

Conservation Practice Standard Overview

Irrigation Pipeline (430)

An irrigation pipeline and its appurtenances are installed as part of an irrigation system to convey water for storage or application.

Practice Information

A properly designed and installed irrigation pipeline will convey water to an irrigation system or storage location in a way that minimizes water loss. For some systems it may be possible to reduce energy use or even create energy through the development of a renewable energy system such as in-line hydropower.

An irrigation pipeline can be made of flexible conduit materials, such as plastic, steel, aluminum, corrugated metal, or ductile iron pipe, or it can be made from rigid conduit, such as, concrete or plastic mortar pipe. The pipeline can be installed underground or aboveground.

Appurtenances used with an irrigation pipeline may include pressure reducers, inlets, check valves, backflow prevention devices, surge tanks, air chambers, and pressure relief valves. Air relief valves and vents can also be used.

Corrosion protection may be needed depending on the metals used and the soils on the site.

An irrigation pipeline has a minimum expected life of 20 years. Operation and maintenance requirements for the practice will depend upon the complexity of the irrigation pipeline system and the type of pipe material chosen by the producer. The operation and maintenance



plan will include information on filling and draining the system as needed. It will also include a procedure for monitoring any cathodic protection systems that are installed. A flow measurement system or methodology will be established to determine the rate of flow in the pipeline system. Routine maintenance will be needed to ensure that the pipeline and all its components operate as designed.

Common Associated Practices

An Irrigation Pipeline (430) is commonly applied with conservation practices such as Irrigation System, Microirrigation (441) or Irrigation System, Sprinkler (442). Conveyance of water from an Irrigation Reservoir (436) or Irrigation System, Tailwater Recovery (447) is also a use of this practice.

For further information, contact your local NRCS field office.