

AL 303 / ADVANCED IRRIGATION MANAGEMENT TOOLS PRACTICE STANDARD

PURPOSE - To protect water resources by improving plant health and reducing the likelihood of total crop failure which typically causes erosion and water quality degradation in receiving water bodies. And to promote efficient use of water through installation of on-farm technology including flowmeters, soil moisture sensors, and weather stations which assist producers in making wise decisions on rate, amount and timing of watering for agricultural crops.

RESOURCE CONCERN - To protect water resources by reducing the likelihood of total crop failure and the associated soil erosion and water quality degradation that occurs from runoff on bare field and to improve irrigation water use efficiency.

MANAGEMENT - An Irrigation Water Management Plan (IWM) will be developed by a Professional Engineer (PE) or a Certified Irrigation Designer (CID) for the proper management and application of irrigation water. The IWM will include the method for determining the timing and amount of each irrigation event using the soil moisture sensor monitoring method. Base the volume of water needed for each irrigation event on the current crop growth stage, the available water holding capacity of the soil, and the soil moisture status. Plan irrigation application rates as to minimize irrigation induced erosion.

To better manage water resources, the following tools are included in this practice:

- One soil moisture sensor per pivot.
- One flow meter per water source.
- Three years of scheduling assistance per pivot.
- One weather station per farm (i.e. multiple fields located in the same area may share stations.)
- Telemetry necessary to automate the suite of practices.

REQUIREMENTS - The designated technician will observe the completed installation of the flow meter, weather station, and soil moisture probe. The producer will provide documentation of a three-year, third-party scheduling subscription. The producer must submit a Certificate of Beneficial Use to the ADECA Office of Water Resources.