

of

BRITISH COLUMBIA

Stand Management Prescription Guidebook

Second edition

March 1999

Authority B.C. Ministry of Forests Act Forest Act Forest Practices Code of British Columbia Act Operational Planning Regulation

Canadian Cataloguing in Publication Data

Main entry under title: Stand management prescription guidebook

(Forest practices code)

Rev. ed. ISBN 0-7726-3900-0

1. Forest management – British Columbia – Planning. 2. Forests and forestry – British Columbia – Planning. I. British Columbia. Ministry of Forests. II. Series: Forest practices code of British Columbia.

SD438.B7S73 1999 634.9'2'0711 C99-960182-2

© 1999 Province of British Columbia

For more information, contact: Forest Practices Branch

1450 Government Street PO Box 9513, Stn. Prov. Govt. Victoria, BC V8W 9C2

Visit our website: http://www.for.gov.bc.ca/hfp/hfp.htm

Preface

This guidebook has been prepared to help forest resource managers plan, prescribe and implement sound forest practices that comply with the Forest Practices Code.

Guidebooks are one of the four components of the Forest Practices Code. The others are the *Forest Practices Code of British Columbia Act*, the regulations and the standards. The *Forest Practices Code of British Columbia Act* is the legislative umbrella authorizing the Code's other components. It enables the Code, establishes mandatory requirements for planning and forest practices, sets enforcement and penalty provisions, and specifies administrative arrangements. The **regulations** lay out the forest practices that apply province-wide. **Standards** may be established by the chief forester, where required, to expand on a regulation. Both regulations and standards, where required and established under the Code, must be followed.

Forest Practices Code guidebooks have been developed to support the regulations, but are not part of the legislation. The recommendations in the guidebooks are not mandatory requirements, but once a recommended practice is included in a plan, prescription or contract, it becomes legally enforceable. Guidebooks are not intended to provide a legal interpretation of the *Act* or regulations. In general, they describe procedures, practices and results that are consistent with the legislated requirements of the Code.

The information provided in each guidebook is to help users exercise their professional judgment in developing site-specific management strategies and prescriptions to accommodate resource management objectives. Some guidebook recommendations provide a range of options or outcomes considered acceptable under varying circumstances.

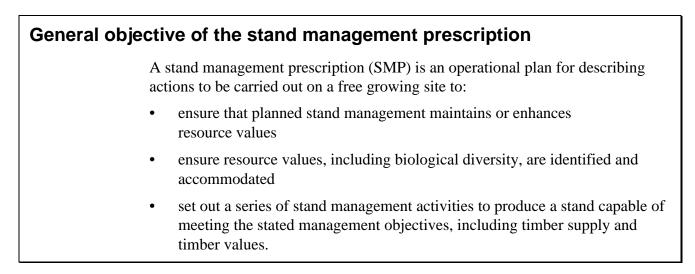
Where ranges are not specified, flexibility in the application of guidebook recommendations may be required to adequately achieve land use and resource management objectives specified in higher level plans. A recommended practice may also be modified when an alternative could provide better results for forest resource stewardship. The examples provided in many guidebooks are not intended to be definitive and should not be interpreted as the only acceptable options.

Contents

Preface		iii
Introduction		1
General objective of t	he stand management prescription	1
General requirements		3
General objective		3
RPF signature a	nd seal	3 3
Ũ	ıre signature	3 3
-	ents	4
-	nanagement prescription	4
	e planning process	4
		6
-	agement prescription	
	tand management prescription	7
-	ect background information	7 9
_	stand management prescription field work	-
		11
	ction A)	12
General objective		12
Information		12
Standards units		13
Treatment areas	and multi-area SMPs	13
	ent areas into one standards unit	14
Separate standa	rds units for treatment areas with one SMP	14
Management objectives an	nd consistency with other plans (Section B)	17
General objective		17
B-1. Higher level plan	s	17
B-2. Stand-level object	ctives	19
Timber manager	nent objectives	19
_	ment objectives	20
	agement objectives	21
Fisheries/Stream	ns–wetlands management objectives	22

Range management objectives	23
Visual landscape management objectives	24
Recreation management objectives	25
Other resource values/interest	26
Ecological information, site and stand characteristics	27
General objective	27
Biogeoclimatic ecosystem classification	27
C-1. Area description	28
C-2. Current stand description	30
C-3. Forest health and protection	31
Forest health assessment	31
Filling out section C-3 of the SMP template	32
Protection	33
Target stand conditions and strategies	34
General objective	34
D-1. Post-treatment standards	35
General objectives	35
D-2. Special areas	38
General objective	38
D-3. Reserve areas	39
General objective	39
Mapping requirements	40
General objective	40
General mapping requirements	40
Map content	40
Administrative and area information	40
E. Prescription signatures	42
Appendix 1. Stand management prescription template	43
Figure 1. Graphical representation of SMP definitions for standards units,	
treatment areas, special areas and reserve areas,	
simplified to show definitions	16

Introduction



All stand management activities must follow the intent and meet the treatment standards stated in the SMP.

The SMP was created to complement the silviculture prescription (SP) by specifying a full-rotation plan or stand strategy for an individual stand.

An approved SMP is required by law prior to the commencement of any treatments on free growing stands. SMPs are prepared for the district manager or approved by the district manager.

SMPs were introduced in 1995 with the *Forest Practices Code of British Columbia Act*, associated regulations and the 1995 *Stand Management Prescription Guidebook*. In 1997/1998, through the *Forest Statutes Amendment Act (Bill 47)*, the legislation was amended to streamline the preparation and implementation of operational plans. Content requirements and applications for SMPs were refined and these changes are reflected in this revised guidebook.

This document has been written to help prepare SMPs that comply with the Forest Practices Code. It is limited to the preparation and administration of SMPs that are required under the *Forest Practices Code of British Columbia Act* and the *Operational Planning Regulation* (OPR).

For clarification, examples are provided from the revised Ministry of Forests SMP template form for each section of the guidebook. The examples are not necessarily required in terms of either content or format. Items required by the OPR are indicated with an asterisk in the text for easy reference.

The template is a guide to the legislative and regulatory requirements. Additional information may be required to produce a professional document and ensure that the prescribed objectives are clear and achievable. Sound professional judgement and discretion are necessary to ensure a prescription is effective. Local knowledge, procedures and issues will dictate the level of detail required in each section.

General requirements

General objective

- To ensure that submission and approval requirements are adequate.
- To explain the role of SMPs in the planning process.
- To explain the relationship of the SMP to the SP.

A SMP must be consistent with any higher level plan in effect when the SMP is submitted for the district manager's approval or prepared for the district manager.

Administration

The following signatures are required to signify where accountability rests.

RPF signature and seal

A SMP must be signed and sealed by a registered professional forester who is responsible for its content and accuracy.

Licensee signature

Where the holder of the prescription is a major licensee or woodlot licensee for treatments required by a licence under the *Forest Act*, the SMP must be signed by the holder of the licence or a person who has signing authority. These SMPs are prepared under Section 24(2) of the *Forest Practices Code of British Columbia Act*.

District manager signature

The district manager should only sign the SMP if it has been prepared and submitted in accordance with the *Act* and the regulations and the district manager is satisfied that the measures prescribed adequately manage and conserve the forest resources.

District managers may require additional information in order to ensure that the measures being prescribed adequately manage and conserve forest resources.

Prescription amendments

Changes to an approved SMP will require an amendment. A SMP may be amended any time prior to the commencement of work affected by the amendment.

Life span of a stand management prescription

An SP authorizes all silviculture activities from pre-harvest of the original stand to free growing of the new stand. A SMP can cover a full rotation, from the free growing declaration until the next harvest. This provides context and rationale for the sequence and types of treatments proposed.

The plan for a stand should be stated in the SMP. For example, a SMP for a lodgepole pine stand could prescribe spacing down to 1600 sph at age 15 years. The overall plan for the area could be to have 3 fertilizations at age 20, 30 and 40 followed by a commercial thinning at age 50. With a harvest forecast for age 80 years. At age 80 the average sawlog piece size is expected to be 25 cm $(450 \text{ m}^3/\text{ha} @ 12.5+ \text{ cm utilization}).$

The legislation requires treatments to be scheduled with an earliest and latest date if the treatment is scheduled for more than three years from the date of SMP approval.

The above example can be managed in the following manner:

The SMP can describe the overall stand management plan in general terms with specifics on the spacing treatment that is expected to occur in the next three years (therefore an earliest and latest date for the spacing treatment is not required). The fertilization treatment can be described in the general plan for the SU. To authorize treatment it can be described in detail with an earliest and latest date for carrying out the fertilization treatment (in this case four to six years after approval). If the fertilization treatment is not described with an earliest and latest date, it must be added as an amendment in order to authorize entry into this stand to carry out the fertilization. The other two fertilization treatments could also be added as amendments in the future. The commercial thinning entry is a planned objective and should be stated in the SMP, however, a silviculture prescription is required before the commercial thinning is carried out.

Full-rotation plans provide continuity and clarity to the direction and development of a stand over a rotation period (or series of cutting cycles), and thereby help meet the management objectives set for the stand.

The schedule of activities prescribed in a SMP should provide the most appropriate and cost effective means of producing the desired target stand. A target stand is a stand with the desired structural attributes achieving the specified management objectives for the site. SMPs should be designed to ensure that the biological, economic and forest-level objectives are achieved in the most efficient manner possible.

The ordering of activities within the schedule is also critical. Activities should be scheduled to maximize the effectiveness of each activity. For example, if fertilizing, pruning, and then spacing are to be carried out, much of the benefit will be lost by fertilizing too many trees, pruning too many trees, and then spacing out the extra trees previously pruned and fertilized. It is more efficient to space, prune, then fertilize, so that the crop trees benefit most from the treatments. If a treatment is scheduled within a SMP for a period greater than three years from the approval date, the range of years for that treatment must be specified.

It may be appropriate to only schedule one activity in the SMP. The SMP can be as simple or as complex as required to meet the forest management objectives.

Where it is critical that a treatment be carried out during a season, the "window" for treatment should be listed in the SMP. For example, this would be important when spacing stands where commandra rust is present. Spacing when the spores are visible on infected trees will help improve the crop tree selection during the spacing operations.

The SMP does not have the same legal requirements as the SP. The holder of an SP must meet specific stand objectives at free growing as a legal requirement.

There is no obligation on the holder of a SMP to fund or carry out any specific treatments under an approved SMP. However, once the decision is made to carry out a treatment, the conditions and post-treatment standards specified in the SMP must be achieved or the SMP amended prior to treatment. There are some licences under the *Forest Act* that require the licensee to conduct treatments on free growing stands at the licensee's expense. In these the cases the licensee is the holder of the SMP.

If no activities are planned for the site after free growing, no SMP is required.

Role of the SMP in the planning process

Stand management prescriptions play a valuable role in the implementation of stand-level management objectives by:

- providing a clear link between specific stand management objectives as defined in higher level plans
- confirming and updating any stand management objectives after free growing
- incorporating input from other resource agencies

- specifying the schedule of silviculture treatments necessary to achieve stand management objectives
- providing specified end results to facilitate monitoring.

Creating a stand management prescription

The creation of a SMP (FS 68) follows a procedure similar to that of the new SPs required under the Forest Practices Code. The presence and details of existing SPs will determine the amount of additional information needed to prepare a SMP. There are three possible scenarios:

- 1. No previous SP in place the area was harvested or originated from a natural disturbance prior to October 1, 1987 and meets the criteria for free growing. There may or may not be any higher level plans and there will be no defined target stand conditions. The SMP for this stand will require the most work as there is little or no information to go on. This scenario will require the identification of higher level plan objectives (if they exist), the collection of stand information, setting of management objective, and preparation of the SMP.
- 2. An older SP (or PHSP) exists and the stand is now free growing the prescription contains no higher-level management objectives and a limited description of target stand conditions. The SMP for this scenario may require almost as much work as an area that has no SP. Older SPs may not be comprehensive but should still be used to identify any stand-level information and management objectives.
- 3. A recent SP is in place and the stand is now free growing the SP clearly identifies stand management objectives to free growing and may include a schedule of silviculture activities proposed for after free growing. The SMP prepared under this scenario is the simplest of all. The SP should be consulted for stand-level information and management objectives. The SMP may be as simple as extracting pertinent SP information and refining the objectives, target stand conditions, current stand attributes, and the schedule of treatments to achieve those objectives. If the SP lacks sufficient detail, other plans guidelines or agreements should be consulted for management objectives.
- 4. The area may have had previous treatments done under a SMP. For these areas, much of the required information is already available and, in that respect, these areas are similar to number 3 above.

Steps for creating a stand management prescription

The following steps are recommended for creating a SMP:

- 1. identify and collect background information identification and determination of management areas and objectives
- 2. conduct the SMP field work field work/data collection including: forest health and protection, significant habitat features, soil conservation and fine tuning of stand structural objectives
- 3. if the area is not considered suitable for treatments a SMP should not be developed
- 4. prepare the final prescription this guideline specifies the required level of detail
- 5. produce the final map.

Identify and collect background information

Assembly of plans and management information

Block identification and assessment of management objectives involves gathering pertinent plans and resource information and preparing for field work. The following process is intended for the creation of SMP on areas, with either no SPs, or for areas with older SPs that do not contain a description of target stand conditions and management practices.

A person preparing a stand management prescription:

- 1. should consider the result of any free growing survey carried out on the area
- 2. must ensure that the prescription is consistent with the resource objectives contained in any higher level plans for the area.

The stand management prescription for the area:

- 1. should contain a reference to any higher level plan for the area under the prescription that guides the formulation of the prescription
- 2. must describe the stand-level objectives for the area
- 3. must describe the location of the area.

Free growing status – Stand management prescriptions must not be submitted for approval or implemented until SP obligations for the area have been met.

Set stand-level resource objectives

Within the SMP, the management objectives should:

- be specific and measurable, so the success of treatments can be evaluated
- be written to effectively communicate the management intent of the prescription
- include a schedule for the implementation of activities, if applicable.

Higher level plans – SMP objectives must be consistent with objectives contained in higher level plans. Where there are no such plans, resource management plans and other resource agencies should be consulted for input to determine suitable resource management objectives for the area.

First Nations issues – The SMP must be consistent with the *Heritage Conservation Act.* Where available, traditional use overview studies and archaeological impact studies should be consulted. Any questions or concerns should be directed to the district Aboriginal forestry advisor of the Ministry of Forests.

Resource value objectives – The SMP should consider all resource values previously identified for the area. Resource values may be specified either in higher level plans or during the forest development plan (FDP) process. The following are examples of strategies to accommodate specific resource values:

- a 5 m, no-treatment zone is prescribed adjacent to Hamilton Creek to maintain streamside species diversity
- crop tree selection criteria has been modified to create a clump distribution (to enhance grizzly bear habitat)
- at least 50% of the existing deciduous trees (approximately 50 trees/ha post-treatment) are to be retained (as wildlife trees).

Stand structure and composition goals – The SMP must specify the post-treatment site conditions and the proposed strategies, if any, to be taken to mitigate the impacts on non-timber resources on or adjacent to the area.

Damaging agents – the SMP must specify the occurrence of forest health factors that are currently causing damage, and strategies, if any, for control of those health factors must be specified in the SMP.

Other objectives – the SMP should also specify any other management objectives. The SMP should specify actions to reduce fire hazard, to prevent the reduction of site and soil productivity, or propose any other management actions needed. Management objectives may be provided through district manager policy for SMPs.

Pre-stratify the proposed SMP area

Pre-stratification of a block on an aerial photo prior to a field visit provides the opportunity to become familiar with the site. At this level of detail it is easier to stratify large parts of the block to meet specific higher-level management objectives. This pre-stratification should be based on local surface or terrain features, vegetation, special areas, previous survey data (e.g., opening file information), or other factors that may influence the prescription.

Conducting the stand management prescription field work

Stand stratification and mapping

Once the block has been identified as a possible candidate for silvicultural treatments through plans and/or reconnaissance, the block should be assessed on the ground to create the SMP. The field assessment may be a walkthrough of the block to identify distinct management units and to clarify stand-level resource objectives. This walkthrough should be similar to field data collection for the SP. If the area is ready for a stand tending activity, particularly spacing, a pre-stand tending survey may be conducted.

When conducting the pre-stand tending survey, the contractor, licensee or ministry staff should consider the information that will be required to guide subsequent activities for the stand (such as pruning after spacing). Increased efficiency can be realized through tailoring the current data collection and prescription development to minimize the administration, cost and work required in subsequent treatment activities.

A walkthrough or pre-stand tending survey should be used to provide a preliminary screening of suitablility for treatment. Areas that are not suitable for treatment can be ruled out at this stage.

Standards units

Standards units (SUs) must be described in the SMP and indicated on the attached map(s). A SU in the SMP is defined as an area covered by the prescription that will be managed through the uniform application of standards. The standards established for these units must be used during treatment and for inspections after treatments have been completed.

In the SMP, the SU is the basis for determining the achievement of target stand objectives through the prescribed silviculture activities. For example, if two distinctly different post-spacing densities are prescribed for two similar ecosystems within a block, two SUs must be created.

Biogeoclimatic ecosystem classification

The SMP must, for each SU, specify the biogeoclimatic ecosystem classification (BEC) for the area. Prior to visiting the block, a biogeoclimatic map should be used to identify the broad site classification for the area. Once on site, the zone, sub-zone and variant classification should be confirmed. Regional guidebooks for ecosystem identification should be used to assist in identifying the site series within the block and developing appropriate SUs.

SMP format

The Ministry of Forests SMP form has been developed to ensure that all Forest Practices Code requirements are addressed in a standardized format. The first two pages of the SMP form contain a description of:

- Location where the stand is
- Management Objectives summarize the forest-level objectives from higher level plans or develop or refine stand-level objectives from information about resource potential collected from the site.

The third and fourth pages of the form summarize site information about a treatment area (or series of treatment areas), the required treatments, and treatment standards.

Location identification (Section A)

General objective

To provide pertinent administrative references and information, including the required fields for ISIS and MLSIS records.

Information

This section provides an administrative description of the treatment areas under the SMP. Through the tenure number, a link is provided to other forest management documents and information systems.

Tenure information must be consistent for plans, referrals, silviculture information systems (MLSIS and ISIS), surveys and any reports required by legislation.

As with SPs, the following information must be recorded for SMPs:

Note: Sections marked with an asterisk are required under the *Operational Planning Regulations*

* SU	Identifies each SU under the SMP. A separate SU is required for treatment areas with the same treatments and standards
* Area identifier	This should clearly identify for future reference where the stand is. A combination of opening number, cutblock number, timber mark, latitude/longitude, UTM grid or location name can be used to locate a treatment area.
* Treatment area	Indicates the area of the individual treatment areas. Net treatable area within these units may differ and should be confirmed post-treatment.
* Total treatment area	A sum of all treatment areas for the SMP.

	A. LOCATION AND GENERAL DESCRIPTION OF	AREA	
SU	TREATMENT AREA (TA) IDENTIFIER (OPENING NO.; CUTBLOCK; TIMBER MARK; OTHER)	ТА	TREATMENT AREA (Net) (to the nearest 0.1 ha)

Standards units

Standards units (SUs) and treatment areas (TAs) must be described in the SMP and indicated on an attached map.

In the SMP, the SU is the basis for determining the achievement of target stand objectives and standards through specific silvicultural activities. Standards unit, as defined in the OPR, means one or more areas of uniform treatments and treatment standards contained in the same SMP. The standards established for the treatment areas will be used in compliance inspections after treatments have been completed.

Treatment areas and multi-area SMPs

Treatment area, as defined in the OPR, means one or more areas of a standards unit that are proposed for treatment and have the same area identifier, and includes special areas located in the treatment area, but does not include any of the following:

- an area occupied by permanent access structures
- and area of rock, wetland or other area that in its natural state is not capable of supporting a free growing stand of trees
- an area of non-commercial forest cover except and to the extent that it is specifically identified in the stand management prescription as an area for treatment
- an area indicated in a stand management prescription on a map as a reserve area where the treatment of a free growing stand is not proposed.

Grouping treatment areas into one standards unit

Section 24 (2.1) of the *Forest Practices Code of British Columbia Act* authorizes SMPs to cover more than one distinct treatment area.

Designation of treatment areas allow for portions of stands or different stands, which are physically separated from one another to be identified as separate treatment areas but amalgamated under the same standards unit, with one prescription for the entire standards unit.

Such a procedure provides significant benefits for record keeping and administration when stand management activities will be uniformly applied over many treatment areas.

The treatment areas within the standards unit should:

- have the same management objectives
- be in the same general geographic location
- have similar site and stand conditions
- have the same target stand strategies
- have the same treatments and standards.

The key consideration before lumping a number of treatment areas into one standards unit, is the appropriateness of applying the same treatment regime and standards to all the treatment areas.

Separate standards units for treatment areas with one SMP

Where treatment areas differ in treatments and standards and/or site or stand conditions, but still have the same management objectives, one SMP "objectives description" for both treatment areas may be completed, although each treatment area would be a different standards unit. All standards unit criteria must be specified for each area, and the different SUs identified on the map.

Even though a multi-treatment area SMP can include many treatment areas, record keeping and auditing must be carried out on a treatment area-specific basis. District and licensee staff should ensure that a copy of the approved SMP and any activity accomplishment reports are stored on each opening file (or cutblock file) and on appropriate silviculture information systems.

Examples of multi-area SMP applications

Example 1. One SMP, containing one standards unit and several treatment units.

The standards unit contains more than one treatment area. Where a number of treatment areas have the same forest management objectives and the same treatment regime and standards, they may be grouped into one standards unit within one SMP.

For example: There are four proposed treatment areas in the same general geographic area. All proposed areas have similar species, stand structure and site condition. They are proposed to be spaced to 1200 sph and a uniform set of treatments and standards are planned for all treatment areas. The four treatment areas could be grouped into one standards unit which have the same treatment regime and standards.

Had different treatment areas required different treatment regimes or standards to meet the SMP management objectives, separate standards units would have been created (as in example 2).

Example 2. One SMP, containing more than one standards unit.

For example, there are four proposed treatment areas in the same geographic area. Three blocks contain similar species, stand structure and site condition and are proposed to be spaced to 1200 sph. The other area contains similar site conditions but is proposed to be spaced to 700 sph. Two separate standards units would be developed; one which contains three treatment areas being spaced to 1200 sph; and one standard unit containing one treatment area being spaced to 700 sph (See Figure 1).

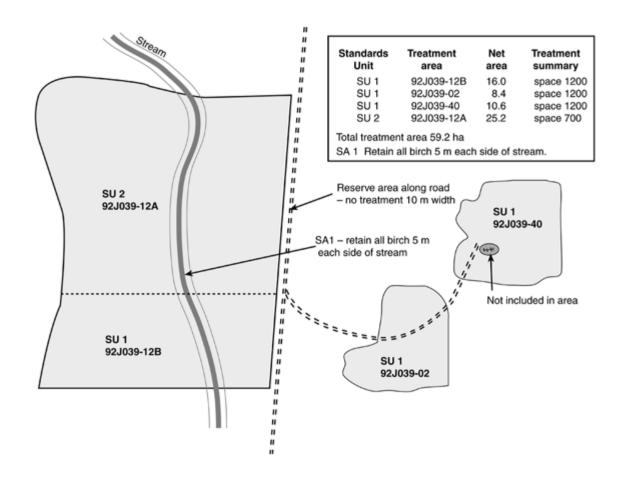


Figure 1. Graphical representation of SMP definitions for standards units, treatment areas, special areas and reserve areas, simplified to show definitions. (This is not a sample SMP map.)

Management objectives and consistency with other plans (Section B)

General objective

• To ensure consistency with objectives presented in higher level plans, resource management zones or landscape units.

Management objectives:

- should be written to effectively communicate the management intent of the prescription
- should be specific and measurable so the success of treatments can be evaluated
- must be consistent with the objectives of higher level plans.

B-1. Higher level plans

Higher level plans provide objectives for resource management and establish the broader, strategic context for operational plans. Higher level plans are the primary source of objectives that determine the forest practices and site conditions described in operational plans, such as SMPs.

* This section specifies whether this prescription is within an area covered by a higher level plan. If a higher level plan(s) exists, the name(s) and date(s) should be recorded for reference. Other resource plans, such as local resource use plans, integrated watershed management plans, or total resource use plans can provide additional information for consideration.

Through interpretation of higher level plans and other resource plans, the forestlevel objectives can be subjectively ranked by writing '1' (highest) to '10' (lowest) in the appropriate boxes. It is possible for more than one forest-level objective to have an equal rank with another objective. The highest rank objectives should all be ranked as '1' (highest). There could be one or more objectives with the highest rank. The next highest objective(s) should be ranked '2' as next highest.

	B. MANAGEMENT OBJECTIVES B-1. HIGHER LEVEL PLANS			
ARE ANY OF	THE TREATMENT AREAS SUBJECT TO A HIGHER LEVEL PLAN? () YES () NO			
	PLAN NAME	Y	Date M	D
IF YES:				
IF NO:	CONSULT WITH OTHER RESOURCE AGENCIES TO ASSIST IN DEVELOPING MANAGEMENT OBJECTIVES FOR	THE PRES	CRIPTION.	
SUMMARY OF HIGHER-LEVEL OBJECTIVES FOR THESE TREATMENT AREAS (Please rank specific objectives [1 = highest priority, 10 = lowest]): () Timber () Range () Recreation () VQO () Wildlife habitat () Biodiversity () Wildlife trees () Fisheries () Water quality () Other:				
()	N B2. STAND-LEVEL OBJECTIVES TO CLARIFY, CONFIRM AND SPECIFY MANAGEMENT OBJECTIVES FROM HIGHER LEVE		() Other.	

B-2. Stand-level objectives

This section is used to summarize management objectives from higher level plans and for developing or refining stand-level objectives based on site specific conditions. This section should be referred to when creating the stand strategy to ensure that all applicable management objectives are addressed. Based on site specific stand conditions, plans can be developed to meet the various objectives.

Timber management objectives

* List specific timber management objectives, if any, for each SU. This may include the target operable sawlog size and merchantable volume, or a reduced time to harvest to fill an age class gap. It may also include some very specific product objectives (e.g., produce a hemlock, spruce and redcedar sawlog mix; harvest at age 80 years; 300–325 sph of approximately 45 cm dbh clear hemlock sawlogs/peelers pruned to 5.5 m).

The use of stand projection models may be useful in providing estimates of stand diameter, volume and density. If a model was used to provide stand structure and/or financial analysis information, the prescribing forester should specify the name of the model and attach a copy of the computer simulations.

If a resource management plan or management plan contains prespecified silviculture regimes, the SMP should refer to those documents and include, where applicable, harvest flow and/or timber values.

B-2. STAND-LEVEL OBJECTIVES
ARE CURRENT STAND-LEVEL OBJECTIVES AVAILABLE FROM SILVICULTURE PRESCRIPTIONS? () Yes () No IF 'YES,' SEE ATTACHED FS 711A.
ARE CURRENT STAND-LEVEL OBJECTIVES STILL APPROPRIATE FOR THESE STANDS? () Yes () No
USE THIS SECTION TO SUMMARIZE OBJECTIVES FROM HIGHER LEVEL PLANS OR FOR DEVELOPING OR CLARIFYING STAND-LEVEL OBJECTIVES.
TIMBER MANAGEMENT OBJECTIVES
THESE OBJECTIVES APPLY TO: SU

Wildlife management objectives

The SMP is a document for managing timber and non-timber resources. List specific wildlife habitat and biodiversity objectives, if any, for each SU. This may include specific objectives, such as target for wildlife trees or timing contstraints to avoid nesting periods.

* Identified wildlife strategies and any "red-listed" or regionally important species should managed in accordance with the *Managing Identified Wildlife: Procedures and Measures*. Additional information may be provided from resource agency recommendations or wildlife guidelines. Information on wildlife trails should be included in this section and shown on the SMP map. Wildlife trails will normally require strategies for protection such as slash removal. If wildlife trails are significant, the prescribing forester should notify the Ministry of Environment, Lands and Parks. Significant wildlife trails may be considered a wildlife habitat feature.

This section is also available to note any local features that may provide useful habitat for the species identified in the higher level plans. Use the "stand strategy" and "special area" portion of the SMP to describe how these features will be managed (e.g., wildlife tree retention may require a "reserve zone" [no-treatment zone] in the SW corner of the block).

In some cases, timber may not be the primary management objective for an area or standards unit. In some situations, the SMP may be directed through a higher level plan to modify habitat conditions. In such situations, timber management objectives should be considered.

* Areas such as streams, wetlands, lakes, wildlife areas and special resource management zones, may have special management objectives and may require special management practices.

Note: Felling or modification of trees in a riparian reserve zone requires approval by the district manager and the designated environment official.

WILDLIFE MANAGEMENT OBJECTIVES – HABITAT/BIODIVERSITY/WILDLIFE TREES

THESE OBJECTIVES APPLY TO: SU_

Watershed management objectives

* List specific watershed management objectives, if any, for each SU.

For areas within a community watershed, known water rights must be identified and a description of any watershed concerns in or adjacent to the prescription area should be provided. If the area is within a community watershed, any special management objectives pertinent to the SMP must be documented.

Where water quality concerns exist, the SMP should detail any water quality monitoring actions that may be required before, during or after any management activities on the area.

Reference any community watershed plan or other higher level plan that provides direction.

WATERSHED MANAGEMENT OBJECTIVES	
THESE OBJECTIVES APPLY TO: SU	

Fisheries/Streams-wetlands management objectives

* List specific fisheries/streams-wetlands management objectives, if any, for each SU.

Any fisheries concerns in or downstream of the prescription area should be identified.

- * Streams must be mapped and classified according to the *Riparian Management Area Guidebook* and the *Fish-Stream Identification Guidebook*. Where there are concerns regarding fisheries values or aquatic habitat treatments, they should be highlighted and dealt with in the stand strategy section.
- * S6 streams do not have to be shown on the SMP map, however, any proposed strategies for riparian class S6 streams must be specified in the SMP.

FISHERIES/STREAMS-WETLANDS MANAGEMENT OBJECTIVES

THESE OBJECTIVES APPLY TO: SU___

Range management objectives

* The SMP must identify range objectives, if any, and assess the impact that silviculture activities are expected to have on range and livestock. If seeding has been carried out on the area, will it be maintained through fertilization or reseeding? Information on primary cattle access trails should be included here and shown on the SMP map. Any other objectives or comments should be recorded in the comments section provided.

Most concerns regarding the interaction between livestock and silviculture should be resolved through range use plans and forest development plans. The SMP should be consistent with those plans and should identify the range tenure holder and reference to any agreements they have with the forest licensee. Where there are range concerns that have not been addressed in higher level plans, any actions that are needed to address those concerns should be specified in the stand strategy section of the SMP.

RANGE MANAGEMENT OBJECTIVES	CATTLE USE? () Yes () N	IF 'YES' RANGE UNIT PASTURE:
CATTLE PRIMARY ACCESS TRAILS? () Yes () No	IF 'YES' LOCATE ON ATTACHED MAP	SEEDED? () Yes (Year) () No
THESE OBJECTIVES APPLY TO: SU	-	

Visual landscape management objectives

- * List specific visual landscape management objectives, if any, for each SU.
- * The SMP should provide a visual quality objective (VQO) where one has been established and is available at the applicable MOF district office. The VQO is based on biophysical, viewing and social factors and indicates the level of acceptable visual impact for a particular landscape. The VQO (i.e., P = preservation, R = retention, PR = partial retention, M = modification, MM = maximum modification, NVS = not visually sensitive) must be differentiated by SU if the difference will require special treatment actions.

Where the VQO is determined to be NVS, no further information is required.

For all other VQOs, the prescription must include:

- the viewing source and distance
- landscape sensitivity rating (LSR) (high, medium, low)
- visual absorption capacity (VAC) (very high, high, moderate, low).

Identify factors on the site that may influence VQO, for example steep slopes. In the stand strategy section, integrate treatments that meet VQO objectives with those to meet other stated objectives. See the visual landscape assessment and prescription section of the *Silviculture Prescription Guidebook* for further assistance.

VISUAL LANDSCAPE MANAGEMENT OBJECTIVES (VQO)	LANDSCAPE SENSITIVITY	VISUAL QUALITY OBJECTIVE
THESE OBJECTIVES APPLY TO: SU		

Recreation management objectives

Recreation values, if any, in or adjacent to the area must be described based on the definitions provided in the Ministry of Forests *Recreation Manual*.

Record:

- The feature significance categories, (A = very high, B = high, C = moderate, D = low), key feature (e.g., aquatic, beaches, vegetation, trails), and recreation management class (i.e., 0 = unique; 1 = special management; 2 = normal forest management) are described in the Inventory Chapter of the *Recreation Manual*.
- Recreation opportunities spectrum (i.e., P = primitive; SPN = semi-primitive non-motorized; SPM = semi-primitive motorized; RRL = roaded resource land; R = rural roaded).

Describe and map any key recreation features (e.g., aquatic, beaches, vegetation, trails), state their significance in accordance with the *Recreation Manual* (A = very high, B = high, C = moderate, D = low), and what actions, if any, will be taken to accommodate the recreation resource in the stand strategy section of the SMP.

Describe here any features found on site that may have high recreational significance.

RECREATION MANAGEMENT OBJECTIVES	FEATURE SIGNIFICANCE	
KEY FEATURE		MANAGEMENT CLASS
THESE OBJECTIVES APPLY TO: SU		

Other resource values/interest

Specify any other resource values or interests present on site that are pertinent to managing the area. An example could be retaining Pacific yew for medical purposes.

If there are known cultural heritage resources in the area, they must be identified and management objectives that mitigate impacts must be developed.

Where archaeological sites, culturally modified trees, heritage trails or other examples of historical use are found, their location must be mapped and specific management strategies developed through consultation with First Nations and/or appropriate resource agencies in accordance with the *Archaeological Impact Assessment Guidelines* (Heritage Conservation Branch, 1989) and the *Heritage Conservation Act*.

Note: Location of archaeological sites may be sensitive information and may require restricted distribution.

Any actions required to mitigate impacts on cultural heritage resources should be provided in the stand strategy section of the SMP.

This section can also be used to document soil conservation objectives.

OTHER RESOURCE VALUES/INTERESTS MANAGEMENT OBJECTIVES

THESE OBJECTIVES APPLY TO: SU_

Ecological information, site and stand characteristics

General objective

• To record the ecological classification of the site and describe site and stand conditions that limit operations.

The SMP must specify the biogeoclimatic ecosystem classification (BEC) and critical site conditions that would affect the type, intensity and timing of operations. Any additional information requirements are not legislated, but may be useful for making and supporting decisions, and could be included or attached to the document.

An ecological approach to forest management is essential to ensure that forest and soil resources are sustained.

The ecological evaluation of the area helps to identify the site associations upon which a SU is based. The aggregation of similar site associations that have similar management objectives forms the basis of a SU.

For additional detail on completing this section of the SMP form, refer to the ecology section in the *Silviculture Prescription Guidebook* and the completed example in the appendix of this guidebook.

Biogeoclimatic ecosystem classification

* The SMP must contain the following ecological information:

- biogeoclimatic zone, sub-zone, variant
- BEC site series.

Ecological classification and interpretation guidance is provided in the following publications:

Banner, A., *et al.* 1993. A field guide to site identification for the Prince Rupert Forest Region. B.C. Min. For., Victoria, B.C. Land Manage. Handb. 26.

B.C. Ministry of Forests. (draft) 1989. A field guide for the identification and interpretation of ecosystems in the Cariboo Forest Region. Research Section, Williams Lake, B.C.

- Braumandl, T.F. and M.P. Curran. 1992. A field guide for site identification and interpretation for the Nelson Forest Region. B.C. Min. For., Victoria, B.C. Land Manage. Handb. 20.
- DeLong, C., *et al.* 1990. A field guide for identification and interpretation of ecosystems of the northeast portion of the Prince George Forest Region. B.C. Min. For., Victoria, B.C. Land Manage. Handb. 22.
- DeLong, C., *et al.* 1994. A field guide for site identification and interpretation for the northern Rockies and portions of the Prince George Forest Region. B.C. Min. For., Victoria, B.C. Land Manage. Handb. 29.
- Green, R.N., *et al.* 1994. Site identification and interpretation for the Vancouver Forest Region. B.C. Min. For., Victoria, B.C. Land Manage. Handb. 28.
- Jull, M.J., *et al.* 1993. A field guide for site identification and interpretation for the southern portion of the Prince George Forest Region. B.C. Min. For., Victoria, B.C. Land Manage. Handb. 24.
- Lloyd, D., *et al.* 1990. A guide to site identification and interpretation for the Kamloops Forest Region Part 1 and Part 2. B.C. Min. For., Victoria, B.C. Land Manage. Handb. 23.
- MacKinnon, A., *et al.* 1990. A field guide for identification and interpretation of ecosystems of the northwest portion of the Prince George Forest Region.B.C. Min. For., Victoria, B.C. Land Manage. Handb. 21.

C-1. Area description

* SU area	Indicates the size in hectares of the SU (net of all roads and landings) but includes all treatment areas (TAs) plus inclusions of special areas (SAs).
* Treatment Area	Indicates the area of the individual treatment areas. Net treatable area should be verified post-treatment.
* Zone, sub-zone, variant,	Enter the BEC zone, sub-zone, variant and site series
site series, phase, type	for this SU. Where site series varies estimate the percent cover of the various site series. Refer to BEC maps and guidebooks for ecosystem identification (phase and type may be needed in some cases).
* Moisture/nutrient grid	Refer to the edatopic grid for the appropriate BEC unit and enter the moisture and nutrient grid codes – may include a range (e.g., 4-5/C-D).
Elevation range (m)	Enter the minimum, maximum and average elevation for the SU.

Aspect	Enter the dominant direction that the SU is facing, as azimuth in degrees. If the area is flat, enter "F."
Slope %	Indicates the average slope over the SU in percent.
Slope position	Describe as per site diagnosis procedures (e.g., upper slope, flat).
Slope length (m)	Enter 'L' or 'LONG' where the distance is equal to or greater than 150 m between major slope breaks, enter 'S' or 'SHORT' where the distance is less than 150 m between major slope breaks.
Slope uniformity	For uniformity, enter 'U' or 'UNIFORM' if there is one or less cross drainages per 100 m of contour. This information is used in determining erosion hazard and site sensitivity.
Humus form	Enter mor, moder or mull.
Rooting depth	Enter rooting depth (in centimetres).
Soil depth to restricting	Indicates the average depth in cm from the surface
layer	to either gleyed, impervious or calcareous layers or bedrock if present.
Soil texture	Enter soil texture based on the soil textural triangle.
Soil coarse fragments	For coarse fragments (% CF), enter an estimate of the percentage of the total volume of soil material (by horizon if necessary) that is comprised of fragments 2 mm and greater in diameter.
Drainage	Enter as very rapid, rapid, well, moderately well, imperfect, poor or very poor.
Water courses and gullies/100 m	Enter the number of water courses and gullies per 100 m of contour on the SU. This information is used in determining erosion hazard and site sensitivity.

* Where mechanized stand tending is prescribed, the hazards for soil compaction and the maximum proportion of each treatment area that may be occupied by soil disturbance caused by the mechanized stand tending treatment must be specified. If trail building is associated with the mechanized treatment, the hazards for soil erosion and soil displacement must be assessed and listed in the SMP. If trail building is associated with the mechanized treatment and the slope gradient is greater than 60 percent, the area must be assessed for the likelihood of landslides. For guidance in assessing site sensitivity refer to the *Soil Conservation Guidebook*. To determine the appropriate level of mapping detail, see the "Mapping requirements" section of this guide.

C-1. AREA DESCRIPTION												
ZONE, SUBZON	E, VARIANT			Sľ	TE SERIES (RAN	GE)	MOIST/NUTR. GRID					
ELEVATION			ASPECT	SLOPE DATA				SLOPE				
Min: Max: Avg.:			Min. %:	Max. %:	Avg. %:	POSITION	LENGTH	UNIFORMITY				
HUMUS FORM) AYER	SOIL TEXTURE		SOIL COARSE FRAGMENT	%	DRAINAGE			
WATER COURSES MECHANIZED S Water Gullies () Yes			D STAND TENDIN s () No		, SEE OPERATIC ENT REQUIREME	NAL PLANNING	REGULATION FO	OR FURTHER				

C-2. Current stand description

The current stand description provides detail on the structure, species mix and percentage, age, height, site productivity (site index), stand density, number of well-spaced stems/ha, and basal area. This section can be completed by transferring the appropriate information from free growing or pre-stand-tending surveys. For even-aged stands the first line is for inventory information, the second line is for silviculture information. For uneven-aged stands, record the information by layers 1 through 4. Use the *Guide to Completing FS 708 Forms* for further assistance.

Strata/or treatment area	Enter the alpha or numeric value corresponding to the area on the map. You may wish to separate out treatment areas or combine them (if they are the same In either case the stand types should be similar enoug to require the same treatment.					
[*] Layer	Enter the kind of layer () – inventory, (S) – silviculture, (V) – veteran, (1) – layer one trees equal to or greater than 12.5 cm dbh, (2) – layer two trees between 7.5 and 12.4 cm dbh, (3) – layer three trees between 1.3 m tall and 7.4 cm dbh, and (4) – layer four trees beneath 1.3 m tall.					
Rank	Rank each layer of a multi-layer stand in the order of their harvest importance starting with '1' for the most important.					
Species composition/ percent	Enter the percentage species composition (nearest one percent) to a maximum of five species. The total species composition should add up to 100 percent.					
* Age	Enter the age on-site (to the closest year) of the leading species (codominants and dominants).					

* Height	Enter the height in metres to the nearest tenth of a metre.								
Reference year	Enter the year the survey information was collected.								
* Site index	Enter the site index for the stand to the nearest tenth of a metre (in line one).								
* Density	Enter the total number of stems per hectare.								
* Well-spaced	Enter the total acceptable well-spaced stems per hectare.								

	C-2. CURRENT STAND DESCRIPTION																
TA or			Species Composition								Age	Age Height	Ref.	Site	Density	Well- spaced	Basal Area
Strata	Layer	Rank	Spp %	5 Spp	%	Spp	%	Spp	%	Spp %	(yrs)	(0.1) m	year	index	(stems/ha)	(stems/ha)	(m²/ha)

C-3. Forest health and protection

Forest health assessment

Insects, disease, wildlife and abiotic factors can have a significant impact on forest productivity and may limit the ability to meet management objectives.

* The SMP must for each standards unit, specify the occurrence of forest health factors that are currently causing damage and the strategies, if any, to mitigate the impacts of identified factors. All anticipated future forest health risks should be identified when developing plans and prescriptions.

Forest health management objectives should be documented in this section.

* Where there are pests currently, the prescription must identify the pest and estimate the percent or magnitude of infection, by standards unit if necessary.

Where the potential of damage occurring later in the rotation is identified, the type of pest and an assessment of the risk to the stand should be provided.

Any actions proposed to address pest concerns must be specified in the prescription.

This section should include treatment windows where treatment during a specific time of the year is critical. For example, sanitation of stem rusts during a time of the year when the spores are visible.

Filling out section C-3 of the SMP template

SU	Record standards unit
* Agent code	Record agent code for specific pest code as per ISIS codes (or FS 747)
* Agent name	Record commonly used name
* Host species	Record host species
* Total trees affected	Record percent of total trees affected
* Total conifers affected	Record percent of total conifers affected
* Host trees affected	Record percent of total host trees affected

Describe the management objectives for the agent (e.g., minimize the spread of armillaria).

	C-3. FOREST HEALTH AND PROTECTION										
FORES	FOREST HEALTH AGENT OCCURRENCE										
SU	AGENT CODE	AGENT NAME	HOST SPECIES	TOTAL TREES AFFECTED (%)	TOTAL CONIFERS AFFECTED (%)	HOST TREES AFFECTED (%)	AREA (ha)				
FORES	ST HEALTH S	STRATEGIES:	1		I	l					

Protection

Increased fire hazards such as concentrations of woody debris or slash resulting from stand management practices should be reduced to an acceptable level. Abating the hazard should not be at the expense of site productivity.

Hazard abatement must be consistent with higher level plans and should be conducted in accordance with the *Fire Management Guidebook*.

The SMP should make an assessment of the fire hazard and fuel loading expected after the silviculture activity and, where fire hazard abatement is anticipated, specify the actions to be undertaken and the expected time frame for completion of the work.

The fire site sensitivity rating will influence hazard abatement options.

PROTECTION		
FIRE HAZARD ASSESSMENT	IT & PROTECTION STRATEGIES:	

Target stand conditions and strategies

General objective

• To provide a concise overview of the entire prescription – What is to be done, when and why.

The prescription should describe the what, when and why (blueprint) for the SU (stand). This section is used to describe the target stand objectives and structure. A series of linked treatments and their objectives are described and details on how they will achieve specific target stand conditions.

This section should describe the blueprint for others to follow. People move, this document remains. This will help provide stability and continuity in stand-level planning. If objectives change, it is possible to determine the consequences of the change and whether the costs are acceptable. If objectives change, an amendment can be done or a new SMP can be prepared.

It is within this section that each of the desired objectives and attributes identified in section B should be addressed and the rationale documented on how the proposed treatment regime fits with the specified objectives and/or constraints.

D. TARGET STAND CONDITIONS AND OBJECTIVES

STAND TREATMENT REGIME — The stand treatment objectives for all treatment areas in this standards unit must be the same. Clearly describe the average target stand condition for all Treatment Areas under this standards unit. Clearly identify how you propose to achieve the forest management objectives in Part B of this prescription. Clearly explain how the proposed treatments will achieve the stated objectives and/or mitigate impacts on non-timber forest resources listed in Part B. Where quantification is *NOT* possible, use qualitative descriptions.

Selection criteria for crop trees (height, age, vigour, species preference, etc.):

* Selection criteria for crop trees to be retained (e.g., species preference, height, age, DBH, health, vigour).

This section must provide a clear definition of what crop trees are to be retained after a spacing treatment. For each activity it is critical to accurately describe what trees will be treated (e.g., pruned) or retained (e.g., after spacing).

D-1. Post-treatment standards

General objectives

- To provide a detailed list and schedule of all stand tending activities planned for the prescription.
- To provide the minimum standards required by activity to meet the management objectives.
- To provide standards by which compliance can be measured.
- To provide direction for treatment contracts.

The table is used to provide a detailed list of all stand tending activities planned for the prescription area and the minimum standards required by activity to meet specific management objectives. Any activities and standards specified in the table applies to all of the treatment areas contained in the standards unit. The lefthand portion provides direction for implementation, while the right-hand portion provides post-treatment standards.

* Year Enter the range of years a treatment is scheduled to be carried out.

Treatments must be scheduled by range of year (if the treatment will occur more than three years after date of approval) and may include average target stand age, stand height, or target diameter. If the implementation of the planned treatment is delayed past the latest treatment year, the site should be revisited to determine if the treatment is still appropriate.

* Age	Enter the stand age when the treatment is scheduled to be carried out.
* Height	Enter the average dominant/codominant stand height when the treatment is scheduled to be carried out.
* Diameter	Enter the target stand diameter when the treatment is to be carried out.
* Layer	Enter the layer the treatment is scheduled for. For even-aged stands there is usually only one layer to consider. For uneven-aged stands there are up to four layers that may be considered for treatment.

* Treatment	Enter the type of treatment planned for the site (add specifics if possible – e.g., fertilize with 225 kg/ha N at a rate 520 kg of forest grade urea/ ha).
* Area	Enter the net treatment area or net area to be treated (ha).
The following standards completed under a SMP.	will become the prime auditing points for activities
Species composition:	
* Preferred	Enter the preferred species for the site (may differ from original SP due to forest health concerns or other objectives).
* Acceptable	Enter the acceptable species for the site.
* Target no. well-spaced	Enter the target number of well-spaced stems/ha to be left after treatment.
* Min. pref. well-spaced	Enter the minimum number of well-spaced stems/ha of the preferred species, to be left after treatment.
* Min. inter-tree dist.	Enter the minimum inter-tree distance between well-spaced trees.
* Min. total well-spaced	Enter the minimum number of total well-spaced stems/ha to be left after treatment.
* Max. total well-spaced	Enter the maximum number of total well-spaced stems/ha to be left after treatment.
* Prune: min. lift height	Enter the minimum lift height for the pruning treatment. This field needs to be completed only if pruning is scheduled.
* Type of fertilizer	Enter the chemical composition of the fertilizer to be used.
* Rate of application	Enter the rate of fertilizer application in kg/ha.
* Method of application	Enter the method of fertilizer application (e.g. aerial or ground).
* Season	Enter the seasonal constraints and any necessary weather conditions necessary for effective application.
* Other post-treatment stan	dards – Describe any other post-treatment standards that apply to either timber or non-timber resource objectives. Any standards specified should be worded to ensure that they are operationally achievable. This section specifies standards that must be met by

individual stand management treatments. For example, after pruning is completed, pruned trees must have:

- all branches greater than 3 cm long removed up to the proper lift height with a minimum of 3 whorls remaining or 30% live crown, whichever is greater
- branches cut flush with the branch collar, with a 1.0 cm or less stub measured from the branch collar
- no scarring of the stem exposing the cambium layer over an area greater than that of the largest pruned branch scar on the tree.

If other standards or modified standards are required, they should be clearly outlined in the SMP.

Range of	Age/				Area	Sp	ecies	Target Min. No. Pref. Well- Well- spaced spaced		Pref. Min.	Min. Total Well- spaced	Max. Total Well- spaced	Min. BA or	Prune Min. Lift
Year	Height	DBH	Layer	Treatment	(ha)	Preferred	Acceptable	/ha	SPH	Dist	SPH	SPH	Vol.	Heigh

D-2. Special areas

General objective

• To describe the location, size and unique features of small areas within a treatment area where different or special treatments will be applied. These areas can be designated as separate standards units. The maximum size for a special area is one hectare or 5% of the area, whichever is greater.

A special area is an area within a standards unit (SU) where the standards differ from the rest of the SU. For each special area the SMP must specify how standards vary from the rest of the SU.

Note: *Buffers and reserves, where no treatments will be conducted are NOT Special Areas by definition in the OPR*. Areas where no treatment is proposed can be designated as reserve areas. Designated reserve areas should be shown on the SMP map.

This section can also be used to describe, wildlife habitat areas, riparian management areas, and any management practices planned to enhance or maintain these areas. Treatment in a riparian reserve zone may be proposed for managing fisheries or wildlife values or for sanitation treatments. Joint approval from the district manager and the designated environmental official is required if trees are to be felled or modified in a riparian reserve zone.

D-2. SPECIAL AREAS - (TREATMENT PROPOSED)								
TREATMENT AREA #			TYPE OF SPECIAL AREA (e.g., Riparian Reserve Zone, Riparian Management Zone, Lakeshore Management Zone, FENs)					
AREA NO. SIZE ha Description of special area and significant features (Show approximate location on map)								
DESCRIBE HOW MANAG	EMENT AC	TIVITIES	DIFFER FROM THE REST OF THE STANDARDS UNIT					

D-3. Reserve areas

General objective

• To describe the location and size of features where no treatment is prescribed. The term reserve area can be used for any area where it is important that no treatment is carried out.

A reserve area differs from a special area due to the absence of a treatment prescribed. Reserve areas should be prescribed where it is important to leave an area untreated to protect a resource feature. The area must be shown on the SMP map. The actual area of a reserve area is part of the net down for calculating the treatment area.

This section can be used to describe wildlife tree reserves or any other area where no treatment is prescribed. An area where a treatment is prescribed is either a special area or a separate area under an SU.

Riparian reserve zones will normally be reserve zones if within the treatment area boundaries. Where it is desirable to fell or modify trees in a riparian reserve zone the area should either be a separate treatment area or a special area. In addition there must be approval from the district manager and the designated environment official in writing to authorize treatments in a riparian reserve zone.

D-3. RESERVE AREAS - (NO TREATMENT PROPOSED)								
TREATMENT AREA #			TYPE OF RESERVE AREA (e.g., Riparian Reserve Zone, Roadside Buffers, others)					
AREA NO.	SIZE	ha						
Description of Reserve Area (Show approximate loction on map)								

Mapping requirements

General objective

• To provide an accurate visual representation of those physical features, ecological units, standards units and other resource features that have been referred to in, or have a bearing on, the prescription.

General mapping requirements

The suggested map scale for silviculture prescriptions is 1:10 000. However, the appropriate scale and level of detail will depend on topography, block size and the complexity of management on the area. Whether it is necessary to delineate very small units depends on their impact on the prescription.

Map content

Stand management prescriptions must include administrative information, known resources, riparian information, ecological information and the approximate location of access structures.

In many cases, only one map will be required in order to display SUs, TAs, SAs and other important features affecting the prescription. However, with multi-area SMPs having blocks significantly separate from one another, two or more maps of suitable scale may be needed.

Administrative and area information

Some of the following information is not mandatory but is suggested to simplify administration and provide references to the prescription document. Mandatory items are marked with an asterisk.

- * tenure identification (area identifier) at least the licence number, cutting permit, block number, mapsheet and opening number
- * location the block must be referenced to a recognizable feature or location name
- * the SU number associated with each treatment area
- * legend the legend describing all mapped objects and strata
- * history symbol

- * scale, north arrow
- * date drawn and name(s) of the cartographer cutblock and other administrative boundaries (e.g., leases, research plots)
- * watercourses, lakes and wetlands within or adjacent to the area existing roads, landings and trails (forest road names and mileage) biogeoclimatic ecosystem units
- * approximate location of special areas
- * approximate location of mappable reserve areas
- * known wildlife habitat areas, known resource features (other than domestic water supply intakes), known *licenced* water supply intakes and related water supply infrastructures, known community water supply intakes and related water supply infrastructures
- * riparian management zones and riparian reserve zones
 - other features or zonation referenced in the prescription or higher level plans. These might include: no-treatment roadside buffers, objectives for sensitive areas, landscape units, resource management zones, stream reach classification, areas of rock or unstable soils, range improvements, or water monitoring
 - different forest cover or topographic factors if different management is proposed based on those factors (e.g., different forest cover may necessitate different target stand conditions and management activities)
 - other significant features requiring a modified or no treatment (reserve zones)

E. Prescription signatures

Before work can be carried out for an area under a SMP, the SMP must be signed by the prescribing forester and the district manager. Where the licensee is the holder of the SMP, it must also be signed by the license holder signing authority.

Signing of a SMP does not constitute liability to carry out any or all treatments scheduled. Once a person carries out a treatment the person must ensure that activity conforms to the standards outlined in the SMP.

Date:

Appendix 1. Stand management prescription template

A. LOCATION AND GENERAL DESCRIPTION OF AREA TREATMENT AREA (TA) IDENTIFIER (OPENING NO.; CUTBLOCK; TIMBER MARK; OTHER) TA **TREATMENT AREA (Net)** (to the nearest 0.1 ha) **B. MANAGEMENT OBJECTIVES B-1. HIGHER LEVEL PLANS** ARE ANY OF THE TREATMENT AREAS SUBJECT TO A HIGHER LEVEL PLAN? () YES () NO PLAN NAME Date Υ М D IF YES: IF NO: CONSULT WITH OTHER RESOURCE AGENCIES TO ASSIST IN DEVELOPING MANAGEMENT OBJECTIVES FOR THE PRESCRIPTION. SUMMARY OF HIGHER-LEVEL OBJECTIVES FOR THESE TREATMENT AREAS (Please rank specific objectives [1 = highest priority, 10 = lowest]): () Timber () Range () Recreation () VQO () Wildlife habitat () Biodiversity () Wildlife trees () Fisheries () Water quality () Other: USE SECTION B2. STAND-LEVEL OBJECTIVES TO CLARIFY, CONFIRM AND SPECIFY MANAGEMENT OBJECTIVES FROM HIGHER LEVEL PLANS. **B-2. STAND-LEVEL OBJECTIVES** ARE CURRENT STAND-LEVEL OBJECTIVES AVAILABLE FROM SILVICULTURE PRESCRIPTIONS? () Yes () No IF 'YES,' SEE ATTACHED FS 711A. ARE CURRENT STAND-LEVEL OBJECTIVES STILL APPROPRIATE FOR THESE STANDS? () Yes () No USE THIS SECTION TO SUMMARIZE OBJECTIVES FROM HIGHER LEVEL PLANS OR FOR DEVELOPING OR CLARIFYING STAND-LEVEL OBJECTIVES. TIMBER MANAGEMENT OBJECTIVES THESE OBJECTIVES APPLY TO: SU WILDLIFE MANAGEMENT OBJECTIVES -HABITAT/BIODIVERSITY/WILDLIFE TREES THESE OBJECTIVES APPLY TO: SU

Light grey shaded boxes are not required by legislation

FS68 HFP 98/10

SU

STAND MANAGEMENT PRESCRIPTION {insert district name} Forest District D

_		
n	ata	
$\boldsymbol{\nu}$	αις	

WATERSHED MANAGEMENT OBJECTIVES					
THESE OBJECTIVES APPLY TO: SU					
FISHERIES/STREAMS-WETLANDS MANAGEN THESE OBJECTIVES APPLY TO: SU		5			
RANGE MANAGEMENT OBJECTIVES	CATTLE USE? () `	Yes ()No	IF 'YES' RANG UNIT PASTUR		
CATTLE PRIMARY ACCESS TRAILS? () Yes () No	IF 'YES' LOCATE ON ATTACHED MAP		SEEDED?	() Yes (Year)	() No
THESE OBJECTIVES APPLY TO: SU					
VISUAL LANDSCAPE MANAGEMENT OBJECT	IVES (VQO)	LANDSCAPE SENSITIVITY			VISUAL QUALITY OBJECTIVE
THESE OBJECTIVES APPLY TO: SU					
RECREATION MANAGEMENT OBJECTIVES	FEATURE SIGNIFICA				
KEY FEATURE			MANAGEMEN CLASS	IT	
THESE OBJECTIVES APPLY TO: SU					
OTHER RESOURCE VALUES/INTERESTS MA	NAGEMENT OBJE	CTIVES			
THESE OBJECTIVES APPLY TO: SU					

STAND MANAGEMENT PRESCRIPTION {insert district name} Forest District Date: _____

This page can also be duplicated to accommodate separate treatment areas; one page per treatment area if appropriate.

	TREATMENT AREA (TA) DESCRIPTION Use this page to record appropriate treatment area(s) information by standards unit. This page may be used for more than one treatment area if similar area descriptions. If necessary duplicate pages 3 & 4 for multiple areas.													
										ea				
							C-1. ARE	A DESCRIP	TION					
ZONE,	SUBZO	NE, VARIA	NT				SITE SERIES (RANGE)				MOIST/NUTR. GRID			
ELEVA	TION				ASPEC	Т	SLOPE DA	ТА				SLOPE		
Min:		Max:	Avg	J.:			Min. %:	Max. %:	Av	g. %:	POSITION	LENGTH UNIFORMITY		
HUMU: FORM										SOIL COARSE FRAGMENT	%	DRAINA	GE	
WATEF Water	WATER COURSES MECHANIZED STAND TENDING IF YES, SEE OPERATIONAL PLANNING REGULATION FOR FURTHER Water Gullies () Yes () No													
						C-2. C	URRENT	STAND DE	SCRIPTI	ON				
TA or Strata	Layer	Rank	Spp %		cies Composi Spp %		% Spp %	Age (yrs)				Density (stems/ha)	Well- spaced (stems/ha)	Basal Area (m²/ha)
			opp 70		000 70	Opp /		0/	(0.1)	,		()	()	(III /IId)
FORES	ST HEAL	тн			C	-3. FO	REST HE	ALTH AND I	PROTEC					
SU	AGEN COD	ΙT	AGENT	ΓΝΑΜΕ	HO	ST SPECI	TOTAL TREES TOTAL CONIFERS				HOST TREES AREA AFFECTED (%) (ha)			
	005	-	7.02.11			0. 0. 20.			<i>'</i>)				2 (70)	(
FORES	ST HEAL	TH STRAT	EGIES:									<u>.</u>	1	
		A00500				· C .								
	AZARD	4995928M		OTECTION S	GIRATEGIE									

STAND MANAGEMENT PRESCRIPTION {insert district name} Forest District

Date: __

D. TARGET STAND CONDITIONS AND OBJECTIVES

STAND TREATMENT REGIME — The stand treatment objectives for all treatment areas in this standards unit must be the same. Clearly describe the average target stand condition for all treatment areas under this standards unit. Clearly identify how you propose to achieve the forest management objectives in Part B of this prescription. Clearly explain how the proposed treatments will achieve the stated objectives and/or mitigate impacts on non-timber forest resources listed in Part B. Where quantification is *NOT* possible, use qualitative descriptions.

Selection criteria for crop trees (height, age, vigour, species preference, etc.):

D-1. POST-TREATMENT STANDARDS

Use the table below to enter the schedule of stand-level treatments and appropriate standards. Complete only the relevant columns.																
TARGET					SCHEDULE				STAND STRUCTURAL ATTRIBUTES							
Range of	Age/	DBH	Lover		Tractment	Area	Species Preferred Acceptable		Target No. Well- spaced /ha	Min. Pref. Well- spaced SPH	Min. Inter- tree Dist	Min. Total Well- spaced SPH	Max. Total Well- spaced SPH	Min. BA or Vol.	Prune Min. Lift	
Year	Height	DBH	Layer		Treatment	(ha)	Preterred	Acceptable	/na	SPH	Dist	SPH	SPH	VOI.	Height	
							<i>.</i>									
OTHER POST-TREATMENT STANDARDS: Describe any other post-treatment standards (type and rate of fertilizer, minimum live crown percent after pruning, maximum stump height after spacing, or other appropriate standards that apply to Forest Health, IRM, wildlife trees, etc.)																
D-2. SPECIAL AREAS - (TREATMENT PROPOSED)																
TREATMENT AREA #					TYPE OF SPECIAL AREA (e.g., Riparian Reserve Zone, Riparian Management Zone, Lakeshore Management Zone, FENs)											
AREA NO. SIZE			E ł	na De	Description of special area and significant features (Show approximate location on map)											
DESCRIBE HOW MANAGEMENT ACTIVITIES DIFFER FROM THE REST OF THE STANDARDS UNIT																
					D-3. RESERVE ARE	4S – (I	NO TREA	TMENT P	ROPOS	ED)						
TREATMENT AREA #					TYPE OF RESERVE AREA (e.g., Riparian Reserve Zone, Roadside Buffers, others)											
AREA NO. SIZE ha					Description of reserve area (Show approximate location on map)											
															-	

STAND MANAGEMENT PRESCRIPTION {insert district name} Forest District Date: _____

PRESCRIPTION PREPARED BY (RPF SIGNATURE AND SEA							
RPF NAME (Printed)							
DATE: RPF NO.:							
	RPF SIGNATURE						
PRESCRIPTION ATTACHMENTS:	MAJOR LICENSEE SIGNING AUTHORITY						
 ADDITIONAL SMP COMMENTS SMP MAP(S) FIELD DATA CARDS TERRAIN STABILITY FIELD ASSESSMENT 							
 FOREST HEALTH/PEST INCIDENCE ASSESSMENT ECONOMIC ANALYSIS OTHER: SPECIFY:	Licence Holder Signing Authority Signature (delete if not applicable)						
	Licence Holder Signing Authority Name (Printed) (delete if not applicable)						
	Date:						
	PRESCRIPTION APPROVED BY:						
	District Manager's Signature						
	District Manager's Name (Printed)						
	Date:						
	Original approval date (if amended):						