



## WQT01 - Montana Supplement – REVISED 2/22/11

### Irrigation System Automation – (Water Quantity Enhancement Activity)

#### Montana Clarification

This enhancement is with pivot irrigation systems. The pivot panel must allow for variable rate by changing the time per rotation and applied water.

#### Montana Specifications

This enhancement requires the installation of a wireless data logger with 6 soil moisture sensors- 3 groups at 2 sensors per system. Set the sensors at 25% and 75% of crop root zone, and different soil types (if applicable). Soil moisture transmitters will send sensor readings to the data logger. Adjust application rates based on moisture readings. Demonstrate that soil moisture is managed between field capacity and management allowed depletion.

#### Incompatible Enhancements

This enhancement may not be contracted with the following enhancements:

For cropland: ANM21, ANM22, SOE02

For pasture: none

#### Eligible Land

Irrigated crop or pasture

#### Applicable Acres

Acres of irrigated cropland, pasture, or hayland

#### Example (System)

The applicable acres are the acres of pivot irrigated cropland or pastureland fields. Any system included in this enhancement is applied. The land owner has 1200 acres of irrigated cropland and 400 acres of irrigated pasture. The landowner chooses to place the system on 640 acres of his cropland in the 2<sup>nd</sup> year of his contract. The applicable acres is 1600, the applied acres is 640 acres:

	Year 1	Year 2	Year 3	Year 4	Year 5
WQT01	0	640 ac	640 ac	640 ac	640 ac

#### Documentation Requirements

1. Documentation of the operation of a variable rate irrigation system which will provide for variable application of irrigation water based on variations of soils, topography, or crops.
2. Provide a copy of the irrigation prescription and irrigation logs.
3. Documentation, with the data logger printout of soil moisture, that irrigations were based on moisture sensor readings.

I acknowledge that I have read and understand all that is required for the implementation of this CSP Enhancement Activity.

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Contract participant

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Date