



Conservation Practice Overview

August 2023

Irrigation and Drainage Tailwater Recovery (Code 447)

An irrigation and drainage tailwater recovery system is a system in which all facilities utilized for the collection, storage, and transportation of irrigation tailwater, rainfall runoff, field drain water, or a combination thereof for reuse have been installed.



Practice Information

Tailwater recovery involves the collection of recoverable irrigation runoff, rainfall runoff, and/or field drain water and is applied to conserve irrigation water supplies, reduce energy use, and/or improve offsite water quality. It applies to systems where recoverable irrigation runoff, subsurface drainage outflows, or rainfall runoff water can be anticipated under current or expected management practices.

Facilities are needed to store the collected water and to convey water from the storage facility to a point of entry back into the irrigation system. Additional storage may be required to provide adequate retention time for the breakdown of chemicals in the runoff water or to provide for sediment deposition. Allowable retention times are specific to the particular chemicals used. Seepage from a storage facility is controlled using natural soil or commercial liners, soil additives, or other approved methods when chemical-laden waters are stored. Protection of system components from storm events and excessive sedimentation are also considered in the planning and design of a system.

Irrigation and drainage tailwater recovery systems require maintenance over the expected life of the practice.

Common Associated Practices

NRCS Conservation Practice Standard (CPS) Irrigation and Drainage Tailwater Recovery (Code 447) is commonly applied with other conservation practices such as NRCS CPSs Pumping Plant (Code 533), Irrigation Ditch Lining (Code 428), Pond Sealing or Lining - Geomembrane or Geosynthetic Clay Liner (Code 521), Drainage Water Management (Code 554), and Irrigation Water Management (Code 449).

For further information, contact your local NRCS field office.