

NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE STANDARD

CRITICAL AREA PLANTING

(acre)
CODE 342

DEFINITION

Planting vegetation, such as trees, shrubs, vines, grasses, or legumes, on highly erodible or critically eroding areas (does not include tree planting mainly for wood products).

PURPOSE

To stabilize the soil, reduce damage from sediment and runoff to downstream areas, and improve wildlife habitat and visual resources.

CONDITIONS WHERE PRACTICE APPLIES

On highly erodible or critically eroding areas. These areas usually cannot be stabilized by ordinary conservation treatment and management and if left untreated can cause severe erosion or sediment damage. Examples of applicable areas are dams, dikes, mine spoil, levees, cuts, fills, surface-mined areas, and denuded or gullied areas where vegetation is difficult to establish by usual planting methods.

SPECIFICATIONS GUIDE

Species of grasses, legumes, shrubs, and trees; methods and rates of planting; fertilizer and lime requirements; planting site preparation; time of planting; mulching; and irrigation.

PLANNING CONSIDERATIONS FOR WATER QUANTITY AND QUALITY

Water Quantity

1. Effects on the water budget, especially on volumes and rates of runoff, infiltration, evaporation, transpiration, deep percolation, and ground water recharge.
2. Effects of vegetation management on soil moisture.
3. Effects of increased organic matter on water holding capacity of the soil.
4. Potential for a change in plant growth and transpiration because of changes in soil water volume.

Water Quality

1. Effects on erosion and the movement of sediment and soluble and sediment-attached substances carried by runoff.
2. Filtering effect of vegetation on movement of sediment and dissolved and sediment-attached substance.
3. Short-term and construction-related effects on downstream water courses.
4. Potential for earth moving to uncover or redistribute toxic materials and effect on water or vegetation.
5. Effects on the use and management of nutrients and pesticides and resulting effects on surface and ground-water quality.
6. Effects on the visual quality of downstream water resources.