

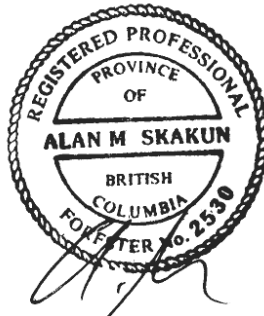


Nakusp and Area Community Forest (2013) Inc.

SUPPORT DOCUMENT
for the Nakusp and Area Community Forest
2018 - 2023 FOREST STEWARDSHIP PLAN
#761

within the
Selkirk Natural Resource District

Nakusp and Area Community Forest (2013) Inc.
P.O. Box 925
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Prepared by: _____

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Date: December 10, 2018

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1. SUPPORTING INFORMATION

1.1. Introduction

This document is provided as supporting information for the Nakusp and Area Community Forest (2013) Inc. (NACFOR) 2018 to 2023 Forest Stewardship Plan (FSP) but is not a component of the legal FSP. The purpose of the support document is primarily to assist the Delegated Decision Maker (DDM) in her consideration of the FSP for approval and secondarily to inform the public and stakeholders. The intent is to provide rationale, clarification and/or background information for the results and strategies in the FSP, where considered useful.

1.2. Support Document Format

To provide for efficient cross-referencing between this support document and the FSP, the Table of Contents and the numbering of each section are the same. Where the author considered the meaning of a section of the FSP to be implicit, not requiring rationale, clarification or background information, the section number and heading has been retained but the section is labelled 'self-explanatory'.

1.3. Public Review and Comment Process Followed

1.3.1 Providing Notice

In accordance with Section 20 of the Forest Planning and Practices Regulation (FPPR), this FSP has been advertised in two newspapers (Arrow Lakes News and Valley Voice) circulating in the vicinity of the Forest Development Unit (FDU) identified in the FSP. The advertisements contain all of the information specified in FPPR Section 20(1).

The 60-day Review and Comment period for this FSP was July 12, 2018 to September 10, 2018.

In addition to the legally required newspaper advertising, letters inviting review and written comments were sent to adjacent major licensees (holding renewable Forest Licences and Tree Farm Licences) within the Selkirk Natural Resource District, as well as to stakeholders who have previously expressed an interest in the FSP or the planning and operations of NACFOR.

All First Nations whose asserted traditional territory overlaps with the FDU identified in this FSP were sent letters informing them of the FSP and offering to arrange a meeting between representatives of the First Nation and NACFOR to discuss the FSP and to share information.

1.3.2 Review and Comment Information Provided to the DDM

In accordance with FPPR Section 22, NACFOR is providing the FSP to the DDM for approval including a Review and Comment Information Package containing:

1. a copy of the newspaper ads described above with their publication dates;
2. a copy of the major licensee referral letter, with mailing list;
3. a copy of the stakeholder referral letter, with mailing list;

4. a copy of the letter to First Nations offering to meet, with mailing list;
5. a copy of each written comment received during the public review and comment period, and a summary of the comments and responses;
6. a description of changes made to the draft plan as a result of comments received;
and
7. a description of the efforts made to meet and share information with First Nations groups.

2. INTERPRETATION

2.1. Definitions under Acts and Regulations

(Self-Explanatory)

2.2. Definitions Specific to this FSP

(Self-Explanatory)

2.3. Objectives, Results and Strategies

This section is not a legal requirement but is provided for reviewer and public information to demonstrate NACFOR's intention and commitment to provide results and strategies that are consistent with objectives set by government and that are measureable or verifiable.

2.4. Common Acronyms Used in this FSP

BEC: Biogeoclimatic Ecosystem Classification

CHR: Cultural Heritage Resource

DDM: Delegated Decision Maker

FDU: Forest Development Unit

FPC: Forest Practices Code of BC Act

FPPR: Forest Planning and Practices Regulation

FRPA: Forest and Range Practices Act

FRR: Forest Recreation Regulation

FSP: Forest Stewardship Plan

GAR: Government Actions Regulation

GIS: Geographic Information System

GWM: General Wildlife Measure

KBHLPO: Kootenay-Boundary Higher Level Plan Order

LU: Landscape Unit

MFLNRORDRD: Ministry of Forests, Lands, Natural Resource Operations and Rural Development

NACFOR: Nakusp and Area Community Forest (2013) Inc.

OGMA: Old Growth Management Area

QP: Qualified Professional

QRP: Qualified Registered Professional

RMZ: Riparian Management Zone

RP: Road Permit

RPF: Registered Professional Forester

RRZ: Riparian Reserve Zone

SAR: Species at Risk

SU: Standards Unit

UWR: Ungulate Winter Range

VIA: Visual Impact Assessment

VQO: Visual Quality Objective
WHA: Wildlife Habitat Area
WHF: Wildlife Habitat Feature
WTP: Wildlife Tree Patch
WTRA: Wildlife Tree Retention Area

3. REFERENCES

(Self-Explanatory)

4. APPLICATION OF THE FSP

4.1. Term of the FSP

NACFOR is requesting that the Delegated Decision Maker (DDM) for the Minister of Forests, Lands, Natural Resource Operations and Rural Development approve the NACFOR FSP for a term of five years. Irrespective of the FSP approval date, NACFOR is requesting that the effective term of the FSP be from **December 20, 2018 to December 19, 2023**.

4.2. FSP Holder - Nakusp and Area Community Forest (2013) Inc.

(Self-Explanatory)

4.3. Purpose of the FSP and Public Engagement Outside of the FSP

Sections 4.3.1 to 4.3.3 are not a legal requirement for FSPs but are intended to inform the public and provide NACFOR's view and interpretation of the scale and purpose of the FSP as a landscape level plan, considering the legal requirements in current acts and regulations.

4.3.1 Government Objectives and Public review

(Self-Explanatory)

4.3.2 NACFOR Development Areas and Public Engagement

Section 4.3.2 describes the role of NACFOR Development Area planning, outside of the FSP, as a source for more detailed 'operational' information, including the location of proposed cutblocks and roads, and as an opportunity and means for site-level consultation with First Nations and engagement with stakeholders, forest licensees and the public. This section also describes the strategies and tools NACFOR utilizes for public engagement including annual public open house meetings, continuous local office access and the comprehensive NACFOR website. A commitment is made to respond to any written comments received regarding forest development planning and resource management.

4.4. Application of the FSP

(Self-Explanatory)

4.5. Forest Development Units (FDUs) & Rationale

(Self-Explanatory)

4.5.1 Collaboration within Shared Management Units

Discussion

Although not a legal content requirement for FSPs, through a legal strategy, NACFOR has committed to collaboration with other forest licence or agreement holders within shared management units (i.e., shared landscape units, community watersheds and ungulate winter ranges) to ensure that the objectives set by government for these areas are achieved.

Measureable or Verifiable

The strategy within this section is verifiable in that, where NACFOR has constructed a road or conducted timber harvesting within one of the above shared management units, written documentation exists and is available regarding the exchange of information with other forest licence or agreement holders, either through direct correspondence or through reports and tables produced from the HLPO Reporting Suite coordinated & maintained by the Selkirk Geospatial Research Centre, or its successor.

4.6. Cutting Permits and Road Permits in Effect

(Self-Explanatory)

4.7. Declared Areas

(Self-Explanatory)

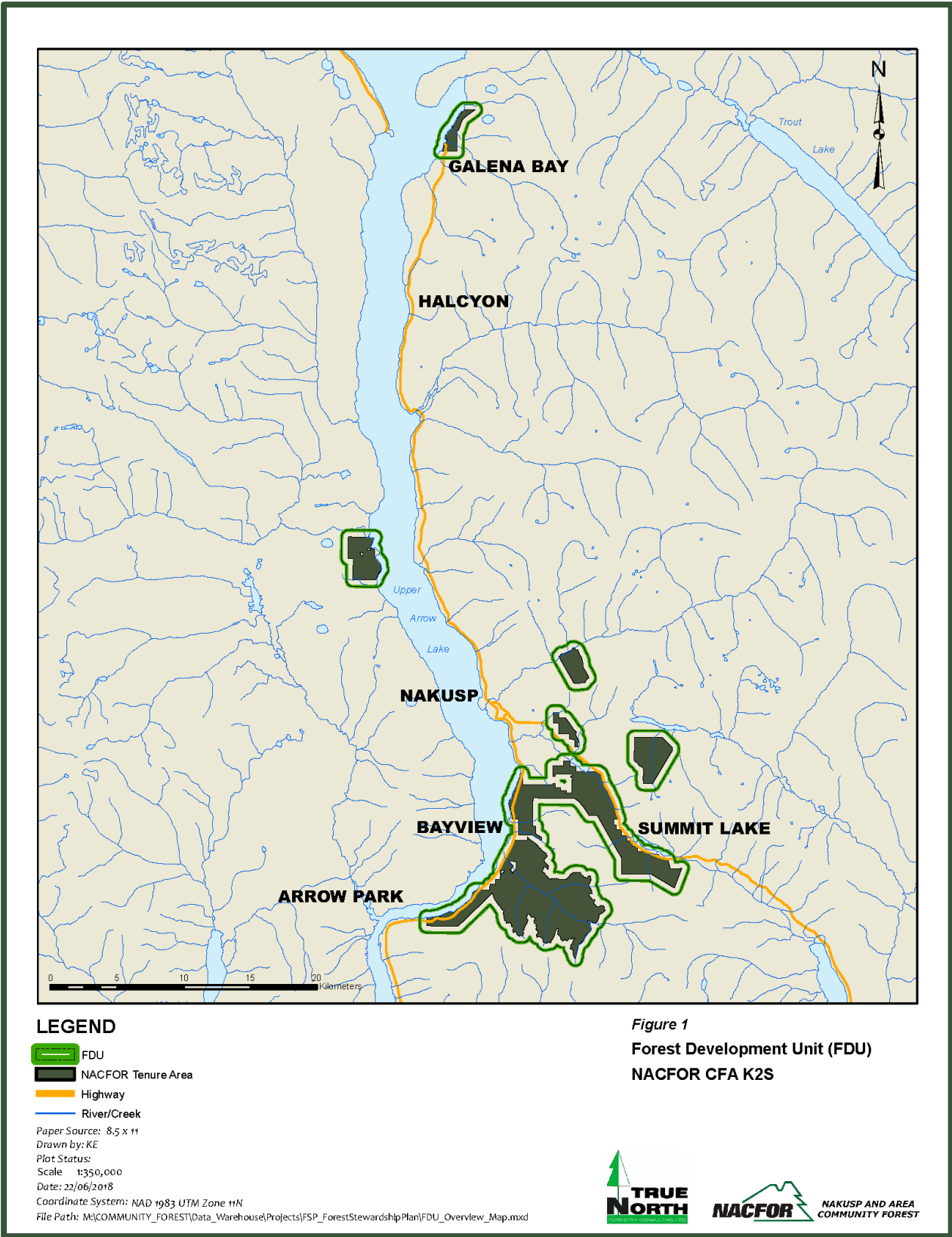


Figure 1. Forest Development Unit (FDU) General Location Map

5. RESULTS AND STRATEGIES IN RELATION TO FOREST RESOURCE VALUES

5.1. Soils

Legal References: FPPR Sec. 5, Sec. 12.1 (1), Sec. 35 and Sec. 36

Discussion

As a result or strategy, NACFOR has elected to adopt and comply with the practice requirements of FPPR Section 35 (specifying soil disturbance limits) and Section 36 (specifying permanent access structure limits).

Measureable or Verifiable

Result or Strategy #1 is considered consistent and measureable or verifiable as it adopts the default practices of FPPR Sections 35 and 36.

5.2. Timber

5.2.1 Timber

Legal References: FPPR Sec. 6.0 and Sec. 12(8)

Discussion

FPPR Section 6 identifies the 3 objectives set by government for timber. These are related to the supply of commercial timber in the province, competitive delivered wood costs in comparison to other jurisdictions and ensuring that legislation does not unduly constrain agreement holders' rights. It is NACFOR's position that these are broad, high level, public policy-related objectives which are outside the scope of results and strategies proposed by a single FSP holder. For this reason, NACFOR has elected the exemption permitted in the regulation (FPPR Section 12(8)) for all FSP holders.

5.2.2 Enhanced Resource Development Zones - Timber

Legal References: KBHLPO Objective 7

Relates to: FSP Sec. [5.3.1.3](#) and Sec. [5.3.1.6](#)

Discussion

KBHLPO Objective 7 allows for successful regeneration of a cutblock within *Enhanced Resource Development Zones - Timber* (ERDZ-Ts) to constitute green-up for the purposes of determining when an adjacent area may be harvested. NACFOR has elected not to take advantage of this reduced green-up standard but to use a single (2.5 metre) green-up height in all situations. Result #1 adopts the practice requirements of Section 64 (Maximum cutblock size) and Section 65 (Harvesting adjacent to another cutblock) of the FPPR as a result related to KBHLPO Objective 7, except that NACFOR has specified that the height requirement of Section 65(3)(a) and Section 65(3)(b)(ii) is reduced from 3 metres to 2.5 metres. The rationale for this strategy is as follows:

Use of 2.5 metres is consistent with KBHLPO Objective 4 which specifies 2.5 metres as green-up height generally, except in certain situations, and which was established based on the then-in-force Section 68(4) of the Operational Planning Regulation of the FPC which stated that a height specified in a higher level plan prevails over the height in the regulation. Within the current regulations, FPPR Sections 12(4) to 12(6) allow that where a land use objective in a higher level plan conflicts with a regulation the objective in the higher level plan may prevail. In accordance, NACFOR has specified a 2.5 metre green-up height to apply in all circumstances within the results or strategies specified in FSP Sections 5.2.2 Enhanced Resource Development Zones - Timber), 5.3.1.3 (Green-up) and 5.3.1.6 (Wildlife and Biodiversity - Landscape Level).

The exceptions to where a 2.5 metre green-up height is established generally by KBHLPO Objective 4 are listed below along with the reasons why NACFOR has specified that 2.5 metres will apply in these situations as well:

1. Community Watersheds. Since KBHLPO Objective 4 was established, the requirement of FPPR Section 8.2 to specify a result or strategy for the objectives set by government for water in a community watershed has come into effect. A comprehensive set of strategies for community watersheds is set out in FSP Section 5.4.1. These include a requirement for a hydrological assessment which considers all of the factors affecting a watershed, and would include the state of green-up / hydrological recovery as well as many other factors. Therefore, specifying a separate, arbitrary green-up height within community watersheds is unnecessary and may be inconsistent with the site-specific assessment results or recommendations.
2. Visually Sensitive Areas. Specifying a green-up height is not an effective method to manage for visual quality as the more significant factor in assessing for visual quality objectives is the amount of the visual landscape or landform that is in a non-vegetated state. FSP Section 5.5 provides effective strategies for visual quality management.
3. Enhanced Resource Development Zones - Timber. Utilizing successful regeneration (essentially 0 metres in height), for a green-up height would be cumbersome to implement and track in ERDZ-Ts separate from other areas, has no increased forest stewardship value and has little benefit related to timber supply.
4. Specified Fire Maintained Ecosystems. This exception is not relevant since the objective related to fire maintained ecosystems (KBHLPO Objective 8) is not in effect.

In Summary:

The use of different green-up height standards in different locations and circumstances would be complex, inefficient, increase the risk of accidental non-compliance and have little or no net resource stewardship benefit.

The FSP result proposed by NACFOR is a balance of the spectrum of standards - from 0 metres green-up permitted in ERDZ-Ts (through KBHLPO Objective 7), to 2.5 metres specified in most locations (with exceptions) by KBHLPO Objective 4, to 3 metres which would apply in the above noted exceptions of KBHLPO Objective 4 and as specified in FPPR Section 65.

This discussion and rationale also applies to FSP Section 5.3.1.3 (KBHLPO Objective 4 - Green-up) and FSP Sec. 5.3.1.6 (Wildlife and Biodiversity at the Landscape Level), for which NACFOR has specified the same results as for Enhanced Resource Development Zones - Timber.

Measureable or Verifiable

This result is verifiable and measurable in that timber harvesting is not conducted by NACFOR adjacent to an existing cutblock except where in compliance with FPPR Sections 64 and 65 and where the (minimum 2.5 metre) green-up (height) status of any adjacent cutblock has been documented in a Site Plan, and is evidenced on the ground.

5.3. Biodiversity, Wildlife and Fish

5.3.1 Biodiversity

5.3.1.1 Biodiversity Emphasis

Legal References: KBHLPO Objective 1

Relates to: KBHLPO Objective 2

Discussion

NACFOR has specified a result to be consistent with the biodiversity emphasis assigned to landscape units through Objective 1. Consistency is achieved through achieving the requirements of objectives that flow from Objective 1, particularly Objective 2 which identifies the old seral and mature-plus-old seral requirements for each biodiversity emphasis option.

Measureable or Verifiable

The result specified for biodiversity emphasis is verifiable through the verification of consistency with the required seral targets of Objective 2 - Old and Mature Forest.

5.3.1.2 Old and Mature Forest

Legal References: KBHLPO Objective 2

Discussion

Although not legally established, Old Growth Management Areas (OGMA's) have been spatially identified within the Selkirk Natural Resource District and are recognized by licensees and NACFOR in order to meet the objective for old forest that is set out in Objective 2 of the KBHLPO. The requirements of Objective 2 for old seral stage forest are considered to be met through maintaining the areas within these identified OGMA's.

Through Strategy #1, to maintain the old requirements achieved through spatialized OGMA's, NACFOR commits to not harvest in OGMA's except for the specific reasons indicated and, in these situations, to replace the OGMA areas harvested with area of equal or greater biological value, unless the harvesting is for minor incidental reasons (i.e., tail holds, guy line tiebacks or danger trees which are a hazard to adjacent activities).

Through Strategy #2, where the mature-plus-old targets are not met within an LU, as determined by a spatial or aspatial analysis, before conducting timber harvesting within seral stages of the LU affected, a rationale and recruitment strategy will be prepared to achieve the targets consistent with Objective 2 (5) of the KBHLPO (a documented strategy by a Registered Professional Forester (RPF)) including the factors in footnote k of KBHLPO Objective 2 (5) (mature and old attributes). In conducting analysis NACFOR utilizes the *HLPO Reporting Suite* application maintained by the Selkirk Geospatial Research Centre to ensure targets are met and/or identify where a professional rationale and recruitment strategy is required.

Measureable or Verifiable

Strategy #1 is verifiable as OGMA's are identified on NACFOR FDU and Development Area maps and in available GIS layer coverages maintained by NACFOR and MFLNRORD and harvesting does not take place in OGMA's except for the reasons stated within the strategy and these occurrences are documented by NACFOR in Site Plans or associated documents, including the locations of replacement OGMA areas.

Strategy #2 is verifiable as, where seral stage analysis confirms mature-plus-old targets are not met, NACFOR conducts timber harvesting only after a written rationale and recruitment strategy have been prepared by a RPF and is available.

5.3.1.3 Green-up

Legal References: KBHLPO Objective 4, FPPR Sections 12(4) to 12(6)

Relates to: KBHLPO Objective 7, FSP Sec. [5.2.2](#) and Sec. [5.3.1.6](#)

Discussion

For the objective for Green-up in Objective 4 of the KBHLPO, NACFOR has adopted the practice requirements of Section 64 (Maximum cutblock size) and Section 65 (Harvesting adjacent to another cutblock) of the FPPR as a result. See discussion and rationale within FSP Section 5.2.2 above with regard to the application of KBHLPO Objectives 4 and 7 and FPPR Sections 12(4) to 12(6).

Measureable or Verifiable

This result is verifiable and measurable in that timber harvesting is not conducted by NACFOR adjacent to an existing cutblock except where in compliance with FPPR Sections 64 and 65 and where the (minimum 2.5 metre) green-up (height) status of any adjacent cutblock has been documented in a Site Plan, and is evidenced on the ground.

5.3.1.4 Fire Maintained Ecosystems

Legal References: KBHLPO Objective 8

This legal objective is not in effect as mapping referred to in the objective has not been legally established under the KBHLPO. Additionally, there are no areas classified as shrub land, open forest or managed forest ecosystems in NDT 4 within the FDU of this FSP, which further makes this Objective non-applicable.

5.3.1.5 Water, Fish, Wildlife and Biodiversity within Riparian Areas

Legal References: FPPR Sec. 8, Sec. 12.1(6) and Sec. 12(3)

Relates to: FSP Sec. [5.3.1.7](#)

Discussion

NACFOR has elected the exemption from the requirement to specify a result or strategy for the objective for Water, Fish, Wildlife and Biodiversity within Riparian Areas, as permitted by FPPR Section 12.1(6), through a commitment to comply with FPPR Sections 47 to 51 and 52(2) (riparian classes and restrictions) and Section 53 (temperature sensitive streams). However, as noted in Footnote 1 of the results and strategies section, Section 53 is not applicable to this FSP as there are no temperature sensitive streams designated through GAR orders within any portion of the FDU of the FSP.

With regard to FPPR Section 12(3) (retention of trees in a riparian management zone (RMZ)), Section 2 lays out six strategies and a result that are based on a riparian assessment conducted by a Qualified Registered Professional (QRP) at the planning stage for timber harvesting. Strategy 2a identifies the specific factors that will be evaluated and specifications and measures prescribed. Result 2b commits to ranges of tree retention levels as specified in the table provided, based on the site specific factors assessed in 2a.

Prescribing retention levels based on specific factors assessed in 2a recognizes that RMZ retention is a site-level prescription and recognizes the huge range of variability and factors that may be involved in different situations and circumstances. Strategies under Section 2 rely on the professional assessment of the QRP to develop the most appropriate site-specific prescription.

Strategy 2c specifies that tree retention may also be used to achieve stand level (WTRA) retention requirements, if they are suitable based on the assessed factors.

Strategies 2d and 2e are specified to contribute to the maintenance of stream bank and stream channel integrity within RMZs.

Strategy 2f commits NACFOR and its contractors to minimize the introduction of new coarse woody debris and sediment into streams during all primary forest activities.

As guidance to prescribing QRPs, the Information box at the beginning of this section identifies what the objectives of RMZ tree retention are in situations where a Riparian Reserve Zone (RRZ) is present and where it is not.

Measureable or Verifiable

Strategy 2a and Result 2b are verifiable in that a riparian assessment is produced by a QRP, which includes an evaluation of the applicable factors listed, and at the completion of harvesting RMZ retention levels are present within the ranges specified. A Site Plan or associated document prepared by a QRP exists which prescribes retention levels including the % of the pre-harvest stems per hectare to be retained, as well as their distribution, species and other characteristics indicated. These documents must be produced before NACFOR conducts timber harvesting and are retained and available. Result 2b is also measureable on the ground through

assessment of the post-harvest tree retention within the RMA versus that prescribed in the Site Plan or associated document.

Implementation of Strategy 2c is verifiable as decisions are documented within the Site Plan or associated document prepared by a QRP.

Strategies 2d and 2e (for maintenance of stream bank and stream channel integrity) are verifiable on the ground through inspection of the post-harvest conditions within an RMA, versus these strategies and as prescribed and documented in the Site Plan or associated document.

Strategy 2f is verifiable on the ground through inspection of the post-harvest conditions within an RMA which indicate that the introduction of new coarse woody debris and sediment into streams is not significant.

5.3.1.6 Wildlife and Biodiversity — Landscape Level

Legal References: FPPR Sec. 9, Sec. 12.1(3), Sec. 64 and Sec. 65

Relates to: FSP Sec. [5.2.2](#), Sec. [5.3.1.2](#) and Sec. [5.3.1.3](#), KBHLPO Objectives 4 and 7

Discussion

NACFOR has elected an exemption from the requirement to specify a result or strategy for the objective for Wildlife and Biodiversity at the Landscape Level, as permitted by FPPR Section 12.1(3), through a commitment to comply with Section 64 (Maximum cutblock size) and Section 65 (Harvesting adjacent to another cutblock) of the FPPR, except that the height requirement in Section 65(3)(a) and Section 65(3)(b)(ii) is reduced from 3 metres to 2.5 metres.

The rationale for specifying a 2.5 metre green-up height in this section is the same as for green-up height for Enhanced Resource Development Zones - Timber. See discussion and rationale within FSP Section 5.2.2.

Measureable or Verifiable

This result is verifiable and measurable in that timber harvesting is not conducted by NACFOR adjacent to an existing cutblock except where in compliance with FPPR Sections 64 and 65 and where the (minimum 2.5 metre) green-up (height) status of any adjacent cutblock has been documented in a Site Plan, and is evidenced on the ground.

5.3.1.7 Wildlife and Biodiversity — Stand Level

Legal References: FPPR Sec. 9.1, Sec. 12.5 (1), Sec. 12.5 (2), Sec. 66 and Sec. 67

Discussion

For the objective for wildlife and biodiversity at the stand level NACFOR has chosen to specify alternate results and strategies to FPPR Sections 66 (Wildlife tree retention) and 67 (Restriction on harvesting), in accordance with FPPR Sections 12.5(1) and 12.5(2).

In Strategy #1 NACFOR identifies and commits to documenting the attributes that a QRP will assess in establishing Wildlife Tree Retention Areas (WTRAs). Appendix 3 of the FSP contains a slightly modified version of 'Attributes of High-Value Wildlife Tree Retention Strategies', which

were published in the document *Wildlife Tree Retention: Management Guidance*, developed by The Wildlife Tree Committee of British Columbia (2006).

To provide consistency with the intent of government's objective for wildlife tree retention, as expressed in the practice requirements of FPPR Section 66 (retention of a minimum of 7% of cutblocks), Result #2 specifies that a minimum of 7% of the cutblock area of a Development Area will be retained in WTRAs. By calculating the WTRA requirement at the Development Area level and relating WTRAs to one or more cutblocks of a Development Area, the strategies allow the preferential location of WTRAs in areas that provide the best biological or habitat values for wildlife, rather than simply achieving an arbitrary accounting requirement.

The seven strategies (a. to g.) under Result #2 identify the calculation and allocation rules to be used and commit to retaining WTRAs over the rotation (except for very specific circumstances specified in Result #3).

The flexibility for the QRP to preferentially locate WTRAs is limited and bound to a degree in that (per 2 e.) some structure must be retained in relation to every cutblock of a Development Area and must be at least 3.5% of the cutblock area for any individual cutblock, except if a cutblock is less than 5 ha in size, in which case retention may be less than 3.5% but must be greater than 0%.

Result #3 commits to not harvesting within established WTRAs and Wildlife Tree Patches (WTPs) except for the very specific reasons identified which, for the most part, are beyond the control of NACFOR.

One of these reasons, windthrown trees that 'are a potential source to cause epidemic insect spread' includes a definition that identifies the two species (spruce and Douglas-fir) that are the most significant within the NACFOR operating areas in terms of providing hosts for bark beetle build-up in downed timber. Based on literature review, the definition identifies 'fresh' windthrow (down less than 4 years) as the greatest hazard for beetle build-up in these species and also identifies distance and stand characteristics that constitute a high risk for infestation.

Another circumstance, 'highly susceptible to insect damage', includes a definition of highly susceptible and specifies that the susceptible WTRA must be within 2 km of a current live infestation with a minimum live infestation level of 30% of the total stems per ha of the stand. Since this scenario is most likely to apply to a mountain pine beetle (MPB) situation, 2 km was considered a conservative distance to a live infestation based on the concept of 'beetle pressure index' where distances approaching 3 km or greater generally produce a significantly lower beetle pressure index, resulting in lower risk ratings, regardless of the relative infestation size. For detailed background, see the document entitled '*Susceptibility and risk rating systems for the mountain pine beetle in lodgepole pine stands*', Shore; Safranyik (1992).

Lastly, Strategy #4 commits to the replacement of any WTRA/WTP area that is harvested as a result of the circumstances identified in Result #3 (except for very incidental, un-mappable situations) with area that is at least equivalent in habitat value.

Measureable or Verifiable

The minimum 7% target for a Development Area (and minimum 3.5% retention per cutblock) is measureable and verifiable on every Development Area (as opposed to requiring an annual analysis of all cutblocks on all Development Areas). The total hectares and percentage within WTRAs are calculated and identified within the Site Plan or associated document for each cutblock as well as the overall Development Area and are also measureable on the ground. Harvesting does not take place within a WTRA/WTP, except for one of the reasons stated in Result #3 and, where it occurs, the reasons for the harvesting and the replacement WTRA/WTP area are documented by a QRP within a related Site Plan or associated document or an amendment to these.

5.3.2 Wildlife

5.3.2.1 Grizzly Bear Habitat and Connectivity Corridors

Legal References: KBHLPO Objective 5

Relates to: FSP Sec. [5.3.2.4](#) and Sec. [5.3.1.2](#)

Discussion

NACFOR has committed to comply with KBHLPO Objective 5 (Grizzly Bear Habitat and Connectivity Corridors) except that, as of the submission date of the FSP, grizzly bear habitat mapping has not been made available through the KBHLPO.

Although the grizzly bear habitat portion of this objective is not in effect, NACFOR has specified a strategy for the maintenance of grizzly bear habitat including following existing management strategies and measures and/or undertaking a field assessment utilizing a QP to provide recommendations and implementing all of the above, including incorporating them into Site Plans or associated documents.

With regard to connectivity and the requirements to meet old and mature-plus-old seral stage targets preferentially within connectivity corridors, the requirements for old forest are considered to be met through spatially identified Old Growth Management Areas (OGMA's) (non-legal) and so there is no need to address the old component of this requirement as connectivity was considered as one of the factors in identifying OGMA's; therefore they are consistent with KBHLPO Objective 5. For the mature component, preferential location into connectivity corridors is an issue where connectivity corridors do not cover an entire BEC variant within the LU. In any situations where the mature-plus-old required targets are not met, the process outlined in FSP Section 5.3.1.2, involving analysis and a recruitment strategy, will be followed before road construction or timber harvesting are authorized.

Measureable or Verifiable

These results and strategies are verifiable as:

1. For important grizzly bear habitat, primary forest activities are consistent with existing management strategies and measures and/or the written recommendations of a QP, based on a field assessment and are documented in a Site Plan or associated document.

2. With regard to connectivity, the area in OGMAs is not reduced and for the mature-plus-old component NACFOR conducts seral stage analysis where a deficit may exist, the results of which are documented, and a written rationale and recruitment strategy is prepared by a RPF and exists before timber harvesting takes place.

5.3.2.2 Caribou

Legal References: KBHLPO Objective 3 and GAR Sec. 9 to Sec. 13

Relates to: FSP Sec. [5.3.2.4](#)

As described, the KBHLPO Objective 3 for Caribou is not in effect but NACFOR will be consistent with the requirements for habitat retention for Mountain Caribou specified within the applicable GAR orders, as committed to in the results and strategies of FSP Section 5.3.2.4.

5.3.2.3 Objectives Set by Government for Wildlife

Legal References: FPPR Sec. 7 and GAR Sec. 9 to Sec. 13

Relates to: FSP Sec. [5.3.2.4](#)

As described, NACFOR is exempt from the obligation to specify a result or strategy in relation to the objective set by government for wildlife as this objective is addressed by objectives established for Wildlife Habitat Areas (WHAs), Ungulate Winter Ranges (UWRs), and General Wildlife Measures (GWMs). Each of the orders establishing these under the GAR Sections 9 to 13 also specifically contain this exemption for persons required to prepare an FSP.

5.3.2.4 Species at Risk, Regionally Important Wildlife, Ungulate Winter Range, Wildlife Habitat Areas and Wildlife Habitat Features

Legal References: KBHLPO FPPR Sec. 7 and GAR Sec. 9 to Sec. 13

Discussion

As a result, NACFOR commits to being consistent with the requirements of the applicable Notices under FPPR Section 7(2) and Orders under the GAR Sections 9 to 13. The Section 7(2) Notices and GAR Orders in effect and applicable to the FDUs in this FSP are listed in Appendix 6 of this Associated document.

As additional strategies related to Species at Risk (SAR), Ungulate Winter Range (UWR), Wildlife Habitat Areas (WHAs) and Wildlife Habitat Features (WHFs), NACFOR has committed to:

- ensuring layout contractors have SAR and WHF awareness training; and
- ensuring contractors conducting primary forest activities (e.g., road building or logging) have SAR awareness training and/or receive an identification/notification information package.

Measureable or Verifiable

The specified result and strategies are verifiable through the following:

1. completed primary forest activities are consistent with the requirements of the applicable Notices and GAR Orders, as documented in Site Plans or Associated documents and as evidenced on the ground;
2. the specified SAR / WHF awareness training and provision of SAR /WHF information packages to contractors is documented on pre-work forms/checklists;
3. information on SAR, UWRs and WHAs is referenced in Site Plans or associated documents and is communicated to contractors through site plans or associated documents and in pre-work forms or checklists; and
4. where a SAR is identified management strategies and measures are documented in a Site Plan or associated document, including the recommendations of any QRP assessment.

5.3.3 Fish Habitat in Fisheries Sensitive Watersheds

Legal References: FPPR Sec. 8.1 and GAR Sec. 14(1) and Sec. 14(2)

Discussion

As of the commencement date of this FSP, there are no designated fisheries sensitive watersheds within the FDU of this FSP. As a result, Section 8.1 of the FPPR does not apply to this FSP.

5.4. Water for Consumptive Use

5.4.1 Water in Community Watersheds

Legal References: FPPR Sec. 8.2, Sec. 59 to Sec. 63, Sec. 84

Discussion

As a result or strategy, NACFOR has adopted FPPR Sections 59 (protecting water quality), 60 (licenced waterworks), 61 (excavated or bladed trails), 62 (roads in a community watershed) and 63 (use of fertilizers). NACFOR has also specified three addition strategies (#2 to #4). Through Strategy #2, before authorizing road construction or timber harvesting, NACFOR has committed to conduct a hydrological assessment and to be consistent with its recommendations in planning and conducting activities. Strategies #3 and #4 commit to a referral letter to the water licensee during planning stages and to notification of the water licensee before the start of road construction or deactivation.

Measureable or Verifiable

Result or Strategy #1 is considered measureable or verifiable as it adopts the practice requirements of FPPR Sections 59 to 63.

The additional specified strategies (#2 to #4) are verifiable as:

1. prior to conducting primary forest activities a hydrologic assessment is completed by a QRP and is available;

2. planning is in accordance with the recommendations of the hydrologic assessment, as verifiable through Site Plans or an associated document;
3. a referral letter is sent to the water licensee and documented prior to any timber harvesting or road construction;
4. written notification to the water licensee at least 48 hours before the commencement of road construction or deactivation is documented; and
5. completed primary forest activities are consistent with the recommendations of the hydrologic assessment as prescribed in a Site Plan or associated document and as evidenced on the ground.

5.4.2 Consumptive Use Streams

Legal References: KBHLPO Objective 6 and FPPR Sec. 59 & Sec. 60(1)

Relates to: FSP Sec. [5.3.1.5](#)

Discussion

In addition to committing to comply with KBHLPO Objective 6 and adopting FPPR Sections 59 (protecting water quality) and 60(1) (licenced waterworks) as a result or strategy (#3), NACFOR commits to provide a referral letter to the water licensee during the planning stage for harvesting and road construction, to ensure a QRP prescribes measures to safeguard water and that the strategies in FSP Section 5.3.1.5 (for riparian management zones) are applied (Strategy #1). As well, Strategy #2 commits to grass seeding of exposed soils within 12 months as a measure for erosion / sediment control measure and to minimize introduction of invasive plants.

Measureable or Verifiable

The specified strategies are verifiable as:

1. a referral letter is sent to the water licensee prior to any timber harvesting or road construction and is documented;
2. a QRP prescribes measures to safeguard water and a prescription for RMZs is made and these are documented in a Site Plan or associated document;
3. grass seeding, as described in Strategy #2, is completed no later than 12 months after road construction or deactivation are completed, and reseeding takes place where initial seeding fails, as confirmed from inspection forms and as evidenced on the ground; and
4. material harmful to human health is not deposited in water for human consumption, and licenced waterworks are not damaged, per FPPR Sec. 59 & 60(1) which, as practice requirements, are considered verifiable or measureable.

5.5. Visual Quality - Scenic Areas and Visual Quality Objectives

Legal References: KBHLPO Objective 9, FPPR Sec. 9.2, GAR Sec. 7(1) and Sec. 7(2)

Discussion

As a result (#1), NACFOR commits that completed road construction and/or timber harvesting will achieve the established VQO for the area.

Strategy #2 commits to the completion of a Visual Impact Assessment, prior to timber harvesting or road building, including the steps that will be taken to predict the likely VQO using the descriptive categories of visually altered forest landscape as defined in FPPR Section 1.1 (i.e., Preservation, Retention, Partial Retention, Modification and Maximum Modification).

Strategy #3 states that where road construction and/or timber harvesting is proposed and it is not practicable to achieve the established VQO, then NACFOR will apply for an exemption through FPPR Section 12(7).

Measureable or Verifiable

Result #1 and Strategies #2 and #3 are verifiable in that:

1. as evidenced on the ground, completed road construction and/or timber harvesting is consistent with the VQO established for the area;
2. a Visual Impact Assessment is completed and documented; and
3. where road construction and/or timber harvesting does not achieve the VQO established for the area, NACFOR has obtained and documented an approval of an exemption under Section 12(7) of the FPPR in advance.

5.6. Cultural Heritage Resources

Legal References: FPPR Sec. 10

Discussion

Six detailed strategies are specified in relation to Cultural Heritage Resources (CHRs). Through these NACFOR has committed to:

- providing a potentially affected First Nation with information on proposed forest development and opportunities for review and comment;
- request information on the type and location of important traditional use;
- offer to meet to share information, identify concerns, identify appropriate assessments, discuss forest management activities that meet the needs of both NACFOR and the First Nation and evaluate potential impacts to CHRs;
- provide written feedback within 60 days to any First Nation providing comments or information;
- hold traditional use information in strict confidence; and
- take specific measures, including communication with a First Nation, where a First Nation's artifact is encountered during timber harvesting or road construction activities.

Measureable or Verifiable

Strategies #1 to #5 for CHRs are verifiable in that, before NACFOR constructs a road or conducts timber harvesting:

1. a written request to share information and an offer to meet with a First Nation is documented, providing at least 30 days for review and comment;
2. where a meeting takes place, the areas of discussion are documented;
3. where information is received from a First Nation and a meeting does not take place, the results of NACFOR's evaluation of the issues is documented and provided to the First Nation;
4. written feedback by NACFOR to any comments from a First Nation occurs within 60 days, including a commitment to implement any recommendations agreed to; and
5. traditional use information provided by a First Nation is not released to any other parties, except with the written consent of the First Nation.

Strategy #6 is verifiable in that, where a First Nation's artifact is encountered during operations, the steps in Strategy #6 are implemented by NACFOR and documented, including communication and an offer to meet with the First Nation.

5.7. Recreation Resources

Legal References: FRPA Sec. 56, Sec. 180 and Sec. 181, FPPR Sec. 70(1), FRR Sec. 16

Discussion

Where legal objectives have been established for recreation sites and trails these continue to apply (per FRPA Sections 180 and 181). However, information from the Recreation Sites and Trails BC Branch indicates that as new recreation sites and trails are developed corresponding legal objectives may no longer be established. In these cases, it is expected that recreation resources will be managed and conserved through professional reliance and the authority of the Recreation Officer under the Forest Recreation Regulation (FRR), Section 16.

NACFOR has specified a result (#1) and five detailed strategies for forest recreation to be applied in all cases where activities may affect an interpretive forest site, a recreation site or a recreation trail. These strategies commit to being consistent with legal objectives, where they exist, to obtaining authorization from the applicable Recreation Officer and to consulting with recreation agreement holders, as well as a number of specific steps and practices to protect recreation resources.

Measureable or Verifiable

The strategies in this section are verifiable through the following:

1. primary forest activities are consistent with any legal objective established for the interpretive forest site, recreation site or recreation trail, as detailed in a Site Plan or associated document and as evidenced on the ground following completion of activities;
2. authorization from a Recreation Officer to conduct activities in and around recreation sites and trails is obtained by NACFOR and is documented;
3. where a recreation agreement or tenure exists, a referral by NACFOR to the agreement holder takes place and is documented;

4. industrial access and/or use of machinery for approved primary forest activities is permitted;
5. roads constructed to sites or trails intended as non-motorized access are deactivated within one year following completion of primary forest activities; and
6. where primary forest activities take place within the area of a recreation site or trail the measures specified in Strategy #6 are followed, as evidenced on the ground.

6. MEASURES IN RELATION TO INVASIVE PLANTS AND NATURAL RANGE BARRIERS

6.1. Measures to Prevent the Introduction or Spread of Invasive Plants

Legal References: FRPA Sec. 47, FPPR Sec. 17

Discussion

The detailed measures specified to prevent the introduction or spread of invasive plants contain components of risk assessment, awareness training, detection, reporting, inspection and monitoring. In addition, the measures include requirements to prevent transport of soil and plant materials and for prompt revegetation measures.

Measureable or Verifiable

The measures in this section are verifiable through the following:

1. during planning stages for primary forest activities, reviews of the MFLNRORD Invasive Alien Plant Program (IAPP) database and the Nakusp Invasive Plant Management Area (IPMA) Invasive Plant Priority List take place and measures are documented in site plans;
2. invasive plant awareness training is confirmed for contractors;
3. personnel carrying out activities in the field identify invasive plant infestations in field documents and enter information into the MFNRO report-a-weed reporting system within 30 days;
4. information is provided to contractors involved in primary forest activities regarding invasive plants and the requirements are reviewed at pre-works and during monitoring, as documented in pre-work inspection forms or checklists;
5. contracts require, and/or inspections document:
 - a. inspection of vehicles, equipment, and structures for soil and plant materials and their removal, where present;
 - b. measures to revegetate exposed soils on new roads, trails, landings and rehabilitated areas and occur within 12 months; and
 - c. seeding using a recommended mix, otherwise Canada Common #1 or better grade seed.
6. grass seeding is completed no later than 12 months after road construction or deactivation are completed, and reseeding takes place where initial seeding fails, as confirmed from inspection forms and as evidenced on the ground; and

7. invasive plant infestations are documented in Site Plans or associated documents, recorded in post-harvest surveys and new infestations identified during surveys are reported.

6.2. Measures to Mitigate the Loss of Natural Range Barriers

Legal References: FRPA Sec. 48 and Sec. 51, FPPR Sec. 18

Discussion

As of the date of commencement of this FSP there are no range units, range agreements or natural range barriers within portions of the FDU identified in this FSP and therefore the requirement to specify measures to mitigate the loss of natural range barriers does not apply.

7. STOCKING STANDARDS

7.1. Free Growing Stand Assessment and Stocking Standards

Legal References: FRPA Sec. 29(2), FPPR Sec. 16 and Sec. 44

Discussion

NACFOR has proposed to adopt the existing Selkirk Resource District South Columbia 2018 Default Stocking Standards, as amended from time to time.

For the purposes of FPPR Section 16(1) (whether free growing is assessed on a block basis or collectively across blocks), NACFOR has specified that FPPR Section 44(1), free growing stands generally (assessed on a block basis), will apply in all situations.

For the purposes of FPPR Section 16(3), for each area where NACFOR is required to establish a free growing stand:

- (a) the applicable stocking standards and applicable regeneration date referred to in FPPR Section 44(1)(a); and
- (b) the applicable stocking standards and applicable free growing height referred to in FPPR Section 44(1)(b);

will be as set out within the Selkirk Resource District South Columbia 2018 Default Stocking Standards, as amended from time to time.

8. APPENDICES

APPENDIX 1 - Cutting Permits and Road Permits in Effect

(Self-Explanatory)

APPENDIX 2 - Declared Areas

(Self-Explanatory)

APPENDIX 3 - Attributes of High-Value Wildlife Tree Retention Strategies

(Self-Explanatory)

APPENDIX 4 - FPPR Section 7(2) Notices and GAR Orders

(Self-Explanatory)

APPENDIX 5 - Designated Community Watersheds in Effect

(Self-Explanatory)