

Conservation Practice Overview

Vermont December 2021

Sprinkler System (Code 442)

The sprinkler system practice uses a distribution system to apply water through a nozzle that is operated under pressure.

Practice Information

The purpose of a sprinkler system is to uniformly and efficiently apply water to land. The controlled application improves plant productivity, prevents nutrient and other chemicals from leaving the root zone, and improves soil where salt and other chemicals adversely impact the land.



This practice is also used to improve air quality by reducing particulate matter from roads and confined animal pens. The practice can also be used to reduce energy by replacing nozzles on an existing sprinkler system, reducing pressure, reducing flow rate, or increasing distribution uniformity.

Sprinkler system designs are based on an evaluation of the site, considering soil, topography, water supply, energy supply, crops grown, labor, and expected operating conditions.

A sprinkler system is an integral part of a conservation plan based on the capabilities of the natural resources and the needs of the farm enterprise.

This practice has a minimum expected life of 15 years. The operation and maintenance of a sprinkler system includes removal of debris from nozzles; checking nozzle and spray heads for wear; testing pressures and flow rates for proper operation; inspection of pipelines, pumping plant components, and appurtenances; and routine maintenance of mechanical components according to manufacturer's recommendations.

Common Associated Practices

NRCS Conservation Practice Standard Sprinkler System (Code 442) is commonly applied with other practices such as NRCS CPSs Irrigation Water Management (Code 449), Irrigation Pipeline (Code 430), Pumping Plant Code 533), Structure for Water Control (Code 587), Pest Management Conservation System (Code 595), and Nutrient Management (Code 590).

For further information, contact your local NRCS field office.