

**NATURAL RESOURCES CONSERVATION SERVICE  
PRACTICE DOCUMENTATION GUIDE IRRIGATION SYSTEM, MICROIRRIGATION  
441**

**441 - STEP 1. INITIAL EVALUATIONS****PURPOSE**

The purpose of this step is to determine the landowner's desire to install a micro irrigation system in a predetermined location for the intended purposes (See NRCS Conservation Practice Standard 441).

The landowner must be interviewed to determine the purpose and need install a micro irrigation system. Considerations will include landowner goals and objectives, existing conditions, and effects of this practice on existing soil, water, air, plant, animal and human resources. A discussion of the NRCS installation of a micro irrigation system standard, specification, and job sheet shall take place. Roles of the landowner and the person assisting with the planning and installation should also be discussed. Additional pertinent questions should be asked on a site-specific basis.

**441 - STEP 2. INVESTIGATIONS, SURVEYS, AND INVENTORIES****PURPOSE**

The purpose of this step is to identify the mandatory preliminary resource inventory and operations that are required before the micro irrigation system can be planned and installed. Resource inventories will include all data and information needed to make informed decisions in the planning and installation of a micro irrigation system and any follow-up management needs. Appropriate resource inventories could include soils, topography, crops, irrigation water supply, water rights and all physical features such as existing ditches, fencing, roads, natural barriers, and the current or planned irrigation system, etc. that might have an effect on planning the usage of the micro irrigation system. Adjacent land

uses and resources that would be affected by installation should also be considered. Identify map resources needed such as engineering surveys, USGS 7.5 minute quadrangle, soils, and road maps as well as aerial photography.

Also include identifying all needed utility clearances, archeological clearances (See NRCS Conservation Practice 441 job sheets, ENV-1 Environmental Assessment, and Resource Inventory Checklist).

**441 - STEP 3. PRACTICE DESIGN****I. PURPOSE**

The purpose of this step is to develop a design for the application of micro irrigation system. This practice will be designed in accordance with all federal, state and local laws and ordinances and shall consist of an acceptable design and layout for the planned purpose and meet the intended life of the practice.

Resource inventories, local conditions, and the intended use will need to be assessed for the proposed micro irrigation system design and location.

A design will be developed with the client that meets the intended goals and objectives. All appropriate job sheets, maps and reports must be developed with landowners input, review and concurrence (See Conservation Practice 441 standard, specifications, and job sheets).

**II. SITING**

The purpose of this step is to insure that the micro irrigation system is properly located and that all involved fully understand where it is to be put into place.

**III. MATERIALS/EQUIPMENT**

The purpose of this item is to insure an understanding of the materials/equipment

used to install the micro irrigation system. Appropriate specifications, job sheets and expectations that include the types and number of each type of material and equipment will be provided to the landowner and all those involved in the planning and installation of a micro irrigation system.

#### **441 -STEP 4. PLANS AND SPECIFICATIONS**

##### **PURPOSE**

The purpose of this step is to document and describe each component of the planned micro irrigation system, which includes step by step instructions to be used while installing the micro irrigation system. This will include the documentation of all components described in specifications and job sheet. Additional reference material should be included as needed and appropriate. The landowner/operator must be provided with a complete detailed design and plan in the form of a Conservation Plan, Plan Map, and NRCS Job Sheet 441. These documents depict the design and location. Items not described in these listed documents, but essential for the location and installation of the micro irrigation system, will be added to the specifications and drawings.

#### **441 - STEP 5. MANAGEMENT, OPERATION, AND MAINTENANCE**

##### **PURPOSE**

The purpose of this step is to assure that proper management, operation, and maintenance is completed on the micro irrigation system (See NRCS Practice Standard 441). This requires a familiarity with the design and correct installation of the micro irrigation system in a proper and safe fashion. Periodic operations and maintenance schedules should be installed. These measures should be discussed with and understood by the landowner.

#### **441 - STEP 6. COMPLIANCE OR SPOT CHECKING**

##### **I. PURPOSE**

The purpose of this step is to determine that all work has been completed in accordance with the standards required by the Natural Resources Conservation Service. All completed NRCS forms should be collected from the landowner and submitted to the appropriate persons (See NRCS Practice Standard, Specifications, and Job Sheets 441, NM-ENV-1 Environmental Assessment, and Resource Inventory Checklist).

##### **II. DOCUMENTS**

Copies of all completed job sheets, data sheets, and work sheets should be submitted to the Natural Resources Conservation Service representative within 10 working days of installation of the micro irrigation system. This includes the Practice Requirements as outlined in Job Sheet 441 and any other job sheets that may be needed for this practice to meet the intended goals and objectives.