NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE STANDARD

TREE/SHRUB ESTABLISHMENT

(Acre)

CODE 612

DEFINITION

To establish woody plants by planting seedlings or cuttings, direct seeding or natural regeneration

PURPOSE

To establish woody plants for forest products, wildlife habitat, long-term erosion control and improvement of water quality, treat waste, reduction of air pollution, sequestration of carbon, energy conservation, and enhance aesthetics.

CONDITIONS WHERE PRACTICE APPLIES

On any area where woody plants can be grown.

CRITERIA

General criteria applicable to all purposes

Species will be adapted to soil-site conditions.

Species will be suitable for the planned purpose.

Species indigenous to the area will be used whenever possible to maintain or restore genetic diversity

Nonnative plants will only be used when no native species are applicable for the intended purpose. Invasive species will not be used unless specific and documented techniques are employed to control the plant, i.e., the use of sterile clones.

Planting or seeding rates will be adequate to accomplish the planned purpose.

Stocking rates will consider short term and long term mortality and will meet final mature stocking levels desired for the planned use.

Planting dates will reflect the time needed to ensure maximum plant survival.

Proper care in handling and planting of the seed or seedlings will ensure that planted materials have an acceptable rate of survival.

Only viable, high quality and adapted planting stock or seed will be used.

Dormant Bareroot and containerized plant stock will be planted before June 25, or will be planted after September 1st. (or when the average low temperature dips below 40 degree F).

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All live growing trees and containerized planting stock will be planted a minimum of 3 weeks before ground temperatures reach biological zero (typically 34 degrees)

Balled and burlap (B&B) stock will have well developed root balls

All stock planted will have free undamaged growing roots

Site preparation shall be sufficient for establishment and growth of selected species.

Adequate seed sources or advanced reproduction needs to be present or provided for when using natural regeneration techniques.

Seeding to establish plants must be sufficient to produce the intended stocking and should endure bird and rodent losses.

The acceptability and timing of coppice (sprouting) regeneration shall be based on species, age, and diameter.

The use of clones and cuttings for regeneration will use established techniques for cutting, handling and planting. Reference Biotechnical Engineering section of the Engineering Handbook.

The planting will be protected form unacceptable adverse impact from pests, wildlife, livestock damage or fire.

Comply with applicable laws and regulations, including Alaska Best Management Practices and Reforestation Act.

CONSIDERATIONS

When under-planting, trees should be planted sufficiently in advance of over-story removal to ensure full establishment and growth.

Prescribed burning may be required for natural regeneration of serotinous cone species and for site preparation for other species.

All planting stock and seed should be purchased from nurseries that are known to be using locally adapted seed, seedlings or cuttings. Priority will be given to plant materials that have been selected and tested in tree improvement programs. All plant materials should comply with the minimum standards established by the American Nursery and Landscape Association, Forest Service, NRCS or Alaska Division of Forestry.

Plans for landscape and beautification plantings should consider foliage, color and season of flowering, and mature plant height. Location of utilities should be considered in selecting species and locations of plants.

Consideration should be given to selecting the species or combination of species which best meets the wildlife objective, i.e. provide food and cover for specific species or to discourage wildlife use of an area.

Residual chemical carryover should be considered prior to planting.

Fall plantings are very useful in areas of low or unpredictable spring moisture levels and where the frost heaving potential of the soil is minimal

PLANS AND SPECIFICATIONS

Specifications for applying this practice shall be prepared for each site and recorded using approved specification sheets, job sheets, and narrative statements in the conservation plan, or other acceptable documentation. Natural or advanced regeneration should be inventoried before actions are implemented to monitor practice success.

Plans and specification will include the following: adapted tree species for the purposes outlined, spacing, planting methods, cultural practices and maintenance requirements that are applicable; and variations in methods and species between interplanting, and underplanting and planting in open areas. Separate specifications can be prepared for each of these planting methods.

OPERATION AND MAINTENANCE

The following actions shall be carried out to insure that this practice functions as intended throughout its expected life. These actions include normal repetitive activities in the application and use of the practice (operation), and repair and upkeep of the practice (maintenance)

Reasonable means will be used to protect plantings after establishment to meet the intended use of the plants.

If needed, competing vegetation will be controlled until the woody plants are established. Noxious weeds will be controlled.

Replanting will be required when survival is inadequate.

Supplemental water will be provided as needed.

The trees and shrubs will be inspected periodically and protected from adverse impacts including insects, diseases or competing vegetation, fire and damage from livestock or wildlife.

Periodic applications of nutrients may be needed to maintain plant vigor.

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