Water Conservation Plan

For

Holiday Beach

Water Supply Corporation

FEBRUARY 2018

Prepared By

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WATER CONSERVATION PLAN

I. INTRODUCTION

This Conservation Plan has been developed to meet the requirements of 30 TAC § 288.2 for Holiday Beach Water Supply Corporation (the WSC) which is a retail public water supplier. The WSC is located in Aransas County in the Lamar Peninsula between Copano Bay and Saint Charles Bay. The WSC receives its water from groundwater wells. The groundwater is obtained from two water wells which are owned and operated by the WSC, and the raw groundwater is treated at the water treatment plant site.

The population in the WSC's service area has increased from 2012 to 2016 by 5%, and is expected to grow by as much as 11% by 2030, according to the historical meter growth.

II. UTILITY EVALUATION

A. Water Supply and Distribution System Information

1. Population of Service Area — 1,323

2. Area of Service Area — 1.3 square miles

3. Water Production and Sales Information
   - **a.** Water Supplied during 2016: — 28,011,175
   - **b.** Monthly Water Use for 2016:

Water Pumped 2016 (gallons)

Month	Total
January	1,926,321
February	1,819,585
March	2,027,638
April	2,087,474
May	2,125,553
June	3,374,384
July	3,045,745
August	3,037,743
September	2,319,579

October	2,289,227
November	1,893,160
December	2,064,766
TOTAL	28,011,175

c. Highest daily water use on record for system: 116,500

d. Peak daily use for the last year: 116,500

e. Unaccounted for water (2016): 7,545,566

B. Utility Financial Operation Information

1. Water Rate Structure

    a. Existing Rates Structure:

    Residential - $43.43 Minimum
    0-8,000 gallons $2.25 per 1,000 gallons
    8,001-Over gallons $8.00 per 1,000 gallons

    Commercial - $51.51 Minimum
    0-8,000 gallons $2.45 per 1,000 gallons
    8,001-Over gallons $8.40 per 1,000 gallons

2. Sources of Revenue for the Utility

    a. Percent of Annual Revenues from Water Rates: 90%

    b. Percent of Annual Revenues from all other sources: 10%

    c. Approximate Annual Operating Costs: $472,165

    d. Projected Annual Operating Costs: $472,165

C. Other Applicable Information

1. Drought Contingency Plan: Appendix A

2. Water Conservation Literature: Appendix B

3. Water Conservation Plan Adopting Ordinance: Appendix C

4. Number and Type of Meter Connections in Service Area
   706 – Residential
   23 – Commercial

5. Net Gain of New Connections per year
   6 – Residential
   0 – Commercial

6. Source of Water
   a. Well #1
   b. Well #2

7. Design Capacity of Water System: 0.86 MGD

8. Major High Volume Customers

Customer	Volume (MG/YR)
Travis Asklund	0.73
William McLain	0.25
Harold Haynes	0.20
Carlos Reyes	0.19
Betty Kissling	0.19

9. Population and Water Use Projections

Year	No. of Connections	Daily Avg. MGD	Daily Max MGD
2030	828	0.84	1.23

III. PUBLIC INVOLVEMENT

A. Public at Large

1. The WSC holds regular council meetings the third Saturday of each month at 7:00 P.M. These meetings are open to the public and members are can be put on the agenda to speak to the Board of Directors of the WSC. At these meetings, Board of Directors are able to hear concerns of the members, which can assist them in making decisions.

2. The WSC will engage in an advertising campaign to inform residents of water conservation goals and techniques. Periodically, information will be posted at WSC Office Building, included in billing statements, and/or published in the local newspaper.

IV. WATER CONSERVATION PLAN

A. Water Use and Water Loss Goals

Between 2012 and 2016, the water users served by the WSC used approximately 60 GPCD. The low GPCD comes from older residents that live in the area and the number of seasonal residents that come into the area for 2-3 months at a time during the calendar year. The 5-year goal for water use reduction is to reduce per capita use by 2 gallons per day per user to 58 GPCD by the end of 2022. The 10-year goal for the WSC is to reduce per capita use by 2 gallons per day per user to 56 GPCD. These 5- and 10-year goals are in line with the overall water conservation goals outlined by both the State of Texas and Region N Water Plans.

Between 2012 and 2016, the WSC experienced an average of approximately 25% water loss through the water system, which equates to a water loss of approximately 14 GPCD. The WSC's 5-year goal is to reduce water loss below 12 GPCD by the end of 2022. The 10-year goal is to reduce water loss below 10 GPCD. See Appendix E: Utility Profile for Retail Water Supplier for historical water use between 2012 and 2016 and Appendix F: Water Conservation Plan 5- and 10- Year Goals for Water Savings.

B. Retrofit Program

Customers in existing buildings that do not have water savings devices will be encouraged to replace their old plumbing fixtures. The advertising program will help inform them of the advantages of installing water saving devices and the enacted excess water rate structure mentioned below should encourage them to be conservative in their water use. Water saving kits will be available to aid in their conservation efforts.

C. Water Rate Structure

The water rate structure is shown in Section II B 3 of this Plan. The WSC will consider options for a rate structure that further encourages conservation.

D. Metering

The WSC understands the important role that effective metering plays in water conservation. The WSC currently meters 100% of the water sold. The WSC will repair or replace meters that appear to have low water usage. Incorporated into the Water Conservation Plan, the WSC adheres to the following meter-testing schedule:

1. Production Meters: test once a year.
2. Meters larger than 1": test once a year at a minimum.
3. Meters 1" and smaller: test every 10 years at a minimum.
4. The WSC's goal is to test fifteen percent (15%) minimum of all meters.
5. The WSC uses a computer billing system, which handles all of the billing.
6. The WSC conducts internal meter testing by qualified operators.
7. The WSC may install inline master meters, and monitor them on a daily basis.

E. Water Conservation Landscaping

The advertising program will include suggestions on landscaping and irrigation procedures, which will save water usage and money.

F. Leak Detection and Repair Program

1. Perform an annual water audit.
2. Leak Detection and Location Program includes visual inspection by meter readers and WSC employees will keep a constant watch out for abnormal

conditions including leaks (i.e. defective fire hydrants and flush valves, unauthorized use of fire hydrants and water main leaks).

3. The WSC maintains an adequate and qualified maintenance staff, which is available to repair leaks as they are located and perform corrective measures.

4. Monthly water use accounting by the billing computer system, which identifies high water use for service meters indicating possible leaks or malfunction.

G. Recycling and Reuse

The WSC has no means to recycle or reuse water. There are no customers at this time that would be able to recycle water.

H. Implementation and Enforcement

The Water Conservation Plan will be enforced by the following methods:

1. The water cost, per 1,000 gallons, should encourage retrofitting of old plumbing fixtures which are using large amounts of water. Customers will realize that replacing their fixtures will save them water and money.

2. The water rate structure will be enforced, if customers do not pay their water bill they will have their water service discontinued.

I. Wholesale Customers

The WSC currently does not have any wholesale customers.

APPENDIX A
DROUGHT CONTINGENCY PLAN

Model Drought Contingency Plan for the Water Supply Corporation

September 2004

Texas Commission on Environmental Quality

DROUGHT CONTINGENCY PLAN
FOR

Holiday Beach Water Supply Corporation

8 St. Charles Loop, Rockport Texas, 78382

11458

0040015

__ August 2011

Section 1 Declaration of Policy, Purpose, and Intent

In cases of extreme drought, periods of abnormally high usage, system contamination, or extended reduction in ability to supply water due to equipment failure, temporary restrictions may be instituted to limit nonessential water usage. The purpose of the Drought Contingency Plan (Plan) is to encourage customer conservation in order to maintain supply, storage, or pressure or to comply with the requirements of a court, government agency or other authority.

Please note: Water restriction is not a legitimate alternative if a water system does not meet the Texas Commission on Environmental Quality (TCEQ) capacity requirements under normal conditions **or** if the utility fails to take all immediate and necessary steps to replace or repair malfunctioning equipment.

Section 2 Public Involvement

Opportunity for the public to provide input into the preparation of the Plan was provided by:
(check at least one of the following)

9 *scheduling and providing public notice of a public meeting to accept input on the Plan*

The meeting took place at:

Date: _____ Time: _____ Location: _____

Section 3 Public Education

The HBWSC 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.

Drought plan information will be provided by:
(check at least one of the following)

public meeting

Utility bill notes (located at bottom of bill)

Section 4 Coordination with Regional Water Planning Groups

The service area of the HBWSC is located within Regional Water Planning Group (RWPG) N (Coastal Bend).

HBWSC has mailed a copy of this Plan to the RWPG.

Section 5 Notice Requirements

Written notice will be provided to each customer **prior to implementation or termination of each stage of the water restriction program**. Mailed notice must be given to each customer 72 hours prior to the start of water restriction. If notice is hand delivered, the utility cannot enforce the provisions of the plan for 24 hours after notice is provided. The written notice to customers will contain the following information:

1. the date restrictions will begin;
2. the circumstances that triggered the restrictions;
3. the stages of response and explanation of the restrictions to be implemented; and
4. an explanation of the consequences for violations.

The utility must notify the TCEQ by telephone at (512) 239-4691, or electronic mail at *watermon@tceq.state.tx.us* prior to implementing Stage III and must notify in writing the Public Drinking Water Section at MC - 155, P.O. Box 13087, Austin, Texas 78711-3087 within five (5) working days of implementation including a copy of the utility's restriction notice. The utility must file a status report of its restriction program with the TCEQ at the initiation and termination of mandatory water use restrictions (i.e., Stages III and IV).

Section 6 Violations

1. First violation - The customer will be notified by written notice of their specific violation.

2. Subsequent violations:

   a. After written notice, the utility may install a flow restricting device in the line to limit the amount of water which will pass through the meter in a 24-hour period. The utility may charge the customer for the actual cost of installing and removing the flow restricting device,

not to exceed $50.00.

b. After written notice, the utility may discontinue service at the meter for a period of seven (7) days, or until the end of the calendar month, whichever is LESS. The normal reconnect fee of the utility will apply for restoration of service.

Section 7 Exemptions or Variances

The utility may grant any customer an exemption or variance from the drought contingency plan for good cause **upon written request**. A customer who is refused an exemption or variance may appeal such action of the utility in writing to the Texas Commission on Environmental Quality. The utility will treat all customers equally concerning exemptions and variances, and shall not discriminate in granting exemptions and variances. No exemption or variance shall be retroactive or otherwise justify any violation of this Plan occurring prior to the issuance of the variance.

Section 8 Response Stages

Unless there is an immediate and extreme reduction in water production, or other absolute necessity to declare an emergency or severe condition, the utility will initially declare Stage I restrictions. If, after a reasonable period of time, demand is not reduced enough to alleviate outages, reduce the risk of outages, or comply with restrictions required by a court, government agency or other authority, Stage II may be implemented with Stage III to follow if necessary.

STAGE I - CUSTOMER AWARENESS

Stage I will begin:

Every April 1st, the utility will mail a public announcement to its customers. No notice to TCEQ required.

Stage I will end:

Every September 30th, the utility will mail a public announcement to it=s customers. No notice to TCEQ required.

Utility Measures:

This announcement will be designed to increase customer awareness of water conservation and encourage the most efficient use of water. A copy of the current public announcement on water conservation awareness shall be kept on file available for inspection by the TCEQ.

Voluntary Water Use Restrictions:

Water customers are requested to voluntarily limit the use of water for nonessential purposes and to practice water conservation.

STAGE II - VOLUNTARY WATER CONSERVATION:

Target: Achieve a 10 percent reduction in Total Water Use.

The water utility will implement Stage II when any one of the selected triggers is reached:

Supply-Based Triggers: (check at least one and fill in the appropriate value)

Well level reaches 199 ft. mean sea level (m.s.l.)
Well Drawdown Level 98 ft.

Demand- or Capacity-Based Triggers: (check at least one and fill in the appropriate value)

Total daily demand as % of pumping capacity >80 %

Upon initiation and termination of Stage II, the utility will mail a public announcement to its customers. No notice to TCEQ required.

Requirements for Termination:

Stage II of the Plan may end when all of the conditions listed as triggering events have ceased to exist for a period of three (3) consecutive days. Upon termination of Stage II, Stage I becomes operative.

Utility Measures:

Visually inspect lines and repair leaks on a daily basis. Monthly review of customer use records and

follow-up on any that have unusually high usage.

Describe additional measures, if any, to be implemented directly by the utility to manage limited water supplies and/or reduce water demand. Examples include: reduced or discontinued flushing of water mains, activation and use of an alternative supply source(s); use of reclaimed water for non-potable purposes.

The second water source for HBWSC is: (check one)

(Well #2)

Voluntary Water Use Restrictions:

1. Restricted Hours: Outside watering is allowed daily, but only during periods specifically described in the customer notice; between 10:00 p.m. and 5:00 a.m. for example;

2. Restricted Days/Hours: Water customers are requested to voluntarily limit the irrigation of landscaped areas with hose-end sprinklers or automatic irrigation systems. Customers are requested to limit outdoor water use to **Mondays for water customers with a street address ending with the numbers 1, 2, or 3, Wednesdays for water customers with a street address ending with the numbers 4, 5, or 6, and Fridays for water customers with a street address ending with the numbers 7, 8, 9, or 0.** Irrigation of landscaped areas is further limited to the hours of 12:00 midnight until 10:00 a.m. and between 8:00 p.m. and 12:00 midnight on designated watering days. However, irrigation of landscaped areas is permitted at anytime if it is by means of a hand-held hose, a faucet-filled bucket or watering can of five (5) gallons or less, or drip irrigation system; or

3. Other uses that waste water such as water running down the gutter.

STAGE III - MANDATORY WATER USE RESTRICTIONS:

Target: Achieve a 15 percent reduction in Total Water Use

The water utility will implement Stage III when any one of the selected triggers is reached:

Supply-Based Triggers: (check at least one and fill in the appropriate value)

Well level reaches 168 ft. (m.s.l.)

Well Drawdown level reaches 67 ft

Demand- or Capacity-Based Triggers: (check at least one and fill in the appropriate value)

Total daily demand as % of pumping capacity >85 %

Upon initiation and termination of Stage III, the utility will mail a public announcement to its customers. Notice to TCEQ required.

Requirements for Termination:

Stage III of the Plan may end when all of the conditions listed as triggering events have ceased to exist for a period of three (3) consecutive days. Upon termination of Stage III, Stage II becomes operative.

Utility Measures:

Visually inspect lines and repair leaks on a regular basis. Flushing is prohibited except for dead end mains.

Describe additional measures, if any, to be implemented directly by the utility to manage limited water supplies and/or reduce water demand. Examples include: activation and use of an alternative supply source(s); use of reclaimed water for non-potable purposes; offering low-flow fixtures and water restrictors.

Mandatory Water Use Restrictions:

The following water use restrictions shall apply to all customers.

1. Irrigation of landscaped areas with hose-end sprinklers or automatic irrigation systems **shall be limited to Mondays for water customers with a street address ending with the numbers 1, 2, or 3, Wednesdays for water customers with a street address ending with the numbers 4, 5, or 6, and Fridays for water customers with a street address ending with the numbers 7, 8, 9, or 0.** Irrigation of landscaped areas is further limited to the hours of 12:00 midnight until 10:00 a.m. and between 8:00 p.m. and 12:00 midnight on designated watering days. However, irrigation of landscaped areas is permitted at anytime if it is by means of a hand-held hose, a faucet-filled bucket or watering can of five (5) gallons or less, or drip irrigation system.

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 12:00 midnight and

10:00 a.m. and between 8:00 p.m. and 12:00 midnight. 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 AJacuzzi@ type pool is prohibited except on designated watering days between the hours of 12:00 midnight and 10:00 a.m. and between 8:00 p.m. and 12:00 midnight.

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 or flush valves shall be limited to maintaining public health, safety, and welfare.

6. Use of water for the irrigation of golf courses, parks, and green belt area is prohibited except by hand-held hose and only on designated watering days between the hours 12:00 midnight and 10:00 a.m. and between 8:00 p.m. and 12:00 midnight.

7. The following uses of water are defined as nonessential and are prohibited:

    a. wash down of any 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;
    d. flushing gutters or permitting water to run or accumulate in any gutter or street;
    e. failure to repair a controllable leak(s) within a reasonable period after having been given notice directing the repair of such leak(s); and
    f. any waste of water.

STAGE IV - CRITICAL WATER USE RESTRICTIONS:

Target: Achieve a 20 percent reduction in Total Water Use

The water utility will implement Stage IV when any one of the selected triggers is reached:

Supply-Based Triggers: (check at least one and fill in the appropriate value)

Well level reaches 137 ft. (m.s.l.)

Well Drawdown level reaches 36 ft

Demand- or Capacity-Based Triggers: (check at least one and fill in the appropriate value)

Total daily demand as % of pumping capacity >90 %

Upon initiation and termination of Stage IV, the utility will mail a public announcement to its customers. Notice to TCEQ required.

Requirements for Termination:

Stage IV of the Plan may be rescinded when all of the conditions listed as triggering events have ceased to exist for a period of three (3) consecutive days. Upon termination of Stage IV, Stage III becomes operative.

Operational Measures:

The utility shall visually inspect lines and repair leaks on a daily basis. Flushing is prohibited except for dead end mains and only between the hours of 9:00 p.m. and 3:00 a.m. Emergency interconnects or alternative supply arrangements shall be initiated. All meters shall be read as often as necessary to insure compliance with this program for the benefit of all the customers. *Describe additional measures, if any, to be implemented directly to manage limited water supplies and/or reduce water demand.*

Mandatory Water Use Restrictions: (all outdoor use of water is prohibited)

1. Irrigation of landscaped areas is absolutely prohibited.
2. Use of water to wash any motor vehicle, motorbike, boat, trailer, airplane or other vehicle is absolutely prohibited.

SYSTEM OUTAGE or SUPPLY CONTAMINATION

Notify TCEQ Regional Office immediately.

If you have any questions on how to fill out this form or about the _____ program, please contact us at 512/239-_____.

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

EXAMPLE RESOLUTION FOR ADOPTION OF A DROUGHT CONTINGENCY PLAN

RESOLUTION NO. _____

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE _____ (name of water supplier) ADOPTING A DROUGHT CONTINGENCY PLAN.

WHEREAS, the Board recognizes that the amount of water available to the _____ (name of water supplier) and its water utility customers are limited and subject to depletion during periods of extended drought;

WHEREAS, the Board recognizes that natural limitations due to drought conditions and other acts of God cannot guarantee an uninterrupted water supply for all purposes;

WHEREAS, Section 11.1272 of the Texas Water Code and applicable rules of the Texas Commission on Environmental Quality require all public water supply systems in Texas to prepare a drought contingency plan; and

WHEREAS, as authorized under law, and in the best interests of the customers of the _____ (name of water supply system), the Board 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 RESOLVED BY THE BOARD OF DIRECTORS OF THE _____ (name of water supplier):

SECTION 1. That the Drought Contingency Plan attached hereto as Exhibit AA@ and made part hereof for all purposes be, and the same is hereby, adopted as the official policy of the _____ (name of water supplier).

SECTION 2. That the _____ (e.g., general manager) is hereby directed to implement, administer, and enforce the Drought Contingency Plan.

SECTION 3. That this resolution shall take effect immediately upon its passage.

DULY PASSED BY THE BOARD OF DIRECTORS OF THE _____, ON THIS __ day of _____, 20__.

_____

President, Board of Directors

ATTESTED TO:

_____

Secretary, Board of Directors

APPENDIX B
WATER CONSERVATION LITERATURE

AGRICULTURAL CONSERVATION LITERATURE

Agricultural Water Conservation in Texas: TWDB, Pamphlet, 8 pp.

Have Your Irrigation System Evaluated Free: TWDB, Pamphlet, 4 pp.

LEPA Irrigation: TWDB, Pamphlet, 6 pp.

Drip Irrigation: TWDB, WC-8, Pamphlet, 6 pp.

Forty-Nine Water Saving Taps: TWDB WC-1, Pamphlet, 8 pp. NEW FOR 1995

Homeowner's Guide to Water Use and Conservation: TWDB WC-3, Booklet, 26 pp. NEW FOR 1995

Saving Water Inside the Home: TWDB WC-4, Pamphlet, 8 pp. NEW FOR 1995

Saving Water Outside the Home: TWDB WC-6, Pamphlet, 8 pp. NEW FOR 1995

Drip Irrigation: TWDB WC-8, Pamphlet, 6 pp.

Lawn Watering Guide: TWDB WC-12, Card, 3½" x 5"

A Directory of Water Saving Plants and Trees for Texas: TWDB WC -13, Booklet, 26 pp.

Xeriscape-Principles, Benefits: TWDB WC-14A, Pamphlet, 4 pp., size 3½" x 7½"

Toilet Tank Leak Detector Tablets: 2 Tablets per packet, Spanish/English instructions

Dillo Dollar/Dillo Dinero: Six water saving tips for the HOME, English/Spanish, TWDB Floyer, 1 pp., size 2½" x 6"', NEW for 1995

Dillo Dollar/Dillo Dinero: Six water saving tips for the YARD, English/Spanish, TWDB Flyer, 1 pp., size 2½" x 6", NEW for 1995

Kit of Municipal Water Conservation Training and Public Awareness Materials for Texas Utility Managers. One kit per utility at no charge. (Manual, videos, and literature packet)

A Guidebook for Reducing Unaccounted for Water: TWDB GB-2, Guidebook, 34 pp.

Guidelines for Municipal Water Conservation and Emergency Water Demand Management TWDB GB-3, Guidebook, 54 pp.

Sources of Water Saving Devices: TWDB GB-6, Guidebook, 20 pp.

Example Xeriscape Incentives and Landscape Watering Ordinances: TWDB GB-9, Guidebook, 58 pp.

Water for Texas...Today and Tomorrow (The Texas Water Plan): TWDB, Book 104 pp.

APPENDIX C
Water Conservation and Drought Contingency Plan Adopting Ordinance

APPENDIX C

RESOLUTION

A RESOLUTION OF THE BOARD OF DIRECTORS OF HOLIDAY BEACH WATER SUPPLY CORPORATION ADOPTING THE ATTACHED WATER CONSERVATION AND DROUGHT CONTIGENCY PLAN.

BE IT RESOLVED BY THE BOARD OF DIRECTORS: That on this 20 day of February, 2018, we do hereby adopt the attached Water Conservation and Drought Contingency plan to be implemented by Holiday Beach Water Supply Corporation (WSC). Any violation of this plan can carry a penalty of termination of water services. Water service termination penalties will only apply to violations of mandatory rationing imposed by the WSC.

ADOPTED THIS 17th day of February, 2018 at a meeting of the Board of Directors at which a quorum was present.

BOARD OF DIRECTORS

(Seal)

David Gill – President

ATTEST

Janet Blandford

APPENDIX D
UTILITY PROFILE FOR RETAIL WATER SUPPLIER

Texas Water Development Board

UTILITY PROFILE FOR RETAIL WATER SUPPLIER

Fill out this form as completely as possible.
If a field does not apply to your entity, leave it blank.

CONTACT INFORMATION

Name of Utility: Holiday Beach Water Supply Corporation

Public Water Supply Identification Number (PWS ID): TX0040015

Certificate of Convenience and Necessity (CCN) Number: 11458

Surface Water Right ID Number: N/A

Wastewater ID Number: N/A

Completed By: Eddie Aguilar Title: Engineer

Address: 1508 Sante Fe Drive, Suite 203 City: Weatherford Zip Code: 76086

Email: eaguilar@jacobmartin.com Telephone Number: (817)594-9880

Date: 11/07/2017

Regional Water Planning Group: N Map

Groundwater Conservation District: 99 Map

Check all that apply:

- [x] Received financial assistance of $500,000 or more from TWDB
- [ ] Have 3,300 or more retail connections
- [ ] Have a surface water right with TCEQ

Section I: Utility Data

A. Population and Service Area Data

1. Current service area size in square miles: 1
(Attach or email a copy of the service area map.)

2. Provide 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 Service
2012	1,205	0	0
2013	1,212	0	0
2014	1,243	0	0
2015	1,248	0	0
2016	1,265	0	0

3. Provide the 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 Service
2020	1,306	0	0
2030	1,408	0	0
2040	1,510	0	0
2050	1,612	0	0
2060	1,714	0	0

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

Used 2010 Census average household size and multiplied by the number of residential connections. Projected populations sourced from historical meter growth and the Texas Water Development Board 2016 Regional Water Plan Population Projection for 2020-2070.

B. System Input

Provide system input data for the previous five years.

Total System Input = Self-supplied + Imported – Exported

Year	Self-supplied Water in Gallons	Purchased/Imported Water in Gallons	Exported Water in Gallons	Total System Input	Total GPCD
2012	26,429,445	0	0	26,429,445	60
2013	25,741,201	0	0	25,741,201	58
2014	28,032,856	0	0	28,032,856	62
2015	26,289,779	0	0	26,289,779	58
2016	28,011,175	0	0	28,011,175	61
Historic 5-year Average	26,900,891	0	0	26,900,891	60

C. Water Supply System (Attach description of water system)

1. Designed daily capacity of system 864,000 **gallons** per day.
2. Storage Capacity:
   Elevated 0 **gallons**
   Ground 250,000 **gallons**

3. List all current water supply sources in gallons.

Water Supply Source	Source Type*	Total Gallons
Water Well #1	Ground	648,000
Water Well #2	Ground	648,000
	Choose One	
	Choose One	
	Choose One	
	Choose One	

*Select one of the following source types: *Surface water, Groundwater, or Contract*

4. If surface water is a source type, do you recycle backwash to the head of the plant?
   ○ Yes _____ estimated **gallons** per day
   ◉ No

D. Projected Demands

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

Year	Population	Water Demands (gallons)
2017	1,323	28,816,334
2018	1,285	28,001,476
2019	1,295	28,223,710
2020	1,306	28,445,944
2021	1,316	28,668,178
2022	1,326	28,890,412
2023	1,336	29,112,646
2024	1,346	29,334,879
2025	1,357	29,557,113
2026	1,367	29,779,347

2. Describe sources of data and how projected water demands were determined. Attach additional sheets if necessary.

Using linear interpolation, the population was projected using the average historical meter growth multiplied by the average household size. The WSC serves mostly residential connections

The water demand was calculated from using taking the population and multiplying it by the average GPCD and factoring that over the course of 1 year.

E. High Volume Customers

1. List the annual water use, in gallons, for the five highest volume **RETAIL customers**. Select one of the following water use categories to describe the customer; choose Residential, Industrial, Commercial, Institutional, or Agricultural.

Retail Customer	Water Use Category*	Annual Water Use	Treated or Raw
	Commercial		Treated
	Commercial		Treated
	Commercial		Treated
	Commercial		Treated
	Commercial		Treated

*For definitions on recommended customer categories for classifying customer water use, refer to the online Guidance and Methodology for Reporting on Water Conservation and Water Use.

2. If applicable, list the annual water use for the five highest volume **WHOLESALE customers**. Select one of the following water use categories to describe the customer; choose Municipal, Industrial, Commercial, Institutional, or Agricultural.

Wholesale Customer	Water Use Category*	Annual Water Use	Treated or Raw
Not applicable	Choose One		Choose One
	Choose One		Choose One
	Choose One		Choose One
	Choose One		Choose One
	Choose One		Choose One

*For definitions on recommended customer categories for classifying customer water use, refer to the online Guidance and Methodology for Reporting on Water Conservation and Water Use.

F. Utility Data Comment Section

Provide additional comments about utility data below.

Section II: System Data

A. Retail Connections

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

Water Use Category*	Active Retail Connections			
	Metered	Unmetered	Total Connections	Percent of Total Connections
Residential – Single Family	706	0	706	97%
Residential – Multi-family (units)	0	0	0	0%
Industrial	0	0	0	0%
Commercial	23	0	23	3%
Institutional	0	0	0	0%
Agricultural	0	0	0	0%
TOTAL	729	0	729	

*For definitions on recommended customer categories for classifying customer water use, refer to the online Guidance and Methodology for Reporting on Water Conservation and Water Use.

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

Water Use Category*	Net Number of New Retail Connections				
	2012	2013	2014	2015	2016
Residential – Single Family	32	21	-4	18	-18
Residential – Multi-family (units)	0	0	0	0	0
Industrial	0	0	0	0	0
Commercial	-1	-3	3	-4	3
Institutional	0	0	0	2	0
Agricultural	0	0	0	0	0
TOTAL	31	18	-1	16	-15

*For definitions on recommended customer categories for classifying customer water use, refer to the online Guidance and Methodology for Reporting on Water Conservation and Water Use.

B. Accounting Data

For the previous five years, enter the number of gallons of RETAIL water provided in each major water use category.

Water Use Category*	Total Gallons of Retail Water				
	2012	2013	2014	2015	2016
Residential - Single Family	18,366,519	19,163,674	18,158,422	15,824,878	19,367,292
Residential – Multi-family	0	0	0	0	0
Industrial	0	0	0	0	0
Commercial	622,490	870,470	1,061,330	1,138,560	603,299
Institutional	0	0	0	0	0
Agricultural	0	0	0	0	0
TOTAL	18,989,009	20,034,144	19,219,752	16,963,438	19,970,591

*For definitions on recommended customer categories for classifying customer water use, refer to the online Guidance and Methodology for Reporting on Water Conservation and Water Use.

C. Residential Water Use

For the previous five years, enter the residential GPCD for single family and multi-family units.

Water Use Category*	Residential GPCD				
	2012	2013	2014	2015	2016
Residential - Single Family	63	60	64	60	64
Residential – Multi-family	0	0	0	0	0

D. Annual and Seasonal Water Use

1. For the previous five years, enter the gallons of treated water provided to RETAIL customers.

Month	Total Gallons of Treated Retail Water				
	2012	2013	2014	2015	2016
January	1,778,665	1,861,753	2,323,322	1,894,466	1,926,321
February	1,518,919	1,430,141	1,586,499	1,820,470	1,819,585
March	1,771,368	2,108,249	1,673,361	2,020,695	2,027,638
April	2,007,294	1,929,925	1,927,138	2,117,368	2,087,474
May	2,115,502	1,727,237	2,843,622	2,213,060	2,125,553
June	3,160,952	2,326,314	2,747,813	2,802,567	3,374,384
July	2,732,765	3,611,708	3,055,067	2,783,305	3,045,745
August	3,149,364	3,192,552	3,257,494	3,074,955	3,037,743
September	2,723,541	2,344,404	2,260,617	2,470,518	2,319,579
October	2,063,461	2,056,111	2,088,940	2,170,393	2,289,227
November	2,133,868	1,725,917	1,982,107	1,436,137	1,893,160
December	1,273,746	1,426,890	2,286,876	1,485,845	2,064,766
TOTAL	26,429,445	25,741,201	28,032,856	26,289,779	28,011,175

2. For the previous five years, enter the gallons of raw water provided to RETAIL customers.

Month	Total Gallons of Raw Retail Water				
	2012	2013	2014	2015	2016
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	0	0	0	0	0
May	0	0	0	0	0
June	0	0	0	0	0
July	0	0	0	0	0
August	0	0	0	0	0
September	0	0	0	0	0
October	0	0	0	0	0
November	0	0	0	0	0
December	0	0	0	0	0
TOTAL	0	0	0	0	0

3. Summary of seasonal and annual water use.

Water Use	Seasonal and Annual Water Use					Average in Gallons
	2012	2013	2014	2015	2016	
Summer Retail (Treated + Raw)	9,043,081	9,130,574	9,060,374	8,660,827	9,457,872	9,070,546 5yr Average
TOTAL Retail (Treated + Raw)	26,429,445	25,741,201	28,032,856	26,289,779	28,011,175	26,900,891 5yr Average

E. Water Loss

Provide Water Loss data for the previous five years.

Water Loss GPCD = [Total Water Loss in Gallons ÷ Permanent Population Served] ÷ 365

Water Loss Percentage = [Total Water Loss ÷ Total System Input] x 100

Year	Total Water Loss in Gallons	Water Loss in GPCD	Water Loss as a Percentage
2012	5,860,493	13	22%
2013	4,427,057	10	17%
2014	7,438,959	16	27%
2015	7,822,698	17	30%
2016	7,545,566	16	27%
5-year average	6,618,955	14	25%

F. Peak Water Use

Provide the 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)
2012	72,409	105,365	1.46
2013	70,523	116,506	1.65
2014	76,802	105,080	1.37
2015	72,027	99,192	1.38
2016	76,743	112,480	1.47

G. Summary of Historic Water Use

Water Use Category	Historic 5-year Average	Percent of Connections	Percent of Water Use
Residential SF	18,176,157	97%	0%
Residential MF	0	0%	0%
Industrial	0	0%	0%
Commercial	859,230	3%	0%
Institutional	0	0%	0%
Agricultural	0	0%	0%

H. System Data Comment Section

Provide additional comments about system data below.

The low residential gpcd comes from older residents that live in the area and the number of seasonal residents that come into the area for 2-3 months at a time during the calendar year.

Section III: Wastewater System Data

If you do not provide wastewater system services then you have completed the Utility Profile. Save and Print this form to submit with your Plan. Continue with the Water Conservation Plan Checklist to complete your Water Conservation Plan.

A. Wastewater System Data (Attach a description of your wastewater system.)

1. Design capacity of wastewater treatment plant(s): 0 **gallons** per day.

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

Water Use Category*	Active Wastewater Connections			
	Metered	Unmetered	Total Connections	Percent of Total Connections
Municipal	0	0	0	0%
Industrial	0	0	0	0%
Commercial	0	0	0	0%
Institutional	0	0	0	0%
Agricultural	0	0	0	0%
TOTAL	0	0	0	

2. What percent of water is serviced by the wastewater system? 0 %

3. For the previous five years, enter the number of gallons of wastewater that was treated by the utility.

Month	Total Gallons of Treated Wastewater				
	2012	2013	2014	2015	2016
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	0	0	0	0	0
May	0	0	0	0	0
June	0	0	0	0	0
July	0	0	0	0	0
August	0	0	0	0	0
September	0	0	0	0	0
October	0	0	0	0	0
November	0	0	0	0	0
December	0	0	0	0	0
TOTAL	0	0	0	0	0

4. Can treated wastewater be substituted for potable water?

○ Yes ◉ No

B. Reuse Data

1. Provide data on the types 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 (parks, golf courses)	
Agricultural	
Discharge to surface water	
Evaporation pond	
Other	
TOTAL	0

C. Wastewater System Data Comment

Provide additional comments about wastewater system data below.

WSC does not provide wastewater collection or treatment.

You have completed the Utility Profile. Save and Print this form to submit with your Plan. Continue with the Water Conservation Plan Checklist to complete your Water Conservation Plan.

APPENDIX E
WATER CONSERVATION PLAN 5- AND 10-YR GOALS FOR WATER SAVINGS

WATER CONSERVATION PLAN
5- AND 10-YR GOALS FOR WATER SAVINGS

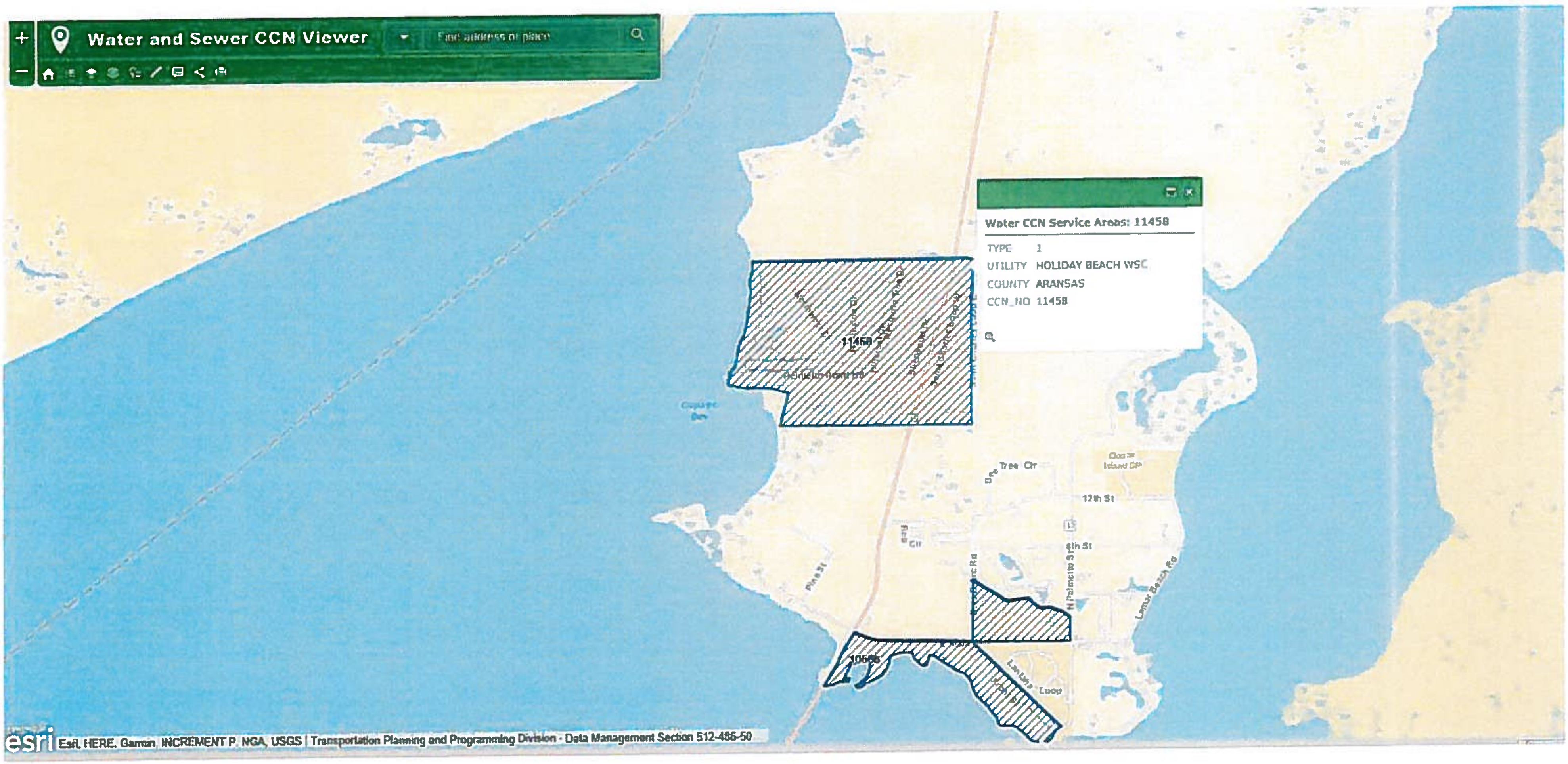
Facility Name: Holiday Beach WSC

Water Conservation Plan Year: 2018

	Historic 5yr Average	Baseline	5-yr Goal for year 2023	10-yr Goal for year 2028
Total GPCD[1]	60	60	58	56
Residential GPCD[2]	40	40	38	36
Water Loss (GPCD)[3]	14	14	12	10
Water Loss (Percentage)[4]	23 %	23 %	21 %	18 %

1. Total GPCD = (Total Gallons in System ÷ Permanent Population) ÷ 365
2. Residential GPCD = (Gallons Used for Residential Use ÷ Residential Population) ÷ 365
3. Water Loss GPCD = (Total Water Loss ÷ Permanent Population) ÷ 365
4. Water Loss Percentage = (Total Water Loss ÷ Total Gallons in System) x 100; or (Water Loss GPCD ÷ Total GPCD) x 100

APPENDIX F
SERVICE AREA MAP


Water and Sewer CCN Viewer
Find address or place
Water CCN Service Areas: 11458
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UTILITY HOLIDAY BEACH WSC
COUNTY ARANSAS
CCN_NO 11458
11458
10566
Tree Cir
12th St
8th St
N Palmetto St
Lamar Beach Rd
Pine St
Loop
Esri, HERE, Garmin, INCREMENT P, NGA, USGS | Transportation Planning and Programming Division - Data Management Section 512-486-50