

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

RANGE PLANTING

(acre)
CODE 550

DEFINITION

Establishment of adapted perennial vegetation such as grasses, forbs, legumes, shrubs and trees.

PURPOSE

- Restore a plant community similar to its historic climax or the desired plant community.
- Provide or improve forages for livestock.
- Provide or improve forage, browse or cover for wildlife.
- Reduce erosion by wind and/or water.
- Improve water quality and quantity.
- Increase carbon sequestration

CONDITIONS WHERE PRACTICE APPLIES

On rangeland, native or naturalized pasture, grazed forest or other suitable location where the principle method of vegetation management will be with herbivores. This practice shall be applied where desirable vegetation is below the acceptable level for natural reseeding to occur, or where the potential for enhancement of the vegetation by grazing management is unsatisfactory.

CRITERIA

General Criteria Applicable to All Purposes

Specified seeding/plant material rates, methods of planting, date of planting and/or species selection shall be consistent with documented guidance cited by Plant

Materials Program, research institutions or agency demonstration trials for achieving satisfactory establishment.

Species, cultivars or varieties selected, must be compatible with management objectives and adapted to climate conditions, soils, landscape position, (e.g., aspect) and range site(s).

Species, cultivars or varieties selected shall provide adequate cover to control erosion by wind and/or water within an acceptable period of time.

Seedbed preparation and planting methods will be suitable to meet any special needs for obtaining an acceptable establishment of planted materials.

Planting depths, dates, seeding rates, soil amendments and fertilizer needs for establishment, minimum seed quality standards and management during the establishment period such as weed control and deferment from grazing shall be followed to enhance establishment success.

Seeding rates will be calculated on a pure live seed (PLS) basis or percent germination.

Additional Criteria to Improve Forages for Livestock

Selection of a species or combination of species shall be designed to meet the desired nutritional and palatability requirements for the kind and class of livestock.

Selection of species or combination of species shall be designed to meet the desired season of use or grazing period.

Additional Criteria for Improved Water Quality and Quantity

Select a species or combination of species that will maintain a stable soil surface and increase infiltration.

Species that have high evapotranspiration rates, such as some woody species and phreatophytes, shall not be planted when watershed yields are the primary objective.

A mixture of shrubs and trees indigenous to the site shall be planted when riparian area, stream bank stability and water temperature criteria are important.

Additional Criteria for Improving Forage, Browse or Cover for Wildlife

Selection of planted species shall meet dietary and palatability requirements for the intended wildlife species.

Species will be selected and planted in a designed manner that will meet the cover requirements of the wildlife species of concern.

Additional Criteria to Increase Carbon Sequestration

For optimal carbon storage, select species that increase site biomass.

CONSIDERATIONS

Planting materials selected should contribute to wildlife and aesthetics when opportunities exist.

Other practices such as Brush Management (314) or Grazing Land Mechanical Treatment (548) may be used to promote a satisfactory site preparation to insure a successful range planting.

Use of certified planting materials should be encouraged, however, distance and source limitations on seed and planting stock should be considered in terms of logistics and costs.

Any special handling requirements for planting materials need to be followed for best results, (e.g., beards or awns on seed, hard seed coats, seed mixture ratios).

Where air quality concerns exist, site preparation techniques should be utilized that will minimize airborne particulate matter generation and transport.

PLANS AND SPECIFICATIONS

Site-specific specifications for the installation and maintenance of this practice shall be prepared for each pasture, field, or management unit according to this Standard and the Conservation Practice Specification.

For standard plantings, *the NRCS Hawaii Jobsheet for this practice shall be used to document the site specifications.* Plantings that require more detailed information, may require the use of other practices prior to planting and require a specific site specification prepared.

Other documents (worksheets, maps, drawings, and narrative statements in the conservation plan) may be used in addition to the Jobsheet to document site specifications

OPERATION AND MAINTENANCE

Operation. Identify any required items needed to assist in stand establishment such as mowing, burning, flash grazing and herbicides to control weeds. Address insect and disease control needs where they are likely to create establishment problems.

Maintenance. Any necessary replanting due to drought, insects or other uncontrollable event which prevented adequate stand establishment should be addressed as soon as possible. Recommendations may vary from complete re-establishment to overseeding or spot replanting. Thin stands may only need additional grazing deferment during the growing season.

REFERENCES

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- Skerman, P.J. 1977. Tropical Forage Legumes. Food and Agriculture Organization of the United Nations, Rome. 611 pp.
- Skerman, P.J. and F. Riveros. 1990. Tropical Grasses. Food and Agriculture Organization of the United Nations, Rome. 832 pp.
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