

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

WINDBREAK/SHELTERBELT RENOVATION
(Ft.)

CODE 650



Chemically controlling herbaceous weeds in windbreak.

DEFINITION

Replacing, releasing and/or removing selected trees and shrubs or rows within an existing windbreak or shelterbelt, adding rows to the windbreak or shelterbelt, or removing selected tree and shrub branches.

PURPOSE

Restoring or enhancing the original planned function of existing windbreaks or shelterbelts.

CONDITIONS WHERE PRACTICE APPLIES

In any windbreak or shelterbelt that is no longer functioning properly for the intended purpose. Extending the length of an existing windbreak is handled under Florida NRCS Conservation Practice Standard Windbreak/Shelterbelt Establishment, Code 380. For normal and periodic pruning, refer to Florida NRCS

Conservation Practice Standard, Tree/Shrub Pruning, Code 660.

CRITERIA

Thin trees or shrubs to reduce plant competition or alter the density of the planting.

Prune or shear the trees or shrubs to remove diseased branches or alter the density of the planting.

Remove entire or partial rows of trees or shrubs to release adjacent rows.

Cut trees or shrubs with coppicing capability close to the ground to improve density and/or vigor of trees or shrubs in decline

Mechanically or chemically control competing herbaceous vegetation to improve the growth and vigor of trees and shrubs.

Add rows of trees or shrubs adjacent to or within an existing windbreak or shelterbelt to improve windbreak or shelterbelt density.

Evaluate existing growing space, shade level, and root competition and determine if they are still within acceptable levels to permit unimpeded growth to new plantings.

Protect residual plants during the renovation.

Impact to cultural resources, wetlands, and Federal and State protected species shall be evaluated and avoided or minimized to the extent practical during planning, design and implementation of this conservation practice in accordance with established National and Florida NRCS policy, General Manual (GM) Title 420-Part 401, Title 450-Part 401, and Title 190-Parts 410.22 and 410.26; National Planning Procedures Handbook (NPPH) FL Supplements to Parts 600.1 and 600.6; National Cultural Resources Procedures Handbook (NCRPH); and The National Environmental Compliance Handbook (NECH).

CONSIDERATIONS

Renovation may be accomplished over a period of years.

Remove debris from the site and dispose of properly if the debris will cause insect, disease, fire or operability problems. Refer to Florida NRCS Conservation Practice Standard Forest Slash Treatment, Code 384 for further information.

Vegetation removed during renovation can be burned as specified by Florida NRCS Conservation Practice Standard Prescribed Burning, Code 338.

Debris and other vegetation removed during renovation may be used to produce energy. Consider the energy balance of this action.

Erosion control may be needed during the renovation process.

Consider wildlife and pollinator needs, species diversity, and use of native species when selecting tree or shrub species to add or remove.

Species diversity, including use of native species, should be considered.

Refer to Florida NRCS Conservation Practice Standard Tree & Shrub Establishment, Code

612, for further guidance on planting trees and shrubs.

PLANS AND SPECIFICATIONS

Prepare specifications for applying this practice for each site and recorded using approved specification sheets, job sheets, technical notes, and narrative statements in the conservation plan or other acceptable documentation.

Specifications need to minimally have:

- purpose of windbreak/shelterbelt;
- location, size, and width;
- type and degree of mechanical or chemical control to be used;
- type and amount of soil amendments, if any, added to existing or new plantings;
- species selection, seeding or planting rates, planting dates, care and handling of seed and/or planting material, and planting method for new plantings, if needed, and;
- an operation and maintenance plan.

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):

- Additional thinning, pruning, or coppice management may be needed in the future to maintain function.
- Periodic applications of nutrients may be needed to maintain plant vigor.

REFERENCES

- Bentrup, Gary 2008. Conservation buffers: design guidelines for buffers, corridors, and greenways. Dep. Agric., Forest Service, Southern Res. Stn. Gen. Tech. Rep. SRS-109. Asheville, NC: (http://www.unl.edu/nac/buffer_guidelines/docs/conservation_buffers.pdf).
- Brandle, J.R., D.L. Hintz, J.W. Sturrock. 1988. Windbreak Technology. Elsevier Sci. Publ., Amsterdam..
- Stange, C., J. Wilson, J. Brandle, M. Kuhns. 1998. Windbreak Renovation. Univ. Nebraska Coop. Ext. EC 98-1777-X.