Irrigation Water Management (IWM) (449) Requirement Sheet

2016 Environmental Quality Incentives Program (EQIP)

Eligibility: Crop and Nursery Operations with adequate irrigation history on file.

Purpose: To encourage proper irrigation scheduling using appropriate tools. Irrigation water management is applying water according to crop needs in an amount that can be stored in the plant root zone of the soil. The site must be equipped with an irrigation system adapted for site conditions (soil, slope, crop grown, climate, water quantity and quality, air quality, etc.) and must be available and capable of efficiently applying water to meet the intended purpose(s). This level of IWM is implemented in conjunction with a cropping/residue management system that is based on RUSLE2 requirements to meet RMS levels.

Measurement and determination of flow rate is a critical component of irrigation water management and must be a part of all irrigation water management purposes. The irrigator or decision-maker must possess the knowledge, skills, and capabilities of management coupled with a properly designed, efficient and functioning irrigation system to reasonably achieve the purposes of irrigation water management.

Requirements: Resource concerns exist such that application of irrigation water is inefficient. Meet Conservation Practice Standard Irrigation Water Management (449).

Requirements for all 449 Practices:

- Payment requires an Irrigation Water Management Plan (IWMP) – Refer to the 2016 Requirement Clarification for IWMP's for further information.
- CPS 587 Structure for Water Control, Flow Meter is required under EQIP if one does not exist. Installation guidance is contained in NE-ENG-83.
- Note: When using the 449 Soil Moisture Sensor practices (2), 449 Intermediate IWM practice under EQIP is also required for these as an accompanying practice.

Further Explanation for Practices:

- Basic IWM – typically achieved using the feel and appearance method for checking soil moisture as well as hand calculations and hand written paper records.
- Intermediate IWM – typically achieved using in-field moisture sensors, on-site weather station, electronic downloads of field data, and the use of an irrigation scheduling computer program.
- Advanced Soil Moisture Sensors – typical system includes a weather station (items such as rain, temperature, wind, humidity, etc.) and a soil moisture sensor and meter. This is one step up from the feel and appearance method for checking soil moisture.
- Soil Moisture Sensor with Data Recorder - typical system includes a weather station (items such as rain, temperature, wind, humidity, etc.), soil moisture sensor and a data logger (instead of a meter).

Producer Requirements for Payment:

Install practice according NRCS plans and specifications. Payment is made following certification by appropriate NRCS staff with engineering job approval authority that system was installed in accordance with the above requirements. For management practices, provide a completed Irrigation Scheduling worksheet to NRCS field office documenting items such as dates, crop ET, rainfall, irrigation amounts, soil moisture, profile depletion balances, etc.