

File: 280-30
Ref: 240609
XRef: 233730 / 238449; 12905-00

June 5, 2019

To: Regional Executive Directors, FLNRORD
Provincial Executive Directors, FLNRORD
District Managers, FLNRORD

From: Diane Nicholls, RPF, ADM, Chief Forester
Jim Schaffhuizen, A/Executive Director, Forest Policy and Indigenous Relations
Division

RE: Guidance for Incorporation of Enhanced Basic Silviculture (EBS) in Forest Stewardship Plan (FSP) Stocking Standards and the use of the EBS Tenure Obligation Adjustment available in the Interior Appraisal Manual.

The intent of this memorandum is to provide guidance to staff on the process for developing stocking standards for enhanced basic silviculture, and the use of the associated Tenure Obligation Adjustment (TOA) in the Interior Appraisal Manual.

The Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD) faces a combined challenge of adapting resource management practices to a changing climate and addressing mid-term timber supply shortfalls. These challenges will require the development of innovative forest management practices. In early 2014, the ministry initiated a project to advance climate change adaptation and address identified issues related to stocking standards, forest health, cost and risk. A number of potential options were considered, including changes to stocking standards, and the use of policy tools to encourage higher planting density and greater species diversity in reforestation activities. Establishment density in BC's interior was chosen as a starting point because of simplicity and ease of administration. Increasing establishment density is a risk reduction strategy intended to offset mortality and assist in meeting expectations for growth, yield, and timber quality in an environment of changing climate and increased disturbances due to insects, disease, and wildfire.

Enhanced Basic Silviculture (EBS) was designed to work within the bounds of the market pricing stumpage system and operates separately from the Forest Carbon Initiative.

On October 1, 2017, the Interior Appraisal Manual was amended to include a Tenure Obligation Adjustment (TOA) for enhanced basic silviculture. The intent of the TOA is to facilitate an increase in investment in our future forests through the use of enhanced basic

silviculture regimes. The following sections provide guidance on incorporating EBS in stocking standards and using the TOA.

Alignment with Management Unit Objectives and /or a Silviculture Strategy

In order for the TOA cost estimate to be available for use, there must be a management unit plan, silviculture strategy, or forest health strategy that includes the management objectives and the associated silviculture regimes needed to achieve those objectives. It is expected that these plans and strategies will consider the full range of objectives and risks that apply to the area, including wildfire risk, public health and safety. These management unit plans must be endorsed by a statutory decision maker through a letter attached to the plan (or equivalent). If the plan or strategy contains EBS regimes that include increased establishment densities for some areas, TOAs can be accessed through the interior appraisal manual.

There are a number of ways this requirement can be satisfied:

- The District Manager endorses existing Type 4 or integrated stewardship strategies that include (or have been revised to include) increased establishment densities;
- There is an approved TFL Management Plan that includes increased establishment densities in the timber supply analysis assumptions;
- The District Manager endorses silviculture strategies developed in management units without Type 4 or integrated stewardship strategies in place or in development (usually at the TSA table); and/or,
- There are forest health strategies that include increased establishment densities.

Development of Stocking Standards

For TSAs, district staff together with their TSA silviculture committee, district steering committee or similar group (including licensee and government forest professionals) co-operatively develop stocking standards that reflect the enhanced basic silviculture regime outlined in the approved management unit plan. The stocking standards must define the situations and circumstances where they will be applied, and reference the strategy or management plan which contains the EBS regime. For TFLs, the licensee in consultation with district staff develops stocking standards that reflect an enhanced basic silviculture regime. Higher establishment densities will be reflected in a Forest Stewardship Plan (FSP) as the new, higher stocking standard density at the regeneration date (in accordance with Forest Planning and Practices Regulation (FPPR) section 16 (3) a or c¹ as compared to those

¹**Forest Planning and Practices Regulation 16 (1)** *A person required to prepare a forest stewardship plan must ensure that the plan specifies the situations or circumstances that determine when section 44 (1) [free growing stands generally] or section 45 [free growing stands collectively across cutblocks] will apply to an area.*
(2) In specifying a stocking standard under this section, a person who prepares a forest stewardship plan may consider the factors set out in section 6 [factors relating to stocking standards] of Schedule 1.
(3) A person required to prepare a forest stewardship plan must ensure that the plan specifies, for each of the situations or circumstances specified under subsection (1) where
(a) section 44 (1) (a) will apply, the regeneration date and stocking standards,
(b) section 44 (1) (b) will apply, the free growing height and stocking standards,
(c) section 45 (1) will apply, the regeneration date and the stocking standards, and
(d) section 45 (2) will apply, the free growing date and the stocking standards, as approved by the chief forester.

associated with current basic silviculture requirements. An FSP amendment will be required in most cases. EBS uses regeneration-date stocking standards rather than free growing stocking standards, allowing both: the standards to be more directly comparable to the regime in a given strategy; and, a more direct link between FSP commitments and the appraisal cost estimate.

Free growing standards typically have minimum densities significantly reduced to account for the variability in stocking that can occur over the early life of a stand; and, as a result, are not as easily compared to regimes in silviculture strategies.

Including Enhanced Basic Stocking Standards in the Forest Stewardship Plan

To include enhanced basic stocking standards, a Forest Stewardship Plan (FSP) amendment will be required in most cases. The Forest Licensees will amend their FSP to include enhanced basic stocking standards, including a regeneration-date-specific stocking standard, in a new FSP submission. The EBS regeneration date stocking standard needs a minimum planting density in addition to a regeneration target / minimum, with no changes needed to free growing standards. It is this minimum planting density that will be monitored to confirm compliance with the EBS standards. Stocking standards as specified in a FSP are enforceable.

The situations and circumstances must be well defined as to where the EBS stocking standards will be applied, and this must reflect the management unit plan or strategy. Well defined situations and circumstances, together with standards that reflect the silviculture regime in a strategy for an area will provide the statutory decision maker the ability to determine whether the proposed standards in an FSP are reasonable and so can be approved under FPPR 26(5).²

Cutting Permit and Appraisal Submission

At the time of cutting permit submission, the TOA for EBS is included in the stumpage calculation. The estimate represents the difference in cost between current practice and the higher planting densities required to meet the new standards. Reports showing current practice regarding densities will be produced annually to support future editions of the Interior Appraisal Manual (IAM). Site plans for areas where EBS is to occur will include the new standards for the appropriate standards units. During appraisal review by a government official, a check for EBS stocking standards in the FSP and for EBS regimes in a government endorsed management unit plan is completed.

The Interior Log Cost Survey will collate EBS costs separately, so that the TOAs can be refined based on actual practices in the future.

Post-Harvest Denudation Reporting

² **Forest Planning and Practices Regulation**

26(5) *The minister may approve the stocking standards referred to in section 16 (3) or (4), even though they do not conform to subsection (3) or (4) of this section, if the minister is satisfied that the regeneration date and stocking standards are reasonable, having regard to the future timber supply for the area.*

Following harvest, the licensee submits an opening definition, including standards units and associated stocking standards, as part of denudation reporting. District staff can check that EBS stocking standards have been used in areas where the TOA has been claimed. Webinar training modules will explain changes in reporting requirements to RESULTS users.

Silviculture Activity Reporting and Regeneration Delay


Following planting, the licensee may declare that regeneration stocking standards have been met. Planting activities must also be reported, including total stems planted per planting unit. Once reported, district staff can confirm that planting densities reported reflect the cost estimate claimed, and that the higher establishment densities reflected in the standard have been met by the regeneration date. If planting densities are inconsistent with the appraisal submission or if the increased minimum densities specified in the FSP have not been achieved on or before the regeneration date, the outcomes may cause administrative or enforcement sanctions as described in the respective enactments.

Concluding Remarks

This guidance supports us to collectively forge stronger links between management unit plans, strategies, timber goals and objectives, FSP stocking standards, reforestation activities and the timber pricing system. The objectives for investing in EBS are to produce medium and long term increases in timber volume and value, and provide positive economic, ecological and social benefits.



Diane Nicholls, RPF
Assistant Deputy Minister
Chief Forester



Jim Schafthuisen
A/Executive Director
Forest Policy and Indigenous
Relations Division

cc: Meggin Messenger, Executive Director, Strategic Initiatives, OCF
Shane Berg, Executive Director, Deputy Chief Forester, OCF
Thomas White, Director, Climate Change and Integrated Planning Branch, OCF
Al Bennett, Director, Timber Pricing Branch, TOPFN
Lorne Bedford, Manager, Resource Practices Branch, OCF
Kathy Hopkins, Technical Advisor, Climate Change and Integrated Planning Branch