

MINIMUM STANDARDS FOR FOREST MANAGEMENT AND REGENERATION

Effective 4/1/10

In order to ensure consistency of conformance with the purposes of the Use Value Appraisal Program (UVA), the following minimum requirements must be met:

Forest Management Plans

Forest management is the practical application of silvicultural principles to the growth, harvest, regeneration, and conservation of forests in order to maintain healthy forests and to meet the specific objectives of the landowner. While many different landowner objectives may be achieved through active forest management, production of high quality forest products on a sustainable basis shall be the primary focus of management efforts on all enrolled parcels.

The landowners shall carry out the activities listed in the forest management plan as approved by the County Forester. The management plan shall include names and original signatures of all legal owners and the address for the owner(s) responsible for attending to UVA.

All changes or additional activities must be submitted in writing, with the landowner signature(s) and must receive prior approval from the County Forester.

Where markets or other conditions beyond the control of the landowner make it advisable, activities may be carried out up to three years before or after dates specified in the management plan.

Practices

Prescribed activities must meet or exceed the following *minimum* standards and be carried out in accordance with U.S. Forest Service or other appropriate silvicultural or management guides or handbooks (See Appendix A – Partial List of Acceptable Forest Management Publications).

Forest: A forest is an ecosystem characterized by a more or less dense and extensive tree cover, consisting of one or more stands that vary in characteristics such as species composition, structure, age class, and associated processes and that often include small open areas, wetlands, streams, access roads, and trails. For open land to be enrolled as forest land, 350 stems per acre of commercial species well distributed must be present.

Regeneration

For newly-regenerated stands, the successful establishment of acceptable commercial species must not be less than 350 stems per acre well distributed throughout the stand five years after the regeneration cut. For regeneration treatments, the plan must address species objectives as well as any necessary actions to ensure establishment.

Even-Age Management

Even-age systems maintain and regenerate a stand with a single age class. Arbitrarily, a stand is defined as even-aged if the range of tree ages does not exceed 20% of the rotation length.

Shelterwood: The gradual removal of the entire stand in a series of partial cuttings which extend over a fraction of the rotation. Natural reproduction starts under the protection of the older stand and is finally released when it becomes desirable to give the new crop full use of the growing space. Trees that are left may be chosen not only as a seed source or protection for the new stand

but also for their capacity to increase in value. The largest, most vigorous and best-formed individuals of desirable species are retained until the final cutting. The most fundamental characteristic of the shelterwood method is the establishment of a new crop before completion of the preceding rotation.

Modifications of the shelterwood method involving the arrangement of cutting by area include: uniform shelterwood, strip shelterwood, and group shelterwood. Another modification of the shelterwood system is the irregular shelterwood where forest cover is retained over a longer period of time resulting in more than two age classes. The irregular shelterwood modification stands in an intermediate position between the methods of even-aged and uneven-aged management.

The current stand conditions and the shelterwood type to be employed shall be clearly described in the management plan.

Clearcut and Progressive Clearcut: Cutting/removal of all trees larger than 2 inches DBH in a stand or portion of a stand.

Overstory Removal: Removal of the overstory when the next stand of acceptable commercial species has become established.

Intermediate Thinning: Total basal area shall not be reduced below the B-level. The stocking of acceptable growing stock will not be reduced below the “C” level in the appropriate stocking guide (See Appendix A – Partial List of Acceptable Forest Management Publications). If no stocking guide is available, the residual basal area of acceptable growing stock will not be reduced below 60 square feet per acre.

Uneven-Age Management

An uneven-aged system is a planned sequence of treatments designed to maintain and regenerate a stand with three or more age classes. Under uneven-age management, the total basal area will not be reduced below minimum levels recommended in the appropriate silvicultural guide or reference. Where no silvicultural guide or reference is available, total basal area will not be reduced below 80 square feet per acre. The ratio of Acceptable Growing Stock (AGS) basal area to total basal area shall be maintained or increased.

Uneven-Aged Management systems include:

Single Tree Selection

Group Selection

Salvage Cutting – The removal of trees that have been or are in imminent danger of being killed or damaged by natural injurious agents other than competition between trees.

Sugarbush Management – For Forestry UVA only

Long-term sugarbush management requires the maintenance of a healthy forest and healthy trees. Sap production is an allowable management objective under Forestry Use Value as long as it is consistent with sustainable forest management.

Standards for sugarbush management in Forestry UVA include:

- 1) Identifying what the long-term management goals are, i.e., even-age vs. all age management for maple syrup production (with an option of timber management).
- 2) Use and reference the appropriate silvicultural guide and the Use Value Appraisal Tapping Guidelines in the Appendix (See Appendix B – Department of Forests, Parks and Recreation Tapping Guidelines).
- 3) All taps shall be removed annually at the end of each sugaring season and before full leaf out.

Ecologically Significant Treatment Areas (ESTAs)

Approved ESTAs are lands not necessarily managed for timber but require protective/conservation management. ESTAs that do involve active timber production will be subject to the previously listed management standards. ESTAs not involving active timber management will require measures necessary to enhance or maintain the ecologically significant features. All ESTAs needing Vermont Fish & Wildlife Department's Natural Heritage Program (NNHP) will be permanently recorded even if landowner objectives within UVA change to timber management.

Erosion Control and Water Quality

It is the obligation of the landowner to ensure that soil erosion and/or stream sedimentation does not occur on any lands enrolled in the UVA program. Appropriate preventative soil erosion and stream pollution control practices, as outlined in the publication entitled "*Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont*", or a successor publication, shall be employed to the maximum practicable extent on all enrolled parcels. Compliance with all State and Federal rules and regulations regarding erosion control, water quality, and wetland protection is required.

Inspections and Conformance

All lands entered in the program are subject to periodic inspection to ensure conformance with the management plan and appropriate standards (See Appendix C – Conformance Inspection Report). If enrolled lands are cut contrary to either the management plan or standards, an adverse inspection report may be filed. Additionally, if erosion control measures are not implemented where deemed necessary to comply with appropriate rules and regulations, an adverse inspection report may be filed on those acres affected. An adverse inspection report can result in a Land Use Change Tax being assessed on those acres in violation and the entire parcel being removed from the program for a period of five tax years. If the landowner fails to make a prescribed cutting according to the management schedule, an appropriate management plan amendment must be submitted for approval or the landowner may be given one year to complete the prescribed cutting. If the cutting is not completed within the one year, the parcel will be discontinued from the program for at least one year and until the land comes back into conformance. The lien remains on the land, but no Land Use Change Tax is due.