP Participant Summary) and Appendix B (Water Utility Profile).

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Section 3. Water Conservation Plan

In the Texas Water Code, water conservation is defined as follows:

“(A) The development of water resources; and,

“(B) Those practices, techniques, and technologies that will reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water, or increase the recycling and reuse of water so that a water supply is made available for future or alternative uses.”³

Based upon these concepts of water conservation, the Division’s objective is to develop a water conservation plan that increases water use efficiency, thereby reducing water demands, without adversely affecting population and the economic growth potential of its customers.

The goals of this Plan are to encourage GRP Participants to reduce water consumption, limit water loss, and extend the capacity of both existing and future water supplies. The potential results of a successfully implemented policy are reduced demands, prolonged capacity of existing facilities, delayed need for new facilities, and potential reduction, or downsizing of treatment and distribution facilities, which could result in economic benefits to the Division and its GRP Participants. The greatest obstacle to implementing any water conservation strategy is the implementation cost relative to the cost of existing water supplies. As the cost of compliance with existing regulations increases, the incentive to conserve water will increase.

3.1 GRP Division 5- and 10-year Water Conservation Target Goals

As a wholesale water provider, the Division is not involved in the day-to-day operations of its GRP Participants and therefore does not have direct control over the demands that it serves; however, it is working closely with the GRP Participants to encourage water-use reduction. Additionally, the Division is empowered through the GRP contracts to take certain enforcement measures to promote compliance with GRP requirements. The water conservation measures described below include those under the direct control of, and being implemented by, the Division as well as goals supported and encouraged by the Division for implementation by its customers. The SJRA GRP Division is to achieve a reduction in water demand, for municipal customers only, of 2.5% over a 5-year period, and 5% over a 10-year period. A baseline was calculated using 2016 through 2018 surface water delivered quantities. The average gallons per-capita day (gpcd) for 2016 through 2018 is 72.185 gpcd. It is the goal of the GRP Division to reduce

³ TWC, Section 17.001 (23) (A) and (B).

municipal per-capita water demand to 70.380 gpcd by the end of 2023 and to 68.575 gpcd by the end of 2028, and water loss less than 10%.

3.2 Water Conservation Methods

The Division's water conservation plan includes the following water conservation methods. Each method is described in greater detail in the following subsections.

- Metering and Record Management;
- Leak Detection, Repair, and Minimization of Conveyance Losses;
- Recycling and Reuse;
- Rate Structure;
- Contractual Requirements for Customer Water Conservation Plans;
- Customer Conservation Plan Guidance;
- Customer Reporting Requirements;
- Public Information and Education;
- Encouraging Customer Conservation Practices; and
- Implementation, Enforcement, Coordination with RWPG, and Updating of the Plan.

There are two reservoirs (Lake Conroe and Lake Houston) in the San Jacinto River system however, they are operated by separate entity's therefore the GRP Division does not have a reservoir system operations plan.

3.2.1 Metering and Record Management

The GRP contracts executed with Division customers provide extensive requirements for metering of flows. Water delivered to selected GRP Participants from Lake Conroe supplies are to be monitored using meters installed and maintained by SJRA and the Division, with testing for meter accuracy at least once every twelve months. Meters must register flows between 97 and 102% of the correct value.

The GRP Participants are responsible for meter installation and maintenance for groundwater withdrawals from their own wells or water imported from other entities who are not Participants in the SJRA GRP. GRP Participants must test meters for accuracy at least once every twelve months. Meters must register flows between 97 and 102% of the correct value.

The data collected from the metering of the GRP Participants allows the Division and SJRA to maintain a detailed record management system of water deliveries.

3.2.2 Leak Detection, Repair, and Minimization of Conveyance Losses

The Division will maintain its transmission infrastructure supplying treated surface water to GRP

Participant receiving facilities. Potential leaks identified through accounting, inspection, or customer reporting will be repaired promptly to minimize conveyance losses. Those components of the GRP Participant's retail system used to distribute water from the receiving facilities into each of the selected GRP Participant's system are owned and maintained by the GRP Participant. The Division encourages its customers to engage in leak detection and repair in their own systems. The Division encourages its GRP Participants to take measures to reduce water loss to prevent waste and facilitate achievement of the Water Conservation Plan demand reduction goals as specified above.

3.2.3 Recycling and Reuse

The Division encourages continued once-through reuse of water supply by GRP Participants. While Lake Conroe will serve as the supply source of raw surface water for the Division, the benefits of ongoing reuse efforts by GRP Participants are recognized by the Division as important contributors to meeting future needs. As part of the GRP process, draft policy has been adopted regarding reuse by GRP Participants. This draft policy includes elements to evaluate potential reuse projects, promote reuse to reduce groundwater production, prohibit unauthorized resale of SJRA-supplied non-potable water, protect other supplies, and maintain legal and regulatory compliance. SJRA and the Division will continue to consider and evaluate opportunities for reuse as they develop.

3.2.4 Rate Structure

SJRA utilizes a non-promotional rate structure for wholesale contracts with its GRP Participants; these rates are periodically reviewed and adjusted as necessary. SJRA also encourages its GRP Participants to establish rate structures promoting conservation for sales to their wholesale and retail customers.

3.2.5 Contractual Requirements for Customer Water Conservation Plans

Through the Division, SJRA requires in its contracts that GRP Participants adopt and enforce water conservation and drought contingency plans meeting or exceeding the requirements to Title 30, Texas Administrative Code, Chapter 288. Customer water conservation plans should be consistent with the conservation goals of the Division and must be at least as stringent as the Division's Plan. Further, these plans must be submitted to the GRP Administrator. The specific contract language is as follows:

Section 3.05: Water Conservation; Drought Contingency. Participant agrees to adopt and enforce a water conservation plan meeting the applicable minimum requirements of the Conservation District and the TCEQ (30 T.A.C. §§ 288.1-288.7, or any successor rules), as well as a drought contingency plan meeting the applicable minimum requirements of the Conservation District and the TCEQ (30 T.A.C. §§ 288.20-288.22, or any successor

rules). Participant may, but shall not be obligated, to include provisions in such plans that exceed or are more stringent than the minimum requirements described in the preceding sentence. Such plans must be completed and filed with the GRP Administrator at such times as may be reasonably required by the GRP Administrator, without regard to whether Participant will connect to the Project. In addition, after review by the Review Committee, the Authority may require Participant to adopt and enforce minimum requirements adopted by the Authority for such water conservation plans and drought contingency plans but only if: (i) such minimum requirements apply on an equal and uniform basis to all Participants and to all entities located in whole or in part in Montgomery County to which the Authority supplies wholesale groundwater or Water; and (ii) the Authority has the legal right to impose such minimum requirements on all such entities to which the Authority supplies wholesale groundwater or Water.

SJRA will include in all water supply contracts entered into, renewed, or amended after the adoption of the Division's Water Conservation Plan a requirement that customers develop and implement water conservation a plans as required by Title 30, Texas Administrative Code, Chapter 288 30 TAC §288). Per 30 TAC §288, any future contract, renewal, or amendment will also require that successive sales from SJRA customers to others include a contractual stipulation for water conservation requirements. At a minimum, customer conservation plans must comply with the requirements of 30 TAC §288. Customers should submit to SJRA on an annual basis a summary of water conservation and drought contingency plan implementation.

SJRA may periodically update these criteria, as well as the Water Conservation and Drought Contingency Plans for the Division to meet legal requirements or address changing conditions; subsequent to such revisions, customers of the Division are requested to update their water conservation and drought contingency plans as applicable.

3.2.6 Customer Conservation Plan Guidance

SJRA will provide to GRP Participants upon request, model water conservation plans as developed by TCEQ, meeting the contractual requirements described in Section 3.2.5 above for each customer type. Additionally, SJRA will at request of its GRP Participants review draft water conservation and drought contingency plans for consistency with contractual requirements and the Division's Water Conservation and Drought Contingency Plans. Customers can contact the Division for information regarding the Division's Plans and contractual requirements.

3.2.7 Customer Reporting Requirements

In 2011, the 82nd Texas Legislature passed Senate Bill (SB) 181, which addressed the need for consistency in water use reporting by municipalities, water utilities, and others. Subsequently, TWDB and TCEQ developed detailed guidance and procedures for calculating and reporting water use, water loss, and other factors.

While SJRA is not directly impacted by these requirements as a wholesale provider, the Division and other divisions provide contracted water supply to a number of entities which are impacted by SB181. The broad range of water uses served by SJRA and the requirements of multiple State reporting programs creates a need for the consistent reporting. As such, SJRA will require GRP Participant water usage reports, including any values for per-capita water demand, to follow the procedures established by TWDB and TCEQ.⁴ Water use reports should include data at the sector level (single-family residential, multi-family residential, industrial, commercial, agricultural, etc.) and should additionally include estimated population served and calculated water loss. Further, SJRA may request that GRP Participants annually submit to SJRA a copy of all conservation plan-reporting forms, if required by TCEQ, that are submitted to the TCEQ.

3.2.8 Public Information and Education

SJRA has the option to utilize a plethora of water conservation resources that the TWDB, American Water Works Association, and American Public Works Association originally created as components of their own public education campaigns. Individual pamphlets and educational messages provided from these entities would be selected for specialized water conservation needs as they arise. SJRA also provides and constantly updates conservation information and efficient water use on the Authority website at <http://www.sjra.net>.

SJRA will provide, as needed and/or requested, water conservation literature to the customers of the Division. The Division is committed to promoting improvements in industrial, municipal, and agricultural/irrigation processes to achieve conservation with its customers.

SJRA, across all divisions, will make information available through its public information and education program for plumbers and customers to use when purchasing and installing plumbing fixtures, water-using appliances, and watering equipment. Information regarding retrofit devices, such as low-flow showerheads or toilet dams that reduce water use by replacing or modifying existing fixtures or appliances, will also be provided.

Other public information approaches which SJRA has utilized in the past and may implement in the future include public tours of various facilities across all divisions, participation in local environmental

⁴ TWDB et al. 2012. Guidance and Methodology for Reporting on Water Conservation and Water Use

events, classroom water conservation educational programs, and joint operation of a mobile teaching lab.

3.2.9 Encouraging Customer Conservation Practices

SJRA and the Division encourages all of its GRP Participants to consider implementing rules, measures, and emerging technologies that promote water conservation and efficient use. Recommended measures include, but are not limited to, the following:

- Prohibitions on wasting water;
- Time-of-day watering restrictions;
- Water conservation pricing structures;
- Landscape irrigation conservation, including integrating rainfall/freeze sensors into irrigation systems;
- Water reuse
- Rainwater harvesting
- Public education programs

Additional information on conservation practices for a wide range of water uses can be found at the TWDB website (<http://www.twdb.texas.gov>).

3.2.10 Implementation, Enforcement, Coordination with RWPG, and Updating of the Plan

The GRP Division Manager and/or designees will act as the administrator(s) of the Water Conservation Plan for the GRP Division. The administrator(s) will oversee the execution and implementation of all elements of the program and monitor the progress of the plan. Additionally, the administrator(s) will be responsible for submission of an annual report to the TCEQ and TWDB on the progress, and any changes to, the Water Conservation Plan. SJRA is responsible for maintaining adequate records for program verification.

SJRA will enforce the terms of contracts with GRP Participants related to water conservation measures and Water Conservation Plan requirements.

The Division is located within the Region H Regional Water Planning Area. In accordance with the TCEQ rules, the Division provides a copy of its water conservation plan to the Region H Regional Water Planning Group. A copy of the transmittal letter is included in Appendix C.

Every five years, SJRA will examine the Division's Water Conservation Plan and revise as necessary. The Water Conservation Plan for the Division has been adopted by a resolution of the Board of Directors of SJRA. A copy of the resolution is included in Appendix C.

Appendix A

GRP Participant Summary

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San Jacinto River Authority Joint GRP
2019 Production Schedule
September 14, 2018

Large Volume Groundwater User (LVGU)	LoneStar TQD (GPY)	ICO Adjusted TQD (GPY)	2019 Projected Demands	Projected Surface Water (GPY)	Projected Reuse (GPY)	Projected AWS Wells (GPY)	2019 Groundwater Allocation
Aqua Texas, Inc. (Brushy Creek)	18,132,000	12,692,400	17,994,500				17,994,500
Aqua Texas, Inc. (Carriage Hills)	94,574,000	66,201,800	93,805,000				93,805,000
Aqua Texas, Inc. (Cimarron Country)	38,403,000	26,882,100	45,004,500				45,004,500
Aqua Texas, Inc. (Clear Creek Forest)	55,363,000	38,754,100	55,000,000				55,000,000
Aqua Texas, Inc. (Crystal Forest)	17,800,000	12,460,000	18,980,000				18,980,000
Aqua Texas, Inc. (Decker Woods)	27,820,000	19,474,000	35,003,500				35,003,500
Aqua Texas, Inc. (Deerwood Sub.)	42,108,000	29,475,600	38,982,000				38,982,000
Aqua Texas, Inc. (Dogwood Hills)	39,522,000	27,665,400	31,974,000				31,974,000
Aqua Texas, Inc. (Frontier Arrowhead)	28,000,000	19,600,000	35,003,500				35,003,500
Aqua Texas, Inc. (Greenfield Forest)	8,697,000	10,000,000	44,895,000				44,895,000
Aqua Texas, Inc. (Hidden Forest)	10,000,000	10,000,000	17,994,500				17,994,500
Aqua Texas, Inc. (Huntington Est.)	16,216,000	11,351,200	15,987,000				15,987,000
Aqua Texas, Inc. (Indigo Ranch)	25,000,000	17,500,000	25,002,500				25,002,500
Aqua Texas, Inc. (Lake Conroe Forest & Tejas Creek)	37,725,500	26,407,850	37,011,000				37,011,000
Aqua Texas, Inc. (Lake Conroe Village)	13,197,000	10,000,000	27,010,000				27,010,000
Aqua Texas, Inc. (Lake Creek Forest)	35,497,000	24,847,900	36,865,000				36,865,000
Aqua Texas, Inc. (Legends Ranch Estates)	47,000,000	32,900,000	46,720,000				46,720,000
Aqua Texas, Inc. (Shadow Bay)	25,000,000	17,500,000	26,280,000				26,280,000
Aqua Texas, Inc. (Timberloch Estates)	19,230,000	13,461,000	25,000,000				25,000,000
Aqua Texas, Inc. (Turtle Creek)	21,451,000	15,015,700	16,790,000				16,790,000
Aqua Texas, Inc. (Walnut Springs)	24,900,000	17,430,000	20,075,000				20,075,000
Aqua Texas, Inc. (West Lane)	-	10,000,000	16,425,000				16,425,000
Aqua Texas, Inc. (Westwood 1&2/Old Egypt)	108,645,000	76,051,500	239,075,000				239,075,000
Aqua Texas, Inc. (Woodlands Parkway)	-	10,000,000	38,325,000				38,325,000
Archdiocese of Galveston - Houston Circle Lake Retreat Center	15,000,000	10,500,000	18,000,000				18,000,000
Blaketree MUD No. 1	55,000,000	38,500,000	171,550,000				171,550,000
C & R Water Supply, Inc. (Bridgepoint Water System)	12,500,000	10,000,000	15,000,000				15,000,000
C & R Water Supply, Inc. (Clear Water Cove)	19,855,000	13,898,500	25,000,000				25,000,000
C & R Water Supply, Inc. (Creekside Acres)	5,485,200	10,000,000	12,500,000				12,500,000
C & R Water Supply, Inc. (Emerson Estates)	33,151,000	23,205,700	45,000,000				45,000,000
C & R Water Supply, Inc. (Rogers Road WS)	20,486,000	14,340,200	20,203,000				20,203,000
C & R Water Supply, Inc. (Timberline Estates)	22,000,000	15,400,000	23,527,900				23,527,900
Cape Malibu Water Supply Inc.	14,962,300	10,473,610	10,000,000				10,000,000
City of Conroe	3,403,950,000	2,382,765,000	3,978,206,530	1,296,895,329			2,681,311,201
City of Cut and Shoot	110,000,000	77,000,000	145,000,000				145,000,000
City of Magnolia	213,267,000	149,286,900	219,000,000				219,000,000
City of Oak Ridge North	180,000,000	126,000,000	160,886,300	52,448,934			108,437,366
City of Splendor	298,127,500	208,689,250	298,127,500				298,127,500
City of Willis	299,192,200	209,434,540	337,500,000			307,500,000	30,000,000
City of Woodbranch Village	51,084,000	35,758,800	51,000,000				51,000,000
Clover Creek MUD	31,000,000	21,700,000	23,375,000				23,375,000
Conroe ISD (Moorehead Jr. High/Caney Creek High)	12,738,100	10,000,000	20,999,000				20,999,000
Conroe Resort Utilities, LLC	104,196,800	72,937,760	65,700,000				65,700,000
Consumers Water Inc. (Porter Terrace)	10,329,000	10,000,000	10,502,100				10,502,100
Consumers Water Inc. (Spring Forest)	35,000,000	24,500,000	35,000,000				35,000,000
Corinthian Point MUD No.2	53,009,300	37,106,510	94,900,500			47,450,253	47,450,247
CWE Utilities L.L.C.	25,000,000	17,500,000	25,000,000				25,000,000
Del Lago Estates	29,420,000	20,594,000	29,420,000				29,420,000
Diamondhead Water & Sewer	22,772,000	15,940,400	22,772,000				22,772,000
Domestic Water Company	41,775,700	29,242,990	49,000,000				49,000,000
East Montgomery County MUD No. 3	30,000,000	21,000,000	16,050,000				16,050,000
East Montgomery County MUD No. 5	-	10,000,000	73,000,000				73,000,000
Everett Square, Inc. (Shady Oaks)	25,000,000	17,500,000	14,000,000				14,000,000
Everett Square, Inc. (Windcrest Est., Honea Egypt, Part of 1488 System)	14,600,000	10,220,000	16,488,100				16,488,100
Far Hills Utility District	64,679,000	45,275,300	65,000,000			60,000,000	5,000,000
HMW Special Utility District (Allenwood)	17,800,000	12,460,000	12,341,600				12,341,600
HMW Special Utility District (Armadillo Woods)	17,300,000	12,110,000	16,219,860				16,219,860
HMW Special Utility District (Coe Country)	70,911,000	49,637,700	52,448,800				52,448,800
HMW Special Utility District (Hunters Retreat)	40,064,000	28,044,800	33,635,600				33,635,600

San Jacinto River Authority Joint GRP
2019 Production Schedule
September 14, 2018

Large Volume Groundwater User (LVGU)	LoneStar TQD (GPY)	ICO Adjusted TQD (GPY)	2019 Projected Demands	Projected Surface Water (GPY)	Projected Reuse (GPY)	Projected AWS Wells (GPY)	2019 Groundwater Allocation
HMW Special Utility District (Kipling Oaks 1)	37,500,000	26,250,000	28,083,500				28,083,500
HMW Special Utility District (Kipling Oaks 2)	75,911,000	53,137,700	43,176,900				43,176,900
HMW Special Utility District (Pleasant Forest)	6,266,000	10,000,000	10,000,000				10,000,000
HMW Special Utility District (Sendera)	32,765,000	22,935,500	15,877,700				15,877,700
HMW Special Utility District (Towering Oaks)	39,406,000	27,584,200	67,070,400				67,070,400
Johnston's Utilities, Inc.	151,729,000	106,210,300	165,000,000				165,000,000
Keenan Water Supply Corp.	25,182,500	17,627,750	30,000,000				30,000,000
Kings Manor MUD	155,100,000	108,570,000	136,000,000				136,000,000
Lake Bonanza Water Supply Corp.	57,606,900	40,324,830	47,000,000				47,000,000
Lake Conroe Hills MUD	56,062,000	39,243,400	56,062,000				56,062,000
Lake South Water Supply	26,000,000	18,200,000	26,725,400				26,725,400
Lakeland Section 4 Civic Club	21,000,000	14,700,000	12,281,000				12,281,000
Lazy River Improvement District	49,559,000	34,691,300	39,000,000				39,000,000
Maverick Tube Corporation - Tenaris	22,018,002	15,412,601	15,000,000				15,000,000
Monarch Utilities, Inc. (Decker Hills/Park Place)	90,000,000	63,000,000	118,700,000				118,700,000
Monarch Utilities, Inc. (Hulon Lake/Woodcreek Valley)	26,731,000	18,711,700	20,200,000				20,200,000
Monarch Utilities, Inc. (Serenity Woods, Pine)	15,317,000	10,721,900	13,500,000				13,500,000
Montgomery County Fresh Water Supply (Dist #6)	11,098,000	10,000,000	16,000,000				16,000,000
Montgomery County MUD No. 105	-	10,000,000	89,060,000				89,060,000
Montgomery County MUD No. 112	50,000,000	35,000,000	195,000,000				195,000,000
Montgomery County MUD No. 119	80,465,000	56,325,500	406,000,000				406,000,000
Montgomery County MUD No. 137	-	10,000,000	43,800,000				43,800,000
Montgomery County MUD No. 139	-	10,000,000	64,142,000				64,142,000
Montgomery County MUD No. 15	124,360,000	87,052,000	325,250,000				325,250,000
Montgomery County MUD No. 16	21,428,000	14,999,600	19,537,000				19,537,000
Montgomery County MUD No. 19	220,000,000	154,000,000	199,000,000				199,000,000
Montgomery County MUD No. 24	27,000,000	18,900,000	28,525,500				28,525,500
Montgomery County MUD No. 83 (Also MUD No. 84)	200,504,000	140,352,800	250,000,000				250,000,000
Montgomery County MUD No. 89 (Also MUD No. 88)	359,000,000	251,300,000	430,095,900				430,095,900
Montgomery County MUD No. 94	180,000,000	126,000,000	307,000,000				307,000,000
Montgomery County MUD No. 96	-	10,000,000	40,000,000				40,000,000
Montgomery County MUD No. 99 (Also MUD No. 115 & No. MUD No. 127)	82,090,000	57,463,000	478,150,000	155,876,900			322,273,100
Montgomery County UD No. 2	160,010,000	112,007,000	177,828,000				177,828,000
Montgomery County WCID No. 1	185,886,000	130,120,200	297,951,000				297,951,000
MSEC Enterprises (Crown Ranch)	22,000,000	15,400,000	35,000,000				35,000,000
MSEC Enterprises (Montgomery Trace/Crown Oaks/HR/LF/SL)	258,711,200	181,097,840	1,436,183,385	468,195,784			967,987,601
Nerro Supply Investors, L.L.P. (Hazy Hallow East Estates)	52,649,700	36,854,790	55,000,000				55,000,000
Nerro Supply Investors, L.L.P. (River Club/River Ridge)	11,500,000	10,000,000	10,000,000				10,000,000
Nerro Supply Investors, L.L.P. (White Oak Valley)	17,257,400	12,080,180	15,000,000				15,000,000
New Caney MUD	384,818,900	269,373,230	485,000,000				485,000,000
North Woods Water Supply Corp.	14,000,000	10,000,000	19,000,000				19,000,000
Patton Village (East)	21,000,000	14,700,000	21,000,000				21,000,000
Patton Village (West)	19,000,000	13,300,000	19,000,000				19,000,000
Pinedale Mobile Home Park (AKA Richard Clark Enterprises)	17,333,597	12,133,518	15,000,000				15,000,000
Pinehurst Decker Prairie WSC	39,889,464	27,922,625	41,905,400				41,905,400
Piney Shores Utility	23,334,000	16,333,800	21,000,000				21,000,000
Point Aquarius MUD	180,000,000	126,000,000	138,481,000			134,326,570	4,154,430
Quadvest, LP. (Benders Landing)	270,136,000	189,095,200	561,037,300				561,037,300
Quadvest, LP. (Caddo Village)	40,000,000	28,000,000	43,709,100				43,709,100
Quadvest, LP. (Creekside Village)	66,000,000	46,200,000	72,120,000				72,120,000
Quadvest, LP. (Decker Oaks Utility)	58,683,800	41,078,660	91,379,900				91,379,900
Quadvest, LP. (Indigo Lakes)	133,864,000	93,704,800	208,437,900				208,437,900
Quadvest, LP. (Lake Windcrest WS)	203,091,000	142,163,700	337,064,700				337,064,700
Quadvest, LP. (Lakes of Magnolia)	20,000,000	14,000,000	22,500,000				22,500,000
Quadvest, LP. (Lonestar Ranch)	65,114,000	45,579,800	79,893,600				79,893,600
Quadvest, LP. (McCall Sound/Sonoma Ridge)	6,000,000	10,000,000	12,364,200				12,364,200
Quadvest, LP. (Mostyn Manor)	35,000,000	24,500,000	82,522,000				82,522,000
Quadvest, LP. (Northcrest Ranch 1,2 &3)	50,000,000	35,000,000	78,464,300				78,464,300
Quadvest, LP. (Red Oak Ranch WS)	26,897,000	18,827,900	56,821,800				56,821,800

San Jacinto River Authority Joint GRP
2019 Production Schedule
September 14, 2018

Large Volume Groundwater User (LVGU)	LoneStar TQD (GPY)	ICO Adjusted TQD (GPY)	2019 Projected Demands	Projected Surface Water (GPY)	Projected Reuse (GPY)	Projected AWS Wells (GPY)	2019 Groundwater Allocation
Quadvest, LP. (Sendera Ranch)	61,271,000	42,889,700	94,782,200				94,782,200
Quadvest, LP. (Stonecrest Ranch)	13,806,000	10,000,000	19,350,600				19,350,600
Rayford Road MUD	502,426,000	351,698,200	534,999,900	174,409,967			360,589,933
Roman Forest Consolidated MUD	100,837,000	70,585,900	103,275,500				103,275,500
San Jacinto River Authority (The Woodlands)	6,515,191,000	4,560,633,700	6,416,574,000	2,091,803,124	126,000,000		4,198,770,876
San Jo Utilities	11,082,000	10,000,000	17,000,000				17,000,000
Sequoia Golf Woodlands LLC (Lake Windcrest)	65,000,000	45,500,000	41,275,000				41,275,000
Sequoia Golf Woodlands LLC (Palmer)	128,802,000	90,161,400	81,789,300				81,789,300
Sequoia Golf Woodlands LLC (Panther Trails)	33,253,606	23,277,524	21,363,900		6,195,000		15,168,900
Sequoia Golf Woodlands LLC (Player)	60,123,500	42,086,450	38,178,400				38,178,400
Sequoia Golf Woodlands LLC (TPC)	112,540,000	78,778,000	71,462,900				71,462,900
Southern Montgomery County MUD	480,000,000	336,000,000	552,840,000	143,570,400	112,440,000		296,829,600
Spring Creek UD	195,000,000	136,500,000	237,036,800				237,036,800
T & W Water Services (Deer Run)	12,800,000	10,000,000	10,000,000				10,000,000
T & W Water Services (Grand Harbor/Gemstone)	108,000,000	75,600,000	110,000,000				110,000,000
T & W Water Services (Harborside)	25,000,000	17,500,000	18,000,000				18,000,000
T & W Water Services (Hidden Springs Ranch)	10,049,000	10,000,000	30,000,000				30,000,000
T & W Water Services (Miller's Crossing)	7,227,000	10,000,000	10,000,000				10,000,000
T & W Water Services (Old Mill Lake)	34,000,000	23,800,000	27,000,000				27,000,000
T & W Water Services (Rio Vista)	-	10,000,000	15,000,000				15,000,000
T & W Water Services (Riverwalk)	61,408,000	42,985,600	90,000,000				90,000,000
T & W Water Services (Sunrise Ranch)	5,844,000	10,000,000	12,000,000				12,000,000
T & W Water Services (Thousand Oaks)	69,811,000	48,867,700	65,000,000				65,000,000
Texaba Water System	24,809,000	17,366,300	10,950,000				10,950,000
Texas National MUD	60,000,000	42,000,000	50,000,000				50,000,000
Walnut Cove Water Supply Corp.	40,000,000	28,000,000	32,000,000				32,000,000
Washington County Railroad	21,000,000	14,700,000	18,274,700				18,274,700
Westwood North Water Supply	103,000,000	72,100,000	120,000,000				120,000,000
White Oak Utilities, Inc. (AKA Aqua Pure Ranch Utilities)	75,000,000	52,500,000	73,000,000				73,000,000
White Oak Water Supply Corporation	48,000,000	33,600,000	49,000,000				49,000,000
Wood Trace MUD No. 1	1,000,000	10,000,000	114,407,200				114,407,200
Woodland Oaks Utility Co. Inc.	79,011,000	55,307,700	166,075,000				166,075,000
Totals (GPY)	19,845,501,169	14,033,318,008	24,631,092,075	4,383,200,437	244,635,000	549,276,823	19,453,979,815
MGD	54.37	38.45	67.48	12.01	0.67	1.50	53.30

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Appendix B

Water Utility Profiles

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San Jacinto River Authority – GRP Division

**TCEQ Form 20162: Profile and Water Conservation Plan
Requirements for Wholesale Public Water Supplies**

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Texas Commission on Environmental Quality

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.

Name: San Jacinto River Authority (GRP Division)

Address: 11998 Pine Valley Drive, Conroe, Texas 77304

Telephone Number: (936) 588-1662 Fax: ()


Water Right No.(s): COA 10-4963

Regional Water Planning Group: Region H

Form Completed by: Matt Corley

Title: Compliance & Administrative Manager

Person responsible for implementing conservation program: Matt Corley Phone: (936) 588-1662

Signature:  Date: 2/28/2019

NOTE: If the plan does not provide information for each requirement, include an explanation of why the requirement is not applicable.

PROFILE

I. WHOLESALE SERVICE AREA POPULATION AND CUSTOMER DATA

A. Population and Service Area Data

1. Service area size (in square miles): 1,042 (Montgomery County)
(Please attach a copy of service-area map) – **See Attachment A to TCEQ Form 20162**
2. Current population of service area: 570,934 (Montgomery County) (*census.gov*)

3. Current population served for:
 - a. Water 246,626 - (Population includes GRP Participants who receive surface water).
 - b. Wastewater N/A

4. Population served for previous five years:
5. Projected population for service area in the following decades:

Year	Population
2014*	0
2015	349,138
2016	365,178
2017	381,219
2018	397,260

Year	Population
2020	429,342
2030	574,880
2040	710,018
2050**	NO DATA
2060**	NO DATA

*Conversion process did not start until 2016 with some entities starting in 2015

The above population data includes all GRP Participants, including those who do not receive surface water. See Attachment A for GRP Participant Map.

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

***Population projection above were developed from data included in SJRA's Groundwater Reduction Plan (GRP). The population data above includes all GRP Participants within SJRA's Joint GRP.*

B. Customers 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:

	Wholesale Customer	Contracted Amount (acre-feet)	Previous Year Amount of Water Delivered (acre-feet)
1.	The Woodlands	N/A *	7,442.35
2.	City of Conroe	N/A *	4,275.99
3.	MSEC Enterprises	N/A *	887.49
4.	Southern MC MUD	N/A *	441.68
5.	Rayford Road MUD	N/A *	531.79
6.	City of Oak Ridge North Montgomery County	N/A *	183.44
7.	MUD No. 99	N/A *	513.27

*The GRP does not have contracted amounts with its GRP Participants. The GRP determines the amount of surface water that is distributed.

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):

Year	Treated Water	Raw Water
2014	0	0
2015	3,324.39	0
2016	19,773.20	0
2017	19,134.84	0
2018	13,373.46	0
Totals	55,605.89	0

B. Water Accounting Data

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

Year	2014	2015	2016	2017	2018
<i>Month</i>					
January	0	0	1,234.92	1,310.11	902.55
February	0	0	1,425.51	1,257.95	780.63
March	0	0	1,451.21	1,765.79	923.01
April	0	0	1,526.24	1,876.29	968.84
May	0	0	1,510.07	1,952.73	1,384.20
June	0	0	1,597.35	1,904.40	1,768.92
July	0	0	2,125.51	2,016.05	1,790.24
August	0	0	2,019.64	1,778.72	1,786.05
September	0	290.18	1,984.00	1,679.77	1,157.15
October	0	695.76	1,930.02	1,545.83	1,077.29
November	0	1,083.90	1,613.98	1,103.67	866.81
December	0	1,254.55	1,354.73	943.52	870.32
Totals	0	3,324.39	19,773.20	19,134.84	14,276.01

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

Year	Total Population Served	Total Annual Water Diverted for Municipal Use
2014	0	0
2015	176,390	3,324.39
2016	199,802	19,773.20
2017	223,214	19,134.84
2018	246,626	13,373.46

Population data includes those Participants who are receiving surface water only.

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.

Projected municipal demands are shown in the table below. These values were developed from data included in the SJRA Groundwater Reduction Plan (GRP), the SJRAGRP Pumpage Rate Study, and the Harris-Galveston Subsidence District Regional Groundwater Update. Please note that some GRP participants will remain on self-supplied groundwater, while others will be converted to surface water provided by the SJRA GRP Division.

Year	Projected GRP Participant Demand - Total		Projected GRP Participant Demand - Surface Water	
	MGD	ac-ft	MGD	ac-ft
2019	60.44	67,705.74	24.00	26,883.42
2020	62.03	69,481.25	24.00	26,883.42
2021	63.61	71,256.76	28.00	31,363.99
2022	65.20	73,032.26	28.00	31,363.99
2023	66.78	74,807.77	28.00	31,363.99
2024	68.37	76,583.27	28.00	31,363.99
2025	69.95	78,358.78	28.00	31,363.99
2026	72.84	81,594.17	28.00	31,363.99
2027	75.73	84,829.57	28.00	31,363.99
2028	78.62	88,064.96	28.00	31,363.99

The projected surface water demands are derived from the GRP's Phase II Trigger Study.

III. WATER SUPPLY SYSTEM DATA

A. Projected Water Demands

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

Water Type	Source	Amount Authorized
Surface Water	Lake Conroe (10-4963)	33,333 acre-feet
	Lake Conroe Contract w/Houston	66,667 acre-feet
Groundwater	N/A	0
Other	N/A	0

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

1. Design daily capacity of system (MGD): 30 MGD
2. Storage capacity (MGD):
 - c. Elevated 0
 - d. Ground 10 Million Gallons
3. Please attach a description of the water system. Include the number of treatment plants, wells, and storage tanks.

The GRP began delivering treated surface water in June of 2015. The surface water facilities at Lake Conroe include an intake and high-service pump station as well as two ground storage tanks and a water treatment plant. Treated surface water is conveyed through a network of approximately 55 miles of pipeline to selected GRP Participants. The additional infrastructure for customers to distribute it to their retail systems, is the responsibility of the customers. The system layout is shown in Attachment B to TCEQ Form 20162.

IV. WASTEWATER SYSTEM DATA

A. Wastewater System Data (if applicable) N/A*

*** The Division does not provide wastewater service.**

1. Design capacity of wastewater treatment plant(s) (MGD): 0 MGD
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.

B. Wastewater Data for Service Area (if applicable)

1. Percent of water service area served by wastewater system: 0 %
2. Monthly volume treated for previous five years (in 1,000 gallons):

<u>Year</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>
<u>Month</u>					
January	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
February	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
March	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
April	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
May	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
June	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
July	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
August	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
September	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
October	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
November	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
December	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Totals	<u>00</u>	<u>00</u>	<u>00</u>	<u>00</u>	<u>00</u>

V. ADDITIONAL REQUIRED INFORMATION

In addition to the description of the wholesaler's service area (profile from above), a water conservation plan for a wholesale public water supplier must include, at a minimum, additional information as required by Title 30, Texas Administrative Code, Chapter 288.5. Note: If the water conservation plan does not provide information for each requirement an explanation must be included as to why the requirement is not applicable.

A. Specific, Quantified 5 & 10-Year Targets

The water conservation plan must include specific, quantified five-year and ten-year targets for water savings including, where appropriate, target goals for municipal use in gallons per capita per day for the wholesaler's service area, maximum acceptable unaccounted-for water, and the basis for the development of these goals. Note that the goals established by wholesale water suppliers under this subparagraph are not enforceable.

B. Metering Devices

The water conservation plan must include a description as to which practice(s) and/or device(s) will be utilized to measure and account for the amount of water diverted from the source(s) of supply.

C. Record Management Program

The water conservation plan must include a monitoring and record management program for determining water deliveries, sales, and losses.

D. Metering/Leak-Detection and Repair Program

The water conservation plan must include a program of metering and leak detection and repair for the wholesaler's water storage, delivery, and distribution system.

E. Reservoir Systems Operations Plan

The water conservation plan must include a reservoir systems operations plan, if applicable, providing for the coordinated operation of reservoirs owned by the applicant within a common watershed or river basin. The reservoir systems operations plan shall include optimization of water supplies as one of the significant goals of the plan.

F. Contract Requirements for Successive Customer Conservation

The water conservation plan must include a requirement in every water supply contract entered into or renewed after official adoption of the water conservation plan, and including any contract extension, that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using the applicable elements of Title 30 TAC Chapter 288. If the customer intends to resell the water, then the contract between the initial supplier and customer must provide that the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures in accordance with the provisions of this chapter.

G. Enforcement Procedure and Official Adoption

The water conservation plan must include a means for implementation and enforcement, which shall be evidenced by a copy of the ordinance, rule, resolution, or tariff, indicating official adoption of the water conservation plan by the water supplier; and a description of the authority by which the water supplier will implement and enforce the conservation plan.

H. Coordination with the Regional Water Planning Group(s)

The water conservation plan must include documentation of coordination with the regional water planning groups for the service area of the wholesale water supplier in order to ensure consistency with the appropriate approved regional water plans.

Example statement to be included within the water conservation plan:

The service area of the _____ (name of water supplier) is located within the _____ (name of regional water planning area or areas) and _____ (name of water supplier) has provided a copy of this water conservation plan to the _____ (name of regional water planning group or groups).

I. Plan Review and Update

A wholesale water supplier shall review and update its water conservation plan, as appropriate based on an assessment of previous five-year and ten-year targets and any other new or updated information. A wholesale water supplier shall review and update the next revision of its water conservation plan no later than May 1, 2009, and every five years after that date to coincide with the regional water planning group. The revised plan must also include an implementation report.

J. Additional Conservation Strategies

Any combination of the following strategies shall be selected by the water wholesaler, in addition to the minimum requirements of this chapter, if they are necessary in order to achieve the stated water conservation goals of the plan. The commission may require by commission order that any of the following strategies be implemented by the water supplier if the commission determines that the strategies are necessary in order for the conservation plan to be achieved:

1. Conservation-oriented water rates and water rate structures such as uniform or increasing block rate schedules, and/or seasonal rates, but not flat rate or decreasing block rates;
2. A program to assist agricultural customers in the development of conservation, pollution prevention and abatement plans;
3. A program for reuse and/or recycling of wastewater and/or graywater;
4. A cost-share program;
5. A technical assistance and outreach program;
6. A program for purchase and direct distribution of water conservation equipment; and
7. Any other water conservation practice, method, or technique which the wholesaler shows to be appropriate for achieving the stated goal or goals of the water conservation plan.

Best Management Practices

The Texas Water Developmental Board's (TWDB) Report 362 is the Water Conservation Best Management Practices (BMP) guide. The BMP Guide is a voluntary list of management practices that water users may implement in addition to the required components of Title 30, Texas Administrative Code, Chapter 288. The Best Management Practices Guide broken out by sector, including Agriculture, Commercial, and Institutional, Industrial, Municipal and Wholesale along with any new or revised BMP's can be found at the following link on the Texas Water Developments Board's website: <http://www.twdb.state.tx.us/conservation/bmps/index.asp>

Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, contact 512-239-3282.

San Jacinto River Authority – GRP Division

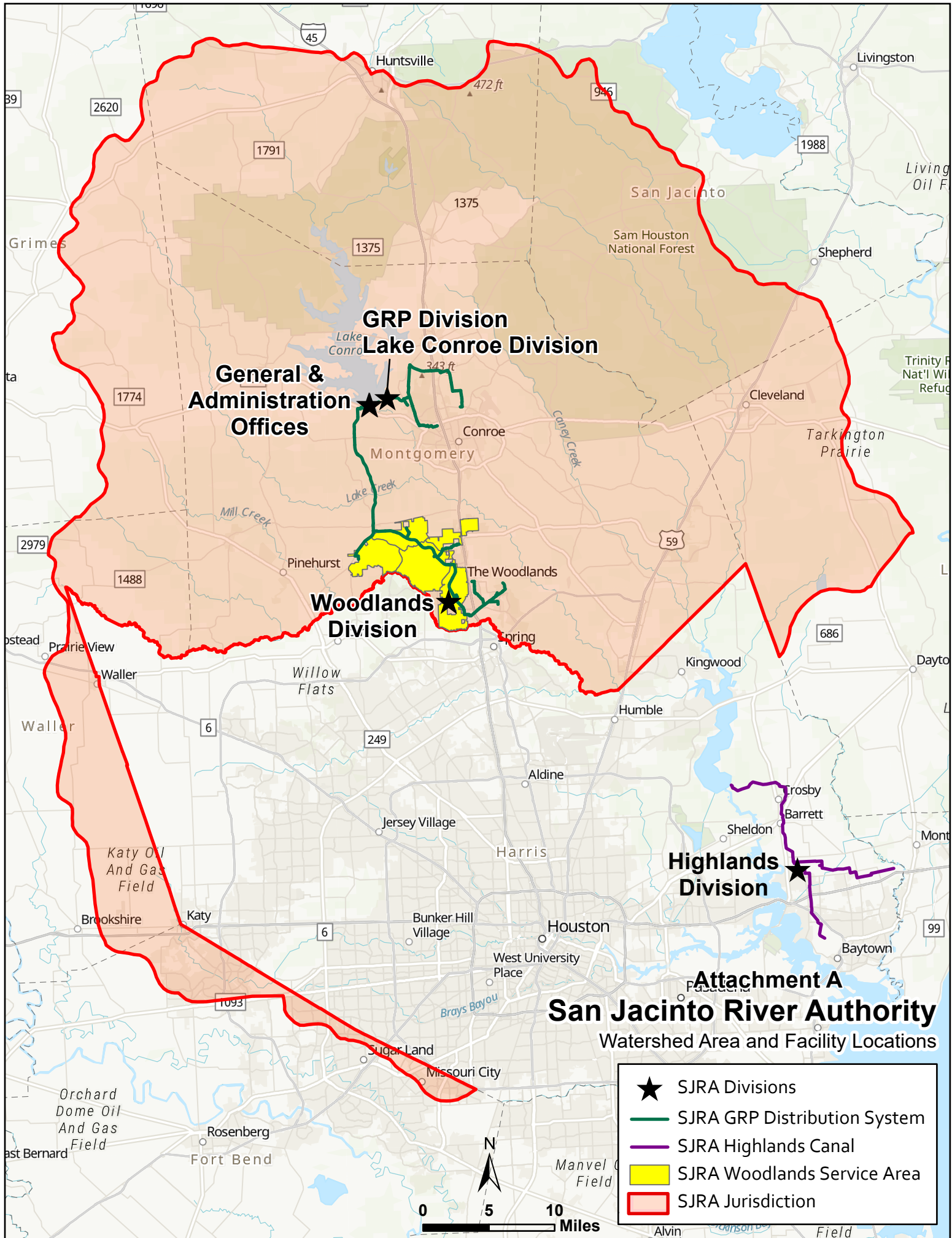
**Attachments to TCEQ Form
20162: Profile and Water Conservation Plan
Requirements for Wholesale Public Water Supplies**

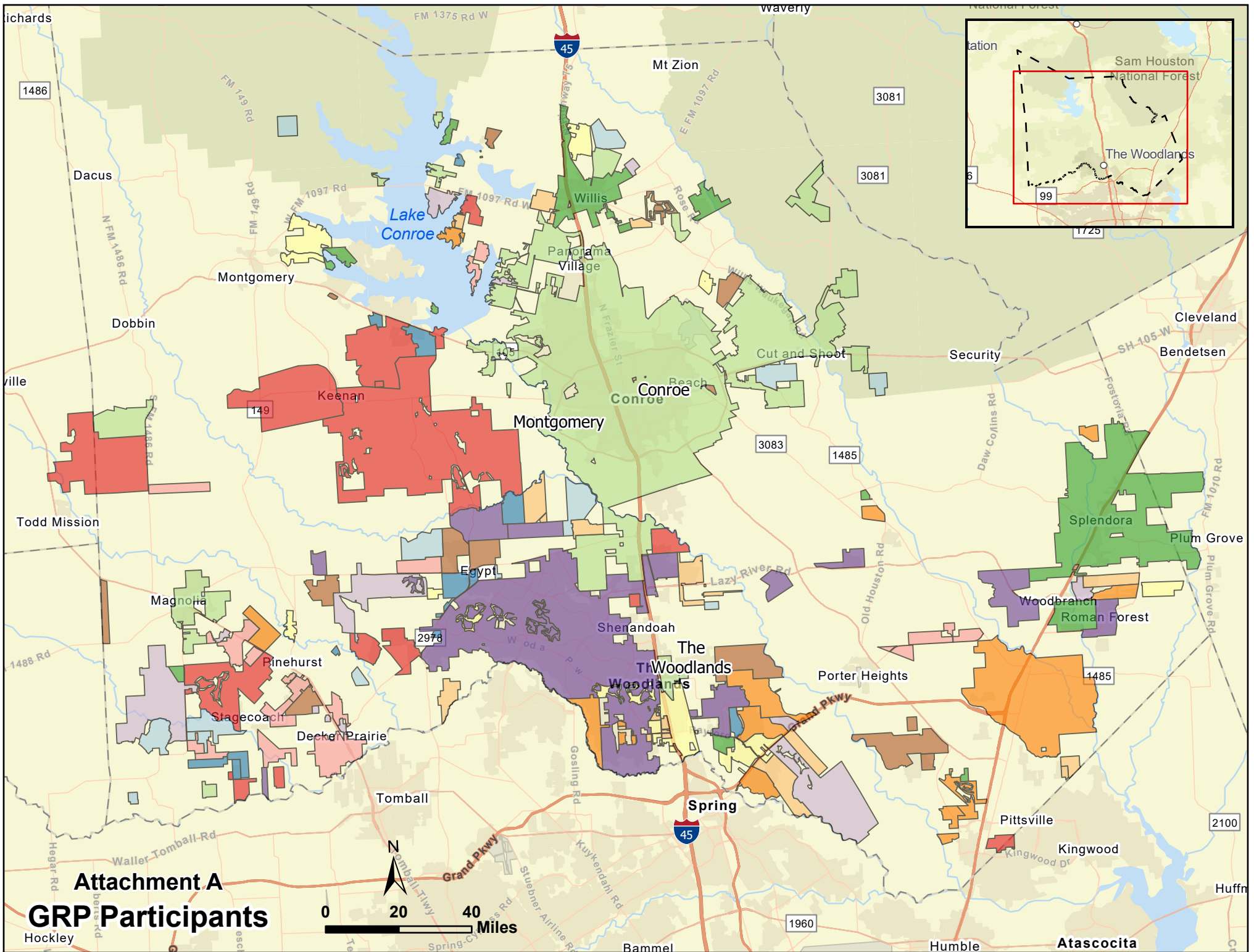
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Attachment A

SJRA Service Area & GRP Participants Map

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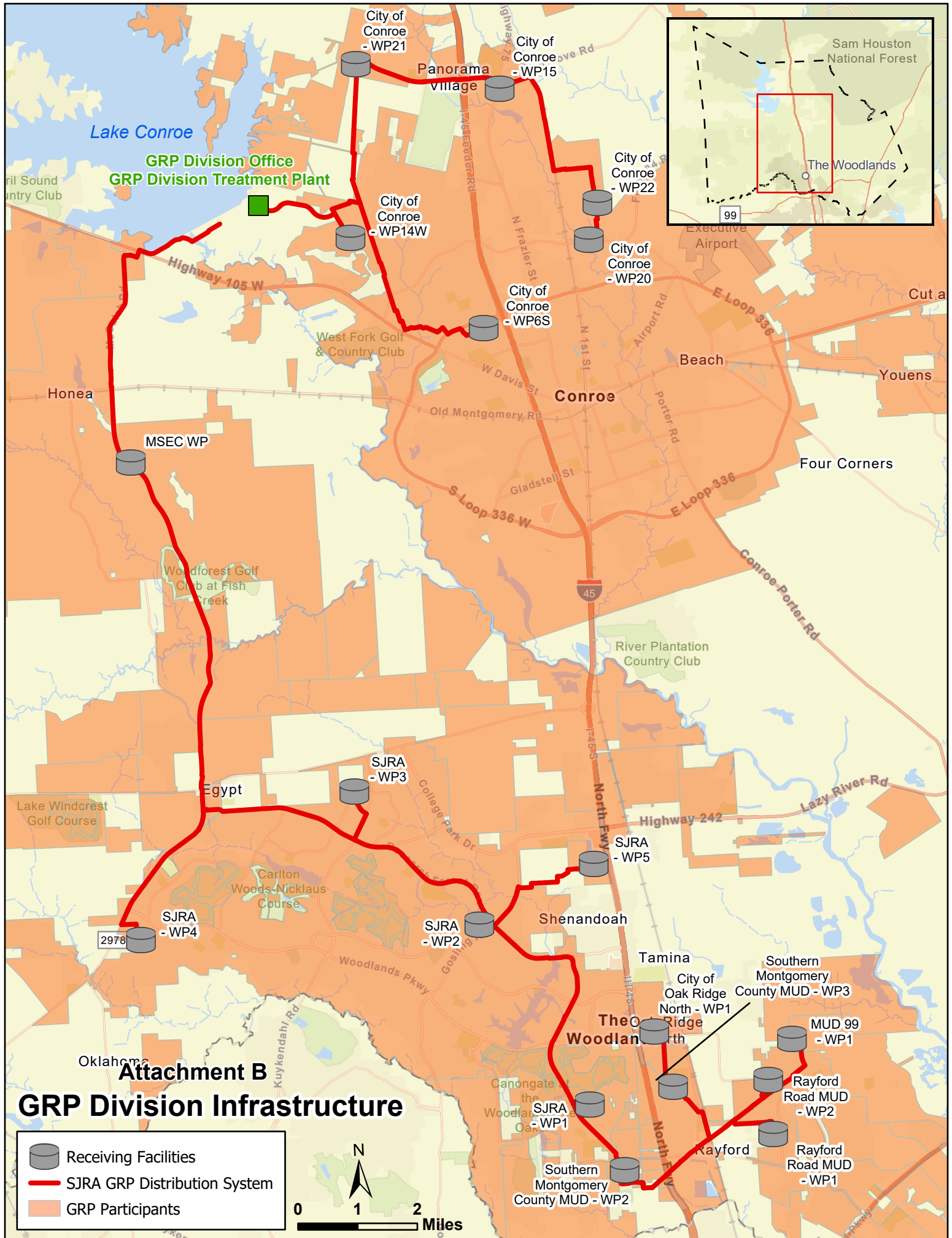


Attachment A
GRP Participants

Attachment B

GRP System Infrastructure Map

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Appendix C

Resolutions Passed by SJRA Transmittal Letter to Region H RWPG

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RESOLUTION NO. 2019-R-03

RESOLUTION ADOPTING REVISED WATER CONSERVATION PLANS AND DROUGHT CONTINGENCY PLANS; AUTHORIZING THE IMPLEMENTATION OF SUCH REVISED PLANS; REPEALING AND RESCINDING ALL PRIOR PLANS; AND CONTAINING OTHER PROVISIONS RELATING TO THE SUBJECT

WHEREAS, the San Jacinto River Authority (the "Authority") has water rights issued by the Texas Commission on Environmental Quality and its predecessor agencies (collectively, the "TCEQ") to divert water from the San Jacinto River and Trinity River basins; and

WHEREAS, the Authority, by and through its Highlands Division, owns and operates water supply and distribution systems and facilities, including the Lake Houston Pump Station, East Canal Transfer Pump Station, Highlands Reservoir, and the Highlands Canal System, in order to sell and deliver water out of such rights to certain customers generally located in eastern Harris County; and

WHEREAS, the Authority also owns an interest in Lake Conroe Dam and Reservoir, located in Montgomery and Walker Counties ("Lake Conroe") upstream on the San Jacinto River from the Lake Houston Reservoir, and holds certain contract rights and water rights issued by the TCEQ to divert or release and use water from Lake Conroe; and

WHEREAS, the Authority, by and through its Lake Conroe Division, operates Lake Conroe and sells water out of such rights to customers located in Montgomery County, generally in close proximity to Lake Conroe; and

WHEREAS, the Authority, by and through its Woodlands Division, owns and operates an extensive water supply and distribution system and facilities for providing regional, wholesale services to customers in the area of The Woodlands; and

WHEREAS, the Authority, by and through its Groundwater Reduction Plan Division (the "GRP Division"), owns and operates a surface water treatment facility and transmission system that will withdraw water from Lake Conroe for treatment, distribution and sale to its Woodlands Division and certain other customers; and

WHEREAS, in connection with the management of such facilities, systems and operations, the Authority has previously adopted various Water Conservation Plans and Drought Contingency Plans (collectively, the "Plans") in accordance with the requirements of Chapter 11, Texas Water Code, as amended, and the rules of the TCEQ under Chapter 288 of Title 30, Texas Administrative Code, as amended; and

WHEREAS, the Board of Directors of the Authority has determined that it is in the public interest to revise and replace the Plans; Now, Therefore,

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE SAN JACINTO RIVER AUTHORITY, THAT:

Section 1: The Plans, as previously adopted and amended by the Authority, are hereby repealed and rescinded in its entirety.

Section 2: The Board of Directors of the Authority hereby approves and adopts the revised water conservation and drought contingency plans, each dated as of the date hereof, titled as follows: *Water Conservation Plan for San Jacinto River Authority Highlands Division; Drought Contingency Plan for San Jacinto River Authority Highlands Division; Water Conservation Plan for San Jacinto River Authority Lake Conroe Division; Drought Contingency Plan for San Jacinto River Authority Lake Conroe Division; Water Conservation Plan for San Jacinto River Authority Woodlands Division; Drought Contingency Plan for San Jacinto River Authority Woodlands Division; Water Conservation Plan for San Jacinto River Authority GRP Division; and Drought Contingency Plan for San Jacinto River Authority GRP Division* (collectively, the "Revised Plans").

Section 3: The Revised Plans, together with any amendments thereto which may be made from time to time, shall be maintained on file in the official records of the Authority and filed, as appropriate, with the TCEQ, the Texas Water Development Board and any other agencies with jurisdiction.

Section 4: It shall be the policy of the Authority that the programs and procedures set forth in the Revised Plans be implemented immediately. The General Manager of the Authority shall report to the Board of Directors of the Authority and other interested agencies annually on the implementation and effectiveness of the Revised Plans in accordance with the procedures set forth in the Revised Plans.

Section 5: The General Manager of the Authority is hereby designated as the official responsible for implementation of the Revised Plans in accordance with the guidelines set forth in the Revised Plans.

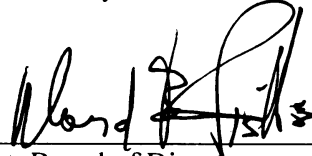
Section 6: It shall be the policy of the Authority to support and assist its wholesale and retail customers in (1) designating their pre-assigned officials as having the responsibility and authority to implement the Revised Plans, (2) allowing for enforcement of the Revised Plans, and (3) providing civil penalties for noncompliance with the Revised Plans.

Section 7: It shall be the policy of the Authority that the *Water Conservation Plan for San Jacinto River Authority GRP Division* and the *Drought Contingency Plan for San Jacinto River Authority GRP Division* establish minimum requirements which shall be adopted, respectively, in a water conservation plan and a drought contingency by each participant in the Authority's Groundwater Reduction Plan. The General Manager of the Authority and the GRP Administrator are hereby authorized and directed to take such actions as are deemed necessary and appropriate to ensure that the participants in the Authority's Groundwater Reduction Plan (the "Participants") adopt water conservation plans and drought contingency plans that are reasonably determined to meet or exceed such minimum requirements. Further, it shall be the policy of the Authority to support and assist the Participants in (1) adopting such water

conservation plans and drought contingency plans, and (2) implementing and enforcing such water conservation plans and drought contingency plans.

Section 8: This Resolution shall be and remain in full force and effect from and after the date of its passage and approval.

PASSED AND APPROVED this 28th day of February, 2019.



President, Board of Directors



Secretary, Board of Directors

(SEAL)



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San Jacinto River Authority

ADMINISTRATIVE OFFICE
P.O. Box 329 • Conroe, Texas 77305
(T) 936.588.3111 • (F) 936.588.3043

March 12, 2019

Mark Evans, Chair
Region H Water Planning Group
c/o San Jacinto River Authority
P.O. Box 329
Conroe, Texas 77305

Re: Water Conservation and Drought Contingency Plans

Dear Mr. Evans:

Please find enclosed one (1) copy of the revised Water Conservation and Drought Contingency Plans for the San Jacinto River Authority's Lake Conroe, GRP, Woodlands, and Highlands Divisions. San Jacinto River Authority's Board of Directors adopted the enclosed plans on February 28, 2019. These revisions have been completed to meet the regulatory requirement to update and submit the Plans to TCEQ and TWDB by May 1, 2019. Electronic versions of the Plans are available on San Jacinto River Authority's website at <http://www.sjra.net/about/wc-dcp/>.

If you have any questions, please do not hesitate to contact Daniel Hilderbrandt, P.E. at (936) 588-7121 or dhilderbrandt@sjra.net.

Sincerely,

Ronald Kelling, P.E.
Deputy General Manager
San Jacinto River Authority

Cc: Mark Smith, P.E.
Chris Meeks
Kimberly Wright
Bret Raley
Daniel Hilderbrandt, P.E.

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Appendix D

**GRP Division TCEQ Form 20645 - Water Conservation Implementation
Report Form and Summary of Updates/Revisions to Water Conservation Plan**

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WATER CONSERVATION IMPLEMENTATION REPORT FORM AND SUMMARY OF UPDATES/REVISIONS TO WATER CONSERVATION PLAN

(Texas Water Code §11.1271(b) and Title 30 Texas Administrative Code §288.30(1) to (4))

Please note, this form replaces the following forms: TCEQ-20645 (Non-Public Water Suppliers) and TCEQ-20646 (Public Water Suppliers)

This Form is applicable to the following entities:

- 1. Water Right Holders of 1,000 acre-feet or more for municipal, industrial, and other non-irrigation uses.**
- 2. Water Right Holders of 10,000 acre-feet or more for irrigation uses.**

The above noted entities are required by rule to submit updates to their water conservation plan(s) and water conservation implementation report(s) every five years. The most current five-year submittal deadline is **May 1st, 2019**. See 30 Texas Administrative Code (TAC) §288.30(1) to (4). Entities must also submit any revisions to their water conservation plan within 90 days of adoption when the plans are revised in between the five-year submittal deadlines. This form may be used for the five-year submittal or when revisions are made to the water conservation plans in the interim periods between five-year submittals. Please complete the form as directed below.

1. Water Right Holder Name: San Jacinto River Authority
2. Water Right Permit or Certificate Nos. COA 10-4963, COA 10-4964, COA 10-4965, COA 10-4966, Permit 5807, Permit 5808, Permit 5809, COA 08-4279, Permit 5271
3. Please Indicate by placing an 'X' next to all that Apply to your Entity:

Water Right Holder of 1,000 acre-feet or more for non-irrigation uses

- ☒ Municipal Water Use by Public Water Supplier
- ☒ Wholesale Public Water Supplier
- ☒ Industrial Use
- ☒ Mining Use
- ☒ Agriculture Non-Irrigation

Water Right Holder of 10,000 acre-feet or more for irrigation uses

- Individually-Operated Irrigation System
- ☒ Agricultural Water Suppliers Providing Water to More Than One User

Water Conservation Implementation Reports/Annual Reports

4. Water Conservation Annual Reports for the previous five years were submitted to the Texas Water Development Board (TWDB) for each of the uses indicated above as required by 30 TAC §288.30(10)(C)? Yes ☒ No

TCEQ no longer requires submittal of the information contained in the detailed implementation report previously required in Forms TCEQ-20645 (Non-Public Water Suppliers) and TCEQ-20646 (Public Water Suppliers). However, the Entity must be up-to-date on its Annual Report Submittals to the TWDB.

Water Conservation Plans

5. For the five-year submittal (or for revisions between the five-year submittals), attach your updated or revised Water Conservation Plan for each of the uses indicated in Section 3, above. Every updated or revised water conservation plan submitted must contain each of the minimum requirements found in the TCEQ rules and must be duly adopted by the entity submitting the water conservation plan. Please include evidence that each water conservation plan submitted has been adopted.
- Rules on minimum requirements for Water Conservation Plans can be found in 30 TAC 288.
http://texreg.sos.state.tx.us/public/readtac%24ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=288
 - Forms which include the minimum requirements and other useful information are also available to assist you. Visit the TCEQ webpage for Water Conservation Plans and Reports. https://www.tceq.texas.gov/permitting/water_rights/wr_technical-resources/conserve.html

Call 512-239-4691 or email to wcp@tceq.texas.gov for assistance with the requirements for your water conservation plan(s) and report(s).

6. For each Water Conservation Plan submitted, state whether the five and ten-year targets for water savings and water loss were met in your *previous* water conservation plan.
Yes ☒ No ☐

If the targets were not met, please provide an explanation.

The GRP Division initiated operations in late 2015. For the previous water conservation plan goal of 1% reduction in water use per year only years 2016-2018 were considered. For these years, the GRP Division's water usage decreased by a minimum of 1% each year.

7. For each five-year submittal, does each water conservation plan submitted contain *updated* five and ten-year targets for water savings and water loss?
Yes ☒ No ☐

If yes, please identify where in the water conservation plan the updated targets are located (page, section).

Section 3.1, Page 3-1

8. In the box below (or in an attachment titled "Summary of Updates or Revisions to Water Conservation Plans), please identify any other revisions/updates made to each water conservation plan that is being updated or revised. Please specify the water conservation plan being updated and the location within the plan of the newly adopted updates or revisions.

SJRA GRP Division

- Updated 5 and 10-year water conservation and water loss goals. (Section 3.1)
- Removed water conservation methods "Conservation Coordination", "Conservation Stakeholder Group", and "Awards and Recognition". The GRP Division does not plan to utilize these methods in at least the next five years. (Previously included in Section 3)
- Revised/Updated all Figures. (Throughout)
- Other minor text revisions (Throughout)

9. Form Completed by (Point of Contact): Matt Corley
(If different than name listed above, owner and contact may be different individual(s)/entities)

Contact Person Title/Position: Matt Corley, Compliance and Administrative Manager

Contact Address: 11998 Pine Valley Drive, Conroe, TX 77304

Contact Phone Number: 936-588-1662 Contact Email Address: mcorley@sjra.net

Signature: 

Date: 2/28/19

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