

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

PRESCRIBED FORESTRY

(Acre)
CODE 409



DEFINITION

Manage forested areas for forest health, wood and/or fiber, water, recreation, aesthetics, wildlife habitat and plant biodiversity.

PURPOSE

- Maintain or improve forest health.
- Protect soil quality and condition.
- Maintain or enhance water quality and quantity.
- Maintain or improve forest productivity.
- Maintain or improve plant diversity.
- Improve aesthetic and recreational values.
- Improve wildlife habitat.
- Achieve or maintain a desired understory plant community for forest products, grazing, and browsing.

CONDITIONS WHERE PRACTICE APPLIES

- On all forest land.
- On land capable and suited to growing trees.

CRITERIA

General Criteria Applicable to All Purposes

Base activities on a forest prescription which achieves the intended purpose(s), addresses the owner's objectives and perpetuates a sustainable forest ecosystem. Ecological parameters such as forest types, soil types, past harvest history, natural community types and successional trends create sustainable forest ecosystems.

Include inventory of the existing forest condition and a description of desired forest condition using ecological site descriptions as guides in the prescription.

Develop the prescription for a minimum management period of 5 years.

Describe and give rationale for selection of the silvicultural system including ecological and economic considerations.

Examine planned activities collectively. Coordinate and time activities to optimize the stated purposes of conservation practices. Do not limit activities to conservation practices. If applicable, incorporate all elements of the comprehensive conservation plan in the forest prescription.

Plan activities to include a distribution of timber age classes. Age class distribution correlates with the appropriate forest conditions, landowner objectives and local ecosystems.

Provide a schedule of activities over at least a 5 year period.

Impact to cultural resources, wetlands and Federal and State protected species need to be 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).

Additional Criteria to Protect Soil Quality and Condition

Develop written guidelines to protect the soil resource during and after harvest operations and site preparation for planting.

Control or prevent erosion. Soil loss will not exceed allowable average annual soil loss (T) as defined by current, approved erosion prediction technology.

Minimize impacts on landscape when planning and constructing roads, harvest trails and landings.

Seed disturbed areas for erosion and sediment control in accordance with Florida NRCS Conservation Practice Standard Critical Area Planting, Code 342.

Maintain adequate cover to control soil erosion. Use proper grazing that will not adversely impact new seeding of erosion control species. Refer to Florida NRCS Conservation Practice Standard Prescribed Grazing, Code 528, for additional information.

Where required, install practices to prevent gully formation.

Avoid soil compaction during all activities occurring in the forest.

Additional Criteria to Maintain Water Quality and Quantity

Maintain the quality and quantity of water flowing from and through forest lands.

Ensure road location, design, construction, maintenance and vegetation reestablishment to reduce water pollution.

Use and maintain filter strips or buffers to remove or reduce the transportation of sediment or organic matter into streams, lakes or other sensitive areas.

Develop written guidelines for stream crossings in accordance with Florida NRCS Conservation Practice Standard Stream Crossing, Code 578. Avoid altering stream courses and drainage patterns.

Assess and manage the impacts of forest activities on water quantities. Follow guidelines outlined in the State of Florida's Silviculture Best Management Practices (BMPs) for protecting water quality.

Refer to Florida NRCS Conservation Practice Standards Filter Strip, Code 393, and Stream Crossing, Code 578, for additional information.

Additional Criteria to Maintain Forest Productivity

Base sustainable harvest levels on one or more of the following:

- Documented growth and regeneration data.
- Site index models.
- Site productivity or culmination of mean annual increment (CMAI) growth.
- Desired future condition.
- Consideration of cyclical and natural disturbances.

Develop written guidelines on protecting the residual forest, including regeneration, during and following harvest operations.

Identify tree and shrub species to be retained.

Follow established guidelines for spacing, density, size class, number and amounts of trees and understory species to be retained. Refer to Florida NRCS Conservation Practice Standard and Guidance Tree/Shrub Establishment, Code 612, for additional information.

Ensure spacing of residual trees is appropriate to their size and species.

Identify and manage pest problems, including insects, diseases, mammals, FLEPPC Category I invasive plants (<http://www.fleppc.org/list/list.htm>) and FL DOACS noxious weeds

(<http://www.doacs.state.fl.us/pi/enpp/botany/noxweed.html>).

Additional Criteria to Maintain Plant Diversity

Assess current conditions, including ecological processes such as disturbance regimes, unique natural communities such as old-growth, rare and imperiled plant species and water and soil resources.

Develop written guidelines addressing the management of these special plant species and their communities. Refer to the State and Federally Listed Species for Florida in FOTG Section II, § D; and the Florida Areas Natural Inventory (<http://www.fnai.org/trackinglist.cfm>) for listed plant species information.

Native plant species shall be inventoried and managed for vertical and horizontal structural complexity, and understory species diversity.

Additional Criteria to Improve Aesthetic and Recreational Values

Develop written guidelines to improve ecotourism and recreation, including hunting and fishing.

Select and manage plant materials adapted to the soil and climatic conditions and that fulfill a specific aesthetic or recreational need.

Additional Criteria to Improve Wildlife Habitat

Develop written guidelines to recognize and maintain forest resources for terrestrial and aquatic wildlife.

Identify and develop specific management guidelines for habitat protection areas, including riparian buffers, critical habitats and those with special needs. Refer to Florida NRCS Conservation Practice Standard and Guidance Upland Wildlife Habitat Management, Code 645, for additional information.

Coordinate forest and wildlife management objectives and activities.

Additional Criteria to Maintain a Desired Understory Plant Community for Forest Products, Grazing, and Browsing

Develop written guidelines for inventorying plants, monitoring plant populations and protecting the forest ecology while allowing the sustainable harvest of non-timber products.

Assess the impacts of timber production and harvest on the non-timber products.

Space trees properly to produce desired forage production, increase desirable woody plants for browsing and provide conditions favorable for understory forest products.

CONSIDERATIONS

Consider impacts of forest management plan to adjacent lands and land uses.

Assess potential landowner and user liability in the development of specifications for this practice.

PLANS AND SPECIFICATIONS

Plans and specifications will describe the requirements for applying the practice to achieve its intended purpose(s) and will be in keeping with this standard.

The forest management plan will include the following components:

- statement of landowner's goals and objectives;
- description of ecological and silvicultural systems and rationale for selection of silvicultural system;
- maps of forest and soil types;
- inventory of the existing forest condition and a description of desired forest condition, including acres, tree species and tree spacing;
- location of roads, property boundaries and protected areas; and
- planned management activities, including regeneration/harvest strategies and guidelines for addressing soil, water, air, plant, animal and human resource problems and concerns.

OPERATION AND MAINTENANCE

Maintain a yearly summary of forest management activities and records of yield for all forest products harvested, including non-timber resources.

Conduct periodic inspections during and after treatment activities to ensure that the purposes are achieved and resource damage is minimized, e.g., post harvest inspection, assessment of insects, disease and other pests, storm damage and damage by trespass. The results of the inspections will determine the need for additional treatment under this practice.

Review timetables, schedules and coordination actions periodically and modify as needed.

REFERENCES

2004. Silviculture Best Management Practices
Division of Forestry, Florida Department of
Agriculture & Consumer Services.

Forest Stewardship Council-U.S. 2001. U.S.
Regional Standards.

<http://www.fscus.org/documents/index.php>

Longleaf Pine Forest Regeneration by The
Longleaf Alliance.

<http://www.longleafalliance.org/landowners/forestryrestoration/cutover.htm>

NRCS National Forestry Handbook Part 636.4:
Planning Considerations.

Yarrow, Greg. K and Deborah T. Yarrow. 2005.
Managing Wildlife. Sweetwater Press, 194 pp.