# Texas Commission on Environmental Quality

### Water Availability DivisionMC-160, P.O. Box 13087 Austin, Texas 78711-3087Telephone (512) 239-4600, FAX (512) 239-2214

## System Inventory and Water Conservation Plan

##  for Individually-Operated Irrigation Systems

This form is provided to assist entities in developing a water conservation plan for individually-operated irrigation systems. If you need assistance in completing this form or in developing your plan, please contact the Conservation staff of the Resource Protection Team in the Water Availability Division at (512) 239-4600.

*Additional resources such as best management practices (BMPs) are available on the Texas Water Development Board's website* [*http://www.twdb.texas.gov/conservation/BMPs/index.asp*](http://www.twdb.texas.gov/conservation/BMPs/index.asp)*. The practices are broken out into sectors such as Agriculture, Commercial and Institutional, Industrial, Municipal and Wholesale. BMPs are voluntary measures that water users use to develop the required components of Title 30, Texas Administrative Code, Chapter 288. BMPs can also be implemented in addition to the rule requirements to achieve water conservation goals.*

**Contact Information**

Name: Click to add text

Address:

Telephone Number: (     )      Fax: (     )

Form Completed By:

Title:

Signature: Date:      /     /

**A water conservation plan for agriculture use (individual irrigation user) must include the following requirements (as detailed in 30 TAC Section 288.4). If the plan does not provide information for each requirement, you must include in the plan an explanation of why the requirement is not applicable.**

#### BACKGROUND DATA

##### Water Use

###### Annual diversion appropriated or requested (in acre-feet):

###### In the table below, list the amount of water (in acre-feet) that is or will be diverted monthly for irrigation during the year.

|  |  |  |  |
| --- | --- | --- | --- |
| January | February | March | April |
|       |       |       |       |
| May | June | July | August |
|       |       |       |       |
| September | October | November | December |
|       |       |       |       |
|  |  | **Total All Months** |       |

###### In the table below, list the type of crop(s), growing season, and acres irrigated per year.

|  |  |  |
| --- | --- | --- |
| *Type of crop* | *Growing Season (Months)* | *Acres irrigated/year* |
|       |       |       |
|       |       |       |
|       |       |       |
|       |       |       |
|  | **Total acres irrigated** |       |

###### Are crops rotated seasonally or annually? [ ]  Yes [ ]  No

###### If yes, please describe:

###### Describe soil type (including permeability characteristics, if applicable).

######

##### Irrigation system information

###### Describe the existing irrigation method or system and associated equipment including pumps, flow rates, plans, and/or sketches of system the layout. Include the rate (in gallons per minute or cubic feet per second) that water is diverted from the source of supply. If this WCP is submitted as part of a water right application, verify that the diversion volumes and rates are consistent with those in the application.

######

###### Describe the device(s) and/or method(s) used to measure and account for the amount of water diverted from the supply source, and verify the accuracy is within plus or minus 5%.

######

###### Provide specific, quantified 5-year and 10-year targets for water savings including, where appropriate, quantitative goals for irrigation water use efficiency and a pollution abatement and prevention plan below in 3(a) and 3(b). Water savings may be represented in acre-feet or in water use efficiency. If you are not planning to change your irrigation system in the next five or ten years, then you may use your existing efficiencies or savings as your 5-year and /or 10-year goals. Please provide an explanation in the space provided below if you plan to use your existing efficiencies or savings.

######

Quantified 5-year and 10-year targets for water savings:

* + - 1. 5-year goal:
			Savings in acre-feet       or system efficiency as a percentage       %
			2. 10-year goal:
			Savings in acre-feet       or system efficiency as a percentage       %

*(Examples of Typical Efficiencies for Various Types of Irrigation Systems – Surface: 50-80%; Sprinkler: 70-85%; LEPA: 80-90%; Micro-irrigation: 85-95%)*

###### If there is an existing irrigation system, have any system evaluations been performed on the efficiency of the system?

###### **[ ]** Yes [ ]  No

###### If yes, please provide thedate of the evaluation, evaluator’s name and the results of the evaluation:

##### Conservation practices

###### Describe any water conserving irrigation equipment, application system or method in the irrigation system (e.g., surge irrigation, low pressure sprinkler, drip irrigation, nonleaking pipe).

######

###### Describe any methods that will be used for water loss control and leak detection and repair.

######

###### Describe any water-saving scheduling or practices to be used in the application of water (e.g., irrigation only in early morning, late evening or night hours and/or during lower temperatures and winds) and methods to measure the amount of water applied (e.g. soil-moisture monitoring).

######

###### Describe any water-saving land improvements or plans to be incorporated into the irrigation practices for retaining or reducing runoff and increasing infiltration of rain and irrigation water (e.g., land leveling, conservation tillage, furrow diking, weed control, terracing, etc.).

######

###### Describe any methods for recovery and reuse of tail water runoff.

######

###### Describe any other water conservation practices, methods, or techniques for preventing waste and achieving conservation.

######

#### WATER CONSERVATION PLANS SUBMITTED WITH A WATER RIGHT APPLICATION FOR NEW OR ADDITIONAL STATE WATER

Water Conservation Plans submitted with a water right application for New or Additional State Water must include data and information which:

###### support the applicant’s proposed use of water with consideration of the water conservation goals of the water conservation plan;

###### evaluates conservation as an alternative to the proposed appropriation; and

###### evaluates any other feasible alternative to new water development including, but not limited to, waste prevention, recycling and reuse, water transfer and marketing, regionalization, and optimum water management practices and procedures.

Additionally, it shall be the burden of proof of the applicant to demonstrate that no feasible alternative to the proposed appropriation exists and that the requested amount of appropriation is necessary and reasonable for the proposed use.