

**NATURAL RESOURCES CONSERVATION SERVICE
OPERATION AND MAINTENANCE PLAN
ARIZONA**

IRRIGATION SYSTEM, SURFACE AND SUBSURFACE

(No. and Ac.)

CODE 443

Cooperator _____ Date _____

Address _____

Location: Section _____ Township _____ Range _____ Field No. _____
 Northing _____ Easting _____ **OR** Longitude _____ Latitude _____

NRCS Field Office _____ County _____

This conservation practice is an asset to your farm or ranch. This practice will need periodic operation and maintenance to maintain satisfactory performance. The life of this practice or system is at least 15 years. The life of this practice can be assured or extended by thorough and timely operation and maintenance.

GENERAL RECOMMENDATIONS

This practice will require you to perform periodic maintenance and may also require operational items to maintain satisfactory performance. Here are some recommendations to help you develop a good operation and maintenance program.

- Periodic cleaning and re-grading of collection facilities (ditches, pipes, structures) to maintain proper flow lines and functionality and maintain design border/furrow spacing as designed.
- Periodic checks and removal of debris, foreign material obstructions, or blockage as necessary from trash racks, ditch/pipe inlets, outlets and structures to assure proper operation.
- Periodic removal and planned placement of sediment from traps and/or storage facilities to maintain design capacity and efficiency.
- Inspection or testing of all pipeline and pumping plant components and appurtenances, as applicable, including the prompt repair of all leaks or worn parts in delivery facilities.
- Routine maintenance of all screens, filters, valves, timers, mechanical and/or electrical components (pumps, agitators, pipe, valves, etc.) in accordance with manufacturer's recommendations.
- Periodic land leveling or grading of surface irrigated fields is required to maintain uniform field grades for application uniformity.
- Only operate the system when needed to furnish water for plant growth (peak consumptive use), salt management, or to store moisture within the soil profile. Monitor crops regularly, noting areas of moisture stress and repair or adjust system operations, as needed.
- Operate the system at the pressure, discharge rate, duration, speed, and frequency as designed, or adjust flows to provide uniform distribution throughout the border or furrow. Water should reach the end of the border/furrow so as to minimize runoff, yet maintain as uniform application throughout the system length.
- Allow the pipe and lateral lines to fill gradually when being put into use after shut down or draining. Filling at the specified rate requirements and opening/closing valves to prevent excessive water hammer.
- Adjust irrigation schedule(s) and set time(s), as necessary, for the soils, crops, topography, moisture monitoring method, allowable soil moisture depletion and irrigation induced erosion.

