NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE STANDARD

FOREST STAND IMPROVEMENT

(Acre)

CODE 666

DEFINITION

To manipulate species composition and stocking by cutting or killing selected trees and understory vegetation.

PURPOSES

- To increase the quantity and quality of forest products, e.g., sawtimber, veneer, wood fiber, poles, pilings, birch syrup, naval stores, nuts and fruits.
- Improve understory forage production, aesthetics, wildlife habitat, recreation, hydrologic conditions.
- To harvest forest products.
- To initiate forest stand regeneration.
- To reduce the potential of damage from wildfire, pests, and moisture stress
- To restore natural plant communities
- To achieve a desired understory plant community
- To improve aesthetic, recreational and open space values.
- To improve wildlife habitat.
- To improve water conservation and yield.
- To achieve a desired level of crop tree stocking density
- To increase carbon storage in selected crop trees.

CONDITIONS WHERE PRACTICE APPLIES

All forest land where improvement of forest resources is needed.

CRITERIA

The harvest-regeneration strategy will be identified for all planned forest improvement harvesting.

The extent or size of treatment area shall achieve the intended purpose.

Preferred tree and understory species are identified and retained to achieve the intended purpose.

Spacing, density and amounts of preferred trees and understory species to be retained will follow established guidelines for the intended purposes.

Such guidelines shall contain stocking in terms of basal area, spacing, or trees per acre by species and size class distribution.

The method, felling direction and timing of tree cutting for harvesting shall facilitate efficient and safe tree removal and protect riparian zones, and sensitive areas such as vernal pools and cultural resources and structures.

Soil erosion, displacement (rutting) and compaction, hydrologic impact and damage to remaining vegetation will not exceed acceptable levels.

Slash, debris and vegetative material left on the site after treatment will not present an unacceptable fire or pest hazard or interfere with the intended purpose.

Comply with applicable laws and regulations, including the Alaska Forest Resources and Practices Act and Regulations.

CONSIDERATIONS

Consider the retention of selected dead and dying trees to enhance wildlife habitat values.

Retain a sufficient number of down trees to serve as “nurse” trees as part of the regeneration strategy in forest systems that utilize downed material for regeneration.

Wildlife food and cover can be retained by minimal modifications to composition and spacing regardless of the purpose for treatment. Forested wildlife corridors can minimize fragmentation effects.

The practice should be timed to minimize disturbance of seasonal wildlife activities

Potential landowner and operator liability should be considered before stand improvement activities begin.

Landowners should be encourage to secure a written contract with any service provider that specifically describes the extent of activity, duration of activity, responsibilities of each party and amount and timing of payment for services provided.

In some instances a forestry professional such as a forester or forest technician may be needed to implement, supervise and protect the landowner’s interest in some harvesting operations.

Consider environmental concerns such as threatened and endangered species, natural areas and aesthetics values.

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.

OPERATION AND MAINTENANCE

Periodic inspections during treatment activities are necessary to ensure that objectives are achieved and resource damage is minimized. Follow-up and ongoing management activities will be needed to obtain desire results.