

Drought Contingency Plan

for

**San Jacinto River Authority
Woodlands Division**

Prepared by

San Jacinto River Authority

Adopted: February 28, 2019

This page intentionally left blank.

Table of Contents

<u>Section</u>	<u>Page</u>
Section 1. Introduction	1-1
Section 2. Utility and Service Area Description.....	2-1
2.1 Utility Description	2-1
2.2 Service Area Description.....	2-2
Section 3. Drought Contingency Plan	3-1
3.1 Drought Contingency Plan – Woodlands Division	3-1
3.2 Trigger Conditions – Initiation and Termination	3-1
3.3 Notification of Initiation and Termination	3-5
3.4 Drought Response Stages	3-5
3.5 Pro Rata Water Allocation.....	3-7
3.6 Compliance Metrics.....	3-7
3.7 Public Involvement.....	3-8
3.8 Procedures for Granting Variances.....	3-8
3.9 Implementation and Enforcement	3-8
3.10 Coordination with Regional Water Planning Group	3-9
3.11 Updating of the Plan	3-9

Tables

Table 2-1. 2018 Blended Surface and Ground Water Production.....	2-2
Table 2-2. 2018 Reuse Production.....	2-3

Figures

Figure 1-1. Watershed Area and Facility Locations.....	1-2
Figure 2-1. Woodlands MUDs	2-5
Figure 2-2. Woodlands Division Water Distribution System.....	2-6
Figure 2-3. Woodlands Division Wastewater Infrastructure.....	2-7

Appendices

Appendix A – Resolutions Passed by SJRA, Transmittal Letter to Region H RWPG

This page intentionally left blank.

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is to achieve lasting, long-term improvements in water use efficiencies using strategies to reduce the amount of water withdrawn from a particular source, and to ensure that the water withdrawn is used in an efficient manner.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 service area 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 Drought Contingency Plan (including utility description, service area description, and drought measures) for the Woodlands Division (the Division). The Division’s Water Conservation Plan is provided under 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.

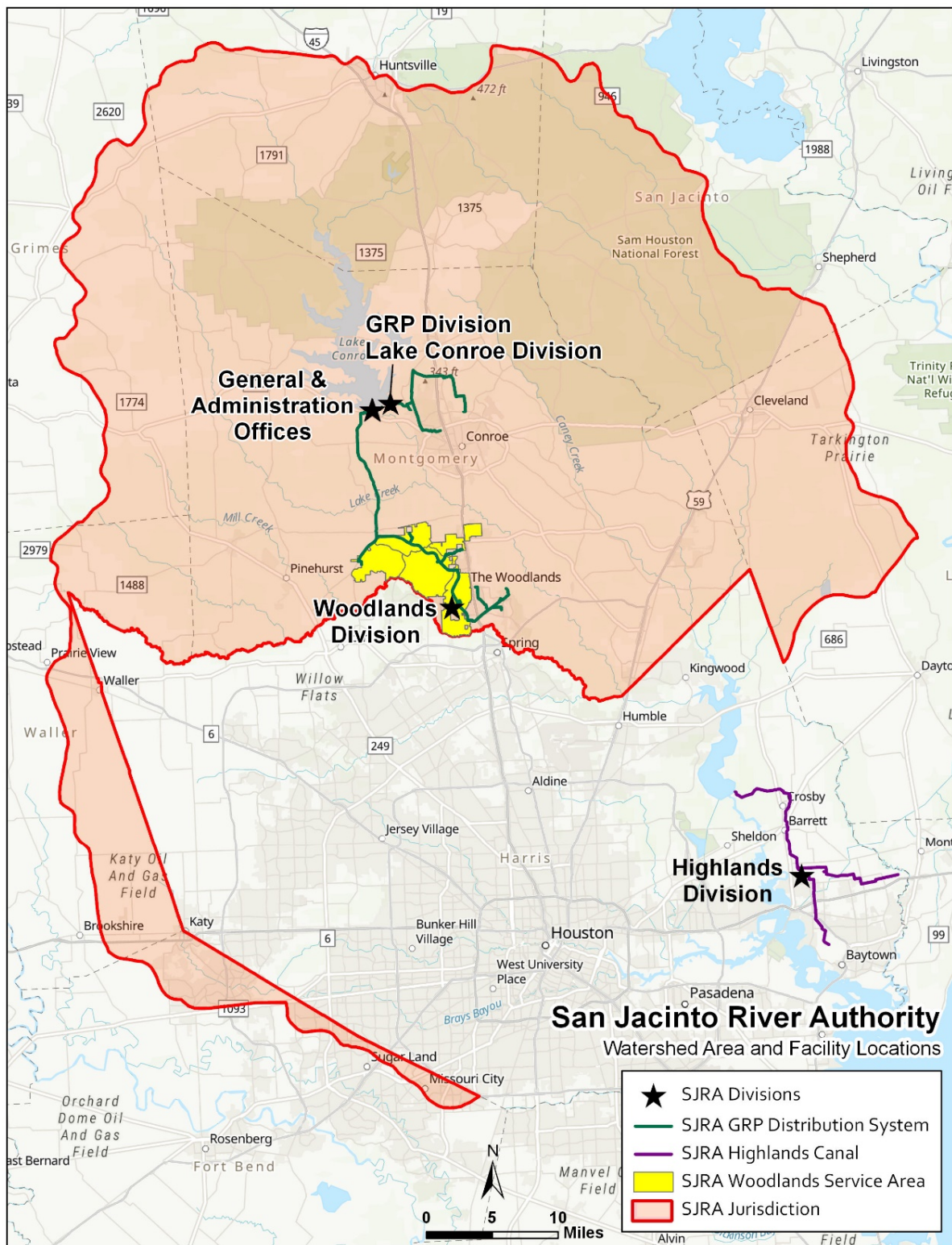


Figure 1-1. Watershed Area and Facility Locations

Section 2. Utility and Service Area Description

2.1 Utility Description

The Division currently provides its customers with water on a wholesale basis from a blend of water generated by 38 groundwater wells within the Evangeline and Jasper formations of the Gulf Coast Aquifer and surface water from Lake Conroe. SJRA is currently authorized by Lone Star Groundwater Conservation District (LSGCD) to produce up to 20,479 acre-feet per year (ac-ft/yr) from these wells. Water is disinfected at five water treatment plants and conveyed to customers through a series of potable distribution pipelines. The Division also provides wholesale wastewater service to customers through a wastewater collection system and three wastewater treatment plants.

In 2004 SJRA was granted 14,944 ac-ft/yr of water rights associated with groundwater based effluent return flows from its three wastewater treatment plants in The Woodlands, within the San Jacinto River Basin (Permit 5809). A portion of this return flow is utilized by SJRA to serve its customers in southeast Harris County. Customers of the Division also utilize indirect reuse through Permit 3960 (held by The Woodlands Land Development Company and Sequoia Golf Woodlands, LLC).

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/year) 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. The SJRA's water right is permitted for multiple uses. Lake Houston, which is owned by the City of Houston, is the other surface water supply reservoir in the basin. SJRA also holds an option contract for the purchase of the Houston portion of raw water in Lake Conroe which it plans to utilize in coming years.

The Woodlands Division is a GRP Participant in the SJRA Joint Groundwater Reduction Plan, which specifies measures to meet the requirements of Phase II(B) of the LSGCD District Regulatory Plan (DRP) to reduce future groundwater use within Montgomery County. 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 requires 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.

The Joint GRP specifies multiple strategies to meet Participant needs, including surface water

supplies, conservation, groundwater use from multiple formations, and wastewater reuse. As one of the selected GRP Participants partially converting to treated surface water, the Division is utilizing treated surface water originating from Lake Conroe to partially supply The Woodlands. Since conversion, the Division receives a base amount of treated surface water and will meet remaining demand with groundwater. The Water Conservation and Drought Contingency Plans for SJRA's GRP Division have been developed separately.

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. The Division covers approximately 36 square miles and is a wholesale provider of water and wastewater service to The Woodlands.

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 a part of the WJPA (Figure 2-1). The WJPA provides retail water and wastewater services to The Woodlands community. The Woodlands Districts purchase all of their wholesale water and wastewater treatment services from the Division.

In 2018, The Woodlands Division produced 16,661 acre-feet ($\approx 5,429,000,000$ gallons) of blended surface and groundwater, and 1,919 acre-feet of reuse water as shown in Tables 2-1 and 2-2. A map of the Division's service area, along with existing potable water treatment facilities and appurtenances, is provided below (Figure 2-2). Major wastewater infrastructure is shown in Figure 2-3.

Table 2-1. 2018 Blended Surface and Ground Water Production

Municipal – GW	9,231 ac-ft
Municipal – SW	7,431 ac-ft
Industrial	0 ac-ft
Irrigation	0 ac-ft
Total	16,661 ac-ft

Table 2-2. 2018 Reuse Production

Municipal*	1,919 ac-ft
Industrial	0 ac-ft
Irrigation	0 ac-ft
Total	1,919 ac-ft

*Includes approximately 65 ac-ft of indirect reuse for landscape irrigation and 1,855 ac-ft of direct reuse for WWTP process and washdown water.

A full description of the Division's customer information can be found under separate cover in the Division's Water Conservation Plan.

This page intentionally left blank.

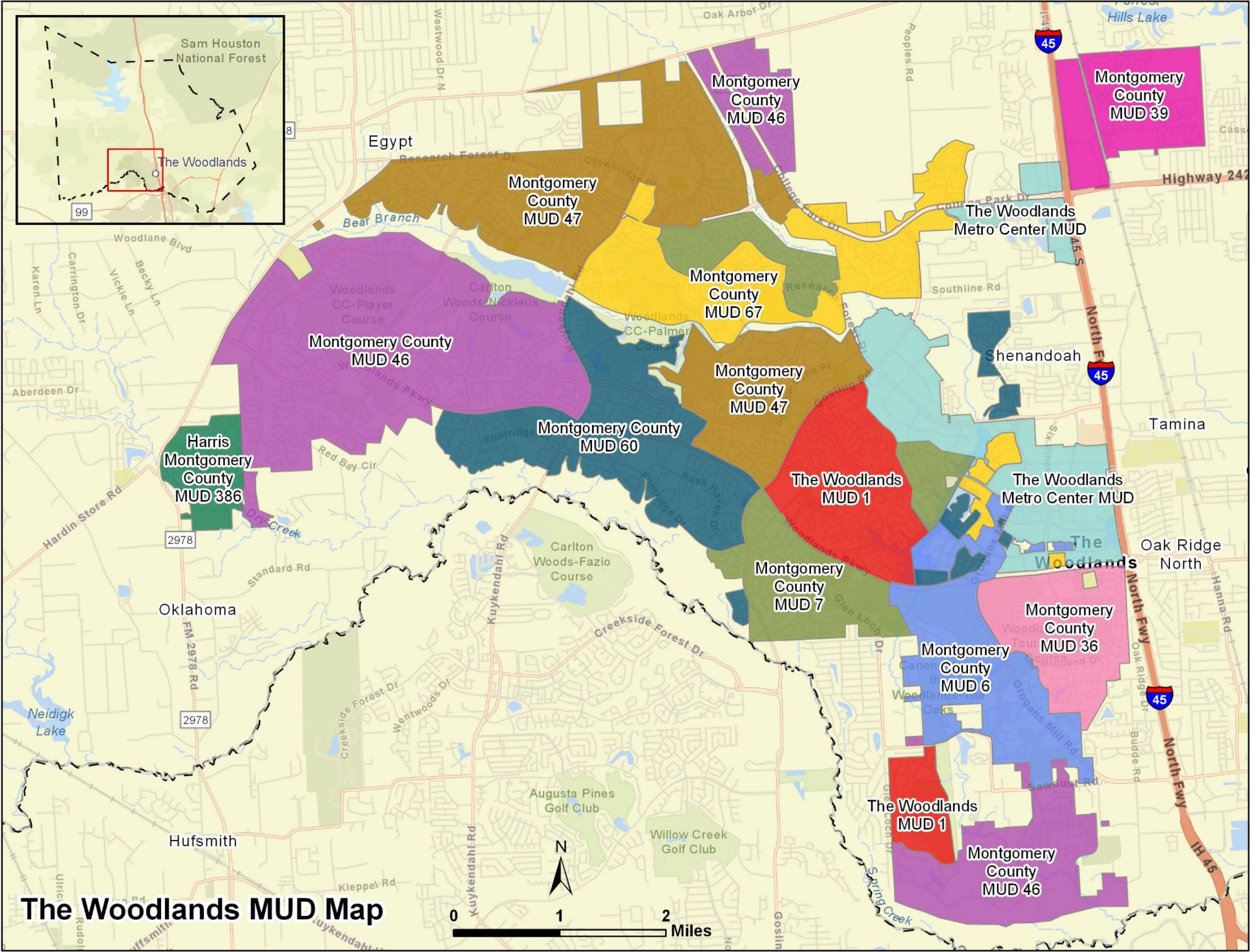


Figure 2-1. Woodlands MUDs

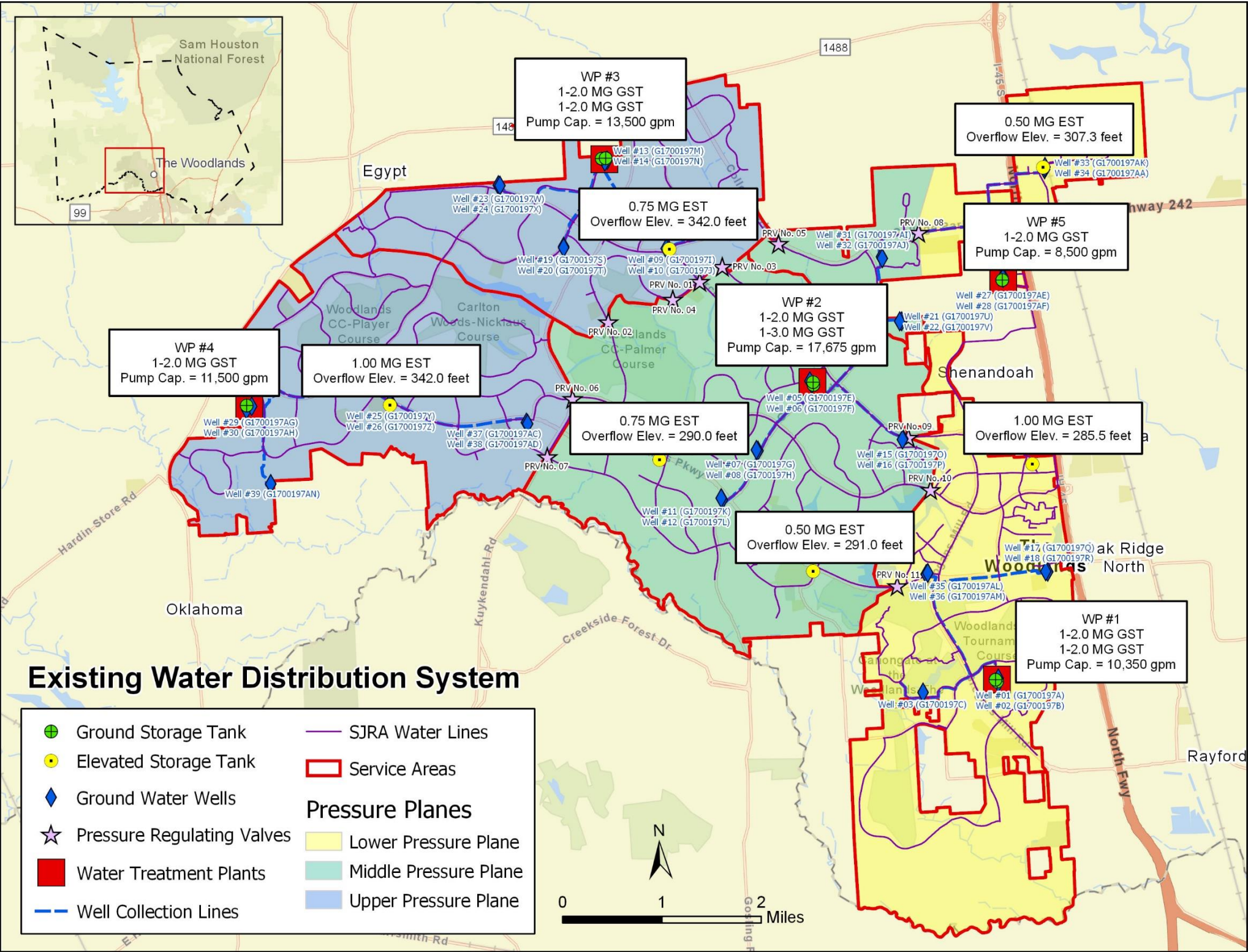


Figure 2-2. Woodlands Division Water Distribution System

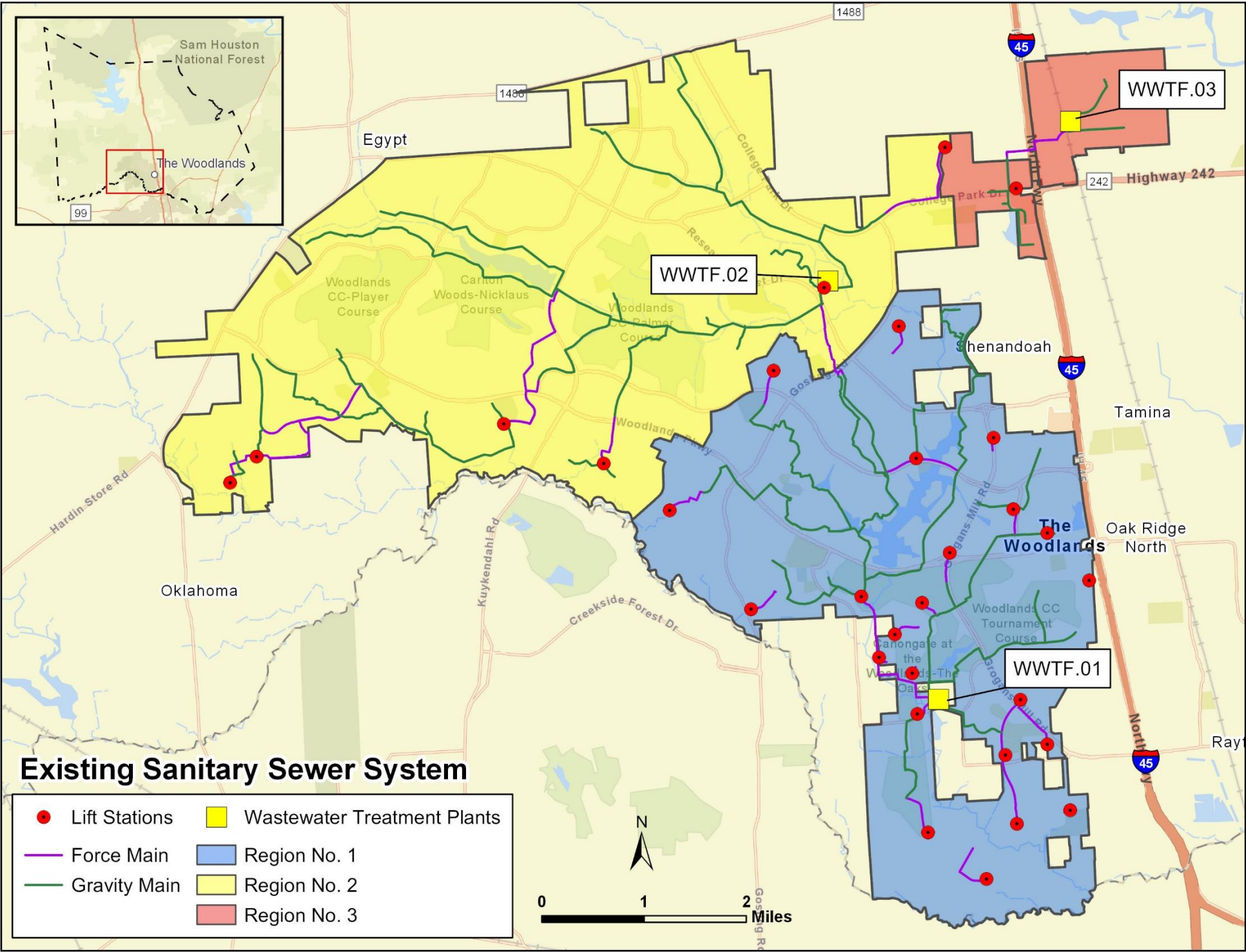


Figure 2-3. Woodlands Division Wastewater Infrastructure

This page intentionally left blank.

Section 3. Drought Contingency Plan

Drought, or a number of other uncontrollable circumstances, can disrupt the normal availability of water supply. Even though an area may have an adequate water supply, the supply can become contaminated, or a disaster can disrupt or destroy the supply. During drought periods, consumer demand is often significantly higher than normal. Failure of the treated water delivery system also can present a utility with an emergency demand management situation.

It is important to distinguish between drought contingency planning and water conservation planning. As detailed in the Division's Water Conservation Plan, water conservation involves implementing permanent water use efficiencies or reuse. Drought contingency planning establishes temporary methods or techniques to be used only as drought and/or emergency conditions persist.

The SJRA has developed a drought contingency plan with regard to the wholesaling of treated surface water from Lake Conroe to the Division as well as groundwater, reuse supplies, and any other supplies used by Division customers. The Woodlands Division is a GRP Participant in the SJRA Joint Groundwater Reduction Plan, which specifies measures to meet LSGCD requirements to reduce future groundwater use within Montgomery County. As one of the selected GRP Participants partially converting to treated surface water, the Division utilizes treated surface water originating from Lake Conroe to partially supply The Woodlands.

3.1 Drought Contingency Plan – Woodlands Division

The Division currently provides its customers with a blend of treated groundwater and surface water supplies and direct reclaimed effluent. In order to conserve the available water supply and/or protect the integrity of water supply facilities during water supply shortages or other supply emergency conditions that can have adverse effects on the customers of the Division, the SJRA has developed the following drought contingency plan elements.

3.2 Trigger Conditions – Initiation and Termination

SJRA GRP Division provides treated surface water from Lake Conroe to Participants of the SJRA GRP Division, including the SJRA Woodlands Division. For this plan, the drought stage of the SJRA GRP Division is the indicator of drought conditions in the Division and will be used as the basis for initiating and terminating drought stages.

The General Manager of the SJRA or a designated representative will monitor water supply and/or demand conditions on a monthly basis or more frequently as conditions warrant and will determine when conditions warrant initiation or termination of each drought stage. Because the Division is a GRP Participant

and is utilizing supplies from Lake Conroe, initiation of drought stages for the Division is in part based on the initiation of drought stages by the SJRA GRP Division. This in turn depends on the drought stage of the SJRA Lake Conroe Division, which is based on the water surface elevation of Lake Conroe. Triggering of drought stages for the Division also includes consideration for groundwater pumpage from the Division's water plants relative to their individual and/or combined capacities.

The trigger points listed below have been selected through hydrologic and operational modeling processes to work conjunctively with the measures identified in Section 3.4 to extend the availability of critical water supplies while simultaneously achieving the highest practicable level of efficiency in water use from a social and economic standpoint across customer classes. If deemed appropriate by the General Manager or a designated representative, termination of a drought stage is followed by initiation of a lower drought stage. An Emergency Water Supply Condition may be initiated or terminated without subsequent enactment of other stages. The various drought contingency stages may be initiated or terminated at the discretion of the General Manager or a designated representative. Otherwise, initiation and termination of the stages shall be as follows:

Stage 1: Voluntary Reduction

Initiation:

- The SJRA GRP Division initiates Stage 1 of its Drought Contingency Plan; or
- Termination of a more severe drought condition, if deemed appropriate by the General Manager or a designated representative; or
- Equipment, pipeline, or sample failure deemed by the General Manager or a designated representative to necessitate enacting Stage 1; or
- Monitoring of water demands/weather forecasts indicate earlier initiation is necessary, as determined by the General Manager or designated representative.

Termination:

- The SJRA GRP Division terminates Stage 1 of its Drought Contingency Plan; or
- Passage of seven or more consecutive days following Stage 2 condition termination; or
- Resolution of equipment, pipeline, or sample failure conditions; or
- Termination of Stage 1 due to indications from monitoring of water demands/weather forecasts.

Stage 2: Moderate Conditions

Initiation:

- The SJRA GRP Division initiates Stage 2 of its Drought Contingency Plan; or

- Combined pumpage from the supplying groundwater plants is in excess of 70% of current remaining production capacity of available groundwater wells for seven consecutive days; or
- Pumpage from one groundwater plant is in excess of 80% of current remaining production capacity of available groundwater wells serving the plant for seven consecutive days; or
- Termination of a more severe drought condition, if deemed appropriate by the General Manager or a designated representative; or
- Equipment, pipeline, or sample failure deemed by the General Manager or a designated representative to necessitate enacting Stage 2; or
- Monitoring of water demands/weather forecasts indicate earlier initiation is necessary, as determined by the General Manager or a designated representative.

Termination:

- The SJRA GRP Division terminates Stage 2 of its Drought Contingency Plan; or
- Groundwater plant operational Stage 2 drought trigger events have ceased for seven consecutive days; or
- Passage of seven or more consecutive days following Stage 3 condition termination; or
- Resolution of equipment, pipeline, or sample failure conditions; or
- Termination of Stage 2 due to indications from monitoring of water demands/weather forecasts.

Stage 3: Advanced Conditions

Initiation:

- The SJRA GRP Division initiates Stage 3 of its Drought Contingency Plan; or
- Combined pumpage from the supplying groundwater plants is in excess of 80% of current remaining production capacity of available groundwater wells for seven consecutive days; or
- Combined pumpage from the supplying groundwater plants is in excess of 85% of current remaining production capacity of available groundwater wells for three consecutive days; or
- Pumpage from one groundwater plant is in excess of 85% of current remaining production capacity of available groundwater wells serving the plant for seven consecutive days; or
- Termination of a more severe drought condition, if deemed appropriate by the General Manager or a designated representative; or

- Equipment, pipeline, or sample failure deemed by the General Manager or a designated representative to necessitate enacting Stage 3; or
- Monitoring of water demands/weather forecasts indicate earlier initiation is necessary, as determined by the General Manager or a designated representative.

Termination:

- The SJRA GRP Division terminates Stage 3 of its Drought Contingency Plan; or
- Groundwater plant operational Stage 3 drought trigger events have ceased for seven consecutive days; or
- Passage of seven or more consecutive days following Stage 4 condition termination; or
- Resolution of equipment, pipeline, or sample failure conditions; or
- Termination of Stage 3 due to indications from monitoring of water demands/weather forecasts.

Stage 4: Severe Conditions

Initiation:

- The SJRA GRP Division initiates Stage 4 of its Drought Contingency Plan; or
- Combined pumpage from the supplying groundwater plants is in excess of 90% of current remaining production capacity of available groundwater wells for two consecutive days; or
- Pumpage from one groundwater plant is in excess of 95% of current remaining production capacity of available groundwater wells serving the plant for three consecutive days; or
- Equipment, pipeline, or sample failure deemed by the General Manager or a designated representative to necessitate enacting Stage 4; or
- Monitoring of water demands/weather forecasts indicate earlier initiation is necessary, as determined by the General Manager or designated representative.

Termination:

- The SJRA GRP Division terminates Stage 4 of its Drought Contingency Plan; or
- Groundwater plant operational Stage 4 drought trigger events have ceased for seven consecutive days; or
- Resolution of equipment, pipeline, or sample failure conditions; or
- Termination of Stage 4 due to indications from monitoring of water demands/weather forecasts.

Emergency Water Supply Condition

Initiation:

- The SJRA GRP Division initiates an Emergency Water Supply Condition under its Drought Contingency Plan; or
- Anticipation of a drought condition beyond historical level of severity; or
- System failure in the Woodlands Division system; or
- Contamination of the water supply has occurred; or
- Equipment, pipeline, or sample failure deemed by the General Manager or a designated representative to necessitate enacting an Emergency Water Supply Condition; or
- Enactment of Emergency Water Supply Condition initiation due to other factors at the discretion of the General Manager or a designated representative.

Termination:

- The SJRA GRP Division terminates an Emergency Water Supply Condition under its Drought Contingency Plan; or
- Restoration of the Woodlands Division system to operational status; or
- Containment or elimination of water supply contamination; or
- Resolution of equipment, pipeline, or sample failure conditions; or
- Termination of Emergency Water Supply Condition due to other factors at the discretion of the General Manager or a designated representative.

Each stage may also be initiated or terminated at the discretion of the General Manager or a designated representative.

3.3 Notification of Initiation and Termination

The General Manager of the SJRA or a designated representative will notify the wholesale customer representatives of the Division in writing by electronic mail when a trigger condition has been met. When the trigger conditions that initiated the drought measures have subsided, the General Manager or a designated representative will inform the wholesale customer representatives of the Division in writing by electronic mail. Additionally, TCEQ will be notified within five business days of initiation or termination of drought stages beyond Stage 1. Notification of drought stage initiation or termination will also be posted on the SJRA website.

3.4 Drought Response Stages

The General Manager or a designated representative will monitor water supply and demand

conditions, and in accordance with the triggering criteria set forth in Section 3.2 will determine that a water shortage exists, or when an emergency condition exists. The reductions listed below have been selected through hydrologic and operational modeling processes to work conjunctively with the trigger points identified in Section 3.2 to extend the availability of critical water supplies while simultaneously achieving the highest practicable level of efficiency in water use from a social and economic standpoint across customer classes. The following actions will be taken when a drought stage or Emergency Water Supply Condition is initiated:

Stage 1: Voluntary Reduction

Target: Achieve a voluntary 5% reduction in use

- Contact wholesale customers of the Division to discuss situation.
- Request that wholesale customers initiate voluntary measures to reduce water use.

Stage 2: Moderate Conditions

Target: Achieve a 5% reduction in use (October through March)

Achieve a 10% reduction in use (April through September)

- Contact wholesale customers of the Division to discuss situation.
- Require wholesale customers initiate mandatory measures to reduce water use by a seasonal 5% or 10%.

Stage 3: Advanced Conditions

Target: Achieve a 10% reduction in use (October through March)

Achieve a 20% reduction in use (April through September)

- Contact wholesale customers of the Division to discuss situation and continue to do so on a weekly basis until termination.
- Require wholesale customers initiate mandatory measures to reduce water use by a seasonal 10% or 20%.

Stage 4: Severe Conditions

Target: Achieve a 15% reduction in use (October through March)

Achieve a 30% reduction in use (April through September)

- Contact wholesale customers of the Division to discuss situation and continue to do so on a weekly basis until termination.
- Require wholesale customers initiate mandatory measures to reduce water use by a seasonal

15% or 30%.

Emergency Water Supply Condition

Target: Subject to scope and nature of emergency

- If appropriate, notify city, county, and/or state emergency response officials for assistance.
- Assess the severity of the problem and identify actions needed and time required to solve the problem.
- Notify TCEQ within five days of initiation or termination of emergency conditions.
- Inform wholesale customers and discuss possible actions, including but not limited to initiation of actions available under Stages 1 through 4.
- If deemed necessary by the General Manager or a designated representative, impose mandatory water rationing per Texas Water Code (TWC) §11.039 to reduce water demand to a level determined by the General Manager or a designated representative and notify TCEQ.
- Undertake necessary actions, such as repair or cleanup, to resolve issue.

3.5 Pro Rata Water Allocation

If deemed necessary by the General Manager or a designated representative due to a drought or Emergency Water Supply condition, SJRA will initiate allocation of water supplies on a pro rata basis in accordance with TWC §11.039 and the force majeure clause and other relevant terms of the contract in place with each raw water customer. TWC §11.039 directs that if a shortage occurs due to drought, accident, or other cause in a water supply covered by a TWDB-approved Water Conservation Plan, the entity controlling the supply shall divide the water to be distributed pro rata among all customers.

3.6 Compliance Metrics

The target of Stages 1 through 4 (and in some circumstances an Emergency Water Supply Condition) is to reduce water use by a certain percentage. Because water demands for Division customers change over time and may be impacted by weather conditions or application of drought response measures, a standard approach to defining a customer's demand must be applied. For the purposes of this drought contingency plan, each customer's demand shall be determined as that customer's water use for the preceding two years, averaged for each month. These demand values will be provided to customers at the beginning of each year. Customer requests for variances to the provided demand values will be considered at an administrative level through an appeal process as described in Section 3.8.

3.7 Public Involvement

Public involvement measures associated with this drought contingency plan shall include the following:

- Making proposed documents available to the public prior to adoption.
- Posting of notice of an SJRA Board of Directors meeting to include consideration of the plan for adoption.
- Consideration and adoption of the plan by the SJRA Board of Directors at a meeting to be open to the public.

Upon adoption of the plan, the completed drought contingency plan with relevant documentation reflecting adoption will be posted on the SJRA website.

3.8 Procedures for Granting Variances

The General Manager or a designated representative may grant a temporary variance to mandatory measures to reduce water use, to calculated customer demand as discussed in Section 3.6, or to pro rata water allocation policies if one or more of the following conditions are met:

- Failure to grant such variance would cause an emergency condition adversely affecting the public health, welfare, or safety.
- Compliance with this plan cannot be technically accomplished during the duration of the water supply shortage or other conditions for which the plan is in effect.
- Alternative methods can be implemented which will achieve the same level of reduction in water use.

The decision to grant or deny such a variance is at the discretion of the General Manager or a designated representative. Persons or entities requesting an exemption from the provisions of this plan shall file a written petition for variance with the General Manager or a designated representative within five business days after the mandatory measures to reduce water use or the pro rata allocation has been invoked. Once received, the General Manager or a designated representative will have five business days to respond, in writing, to a petition for variance.

3.9 Implementation and Enforcement

The SJRA General Manager or a designated representative will be responsible for implementation and enforcement of the drought contingency plan. During any period when pro rata allocation of available water supplies is in effect, the General Manager or a designated representative has the authority to discontinue service to any customer who fails to comply with the conditions of the allocation, declaring the customer in breach of contract. Prior to discontinuance of service, the General Manager or a designated

representative will issue a warning to the wholesale customer, and work with the customer to ensure that they are complying with the restrictions. In the event the customer fails to voluntarily comply, a court injunction will be obtained for violation of the Texas Water Code and for breach of contract.

Once notified of initiation of a drought stage with mandatory demand reduction, Division customers are required to reduce their water use in accordance with the appropriate stage as described above. In order to promote compliance with the drought contingency plan, the General Manager or a designated representative may enact a special temporary drought contingency rate structure with certain non-promotional rates for each drought stage. Customers failing to comply with mandatory demand reductions may also be subject to disincentive fees and be required to reimburse SJRA for any costs, fines, or penalties incurred by SJRA as a result of the customer's noncompliance. Enforcement actions, including penalties, will not be put into place until 30 calendar days after a drought stage is initiated.

3.10 Coordination with Regional Water Planning Group

The Woodlands Division is located within the Region H Regional Water Planning Area. In accordance with TCEQ rules, the Division has provided a copy of the Division drought contingency plan to the Region H Regional Water Planning Group. A copy of the transmittal letter is included in Appendix A.

3.11 Updating of the Plan

Every five years, SJRA will examine the Division operations to determine if trigger conditions need to be re-established. Updates may also be considered earlier than each five years in the case of any changes to operations that would warrant a re-examination of the trigger conditions. Any updates will result in a revised drought contingency plan.

The drought contingency 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 A.

This page intentionally left blank.

Appendix A
Resolutions Passed by SJRA
Transmittal Letter to Region H RWPG

This page intentionally left blank.

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.

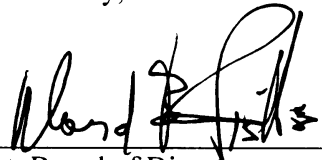
Section 6: It shall be the policy of the Authority to support and assist its wholesale and retail customers in (1) designating their pre-assigned officials as having the responsibility and authority to implement the Revised Plans, (2) allowing for enforcement of the Revised Plans, and (3) providing civil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



This page intentionally left blank.



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.

This page intentionally left blank.