



WEBB COUNTY UTILITIES DEPARTMENT

WATER CONSERVATION PLAN

Adopted this __ day of _____, 2024

513 Martha Drive

Rio Bravo, Texas 78046

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WEBB COUNTY
WATER CONSERVATION PLAN

Article I. Purpose of the water conservation plan for Webb County utilities.

(a) The purpose of this plan is to promote the protection and proper utilization of Webb County's water resources to ensure an uninterrupted supply of water sufficient to satisfy essential needs.

(b) This water conservation plan, officially named the Webb County Utility Water Conservation Plan is established in accordance with V.T.C.A. Administrative Code Title 30, Chapter 288.

Interpretation of the water conservation plan.

(a) The provisions of this water conservation plan shall be interpreted and applied as the minimum requirements for water conservation in the county and shall control over all other landscape and water management requirements, if applicable.

(b) This plan is not intended to interfere with, abrogate or annul any restrictive covenants or other agreements between individual parties. When there is a conflict between the requirements of this plan and any restrictive covenants, agreements or other requirements imposed on the property, the more stringent requirement shall apply.

(c) Where any provision of federal or state law conflicts with any provision of this plan, the most stringent provision shall apply unless otherwise regulated by law.

(d) The provisions of this plan shall not be interpreted as part of or in lieu of the County's drought contingency plan.

Article II. Specific and quantified water conservation goals.

In an effort to reduce long-term capital expenditures, Webb County has instituted this water conservation program to implement water conservation regulations for its utility department and service area in accordance with the rules of the Texas Water Development Board and the Texas Commission on Environmental Quality. The County will continue to implement additional activities and programs, as deemed necessary, in order to meet or exceed the specific and quantified water conservation goals listed below:

(1) Maintain unaccounted-for water at ten (10) percent until year 2024 and reduce to less than ten (10) percent by 2029 through improved water use accounting system, leak detection, and leak repairs.

(2) Maintain the gallons per capita per day (GPCD) consumption at one hundred thirty (130) GPCD.

(3) Find ways to Increase the beneficial reuse of effluent from the County's wastewater treatment facilities.

- (4) Use increasing block rates for water and wastewater services to discourage excessive water usage.
- (5) Continue to implement the meter testing, repair, and replacement program, as well as leak detection efforts, in order to assist reducing the unaccounted-for water to less than ten (10) percent.
- (6) Continue to meet or exceed all Texas Commission on Environmental Quality (TCEQ) and Environmental Protection Agency (EPA) requirements.

These goals are consistent with commonly accepted water industry standards as required by the 30 V.T.C.A. Administrative Code § 288.2, entitled "Water Conservation Plans for Municipal Uses by Public Water Suppliers" and the Texas Water Development Board.

Article III. Water conservation program.

The County's water conservation program is designed to provide practices, techniques, and technologies that help reduce the consumption of water, reduce the loss or waste of water, improve the efficiency in the use of water, and increase the recycling and reuse of water for the ultimate purpose of making available a water supply for future or alternative uses. The program is comprised of a water conservation planner and water conservation inspectors, who are responsible to implement water conservation requirements and enforce all regulations established in the water conservation and drought contingency plans, also known as the water conservation and drought contingency ordinance.

Article IV. Accurate metering devices.

Raw water diverted from the Rio Grande is metered, as well as the treated water that is sent to the booster pumping stations for distribution throughout the County. Each meter has an accuracy within the range of plus or minus 5.0 percent. The meters must be calibrated at least annually by qualified personnel in order to maintain the required meter accuracy. Meters must be replaced or repaired, as deemed necessary.

Article V. Universal metering.

Metering all water services is an effective way of improving and maintaining control of the water system operations and for providing the basis of an efficient and equitable cost recovery. Metering provides a database for system performance monitoring, for planning future facilities, and for assessing the effects of water conservation measures. Metering also improves accountability for both water deliveries and unaccounted-for water losses.

A standard universal metering system is used to monitor the quantity of water that is delivered to each residential and commercial customer. Water delivered to public facilities is not an exception. Each public facility has a water meter. Water that is used for public services such as street cleaning/sweeping, graffiti removal, or firefighting training will need to use a temporary fire hydrant meter when using water from a fire hydrant to account for the total amount of water that is utilized. The water meters are read by the utility's meter readers and recorded on the County's system once per month, with billings made monthly to residential and commercial customers.

Webb County Utilities Department replaced water meters with automated meters in 2020, in addition to having installed advanced metering infrastructure (AMI) in an effort to create efficiency, reliability, and use the latest technology.

Article VI. Unaccounted-for water use measures.

Unaccounted-for water, which includes authorized but unmetered uses of water such as firefighting and flushing of a waterline, is the difference between the treated water leaving the water treatment plants and the water delivered to the customers through a meter. There are several categories of unaccounted-for water, which include, but are not limited to:

- (1) Loss of water due to inaccuracies in older meters;
- (2) Loss of water due to water main breaks in the distribution system;
- (3) Loss of water due to waterline leaks in the distribution system;
- (4) Loss of water due to illegal connections and theft of water.

The Webb County Utilities Department will continue to use its water leak detection equipment, as often as possible, when conducting periodic visual inspections along the distribution lines to detect water leaks.

Fire hydrant meters can only be installed, repaired, or replaced by utilities department staff. No person shall be allowed to open or close a fire hydrant or fire hydrant meter without having a training and certificate from the utilities department for having completed a mandatory training. Utilities staff are prohibited from using water from a fire hydrant for any water-related operation without a fire hydrant meter installed.

The utilities department customer service division is developing a process to detect and prevent illegal connections. When an illegal connection is identified, staff take pictures, remove the illegal connection and confiscate the illegal device used as a connection, send correspondence to the property owner, document the file, and impose a hefty illegal connection fee. Water conservation inspectors also assist by issuing a citation for theft of water services and for having an illegal connection and also file a police report against the alleged violator.

In order to further assist in determining the amount and source(s) of water loss, the Webb County Utilities Department conduct a comprehensive water audit and meter management evaluation in within the next five years. Cost-effective measures for reducing water loss will be recommended in the audit.

Public education and awareness program.

Public education and awareness is an essential component of the water conservation program. Various strategies are used to communicate the need for and benefits of water conservation and to provide useful consumer-oriented information about water conservation practices and technologies to utility customers.

The Webb County Utilities Department will establish public awareness and educational activities within the community by conducting presentations, participating in events, preparing publications of water related flyers, advertisements, and other public relations messages.

Article VII. Water rate and sewer rate structure.

Webb County has a water rate increase plan. This water rate increase plan is a strategy placed in effect to discourage excessive use of water.

In addition to an escalating water rate structure, the County adopted a sewer rate increase plan. This escalating water rate structure is a strategy placed in effect to discourage excessive use of water. The more water that is used, the higher that the sewer rate will be.

Article VIII. Reservoir systems operation plan.

The County does not own a reservoir; therefore, a reservoir systems operation plan is not applicable to the County. The County, however, shares the waters of the Rio Grande River, which serves as a natural boundary along the borders of Laredo, Texas, and Nuevo Laredo, Tamaulipas. The Amistad and Falcon Reservoirs are naturally connected to the Rio Grande River; therefore, the Webb County Utilities Department has a drought contingency plan to help optimize the available water supplies of the Rio Grande River. (Refer to drought contingency plan.)

Article IX. Implementation and enforcement of the water conservation plan.

The Webb County Utilities Director has the primary responsibility for implementing and enforcing this water conservation plan through the water conservation program. All water conservation orders described on this plan shall be enforced by the utility's water conservation inspectors and other utility personnel designated by the utilities director, such as code enforcement inspectors, code-certified personnel from other County departments, police officers, and the municipal court, as appropriate.

Any employee of the Webb County Utilities Department designated by the utilities director and where allowable by State law, sheriff department or code-certified employees from another County department may issue a warning or citation to a person that he or she reasonably believes to be in violation of this water conservation plan. The alleged violator shall receive two (2) written warnings before receiving the first citation. The two (2) written warnings may be for violation of any section, or combination of sections, found on this water conservation plan. The citation, which shall be issued on the third offense and thereafter, shall be prepared in triplicate form and must contain the name and address of the alleged violator, if known, the offense charged, and shall direct him or her to appear at the appropriate Court on the date shown on the citation, which date shall be not less than five (5) days or more than ten (10) days from the date that the citation was issued. The citation must be issued to the alleged violator, an agent, manager, or employee of the violator, or to a person of age eighteen (18) years or older who is a member of the violator's immediate family or is a resident of the violator's residence. The alleged violator shall be served with a copy of the citation, and a copy must be submitted to the water conservation program for data entry and recordkeeping. Any pictures taken as proof of violation shall also be submitted to the water conservation program with a copy of the citation. The

original document(s) must be delivered to a Court of competent jurisdiction for stamping and processing. The alleged violator shall appear at Court to enter a plea of guilty or not guilty for the violation of this water conservation plan. If the alleged violator fails to appear in court, a warrant for his or her arrest may be issued by the Court. A summons to appear in court may also be issued in lieu of an arrest warrant. **Note: The above section is contingent upon statutory jurisdiction provided for in State law.**

Article X. Penalties for violation of the water conservation plan.

After receiving two (2) written warnings for any section or combination of sections, a person who violates this water conservation plan shall be issued a citation and may be guilty of a class C misdemeanor. Upon citation and conviction, any person violating this provisions shall be subject to punishment as provided in section 31-132. All payments shall be made payable to the Court.

A previous violation shall not be considered if a period of one (1) year has elapsed since the violation was first incurred or the property is acquired by a new owner or tenant.

In the event that a citation is issued erroneously and submitted to a Court of competent jurisdiction, the citation shall be voided by the person issuing the citation only with a written approval from the utilities director. **Note: The above section is contingent upon statutory jurisdiction provided for in State law.**

Article XI. Coordination with regional water planning groups.

The service area of the Webb County is located within the Rio Grande Regional Planning Group, known as the Rio Grande Region (M). The County shall provided a copy of the existing Water Conservation and Drought Contingency Ordinance to this group as an effort to maintain a close coordination with the Rio Grande Region (M). Copies of any amendment to this ordinance(s) will continue to be provided to the Rio Grande Region (M) in order to maintain a close communication with them in regards to water conservation efforts implemented in the County or drought emergency triggers affecting the Rio Grande River along the Webb County border.

Article XII. Plan review and update.

The Webb County Utilities Department shall review and update its water conservation plan, as appropriate, based on an assessment of previous five-year and ten-year targets and any other new or updated information. The Webb County Utilities Department shall review and update the next revision of its water conservation plan not later than May 1, 2029, and every five (5) years after that date to coincide with the regional water planning group. The revised plan must also include an implementation report.

Article XIII. Leak detection, repair, and water loss accounting.

Meter readers, water conservation inspectors, distribution crews, and other utility staff assist with detecting leaks caused by irrigation systems, meters, backflow devices, fire hydrants, waterlines, fire protection lines, and wastewater lines. When leaks are identified, the utility's emergency call center is notified to dispatch a serviceman from the responsible division to the location of the leak. The responsible division will do the necessary repairs to eliminate the leak or replace the faulty meter, fire hydrant, water line, or wastewater line, if necessary. If a meter, an irrigation

system, or backflow device is found to be leaking on the private side, the property owner will be notified and issued a written warning for failure to repair a controllable leak. Failure to repair the private leak, after the second warning, will constitute a citation and incur the penalties established in this plan

The utilities department plan uses a sonic water leak detection device to locate water leaks. The utilities department plans to implement a long-term water main replacement and upgrade program in an effort to reduce the number of waterline leaks and breaks. Based on a fifty-year life cycle, water lines will be replaced per year.

Water loss accounting to control water loss from water waste and unaccounted-for water are part of the utilities department's routine operations. The standard universal metering system, used by the utilities department, helps reduce the amount of unaccounted-for water. Meter readers, water conservation inspectors, and other Webb County Utilities Department staff assist by identifying and reporting any signs of illegal connections so that they are addressed as promptly as possible by the responsible division. Those who are found to be illegally connected to the County's water system face disconnection of water service, penalties, and convictions, as deemed necessary. Waterline leaks or breaks are reported to the utilities department by the public, or other County personnel and they are documented. Then distribution division crews respond quickly to repair or replace the waterlines and provide the proper information to complete the computerized reports. These strategies provide the ability to generate a more accurate estimate of the actual water losses and also help evaluate costs and benefits associated with leak detection, repair, and/or replacement of main waterlines.

Article XIV. Record management system.

The utility owns and operates one (1) water treatment plant. Staff maintain daily reports, which document the total plant flows and daily average water demands measured in million gallons of water per day.

Water sales are reported by the utility's customer service division on a daily basis as new water customers pay for the connection of a new regular or irrigation meter. A customer information system is used to control the water delivered to each customer on a monthly basis according to the meter reading dates. The customer service division is responsible for maintaining the customer billing accounts current. In addition, the customer service division processes applications for temporary fire hydrant meters and installs temporary meters for contractors who need to use water from a fire hydrant for construction purposes. The temporary meter registers the amount of water released through the fire hydrant, and the water used is then paid for by the contractor

Article XV. Conservation-oriented water rates and water rate structures.

The Webb County instituted an increasing water block rate schedule in April 2006, for a period of five (5) years, as approved by the Webb County Commissioners Court, categorizing a water rate structure for each of the following block tiers: residential, multi-family, residential irrigation, commercial, commercial irrigation, and commercial hydrant. As the water

consumption increases, the water rate also increases, thereby, discouraging the use of excessive water use serving as an indirect conservation-oriented water rate structure.

Article XVI. Water-conserving plumbing fixtures.

Under the V.T.C.A. Health and Safety Code, § 372.002, "Water Saving Performance Standards," water-conserving plumbing fixtures are required for new structures and existing structures undergoing substantial modification or addition.

The requirement for water conserving fixtures, to the extent there is authorization for County regulation under State law, is being evaluated.

Article XVII. Reuse and recycling of wastewater.

Wastewater is water that has already been used, such as water from sinks, showers, bathtubs, toilets, washing machines, and dishwashers. Many businesses, industries, and even storm runoff contributes to these waste products. However, most of this wastewater can be reused and recycled as a way to conserve water.

(1) Wastewater reuse program. Webb County is developing a wastewater reuse program, in which effluent is used at the wastewater treatment plant for beneficial purposes. Effluent, which is treated wastewater that meets the requirements of the Texas Commission on Environmental Quality and is suitable for a beneficial use, may be used by the utility for washdowns, dust control, cleaning of equipment, and tank washing.

Article XVIII. Pressure control and reduction.

Pressure is the force that determines how much water can pass through a faucet, valve, pipe, or hole at any given time. Pressure reduction valves are used to adjust the pressure. If a faucet can have a flow rate ranging from 3.0 to 5.6 gallons per minute at one hundred fifty (150) pounds per square inch (psi), it is evident that pressure control and reduction is of utmost importance. Reducing the pressure causes less water to flow through the opened valve or faucet in a given time. Pressure reduction also saves water by reducing the mechanical stress placed on plumbing fixtures and appliances, and more importantly by reducing the stress placed on the distribution system, which usually leads to waterline breaks. Pressure reduction valves shall be installed where the system pressures exceed eighty (80) psi.

Article XIX. Landscape and outdoor water management.

Customers will be allowed to use water outdoors any day at any time; unless a more stringent drought triggering stage from the drought contingency ordinance is declared.

The following are outdoor water management requirements:

- (a) Hand-watering using a handheld hose with a positive shut-off nozzle shall be permitted any day at any time. Leaving a water hose unattended is strictly prohibited.
- (b) Vehicle washing shall be permitted on Saturdays and Sundays any time during the day using a bucket and handheld hose with a positive shut-off nozzle. Using a leaking faucet or a leaking water hose is strictly prohibited.

(c) Every outdoor faucet in residential, commercial, or public facility shall have a hose bibb vacuum breaker installed in order to prevent water contamination to the facility and the County's water system. All hose bibb vacuum breakers shall be lead free.

(d) Washing sidewalks, walkways, driveways, parking lots, tennis courts, or other hard-surfaced areas shall only be permitted if a high pressure washer not to exceed 4.5 gallons per minute is used. Washing a street is strictly prohibited, unless it is done by a County department to eliminate a public hazard.

The provisions of the water conservation plan shall not be interpreted as part of or in lieu of the County's drought contingency plan. During a more stringent drought triggering stage, the outdoor water use conditions from the drought contingency plan shall supersede this division. (Refer to drought contingency plan.)

Article XX. Other water management strategies.

(a) Vehicle wash fundraisers. Vehicle washing for fundraising purposes by schools, non-profit organizations, or charity organizations shall require a one-day permit from the Webb County Utilities Department. An application for a one-day permit must be obtained from the water conservation program. A complete application shall be submitted to the water conservation program at least five (5) days before the day of the event. A fee of ten dollars (\$10.00) shall be charged for each permit, and funds are to be deposited into a "utilities department fund" in the County's annual budget. Funds from the "utilities department fund" shall be used for programs related to water conservation, which include, but are not limited to, educational programs, free giveaway programs, and other water conservation programs for the community. Payments shall be made by check or money order and made payable to the Webb County Utilities Department. Upon receiving payment of ten dollars (\$10.00) for each car washing fundraising activity, the water conservation program will issue a one-day permit (not to exceed five (5) hours), approved by the utilities director, with instructions on water conservation strategies, and one (1) hose bibb vacuum breaker to be placed on the outdoor faucet at the location of the event to help protect the County's water system from any possible contamination. The school or non-profit organization shall be responsible to purchase additional hose bibb vacuum breakers from any local hardware store when using more than one (1) outdoor faucet at the same location.

Article XXI. Performance measurement tools.

In an effort to monitor the effectiveness and efficiency of the existing water conservation and drought contingency ordinance, a water conservation database is will be developed to document the number of watering violations throughout the County's service area. The database would generate reports by type of violation, address of violation, date of violation, and by inspector name. The alleged violators receive water conservation pamphlets that help educate the customer and prevent the violation from reoccurring.

The utility's water treatment plant also generate reports that show the water consumption on a daily, weekly, or monthly basis, which help make comparisons as needed. This report is a type of performance measurement tool that helps monitor the raw water intake and water treated at the water treatment plants and the delivery of potable water to the distribution system.

Additional performance measures will be implemented to monitor the effectiveness and efficiency of this division, as deemed necessary.

Article XXII. Citizen participation.

All customers are encouraged to participate in water conservation and to report any violation of this division to the Webb County Utilities Department—Main Office at (956) 523-5590.

Article XXIII. Exempted parties.

Owners of water wells, owners of water rights, and effluent users are exempt from the provisions of this division, except that they are prohibited from allowing water to spray or run off in any street, gutter, ditch, or drain, or to any adjacent property.

Customers using effluent for irrigation or other purposes shall have an approved written agreement from the Webb County Utilities Department.