



United States Department of Agriculture
Natural Resources Conservation Service

Irrigation Water Management Enhancement Activity – WQT01 - Irrigation System Automation



Irrigation System Automation

This enhancement entails using GPS guided variable rate irrigation or other innovative technologies that allow irrigation water application based on variable site conditions within a field.

Land Use Applicability

This enhancement is applicable on cropland and pastureland

Benefits

The advantages of using variable rate irrigation or other innovative technologies to reduce water use and runoff from irrigation include conservation of water resources and energy conservation.

Criteria for Irrigation System Automation

- Implementation of this enhancement requires compliance with the requirements of the Conservation Practice Standard, Irrigation Water Management (449);
- Development and utilization of an irrigation prescription based on soil characteristics, topography, or crops;
 - Use of a GPS guidance and control system which will provide for the variable application of irrigation water based on variations of soils, topography, or crops;

Or

 - Use of an automated control system based on technologies other than GPS which will provide for variable application of irrigation water based on variations of soils, topography, or crops.

Documentation Requirements for Irrigation System Automation

- 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.
- Copy of the irrigation prescription and irrigation logs.