

Approved by:

/s/ Forrest L. Boe _____ Date: 12/8/2016 _____

Forrest Boe, Director

Minnesota Department of Natural Resources, Division of Forestry



MNDNR

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Using ECS Information in Silviculture Prescriptions

Division Policy..... 27

Supersedes Circular Letter 3431-0, effective May 1, 2006

Policy Owner Dave Schuller

Related Department Policies

Related Division Policies.....

Related Procedures.....

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Policy Statement

The Division of Forestry has a responsibility to adhere to sustainable forest management principles and promote ecologically sound decision-making through an understanding of the DNR Ecological Classification System (ECS). To make informed site prescriptions, ECS information is to be collected and silvicultural interpretations consulted.

Purpose and Scope

The department recognizes the importance of using ECS information in the management of state forest lands. ECS products help us understand forest's full potential to produce timber and wildlife and protect water, soil, and natural heritage features. They are essential for interdisciplinary communication and forest resource assessment. They are an important link between [Section Forest Resource Management Plan](#) (SFRMP) goals and what a forester chooses to do on an individual timber sale or silviculture project to meet those goals. ECS supports other indicators of sustainable forest management and helps match appropriate silvicultural systems, strategies, and suitable tree species to forest sites to achieve desired outcomes.

Procedures

- Native Plant Community (NPC) classifications will be completed on all forest regeneration sites targeted for species composition change, or where silviculture program dollars will be spent; except for winter-access-only sites.
- Department NPC mapping is adequate for site classification where such mapping exists. Staff should verify NPC mapping in the field when initiating a timber appraisal or other silviculture project and correct it, when needed, by submitting a new ECS worksheet.
- Staff should contact their Area Ecological Classification Lead or Regional Ecological Classification Specialist for locations of point/polygon ECS information.
- The preferred timing for NPC classification is during the initial stand examination or prior to a timber sale being completed in the Timber Sales Module (TSM).
- Staff will forward completed NPC classifications (ECS Worksheets) to the Regional Ecological Classification Specialist and/or the Area Ecological Classification Lead.
- [ECS products](#), [NPC guides](#), soil descriptions, and [silvicultural interpretations](#) will be used to support and design site prescriptions.

Roles and Responsibilities

Silviculture Program Coordinator:

- Provides funding and direction to meet Silviculture Program training needs, ensures area and regional silviculture targets are developed, and monitors progress and outcomes.
- Works closely with the Forest Ecologist, Ecological Classification Program Coordinator, Regional Ecological Classification Specialists, and Region Silviculture Program Specialists, to revise silviculture interpretations and review case studies for selected site prescriptions.
- Updates the Silviculture Program websites and communicates changes to all Division staff on a regular basis.

Ecological Classification Program Coordinator:

- Directs funding to meet the ECS Program's planned training and field activities.
- Collects and compiles all site classification locations and related data, produces a statewide point cover with attribute data and maps, and maintains an archive of all observations and attribute data. The point observations and map units will be provided to the regions and areas on a regular basis or as requested.
- Ensures area ECS targets are developed, and monitors progress and outcomes.

Forest Ecologist (ECS Program Consultant):

- Provides training, develops silvicultural interpretations associated with NPCs, develops case studies to monitor effectiveness of silvicultural decision-making, and provides assistance and trouble shooting in NPC classification and the design of site prescriptions.

Area Forest Supervisor:

- The Area Forest Supervisor supports and implements the policy and determines which state land program leader has overall responsibility for providing oversight, review, and training to area personnel.

Area Silviculture Program Forester and Timber Program Forester

- Work closely with the Area Ecological Classification Lead to ensure that all required NPC classifications are completed.
- Review annual stands in the Stand Exam Layer (SEL) for sites that may need additional silvicultural prescription consideration based on the site, species composition and/or SFRMP direction. These sites are marked in SEL as “Needs review”, requiring review and approval of site prescriptions. This will generally be done by the Area Silviculture Program Forester prior to the completion of a timber sale appraisal or silviculture project proposal.
- Approve site prescriptions collaboratively to ensure that timber harvest and regeneration plans are supported by SFRMP direction and objectives, NPC classifications, and associated silvicultural information.

Region Silviculture Program Specialist and Region Ecological Classification Specialist:

- Support the policy within the region.
- Work collaboratively to establish regional NPC classification implementation targets.
- Monitor implementation, provide training and assistance to the field, and ensure that all site prescriptions and silviculture project objectives are supported by SFRMP direction and objectives, NPC classifications, and associated silvicultural information.

Region Timber Program Specialist:

- The Region Timber Program Specialist supports the policy within the region.
- Works closely with the Region Silviculture Program Specialist to ensure that timber harvest prescriptions and regeneration plans are supported by SFRMP direction and objectives, NPC classifications, and associated silvicultural information.

All Division employees:

- Complete NPC classifications and collect stand growth stage data for all forest regeneration sites as described in the procedures above.
- Consult ECS products, NPC guides, soil descriptions, and silvicultural interpretations, as needed, when designing site prescriptions.
- For stands checked as “Needs Review” or where consultation is needed, notify the area silviculture and timber program forester when a prescription is ready for review).

Contacts

Dave Schuller
State Land Programs Supervisor
651-259-5255
dave.schuller@state.mn.us

Paul Dubuque
Silviculture Program Coordinator
651-259-5274
paul.dubuque@state.mn.us

John Almendinger
ECS Program Consultant (Forest Ecologist)
218-322-2503
john.almendinger@state.mn.us

Definitions

Case Study: A formal prescription and assessment which monitors the effect of silvicultural treatment(s) on forested Native Plant Communities throughout the life of the stand. They are documented and published for the purpose of sharing forest-management experiences at the stand scale over time.

Growth stages: Periods of stability and change throughout the course of natural succession. Each growth-stage is characterized by differences in composition and structure. The ECS program focuses on four growth-stage forests: young, transitioning, mature, and old.

Silviculture: The art and science of controlling the establishment, growth, composition, health, and quality of forests and woodlands to meet the multitude of purposes and values of landowners and society on a sustainable basis.

Silvicultural interpretations: Silviculture-related information developed for each native plant community and growth stage to help guide the land manager in developing site prescriptions.

Silvicultural system: A planned series of treatments for tending, harvesting, and re-establishing a stand.

Site prescription: A site plan, including specific actions and timing, to move a stand's composition and structure to a desired condition and protect its ecological integrity.

Winter-access-only sites: Sites in which access is restricted to the time of year when the ground is frozen or snow covered. The majority of these sites will be dominated by black spruce and tamarack. However, **winter-access-only sites** may also be upland sites that are accessible only during the winter due to being surrounded by wetlands. Examples would be upland islands within bogs.

Forms and Instructions

- [ECS Worksheet](#) (NPC classification form) identified as Version 2.0, Feb. 2014.

History

Maintenance:

Amended:

12/8/2016 Updated using new division policy format