

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

PRESCRIBED FORESTRY

(Ac.)

CODE 409

DEFINITION

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

perpetuating a sustainable forest ecosystem based on ecological parameters such as forest types, soil types, past harvest history, natural community types and successional trends.

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.

A forest prescription prepared under this practice shall follow the general criteria applicable to all purposes and shall contain at least one, but may contain many or all of the listed purposes for this practice.

A forest prescription prepared under this practice that is an element of a more comprehensive conservation plan shall recognize and be comparable with the other requirements of the plan.

CONDITIONS WHERE PRACTICE APPLIES

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

The prescription shall include a description of the existing forest condition and desired sustainable forest condition. Where available use ecological site descriptions as guides or other natural plant community descriptions such as those developed by the Department of Conservation Maine Natural Areas Program.

CRITERIA

General Criteria Applicable to All Purposes

Activities to achieve the intended purpose(s) shall be based on a forest prescription that addresses the owner's objectives as well as

The prescription shall include a written inventory report outlining the field work done to prepare the plan, especially to develop existing forest condition descriptions, prescriptions, and other information. This report shall also include the number and type of field plots/points, and related methods used. See the Prescribed Forestry Specification Guide Sheet for more detailed requirements for the inventory portion of the prescription.

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service. Contact Sally Butler, Forest at 207-990-9557 or email sally.butler@me.usda.gov.

**NRCS, ME
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The prescription shall integrate all criteria applicable to the intended purpose(s) of this practice.

The prescription shall be developed for a minimum management period of 10 years.

An existing prescription or inventory data may be used if it is not more than 5 years old and updated to meet the applicable practice criteria.

Describe and give rationale for selection of silvicultural system(s) including ecological and economic considerations.

Planned activities shall be examined collectively. Coordinate and time activities to optimize the stated purposes of conservation practices. Activities are not limited to NRCS conservation practices, but may include other activities essential to implementation of the prescription.

Comply with other NRCS practice standards as needed to implement the prescription, as well as any other legally binding requirements, such as biological opinions, conservation easement restrictions, contracts, etc.

All activities planned under this practice shall comply with applicable federal, tribal, state, and local laws, rules and regulations.

Planned activities shall lead to a distribution of age classes appropriate to sustainable forest conditions, landowner objectives and local ecosystems.

Develop written guidelines that minimize the effects of forestry activities, such as construction of roads, trails and landings and site preparation for planting, on all the natural resources, including soil, water, air, plants and animals.

Do not use plants listed as invasive by the Maine Department of Conservation in any restoration plans.

Follow guidelines as outlined in the Prescribed Forestry Specification Guide Sheet, Job Sheet and Statement of Work.

Implementation will include preparing an annual schedule of activities or project plan that clearly describes management objectives and goals specific to the intended purpose or purposes, so that NRCS environmental compliance can be completed prior to work.

Additional Criteria to Protect Soil Quality and Condition

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

Maintain adequate cover to control soil erosion. Cover may include logging debris as well as vegetative cover.

Prevent gully formation.

Minimize impacts on the landscape when placing roads, harvest trails and landings.

Avoid soil compaction during all activities occurring in the forest.

Use other conservation practices when needed, such as forest trails and landings (655), critical area planting (342) and filter strip (393), to control or prevent soil erosion.

Additional Criteria to Maintain or Enhance Water Quality and Quantity

Develop written guidelines to maintain and enhance the quality and quantity of water flowing from and through forest management unit.

Assess and manage the impacts of forest activities on water quality and quantity.

Ensure road/trails/landing locations, design, construction maintenance, and vegetation reestablishment does not impair water

quality. Develop written guidelines for the use of drainage measures. Include information on when, where, what types, and sizing.

Follow Filter Strip (393) and/or Riparian Forest Buffer (391) Practice Standards to install, operate, 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 the use of stream crossings. Include information on when, where, what types, and sizing. Avoid altering stream courses and drainage patterns.

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Additional Criteria to Maintain or Improve Forest Productivity and Health

Sustainable harvest levels shall be based on the following:

- Clearly documented growth and regeneration data
- Site index models (if available)
- Site productivity or culmination of mean annual increment (CMA) growth
- Desired future sustainable condition
- Consideration of cyclical and natural disturbances.

Develop guidelines on protecting the residual forest, including regeneration, following harvest operations or other activities.

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.

Ensure spacing is by species and size class distribution.

Identify pest problems, including insects, diseases, mammals and invasive/noxious plants, and develop management guidelines.

Use integrated pest management practices, such as maintaining a diversity of plants that discourages pest outbreaks, whenever possible.

Assess and manage the environmental impacts of pest management activities, including, but not limited to, application timing and amount, and disposal.

A timber harvest plan shall indicate harvesting techniques and equipment to be used.

Additional Criteria to Maintain or Improve Plant Diversity

Assess the current plant diversity condition of all forest types on the management unit. Include descriptions of the ecological processes such as disturbance regimes, the unique natural plant communities such as old-growth, and the rare and imperiled plant species and plant communities such as floodplain forest.

Designate and delineate areas that contain these unique communities and develop and implement strategies to protect and maintain their functions and values. This may be accomplished by moving designated areas as conditions change or by maintaining the same area in that condition.

All native plant communities shall be inventoried and managed on the landscape to provide for vertical and horizontal structural complexity, and species diversity.

Develop written guidelines addressing the management of the native plant species and their communities. Include invasive species control and native plant species/community restoration plans if needed.

Additional Criteria to Improve Aesthetic and Recreational Values

Develop written guidelines for those practices that improve the aesthetic and recreational values indicated as important by the landowner. Include measures that will minimize any potential adverse effects associated with recreational uses.

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 identify protected Federal and State habitats and those with special needs and maintain or enhance those habitats.

Designate and delineate areas that contain these wildlife habitats and develop strategies to protect and maintain their functions and values. This may be accomplished by moving designated areas as conditions change or by maintaining the existing habitat.

Develop management strategies and prescriptions based on the best available science to provide for targeted species biological and ecological needs.

Barriers to aquatic organism passage will not be created.

Integrate forest and wildlife management objectives and activities.

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

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

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

Assess the impacts of grazing and browsing on the management unit, and develop strategies, such as Use Exclusion (472) to reduce or eliminate the adverse effects.

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

CONSIDERATIONS

Maine Forest Service's Best Management Practices (BMPs) for Forestry (2005) may be used to assist with minimizing potential adverse impacts associated with forestry operations.

Consider landscape-level, including adjacent and cumulative land use, effects.

Consider multiple resource use of forestland including, but not limited to, hunting, fishing, birdwatching, snowmobiling, cross-country skiing and other eco-tourism type activities.

Consider wildlife and biodiversity within all purposes. Manage for "umbrella" or "indicator" species, whenever possible, to benefit a wider range of species. See Prescribed Forestry Specification Guide Sheets for more information.

Consider developing an ecologically sound, sustainable forest management plan that qualifies the landowner for third-party forest certification.

Consider social effects of decisions.

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

PLANS AND SPECIFICATIONS

Plans and specifications shall be in keeping with this standard and the Prescribed Forestry specification guide sheets, and shall describe the requirements for applying the practice to achieve its intended purpose(s).

The following minimum components shall be included in the forest prescription:

- A clear statement of landowner's goals and objectives, including the primary purpose or purposes under this standard.
- Description of ecological and silvicultural systems and rationale for selection of silvicultural system. Include individual stand descriptions.
- Maps of forest and soil types, land location, access system, and sensitive areas.
- Location of roads, property boundaries, protected areas.
- Planned and applied management activities, including regeneration/harvest strategies and guidelines for addressing soil, water, air, plant, animal and human resource problems and concerns. They may or may not be conservation practices.

See Prescribed Forestry Specification Guide Sheet for a more detailed listing of prescription components.

OPERATION AND MAINTENANCE

Provide an Operation and Maintenance Plan that contains information on the frequency, intensity and description of the monitoring and evaluation of the current prescription.

Provide a yearly project/harvest plan, by an agreed upon date, that clearly indicates those activities specific to the intended purpose or purposes of the prescription, so that NRCS environmental compliance may be completed prior to implementation.

Conduct periodic inspections during and after treatment activities to ensure that the purposes are achieved and resource damage is minimized. The results of the inspections and the annual project plan shall determine the need for additional treatment under this practice.

Review timetables, schedules and coordination actions periodically, at least once per year, and modify the prescription as needed.

REFERENCES

Forest Stewardship Council – U.S. 2005
Northeast USA Regional Forest
Stewardship Standard, Revised Final
Version V9.0, 2/10/05.
(http://www.fscus.org/images/documents/2006_standards/ne_9.0_NTC.pdf)

Maine Forest Service. 2005. Best Management Practices for Forestry; protecting Maine's Water Quality. Maine Department of Conservation. 93pp.

Gawler, S. and A. Cutko. 2003. Natural Landscapes of Maine: A Classification of Ecosystem and Natural Communities. Department of Conservation, Maine Natural Areas Program.