

## **DRAFT POLICY REGARDING WATER CONSERVATION MEASURES**

### Policy Objective

The primary objective of all policies is to support the San Jacinto River Authority Groundwater Reduction Plan (SJRA GRP) Program and to benefit all SJRA GRP Participants. The objective of this water conservation measures policy is to establish and promote ongoing strategies for the SJRA GRP Participants to reduce the volume of water withdrawn from a water supply source, to reduce the loss or waste of water, and to maintain or improve the efficiency in the use of water. Water conservation measures will not impact the infrastructure required to meet the 2016 conversion. However, water conservation measures may have a significant future impact by delaying the need for future infrastructure and ultimately delaying the need for development of additional water supply sources.

### Introduction

The goals of this Policy are to encourage participants to reduce water consumption, limit unaccounted for water, and extend the capacity of both existing and future water supplies. The potential results of a successfully implemented policy are reduced demands, prolonged capacity of existing facilities, delayed need for new facilities, and potential reduction, or downsizing of treatment and distribution facilities, which could result in economic benefits to the SJRA and the SJRA GRP Participants. The greatest obstacle to implementing any water conservation strategy is their cost relative to the cost of existing water supplies. As the cost of compliance with existing regulations increases, the incentive to conserve water will increase.

### Policy Elements

1. Collect, read, review and understand existing water conservation plan (WCP) from all SJRA GRP Participants that currently have one in place. Assist the SJRA GRP Participants in developing, adopting and enforcing a water conservation plan at the retail level meeting the applicable minimum requirements of the SJRA and the TCEQ (30 T.A.C. Chapter 288; Subchapter A: Water Conservation Plans §§ 288.1-288.7, or any successor rules), as specified in the SJRA GRP Contract.
2. Prepare a Water Conservation study to identify potential reductions in water demand and develop water conservation strategies and goals at the retail level for reduction in water demand.
3. Develop a standard WCP and for the SJRA GRP Program that all SJRA GRP Participants can use as a guide at the retail level. Methods used to encourage

water conservation must be cost effective such that the cost to reduce demand is less than the cost to develop new/additional water supplies.

4. Implement a program requiring each SJRA GRP Participant to demonstrate compliance with the adopted WCP including established water conservation strategies and reduction goals of the GRP Program. This demonstrated compliance will include as a minimum:
  - a. Dates and descriptions of the conservation methods implemented.
  - b. Data about whether or not goals in the plan are being met.
  - c. Actual amount of water saved.
  - d. If the targets are not being met, an explanation as to why.
5. Evaluate/establish penalties for not meeting the goals.

**The applicable portions of the SJRA GRP Contract Section 3.05 are reproduced below and included for reference only.**

Section 3.05: Water Conservation; Drought Contingency. Participant agrees to adopt and enforce a water conservation plan meeting the applicable minimum requirements of the Conservation District and the TCEQ (30 T.A.C. 95 288.1-288.7, or any successor rules), as well as a drought contingency plan meeting the applicable minimum requirements of the Conservation District and the TCEQ (30 T.A.C. §§ 288.20-288.22, or any successor rules). Participant may, but shall not be obligated, to include provisions in such plans that exceed or are more stringent than the minimum requirements described in the preceding sentence. Such plans must be completed and filed with the GRP Administrator at such times as may be reasonably required by the GRP Administrator, without regard to whether Participant will connect to the Project. In addition, after review by the Review Committee, the Authority may require Participant to adopt and enforce minimum requirements adopted by the Authority for such water conservation plans and drought contingency plans but only if: (i) such minimum requirements apply on an equal and uniform basis to all Participants and to all entities located in whole or in part in Montgomery County to which the Authority supplies wholesale groundwater or Water; and (ii) the Authority has the legal right to impose such minimum requirements on all such entities to which the Authority supplies wholesale groundwater or Water.

**End of the applicable portions of the SJRA GRP Contract Section 3.05.**

**SUBCHAPTER A: WATER CONSERVATION PLANS**

**30 TAC §§288.1-288.6**

**§288.1. Definitions.**

The following words and terms, when used in this chapter, shall have the following meanings, unless the context clearly indicates otherwise.

(1) **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 water supply is made available for future or alternative uses.

(2) **Drought contingency plan** - A strategy or combination of strategies for temporary supply and demand management responses to temporary and potentially recurring water supply shortages and other water supply emergencies. A drought contingency plan may be a separate document identified as such or may be contained within another water management document(s).

(3) **Industrial use** - The use of water in processes designed to convert materials of a lower order of value into forms having greater usability and commercial value, including commercial feedlot operations, commercial fish production, and the development of power by means other than hydroelectric.

(4) **Irrigation use** - The use of water for the irrigation of crops, trees, and pastureland, including, but not limited to, golf courses and parks which do not receive water through a municipal distribution system.

(5) **Irrigation water use efficiency** - The percentage of that amount of irrigation water which is beneficially used by agriculture crops or other vegetation relative to the amount of water diverted from the source(s) of supply. Beneficial uses of water for irrigation purposes include, but are not limited to, evapotranspiration needs for vegetative maintenance and growth, salinity management, and leaching requirements associated with irrigation.

(6) **Mining use** - The use of water for mining processes including hydraulic use, drilling, washing sand and gravel, and oil field repressuring.

(7) **Municipal per capita water use** - The sum total of water diverted into a water supply system for residential, commercial, and public and institutional uses divided by actual population served.

(8) **Municipal use** - The use of potable water within or outside a municipality and its environs whether supplied by a person, privately owned utility, political subdivision, or other entity as well as the use of sewage effluent for certain purposes, including the use of treated water for domestic purposes, fighting fires, sprinkling streets, flushing sewers and drains, watering parks and parkways, and recreational purposes, including public and private swimming pools, the use of potable water in

industrial and commercial enterprises supplied by a municipal distribution system without special construction to meet its demands, and for the watering of lawns and family gardens.

(9) **Pollution** - The alteration of the physical, thermal, chemical, or biological quality of, or the contamination of, any water in the state that renders the water harmful, detrimental, or injurious to humans, animal life, vegetation, or property, or to the public health, safety, or welfare, or impairs the usefulness or the public enjoyment of the water for any lawful or reasonable purpose.

(10) **Public Water Supplier** - an individual or entity that supplies water to the public for human consumption.

(11) **Regional Water Planning Group** - A group established by the Texas Water Development Board to prepare a regional water plan under Texas Water Code, §16.053.

(12) **Retail Public Water Supplier** - An individual or entity that for compensation supplies water to the public for human consumption. The term does not include an individual or entity that supplies water to itself or its employees or tenants when that water is not resold to or used by others.

(13) **Reuse** - The authorized use for one or more beneficial purposes of use of water that remains unconsumed after the water is used for the original purpose of use and before that water is either disposed of or discharged or otherwise allowed to flow into a watercourse, lake, or other body of state-owned water.

(14) **Water conservation plan** - A strategy or combination of strategies for reducing the volume of water withdrawn from a water supply source, for reducing the loss or waste of water, for maintaining or improving the efficiency in the use of water, for increasing the recycling and reuse of water, and for preventing the pollution of water. A water conservation plan may be a separate document identified as such or may be contained within another water management document(s).

(15) **Wholesale Public Water Supplier** - An individual or entity that for compensation supplies water to another for resale to the public for human consumption. The term does not include an individual or entity that supplies water to itself or its employees or tenants as an incident of that employee service or tenancy when that water is not resold to or used by others, or an individual or entity that conveys water to another individual or entity, but does not own the right to the water which is conveyed, whether or not for a delivery fee.

**§288.2. Water Conservation Plans for Municipal Uses by Public Water Suppliers.**

(a) A water conservation plan for municipal water use by public water suppliers shall provide information, where applicable, in response to the following.

(1) **Minimum requirements.** All water conservation plans for municipal uses by public drinking water suppliers shall include the following elements:

(A) a utility profile including, but not limited to, information regarding population and customer data, water use data, water supply system data, and wastewater system data;

(B) specification of conservation goals including, but not limited to, municipal per capita water use goals, the basis for the development of such goals, and a time frame for achieving the specified goals;

(C) metering device(s), within an accuracy of plus or minus 5.0% in order to measure and account for the amount of water diverted from the source of supply;

(D) a program for universal metering of both customer and public uses of water, for meter testing and repair, and for periodic meter replacement;

(E) measures to determine and control unaccounted-for uses of water (for example, periodic visual inspections along distribution lines; annual or monthly audit of the water system to determine illegal connections, abandoned services, etc.);

(F) a program of continuing public education and information regarding water conservation;

(G) a water rate structure which is not "promotional," i.e., a rate structure which is cost-based and which does not encourage the excessive use of water;

(H) a reservoir systems operations plan, if applicable, providing for the coordinated operation of reservoirs owned by the applicant within a common watershed or river basin in order to optimize available water supplies; and



(I) a means of implementation and enforcement which shall be evidenced by:

(i) a copy of the ordinance, resolution, or tariff, indicating official adoption of the water conservation plan by the water supplier; and

(ii) a description of the authority by which the water supplier will implement and enforce the conservation plan; and

(J) documentation of coordination with the Regional Water Planning Groups for the service area of the public water supplier in order to insure consistency with the appropriate approved regional water plans.

(2) Additional content requirements. Water conservation plans for municipal uses by public drinking water suppliers serving a current population of 5,000 or more and/or a projected population of 5,000 or more within the next ten years subsequent to the effective date of the plan shall include the following elements:

(A) a program of leak detection, repair, and water loss accounting for the water transmission, delivery, and distribution system in order to control unaccounted-for uses of water;

(B) a record management system to record water pumped, water deliveries, water sales, and water losses which allows for the desegregation of water sales and uses into the following user classes:

(i) residential;

(ii) commercial;

(iii) public and institutional; and

(iv) industrial; and

(C) a requirement in every wholesale water supply contract entered into or renewed after official adoption of the plan (by either ordinance, resolution, or tariff), and including any contract extension, that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using the applicable elements in this chapter; if the customer intends to resell the water, then the contract between the initial supplier and customer must provide that the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures in accordance with applicable provisions of this chapter.

(3) Additional conservation strategies. Any combination of the following strategies shall be selected by the water supplier, in addition to the minimum requirements in paragraphs (1) and

(2) of this subsection, if they are necessary to achieve the stated water conservation goals of the plan.

The commission may require that any of the following strategies be implemented by the water supplier if the commission determines that the strategy is necessary to achieve the goals of the water conservation plan:

(A) conservation-oriented water rates and water rate structures such as uniform or increasing block rate schedules, and/or seasonal rates, but not flat rate or decreasing block rates;

(B) adoption of ordinances, plumbing codes, and/or rules requiring water-conserving plumbing fixtures to be installed in new structures and existing structures undergoing substantial modification or addition;

(C) a program for the replacement or retrofit of water-conserving plumbing fixtures in existing structures;

(D) reuse and/or recycling of wastewater and/or greywater;

(E) a program for pressure control and/or reduction in the distribution system and/or for customer connections;

(F) a program and/or ordinance(s) for landscape water management;

(G) a method for monitoring the effectiveness and efficiency of the water conservation plan; and

(H) any other water conservation practice, method, or technique which the water supplier shows to be appropriate for achieving the stated goal or goals of the water conservation plan.

(b) A water conservation plan prepared in accordance with 31 TAC §363.15 (relating to Required Water Conservation Plan) of the Texas Water Development Board and substantially meeting the requirements of this section and other applicable commission rules may be submitted to meet application requirements pursuant to a memorandum of understanding between the commission and the Texas Water Development Board.

**§288.3. Water Conservation Plans for Industrial or Mining Use.**

A water conservation plan for industrial or mining uses of water shall provide information, where applicable, in response to each of the following elements:

(1) a description of the use of the water in the production process, including how the water is diverted and transported from the source(s) of supply, how the water is utilized in the production process, and the estimated quantity of water consumed in the production process and therefore unavailable for reuse, discharge, or other means of disposal;

(2) specification of conservation goals, the basis for the development of such goals, and a time frame for achieving the specified goals;

(3) a description of the device(s) and/or method(s) within an accuracy of plus or minus 5.0% to be used in order to measure and account for the amount of water diverted from the source of supply;

(4) leak-detection, repair, and accounting for water loss in the water distribution system;

(5) application of state-of-the-art equipment and/or process modifications to improve water use efficiency; and

(6) any other water conservation practice, method, or technique which the user shows to be appropriate for achieving the stated goal or goals of the water conservation plan.

**§288.4. Water Conservation Plans for Irrigation Use.**

(a) A water conservation plan for irrigation uses of water shall provide information shall provide information in response to the following applicable subsections.

(1) For an individual user:

(A) a description of the agricultural production process which shall include, but is not limited to, the type of crops and acreage of each crop to be irrigated, monthly irrigation diversions, any seasonal or annual crop rotation, and soil types of the land to be irrigated;

(B) a description of the irrigation method or system and equipment including pumps, flow rates, plans, and/or sketches of the system layout;

(C) a description of the device(s) and/or methods within an accuracy of plus or minus 5.0%, to be used in order to measure and account for the amount of water diverted from the source of supply;

(D) specification of conservation goals including, where appropriate, quantitative goals for irrigation water use efficiency and a pollution abatement and prevention plan;

(E) water-conserving irrigation equipment and application system or method including, but not limited to, surge irrigation, low pressure sprinkler, drip irrigation, and nonleaking pipe;

(F) leak-detection, repair, and water-loss control;

(G) scheduling the timing and/or measuring the amount of water applied (for example, soil moisture monitoring);

(H) land improvements for retaining or reducing runoff, and increasing the infiltration of rain and irrigation water including, but not limited to, land leveling, furrow diking, terracing, and weed control;

(I) tailwater recovery and reuse; and

(J) any other water conservation practice, method, or technique which the user shows to be appropriate for preventing waste and achieving conservation.

(2) For a system providing irrigation water to more than one user:

(A) a system inventory for the supplier's:

(i) structural facilities including the supplier's water storage, conveyance, and delivery structures;

(ii) management practices, including the supplier's operating rules and regulations, water pricing policy, and a description of practices and/or devices used to account for water deliveries; and

(iii) a user profile including square miles of the service area, the number of customers taking delivery of water by the system, the types of crops, the types of irrigation systems, the types of drainage systems, and total acreage under irrigation, both historical and projected;

(B) specification of water conservation goals, including maximum allowable losses for the storage and distribution system;

(C) a description of the practice(s) and/or device(s) which will be utilized to measure and account for the amount of water diverted from the source(s) of supply;

(D) a monitoring and record management program of water deliveries, sales, and losses;

(E) a leak-detection, repair, and water loss control program;

(F) a program to assist customers in the development of on-farm water conservation and pollution prevention plans and/or measures;

(G) a requirement in every wholesale water supply contract entered into or renewed after official adoption of the plan (by either ordinance, resolution, or tariff), and including any contract extension, that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using the applicable elements in this chapter; if the customer intends to resell the water, then the contract between the initial supplier and customer must provide that the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the water will be required to implement water conservation measures in accordance with applicable provisions of this chapter;



(H) official adoption of the water conservation plan and goals, by ordinance, rule, resolution, or tariff, indicating that the plan reflects official policy of the supplier;

(I) any other water conservation practice, method, or technique which the supplier shows to be appropriate for achieving conservation; and

(J) documentation of coordination with the Regional Water Planning Groups in order to insure consistency with the appropriate approved regional water plans.

(b) A water conservation plan prepared in accordance with the rules of the United States Department of Agriculture Natural Resource Conservation Service, the State Soil and Water Conservation Board, or other federal or state agency and substantially meeting the requirements of this section and other applicable commission rules may be submitted to meet application requirements pursuant to a memorandum of understanding between the commission and that agency.

**§288.5. Water Conservation Plans for Wholesale Water Suppliers.**

A water conservation plan for a wholesale water supplier shall provide information, where applicable, in response to each of the following paragraphs.

(1) Minimum requirements. All water conservation plans for wholesale water suppliers shall include the following elements:

(A) a description of the wholesaler's service area, including population and customer data, water use data, water supply system data, and wastewater data;

(B) specification of conservation goals including, where appropriate, target per capita water use goals for the wholesaler's service area, maximum acceptable unaccounted-for water, the basis for the development of said goals, and a time frame for achieving those goals;

(C) a description as to which practice(s) and/or device(s) will be utilized to measure and account for the amount of water diverted from the source(s) of supply;

(D) a monitoring and record management program for determining water deliveries, sales, and losses;

(E) a program of metering and leak detection and repair for the wholesaler's water storage, delivery, and distribution system;

(F) a requirement in every water supply contract entered into or renewed after official adoption of the water conservation plan, and including any contract extension, that each successive wholesale customer develop and implement a water conservation plan or water conservation measures using the applicable elements of this chapter. If the customer intends to resell the water, then the contract between the initial supplier and customer must provide that the contract for the resale of the water must have water conservation requirements so that each successive customer in the resale of the

water will be required to implement water conservation measures in accordance with applicable provisions of this chapter;

(G) a reservoir systems operations plan, if applicable, providing for the coordinated operation of reservoirs owned by the applicant within a common watershed or river basin. The reservoir systems operations plans shall include optimization of water supplies as one of the significant goals of the plan;

(H) a means for implementation and enforcement, which shall be evidenced by: a copy of the ordinance, rule, resolution, or tariff, indicating official adoption of the water conservation plan by the water supplier; and a description of the authority by which the water supplier will implement and enforce the conservation plan; and

(I) documentation of coordination with the Regional Water Planning Groups for the service area of the wholesale water supplier in order to insure consistency with the appropriate approved regional water plans.

(2) Additional conservation strategies. Any combination of the following strategies shall be selected by the water wholesaler, in addition to the minimum requirements of paragraph (1) of this section, if they are necessary in order to achieve the stated water conservation goals of the plan. The commission may require by commission order that any of the following strategies be implemented by the water supplier if the commission determines that the strategies are necessary in order for the conservation plan to be achieved:

(A) conservation-oriented water rates and water rate structures such as uniform or increasing block rate schedules, and/or seasonal rates, but not flat rate or decreasing block rates;

(B) a program to assist customers in the development of conservation pollution prevention and abatement plans;

(C) a program for reuse and/or recycling of wastewater and/or greywater; and

(D) any other water conservation practice, method, or technique which the wholesaler shows to be appropriate for achieving the stated goal or goals of the water conservation plan.

**§288.6. Water Conservation Plans for Any Other Purpose or Use.**

A water conservation plan for any other purpose or use not covered in this subchapter shall provide information where applicable about those practices, techniques, and technologies that will be used to reduce the consumption of water, prevent or reduce the loss or waste of water, maintain or improve the efficiency in the use of water, increase the recycling and reuse of water, or prevent the pollution of water.