

# **CITY OF CASTROVILLE WATER MANAGEMENT PLAN**

**City of Castroville Public Works  
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**PWS 1630005  
RN101391159  
CN600647614**

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## Water Conservation Introduction

Water conservation is not limited to the recurring periods of Texas drought. Conserving water and avoiding water waste are important for the long-term sustainability of the community even in times of abundant rainfall. The City of Castroville recognizes that water is an essential resource for sustaining the growth and vitality of the city, the region and the State of Texas.

The City must provide enough water to meet demand at a reasonable cost while maintaining quality standards to protect public health. We must balance our goals while facing such growing concerns as water availability, population and demand growth, operational and maintenance costs, regulatory requirements, climate and drought, and public service responsibility.

This Plan describes both the city's long-term commitment to conserving water resources for future generations and the need to manage water demands during short-term conditions when water supplies are limited (drought). As part of the plan, the Public Works Director acts as the City's Conservation Coordinator.

The City of Castroville has adopted this Water Conservation Plan and Drought Contingency Plan as a comprehensive set of strategies and regulations on the delivery and consumption of water to conserve the available water supply and to protect the integrity of water supply infrastructure, particularly facilities critical for domestic water supply, sanitation, and fire protection, and to protect and preserve public health, welfare, and safety. It is also the intent of the Plan to minimize the adverse impacts of water supply shortage or other water supply emergency conditions.

The ordinance the City Council adopts shall authorize the City to implement, enforce, and administer the program outlined in this Water Management Plan, to include the Drought Contingency Plan. The scope of authority applies to all persons and premises that obtain water directly or indirectly from the City. The Drought Contingency Plan is included as **Appendix A**.

Recognizing the need for efficient use of existing water supplies, the Texas Commission on Environmental Quality (TCEQ) has developed guidelines and requirements governing the development of water conservation and drought contingency plans for public water suppliers.

The City of Castroville has adopted this Water Conservation Plan and Drought Contingency Plan according to Texas Commission on Environmental Quality (TCEQ) guidelines and requirements and Texas Government Code, Title 30.

## Section 1: Water Utility Profile

The City of Castroville (the City) is located in eastern Medina County, Texas along US 90 approximately 24 miles west of the City of San Antonio, TX. US 90, Farm to Market 471 and Farm to Market 1343 are major roads in the area.

The City's existing water system functions as three systems with one owner and is recognized as such by TCEQ. The three systems are the City of Castroville system, the Medina Valley Water Supply Corporation (WSC) system, and the Castroville Airport. The total water average daily demand for the city is 0.493 MGD. Four groundwater wells serve the three systems. Well water is disinfected locally at each well and seven tanks are connected to the distribution system which are used to maintain system pressure, as

well as provide equalization and emergency storage. The City's distribution system consists of approximately 34 miles of water mains that range from 2-inches to 16-inches. Improvements were made in 2022-2023 to interconnect the City of Castroville and the Medina Valley WSC systems.

The City's current population is approximately 3,913 residents that reside within approximately 1,412 acres. The City is growing within their Certificate of Convenience and Necessity (CCN), which is approximately 10,667 acres. The City has entered a multi-party agreement with four real estate development teams for proposed subdivisions within the City. The proposed developments will expand the city by approximately 1,670 acres with an anticipated population growth of approximately 9,200 residents. Population projections for Castroville, described in the South Texas Regional Water Planning Area's 2021 Regional Water Plan (see Section 7, Important Links), provide a conservative forecast for the City's growth. Based on development in progress and projected development, we believe our population will increase at a more rapid pace.

**Projected Population Growth and Water Demand**

|                          | 2030        | 2040        | 2050        | 2060        | 2070        | 2080        |
|--------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Total Population         | 6,496       | 7,081       | 7,930       | 9,120       | 10,214      | 10,929      |
| Total Demand (gallons)   | 348,542,880 | 361,839,100 | 405,223,000 | 466,032,000 | 521,935,400 | 558,471,900 |
| Total Demand (acre-feet) | 1069.64     | 1110.44     | 1243.58     | 1430.20     | 1601.76     | 1713.89     |
| Total GPCD               | 147         | 140         | 140         | 140         | 140         | 140         |

As the City of Castroville continues to grow, the water system requires analysis to prioritize infrastructure projects to meet the future demands and maintain compliance with TCEQ regulations for capacity and treatment. Improvements in efficiency and water conservation can help the City meet future water demands, but additional plants, line extensions, line upgrades, and other improvements will be necessary to meet the City's ultimate conditions to serve the entire CCN while conserving water. We have engineers assessing our system to provide a comprehensive Water Master Plan to work in conjunction with our Water Management Plan. The Master Plan will identify projected growth and identify new sources of water supply.

## Section 2: Objectives

Over the past few years, Castroville has been exploring our options to reduce water loss and to improve the data used in estimating water loss. We expect water loss to fluctuate annually with weather and demand conditions and improve as a result of improved data collection utilizing smart meters. Overall, this plan was developed to reduce water consumption per user, reduce loss and waste of water and improve the efficiency in the use of water.

We will utilize the City's billing system and the smart meter portal to monitor usage. This data will enable us to provide information on possible leaks that can be remedied quicker than in the past and reduce water loss.

City social media platforms will be key in providing public information on water saving tips and to heighten public awareness of conservation programs such as landscaping to save water.

We completed the required Utility Profile in the online system provided by the Texas Water Development Board (TWDB). This gave us the needed data to establish our goals in conjunction with the regional

water management plan that includes all of Medina County/Castroville. The regional plan recommends with total water use of 140 GPCD (gallons per capita per day) or greater, to develop a goal is to reduce per capita water use by 1 percent per year until 140 GPCD is reached; after which, the goal is to reduce per capita water use by 1/4 percent per year (0.25 percent per year) for the remainder of the planning period. Below are our goals using that guidance.

### **Residential Water Conservation Plan 5- and 10-Year Goals**

| Description             | Historic 5-Yr Average | Baseline | 5-yr Goal (2027) | 10-yr Goal (2032) |
|-------------------------|-----------------------|----------|------------------|-------------------|
| <b>Total GPCD</b>       | 160                   | 160      | 152              | 145               |
| <b>Residential GPCD</b> | 81                    | 81       | 77               | 73                |
| <b>Water Loss GPCD</b>  | 32                    | 32       | 30               | 29                |

We will track this annually to review annual usage and if we are meeting our goals. We will adjust based on real time population growth and water consumption. We estimate we would reach our goal of Total 140 GPCD in the year 2037 based on current population growth projections.

### **Section 3: Accurate Metering**

The City of Castroville uses meters at each wellhead. Each meter has an accuracy of plus or minus one percent. The City's well meters are calibrated on an annual basis in order to maintain the required accuracy and are repaired and/or replaced as needed.

The City will install meter(s) between the City system and Medina Valley WSC to measure water flows through the interconnected line (s).

Water usage for all customers of the City of Castroville, including public and governmental users, is metered.

As part of water conservation, the City of Castroville began replacing all meters with AMI (Advanced Metering Infrastructure) meters in the spring of 2023. These meters will provide important data to assist in the monitoring and management of water usage throughout the City. Once installation is complete, we expect to see a 3% decrease in water loss.

The data available through the meter portal will allow us to monitor and review usage in real time. This will assist in early leak detection, which will reduce water loss. Any meters registering unusual or questionable readings will be reviewed and discussed with the customer to identify the cause of the issue. When necessary, meters will be tested and replaced.

With the smart metering portal, customers can also review and visualize their own water usage over time. In addition to detecting leaks, this can help the customer budget their water use. For example, they can tell exactly how much water they are using to water their lawn, filling a pool or doing their laundry.

### **Section 4: Water Rate Structure**

Castroville uses a tiered fee system which includes a base charge for fixed costs and a variable rate for volume of water consumed. This cost-based rate structure encourages customers to reduce both peak

and overall water usage. We conducted a rate study in 2021 and adopted the recommended rate structure that same year as Ordinance 2022-003. The rate schedule was implemented in October 2022. Below are the rate tables for residential and commercial services. We do not have any wholesale customers, therefore no rates required for this customer type.

|                     |                    | Water Utility Rate Table - RESIDENTIAL |          |          |          |
|---------------------|--------------------|--|----------|----------|----------|
|                     |                    | FY 2023                                | FY 2024  | FY 2025  | FY 2026  |
| Inside City Limits  | Cust. Charge       | \$ 30.00                               | \$ 30.00 | \$ 30.00 | \$ 30.00 |
|                     | 0-5,000 Gal.       | \$ 5.35                                | \$ 5.35  | \$ 5.35  | \$ 5.35  |
|                     | 5,001-10,000 Gal.  | \$ 5.67                                | \$ 5.67  | \$ 5.67  | \$ 5.67  |
|                     | 10,001-20,000 Gal. | \$ 6.20                                | \$ 6.20  | \$ 6.20  | \$ 6.20  |
|                     | 20,001-30,000 Gal. | \$ 6.53                                | \$ 6.53  | \$ 6.53  | \$ 6.53  |
|                     | 30,001-40,000 Gal. | \$ 6.95                                | \$ 6.95  | \$ 6.95  | \$ 6.95  |
|                     | 40,001-50,000 Gal. | \$ 7.18                                | \$ 7.18  | \$ 7.18  | \$ 7.18  |
|                     | Over 50,000 Gal.   | \$ 8.17                                | \$ 8.17  | \$ 8.17  | \$ 8.17  |
| Outside City Limits | Cust. Charge       | \$ 35.00                               | \$ 35.00 | \$ 35.00 | \$ 35.00 |
|                     | 0-5,000 Gal.       | \$ 6.52                                | \$ 6.52  | \$ 6.52  | \$ 6.52  |
|                     | 5,001-10,000 Gal.  | \$ 6.94                                | \$ 6.94  | \$ 6.94  | \$ 6.94  |
|                     | 10,001-20,000 Gal. | \$ 7.60                                | \$ 7.60  | \$ 7.60  | \$ 7.60  |
|                     | 20,001-30,000 Gal. | \$ 8.01                                | \$ 8.01  | \$ 8.01  | \$ 8.01  |
|                     | 30,001-40,000 Gal. | \$ 8.41                                | \$ 8.41  | \$ 8.41  | \$ 8.41  |
|                     | 40,001-50,000 Gal. | \$ 8.82                                | \$ 8.82  | \$ 8.82  | \$ 8.82  |
|                     | Over 50,000 Gal.   | \$ 10.06                               | \$ 10.06 | \$ 10.06 | \$ 10.06 |

|                                |                    | Water Utility Rate Table - COMMERCIAL |          |          |          |
|--------------------------------|--------------------|---------------------------------------|----------|----------|----------|
|                                |                    | FY 2023                               | FY 2024  | FY 2025  | FY 2026  |
| Commercial Inside City Limits  | Cust. Charge       | \$ 40.00                              | \$ 40.00 | \$ 40.00 | \$ 40.00 |
|                                | 0-5,000 Gal.       | \$ 5.43                               | \$ 5.43  | \$ 5.43  | \$ 5.43  |
|                                | 5,001-10,000 Gal.  | \$ 5.77                               | \$ 5.77  | \$ 5.77  | \$ 5.77  |
|                                | 10,001-20,000 Gal. | \$ 6.31                               | \$ 6.31  | \$ 6.31  | \$ 6.31  |
|                                | 20,001-30,000 Gal. | \$ 6.64                               | \$ 6.64  | \$ 6.64  | \$ 6.64  |
|                                | 30,001-40,000 Gal. | \$ 6.97                               | \$ 6.97  | \$ 6.97  | \$ 6.97  |
|                                | 40,001-50,000 Gal. | \$ 7.30                               | \$ 7.30  | \$ 7.30  | \$ 7.30  |
|                                | Over 50,000 Gal.   | \$ 8.31                               | \$ 8.31  | \$ 8.31  | \$ 8.31  |
| Commercial Outside City Limits | Cust. Charge       | \$ 45.00                              | \$ 45.00 | \$ 45.00 | \$ 45.00 |
|                                | 0-5,000 Gal.       | \$ 7.39                               | \$ 7.39  | \$ 7.39  | \$ 7.39  |
|                                | 5,001-10,000 Gal.  | \$ 7.81                               | \$ 7.81  | \$ 7.81  | \$ 7.81  |
|                                | 10,001-20,000 Gal. | \$ 8.49                               | \$ 8.49  | \$ 8.49  | \$ 8.49  |
|                                | 20,001-30,000 Gal. | \$ 8.90                               | \$ 8.90  | \$ 8.90  | \$ 8.90  |
|                                | 30,001-40,000 Gal. | \$ 9.31                               | \$ 9.31  | \$ 9.31  | \$ 9.31  |
|                                | 40,001-50,000 Gal. | \$ 9.73                               | \$ 9.73  | \$ 9.73  | \$ 9.73  |
|                                | Over 50,000 Gal.   | \$ 10.99                              | \$ 10.99 | \$ 10.99 | \$ 10.99 |

## Section 5: Determination and Control of Water Loss

Water loss is the difference between water produced and metered deliveries to customers. Water loss can include several categories:

- Inaccuracies in customer meters (customer meters tend to run more slowly as they age and under-report actual use)
- Losses due to water main breaks and leaks in the water distribution system
- Theft
- Inaccuracies of internal meters (plus or minus 3%); and
- Other unmetered uses

The City of Castroville conducts annual water use surveys and water loss audits in compliance with TWDB requirements and TCEQ regulations. These assist the City in determining how water is used (residential, commercial, institutional), quantity of usage and quantity of water loss. These reports are instrumental in developing processes for managing our water.

Much of the City's water distribution system is aged and increasingly deteriorating. As the integrity of our aging infrastructure decreases, the loss of finished water in the distribution system increases. The loss of integrity in the distribution system is evident by the increasing amounts of reported breaches in distribution systems. The loss of finished water in the distribution system results in direct loss of revenue for the City.

In 2022, the City instituted a proactive annual repair and replace line program to reduce water loss through aged lines. The City Engineer and water department staff assess water lines for frequent leaks and line breaks to determine the lines most in need of repair or replacement.

## Section 6: Public Education and Information Campaign

City social media platforms will be key in providing public information on water saving tips and to heighten public awareness of conservation programs such as landscaping to save water. The continuing public education and information campaign on water conservation for the City of Castroville includes the following elements.

- Promote the city's water conservation measures through city newsletter and social media platforms
- Make water conservation brochures and other water conservation materials available to the public by placing in reception areas of City Hall and Public Works
- Provide information on water conservation online at [Castroville Public Works](#)

## Section 8: Important Links

- 2021 Regional Water Plan – Region L
  - [Region L - 2021 Regional Water Plan: Vol. I](#)
  - [Region L - 2021 Regional Water Plan: Vol. II](#)
- State law with provision for water conservation and drought planning
  - [Texas Administrative Code 30](#)
- Additional Links
  - [Texas Water Development Board Conservation](#)
  - <https://savetexaswater.org/index.html>
  - <https://wateriq.org/index.html>
  - <https://www.epa.gov/greeningepa/water-conservation-epa>

## Appendix A: Drought Contingency Plan

**ORDINANCE NO. 2022-006**

**AN ORDINANCE OF THE CITY COUNCIL AMENDING CASTROVILLE CODE OF ORDINANCES, CHAPTER 110, UTILITIES, ARTICLE VI, AMENDING AND UPDATING THE DROUGHT CONTINGENCY PLAN; PROVIDING A PENALTY CLAUSE PROVIDING THAT VIOLATIONS OF THIS ORDINANCE ARE CLASS C MISDEMEANORS SUBJECT TO FINES NOT TO EXCEED \$2,000.00; PROVIDING REPEALER, CUMULATIVE AND SEVERABILITY CLAUSES; AND ESTABLISHING AN EFFECTIVE DATE.**

**WHEREAS**, the City of Castroville, Texas, recognizes that the amount of water available to the City and its water utility customers is limited and subject to depletion during periods of extended drought or upon failure of major system components; and

**WHEREAS** the City recognizes that natural limitations due to drought conditions and other acts of force majeure cannot guarantee an uninterrupted water supply for all purposes; and

**WHEREAS**, Section 11.1272 of the Texas Water Code and applicable rules of the Texas Commission on Environmental Quality ("TCEQ"), including Title 30, Chapter 288, Subchapters A and B of the Texas Administrative Code require all public water supply systems in Texas to prepare, update and adopt a water conservation and drought contingency plan at a minimum at least every five years; and

**WHEREAS**, the City previously updated and adopted the City's current water conservation and drought contingency plan under Chapter 110, Article VI of the City's Code of Ordinances; and

**WHEREAS**, in accordance with the regulations established by the TCEQ, it is necessary to review, update and adopt an amended water conservation and drought contingency plan; and

**WHEREAS**, as authorized under law, and in the best interests of the citizens of Castroville, Texas, and its customers, the City Council deems it expedient and necessary to establish certain rules and policies for the orderly and efficient management of limited water supplies during drought and other water supply emergencies.

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CASTROVILLE, TEXAS:**

**Section 1:** That the Code of Ordinances, City of Castroville, Texas, Chapter 110, Utilities, Article VI, Drought Contingency Plan, is hereby amended as set forth in Exhibit A attached hereto and incorporated for all purposes.

**Section 2:** That the recitals contain in the preamble hereto are hereby found to be true and such recitals are hereby made a part of this Ordinance for all purposes and are adopted as a part of the judgment and findings of the Council.

**Section 3.** All ordinances of parts of the ordinance in force when the provisions of this Ordinance become effective which are inconsistent or in conflict with the terms and provisions contained in this Ordinance are hereby repealed only to the extent of such conflict.

**Section 4.** Should any part, sentence or phrase of this Ordinance be determined to be unlawful, void or unenforceable, the validity of the remaining portions of this Ordinance shall not be adversely affected. No portion of this Ordinance shall fail or become inoperative by reason of the invalidity of any other part. All provisions of this Ordinance are severable.

**Section 5.** That it is officially found, determined and declared that the meeting at which this Ordinance was adopted was open to the public and public notice of the time, place, and subject matter of the public business to be considered at such meeting, including this ordinance, was given, all as required by Chapter 551, as amended, Texas Government Code.

**Section 6:** This Ordinance shall take effect immediately from and after its passage and any publication requirements.

**PASSED AND APPROVED** this 22<sup>nd</sup> day of February, 2022.

**CITY OF CASTROVILLE**



**DARRIN SCHROEDER**  
**MAYOR**

**ATTEST:**



**DEBRA HOWE**  
**CITY SECRETARY**

## ARTICLE VI. - DROUGHT CONTINGENCY PLAN

### Sec. 110-141. - 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 city hereby adopts the following regulations and restrictions on the delivery and consumption of water through an ordinance.

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 110-151 of this plan.

### Sec. 110-142. - Public involvement.

Opportunity for the public to provide input into the preparation of the plan was provided by the City of Castroville, Texas ("city") by means of a public notice of a public meeting, which was held on February 22, 2022. Additionally, the public is always invited to attend the city council meetings to ask questions about the plan and its implementation.

### Sec. 110-143. - Public education.

The city 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 public meetings, press releases to newspapers serving the area, periodic utility bill inserts, monthly newsletter articles, and placement on the city's website.

### Sec. 110-144. - Coordination with regional water planning groups.

The service area of the city is located within the South Central Texas Regional Water Planning Area and the city has provided a copy of this plan to South Central Texas Regional Water Planning Area.

### Sec. 110-145. - Authorization.

The city administrator, or his/her 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 city administrator or his/her designee shall have the authority to initiate or terminate drought or other water supply emergency response measures as described in this plan.

### Sec. 110-146. - Application.

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

### Sec. 110-147. - 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.

*City:* The City of Castroville, Texas.

*Commercial and institutional water use:* Water use which is integral to the operations of commercial and non-profit establishments and governmental entities such as 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 so that a supply is conserved and made available for future or alternative uses.

*Customer:* Any person, company, or organization using water supplied by the city.

*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.

*Even number address:* Street addresses, box numbers, or rural postal route numbers ending in 0, 2, 4, 6, or 8 and locations without addresses.

*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 use:* Water used for the irrigation and maintenance of landscaped areas, whether publicly or privately owned, including residential and commercial lawns, gardens, golf courses, parks, and rights-of-way and medians.

*Non-essential water use:* Water uses that are not essential nor required for the protection of public, health, safety, and welfare, including:

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

*Odd numbered address:* Street addresses, box numbers, or rural postal route numbers ending in 1, 3, 5, 7, or 9.

Sec. 110-148. - Criteria for initiation and termination of drought response stages.

The city administrator or his/her designee shall monitor water supply and/or demand conditions on a weekly basis and shall determine when conditions warrant initiation or termination of each stage of the plan, that is, when the specified "triggers" are reached. During especially dry periods, the city administrator or his/her designee may monitor water supply and/or demand conditions on a daily basis and determine when conditions warrant initiation or termination of a stage of the plan.

Public notification of the initiation or termination of drought response stages shall be by means of City's emergency notification program, social media, and with signs posted in public places. Further, the notice shall be posted at City Hall and on the city's web page.

The triggering criteria described below are based on guidelines adopted by the San Antonio Water System ("SAWS") and the implementation and termination of the stages by the Edwards Aquifer Authority ("EAA") based upon reported water levels in the San Antonio Pool.

(1) *Year-round.*

- a. *Requirements for initiation.* Year-round watering restrictions are in effect when the aquifer level is above 660 feet mean sea level as determined by EAA at the monitored well for 15 consecutive days.
- b. *Requirements for termination.* Year-round water restrictions continue until there is an announcement by EAA that Stage 1 is triggered.
- c. Year-round watering rules are in effect when the City of Castroville is NOT under any specific drought restrictions
  1. Under year-round watering rules, all fountains – whether commercial or residential (indoor or outdoor) are allowed.
  2. Landscape watering with an irrigation system or sprinkler is permitted any day of the week before 11 a.m. or after 7 p.m.
  3. Hand watering with a hand-held hose, drip irrigation, soaker hose or bucket is permitted any time of day.
  4. Washing impervious cover such as parking lots, driveways, streets or sidewalks is permitted without runoff to avoid water waste.
  5. Water waste is prohibited at all times. Allowing water to run off into a gutter, ditch, or drain or failing to repair a controllable leak is considered water waste.
  6. Residential, commercial, industrial and agricultural Edwards Aquifer water users should use common sense and best practices to avoid water waste.
  7. The use of commercial vehicle wash facilities is permitted any day.

\* NOTE: The use of treated wastewater or recycled water is a defense to prosecution under these rules.

(2) *Stage 1 Triggers—Mild water shortage conditions.*

- a. *Requirements for initiation.* Customers shall be requested to ~~voluntarily~~ conserve water and adhere to the prescribed restrictions on certain water uses, defined in section 110-147 of this plan, when the ten-day rolling average of the Edwards Aquifer level drops to 660 feet mean sea level at the monitored well.
- b. *Requirements for termination.* Stage 1 of the plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 15 consecutive days or notification by Edwards Aquifer Authority that Stage 1 restrictions are terminated or that Stage 2 is in effect. Upon termination of Stage 1, year-round becomes operative.

(3) *Stage 2 Triggers—Moderate water shortage conditions.*

- a. *Requirements for initiation.* Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses provided in section 110-149 of this plan when the ten-day rolling average of the Edwards Aquifer level reaches 650 feet mean sea level at the monitored well.
- b. *Requirements for termination.* Stage 2 of the plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 15 consecutive days or notification by Edwards Aquifer Authority that Stage 2 restrictions are terminated or that Stage 3 is in effect. Upon termination of Stage 2, Stage 1 becomes operative.

(4) *Stage 3 Triggers—Severe water shortage conditions.*

- a. *Requirements for initiation.* Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses for Stage 3 provided in section 110-149 of this plan when ten-day rolling average of the Edwards Aquifer level drops to 640 feet mean sea level at the monitored well.
- b. *Requirements for termination.* Stage 3 of the plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 15 consecutive days or notification by Edwards Aquifer Authority that Stage 3 restrictions are terminated or that Stage 4 is in effect. Upon termination of Stage 3, Stage 2 becomes operative.

(5) *Stage 4 Triggers—Extreme water shortage conditions.*

- a. Requirements for initiation. Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses for Stage 4 provided in section 110-149 of this plan when ten-day rolling average of the Edwards Aquifer level drops to 630 feet mean sea level at the monitored well.
- b. *Requirements for termination.* Stage 4 of the plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 15 consecutive days or notification by Edwards Aquifer Authority that Stage 4 restrictions are terminated or that Stage 5 is in effect. Upon termination of Stage 4, Stage 3 becomes operative.

(6) *Stage 5 Triggers—Critical water shortage conditions.*

- a. *Requirements for initiation.* Customers shall be required to comply with the requirements and restrictions on certain non-essential water uses for Stage 5 provided in section 110-149 of this plan when ten-day rolling average of the Edwards Aquifer level drops to 625 feet mean sea level at the monitored well.
- b. *Requirements for termination.* Stage 5 of the plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of 15 consecutive days or notification by Edwards Aquifer Authority that Stage 5 restrictions are terminated. Upon termination of Stage 5, Stage 4 becomes operative.

(Ord. No. 2009-013, § 2(Exh. A, § VIII), 8-24-09; Ord. No. 2013-006, § 1, 4-9-13)

Sec. 110-149. - Drought response stages.

The city administrator, or his/her designee, shall monitor water supply and/or demand conditions on a daily basis and, in accordance with the triggering criteria set forth in section 110-148 of this plan, shall determine that a mild, moderate, severe, critical, emergency or water shortage condition exists and shall implement the following notification procedures:

(1) *Notification.*

- a. *Notification of the public:* The city administrator or his/ her designee shall notify the public by means of the, City's emergency notification program, social media, and posting at City Hall and placement of the information on the city's website.
- b. *Additional notification:* The city administrator or his/ her designee shall notify directly, or cause to be notified directly, the following individuals and entities when required under the plan:
  1. Mayor/chairman and members of the city council—At each declaration.
  2. Police chief/fire chief—At each declaration.
  3. County emergency management coordinator(s)—When mandatory restrictions are imposed.
  4. Critical water users, i.e. hospitals, critical care facilities—when mandatory restrictions are imposed.

(2) *Stage 1 Response—Mild water shortage conditions.*

- a. *Target:* Achieve a 20 percent reduction in total water use.
- b. *Mandatory water use restrictions for reducing demand:*
  1. Landscape watering with an irrigation system, or sprinkler or soaker hose is allowed only once a week, before 11 a.m. and after 7 p.m. on your designated water day. For addresses ending in 0 or 1, the designated day is Monday. Addresses ending in 2 or 3 have a designation of Tuesday. Addresses ending in 4 or 5 have a designation of Wednesday. Addresses ending in 6 or 7 have a designation of Thursday. Addresses ending in 8 or 9 have a designation of Friday. No watering on weekends with a sprinkler or irrigation system.
  2. Watering days begin and end at midnight; overnight watering is not allowed.
  3. Hand watering with a hand-held hose, soaker hose, drip irrigation, bucket or water can is permitted any time and any day.
  4. Use of grey water is allowed at any time.
  5. The use of commercial car wash facilities is allowed any day.
  6. Residential car washing allowed during drought once per week on your designated watering day, Saturday or Sunday as long as there is no water waste.
  7. Washing impervious cover such as parking lots, driveways, streets, or sidewalks is prohibited. Health and safety exceptions to this rule may be requested from the City in writing.
  8. All non-public swimming pools must have a minimum of 25 percent of the surface covered with evaporation screens when not in use. Inflatable pool toys or floating decorations may be used.
  9. Landscape areas on golf courses not directly "in play" are required to follow on-day-per-week watering based on address unless otherwise instructed by the city.
  10. Operators of golf courses, athletic fields and parks must submit a conservation plan to the city. For submittal requirements, operators should contact the city administrator.
  11. All residential fountains and indoor commercial fountains can operate at any stage of drought. Outdoor commercial fountains must have a city variance in order to operate during drought stages 1—65.
  12. **Water waste is prohibited at all times.** Water waste includes allowing water to run off into gutter, ditch or drain; or failing to repair a controllable leak
  13. Reduce water consumption/usage by any means available.

(3) *Stage 2 Response—Moderate water shortage conditions.*

- a. *Target:* Achieve a 30 percent reduction total water usage.
- b. *Water use restrictions for demand reduction:* Under threat of penalty for violation, the following water use restrictions shall apply to all persons:
  1. All restrictions from Stage 1 remain in effect unless added to or replaced by Stage 2.
  2. Landscape watering with an irrigation system, sprinkler or soaker hose is allowed only once a week from 7-11 a.m. and 7-11 p.m. on your designated watering day, as determined by your address. No watering on weekends with a sprinkler or irrigation system.
  3. Watering with a drip irrigation is permitted any day, but only between 7-11 a.m. and 7-11 p.m.

4. Watering with a hand-held hose or bucket is allowed any time on any day.
5. Use of grey water is allowed at any time.
6. Hotels, motels and other lodging must offer and clearly notify guests of a "linen/towel change on request only" program.
7. Use of water from hydrants shall be limited to firefighting related activities, or other activities necessary to maintain public health, safety, and welfare, except that use of water from designated fire hydrants for construction purposes may be allowed under special permit from the city.

8. All restaurants may prohibit the serving of water to patrons except upon request of the patron.

(4) *Stage 3 Response—Severe water shortage conditions.*

- a. *Target:* Achieve a 35 percent reduction in total water use.
- b. *Water use restrictions for demand reduction:* All restrictions from Stage 1 and Stage 2 remain in effect, unless added to or replaced by Stage 3 rules.
  1. Landscape watering allowed only **every other week** with an irrigation system, sprinkler or soaker hose from 7:00 a.m. -11:00 a.m. and 7:00 p.m. – 11:00 p.m. on your designated watering day, as determined by your address. Weeks when no watering is allowed will be announced via local media, social media and City website.
  2. Watering with drip irrigation is permitted every Monday, Wednesday, and Friday, but only between 7 a.m. -11 a.m. and 7 p.m. – 11 p.m
  3. Watering with a hand-held hose, bucket or watering can is allowed any time on any day.
  4. Washing impervious cover such as parking lots, driveways, streets or sidewalks is prohibited. Health and safety exceptions may be requested from the city administrator or his/her designee.
  5. All non-public swimming pools must have a minimum of 25 percent of the surface are covered when not in use. Inflatable pool toys or floating decorations may be used for this purpose.
  6. Residential car washing allowed during drought once per week on Saturday or Sunday as long as there is no water waste. No street run-off allowed.
  7. Use of grey water is allowed at any time.
  8. Hotels, motels and other lodging facilities must limit linen/towel changes to once every three nights, except for health and safety.
  9. The use of water for construction purposes from designated fire hydrants under special permit is to be discontinued.

(5) *Stage 4 Response—Extreme water shortage conditions.*

- a. *Target:* Achieve a 40 percent reduction in total water use.
- b. *Water use restrictions for reducing demand:* All requirements of Stage 1, 2 and 3 shall remain in effect during Stage 4 with the following additional restrictions:
  1. 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 for immediate usage. Approval of such applications will be reviewed on an individual basis, but the city shall not be required to approve such application during such time as the drought response stage or higher-numbered stage shall be in effect. Any time limits for approval of such applications are hereby suspended for such time as this drought response stage or higher-numbered stage shall be in effect.

2. The filling, refilling, or adding of water to swimming pools, wading pools, and Jacuzzi-type pools is prohibited, unless such pool is equipped with a filtration system which requires such pool to maintain a constant level for proper operation.
3. *Reserved.*
4. Use of grey water is allowed at any time.

(6) *Stage 5 Response—Critical water shortage conditions.*

- a. *Target:* Achieve a 44 percent reduction in total water use.
- b. *Water use restrictions for reducing demand:* All requirements of Stage 1, 2, 3, and 4 shall remain in effect during Stage 5 with the following additional restrictions:
  1. *Reserved.*
  2. At this stage, Stage 3 landscape irrigation restrictions remain in effect.
  3. Use of grey water is allowed at any time.

Sec. 110-150. - Plan review and update.

The city will review and update the plan as appropriate based on an assessment of the five- and ten-year goals, as well as whenever the plans for SAWS and EAA are updated. At a minimum, the plan will be updated every five years.

Sec. 110-151. - Enforcement.

- (a) No person shall knowingly or intentionally allow the use of water from the city for residential, commercial, industrial, agricultural, governmental, or any other purpose in a manner contrary to any provision of this 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 city administrator or his/her designee, in accordance with provisions of this plan.
- (b) Any person who violates this plan is guilty of a misdemeanor and, upon conviction shall be punished by a fine of not less than \$200.00 and not more than \$2,000.00. Each day that one or more of the provisions in this plan is violated shall constitute a separate offense. If a person is convicted of three or more distinct violations of this plan, the city administrator shall, upon due notice to the customer, be authorized to discontinue water service to the premises where such violations occur. Services discontinued under such circumstances shall be restored only upon payment of a re-connection charge, hereby established at \$50.00, and any other costs incurred by the city in discontinuing service. In addition, suitable assurance must be given to the city administrator that the same action shall not be repeated while the plan is in effect. Compliance with this plan may also be sought through injunctive relief in the district court.
- (c) Any person, including a person classified as a water customer of the city, in apparent control of the property where a violation occurs or originates shall be presumed to be the violator, and proof that the violation occurred on the person's property shall constitute a rebuttable presumption that the person in apparent control of the property committed the violation, but any such person shall have the right to show that he/she did not commit the violation. Parents shall be presumed to be responsible for violations of their minor children and proof that a violation, committed by a child, occurred on property within the parent's control shall constitute a rebuttable presumption that the parent committed the violation, but any such parent may be excused if he/she proves that he/she had previously directed the child not to use the water as it was used in violation of this plan and that the parent could not have reasonably known of the violation.
- (d) The city's police officer, code enforcement officer, or other city employee designated by the city administrator may issue a citation to a person he/she reasonably believes to be in violation of this article. The citation shall be prepared in duplicate and shall contain the name and address of the alleged violator, if known, the offense charged, and shall direct him/her to appear in the municipal court on the date shown on the citation. The alleged violator shall be served a copy of the citation. Service

of the citation shall be complete upon delivery of the citation to the alleged violator, to an agent or employee of a violator, or to a person over 14 years of age who is a member of the violator's immediate family or is a resident of the violator's residence. The alleged violator shall appear in municipal court to enter a plea of guilty or not guilty for the violation of this plan. If the alleged violator fails to appear in municipal court, a warrant for his/her arrest may be issued. A summons to appear may be issued in lieu of an arrest warrant. These cases shall be expedited and given preferential setting in municipal court before all other cases.

Sec. 110-152. - Variances.

- (a) The city administrator, or his/her designee, 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 an emergency condition adversely affecting the health, sanitation, or fire protection for the public or the person requesting such variance and 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.
- (b) Persons requesting an exemption from the provisions of this article shall file a petition for variance with the city within five days after the plan or a particular drought response stage has been invoked. All petitions for variances shall be reviewed by the city administrator, 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 article.
  - (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.
- (c) Variances granted by the city administrator or his/her designee may be subject to conditions which shall be set forth in the variance. Should the city administrator or his/her designee deny a variance, the person requesting the variance may appeal such a denial to the city council.

Secs. 110-153—110-170. - Reserved.

## Appendix B: Utility Profile

## UTILITY PROFILE FOR RETAIL WATER SUPPLIER

### CONTACT INFORMATION

|  |                     |                                |             |        |                               |
|--|---------------------|--------------------------------|-------------|--------|-------------------------------|
| Name of Utility:   | CITY OF CASTROVILLE |                                |             |        |                               |
| Public Water Supply Identification Number (PWS ID):          | TX1630005           |                                |             |        |                               |
| Certificate of Convenience and Necessity (CCN) Number: 10218 |                     |                                |             |        |                               |
| Surface Water Right ID Number:                               |                     |                                |             |        |                               |
| Wastewater ID Number:  | 20080               |                                |             |        |                               |
| Contact:   | First Name:         | Katherine                      | Last Name:  | Adams  |                               |
|  | Title:              | Technical Services Coordinator |             |        |                               |
| Address:   | 703 Paris           | City:                          | Castroville | State: | TX                            |
| Zip Code:  | 78009               | Zip+4:                         |             | Email: | kathy.adams@castrovilletx.gov |
| Telephone Number:  | 8309314090          | Date:                          | 6/23/2023   |        |                               |

Is this person the designated Conservation Coordinator?

Yes  No

|                          |                              |                          |              |
|--------------------------|------------------------------|--------------------------|--------------|
| Coordinator: First Name: | Gomez                        | Last Name:               | John         |
|                          | Title:                       | Director of Public Works |              |
| Address:                 | 703 Paris St                 | City:                    | Castroville  |
| Zip Code:                | 78009                        | Telephone Number:        | 830-931-4090 |
| Email:                   | john.gomez@castrovilletx.gov |                          |              |

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: 37

## UTILITY PROFILE FOR RETAIL WATER SUPPLIER

Attached file(s):

| File Name             | File Description |
|-----------------------|------------------|
| METER READING MAP.pdf |                  |

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 |
|------|--|---|--|
| 2022 | 3,913  | 0   | 3,547  |
| 2021 | 3,836  | 0   | 3,535  |
| 2020 | 3,149  | 0   | 3,122  |
| 2019 | 3,127  | 0   | 3,076  |
| 2018 | 2,977  | 0   | 2,941  |

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 |
|------|---|--|---|
| 2030 | 6,496   | 0  | 5,846   |
| 2040 | 7,081   | 0  | 6,373   |
| 2050 | 7,930   | 0  | 7,137   |
| 2060 | 9,120   | 0  | 8,208   |
| 2070 | 10,214  | 0  | 9,193   |

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

We began with the population used for 2022 for our other TWDB reports to project population growth. We have two platted development projects that have begun construction. We have six others that have signed a development agreement and with lots in the city plus more in our ETJ we are on the cusp of large population growth. If the existing two and two of the others in development build as planned, then our population will be 6,496 by 2030 with growth continuing at between 9% and 15% over the next 50 years.

Attached file(s):

| File Name                         | File Description |
|-----------------------------------|------------------|
| Population Growth Projections.pdf |                  |

## 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 |
|-------------------------|---------------------------|-------------------------------------|---------------------------|--------------------|------------|
| <b>2022</b>             | 207,353,061               | 0                                   | 0                         | 207,353,061        | 145        |
| <b>2021</b>             | 185,551,020               | 0                                   | 0                         | 185,551,020        | 133        |
| <b>2020</b>             | 215,466,327               | 0                                   | 0                         | 215,466,327        | 187        |
| <b>2019</b>             | 191,348,980               | 0                                   | 0                         | 191,348,980        | 168        |
| <b>2018</b>             | 181,045,918               | 0                                   | 0                         | 181,045,918        | 167        |
| <b>Historic Average</b> | 196,153,061               | 0                                   | 0                         | 196,153,061        | 160        |

## C. Water Supply System

**Attached file(s):**

| File Name                         | File Description                   |
|-----------------------------------|------------------------------------|
| City of Castroville Schematic.pdf | castroville water system schematic |

1. Designed daily capacity of system in gallons 2,692,800

## 2. Storage Capacity

2a. Elevated storage in gallons:

2b. Ground storage in gallons: 550,000

## 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) |
|------|------------|------------------------|
| 2024 | 4,129      | 248,669,000            |
| 2025 | 4,354      | 262,220,000            |
| 2026 | 4,606      | 277,396,000            |
| 2027 | 4,981      | 299,981,000            |
| 2028 | 5,446      | 327,985,000            |
| 2029 | 5,971      | 359,603,000            |
| 2030 | 6,496      | 391,222,000            |
| 2031 | 6,559      | 395,016,000            |
| 2032 | 6,616      | 398,449,000            |
| 2033 | 6,676      | 402,062,000            |

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

We expect growth to be aggressive at first then taper off after about 2030 then pick back up. We averaged our GCPD to use for determining water demand.

Attached file(s):

| File Name             | File Description         |
|-----------------------|--------------------------|
| Projected Demands.pdf | water demand projections |

## 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 |
|------------------------------|--------------------|------------------|----------------|
| Pumphousr #5                 | Commercial         | 5,422,000        | Treated        |
| WAL-MART                     | Commercial         | 3,773,000        | Treated        |
| Medina Valley Health & Rehab | Commercial         | 3,506,000        | Treated        |
| Hidden View RV Park          | Residential        | 2,291,000        | Treated        |
| Brenda Decock Hoffman        | Residential        | 1,948,000        | Treated        |

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

| Customer | Water Use Category | Annual Water Use | Treated or Raw |
|----------|--------------------|------------------|----------------|
|          |                    |                  |                |

### F. Utility Data Comment Section

Additional comments about utility data.

Pulled report from INCODE billing system of top users.

Attached file(s):

| File Name                             | File Description           |
|---------------------------------------|----------------------------|
| US Customer Ranking Report - 9683.pdf | incode report of top users |

## 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 | 1,170  | 60.91 %                      |
| Residential - Multi-Family  | 247  | 12.86 %                      |
| Industrial                  | 0  | 0.00 %                       |
| Commercial                  | 312  | 16.24 %                      |
| Institutional               | 192  | 9.99 %                       |
| Agricultural                | 0  | 0.00 %                       |
| <b>Total</b>                | <b>1,921</b>                                 | <b>100.00 %</b>              |

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

| Year | Net Number of New Retail Connections |                            |            |            |               |              |       |
|------|--------------------------------------|----------------------------|------------|------------|---------------|--------------|-------|
|      | Residential - Single Family          | Residential - Multi-Family | Industrial | Commercial | Institutional | Agricultural | Total |
| 2022 | 5                                    |                            |            |            |               |              | 5     |
| 2021 | 3                                    |                            |            | 1          | 2             |              | 6     |
| 2020 | 6                                    |                            |            | 3          | 1             |              | 10    |
| 2019 | 7                                    |                            |            | 2          |               |              | 9     |
| 2018 | 7                                    |                            |            |            |               |              | 7     |

## 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       |
|-------------|-----------------------------|----------------------------|------------|------------|---------------|--------------|-------------|
| <b>2022</b> | 99,664,000                  | 6,981,000                  | 0          | 40,317,000 | 8,491,000     | 0            | 155,453,000 |
| <b>2021</b> | 88,704,000                  | 6,046,000                  | 0          | 34,569,000 | 9,570,000     | 0            | 138,889,000 |
| <b>2020</b> | 103,889,000                 | 5,940,000                  | 0          | 46,923,000 | 13,404,000    | 0            | 170,156,000 |
| <b>2019</b> | 91,075,000                  | 5,479,000                  | 0          | 33,155,000 | 16,731,000    | 0            | 146,440,000 |
| <b>2018</b> | 81,188,000                  | 5,332,000                  | 0          | 33,089,000 | 14,277,000    | 0            | 133,886,000 |

### C. Residential Water Use

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

| Year                    | Total Residential GPCD |
|-------------------------|------------------------|
| <b>2022</b>             | 75                     |
| <b>2021</b>             | 68                     |
| <b>2020</b>             | 96                     |
| <b>2019</b>             | 85                     |
| <b>2018</b>             | 82                     |
| <b>Historic Average</b> | 81                     |

## 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 |             |             |             |             |
|------------------|--------------------------------|-------------|-------------|-------------|-------------|
|                  | 2022                           | 2021        | 2020        | 2019        | 2018        |
| <b>January</b>   | 11,052,000                     | 12,554,000  | 15,037,000  | 12,324,000  | 13,327,000  |
| <b>February</b>  | 16,213,000                     | 14,645,000  | 12,492,000  | 11,151,000  | 11,805,000  |
| <b>March</b>     | 16,212,000                     | 14,835,000  | 15,634,000  | 13,848,000  | 16,255,000  |
| <b>April</b>     | 17,375,000                     | 16,998,000  | 16,694,000  | 13,845,000  | 14,689,000  |
| <b>May</b>       | 17,218,000                     | 12,527,000  | 19,531,000  | 14,408,000  | 16,443,000  |
| <b>June</b>      | 21,801,000                     | 15,787,000  | 20,498,000  | 14,428,000  | 18,954,000  |
| <b>July</b>      | 21,031,000                     | 15,784,000  | 23,083,000  | 17,831,000  | 19,988,000  |
| <b>August</b>    | 18,557,000                     | 17,481,000  | 22,451,000  | 24,256,000  | 19,471,000  |
| <b>September</b> | 17,322,000                     | 20,175,000  | 18,002,000  | 22,107,000  | 11,655,000  |
| <b>October</b>   | 17,735,000                     | 14,983,000  | 19,018,000  | 17,336,000  | 11,555,000  |
| <b>November</b>  | 14,590,000                     | 13,067,000  | 15,598,000  | 12,654,000  | 11,096,000  |
| <b>December</b>  | 14,100,000                     | 13,004,000  | 13,119,000  | 13,334,000  | 12,187,000  |
| <b>Total</b>     | 203,206,000                    | 181,840,000 | 211,157,000 | 187,522,000 | 177,425,000 |

## 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 |      |      |      |      |
|--------------|----------------------------|------|------|------|------|
|              | 2022                       | 2021 | 2020 | 2019 | 2018 |
| January      |                            |      |      |      |      |
| February     |                            |      |      |      |      |
| March        |                            |      |      |      |      |
| April        |                            |      |      |      |      |
| May          |                            |      |      |      |      |
| June         |                            |      |      |      |      |
| July         |                            |      |      |      |      |
| August       |                            |      |      |      |      |
| September    |                            |      |      |      |      |
| October      |                            |      |      |      |      |
| November     |                            |      |      |      |      |
| December     |                            |      |      |      |      |
| <b>Total</b> |                            |      |      |      |      |

3. Summary of seasonal and annual water use.

|                           | Summer RETAIL<br>(Treated + Raw) | Total RETAIL<br>(Treated + Raw) |
|---------------------------|----------------------------------|---------------------------------|
| <b>2022</b>               | 61,389,000                       | 203,206,000                     |
| <b>2021</b>               | 49,052,000                       | 181,840,000                     |
| <b>2020</b>               | 66,032,000                       | 211,157,000                     |
| <b>2019</b>               | 56,515,000                       | 187,522,000                     |
| <b>2018</b>               | 58,413,000                       | 177,425,000                     |
| <b>Average in Gallons</b> | 58,280,200.00                    | 192,230,000.00                  |

## 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 |
|----------------|-----------------------------|--------------------|----------------------------|
| <b>2022</b>    | 50,190,061                  | 35                 | 0.00 %                     |
| <b>2021</b>    | 45,856,197                  | 33                 | 0.00 %                     |
| <b>2020</b>    | 41,689,918                  | 36                 | 0.00 %                     |
| <b>2019</b>    | 42,299,098                  | 37                 | 0.00 %                     |
| <b>2018</b>    | 25,404,844                  | 23                 | 0.00 %                     |
| <b>Average</b> | 41,088,024                  | 33                 | 0.00 %                     |

### 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) |
|-------------|-------------------------|--------------------|------------------|
| <b>2022</b> | 556,728                 | 667271             | 1.1986           |
| <b>2021</b> | 498,191                 | 533173             | 1.0702           |
| <b>2020</b> | 578,512                 | 717739             | 1.2407           |
| <b>2019</b> | 513,758                 | 614293             | 1.1957           |
| <b>2018</b> | 486,095                 | 634923             | 1.3062           |

### G. Summary of Historic Water Use

| Water Use Category                 | Historic Average | Percent of Connections | Percent of Water Use |
|------------------------------------|------------------|------------------------|----------------------|
| <b>Residential - Single Family</b> | 92,904,000       | 60.91 %                | 62.37 %              |
| <b>Residential - Multi-Family</b>  | 5,955,600        | 12.86 %                | 4.00 %               |
| <b>Industrial</b>                  | 0                | 0.00 %                 | 0.00 %               |
| <b>Commercial</b>                  | 37,610,600       | 16.24 %                | 25.25 %              |
| <b>Institutional</b>               | 12,494,600       | 9.99 %                 | 8.39 %               |
| <b>Agricultural</b>                | 0                | 0.00 %                 | 0.00 %               |

## 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 |
|----------------------|---------|-----------|-------------------|------------------------------|
| <b>Municipal</b>     |         | 1,083     | 1,083             | 87.62 %                      |
| <b>Industrial</b>    |         |           | 0                 | 0.00 %                       |
| <b>Commercial</b>    |         | 153       | 153               | 12.38 %                      |
| <b>Institutional</b> |         |           | 0                 | 0.00 %                       |
| <b>Agricultural</b>  |         |           | 0                 | 0.00 %                       |
| <b>Total</b>         |         | 1,236     | 1,236             | 100.00 %                     |

3. Percentage of water serviced by the wastewater system:

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

| Month            | Total Gallons of Treated Water |            |            |            |            |
|------------------|--------------------------------|------------|------------|------------|------------|
|                  | 2022                           | 2021       | 2020       | 2019       | 2018       |
| <b>January</b>   | 6,425,000                      | 6,883,000  | 4,794,000  | 4,571,000  | 6,051,000  |
| <b>February</b>  | 6,025,000                      | 6,959,000  | 4,654,000  | 4,505,000  | 5,171,000  |
| <b>March</b>     | 6,363,000                      | 6,763,000  | 5,181,000  | 4,811,000  | 6,799,000  |
| <b>April</b>     | 6,116,000                      | 6,963,000  | 4,840,000  | 4,516,000  | 5,375,000  |
| <b>May</b>       | 6,490,000                      | 7,632,000  | 5,123,000  | 4,567,000  | 7,143,000  |
| <b>June</b>      | 6,592,000                      | 6,611,000  | 4,917,000  | 4,867,000  | 3,236,000  |
| <b>July</b>      | 6,855,000                      | 7,404,000  | 5,006,000  | 4,855,000  | 4,076,000  |
| <b>August</b>    | 7,187,000                      | 7,077,000  | 4,937,000  | 5,021,000  | 4,281,000  |
| <b>September</b> | 7,124,000                      | 6,653,000  | 4,572,000  | 4,731,000  | 5,650,000  |
| <b>October</b>   | 7,208,000                      | 6,501,000  | 4,669,000  | 4,770,000  | 4,602,000  |
| <b>November</b>  | 7,313,000                      | 6,189,000  | 6,540,000  | 4,707,000  | 4,660,000  |
| <b>December</b>  | 7,716,000                      | 6,071,000  | 6,630,000  | 4,606,000  | 5,031,000  |
| <b>Total</b>     | 81,414,000                     | 81,706,000 | 61,863,000 | 56,527,000 | 62,075,000 |

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<br>(in gallons) |
|---|-------------------------------------|
| On-site Irrigation                          |                                     |
| Plant wash down                             |                                     |
| Chlorination/de-chlorination                |                                     |
| Industrial                                  |                                     |
| Landscape irrigation<br>(park,golf courses) | 0                                   |
| Agricultural                                |                                     |
| Discharge to surface water                  | 0                                   |
| Evaporation Pond                            | 0                                   |
| Other                                       |                                     |
| <b>Total</b>                                | 0                                   |

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### C. Wastewater System Data Comment

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

Could not enter information into table so have attached it.

Attached file(s):

| File Name            | File Description  |
|----------------------|-------------------|
| Wastewater Plant.pdf | plant information |