



MANAGEMENT OF TREE SPECIES COMPOSITION

Scope

This policy provides direction to FFT program staff concerning the management of tree species composition in FFT-funded silviculture operations.

Purpose

The purpose of this policy is to ensure that:

1. tree species composition in FFT-funded silviculture operations is well managed; and
2. FFT operations are consistent with the principles and objectives of the FFT Program Management Plan and the provincial government's Mountain Pine Beetle Action Plan. FFT has adopted the following goal for its management of tree species composition:

FFT-funded silviculture operations will contribute to achieving diverse mixes of desirable tree species within FFT treatment units, subject to applicable site management objectives, site limitations, and considerations of economic return.

Policy

1. Species mixtures will be planted.
 - Where appropriate, and to the degree reasonable:
 - areas will be planted with a mixture of desirable species; and
 - on sites with more than one "preferred" species, more than one preferred species (and, where practicable, all of the preferred species) will be planted.
 - Planting mixtures will vary within and among FFT planting areas.
2. Existing natural and advance regeneration will be used.
 - The FFT program will use, to an appropriate degree, existing natural regeneration and advance regeneration to achieve diverse mixtures of desirable tree species .
3. Caution will be exercised in conifer release.
 - Because of the potential to reduce species diversity and destroy broadleaf trees that may contribute to mid-term timber supply, FFT will exercise caution in applying conifer release treatments.
4. Only cost-effective actions will be taken.
 - FFT will ensure that benefits exceed costs. For all treatments, the calculated internal rate of return (IRR) must meet or exceed the "guiding rate" (the

minimum acceptable rate). FFT will not undertake treatments that significantly increase the risk of reforestation failure.

5. Species management decisions will be informed by forest-level analysis.
 - FFT species management will be informed by analyses of the long-term, forest-level impact of species choices, where these analyses are available.
6. Cumulative impacts, and impacts at the landscape scale, will be considered.
 - Where appropriate, and to the degree practical, FFT will work to improve watershed and landscape composition.
 - Where young stand composition is known to deviate from natural composition (as a result of past management), FFT treatments will help to re-establish natural composition.
7. Actions will be consistent with the management objectives applicable to the site.
8. Actions will be consistent with site limitations.
 - FFT will not, just to increase diversity, force species onto sites to which the species are poorly suited.
9. Species selection and consideration of species acceptability will follow current guidelines.
 - At this time, FFT will not undertake unconventional species deployment unless in a strategic context (e.g., direction that may arise from the Future Forest Ecosystems initiative).
10. Performance will be measured.
 - Progress in achieving the FFT species goal will be assessed by the four indicators specified below.

Indicators

The following indicators will be used to track progress toward achieving the FFT species goal:

1. Percent of area planted with more than one tree species
 - This indicator addresses the question of how frequently FFT plants more than one species on those sites where more than one species is “preferred.” For each planting area, it is determined whether more than one species is preferred and whether more than one species was planted. Over all of the planted areas with more than one preferred species, the percent of area planted with more than one species is computed. The target level for this indicator is 100%, with an acceptable variance of 20%. To provide an additional benchmark against which FFT can be assessed, the percent of area planted with more than one species by other operators on similar sites is also computed.
2. Area-weighted mean dominant species percent in silviculture labels
 - This indicator addresses the issue of the degree of within-polygon species diversity, recognizing natural and advance regeneration. For each forest

cover polygon (stratum) in areas treated by FFT, the percent of the leading species is taken from the silviculture label. Over all strata, an area-weighted average is computed. To provide a benchmark, the area-weighted average achieved by other operators on similar sites is also computed.

3. Percent of planted seedlings that are lodgepole pine (Pl)
 - This indicator addresses concerns over the excessive planting of Pl. Percent Pl planted under FFT is compared with percent Pl planted by all other operators on similar sites over a defined time period.
4. Percent of post-treatment stand composition that is lodgepole pine
 - This indicator addresses concerns over the excessive regeneration of Pl, recognizing natural and advance regeneration, as well as planting and other treatments. The percent Pl is taken from the inventory label derived from the forest cover update of each FFT silviculture treatment. Over all FFT projects, an area-weighted average is computed. To provide a benchmark, the area-weighted mean percent Pl achieved by other operators is also computed for similar sites over a defined time period.

Responsibilities

The FFT program manager, Forest Practices Branch, is responsible for:

- communicating the policy to FFT staff and partners,
- incorporating the policy into relevant standards documents and training materials,
- monitoring the implementation of the policy,
- periodically reviewing and revising the policy as required, and
- reporting on the level of achievement of the goals of the policy.

FFT regional staff are responsible for:

- implementing the policy,
- incorporating the policy into relevant standards documents and training materials, and
- ensuring that the data required for the indicators are collected and reported into RESULTS (the ministry's software application that stores and manages silvicultural data).

NOTE: Application of this policy will begin with the 2006 sowing.

For further information, visit www.for.gov.bc.ca/hfp/fft/ or contact John McClarnon, Forests for Tomorrow Officer (250-387-8903).

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