



General Bulletin

Number 40

July 17, 2001

Submission of Free Growing Reports by Standards Unit

Introduction

The Silviculture Practices Regulation (SPR) provides a framework for monitoring and reporting the achievement of a silviculture prescription (SP) holder's obligation to establish a free growing stand on those portions of the area under the prescription that are within the net area to be reforested (NAR). A survey, within the free growing assessment period, containing sufficient information to enable the district manager to determine if the stand meets the free growing standards specified in the prescription is required. When a standards unit (SU) can be identified as a separate stand, and this stand has met the free growing requirements in the SP, then the SP holder has fulfilled the silviculture obligation for that portion of the block. With respect to the formal free growing declaration, if all of the free growing requirements on one, two or more SUs described in the SP have been met, the SP holder may, in some circumstances, declare a SU free growing before the remainder of the cutblock is free growing.

Justification and Authority

The following sections of the SPR apply:

- SPR section 23 (1) (c) requires the licensee to conduct a survey that enables the district manager to determine if the stand meets the free growing standard specified in the SP,
- SPR section 23 (3) requires the licensee to conduct a survey, on areas without regeneration objectives, that enables the district manager to determine if the stand meets the requirements specified in the SP,
- In accordance with SPR section 28 (1) (c), after completion of the report of the survey, the SP holder must submit, on or before May 31, a report in Form C with an accurate map showing the silviculture treatments applied and a map notation that includes a description of the forest cover,
- SPR 28 (1) (d) requires that licensees submit a signed and sealed declaration when a stand referred to in s.23 is free growing.

Timing of a free growing survey

The beginning and end of the free growing assessment period are measured from the commencement date, the definition of which is provided in section 70 of the *Forest Practices Code of BC Act* and varies with the silviculture prescription category. One commencement date applies to all SUs in a SP, regardless of whether a free growing declaration is being made for a SU or the entire NAR.

Following the last brushing treatment on a site, there is a required number of complete growing seasons prior to doing a free growing survey. This will ensure that any subsequent re-growth or re-sprouting of the brush can be assessed properly. The length of this minimum waiting period (2 or 3 years) is dependent on the biogeoclimatic zone in which the opening is located and brushing method used (i.e. chemical or manual). For further details on timing of free growing surveys, refer to *the Establishment to Free Growing Guidebook*.

Recommendations:

In most cases, meeting the standards described in the SP will qualify the free growing trees growing within a cutblock boundary as a stand. The free growing survey report as required by SPR s. 28(1)(c) and the free growing declaration submitted in accordance with SPR s. 28(1)(d) will report on the entire NAR. In these instances, the district manager should either:

- (1) acknowledge that the statement, signed and sealed by a professional forester, indicate that the entire NAR has achieved free growing in accordance with the standards contained in the silviculture prescription; or
- (2) reject the entire NAR as not free growing.

If a free growing declaration is submitted on a SU basis then the district manager may consider the following when determining if the free growing declaration should be accepted on a SU basis:

- Free Growing Assessment Period (FGAP): Does the free growing assessment period for one SU differ from the remaining SU(s)? If they differ, the SUs may be considered separate stands.

Has the area been well managed?

Failure to meet the regeneration date milestone or mediocre management practices which result in stocking close to minimum stocking levels on a portion of a cutblock (e.g. a SU) can prompt requests for different FGAPs or declaration of FG by SU (e.g. when a SP amendment to early free growing is being requested for the well-managed portion or SU). In these cases, free growing declarations on a SU basis may not be reasonable.

- Is there a significant difference in stand structure? If the stand structure of the stands in each SU makes it clearly distinguishable from those in other SUs, they could be considered separate stands (i.e. single storey versus multi-storied, mixed broadleaf-conifer versus pure conifer or pure broadleaf).
- Is the licensee carrying an unreasonably high risk for an extended period? When a SP for a “large” (i.e. exceeds the size described in OPR section 11) cutblock includes more than one SU, these SUs may be considered separate stands. In these instances, although the FGAPs are the same, the licensee may submit a rationale as to why the

district manager should accept a free growing declaration by SU. Also, when a “large” single SU cutblock contains a relatively small but manageable stratum, which for reasons beyond the SP holder’s control (e.g. Act of God) will not become free growing before the prescribed late free growing date, this portion may be considered a separate stand. An SP amendment would be required to create a new SU with an extended FGAP.

However, stratification of an existing SU and amending SPs to create separate SUs that are based primarily on differing FGAPs is generally not appropriate.

- Basic spacing: Does one SU, or a portion of that SU, exceed maximum density and thus require basic spacing before the SU can be declared free growing? In this case, other SUs are considered separate stands. If the spacing treatment would be better done at a later date, it may be appropriate to accept free growing by SU.

District Inspection Plans for silviculture identify which cutblocks or standards units will be inspected. For areas that have been declared free growing, in most cases a district manager office review and field inspection should be completed less than 1 year (sooner if possible) from the receipt of the declaration. The district manager may choose not to inspect an individual SU after a free growing declaration is submitted for an individual SU, and instead wait until all of the SUs in the cutblock are declared free growing. In this case, inspections would be based on the conditions that existed when each SU was declared free growing.

Applying the concept

The following examples are not a complete listing of the conditions required to meet free growing obligations by SU. They illustrate the types of site-specific conditions and considerations that can be made by ministry and licensee personnel when deciding whether to submit and accept free growing declarations by SU.

Example 1 – A cutblock includes two SUs stratified by biogeoclimatic zone and stocking requirements.

A cutblock crosses the CWH and MH biogeoclimatic zone boundary. The following table shows the regeneration and free growing timelines specified in the SP.

SU	Ha	Ecosystem	Regen Date	Free growing Assessment	
				Early	Late
1	18.7	CWH ms1 05	6	11	14
2	11.5	MH mm2 05	4	12	20

The SP specifies two different FGAPs. SU1 is declared free growing before SU2 is eligible for a free growing survey. Each SU is considered a stand.

Example 2. A cutblock includes two SUs stratified by regeneration objective.

A cutblock has two SUs, one with regeneration objectives (e.g. clearcut with reserves or single tree selection) and one with no regeneration obligations (e.g. an intermediate cut for harvesting cedar poles or a commercial thinning). The intermediate cut area can be declared free growing 12 months after completion of harvesting, while the rest of the block must be surveyed within the prescribed FGAP. Therefore, similar to Example 1, the different milestone dates justify a declaration by SU.

Example 3. A cutblock includes two SUs stratified by stand structure objective.

A cutblock is harvested using two silvicultural systems – single tree selection and clear cut with reserves - thus creating different stand structures. The following table shows the regeneration and free growing timelines specified in the SP.

SU	Ha	Silv System	Regen Date	Free growing Assessment	
				Early	Late
1	40.6	Single tree selection	7	12	15
2	12.5	Clear cut, with mixed reserves (natural regen.)	7	12	15

The stand structure of the SU harvested using single tree selection makes it clearly distinguishable from the naturally regenerated clearcut area. The two SUs are easily recognized as different stands although the FGAPs in the approved SP are the same. If the stands are regenerating at significantly different rates, a free growing declaration by SU may be acceptable.

Example 4. A large cutblock (i.e. larger than the limits set by OPR section 11) includes two SUs with the same FGAP.

A 90 ha. opening is stratified into 2 SUs based on BEC site series and therefore species acceptability. The following table shows the regeneration and free growing timelines specified in the SP.

SU	Ha	Ecosystem	Regen Date	Free growing Assessment	
				Early	Late
1	64.2	MH mm1 03	4	12	20
2	25.1	MH mm1 07	4	12	20

SU1 is surveyed and declared free growing in year 12. SU2 will not be free growing for several years. The licensee submits the free growing report and declaration for SU1 along with a rationale as to why the declaration by SU is valid although the FGAP is the same.

Example 5. A large single SU cutblock.

Although the block is a mosaic of zonal and the slightly drier 03 sites, it is identified in the approved SP as a single SU with the following milestones.

SU	Ha	Ecosystem	Regen Date	Free growing Assessment	
				Early	Late
1	180.2	ICH mw2 01(03)	4	9	15

The area was surveyed in year 11. A 20 ha. portion of the block was stratified and classified as NSR. Extensive animal damage had girdled the 11-year old crop trees before the area was surveyed and declared free growing. An amendment and rationale for creating a new 20 ha. SU with a revised FGAP is submitted to the district manager, along with a free growing declaration for the remaining 160.2 ha. The district manager could then accept both the amendment and the free growing declaration.

Example 6. A cutblock in the BWBS mw1 is stratified based on site series.

A cutblock in the BWBS mw1 contains two ecosystems and, therefore, the block is stratified into two SUs. While the preferred and acceptable species are different, the regeneration and free growing dates are identical.

SU ¹	Ha	Ecosystem	Regen Date	Free growing Assessment	
				Early	Late
1	18.7	BWBS mw1 01	4	9	15
2	11.3	BWBS mw1 05	4	9	15

The opening is surveyed in year 11. SU1 is free growing however a portion of SU2 is not. The block is not larger than the limits set by OPR section 11, the two SUs have identical FGAPs, there is no significant difference in stand structure and maximum density spacing is not required; therefore, the block clearly does not qualify for declarations by SU. The year 11 survey results and Form C are NOT submitted to the district manager until the entire NAR can be declared free growing.

¹ For older PHSPs, this may be referred to as TU - treatment unit. If two TUs with identical stocking requirements are identified in the PHSP because different silviculture treatment regimes were used to create the same target stand structure, free growing declarations should not be submitted by TU.

In year 14, SU2 is resurveyed to confirm it is free growing. SU1 is resurveyed using a visual assessment to confirm that the area remains free growing and that the previous survey results were still defensible. The entire opening is declared free growing in year 14.

Note: The district manager must be satisfied that the visual assessment (i.e. walk-through) of SU1 is acceptable and that the survey and subsequent visual assessment contains sufficient information to enable him/her to determine that the free growing standards specified in the prescription have been met.

Example 7. A cutblock has two SUs, both SUs are free growing with respect to all obligations except basic spacing because SU1 exceeds maximum density.

It would be more biologically appropriate to space SU1 several years after the SU2 is declared free growing. The licensee submits a free growing declaration for SU1, and waits until SU2 is spaced before declaring it free growing.

Conclusion

On the majority of cutblocks, free growing declarations will be based on the entire NAR. However, where there are distinct differences in the stands and/or standards that make up the NAR (as described in the examples above), those specific circumstances may justify free growing declarations on a standard unit basis.

Contact

For any questions regarding this bulletin, please contact:

Forest Practices Branch:

Paul Rehsler (250) 387-8306

Paul.Rehsler@gems9.gov.bc.ca

Compliance and Enforcement Branch:

Greg Goss (250) 356-7576

Greg.Goss@gems3.gov.bc.ca