SPRINGS HILL WATER SUPPLY

WATER CONSERVATION AND DROUGHT CONTINGENCY PLAN 2019

INTRODUCTION AND BACKGROUND

Springs Hill Water Supply Corporation (SHWSC) is a Member-Owned, non-profit corporation incorporated under Article 1434 (a) of the Revised Civil Statutes of Texas of 1925, as amended, supplemented by the Texas Non-Profit Corporation Act, Article 1.01 et seq., as amended for the purpose of furnishing a water supply for general farm use and domestic purposes to individuals in rural areas. Corporation operating policies, rates, tariffs, and regulations are formulated and affected by a Board of Directors elected by the Owner Members of the Corporation. These are on file at the Corporation's offices located at 5510 S. 123 Bypass, Seguin, Texas and are available for inspection as public documents.

SHWSC service is comprised of approximately 182,000 acres / 284 square miles and encompasses the City of Seguin; with boundaries on the north, into the New Braunfels city limits, on the south and east, the Gonzales County Line, and to the west the City of McQueeney city limits, abutting the Green Valley Special Utility District's service area. SHWSC is located within the extra territorial jurisdiction (ETJ) of the City of Seguin and City of New Braunfels. (See Appendix A – SHWSC Map)

COORDINATION WITH REGIONAL WATER PLANNING GROUP

The service area of SHWSC is located within the South Central Texas Region L water planning area. The Corporation has provided a copy of the Water Conservation Plan and the Drought Contingency Plan to the South Central Texas Region L water planning group. The General Manager attends the Region L planning meetings and contributes all information requested of them to help develop future state plans.

OVER ALL PLAN GOALS

The plan has two components; the Water Conservation Plan and the Drought Contingency Plan. The Water Conservation Plan is to establish policy and define five-year and ten-year goals, which will:

- Insure that demand for water does not exceed the amount of treated water available.

- Provide the public with educational information to encourage water conservation and decrease waste.

- Limit peak water usage during the summer months so that mandatory water use restrictions are limited to times of drought.

- Decrease the average water usage per connection.

- Limit unaccounted for water by tracking loss on a monthly basis, collecting information from local fire departments and calculate water loss at all leak repair locations.

- Replace old infrastructure in areas that show continual leak repair by tracking those leaks with our H2O Analytics software.

- Use Continental Utility Software in combination with H2O Analytics software to monitor usage.

The overall goal of the Drought Contingency Plan is to follow the lead and plan that Guadalupe Blanco River Authority applies to the Hydroelectric Lakes including Lake Dunlap and Lake Placid. The procedures initiated by certain triggers set by GBRA to prevent loss of water supply to any customer during periods of high usage and to protect the environment. The GBRA plan impacts our members who live along the Guadalupe River and Springs Hill does not see a benefit in having a different set of guidelines. This would make enforcement extremely difficult:

- Establish trigger conditions that conform to GBRA's bench marks for the Hydroelectric Lakes

- Outline a management plan that follows GBRA's Drought Plan.

- Specify public information and education policies.

- State initial start and termination notice procedures.

- State implementation and enforcement procedures.

In order to conserve and protect the integrity of the available water supply, with particular regard for domestic water use, sanitation, and fire protection, and to protect public health, welfare, and safety and minimize the adverse impacts of water shortage or other water supply emergency conditions, SHWSC has formulated these policies, regulations and restrictions on the delivery and consumption of water.

The policies presented in this plan are needed to efficiently manage the water available to the Corporation for the benefit of all customers. Water uses regulated or prohibited under this Plan are considered to be non-essential and continuation of such uses during times of water shortage or other emergency water supply conditions are deemed to constitute a waste of water which subjects the offender(s) to penalties as defined in the Drought Contingency Plan.

Statutory & Rule Requirements:

Texas Water Code 13.146- Water Conservation Plan. The commission (TCEQ) shall require a retail public utility that provides potable water service to 3,300 or more connections to submit to the executive administrator of the board (TWDB) a water conservation plan base on specific targets and goals developed by the retail public utility and using appropriate best management practices, as defined by Section 11.002, or other water conservation strategies.

Title 30, Texas Administrative Code (TAC), Chapter 288.30(5) (A) - Drought Contingency Plan. For retail public water suppliers providing water service to 3,300 or more connections, the drought contingency plan must be submitted to the executive director (TCEQ) not later than May 1, 2005. Thereafter, the retail public water suppliers providing water service to 3,300 or more connections shall submit the next revision of the plan not later than May 1, 2009, and every five years after that date to coincide with the regional water planning group.

UTILITY PROFILE

SHWSC currently serves a population of approximately 25,062 people and has over 8,354 connections. The Texas Water Development Board (TWDB) has projected the population to reach 48,418 by the year 2060 and connections are likewise projected to reach 16,800. The prominent area of growth is in the northern service area along state highway (SH) 46, the northwest service area along Farm-to-Market (FM) 78 and the IH10 corridor going east and west to SH130.

SHWSC obtains water from several sources. The corporation operates a 2 MGD conventional surface water treatment plant on Lake Placid. The Lake Placid plant has access to 2850 AF of surface water. Canyon Regional Water Authority (CRWA) provides additional 2450 acre feet of Lake Dunlap surface water per year. Groundwater is obtained from three wells operated and owned by SHWSC and located in the Carrizo Aquifer producing approximately 350 acre feet per year per well. In addition SHWSC has a contract to purchase 700 acre feet of groundwater from Seguin-Schertz. CRWA has contracted with SHWSC to provide an additional 100 acre foot from the CRWA wells located in the Carrizo aquifer.

S.H.W.S.C. System capacity is 5 Million Gallons per Day (MGD). Storage capacity is 1 Million Gallons (MG) Ground, 3.2 (MG) Elevated. Service is distributed to single & multi-family residences, Industrial, Commercial, Institutional and Agricultural users. Most water is used by single residential families. Complete Water Utility Profile is included in **Appendix H**.

Water Use Category	Historic Average	Percent of Connections	Percent of Water use
Residential –	534,770,511	92.93%	77.90%

Single Family			
Residential-Multi-family	45,848,580	6.11%	6.68%
Industrial	61,334,460	0.18%	8.93%
Commercial	36,598,125	0.54%	5.33%
Institutional	7,619,130	0.23%	1.11%
Agricultural	288,200	0.01%	0.04%

Average Daily Water use and Peak Day Water use for the previous five years

Year	Average Daily Use (gal)	Peak Day Use (gal)	Ratio (Peak /avg.)
2018	1,971,096	2753218	1.3968
2017	1,861,027	2457313	1.3204
2016	1,722,661	2124456	1.2332
2015	1,807,667	2311404	1.2787
2014	1,851,011	2435742	1.3159

WATER CONSERVATION PLAN FIVE AND TEN YEAR GOALS

The Corporation has reviewed and developed quantifiable five-year and ten-year targets for water savings as required by the TCEQ in Title 30, Chapter 288 of the TAC. Additionally a progress report on plan implementation is to be submitted to the TCEQ and TWDB annually.

Goals are listed as gallons per capita per day (gpcd). For the past 5 years, 2014-2018, the average total GPCD for Springs Hill was 105 and residential average was 67.

	Historic 5-year Average	Baseline	5-year Goal for 2024	10-year Goal for 2028
Total GPCD	105	105	95	90
Residential GPCD	67	67	59	54
Water Loss (GPCD)	24	24	11	10
Water Loss (Percentage)	23%	23%	12%	11%

PLAN ELEMENTS

The plan has seven elements, all of which are equal in importance and the implementation of which will be periodically reviewed to ensure progress is being made in each area and that goals are being met:

1. Education and Information

The single most effective means of educating the water consumer on the consequences of wasting water is providing relevant, timely information on the benefits of conservation and the means by which it can be accomplished. The following is implemented:

- The Corporation obtains excellent educational literature from the TWDB, TCEQ, Texas Municipal Utility Association, and the American Water Works Association. This literature is also available at all times at the Corporation's office.
- Educational Water Conservation links are available on our website at www.springshill.org at all times.
- A direct mailing of conservation reminders is conducted annually.
- Monthly conservation reminders are sent via email as a part of the billing system.
- New customer packages will include educational handouts for children and on the benefits of the above.
- Staff Participates in water programs hosted by GBRA and attends annual meeting conservation classes.
- Educational presentations regarding Water conservation offered by staff to schools.
- Review and update Conservation or Drought plan annually as needed.

2. Conservation Oriented Rate Structure

The Corporation has always used an increasing block rate structure for all customers. The Corporation revised rates in the winter of 2017 to encourage water conservation. The rate structure does not include water in the base rate so that customers with minimal usage still pay for water they use. The billing rate structure is evaluated annually. The SHWSC rate structure is included in **Appendix F.**

3. Metering Devices

All services which include residential, industrial, agricultural, and commercial accounts on the SHWSC system are metered.
Master meters at all production wells, pumping stations, and interconnections are calibrated annually in accordance with American Water Works Association.

4. Meter Replacement

Inaccurate metering is one probable cause of unaccounted water, and since meter readings form the basis for data gathering on production, usage and sales, maintaining accurate meters is a high priority. SHWSC has a loan from the Texas Water Development Board and replaced over 5000 meters with smart meters.

Implementation

All old meters have been changed to smart meters. All meters will be read on the same day and compared to Master meters in the system to obtain a more accurate accounting of where our water losses are.
The meter readers have been informed to watch for meters that are leaking on either side and create work orders and or notify the member of the problem if the leak is physically detected. If the meter reader is physically present and a large leak is detected, the meter will be turned off and the customer will be notified immediately.
Dual connections and anything out of the ordinary are to be reported by the meter readers. These reports are followed up by the field services department.
Members questioning or disputing their high water usage are informed on how to check for open lines and regular visual checks of the water meter. Interrogation of the meter may be done to produce a data log report upon request to show the customer when high usage occurred and conservation information is provided. Meters are also tested upon request. All retail meters over the 1.5 to 2 million gallon mark are replaced, tested or calibrated.

Determination of Water Savings

We use a feature in H2O Analytics software that automatically creates water loss reports each month. Once the loss area has been identified we will inform the field service department to research and locate the leak or leaks and repair them.

The corporation will continue weekly meter maintenance by replacing meters that are broken, inoperable or not working properly due to being damaged. Monthly zero usage reports are reviewed and the accounts with abrupt stop in usage are researched.

5. Water Audit and Water Loss

The foundation for control is performing a reliable water audit. The Corporation routinely monitors production rates and consumption. This monitoring is not only used for billing purposes but also to satisfy TCEQ and TWDB regulatory requirements to account for production quantities and individual customer usage on a monthly basis. The results of water meter readings are prepared and analyzed to determine trends of usage, water accountability, and production requirements both near term and future. From this information an evaluation of system operation is made and appropriate action is taken to correct system deficiencies when practical. A form of unaccounted water that rural areas face is the multiple Volunteer Fire Departments using fire hydrants for filling trucks and sometimes for uses that should not be part of the regular fire fighting usage. For instance, filling swimming pools, washing their vehicles and other fund raising activities.

Implementation

The first day of each month the Water Production Manager turns in meter readings of Raw Water reading and the processed water reading. We use these

readings to determine how much water is being lost from the Wells during production and how much is being lost from the Treatment Plant in the process of producing potable water from Surface water. Each month we see if the loss has increased and if so we investigate the processing to determine if leaks have developed, or over flows have occurred, etc. Any identified problems are dealt with immediately. All the customer meters are tied to a billing cycle that is related back to Well Water, Treatment Plant water or CRWA water. We then match the meter readings from the source water to the total billed usage. Using this method will provide us with the percentage of water loss in the areas of our system. Numbers that are above 3% of water loss from each source will be investigated to determine why.

Volunteer fire departments in our area have been asked to sign contracts agreeing to provide us with weekly water usage estimates. Forms have been developed to track the information and are to be faxed or emailed back to SHWSC. Should they not send the results at the end of the month our water loss clerk is responsible for contacting them and getting the information required.

We can also analyze data from the SCADA system to help identify problems that might be developing. A new approach will be to take pressure readings at key points in the system to determine drops in pressure that indicate water loss in a major line. These indicators will have the ability to notify the Field Services and General Manager by a text message.

Schedule
Daily monitoring and monthly update of water loss and usage

Documentation
A water loss report is automatically produced by H2O Analytics and shared with the Board of Directors.
Monthly usage reports are filed by Fire Departments.

6. Leak Detection, Prevention, and Repair

An important element in the operation of an efficient water system is the reduction of water loss. It is the goals of this program to keep the lost water figure under fifteen percent. Unaccounted for water had been averaging approximately twenty three percent. Leaks are detected by visual inspection or through the reports of our members. We highly encourage our members to report leaks so our field service crew can respond as soon as possible to fix the leak as soon as it is reported. We have a team on call 24 hours a day 7 days a week.

Implementation
Currently we are documenting leaks on our maps to identify problem water lines and prioritize these for repair. We then calculate the cost effectiveness of replacing a line due to large amounts of leaks occurring. The location, date reported, locates called in, date permits ordered and date leak has been fixed are recorded in Elements.

With the proceeds from the Texas Water Development Agency and as part of the meter replacement process we check each meter box for the following: customer cut off valve, cross connections, multiple hookups, pressure reduction valves and back flow prevention.

We utilize the H2O Analytics program which allows us notify all customers who are going to be impacted by a leak. We attempt to call and notify customers before we turn off the water whenever possible. At the same time a leak notification message is deployed, all service reps receive a message notifying them of where the leak is and a list of everyone who has been notified.

Schedule
All the new meters have been installed. Meter maintenance will continue by replacing inoperable/broken meters. Leaks on main water lines are repaired as soon as possible and the corporation will continue to monitor areas within the CCN that need pipe line replacement.

Documentation
Monthly water loss report presented to Board each month.
Maps are available online for the County, City, Developers, and Fire Departments etc.
Monthly leak reports available for board including: flushing, fire use, estimated leak loss and unaccounted for loss.

7. Pressure Control

High pressure may cause small openings in a main to leak significantly in a short amount of time. SHWSC maintains pressures of less than 80 psi whenever possible. Storage tanks and interconnects are closely monitored.
A cross connection program is also in place to inspect the system by performing customer service inspections for cross connections and taking steps in preventing back flow which can cause pressure to fall during emergency repairs.

Implementation: As described above.

Schedule
Springs Hill WSC will continue to utilize the established software and practices to minimize water loss. Perform customer service inspections for all new and existing accounts by ensuring that there are no direct connections between the public drinking water supply and a potential source contamination present. Potential threats to the public drinking water supply shall be eliminated at the service connection by the proper installation of an air gap, reduced pressure-zone backflow prevention assembly (RPZ) or a hose bib vacuum breaker. Annual inspection and testing for an RPZ must be done by a certified backflow prevention device tester.

Documentation
Maps

8. Standard Conservation Practices

SHWSC also endorses the following conservation practices:

a. Encourage retrofit of existing fixtures to water saving types.
    1. Shower Heads
    2. Faucet Aerators
    3. Low flush toilets
    4. Toilet flap replacement
    5. Front load washers

b. Adoption and enforcement of the 2000 Uniform Plumbing Code which includes pertinent sections of state law restricting the use of non-water saving fixtures in new construction. The Corporation uses the plumbing code to regulate and conduct plumbing inspections on all residential and commercial installations.

c. Recommend water wise and alternative landscaping which uses less water.
    1. Drip Irrigation
    2. Rain Harvesting
    3. Rain Barrels
    4. Xeriscape
    5. Condensate usage
    6. Gray water usage

d. Encourage irrigation in off peak hours before 8:00 p.m. and before 10:00 a.m. During the night and early morning when demand and evaporation rates are lower. Provide toilet strips to customers so they may check for silent toilet leaks.

CONSERVATION PLAN IMPLEMENTATION

The Board of Directors of SHWSC will adopt this Plan through formal resolution (**Appendix G**) and implement it through direction to the general manager, staff and consultants.

ANNUAL REPORTING AND REVIEW

Sample reports are included in **Appendix C** and Weekly, Monthly and annual check list are included in **Appendix D.**

I. DROUGHT CONTINGENCY PLAN

A. DECLARATION OF POLICY, PURPOSE, AND INTENT

In order to conserve the available water supply and protect the integrity of water supply facilities, with particular regard for domestic water use, sanitation and fire protection, and to protect and preserve public health, welfare and safety, and minimize the adverse impacts of water supply shortage or other water supply emergency conditions, the SHWSC hereby adopts the following regulations and restrictions on the delivery and consumption of water.

Water uses regulated or prohibited under this Drought Contingency Plan (the Plan) are considered to be non-essential and continuation of such uses during times of water shortage or other emergency water supply condition are deemed to constitute a waste of water which subjects the offender(s) to penalties as defined in Section H of this Plan.

B. PUBLIC EDUCATION

SHWSC will periodically provide the public with information about the Plan, including information about the conditions under which each stage of the Plan is to be initiated or terminated and the drought response measures to be implemented in each stage. This information will be provided by means of utility bill inserts, press releases, public notices, newsletters, and on the website at www.springshill.org.

C. COORDINATION WITH REGIONAL WATER PLANNING GROUPS

The service area of SHWSC is located within the South Central Texas Region L water planning area and SHWSC has provided a copy of this Plan to the South Central Texas Region L water planning group. SHWSC will also coordinate with all our water wholesalers using the Triggers found in the GBRA Plan.

D. AUTHORIZATION

The Field Service Manager of SHWSC or staff designee is hereby authorized and directed to implement the applicable provisions of this Plan upon determination that such implementation is necessary to protect public health, safety, and welfare. The general manager shall have the authority to initiate or terminate drought stages or other water supply emergency response measures as described in this Plan.

E. APPLICATION

The provisions of this Plan shall apply to all persons, customers, and property utilizing water provided by SHWSC. The terms "person" and "customer" as used in this Plan include individuals, corporations, partnerships, associations, and all other legal entities.

F. DEFINITIONS

For the purposes of this Plan, the following definitions shall apply:

Aesthetic water use: Water use for ornamental or decorative purposes such as fountains, reflecting pools, and water gardens.
Commercial and institutional water use: Water use, which is integral to the operations of commercial and non-profit establishments, governmental entities, retail establishments, hotels and motels, restaurants and office buildings.
Conservation: Those practices, techniques, and technologies that 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.
Customer: Any person, company, or organization using water supplied by SHWSC.
Domestic water use: Water use for personal needs or for household or sanitary purposes such as drinking, bathing, heating, cooking, sanitation, or for cleaning a residence, business, industry, or institution.
Guadalupe-Blanco River Authority (GBRA): agency that manages the availability of surface water resources from which SHWSC obtains the majority of its water supply. (Lake Placid Water Treatment Plant and CRWA Lake Dunlap Plant)
Industrial water use: The use of water in processes designed to convert materials of lower value into forms having greater usability and value.
Landscape irrigation: Water used for the irrigation and maintenance of landscaped areas, whether publicly or privately owned, including residential /commercial lawns, gardens, golf courses, parks, rights-of-way and medians.
Non-essential water use: Water uses that are not essential or required for the protection of public, health, safety, and welfare, including:

- Irrigation of landscape areas, including parks, athletic fields, and golf courses, except as otherwise provided under this Plan;
- Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle;
- Use of water to wash down any sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
- Use of water to wash down buildings or structures for purposes other than immediate fire protection;
- Flushing gutters or permitting water to run or accumulate in any gutter or street;
- Use of water to fill, refill, or add to any indoor or outdoor swimming pools or Jacuzzi-type pools;
- Use of water in a fountain or pond for aesthetic purposes except where necessary to support aquatic life;
- Failure to repair a controllable leak(s) within a reasonable period after having been given notice;
- Use of water from hydrants for construction purposes or any other purposes other than fire fighting or flushing.

G. Triggering criteria for initiation and termination of drought response stages

Because of Springs Hill dependence on raw water from the Guadalupe Blanco River Authority (GBRA) we will use their Triggers and follow their guidelines on going into Drought response stages. Canyon Reservoir impounds 378,852 acre feet and is 8,200 surface acres. The Conservation Pool is between 800' mean sea level (msl) and elevation of 909, msl. Springs Hill has contract rights through Canyon Regional of 1925 acre feet and 2850 acre feet directly from GBRA at Springs Hill Lake Placid Treatment Plant.

Stage 1 Trigger – Springs Hill stays in at all times in order to practice Conservation of Water Resources when Canyon Lake is at 890' plus msl.

Requirements for Initiation (Stage 1) Mild Water Shortage

Customers shall be requested to voluntarily conserve water and adhere to the prescribed restrictions on certain water uses as defined in this plan in section H.

Requirements for Termination (Stage 1)

The plan may be rescinded when the General Manager feels it is appropriate.

Stage 2 Trigger – Canyon Lake falls to 890' msl or approximately 64% full

Requirements for Initiation (Stage 2) Moderate Water Shortage Conditions

Customers shall be required to comply with the Stage 2 requirements and restrictions on certain non-essential water uses defined in this Plan when Canyon Lake falls to 890'. The goal is to achieve a 10% reduction in use. The restrictions are outlined in section H of the plan.

Requirements for Termination (Stage 2)

Stage 2 of the Plan may be rescinded when the GBRA General Manager, or his designee, determines that the condition listed has ceased to exist for a period of (30) consecutive days. Upon termination of the restrictions of the Stage, the restrictions of the prior Stage become operative.

Stage 3 Trigger – Canyon Lake falls to 885' msl or approximately 56% full

Requirements for Initiation (Stage 3) Severe Water Shortage Condition

Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses for Stage 3 of this Plan when the 885' mark has been reached. The goal is to achieve a 15% reduction in water usage.

Requirements for Termination (Stage 3)

Stage3 of the Plan may be rescinded when the GBRA General Manager, or his designee, determines that the condition listed has ceased to exist for a period of (30) consecutive days. Upon termination of the restrictions of the Stage, the restrictions of the prior Stage become operative.

Stage 4 Trigger – EMERGENCY Water Shortage Conditions

Requirements for Initiation (Stage 4) Emergency Water Shortage Condition

Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses for Stage 4 on this Plan when:

1. Major line breaks, pump, or system failure, which causes unprecedented loss of capability to provide water service.
2. Water system or source is contaminated either accidentally or intentionally. Severe emergency conditions will be declared immediately upon detection.
3. A Drought of greater severity than the Drought of Record occurs.
    a. Drought of at least 24 months
    b. Storage of Canyon Reservoir is less than 885'msl

Requirements for Termination (Stage 4)

Stage 4 of the Plan may be rescinded when the GBRA Board of Directors cancel such a declaration based on the improved condition of Canyon Reservoir.

H. ACTIONS REQUIRED FOR DROUGHT RESPONSE STAGES

The Corporation's field services manager, or his/her designee, shall monitor the GBRA Web site on a daily basis and, in accordance with the triggering criteria set forth in this Plan, shall determine that a mild, moderate, or severe water shortage condition exists and shall implement the following notification procedures:

Notification of the Public

The Corporation's general manager or his/her designee shall notify the public by means of the following methods as appropriate to each condition:

- Publication in a newspaper of general circulation.
- Direct mail to each customer, notes placed in billing envelopes.
- Public service announcements on television or radio, or through signs posted in public places throughout the SHWSC service area.
- Notification through the use of telephone networks to neighborhood associations and other public entities.

- Posting on the SHWSC website www.springshill.org.

The Corporation's general manager or his/her designee shall notify directly, or cause to be notified directly, the following individuals and entities as required:

- Members of the Board of Directors.
- Fire Chiefs and/or County Emergency Management Coordinator(s).
- State Disaster District and/or Department of Public Safety.
- TCEQ (required when mandatory restrictions are imposed).
- Major water users.
- Critical water users, (i.e., hospitals).

Stage 1 Response – MILD Water Demand Conditions

Goal: Achieve a voluntary 5 percent reduction in daily water demand

Supply Management Measures (Stage 1)

SHWSC shall:

- Reduce or discontinue flushing of water mains.
- Notification of customers by mail with suggestions for ways to reduce usage.
- Meter readings reviewed for high usage
- Initiate voluntary water use restrictions.
- Issue warnings as necessary.

Water Use Restrictions (Stage 1)

1. Water customers will be requested to voluntarily limit the irrigation of landscaped areas and non-essential water use as defined in this Plan to twice a week and to irrigate landscapes only between the hours of 8:00 pm and 10 am. Irrigation of landscaped areas is permitted at anytime if it is by means of a hand-held hose or faucet filled bucket of five gallons or less.
2. All operations of the SHWSC shall adhere to water use restrictions prescribed for Stage 1 of the Plan.
3. No washing of parking lots, driveways, sidewalks or streets unless for health or safety reasons.
4. Swimming pools must be at least 25 percent covered by evaporation shields when not in active use.
5.

Stage 2 Response – MODERATE Water Demand Conditions

Goal: Achieve a 10 percent reduction in daily water demand.

Supply Management Measures (Stage 2)

SHWSC shall:

1. Reduce or discontinue flushing of water mains.
2. Notify customers by mail with suggestions for ways to reduce usage.
3. Field personnel to monitor and report excessive usage.
4. Initiate mandatory water use restrictions.
5. Issue warnings and fines as necessary as provided in the tariff rules.
6. Ensure all production equipment is operating at maximum capacity.

Water Use Restrictions (Stage 2)

Under threat of penalty for violation, the following water use restrictions shall apply to all persons:

1. Landscape watering is prohibited except on designated watering days between 8 pm. and 10 am, and is further restricted such that properties with an odd numbered address may landscape water only on Mondays, Wednesdays and Fridays and properties with an even numbered address may landscape water only on Tuesdays, Thursdays and Saturdays. However, landscape watering by means of a bucket, hand-held or soaker hose, or a properly installed drip irrigation system is permitted at any time. This subsection does not apply to reclaimed, recycled or reuse water.
2. Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is prohibited except on designated watering days between the hours of 8:00 pm and 10:00 am. Such washing, when allowed, shall be done with a hand-held bucket or a hand-held hose equipped with a positive shutoff nozzle for quick rinses. Vehicle washing may be done at any time on the immediate premises of a commercial car wash or commercial service station. Further, such washing may be exempted from these regulations if the health, safety, and welfare of the public are contingent upon frequent vehicle cleansing, such as garbage trucks and vehicles used to transport food and perishables.
3. Use of water to fill, refill, or add to any indoor or outdoor swimming pools, wading pools, or spas is prohibited except on designated watering days between the hours of 8:00 pm and 10:00 am.
4. Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system.
5. Use of water from hydrants shall be limited to fire fighting related activities, or other activities necessary to maintain public health, safety and welfare. Use of water from designated fire hydrants for construction purposes may be allowed by special permit from SHWSC.
6. Use of potable water for irrigation of golf course greens and tees, and fairways is prohibited except on designated watering days between the hours of 8:00 pm and 10:00 am. However, if the golf course utilizes a water source other than that provided by SHWSC, or uses reclaimed water the facility shall not be subject to these rules.
7. All restaurants are prohibited from serving water to patrons except upon request of the patron.
8. The following uses of water are defined as non-essential and are prohibited:

a. Use of water to wash down sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas;
b. Use of water to wash down buildings or structures for purposes other than immediate fire protection;
c. Use of water for dust control; unless reclaimed water is used.
d. Flushing gutters or permitting water to run or accumulate on any gutter or street; and
e. Failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s).

Stage 3 Response – SEVERE Water Demand Conditions

Goal: Achieve a 15 percent reduction in daily water demand.

Supply Management Measures (Stage 3)

SHWSC shall:

1. Reduce or discontinue flushing of water mains.
2. Notify customers by mail with suggestions for ways to reduce usage.
3. Field personnel to monitor and report excessive usage.
4. Initiate severe mandatory water use restrictions.
5. Issue warnings and fines as necessary.
6. Prohibit nearly all outside watering unless using recycled water.
7. Prohibit non-essential uses.
8. Ensure all production equipment is operating at maximum capacity.
9. Activate interconnects and purchase water from neighboring utilities if available.

Mandatory Water Use Restrictions (Stage 3)

Under threat of penalty for violation, all requirements of Stage 2 shall remain in effect during Stage 3, but more severe restrictions will apply as follows:

1. Irrigation of landscaped areas is absolutely prohibited unless using recycled water or by means of hand held hose or faucet filled watering can of five gallons or less.
2. The watering of golf course tees is prohibited unless the golf course utilizes a water source other than potable water from SHWSC. Reclaimed water if available may be used.
3. The use of water for construction purposes from designated fire hydrants under special permit will be discontinued. Reclaimed water if available may be used.
4. The use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle not occurring on the premises of a commercial car wash and commercial service stations and not in the immediate interest of public health, safety, and welfare is prohibited. Further, such vehicle washing at commercial car

washes and commercial service stations shall occur only between the hours of 6:00 a.m. and 10:00 a.m. and between 8:00 p.m. and 10:00 p.m.

5. The filling, refilling, or adding of water to swimming pools, wading pools, or spas are prohibited.
6. Operation of any ornamental fountain or pond for aesthetic or scenic purposes is prohibited except where necessary to support aquatic life or where such fountains or ponds are equipped with a recirculation system or use reclaimed water.
7. No application for new, additional, expanded, or increased-in-size water service connections, meters, service lines, pipeline extensions, mains, or water service facilities of any kind shall be approved, and time limits for approval of such applications will be suspended for such time as this drought response stage or more severe restrictions shall be in effect.

Stage 4 Response – SEVERE Water Demand Conditions

Goal: Achieve a 25 percent reduction in daily water demand.

Supply Management Measures (Stage 4)

SHWSC shall:

1. Discontinue flushing water mains.

2. Activate inter-connections and purchase water from neighboring utilities if available.

Water Use Restrictions (Stage 4)

All requirements of Stage 1, 2, and 3 shall remain in effect during Stage 4 except:

1. Irrigation of landscaped areas is absolutely prohibited unless using recycled water or by means of a hand-held hose or faucet filled watering can of five- gallons or less.
2. Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is absolutely prohibited, unless using recycled water.

In the event that water shortage conditions threaten public health, safety, and welfare, the Corporation's general manager is hereby authorized to allocate water according to the following allocation plan:

Single – Family Residential Customers (Emergency Allocations)

The allocation to residential water customers residing in a single-family dwelling shall be as follows:

PERSONS PER HOUSEHOLD	GALLONS PER MONTH
1 or 2	5,000
3 or 4	6,000

5 or 6	7,000
7 or 8	8,000
9 or 10	9,000
11 or more	10,000

"Household" means the residential premises served by the customer's meter. "Persons per Household" includes only those persons currently physically residing at the premises and expected to reside there for the entire billing period. It shall be assumed that a particular customer's household is comprised of two persons unless the customer notifies the Corporation of a greater number of persons per household on a form prescribed by the general manager. The general manager shall give his/her best effort to see that such forms are mailed, otherwise provided, or made available to every residential customer. If, however, a customer does not receive such a form, it shall be the customer's responsibility to go to the Corporation office to complete and sign the form claiming more than two persons per household. New customers may claim more persons per household at the time of applying for water service on the form prescribed by the Corporation. When the number of persons per household increases, so as to place the customer in a different allocation category, the customer may notify SHWSC on such form and the change will be implemented in the next practicable billing period. If the number of persons in a household is reduced, the customer shall notify the Corporation in writing within two weeks. In prescribing the method for claiming more than two persons per household, the Corporation shall adopt methods to insure accuracy of the claim.

Residential water customers shall pay the following surcharges:

5% of base for the first 1,000 gallons over allocation.

8% of base for the second 1,000 gallons over allocation.

10% of base for the third 1,000 gallons over allocation.

25% of base for each additional 1,000 gallons over allocation.

Surcharges shall be cumulative.

Master–Metered Multi-Family Residential Customers (Emergency Allocations)
The allocation to a customer billed from a master meter which jointly measures water to multiple permanent residential dwelling units (e.g., apartments, mobile homes) shall be allocated 5,000 gallons per month for each dwelling unit unless the customer notifies SHWSC of a greater number on a form prescribed by the general manager. The Corporation's general manager shall give his/her best effort to see that such forms are mailed, otherwise provided, or made available to every such customer. If, however, a customer does not receive such a form, it shall be the customer's responsibility to go to the Corporation offices to complete and sign the form claiming more than two dwellings. A dwelling unit may be claimed under this provision whether it is occupied or not. New customers may claim more dwelling units at the time of applying for water service on the form prescribed by the Corporation's general manager. If the number of dwelling units served by a master meter is reduced, the customer shall notify the SHWSC in writing within two weeks. In prescribing the method for claiming more than two dwelling units, the general manager shall adopt methods to insure the accuracy of the claim. Customers billed from a master meter under this provision shall pay the following monthly surcharges:

5% of base for 1,000 gallons over allocation up through 1,000 gallons for each dwelling unit.
8% of base thereafter, for each additional 1,000 gallons over allocation up through a second 1,000 gallons for each dwelling unit.
10% of base thereafter, for each additional 1,000 gallons over allocation up through a third 1,000 gallons for each dwelling unit.
25 % of base thereafter for each additional 1,000 gallons over allocation.

Surcharges shall be cumulative.

Industrial Customers (Emergency Allocations)

A monthly water allocation shall be established by the Corporation's general manager or his/her designee, for each non-residential commercial customer other than an industrial customer who uses water for processing purposes. The non-residential customer's allocation shall be approximately 75% of the customer's usage for the corresponding month's billing period for the previous 12 months. If the customer's billing history is shorter than 12 months, the monthly average for the period for which there is a record shall be used for any monthly period for which no history exists. The Corporation's general manager shall give his/her best effort to see that notice of each non-residential customer's allocation is mailed to such customer. If, however, a customer does not receive such notice, it shall be the customer's responsibility to contact the SHWSC office to determine the allocation. Upon request of the customer or at the initiative of the general manager the allocation may be reduced or increased if, (1) the designated period does not accurately reflect the customer's normal water usage, (2) one nonresidential customer agrees to transfer part of its allocation to another nonresidential customer, or (3) other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the general manager or alternatively, a special water allocation review committee. Non-residential commercial customers shall pay the following surcharges:

Customers whose allocation is 1,000 gallons through 10,000 gallons per month:

5% of base per thousand gallons for the first 1,000 gallons over allocation.

10% of base per thousand gallons for the second 1,000 gallons over allocation.
20% of base per thousand gallons for the third 1,000 gallons over allocation.
25% of base per thousand gallons for each additional 1,000 gallons over allocation.

Customers whose allocation is greater than 10,000 gallons per month or more:

1.2 times the block rate for each 1,000 gallons in excess of the allocation up through 5 percent above allocation.
1.5 times the block rate for each 1,000 gallons from 5 percent through 10 percent above allocation.
1.8 times the block rate for each 1,000 gallons from 10 percent through 15 percent above allocation.

2.0 times the block rate for each 1,000 gallons more than 15 percent above allocation.

The surcharges shall be cumulative. As used herein, "block rate" means the charge to that customer per 1,000 gallons at the regular water rate schedule at the level of the customer's allocation.

Industrial Customers (Emergency Allocations)

A monthly water allocation shall be established by the Corporation's general manager or his/her designee, for each industrial customer, which uses water for processing purposes. The industrial customer's allocation shall be approximately 90% of the customer's water usage baseline. Ninety days after the initial imposition of the allocation for industrial customers, the industrial customer's allocation shall be further reduced to 85% of the customer's water usage baseline. The industrial customer's water use baseline will be computed on the average water use for the 12-month period ending prior to the date of implementation of Stage 2 of the Plan, if the industrial water customer's billing history exists. The general manager shall give his/her best effort to see that notice of each industrial customer's allocation is mailed to such customer. If, however, a customer does not receive such notice, it shall be the customer's responsibility to contact the Corporation to determine the allocation, and the allocation shall be fully effective notwithstanding the lack of receipt of written notice. Upon request of the customer or at the initiative of the Corporation's general manager, the allocation may be reduced or increased: (1) if the designated period does not accurately reflect the customer's normal water use because the customer had shutdown a major processing unit for repair or overhaul during the period, (2) the customer has added or is in the process of adding significant additional processing capacity, (3) the customer has shut down or significantly reduced the production of a major processing unit, (4) the customer has previously implemented significant permanent water conservation measures such that the ability to further reduce water use is limited, (5) the customer agrees to transfer part of its allocation to another industrial customer, or (6) if other objective evidence demonstrates that the designated allocation is inaccurate under present conditions. A customer may appeal an allocation established hereunder to the Corporation's general manager or alternatively, a special water allocation review committee. Industrial customers shall pay the following surcharges:

Customers whose allocation is 1,000 gallons through 10,000 gallons per month:

5% of base per thousand for the first 1,000 gallons over allocation.

10% of base per thousand gallons for the second 1,000 gallons over allocation.
20% of base per thousand gallons for the third 1,000 gallons over allocation.
25% of base per thousand gallons for each additional 1,000 gallons over allocation.

Customers whose allocation is greater than 10,000 gallons per month or more:

1.2 times the block rate for each 1,000 gallons in excess of the allocation up through 5 percent above allocation.

1.5 times the block rate for each 1,000 gallons from 5 percent through 10 percent above allocation.

1.8 Times the block rate for each 1,000 gallons from 10 percent through 15 percent above allocation.

2.0 times the block rate for each 1,000 gallons more than 15 percent above allocation.

The surcharges shall be cumulative. As used herein "block rate" means the charge to the customer per 1,000 gallons at the regular water rate schedule at the level of the customer's allocation.

I. ENFORCEMENT

1. No customer shall allow the use of potable water from SHWSC for residential, commercial, industrial, agricultural, governmental, or any other purpose in a manner contrary to any provision of this Water Conservation and Drought Contingency Plan, or in an amount in excess of that permitted by the drought response stage in effect at the time pursuant to action taken by the general manager, or his/her designee.

2. The customer will be notified by written notice of a violation on its property. After written notice, SHWSC may install a flow restricting device in the service line for the property to limit the amount of water that will pass through the meter during a 24 hour period. SHWSC will charge the customer the actual costs of installing and removing the flow restricting device. After written notice, SHWSC may discontinue service to the customer for a period of 7 days or until the end of the month, whichever is less. SHWSC's reconnection fees will apply to re-establish service.

J. VARIANCES

The Corporation's general manager may, in writing, grant temporary variance for existing water uses otherwise prohibited under this Plan if it is determined that failure to grant such variance would cause a condition adversely affecting the health, sanitation, or fire protection for the public or the person requesting such variance or if one or more of the following conditions are met:

1. Compliance with this Plan cannot be technically accomplished during the duration of the water supply shortage or other condition for which the Plan is in effect.
2. Alternative methods can be implemented which will achieve the same level of reduction in water use.
3. The person or entity requesting the variance can demonstrate that severe financial hardship or property damage will result if the variance is not granted.

Persons requesting an exemption from the provisions of this ordinance shall file a petition for variance with the Corporation's general manager within five days after the Plan or a particular drought response stage has been invoked. The Corporation staff will make every effort to work with customers to establish a satisfactory solution to water use problems. All petitions for

variances shall be reviewed by the Corporation's general manager or his/her designee, and shall include the following:

1. Name and address of the petitioner(s).
2. Purpose of water use.
3. Specific provision(s) of the Plan from which the petitioner is requesting relief.
4. Detailed statement as to how the specific provision of the Plan adversely affects the petitioner or what damage or harm will occur to the petitioner or others if petitioner complies with this Ordinance.
5. Description of the relief requested.
6. Period of time for which the variance is sought.
7. Alternative water use restrictions or other measures the petitioner is taking or proposes to take to meet the intent of this Plan and the compliance date.
8. Other pertinent information.

Variances granted by SHWSC shall be subject to the following conditions, unless waived or modified by the Corporation's general manager or his/her designee:

1. Variances granted shall include a timetable for compliance.
2. Variances granted shall expire when the Plan is no longer in effect, unless the petitioner has failed to meet specified requirements.
3. No variance shall be retroactive or otherwise justify any violation of this plan occurring prior to the issuance of the variance.

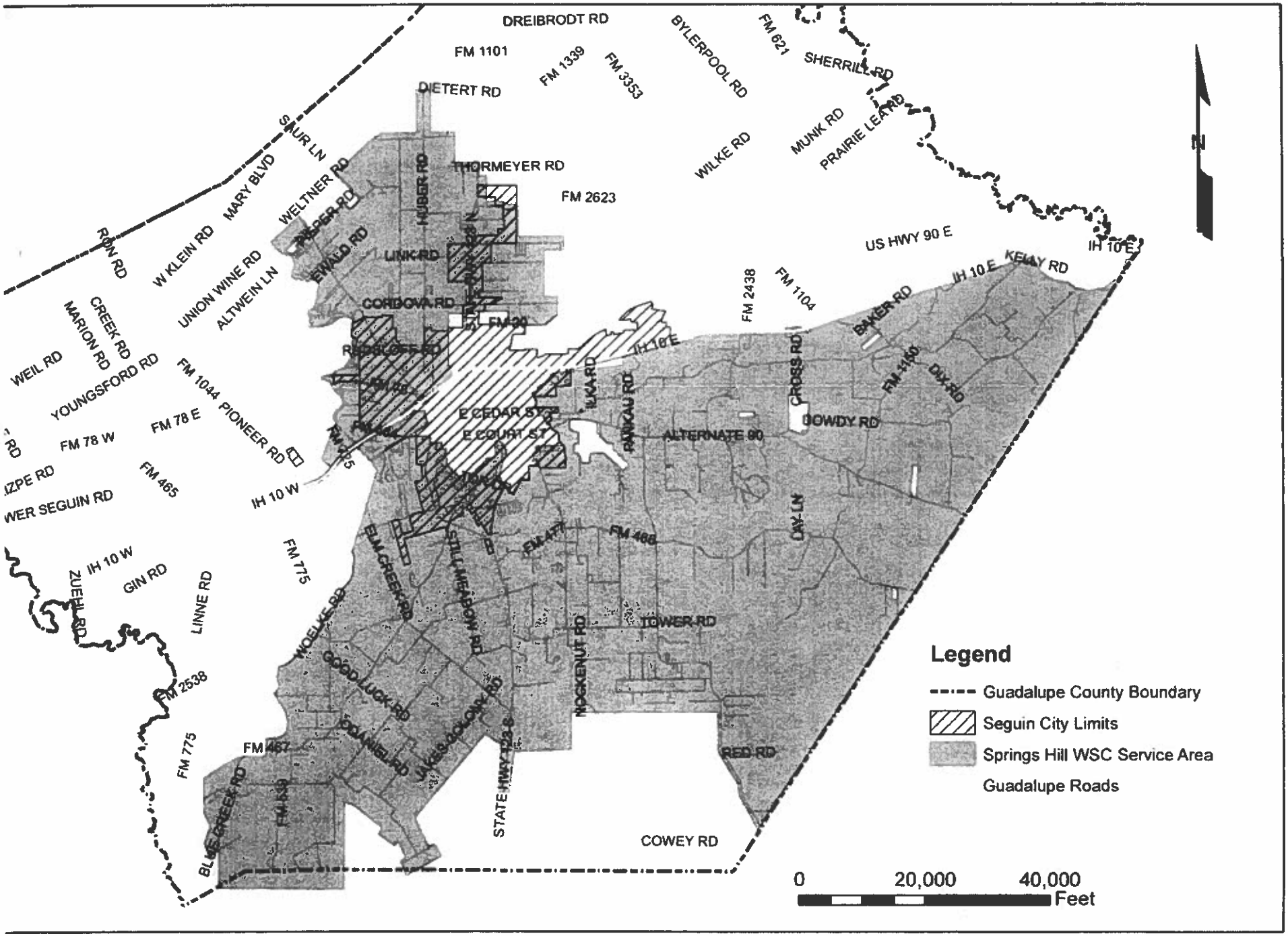
K. SEVERABILITY

It is hereby declared to be the intention of the Board of Directors of SHWSC that the sections, paragraphs, sentences, clauses, and phrases of this Ordinance are severable and, if any phrase, clause, sentence, paragraph, or section of this Plan shall be declared unconstitutional by the valid judgment or decree of any court of competent jurisdiction, such as unconstitutionality shall not affect any of the remaining phrases, clauses, sentences, paragraphs, and sections of this Plan, since the same would not have been enacted by the Board of Directors of SHWSC without the incorporation into this Plan of any such unconstitutional phrase, clause, sentence, paragraph, or section.

Appendix A

SHWSC Service Map

Springs Hill WSC Service Area with City Limits of Seguin



Appendix B

Transmittal Letters

SPRINGS HILL WATER SUPPLY CORP.

P.W.S. ID. NO.
0940022

P.O. BOX 29
8810 S. 123 BYPASS
SEGUIN, TEXAS 78156-0029

Phone: 830-379-7683
Fax: 830-379-0639
Website:
www.springshill.org

December 6, 2019

South Central Texas Regional Water Planning Group
Attn: Suzanne Scott
100 East Guenther Street
San Antonio, TX 78204-1401

RE: Springs Hill WSC Water Conservation and Drought Contingency Plan Submittal

Dear Ms. Scott,

Springs Hill WSC has completely updated its Water Conservation and Drought Contingency Plan. This submittal represents the newest version adopted by the Board of Directors on November 26, 2019 which includes quantifiable 5 and 10 year goals for conservation. This plan has also been filed with TCEQ.

If you need any further information, please contact me at (830) 379-7683.

Sincerely,

Atilano Aguero
General Manager-SHWSC

SPRINGS HILL WATER SUPPLY CORP.

P.W.S. ID. NO.
0940022

P.O. BOX 29
5510 S. 123 BYPASS
SEGUIN, TEXAS 78156-0029

Phone: 830-379-7683
Fax: 830-379-0839
Website:
www.springshill.org

December 6, 2019

Guadalupe-Blanco River Authority
Attn: Kevin Patteson
933 E. Court Street
Seguin, Texas 78155

RE: Springs Hill WSC Water Conservation and Drought Contingency Plan Submittal

Dear Mr. Patteson,

Springs Hill WSC has completely updated its Water Conservation and Drought Contingency Plan. This submittal represents the newest version adopted by the Board of Directors on November 26, 2019 which includes quantifiable 5 and 10 year goals for conservation. This plan has also been filed with TCEQ.

If you need any further information, please contact me at (830) 379-7683.

Sincerely,

Atilano Aguero
General Manager-SHWSC

SPRINGS HILL WATER SUPPLY CORP.

P.W.S. ID. NO.
0940022

P.O. BOX 29
6810 S. 123 BYPASS
SEGUIN, TEXAS 78156-0029

Phone: 830-379-7683
Fax: 830-379-0539
Website:
www.springshill.org

December 6, 2019

Schertz-Seguin Local government Corporation
Attn: Amber Briggs Beard
600 River Drive West
P.O. Box 833
Seguin, Texas 78156-0833

RE: Springs Hill WSC Water Conservation and Drought Contingency Plan Submittal

Dear Ms. Beard,

Springs Hill WSC has completely updated its Water Conservation and Drought Contingency Plan. This submittal represents the newest version adopted by the Board of Directors on November 26, 2019 which includes quantifiable 5 and 10 year goals for conservation. This plan has also been filed with TCEQ.

If you need any further information, please contact me at (830) 379-7683.

Sincerely,

Atilano Aguero
General Manager-SHWSC

SPRINGS HILL WATER SUPPLY CORP.

P.W.S. ID. NO.
0940022

P.O. BOX 29
5810 S. 123 BYPASS
SEGUIN, TEXAS 78156-0029

Phone: 830-379-7683
Fax: 830-379-0539
Website:
www.springshill.org

December 6, 2020

CRWA
Attn: David Davenport
850 Lakeside Pass
New Braunfels, TX 78130-8233

RE: Springs Hill WSC Water Conservation and Drought Contingency Plan Submittal

Dear Mr. Davenport,

Springs Hill WSC has completely updated its Water Conservation and Drought Contingency Plan. This submittal represents the newest version adopted by the Board of Directors on November 26, 2019 which includes quantifiable 5 and 10 year goals for conservation. This plan has also been filed with TCEQ.

If you need any further information, please contact me at (830) 379-7683.

Sincerely,

Atilano Aguero
General Manager-SHWSC

SPRINGS HILL WATER SUPPLY CORP.

P.W.S. ID. NO.
0940022

P.O. BOX 29
8810 S. 123 BYPASS
SEGUIN, TEXAS 78156-0029

Phone: 830-379-7683
Fax: 830-379-0839
Website:
www.springshill.org

December 6, 2019

Crystal Clear WSC
Attn: Mike Taylor
2370 FM 1979
San Marcos, TX 78666

RE: Springs Hill WSC Water Conservation and Drought Contingency Plan Submittal

Dear Mr. Taylor,

Springs Hill WSC has completely updated its Water Conservation and Drought Contingency Plan. This submittal represents the newest version adopted by the Board of Directors on November 26, 2019 which includes quantifiable 5 and 10 year goals for conservation. This plan has also been filed with TCEQ.

If you need any further information, please contact me at (830) 379-7683.

Sincerely,

Atilano Aguero
General Manager-SHWSC

Appendix C

Annual Reports

2014 Consumption Totals

	Commercial			Industrial			Multi-Fam			Institutional-GOVT. ETC			Residential			AGRICULTURAL			Totals	
	Type	Count	Usage	Type	Count	Usage	Type	Count	Usage	Type	Count	Usage	Type	Count	Usage	Type	Count	Usage	Count	Usage
Jan	5/8 to 3"	35	1,155,400	1" to 4"	15	3,022,300	3/4 to 1"	636	2,565,900	2"	19	447,100	3/4 " 5/8	6701	24,130,100	1"	1	20,700	7407	31,341,500
Feb		38	994,700		16	3,228,900		636	2,021,500		19	531,050		6709	33,377,353		1	18,500	7419	40,172,003
March		37	1,083,800		15	4,037,400		636	3,007,900		19	601,500		6685	36,361,572		1	18,800	7393	45,110,972
Apr		36	1,852,300		15	4,627,000		636	3,257,900		19	960,800		6727	43,830,900		1	26,000	7434	54,554,900
May		36	2,165,100		15	5,726,800		636	3,686,700		19	909,800		6740	48,767,533		1	23,700	7447	61,279,633
Jun		36	1,709,700		15	5,744,500		636	3,603,100		19	686,200		6745	43,097,900		1	24,400	7452	54,865,800
Jul		36	4,036,300		15	4,996,200		636	3,852,900		19	612,100		6753	94,051,100		1	37,800	7460	107,586,400
Aug		36	4,435,400		15	7,703,800		636	3,236,100		19	910,400		6813	45,305,700		1	44,700	7520	61,636,100
Sep		37	2,188,600		15	7,768,100		636	3,430,100		19	922,100		6764	42,871,600		1	33,900	7472	57,214,400
Oct		36	1,978,600		15	9,651,250		636	3,681,300		19	710,200		6796	48,416,650		1	27,000	7503	64,465,000
Nov		38	1,967,700		15	5,364,800		636	3,887,700		19	896,100		6785	36,771,800		1	12,600	7494	48,900,700
Dec		35	1,300,600		15	5,478,050		636	5,027,950		19	493,200		6767	36,173,300		1	18,600	7473	48,491,700
																				675,619,108

2015 Consumption Totals

	Commercial			Industrial			Multi-Fam			Institutional-GOVT. ETC			Residential			AGRICULTURAL			Totals	
	Type	Count	Usage	Type	Count	Usage	Type	Count	Usage	Type	Count	Usage	Type	Count	Usage	Type	Count	Usage	Count	Usage
Jan	5/8 to 3"	38	1,218,100	1" to 4"	15	5,972,600	3/4 to 1"	636	3,909,700	2"	19	632,900	3/4 " 5/8	6830	32,650,300	1"	1	14,700	7539	44,398,300
Feb		38	1,136,300		15	3,716,500		636	3,336,700		19	740,500		6828	31,925,700		1	15,100	7537	40,870,800
March		38	1,634,000		16	4,157,100		630	4,136,000		25	667,400		6832	57,329,200		1	20,700	7542	67,944,400
Apr		38	1,232,000		16	4,559,300		630	2,449,900		13	519,800		6840	11,874,900		1	19,000	7538	20,654,900
May		39	1,160,900		15	5,881,700		619	3,618,900		19	551,700		6879	34,603,700		1	28,800	7572	45,845,700
Jun		38	1,192,300		15	5,394,400		610	3,596,800		19	347,000		6951	39,806,000		1	28,600	7634	50,365,100
Jul		40	1,678,000		15	6,146,700		610	4,537,350		19	230,300		6929	61,870,650		1	32,400	7614	74,495,400
Aug		41	2,689,400		15	7,139,200		605	4,198,300		19	395,700		7097	73,329,500		1	36,600	7778	87,788,700
Sep		40	2,001,700		15	6,052,500		599	3,660,100		19	486,400		6972	61,601,500		1	32,300	7646	73,834,500
Oct		40	2,328,300		15	5,591,400		597	3,784,200		19	459,000		6994	52,202,400		1	42,400	7666	64,407,700
Nov		41	1,625,700		15	3,646,260		593	3,744,700		20	1,082,100		6984	33,634,800		1	12,700	7654	43,746,260
Dec		45	1,527,100		15	6,556,040		590	3,056,100		20	481,300		6951	33,809,300		1	17,100	7622	45,446,940
																				659,798,700

2016 Consumption Totals

	Commercial			Industrial			Multi-Fam			Institutional-GOVT. ETC			Residential			AGRICULTURAL			Totals	
	Type	Count	Usage	Type	Count	Usage	Type	Count	Usage	Type	Count	Usage	Type	Count	Usage	Type	Count	Usage	Count	Usage
Jan	5/8 to 3"	40	3,639,000	1" to 4"	15	5,311,000	3/4 to 1"	590	3,559,700	2"	19	467,000	3/4 " 5/8	7010	36,469,100	1"	1	18,800	7675	49,464,600
Feb		41	2,818,950		15	4,291,300		590	3,064,000		19	490,200		7037	35,902,650		1	17,500	7703	46,584,600
March		39	2,028,100		15	5,294,800		590	3,348,100		19	515,400		7070	36,642,300		1	17,000	7734	47,845,700
Apr		40	1,240,200		15	4,975,100		590	4,206,600		19	556,700		7064	37,757,400		1	21,400	7729	48,757,400
May		41	1,993,200		15	4,687,500		590	3,476,300		19	510,000		7091	37,429,900		1	20,300	7757	48,117,200
Jun		40	1,750,200		15	5,163,600		588	3,682,200		19	392,800		7065	46,534,300		1	32,600	7728	57,555,700
Jul		41	2,298,400		15	5,973,100		585	4,262,400		19	574,400		7127	69,241,400		1	38,100	7788	82,387,800
Aug		39	1,572,400		15	5,943,600		581	4,016,600		20	540,400		7123	47,051,200		1	27,500	7779	59,151,700
Sep		37	1,315,900		15	4,617,700		580	3,667,500		20	466,100		7143	39,203,100		1	27,500	7796	49,297,800
Oct		37	2,437,300		15	4,828,100		580	3,805,300		20	623,500		7123	45,743,000		1	25,200	7776	57,462,400
Nov		36	1,215,900		15	4,476,200		580	3,643,000		21	569,500		7122	37,645,500		1	17,400	7775	47,567,500
Dec		36	1,359,200		15	4,020,700		577	3,447,300		20	358,600		7125	34,213,500		1	8,600	7774	43,407,900
																		271,900		637,600,300

2017 Consumption Totals

	Commercial			Industrial			Multi-Fam			Institutional-GOVT. ETC			Residential			AGRICULTURAL			Totals	
	Type	Count	Usage	Type	Count	Usage	Type	Count	Usage	Type	Count	Usage	Type	Count	Usage	Type	Count	Usage	Count	Usage
Jan	5/8 to 3"	40	1,583,000	1" to 4"	15	4,386,700	3/4 to 1"	577	3,754,100	2"	20	529,900	3/4 " 5/8	7212	36,703,500	1"	1	19,700	7865	46,976,900
Feb		41	1,508,700		15	3,737,800		577	3,384,700		20	578,900		7193	33,874,300		1	21,300	7847	43,105,700
March		40	1,428,700		15	4,489,300		577	3,708,900		20	543,100		7263	35,038,700		1	19,300	7916	45,228,000
Apr		40	1,249,600		15	4,616,000		577	3,693,700		20	669,200		7279	39,998,400		1	29,900	7932	50,256,800
May		39	1,439,800		15	4,741,700		577	3,879,300		20	840,000		7314	49,059,274		1	30,200	7966	59,990,274
Jun		40	1,789,400		15	5,484,000		577	3,975,500		20	729,400		7367	53,185,600		1	27,900	8020	65,191,800
Jul		40	1,922,500		15	5,997,800		577	4,856,300		20	1,032,100		7357	73,823,900		1	35,200	8010	87,667,800
Aug		40	2,097,500		15	6,629,900		577	4,355,000		20	936,700		7390	59,165,900		1	28,200	8043	73,213,200
Sep		41	1,475,500		15	5,479,200		577	4,494,000		20	820,800		7405	45,331,900		1	22,200	8059	57,623,600
Oct		43	1,778,326		15	4,606,600		577	4,880,600		20	640,000		7425	44,097,400		1	24,000	8081	56,026,976
Nov		44	1,668,900		15	4,045,400		577	4,398,600		20	602,300		7430	41,558,000		1	15,800	8087	52,289,000
Dec		46	1,690,000		15	2,884,400		580	3,836,500		20	522,100		7431	32,746,900		1	25,300	8093	41,705,200
																				679,275,200

2018 Consumption Totals

	Commercial			Industrial			Multi-Fam			Institutional-GOVT. ETC			Residential			AGRICULTURAL			Totals	
	Type	Count	Usage	Type	Count	Usage	Type	Count	Usage	Type	Count	Usage	Type	Count	Usage	Type	Count	Usage	Count	Usage
Jan	5/8 to 3"	43	1,278,100	1" to 4"	15	3,248,200	3/4 to 1"	580	4,993,800	2"	20	602,300	3/4 * 5/8	7475	39,735,800	1"	1	19,400	8134	49,877,600
Feb		43	1,014,800		15	3,146,400		580	3,688,900		20	674,300		7487	32,546,000		1	10,600	8146	41,081,000
March		44	1,291,000		15	3,103,800		580	3,592,300		20	773,500		7538	39,594,200		1	23,500	8198	48,378,300
Apr		44	1,409,600		15	3,735,900		575	3,663,300		20	551,600		7556	42,218,100		1	21,900	8211	51,600,400
May		45	1,651,000		15	5,407,500		560	3,968,800		20	680,900		7570	54,165,200		1	27,500	8211	65,900,900
Jun		45	2,101,400		15	6,615,400		560	4,054,600		20	724,800		7552	62,680,900		1	33,600	8193	76,210,700
Jul		45	2,332,700		15	9,081,000		540	4,455,900		20	674,500		7607	73,280,200		1	34,400	8228	89,858,700
Aug		45	2,331,700		15	7,229,400		530	4,394,500		20	959,600		7618	73,750,700		1	45,800	8229	88,711,700
Sep		45	2,677,250		15	5,617,600		521	3,439,400		20	696,100		7782	46,880,950		1	19,900	8384	59,331,200
Oct		45	1,658,300		15	5,956,200		515	3,032,000		20	520,900		7608	38,438,300		1	14,700	8204	49,620,400
Nov		45	1,882,800		15	5,231,800		507	3,019,100		21	572,300		7658	34,480,500		1	11,100	8247	45,197,600
Dec		44	1,347,900		15	5,227,400		502	2,928,600		19	460,300		7638	35,893,700		1	10,100	8219	45,868,000
																				711,636,500

Appendix D

Check List

SPRINGS HILL WATER SUPPLY CORP
PO BOX 29
SEGUIN, TX 78156-0029
(830)379-7683 (330)379-0539 FAX

MONTHLY WATER AUDIT WORKSHEET - FOR FIELD SERVICE DEPARTMENT

LIST ESTIMATED NUMBER OF GALLONS LOST

DAY	DESCRIPTION / WO#	MAIN FLUSHING	LEAKS REPAIRS	OTHER METER MALF	TREATMENT PLANT
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
TOTALS					

Appendix E

Examples of Conservation Literature

Appendix F

SHWSC Rate Structure

RATE SCHEDULE

effective March 2017

Standard Residential Meter (5/8 X 3/4")

A. Residential: (R-1) 5/8X3/4"

Demand 20 GPM Basic Charge $38.00. -0- water

0 to 2,500 gallons	$3.75 per thousand
2,501 to 5,000 gallons	$4.25 per thousand
5,001 to 15,000 gallons	$4.50 per thousand
15,001 to 25,000 gallons	$4.75 per thousand
25,001 to 45,000 gallons	$5.25 per thousand
45,001 to 65,000 gallons	$5.50 per thousand
over 65,001 gallons	$6.00 per thousand

Residential: (R-2) 3/4X3/4"

Demand 30 GPM Basic Charge $57.00 -0- water

0 to 2,500 gallons	$3.75 per thousand
2,501 to 5,000 gallons	$4.25 per thousand
5,001 to 15,000 gallons	$4.50 per thousand
15,001 to 25,000 gallons	$4.75 per thousand
25,001 to 45,000 gallons	$5.25 per thousand
45,001 to 65,000 gallons	$5.50 per thousand
over 65,001 gallons	$6.00 per thousand

Commercial Rate (other than standard meter)

A. **Rates:**

1" meter single hookup C-1

Demand 50 GPM Basic Charge $95.00 -0- water

0 to 15,000 gallons	$3.75 per thousand
15,001 to 30,000 gallons	$4.25 per thousand
30,001 to 60,000 gallons	$4.50 per thousand
60,001 to 120,000 gallons	$5.25 per thousand
120,001 and over gallons	$5.50 per thousand

1" meter Multi dwelling/Multi connection demand 50 GPM
For trailer parks & multi- family dwellings number of families per building or number of mobile homes in a mobile home park multiplied by $36.00 for the basic charge. This basic charge includes NO WATER per Equivalent Dwelling Unit (EDU).
Water use fee same as R-1 per dwelling unit

1 ½" meter demand 100 GPM C-2

Basic Charge	$190.00 -0- water
0 to 25,000 gallons	$3.75 per thousand
25,001 to 50,000 gallons	$4.25 per thousand
50,001 to 100,000 gallons	$4.50 per thousand
100,001 to 200,000 gallons	$5.25 per thousand
200,001 and over gallons	$5.50 per thousand

2" meter demand 160 GPM C-3

Basic Charge	$304.00 -0- water
0 to 25,000 gallons	$3.50 per thousand
25,001 to 50,000 gallons	$3.75 per thousand
50,001 to 100,000 gallons	$4.25 per thousand
100,001 to 200,000 gallons	$5.25 per thousand
200,001 and over gallons	$5.50 per thousand

3" meter demand 320 GPM C-4

Basic Charge	$608.00 -0- water
0 to 50,000 gallons	$3.50 per thousand
50,001 to 100,000 gallons	$3.75 per thousand
100,001 to 200,000 gallons	$4.25 per thousand
200,001 to 400,000 gallons	$5.25 per thousand
400,001 and over gallons	$5.50 per thousand

4" meter demand 600 GPM C-5

Basic Charge	$1140.00 -0- water
0 to 500,000 gallons	$3.50 per thousand
500,001 to 1,250,000 gallons	$3.75 per thousand
1,250,001 to 2,000,000 gallons	$4.25 per thousand
2,000,001 to 2,750,000 gallons	$5.25 per thousand
2,750,001 to 3,500,000 gallons	$5.50 per thousand
3,500,001 and over gallons	$6.00 per thousand

Appendix G

Board Resolution

Resolution of the Governing Body of
SPRINGS HILL WATER SUPPLY CORP.

Adoption of the 2020 Water Conservation Plan for 2020 - 2025

Adopted November 26, 2019

Whereas the Board of Directors of Springs Hill Water Supply Corporation ("Springs Hill") desires to adopt the 2020 Water Conservation Plan as required by the Texas Water Development Board and prepared by the General Manager and staff of Springs Hill WSC to set forth goals for the conservation of water and to set the stages and actions to protect us doing periods of drought.

Now, therefore be it resolved by the board of directors of Springs Hill to approve the 2019 Water Conservation Plan and Drought Contingency Plan as presented.

Passed and approved this 26th day of November, 2019.

James Martin
President, Board of Directors

ATTEST:

Bernie Mueller
Secretary, Board of Directors

Appendix H

Utility Profile

Texas Water
Development Board

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

CONTACT INFORMATION

Name of Utility: Springs Hill WSC

Public Water Supply Identification Number (PWS ID): TX0940022

Certificate of Convenience and Necessity (CCN) Number: 10666

Surface Water Right ID Number: 1058-A, 2266-D

Wastewater ID Number:

Contact: First Name: FRANCES Last Name: GARCIA

Title: OFFICE MANAGER

Address: 5510 South 123 Bypass City: Seguin State: TX

Zip Code: 78156 Zip+4: Email: FGARCIA@SPRINGSHILL.ORG

Telephone Number: 8303797683 Date:

Is this person the designated Conservation Coordinator? (●) Yes ( ) No

Regional Water Planning Group: L

Groundwater Conservation District:

Our records indicate that you:

☑ Received financial assistance of $500,000 or more from TWDB

☑ Have 3,300 or more retail connections

☑ Have a surface water right with TCEQ

A. Population and Service Area Data

1. Current service area size in square miles: 300

Attached file(s):

File Name	File Description
CCN_MAP.pdf	CCN

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

2. Historical service area population for the previous five years, starting with the most current year.

Year	Historical Population Served By Retail Water Service	Historical Population Served By Wholesale Water Service	Historical Population Served By Wastewater Water Service
2018	24,420	11,286	0
2017	24,279	10,983	0
2016	23,331	0	0
2015	22,866	1,904	0
2014	24,465	1,904	0

3. Projected service area population for the following decades.

Year	Projected Population Served By Retail Water Service	Projected Population Served By Wholesale Water Service	Projected Population Served By Wastewater Water Service
2020	24,870	13,170	
2030	27,120	22,590	
2040	29,370	32,010	
2050	31,620	41,430	
2060	33,870	50,850	

4. Described source(s)/method(s) for estimating current and projected populations.

Historical population average= 788
788 / 3.5 = 225 connections per year

Historical population wholesale average= 3297
3297 /3.5 = 942 connections per year

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

B. System Input

System input data for the previous five years.
Total System Input = Self-supplied + Imported – Exported

Year	Water Produced in Gallons	Purchased/Imported Water in Gallons	Exported Water in Gallons	Total System Input	Total GPCD
2018	309,448,485	622,682,828	122,525	932,008,788	105
2017	296,353,535	670,898,990	318,586	966,933,939	109
2016	297,432,326	565,813,333	14,402,020	848,843,639	100
2015	439,245,479	535,818,182	82,634,067	892,429,594	107
2014	522,775,063	488,720,266	95,275,950	916,219,379	103
Historic Average	373,050,978	576,786,720	38,550,630	911,287,068	105

C. Water Supply System

1. Designed daily capacity of system in gallons: 5,000,000
2. Storage Capacity
   - 2a. Elevated storage in gallons: 3,200,000
   - 2b. Ground storage in gallons: 983,000

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

D. Projected Demands

1. The estimated water supply requirements for the next ten years using population trends, historical water use, economic growth, etc.

Year	Population	Water Demand (gallons)
2020	25,994	996,220,050
2021	26,781	1,026,381,825
2022	27,568	1,056,543,600
2023	28,355	1,086,705,375
2024	29,142	1,116,867,150
2025	29,929	1,147,028,925
2026	30,716	1,177,190,700
2027	31,503	1,207,352,475
2028	32,290	1,237,514,250
2029	33,077	1,267,676,025

2. Description of source data and how projected water demands were determined.

On average we have 225 connections per year added to our system. 225 connections x 3.5 persons/per household= 787 population.

So I took 787 population and added this each year.

We used 105 GPCD x 25, 994 population = 2,729,370 total gallons/ per day.
Total gallons/ per day 2,729,370 x 365 days = 996,220,050 gallons per year.

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

E. High Volume Customers

1. The annual water use for the five highest volume **RETAIL customers.**

Customer	Water Use Category	Annual Water Use	Treated or Raw
CMC STEEL TEXAS	Commercial	31,747,000	Treated
CATERPILLAR	Commercial	29,584,000	Treated
FAIRWAY MANOR APARTMENTS	Residential	9,981,000	Treated
NAVARRO ISD	Commercial	6,275,600	Treated
STEFAN FILIPIAK	Residential	4,700,400	Treated

2. The annual water use for the five highest volume **WHOLESALE customers.**

Customer	Water Use Category	Annual Water Use	Treated or Raw
CRYSTAL CLEAR WSC	Municipal	1,490,000	Treated

F. Utility Data Comment Section

Additional comments about utility data

Attached file(s):

File Name	File Description
Top 10 2018.pdf	Top 10 Users 2018
Crystal Clear 2018.pdf	Crystal Clear 2018 Wholesale

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

Section II. System Data

A. Retail Water Supplier Connections

1. List of active retail connections by major water use category.

Water Use Category Type	Total Retail Connections (Active + Inactive)	Percent of Total Connections
Residential - Single Family	7,638	92.93 %
Residential - Multi-Family	502	6.11 %
Industrial	15	0.18 %
Commercial	44	0.54 %
Institutional	19	0.23 %
Agricultural	1	0.01 %
Total	8,219	100.00 %

2. Net number of new retail connections by water use category for the previous five years.

	Net Number of New Retail Connections						
Year	**Residential - Single Family**	**Residential - Multi-Family**	**Industrial**	**Commercial**	**Institutional**	**Agricultural**	**Total**
2018	215			3			218
2017	312			2			314
2016	205			3	1		209
2015	218	1		1			220
2014	179			1			180

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

B. Accounting Data

The previous five years' gallons of RETAIL water provided in each major water use category.

Year	Residential - Single Family	Residential - Multi-Family	Industrial	Commercial	Institutional	Agricultural	Total
2018	572,946,900	45,029,100	61,360,400	18,112,100	7,505,100	272,500	705,226,100
2017	545,188,000	49,401,000	57,098,800	16,588,126	8,444,500	289,500	677,009,926
2016	499,997,900	44,834,900	59,582,700	15,403,400	6,064,600	271,900	626,155,400
2015	523,081,200	45,412,600	64,889,100	17,916,400	7,365,400	300,400	658,965,100
2014	532,638,558	44,565,300	63,741,300	114,970,600	8,716,050	306,700	764,938,508

C. Residential Water Use

The previous five years residential GPCD for single family and multi-family units.

Year	Residential - Single Family	Residential - Multi-Family	Total Residential
2018	7,638	502	69
2017	7,431	580	67
2016	7,125	577	64
2015	6,951	590	68
2014	6,767	636	68
Historic Average	7,182	577	67

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

D. Annual and Seasonal Water Use

1. The previous five years' gallons of treated water provided to RETAIL customers.

Month	Total Gallons of Treated Water				
	2018	2017	2016	2015	2014
January	49,877,600	46,976,900	47,980,934	44,398,300	31,341,500
February	45,732,833	43,105,700	45,478,900	40,870,800	40,172,003
March	48,378,300	45,228,000	46,948,700	67,944,400	45,110,972
April	51,600,400	50,256,800	48,105,400	20,654,900	54,554,900
May	65,900,900	59,990,274	47,072,200	45,845,700	61,279,633
June	76,210,700	65,191,800	56,441,200	50,365,100	54,865,800
July	89,308,700	87,667,800	81,123,800	74,495,400	107,586,400
August	87,776,700	73,213,200	57,884,966	87,788,700	61,636,100
September	59,326,200	57,623,600	49,297,800	73,834,500	57,214,400
October	54,272,233	56,026,926	57,462,400	64,407,700	64,465,000
November	45,197,600	52,289,000	47,567,500	43,746,260	48,900,700
December	45,868,000	41,705,200	43,407,600	45,446,940	48,491,700
Total	719,450,166	679,275,200	628,771,400	659,798,700	675,619,108

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

2. The previous five years' gallons of raw water provided to RETAIL customers.

Month	Total Gallons of Raw Water				
	2018	2017	2016	2015	2014
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					
Total					

3. Summary of seasonal and annual water use.

	Summer RETAIL (Treated + Raw)	Total RETAIL (Treated + Raw)
2018	253,296,100	719,450,166
2017	226,072,800	679,275,200
2016	195,449,966	628,771,400
2015	212,649,200	659,798,700
2014	224,088,300	675,619,108
Average in Gallons	222,311,273.20	672,582,914.80

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

E. Water Loss

Water Loss data for the previous five years.

Year	Total Water Loss in Gallons	Water Loss in GPCD	Water Loss as a Percentage
2018	205,824,294	23	22.08 %
2017	288,547,154	33	29.84 %
2016	200,992,619	24	23.68 %
2015	195,591,399	23	21.92 %
2014	139,828,128	16	15.26 %
Average	206,156,719	24	22.56 %

F. Peak Day Use

Average Daily Water Use and Peak Day Water Use for the previous five years.

Year	Average Daily Use (gal)	Peak Day Use (gal)	Ratio (peak/avg)
2018	1,971,096	2753218	1.3968
2017	1,861,027	2457313	1.3204
2016	1,722,661	2124456	1.2332
2015	1,807,667	2311404	1.2787
2014	1,851,011	2435742	1.3159

G. Summary of Historic Water Use

Water Use Category	Historic Average	Percent of Connections	Percent of Water Use
Residential - Single Family	534,770,511	92.93 %	77.90 %
Residential - Multi-Family	45,848,580	6.11 %	6.68 %
Industrial	61,334,460	0.18 %	8.93 %
Commercial	36,598,125	0.54 %	5.33 %
Institutional	7,619,130	0.23 %	1.11 %
Agricultural	288,200	0.01 %	0.04 %

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

H. System Data Comment Section

Section III: Wastewater System Data

A. Wastewater System Data

1. Design capacity of wastewater treatment plant(s) in gallons per day: _____

2. List of active wastewater connections by major water use category.

Water Use Category	Metered	Unmetered	Total Connections	Percent of Total Connections
Municipal			0	0.00 %
Industrial			0	0.00 %
Commercial			0	0.00 %
Institutional			0	0.00 %
Agricultural			0	0.00 %
Total			0	100.00 %

3. Percentage of water serviced by the wastewater system: _____ %

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

4. Number of gallons of wastewater that was treated by the utility for the previous five years.

Month	Total Gallons of Treated Water				
	2018	2017	2016	2015	2014
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					
Total					

5. Could treated wastewater be substituted for potable water?

◯ Yes ◯ No

B. Reuse Data

1. Data by type of recycling and reuse activities implemented during the current reporting period.

Type of Reuse	Total Annual Volume (in gallons)
On-site Irrigation	
Plant wash down	
Chlorination/de-chlorination	
Industrial	
Landscape irrigation (park,golf courses)	
Agricultural	
Discharge to surface water	
Evaporation Pond	
Other	
Total	

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

C. Wastewater System Data Comment

Additional comments and files to support or explain wastewater system data listed below.