

Irrigation Land Leveling

Conservation Practice Fact Sheet

464



Definition

Irrigation Land Leveling consist of reshaping the surface of land to be irrigated to a planned grade.

Purpose

Irrigation land leveling provides irrigation water over an area which can result in high distribution uniformity and high overall application efficiency. Soil is moved from high spots to low spots to enable efficient irrigation and removal of surface water.

Where used

Irrigation land leveling is applied to crop land fields where precision is necessary to irrigate

crops. Land should be suitable for irrigation and the proposed method of irrigation.

Operation and maintenance

Annual maintenance is an important part of the farmer's operation to obtain the proper return on this investment. Special treatment and annual maintenance is needed to bring land back to full production and keep the surface uniform. Fill areas settle and cut area "fluff up" leaving the surface uneven following the first irrigations and farming operations. For this reason it is best to plant an annual crop the first year after land leveling. If these irregularities are slight land planning may be adequate. If land shaping has exposed infertile subsoils, it is a good plan to

plant a green manure crop the first year to add organic matter.

Conservation management system

Irrigation land leveling is used with other conservation practices, such as irrigation pipeline, surface drain – field ditch, or irrigation ditch.

Specifications

Site-specific requirements are listed on the cut/fill and specifications sheet. Specifications are prepared in accordance with the NRCS Field Office Technical Guide. See practice standards Irrigation Land Leveling (464).