

IRRIGATION SYSTEM, SPRINKLER

PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service – Practice Code 442



SPRINKLER IRRIGATION SYSTEM

An irrigation system in which all necessary equipment and facilities are installed for efficiently applying water by means of nozzles operated under pressure.

PRACTICE INFORMATION

Sprinkler irrigation systems are used to achieve one or more of the following purposes:

- Efficient and uniform application of irrigation water to maintain adequate soil water for plant growth and production without causing excessive water loss, erosion, or water quality impairment;
- Control of and/or modification of climate;
- Application of chemicals, nutrients and/or waste water;
- Reduction of particulate matter emissions to improve air quality.

Common sprinkler systems applied in New England include fixed solid-set, big gun, periodic move, and traveling sprinkler systems. Application rate and depth of application are based on the specific soils and crops. Runoff, translocation, and deep percolation are minimized. Distribution patterns, spacing and operating pressure control the application rate. Systems used for chemigation or fertigation must meet industry accepted washoff and total rinse-out times.

COMMON ASSOCIATED PRACTICES

The practice is commonly used in a Conservation Management System with the following practices:

- Irrigation Water Conveyance,
- Irrigation Water Management.

Refer to the practice standard in the local Field Office Technical Guide and associated specifications and Job Sheets for further information.

The following page identifies the effects expected to occur when this practice is applied. These effects are subjective and somewhat dependent on variables such as climate, terrain, soil, etc. All appropriate local, State, Tribal, and Federal permits and approvals are the responsibility of the landowners and are presumed to have been obtained. Users are cautioned that these effects are estimates that may or may not apply to a specific site.