

OPERATION AND MAINTENANCE
Irrigation Water Management (449)
Tennessee

Landowner/Operator: _____

Practice Location: _____

County: _____ Farm/Tract Number: _____

Prepared By: _____ Date: _____

A properly executed irrigation water management plan can be an asset to a farm. The system installed on your farm was designed and installed to support crop growth by meeting crop irrigation requirements. The estimated life span of this practice is one year. Developing and implementing a sound management program can ensure and usually increases the life of the irrigation system.

Your irrigation water management program includes but is not limited to:

- Follow the Operation and Maintenance plans established for the components of the system.
- The volume of water needed for each irrigation application shall be based on plant available water holding capacity of the soil for the crop rooting depth, allowed soil water depletion, irrigation efficiency, and water table contribution.
- The irrigation frequency shall be based on the volume of irrigation water needed and/or available, the rate of crop evapotranspiration, crop needs, and effective precipitation.
- The application rate shall be based on the volume of water to be applied, the frequency of irrigation applications, soil infiltration and permeability characteristics, and the capacity of the irrigation system.
- Modify plant populations, crop and variety selection, and irrigated acres to match available or anticipated water supplies.
- Consider potential for spray drift and odors when applying agricultural and municipal wastewaters.
- Equipment modifications and/or soil amendments such as polyacrylamides and mulches should be considered to decrease erosion.
- Quality of irrigation water should be considered relative to its potential effect on the soil's physical and chemical properties, such as soil crusting, pH, permeability, salinity, and structure.
- Avoid traffic on wet soils to minimize soil compaction.
- Water should be managed in such a manner as to not drift or come in direct contact with surrounding electrical lines, supplies, devices, controls, or components that would cause shorts in the same or the creation of an electrical safety hazard to humans or animals.
- Consideration should be given to electrical load control/interruptible power schedules, repair and maintenance downtime, and harvest downtime.
- Keep records of each irrigation event to include dates, methods used for determining timing and amount of irrigation, amounts applied, current weather, soil moisture, etc.

Landowner: _____ Date: _____

Reviewer: _____ Date: _____