



City of White Settlement  
214 Meadow Park Drive  
White Settlement, TX 76108

# Water Conservation Plan

For Water Customers

**MAY 2024**

Adopted: May 7, 2024  
Published: May 7, 2024

**Effective: May 7, 2024**

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## **1. Water Conservation Utility Profile**

The City of White Settlement, Texas covers an area of 5.01 square miles and is located on the West side of Fort Worth. White Settlement is bounded by IH30 to the South, IH820 to the West and the Joint Naval Air Station to the East. The City has a population of approximately 18,269 residents.

The City's water is partly supplied by contract from the City of Fort Worth and partly from City of White Settlement ground water wells. The city has a total of eight wells with four drawing from the Trinity Aquifer and four from the Paluxy Aquifer.

## **2. Conservation Overview**

The City of White Settlement Conservation Plan recognizes that the city is under a contract with the City of Fort Worth for the purchase of raw water and the quality of that water is monitored and controlled according to said contract. The City of White Settlement Conservation Plan recognizes the emphasis that is placed on the cooperation with the City of Fort Worth to maintain the level of quality and quantity required.

## **3. Five and Ten-Year Targets and Goals**

The City of White Settlement encourages water conservation and reduction in water loss. In a recent assessment of the City water distribution system, Freese and Nichols, Inc. identified 45.5(%) percent of the system as older than 50 years, producing a demanding forecast for essential replacement and the subsequent challenge of addressing water loss resulting from water main breaks. In response, the City's has developed a 5-year Capital Improvement Plan aimed at replacing the worst sections of the system.

In 2022, the City adopted goals of reducing water consumption levels to 126 gallons per capita per day by 2015 and 120 gallons per capita per day by 2020. In 2017, the gallons per capita per day measured 100 gallons, which includes a 20.21% water loss. For future goals, the City has adopted a goal of reducing water consumption to a level of 98 gallons per capita per day by 2024 and 96 gallons per capita per day by 2029. The City has also adopted a goal of reducing the current water loss to an amount of 18.0% within 5 years and to an amount of 16.0% within 10 years.

**3.1 Implementation Schedule:**

<b>Water Conservation Goals in Gallons PCPD</b>	
<b>Year</b>	<b>Goal</b>
2029	98
2034	96

<b>Water Loss Reduction</b>	
<b>Year</b>	<b>Goal</b>
2029	18.0%
2034	16.0%

**4. Implementation and Evaluation**

Water Conservation Goals - Implementation of water conservation goals will rely heavily on public education measures and handouts.

Water Loss Reduction Goals - Implementation of water loss reduction goals will rely on measures to reduce loss throughout the distribution system and improve accuracy in the metering system.

Both water conservation and water loss reduction goals will be evaluated on an annual basis and a report will be presented to the City Council.

**5. Lawn and Landscape Irrigation Restrictions (Sec. 52-231)(Penalty 1-11)**

Lawn and Landscape Irrigation Restrictions

- (a) Lawns and landscaping may be watered on any day, at any time, by handheld hose, drip irrigation, a soaker hose or tree bubbler. (The intent of this measure is to allow for the protection of structural foundations, trees, and other high value landscape materials).

Except for hand watering, drip irrigation and the use of soaker hoses, a Person may only irrigate, water, or cause or permit the irrigation or watering of any lawn or landscape, inclusive of structural foundations, trees, and other high value landscape materials, located on premises owned, leased, or managed by that Person (i) on a day designated as an outdoor water use day for the property’s address as shown below; and (ii) between the hours of 12 midnight to 10 a.m. and 6 p.m. to 11:59 p.m. on such day.

- (1) Residential addresses ending in an even number (0, 2, 4, 6 or 8) may water on Wednesdays and Saturdays.
- (2) Residential addresses ending in an odd number (1, 3, 5, 7 or 9) may water on Thursdays and Sundays.

- (3) All non-residential locations (apartment complexes, businesses, industries, parks, street and/or roadway medians, etc.) may water on Tuesdays and Fridays.
- (b) Except for hand watering, drip irrigation and the use of soaker hoses, a Person commits an offense if that Person irrigates, waters, or causes or permits the irrigation or watering of any lawn or landscape located on premises owned, leased, or managed by that Person between the hours of 10:00 a.m. and 6:00 p.m. on a day that is not designated as an outdoor water use for that property address as shown in subsection (a) above.
- (c) A Person commits an offense if a Person knowingly or recklessly irrigates, waters, or causes or permits the irrigation or watering of a lawn or landscape located on premises owned, leased, or managed by the Person in a manner that causes:
  - (1) a substantial amount of water to fall upon impervious areas instead of a lawn or landscape, such that a constant stream of water overflows from the lawn or landscape onto a street or other drainage area; or
  - (2) An irrigation system or other lawn or landscape watering device to operate during any form of precipitation.
- (d) A Person commits an offense if, on premises owned, leased, or managed by that Person, a Person operates a lawn or landscape irrigation system or device that:
  - (1) has any broken or missing sprinkler head; or
  - (2) has not been properly maintained in a manner that prevents the waste of water.
- (e) Affirmative Defenses and Allowable Exceptions
  - (1) It shall be an affirmative defense to prosecution of an offense in section 52-231 (a) that at the time such Person irrigates, waters, or causes or permits the irrigation or watering of any lawn or landscape, such activity was for the purpose of:
    - (A) dust control of a sports field; or
    - (B) the maintenance, repair, or testing of an irrigation system.

- (2) The activity described in subsection f (1) (A) and (B) may only occur within a period of two (2) days no more than once every thirty (30) days. Any such activity requiring a longer period or greater frequency shall require a variance as provided by subsection (g).
- (3) A Person who irrigates, waters, or causes or permits the irrigation or watering by use of an alternative water source such as a well, reclaimed, or reused water, or water from the Trinity River is exempt from prosecution if that Person has:
  - (A) registered such alternative water source with the City;
  - (B) provided sufficient proof to the water department director that the alternative water source is from a well, reclaimed, or reused water or from the Trinity River and has allowed inspection by the water department director if deemed necessary; and
  - (C) complied with the City's Backflow and Cross-connection Control Program and City Code Article VI.

(f) Variances

- (1) The City Manager or his/her official designee may grant variances to the twice per week watering and irrigation restrictions and schedule, if one or more of the following conditions are met:
  - (A) Failure to grant such a variance would cause an emergency condition adversely affecting health, sanitation, or fire safety for the public or the Person requesting the variance.
  - (B) Compliance with the watering and irrigation restrictions and/or schedule cannot be accomplished due to technical or other limitations; or
  - (C) Alternative methods that achieve the same level of reduction in water use can be implemented.
- (2) The City Manager or his/her official designee may grant variances to allow for establishment of hydro-mulch, grass sod, grass seed for new lawns or landscaping.

- (3) Variances shall be granted or denied at the discretion of the City Manager or his/her official designee. All petitions for variances shall be in writing and shall include the following:
- (A) Name and address of the petitioner(s).
  - (B) Purpose of the water use.
  - (C) Specific provisions from which relief is requested.
  - (D) Detailed statement of the adverse effect of the provision from which relief is requested.
  - (E) Description of the relief requested.
  - (F) Time period for which the variance is sought.
  - (G) Alternative measures that will be taken to reduce water use; and
  - (H) Other pertinent information requested.

## **6. Master Meters**

A master meter is located at each supply source. All groundwater wells are metered and the three delivery vaults from the City of Fort Worth are metered.

## **7. Universal Metering**

All commercial and residential customers are metered. All meters are installed and maintained in accordance with all applicable local, state, and federal regulations and standards.

## **8. Water Loss Prevention**

Unaccounted for water loss is typically attributed to distribution system leaks, inaccurate metering, and theft of service. Distribution system leaks are investigated for by routine investigation of the system, continual 24/7 monitoring of the City's SCADA system and citizens reporting leaks to the Water Department and the Police Dispatcher.

Inaccurate metering is routinely investigated by the Utility Billing and Public Works personnel, along with Code Enforcement personnel and the Police Department.

## **9. Leak Detection Program**

The City's smart meters provide leak notification data to the City and the City conducts visual inspections for leaks. The City's SCADA system is also utilized on a 24/7 basis to monitor water line breaks and major leaks.

## **10. Public Education Program**

Water Conservation brochures are provided at all public buildings and information is included with the water billing notice on a routine basis. Also, informational items are located on the City's website, along with routinely provided at public meetings. In accordance with the TRWD Water Conservation recommendations, the City of White Settlement commits to:

2. 1. Participate in Customer City Water Conservation workshops and work with TRWD and assist with workshop topics, promotion, and coordination of the workshops.
3. 2. Support the Regional Water Conservation Public Awareness Campaign.
3. 3. Promote the Weekly Watering Advice Service.
4. 4. Participate in and coordinate Learn and Grow activities; and
5. 5. Share annual conservation reports with TRWD

## **11. Adoption and Enforcement of Plan**

The Water Conservation Plan has been adopted by Ordinance No. 2019-05-009.

Enforcement of the Water Conservation Plan and the Drought Contingency Plan are addressed in the Code of Ordinances of the City of White Settlement, Chapter 52 Article VII, Section 52-231.

### **City of White Settlement Code of Ordinances -**

#### **Sec. 52-232. - Enforcement.**

Mandatory water use restrictions may be imposed in stages 1, 2, and 3. These mandatory water use restrictions will be enforced by warnings and penalties as follows:

## **City of White Settlement Code of Ordinances -**

### **Sec. 52-232. - Enforcement.**

Mandatory water use restrictions may be imposed in stages 1, 2, and 3. These mandatory water use restrictions will be enforced by warnings and penalties as follows:

On the first violation, customers will be given a written warning that they have violated the mandatory water use restriction.

On the second and subsequent violations, citations may be issued to customers, with minimum and maximum fines established by ordinance.

After three violations have occurred, the utility may cut off water service to the customer.

### **Sec. 1-11. - General penalty for violations of Code; continuing violations.**

Whenever in this Code or in any ordinance of the city an act is prohibited or is made or declared to be unlawful or an offense or a misdemeanor, or whenever in such Code or ordinance the doing of any act is required or the failure to do any act is declared to be unlawful, and no specific penalty is provided therefor, the violation of any such provisions of this Code or any such ordinance shall be punished by a fine not exceeding \$500.00. However, a fine or penalty for the violation of a rule, ordinance or police regulation that governs fire safety, zoning or public health and sanitation, including the dumping of refuse, may not exceed \$2,000.00; provided, however, that no penalty shall be greater or less than the penalty provided for the same or a similar offense under the laws of the state. Each day any violation of this Code or of any ordinance shall constitute a separate offense. If any such violation is designated as a nuisance under the provisions of this Code, such nuisance may be summarily abated by the city. In addition to the penalty prescribed in this section, the city may pursue other remedies such as abatement of nuisances, injunctive relief and revocation of licenses or permits.

## **12. Regional Water Planning Group Notification**

The City has/will notify Region C Water Planning Group in accordance with the TRWD and TCEQ requirements for Water Conservation Plans to be filed.

## **13. Graywater**

Graywater Residential graywater use (i.e., recycling water within the home using a dual plumbing system) is another potential water supply. The Texas Administrative Code Chapter 210 has rules governing the use of graywater for domestic purposes, industrial, commercial, or institutional purposes and irrigation. At this time this practice is not considered economically feasible on a large residential scale, however it may be evaluated on a case-by-case basis for other customer classes.