Conservation Practice Overview

Drainage Water Management (Code 554)

Drainage water management is the process of managing water discharges from surface or subsurface agricultural drainage systems with water-control structures.

Practice Information

The purpose of regulating water in a drainage system is to manage moisture by controlling the outflow of drainage water. This practice applies to areas where drainage is needed during certain periods and where it is advantageous to limit the outflow at other times. Limiting the outflow raises the level of water in the soil so the moisture can be utilized by crops or when wet conditions are needed to conserve organic material (organic soils). This practice is especially applicable in highly permeable soils that have a low available water capacity and in organic soils that tend to subside when soil-moisture conditions are favorable for decomposition of organic material.

Management is based upon the time and stage of water held in drains, pumping schedules, and coordination of these items with rainfall, season, crop needs, and soil requirements. Infield water table observation points may be used to determine the relationship of the control elevation settings relative to critical field water table depths.

Common Associated Practices

NRCS Conservation Practice Standard (CPS) Drainage Water Management (Code 554) is commonly applied with conservation practices such as CPSs Structure for Water Control (Code 587), Subsurface Drain (Code 606), Surface Drain, Main or Lateral (Code 608), Pumping Plant (Code 533), Vertical Drain (Code 630), Water and Sediment Control Basin (Code 638), Dike (Code 356), and Critical Area Planting (Code 342).

For further information, contact your local NRCS field office.