

Irrigation Water Management

Code: 449

Reporting Unit: Acre

Definition:

The process of determining and controlling the volume, frequency, and application rate of irrigation water in a planned, efficient manner.

Purpose:

- Manage soil moisture to promote desired crop response
- Optimize use of available water supplies
- Minimize irrigation-induced soil erosion
- Decrease nonpoint source pollution of surface and groundwater resources
- Manage salts in the crop root zone
- Manage air, soil, or plant micro-climate
- Provide proper and safe chemigation or fertigation
- Improve air quality by managing soil moisture to reduce particulate matter movement

Conditions Where Practice Applies:

This practice is applicable to all irrigated lands. An irrigation system adapted for site conditions (soil, slope, crop grown, climate, water quantity and quality, etc.) must be available and capable of applying water to meet the intended purpose(s).

Payment Schedule:

Activity Description	Payment Unit	Payment Rate	
		General	HU
IWM, Advanced Technique Implementation of a high intensity IWM system for producers using a water budget method with advanced methods of determining irrigation water applied, estimated crop evapotranspiration, continuous soil moisture data, and crop temperature stress monitoring. Typically soil moisture is determined by automated soil moisture monitoring stations equipped with telemetry data, irrigation amounts are recorded from a flow meter near the pump, and telemetry data is automatically sent to a computer with irrigation software. Typical water and energy savings are greater than 20%. The number for payment will be the number of irrigation systems using advanced irrigation water management. Energy savings must be documented with an energy audit.	Ea	\$1,838.40	\$2,206.08

Limitations:

1. This practice will be implemented a minimum of three (3) years. Payment will be made upon annual implementation of the practice.

Documentation:

Forms KS-ENG-390, Irrigation Water Management - 449; KS-ENG-201, Sprinkler System - 442 (Center Pivot); KS-ENG-394, Irrigation Water Management - 449, Planned Crop and Water Requirement; Irrigation Water Management - 449, Farm Irrigation Rating Tool (FIRI) Worksheet; pumping plant evaluation and recommendations; energy audit and recommendations.

Maintenance:

Practice will be maintained for a lifespan of one year following installation.