



# **Forest Stewardship Plan Rationale Document**

*FOR*

**Lillooet TSA**

**Cascades Natural Resource District**

**Thompson/Okanagan Forest Region**

**July 25, 2017**

**FSP Term: 5 Years (2018 – 2022)**

**FSP ID # To Be Determined**

**Commencing: To Be Determined**

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**Brent Turmel, RPF**

Date: July 25, 2017

“I certify that the work described herein fulfills the standards expected of a member of the Association of British Columbia Forest Professionals and that I did personally supervise the work”

## Table of Contents

### **A - Response to District Manager Letter of Expectation Regarding Forest Stewardship Plans – June 2<sup>nd</sup>, 2016**

#### **B – FSP Content Clarification, by Section:**

1. Interpretation
2. Application
3. Term
4. Forest Development Units
5. Results or Strategies
  - 5.1 Objectives Set By Government
    - 5.2.4 Old Growth Order
  - 5.2 Objectives Prescribed under section 149(1) of the Forest and Range Practices Act
    - 5.2.4 Soils
    - 5.2.4 Wildlife – FPPR Section 7 Notices
      - 5.2.2.1 Moose
      - 5.2.2.2 Coastal Tailed Frog
      - 5.2.2.3 Flammulated Owl
      - 5.2.2.4 Gopher Snake
      - 5.2.2.5 Spotted Bat
      - 5.2.2.6 Grizzly Bear
      - 5.2.2.7 Ungulate Winter Range (Mule Deer, Bighorn Sheep and Elk)
      - 5.2.2.8 Mountain Goat
    - 5.2.3 Water, Fish, Wildlife and Biodiversity within Riparian Management Areas
    - 5.2.4 Wildlife and Biodiversity – Landscape Level
    - 5.2.5 Wildlife and Biodiversity – Stand Level
    - 5.2.6 Cultural Heritage Resources
    - 5.2.7 Water in Community Watersheds
  - 5.3 Other Designations and Objectives established or continued under FRPA
    - 5.3.1 Scenic areas with established VQO's
    - 5.3.2 Scenic areas without VQO's
    - 5.3.3 Interpretive forest sites, recreation sites or recreation trails – without objectives
6. Stocking Standards
7. Measures to Prevent the Introduction or Spread of Invasive Plants
8. Measures to Mitigate the Effect of Removing or Rendering Ineffective Natural Range Barriers
9. Signatures of Persons Authorized to Sign on Behalf of Persons Required to Prepare this FSP
  - 9.1 Advertisement
  - 9.2 Copies of Written Comments Received
  - 9.3 Description of Changes Made as a result of Comments
  - 9.4 Efforts to meet with First Nations Groups Affected by the Plan
  - 9.5 Efforts to Meet with All/Other Stakeholders Affected by the Plan

Appendix A – Consultation Summary Table

Appendix B – Lillooet FSP Referral List

## **A- Responses to District Manager Letter of Expectation Regarding FSP's**

The following section outlines our responses to and considerations of the, “District Managers Letter of Expectation Regarding Forest Stewardship Plans,” dated June 2<sup>nd</sup>, 2016 (File: 18045-20/FSP Renewal 2016)-and how the **FSP** will address each issue –

### ***By Email***

***To: All Licensees and Forest Professionals Operating in the Cascades Natural Resource District who are renewing Forest Stewardship Plans (FSP's)***

### ***Re: District Manager Letter of Expectation Regarding Forest Stewardship Plans***

*The Ministry of Forest, Lands and Natural Resource Operations (FLNRO) is responsible for the stewardship of Provincial Crown land and natural resources, and protection of BC's archeological and heritage resources. Forest Stewardship Plans (FSPs) are one mechanism enables through the Forest and Range Practices Act (FRPA) that the Ministry uses to deliver its vision of environmental sustainability and economic prosperity.*

*In the decade since most FSPs were first approved, the landscape has changes and we have gained much experience, and improved our understanding of forests complexities and societal interests. As a result, I believe it is imperative that forest professionals manage beyond the legal objectives to realize environmental sustainability and appropriate social management of the FRPA values.*

*This District Manager Letter of Expectation regarding FSPs is intended to align with the FLNRO vision and to provide information and expectations that are in addition to the March 2016 Chief Forester Guidance.*

*As forest professionals you manage the forest related landscape and values in the Cascades Natural Resource District (CNRD) consistent with the Foresters Act and other related legislation. You are aware of you legal and ethical requirements. Therefore, the attached expectations, while not exhaustive, highlight key areas of concern that I believe warrant particular consideration when preparing replacement FSPs.*

*My staff will work to assist you in understanding the Chief Forester Guidance as well as the expectations contained in this letter. They have also been instructed to consider the Forest Practices Board report, Forest Stewardship Plans: Are They Meeting Expectations? and to consider the methodology used by the report's author to determine that Results, Strategies and Measures contained in your FSPs, are both measurable and verifiable.*

*My staff can also support your FSP development as you address specific areas of concern by arranging for Provincial experts (e.g. Ecosystem Specialists) to be available for discussion and/or training purposes. I encourage you to take advantage of this opportunity.*

*The following expectations are not legally binding but rather constitute policy guidance for the development of your FSPs.*

### **Cascades Natural Resource District Expectations**

#### ***First Nations***

*While legislation provides for sharing FSPs with First Nations it is my expectation that First Nations will be involved early and throughout the FSP development process. First Nations should be meaningfully involved and licensees should actively seek First Nations support and endorsement for your Results and Strategies.*

*With specific reference to Cultural Heritage Resource (CHR) values, First Nations should support your approach to CHR Results and Strategies and recognize the implementation f these will help ensure their cultural values are conserved and protected.*

*Your FSP should also recognize and demonstrate understanding of the agreements that government has with First Nation in the Merritt and Lillooet timber supply areas. Agreements such as Forest Consultation and Revenue Sharing Agreements and the Land and Resource Decision Making Pilot Project (aka Shared Decision Making Pilot) with the Nlaka'Pamux Nation*

*Tribal Council which is developing new shared decision making processes through which FSPs will be reviewed and vetted as well as subsequent operational forestry approvals and issuance. Licensees are to discuss these new approaches with the local FLNR First Nations Relations staff for guidance on how to proceed with FSP and operational plans First Nation information sharing.*

## 1. First Nations

- (a) In preparation for the development of this replacement FSP, affected First Nations groups have been made aware of the FSP replacement process at Lillooet TSA committee meetings and applicable Lillooet Tribal Council LUP meetings, beginning in August 2016;
- (b) active, meaningful and continual First Nations engagement was and will continue to be sought by Aspen Planers throughout the development of the replacement **FSP**;
- (c) **MFLNRO** staff were also engaged to participate in the development of and to provide guidance to this replacement **FSP** and its' First Nations content;
- (d) acknowledgement and incorporation of the CAD systems for determination of affected First Nations parties during project referral;
- (e) in respect to agreements held between First Nations and provincial government, every effort has been made to ensure consistency with these agreements and protocols and this replacement **FSP**;
- (f) commitments have been made with regards to community-specific CHR protocols and various value management strategies, and many comments were incorporated in this **FSP**;
- (g) **FSP** results and strategies have been designed committing to developing protocol agreements and mitigation strategies with First Nations. This section also explains strategies in the absence of a protocol, or when agreement regarding mitigating strategies cannot be reached;
- (h) Aspen Planers continues to implement Best Management Practices that have been developed with specific First Nations groups and will continue to seek out and improve these practices and First Nations specific protocols.

### ***Public Review and Comment***

*In their report on FSPs, the Forest Practices Board identified a significant failing with respect to public review and comment. The public seeks better opportunities to review and understand the content of the FSPs and the forest management intent they contain. I expect that your FSP will be written in a style that is easy for the public to comprehend and that there will be enhanced opportunities for the public to review and comment on both your FSPs and your subsequent operational forest management activities.*

*I suggest that it is also appropriate to commit to offer the public ongoing, regular opportunities to review your FSP and forest management activities – spatially and in text form. This will provide you with important opportunities to explain your forest development activities to a concerned public.*

## **2. Public Review and Comment**

- (a) in face of board review regarding less than satisfactory public consultation, open house review sessions will be offered in affected areas of the **FDU** (Lillooet) in an effort to increase awareness of the document and its intent and provide enhanced opportunities for the public to review and comment. Open House Meeting was held on June 15, 2017 (Lillooet).
- (b) ease of comprehension has been considered in the writing of this replacement **FSP** – this includes a more readable presentation of the obligations, strategies, and guiding legislation and regulation affecting forest management;
- (c) this replacement **FSP** and rationale document will be posted on the Aspen Planers Ltd. website to provide easier public review and comment, as well as for future operational updates (via ArcGIS online).

### ***Defaults and Exemptions***

*It is my expectation that licensees will either commit to default practices in the Forest Planning and Practice Regulation or, propose alternative results and strategies (i.e. your FSP should not propose modified default results and strategies). Also, “self-exemptions” from results and strategies should not be proposed unless they are contained or limited to specified circumstances and particular areas (see FRPA bulletin 25 for guidance on flexibility options).*

## **3. Defaults and Exemptions**

- (a) This **FSP** has incorporated default practices, proposed results and strategies as well as alternative results and strategies that are contained or limited to specific circumstances and particular areas. Some of these alternate results and strategies are based on contemplated future events (such as **Damaged Timber**) and in situations where it is not practicable for the alternative to be consistent with the established objective, an exemption will be sought under the FPPR Section 12(7).

### **Best Practices**

*Forest Stewardship plans (FSPs) should take into account any best practices that have been shared, discussed and ratified at local Cascades Natural Resource District (CNRD) planning tables. For example, the “Old Growth Management Area Guidance Thompson Okanagan and the Cascades District Agreement for Managing OGMA Consolidation Mapping as Approved by DOIT Committee Members on July 15, 2013” is to be considered.*

## **4. Best Practices**

- (a) Best Management Practices stemming from local and higher-level roundtable discussions have been incorporated into this replacement FSP, including (but not limited to):
- i. Old Growth Order;
  - ii. Wildlife (all);
  - iii. Riparian Management;
  - iv. Wildlife and Biodiversity – Stand Level;
  - v. Cultural Heritage Resources;
  - vi. Community Watersheds;
  - vii. Scenic Areas;
  - viii. Invasive Plants;
  - ix. Natural Range Barriers;
  - x. Stocking Standards (at a provincial level)
  - xi. Access Management.

### **Climate Change**

*I expect Climate Change adaptation and mitigation strategies to be considered in your FSP. The documents: “Adapting Natural Resource Management to a Changing Climate in the Thompson Okanagan Region: Considerations for Practitioners and Government Staff and the, Forest Stewardship Action Plan for Climate Change Adaptation 2012-2017 February 27, 2012” and the “Climate Action Plan: Thompson Okanagan Region 2016 – 2020” will be considered.*

## **5. Climate Change**

- (a) Climate change adaptation and mitigation strategies will be considered through development of southern Regional stocking standards;
- (b) A fair amount of flexibility exists currently, however improvement will be sought through future adjustments;

- (c) Increases to riparian management retention and stand-level retention level commitments will contribute to higher levels of carbon sink on the harvested landscape.

### ***Roads and Access Management***

*Access resulting from forest development can lead to unintended cumulative impacts. I expect forest professionals will consider mitigating these impacts through such approaches as increased coordination, planning and implementation of access management with other forest licensees and non-licensee users, including First Nations communities, where appropriate.*

## **6. Roads and Access Management**

- (a) Current practices, including the soils result and strategy, minimize the amount of permanent access and encourages more temporary access structures wherever possible;
- (b) Promotion of temporary access levels versus permanent provide the opportunity to reforest and return more area to the THLB;
- (c) Outside of the FSP, best management practices are to reduce road density by employing the ‘No Net Gain’ concept in the TSA (deactivation to equal construction, in a given calendar year).

### ***Water Sustainability Act***

*The Water Sustainability Act and regulations were enacted February 29, 2016 and I expect forest professionals will familiarize themselves with this new legislation and ensure consistency within their FSP and operations.*

## **7. Water Sustainability Act**

- (a) Increased riparian consideration (retention, riparian management);
- (b) Watershed assessments;
- (c) Prompt road rehabilitation/deactivation and consistent maintenance to prevent failure or negative resource impacts;
- (d) Consideration of temperature sensitive streams/fisheries sensitive streams;
- (e) Made reference in R/S's to the Water Sustainability Regulation Sec. 43 & 44 in regards to any stream crossings.



### **Forest Health**

*I expect the annually revised CNRD Forest Health Strategy will be reviewed to aid in the development of new FSP content.*

#### **8. Forest Health**

- (a) The Annual Cascades Natural Resource District forest health strategy has been reviewed and issues have been considered during creation of this replacement FSP;
- (b) Commitment to addressing **Damaged Timber** (where applicable) has been incorporated in the FSP via the FPPR Section 12(7) process. An alternative strategy has been incorporated for VQO's, subject to a 12(7) exemption.

#### **Fuel Management and Fire Management Stocking Standards**

*The CNRD is dominated by fire prone ecosystems, with many values at risk. CNRD working in partnership with Wildfire Services Branch develops annual Fuel Management Plans for the district. These plans incorporate measures and actions to reduce fuels in the Crown land/rural interface and create landscape level barriers and strategic fire suppression control points in mid to upper elevation areas. I will be seeking industry cooperation in assisting the district and Wildfire Services Branch in achieving these objectives.*

*I expect that licensees will conduct harvesting operations within the two kilometer interface zone around communities to balance all values unique to these areas, including fuel reduction and scenic considerations.*

*Our Ministry has recently released Guidance on Fire Management Stocking Standards. I expect forest professionals will consider this guidance for their FSPs as well as increase their awareness of fuel loading and fuel management. The most current district fire management plans, as well as local community wildfire plans should be consulted and addressed where appropriate.*

#### **9. Fuel Management and Fire Management Stocking Standards**

- (a) Consideration of stocking standards that apply to fire management areas have been considered;
- (b) An application to the Forest Enhancement Society with regards to fuel management (long term fuel break creation, consistent with the CNRD) has been submitted;
- (c) Interface/fuel management projects are ongoing (i.e. Comstock Interface Tenure) and more will be pursued within community interface areas;
- (d) For interface projects, stocking standards that are specific to these areas have been and will continue to be considered.



***Invasive Plants***

*The Forest Practices Board was critical of the FSP measures for invasive plants. I expect forest professionals to increase their awareness and address their responsibility to prevent the spread of invasive plants by providing more robust measures. The Invasive Plants Prevention Guidelines for FRPA Operational Plans and the Habitat Susceptibility to Invasive Plants by BEC Zone are considered best available information. Key to preventing expansion of invasive plants and measures that support the training of operators and staff, preventative practices, monitoring, and treatments where necessary.*

**10. Invasive Plants**

- (a) Increased commitments have been made for general awareness and identification of Invasive Plants, with special emphasis of High Hazard Invasive species;
- (b) Direction and guidance was sought from the three Invasive Plant committees in the district during the development of the measures contained in this replacement FSP;
- (c) Invasive plant reporting, monitoring, and prevention measures have all been addressed and improved upon.

***Natural Range Barriers***

*The Forest Practices Board was critical of FSP measures for Natural Range Barriers (NRBs) finding the measures to be unnecessarily vague and lacking clear commitments to address NRBs. Removal of, or ineffectiveness of range barriers after harvesting has been an issue in the CNRD and was the subject of my direction in a letter dated August 2010 regarding “Natural Range Barriers on Range Pasture, Tenures and District’s Boundaries”. In addition to my 2010 direction, I expect forest professionals to demonstrate an awareness of FRPA General Bulletin Number 21 Managing Section 48 of the FRPA – Natural Range Barriers and reflect best practices for NRB in your FSPs.*

**11. Natural Range Barriers**

- (a) Clear and measurable commitments have been outlined in this replacement **FSP** with regards to Natural Range Barriers;
- (b) Best practices with regards to referral to range agreement holders prior to **Cutblock** harvest and road construction have been considered and incorporated into this plan;
- (c) The consideration of required management on range areas in the absence of an agreement holder have been incorporated;
- (d) There is a requirement for joint mitigation strategies to be developed between the range agreement holder and the holder of this FSP.

### ***Species at Risk***

*Best management practices for Species at Risk such as Williamson's Sapsucker, have been shared and I expect that the implementation of these management practices will be addressed in FSPs. It should be noted that the federal recovery strategy for Williamson's Sapsucker was released in 2014 and Critical Habitat has been identified in this strategy.*

### **12. Species at Risk**

- (a) The *Best Management Practices for Timber Harvesting, Roads, and Silviculture for Williamson's Sapsucker in British Columbia: Western Area of Occupancy* has not specifically been addressed in this replacement FSP, however plan-specific management strategies are considered on each project area where they apply.

### ***Dry-Belt Fir Ecosystems***

*Dry Belt Fir Ecosystems represent a complex and challenging harvesting opportunity in CNRD. These ecosystems have multiple values, often competing, and are managed for timber production, wildlife habitat, forest health, fire resiliency, forage production, recreation and range use.*

*When developing FSPs, I expect forest professionals to be mindful of the current science and the competing values represented by these ecosystems. Stocking standards and appropriate silviculture systems for dry belt fir stands must be consistent with these expectations. FLNRO regional specialists are available for discussion and training purposes to aid in your FSP development with respect to Dry Belt Fir areas.*

### **13. Dry-Belt Fir Ecosystems**

- (a) While there is no specific reference to management as it pertains to the complexities of these forest types, stocking standards, use expectations and overall forest health management, including interests and values presented by other forest users, have been considered in operational plans.

### ***Watershed Management***

*Management of Cumulative Watershed Effects to maintain water quality and quantity, timing of flows, stream channel dynamics, as well as aquatic ecosystem integrity, species at risk, fish and fish habitat must be recognized and managed for in your FSPs. I expect that forest professionals consider the best hydrology science and assessment guidance when considering the combined effects of forestry activities, other land uses and users, within all CNRD watersheds.*

### **14. Watershed Management**

- (a) Measurable commitments have been made throughout this replacement **FSP** with regards to temperature sensitive and fisheries-sensitive streams, through increased retention;
- (b) A continued commitment to hydrologic assessment in operational plans will ensure that the overall effects on watershed flow timing and quantity are mitigated.

### ***Stocking Standards***

*I expect forest professionals to address emerging forest health issues, fire management considerations, or emerging effects of climate change in their FSP stocking standards. Forest professionals should consider the Updates to the Reference Guide for FSP Stocking Standards (2014). I expect that professionals remain up to date with stocking standard changes and guidance as it becomes available.*

## **15. Stocking Standards**

- (a) Some variances have been added to the existing standards to deal with common occurrences that have been found to happen over the last ten years;
- (b) New standards as developed by Licensees and **MFLNRO** may be amended into the **FSP** at a later date.

### ***Stand and Landscape-Level Biodiversity***

*Natural disturbance patterns at a stand and landscape-level help to maintain forest biodiversity and the diversity and abundance of native species and their habitats. I expect that professionals consider best available science on natural disturbance regimes, stand level biodiversity and coarse woody debris, and build upon the existing coarse-fine filter legal designations and regulations that exist under FRPA or the Land Act where necessary.*

## **16. Stand and Landscape-Level Biodiversity**

- (a) Largely the Results/Strategies for both stand and landscape level biodiversity have been derived from the default practices;
- (b) The WTP retention level has been simplified to 7% for all harvesting, which mimics the practice requirement, versus the previous % by BEC zone;
- (c) A replacement process has been built into the Result and Strategy for “Restrictions on harvesting WTR”, similar to the 91(2) exemption process which would have to be used if FPPR Section 67 had been adopted.

### ***Collaborative Planning and Cumulative Effects***

*The combined effect of the activities of multiple licensees affects both aquatic and terrestrial values. Aquatic values are strongly influenced by factors of hydrology and geomorphology. Current watershed assessment guidance, new hydrologic research and cumulative effects assessment and monitoring suggest that the watershed scale is best suited to consider the effect of both past and planned forest activity. Terrestrial values associated with forest biodiversity are also strongly affected by the amount and pattern of forest seral stages over the broader landscape and require a broader focus to achieve positive outcomes for these values.*

*Given our growing knowledge and recent results from cumulative effects assessment, I believe there is a mounting case for collaborative planning across watersheds or at least within timber supply areas. On this basis I believe a case can be made for the development of a single FSP shared by licensees within a timber supply area. While I am hopeful for such an approach I recognize that licensees may prefer their own plans. If this is the case, I expect that licensees strive for the highest level of consistency possible through coordination and collaboration with other licensees.*

*The Cumulative Effects Assessment for the Merritt Operational Trial – March 2015 provides information with respect to Fish Habitat, Mule Deer, Moose, Visuals, Grizzly Bear, Old Growth Management Areas, and Watershed Condition. This document and its recommendation for the resource sector should be considered during FSP development.*

## 17. Collaborative Planning and Cumulative Effects

- (a) The Major License Holders within the Cascades Natural Resource District (CNRD) **FSP** have been meeting since April, 2016 to develop R/S's and an **FSP(s)** that would allow a high level of consistency if not identical R/S's;
- (b) Ministry staff have also been in attendance at all of these meetings so they would be fully informed and inclusive of discussions around R/S's;
- (c) Substantial and continual effort was made by Aspen Planers to invite First Nations to be part of this group developing new R/S's, however they did not attend; however, First Nations groups did engage outside of the Cascades Natural Resource District **FSP** Committee process (See Appendix A);
- (d) All core First Nations/representative groups in the TSA will be provided information regarding the new **FSP** in conjunction with advertising with the request to meet and discuss the content and/or any questions or concerns they may have had. These include, but are not limited to: Nxwisten (Bridge River), Ts'kw'aylaxw (Pavillion), Sekw'el'was (Cayoose Creek), Lil'wat (Mt. Currie), T't'q'et (Lillooet), Xaxli'p (Fountain), N'Quatqua (Anderson Lake), Xa'xtsa (Douglas), and Tsal'alh (Skatin, Samahquam and Seton). Further meetings will be held throughout the advertising period with regard to new **FSP** and First Nations' interest;
- (e) The latest Cumulative Effects Report, *Cumulative Effects Assessment for the Merritt Operational Trial*, (DRAFTv3.0, March 2015) has been reviewed, and the results and strategies contained in the **FSP** for the main topics of the report – Fish Stream Habitat, Moose Populations, Mule Deer Populations, Visual Quality Objectives, Grizzly Bear Populations, and Old Growth Management Areas (OGMA) - are in line with the recommendations made therein, and best management strategies have been designed with these recommendations where forest management is concerned. In addition, we recognize that current and upcoming GAR orders will further the cumulative effects considerations and drive site-specific management considerations outside of the direction of the FSP.

### **Results of Natural Resource Monitoring**

*I expect that forest professionals will continue to improve their management of the FRPA values and use tools such as Forest and Range Evaluation Program and Multiple Resource Value Assessments to learn and improve on practices.*

## 18. Results of Natural Resource Monitoring

- (a) Consideration has been given to recent FREP monitoring reporting conducted in the Merritt TSA (via regional report #41) and changes to specific results and strategies have been made based on report trends (for example, the careful development of Alternate Results and Strategies and more specifically, increases over current **FSP** commitments with regards to small stream retention).

***Integrated Silviculture Strategy***

*Licensees should be aware of the Integrated Silviculture Strategy (ISS) current being developed for the Merritt Timber Supply Area post TSR 5. Licensees should participate in the ISS development process and FSPs should consider the direction and recommendations that may be available from ISS albeit in the future.*

**19. Integrated Silviculture Strategy (ISS)**

- (a) Aspen is aware and will become involved in development of the ISS for the Lillooet TSA once initiated and will consider the direction and recommendations that may become available in the future.

***Forest Practices Board Audits and Recommendations***

*Finally, I encourage licensees to heed the advice in the Forest Practices Board audits and reports and commit to ensuring that results, strategies and measures are measurable and verifiable.*

**20. Forest Practices Board Audits and Recommendations**

From the onset of the development of the new FSP, Aspen Planers and other tenure holders within the TSA have been actively reviewing Forest Practices Board audits and we have ensured all results, strategies and measures are measurable, verifiable, and consistent with the objectives.

***Closing Remarks***

*I look forward to the continued success of the relationships you have established with FLNRO staff, the public, First Nations, and stakeholders within CNRD. I encourage you to build upon your successes in the areas of collaboration, innovation and leadership. The recent establishment of a Licensee FSP subcommittee bodes well for the creation of an FSP(s) that is complete, collaborative and in the best position to address the FRPA values, objectives and cumulative impacts, First Nations and the broader societal interests. I wish you well in moving forward on this important process. My staff are ready and willing to assist.*

*My letter, attachments, and all referenced documents, including the Forest Practices Board report, can be found on the FTP site located at [http://www.for.gov.bc.ca/ftp/DCS/external!/publish/FSP\\_Renewals%202016/](http://www.for.gov.bc.ca/ftp/DCS/external!/publish/FSP_Renewals%202016/).*

*Yours truly,  
(Original Signed)*

*Charles (Chuck) van Hemmen, RPF  
District Manager  
Cascades Forest District*

## 1. Interpretation

### 1.1 Definitions

“**Act**” means the Forest and Range Practices Act S.B.C 2002, c 69;

“**CP**” means a Cutting permit;

“**Current**” means, in the context of a FDP, FSP, timber sale licence, *CP* or *RP*, an approved document that has not expired or been replaced;

“**Cutblock**” - There is no definition of “*Cutblock*” in *FRPA* or its regulations but, since the term is used independently or as part of another term (see below) in a number of results or strategies, it is important that it be appropriately defined so as to clarify the specific commitments. In light of how it is used in results or strategies, this definition excludes very small patches or incidental harvest primarily because they would be very difficult to track and have negligible impact on consistency with the objective.

“**Damaged Timber**” means timber that has been affected by insects, disease, wind, fire, or other similar agents and is in danger of being significantly reduced in value, lost, destroyed, or poses risk to adjacent timber.

“**Date of Submission**” means the date this *FSP* was submitted for approval;

“**Established Cutblock & Established Roads**” - This definition identifies those *Cutblocks* and roads (see above definition) that contribute to thresholds in results or strategies that apply across areas larger than the *Cutblock* level. It is meant to address how the actions of multiple operators will be considered when determining compliance with the commitment. The definition gives precedent to *Cutblocks* and roads based on timing of certain planning or contractual milestones.

“**FDU**” means a forest development unit;

“**First Nation Band**” means a band, as defined by the Indian Act, R.S., 1985, c. I-5;

“**Forest Act**” means the *Forest Act* R.S.B.C. 1996, c.157;

“**FN**” means First Nation;

“**FPC**” means the Forest Practices Code of British Columbia Act R.S.B.C. 1996, c. 159 and all regulations thereunder;

“**FPPR**” means the Forest Planning and Practices Regulation B.C. Reg. 14/2004;

“**FRPA**” means the Forest Planning and Practices Regulation B.C. Reg. 14/2004;

“**FSP**” means a forest stewardship plan;



“**Holder of this FSP**” means, for each Licence specified in the *FSP* document, the holder of that Licence as indicated in that Paragraph, or any successor or assignee of that holder; “Holder” has the same meaning; and “Holders of this FSP” means all of those holders of those Licenses or any successor or assign to those holders;

“**ILMB**” means Integrated Land Management Bureau;

“**Legislated Planning Date**” – This definition simplifies subsequent drafting of *FSP* content by assigning a defined term to planned and periodic change provisions contained in the legislation.

“**MFLNRO**” means Ministry of Forests, Lands and Natural Resource Operations;

“**QP**” means Qualified Professional;

“**VQO**” means Visual Quality Objective;

“**VSC**” means Visual Sensitivity Class.

## 1.2 Relevant Date for Legislation and Objective References

This provision establishes a default date that determines which version of the legislation, objective, notice, etc. is being referenced. Only exceptions to this default rule would then need to be explained in subsequent provisions of the *FSP*.

## 1.3 to 1.12 Legal Conventions

Provisions identify legal convention to be used in interpreting the *FSP*.

### 1.9 and 1.10 Self explanatory

**1.11 Development Project in government’s interest** has been defined and this is statement is to apply to any *FSP* Result or strategy to be clear the *FSP* may not apply in certain circumstances where these types of projects are spear-headed by the government.

### 1.12 FPPR Section 12(7) Exemption

Again this may apply to any Result and Strategy where it has been determined by the *Minister* that one is exempt from the requirement to specify one that is consistent. The *FSP* Results and strategies will not apply as written. Rather than inserting this and the section above into each R/S the statements have been written only once in this section.



**2. Application**

N/A

**3. Term**

N/A

**4. Forest Development Units**

This *FSP* applies to operations in *FDU A*.

**5. Results or Strategies**

**5.1 Objectives Set by Government**

**5.1.1 Old Growth Order**

- (a) These strategies are based on the work of the CNRD Old Growth Management Area (OGMA) Advisory Committee which was convened in late April - early May 2003 and worked for over 1 year to place OGMA’s throughout the Merritt TSA;
- (b) the core data was based on the Nicola-Similkameen Innovative Forest Society OGMA analysis used in the 2003 uplift request. On May 11, 2006 Integrated Land Management Bureau distributed a draft “Regional Management Guide for Old Growth Management Areas” to all participates of the OGMA committee;
- (c) this document contains practices governing operations within OGMA’s and when replacement should occur and has been used as guidance;
- (d) the strategies in this *FSP* are based on the above mentioned document;
- (e) the current Strategy for the Old Growth Order incorporates polygons as described by the most current consolidated Old Growth Polygon layer on the map housed by the MFLNRO. This is in accordance with the Cascades NRD Agreement for managing OGMA’s as approved by the DOIT committee members on July 15, 2013;
- (f) the actual “Order” established non-spatial old growth objectives that came into effect on June 30, 2004;
- (g) the original OGMA layer as developed by the Advisory Committee was considered to meet the intent of the Order by the *ILMB* and they developed guidelines for the use of these mapped polygons;

- (h) incursions are generally for recovering timber damaged by insects, fire or similar events, but can also occur for other reasons that are operational in nature;
- (i) the replacement policy found in the guidelines has generally been adopted in this strategy where any incursion greater than 1 ha is replaced; and
- (j) the replacement area is then sent to the keeper of the consolidated data and the Old Forest Layer is updated annually through this strategy.

## 5.2 Objectives Prescribed under section 149(1) of the Forest and Range Practices Act

### 5.2.1 Soils Objective

Definitions for “Gross Cutblock Area” and “Percent of Cutblock occupied in permanent access structures” were added for clarity on the procedures used to measure the outcomes. These were derived from FREP extension note #28 (January 2014 Revision) dealing specifically with temporary access.

- (a) Most of the default for soils has been accepted in this FSP; however, the following specific items were changed:
  - (i) 35(4) was changed to remove the limit of exceeding soil disturbance by more than 5% for temporary access. It was replaced with two provisions:
    - A. the first allows for no limit on temporary access as long as the SU NAR is less than 5 ha, and the soils are not “sensitive soils.” This change is required to enable the use of temporary access structures in small standard units;
    - B. the second allows temporary access percent on SUs not spoken to above, to “borrow” from unused permanent access. This change is required to encourage the use of temporary access structures rather than permanent access structures;
  - (ii) both require rehabilitation to be in compliance with section 35(3) of the FPPR.
- (b) 35(6) and 35(7) were essentially ‘adopted as a result or strategy’; however, in order to ensure that cross references between sections of the regulation, and the *FSP* were correct and meaningful, we have embodied the text of section 35(6) & 35(7) into the FSP. Specifically Paragraph 5.2.1.3 has replaced reference to section 35(4).

## 5.2.2 Wildlife Objective

### Best Management Practices

While not specifically listed under each applicable species that the Best Management Practice for wildlife applies to, these strategies are employed to fulfill multiple management strategy requirements:

- a) Visual screening (moose, ungulates, bears, etc.);
- b) Access Management and No Net Gain concept (limiting hunting pressures);
- c) Enhanced riparian management (basal area retention)
- d) Small mammal habitat commitments (fisher)
- e) Incorporation of traditional knowledge (wildlife and human uses)

#### 5.2.2.1 Moose

A notice was issued under section 7(2) of the Forest Planning and Practices Regulation. The notice identified amount, distribution, and attributes of habitat required. Supporting information was also posted.

The result or strategy in this *FSP* considered the following:

- (a) ***Thermal Cover*** by retaining a significant amount of the forested area in each ***Moose Management Unit*** (where key habitat exists). Also, an emphasis for enhancing ***Moose Forage*** (palatable species of plants that are a food source for moose, including willow (*Salix spp.*), aspen (*Populus spp.*), birch (*Betula spp.*) and red-osier dogwood (*Cornus stolonifera*));
- (b) ***Visual Screening*** (vegetation or topography) between ***Extended Use Roads*** and ***Moose Management Units*** to provide cover for moose;
- (c) mitigating the effects of silviculture activities on moose forage;
- (d) on a Management Unit level, considers the total wildlife tree retention to ensure adequate retention.

#### 5.2.2.2 Coastal Tailed Frog

A notice was issued under section 7(2) of the Forest Planning and Practices Regulation. The notice identified amount, distribution, and attributes of habitat required. In addition to the notice, mapped occurrence data was posted at:

[ftp://ribftp.env.gov.bc.ca/pub/outgoing/cdc\\_data/Approved\\_FRPR\\_sec7\\_WLPPR\\_sec9\\_Notices\\_and\\_Supporting\\_Info/Species\\_at\\_Risk/Cascades\\_FD/Supporting\\_Info/Spatial\\_data\\_by\\_species/cascades\\_tailed\\_frog\\_2.shp](ftp://ribftp.env.gov.bc.ca/pub/outgoing/cdc_data/Approved_FRPR_sec7_WLPPR_sec9_Notices_and_Supporting_Info/Species_at_Risk/Cascades_FD/Supporting_Info/Spatial_data_by_species/cascades_tailed_frog_2.shp)

The result or strategy borrows from the “Accounts and Measures for Managing Identified Wildlife – Accounts V.2004”.

Suggested measures for access include, “**minimize roads or stream crossings within the core area.**” Since this statement alone would not be measurable, our result adds to this statement, “**by not constructing roads unless required for a stream crossing and no practicable alternative road location exists**”. There is no intention for a “self-exemption”; rather, this is the result or strategy based on the accounts and measures as indicated above with the intent to minimize crossings.

Also, when a stream crossing is required a specific Tailed Frog assessment will be completed by a **QP** which will assess potential impacts and make recommendations regarding design and installation. There is then a commitment to construct the crossing consistent with the design as well as the Water Sustainability Regulation Sections 43 & 44.

- (a) While not expressly discussed in the result or strategy, the following will also contribute to the conservation of sufficient habitat for coastal tailed frog:
  - (i) limitations on allowable annual cut during the term of this FSP;
  - (ii) the result or strategy for:
    - (A) Old Growth Order (note that many of the Old Growth Forest Polygons in the landscape where tailed frog that have been identified, are associated with streams. There is a minimum of **2000 ha** of Old Forest Polygons that contribute to the conservation of tailed frog habitat;
    - (B) Wildlife and Biodiversity – Landscape Level;
    - (C) Wildlife and Biodiversity – Stand Level;
    - (D) Water in Community Watersheds;
    - (E) Water, Fish, Wildlife and Biodiversity within Riparian Management Areas, including:
      - (I) Limitations on harvesting in a Riparian Reserve Zone; and
      - (II) Retention in a Riparian Management Zone;
      - (III) The amount and distribution of non-Timber Harvesting Land Base;
      - (IV) Other practice requirements within **FRPA** related to water quality;
      - (V) Other enactments (e.g. Federal Fish Act, Water Sustainability Act);
      - (VI) UWR for Mule Deer, Big Horn Sheep and Elk.

### **5.2.2.3 Flammulated Owl**

A notice was issued under section 7(2) of the Forest Planning and Practices Regulation. The notice identified amount, distribution, and attributes of habitat required. In addition to the notice, mapped suitability data was posted at:

*ftp://ribftp.env.gov.bc.ca/pub/outgoing/cdc\_data/Approved\_FRPR\_sec7\_WLPPR\_sec9\_Notices\_and\_Supporting\_Info/Species\_at\_Risk/Cascades\_FD/Supporting\_Info/Spatial\_data\_by\_species/flam\_owl\_suitability.shp*

Target area for suitable Flammulated owl habitat as per the Cascades Forest District Section 7(2) Notice has been met in the Lillooet TSA as a result of the Owl habitat overlap with Old Forest Polygons, inoperable and non-THLB area in the district. Old growth stand attributes, suitable for habitat, will be considered for WTP development on a project by project basis.

### **5.2.2.4 “Great Basin” Gopher Snake**

A notice was issued under section 7(2) of the Forest Planning and Practices Regulation. The notice identified amount, distribution, and attributes of habitat required. The type of habitat required is identified on the map in appendix B and the result and strategy to avoid these habitats will sufficiently protect this species.

The Result was built based on the “Accounts and Measures for Managing Identified Wildlife – Accounts V.2004”.

The suggested measures use language that may be difficult to measure so the result was written to be more concise. Such as, “**not construct a road unless no practicable alternative location exists.**” This should not suggest roads are not allowed, and if one reads the accounts and measures it is similar in that in the suggested measures it starts off with, “**Place roads as far as practicable from hibernacula and...**”.

Under 5.2.2.4.2 (d)(iv) where there is the need for a permanent road, any management strategies required will be determined by the Ministry as per the suggested measures in the notice. Then there is a commitment to implement them.

### **5.2.2.5 Spotted Bat**

A notice was issued under section 7(2) of the Forest Planning and Practices Regulation. The notice identified amount, distribution, and attributes of habitat required.

The Result was built based on the “Accounts and Measures for Managing Identified Wildlife – Accounts V.2004”.

### **5.2.2.6 Grizzly Bear**

Aspen will comply with the 2016 Draft Grizzly Bear Habitat and “Forestry General Wildlife Measures for Grizzly Bear Specified Areas in Lillooet TSA” as developed by the *MFLNRO*.

### **5.2.2.7 Ungulate Winter Range (Mule Deer, Bighorn Sheep and Elk) –**

A notice was issued under section 7(2) of the Forest Planning and Practices Regulation. The notice identified amount, distribution, and attributes of habitat required.

The Result was built based on the “Accounts and Measures for Managing Identified Wildlife – Accounts V.2004”.

### **5.2.2.8 Mountain Goat –**

A notice was issued under section 7(2) of the Forest Planning and Practices Regulation. The notice identified amount, distribution, and attributes of habitat required.

The Result was built based on the “Accounts and Measures for Managing Identified Wildlife – Accounts V.2004”.

## **5.2.3 Water, Fish, Wildlife and Biodiversity within Riparian Management Areas**

Most of the defaults for water, fish, wildlife and biodiversity within riparian management areas were accepted in this FSP, however, the following specific items were changed:

### **5.2.3.3 Retention in Riparian Management Zones**

When required to protect a riparian reserve zone, there will be retention within the RMZ within the block.

The retention in RMZ’s generally exceeds those stated in section 52(1) of the *FPPR* for minor tenures. The values listed under this paragraph are minimums and should not be considered as targets in all cases – rather, these retention levels may be increased, on a site-by-site basis, based on the judgment of a QP and/or based on area-specific community agreements regarding riparian management.

Of note are:

- (a) W3 wetlands were split into small (1 - <3 ha) and large (3 – 5 ha) and prescribed at 10% and 25% retention respectively. Often more retention will be left in these areas as these locations represent good anchors for WTR which, when chosen, results in 100% retention. But because these decisions are site specific, flexibility was built into the FSP;
- (b) L1-A and L1-B are not referenced because they do not have riparian management zones;

- (c) only the small S6 streams under 1.5m wide and those S6's with harvest methods other than ground based indicate 10% RMZ basal area retention. This lower retention allows accommodation of various stand management strategies, with consideration to the following:
  - (i) these streams will all have a 5 m No Machine Zone (NMZ) established prior to harvest;
  - (ii) in turn, the standard practice is to retain, where practicable, understory brush, poles, saplings and regeneration - variable retention levels of layers 2,3 & 4, within riparian management areas in the norm;
  - (iii) this level of retention allows the logging supervisor to make on-site decisions around leaving only the best, wind-firm stems;
  - (iv) other stream features (such as coarse woody debris and streamside vegetation) may exist and will be protected by no-machine flagging – this, in addition to preservation of non-merchantable understory pole, sampling, regen and riparian management area brush will contribute to maintaining small stream values (for example, temperature, water quality, and habitat protection);
- (d) where basal area retention is required, two options may exist to ensure it is retained – either prescriptive measures will be written into the SP (in terms of stems per ha to retain, based on piece size), or a hard reserve will be established (excluded) from the **Cutblock**.
  - i.e. 25% basal area retention on a 30m RMZ (i.e. W3) = either
    - a) 7.5m reserve area to be excluded from the block; or
    - b) 25% of basal area to be retained dispersed within the 30m RMZ.

The decision regarding retention choice (basal area vs. reserved stems, or some combination thereof) and the amount of retention will vary depending on timber type, susceptibility to future forest health issues, blowdown and the potential for stream bank disturbance, operational constraints, or other known values (i.e. water, cultural, wildlife values, OGMA, etc.)

- (e) Best management practices are to take all necessary measures to determine the presence of fish on all default S4 streams. Where fish presence is confirmed, and on S4's in community watersheds, every effort will be made, where practicable, to establish a 10m reserve zone to enhance protection of small stream values. Alternatively, 30 % basal area retention measures contributing to stream value preservation will be established (i.e. 30% approximates the equivalent retention provided by a 9m reserve).



### **5.2.3.4 Alternative Strategies to Retention in Riparian Management Zones**

Some of these alternatives are necessary for the stated reasons and will not always be required when there is a larger RMZ and would normally be used where these activities preclude leaving the stated RMZ retention % on small areas of RMZ. These are similar to the FPPR Sections 50(1) and 51(1) which were adopted in this paragraph.

### **5.2.3.5 Restricted Operation of Machinery**

This is an extra commitment over the current FSP which restricts machinery within 5m of a stream. These NMZ's are also established on NCD's.

### **5.2.3.7 Stream Crossings – Protection of Water Quality and Aquatic Ecosystems**

This paragraph was added to highlight the sections of the new Water Sustainability Act and Regulations that are applicable to stream crossings.

## **5.2.4 Wildlife and Biodiversity – Landscape Level**

### **5.2.4.1 Maximum Cutblock Size and Harvesting Adjacent to another Cutblock**

The default practice requirements sections 64(1) and 65(2) of the *FPPR* have been adopted as a result/strategy for Wildlife and Biodiversity – Landscape Level.

Patch size analysis by NDT type (as per the Biodiversity Guidebook outlining target standards by unit) has been completed for the Lillooet TSA. This analysis shows a deficit of larger disturbance areas in certain landscape units. As a result, larger patch sizes – beyond the FPPR maximum – may be developed within certain units in the TSA.

Adjacency and size, in certain cases, may be managed for, under a DM exemption, in the event of forest health management requirements.

## **5.2.5 Wildlife and Biodiversity – Stand Level**

The Result has essentially adopted the practice requirements of section 66 and 67 of the *FPPR* with the following differences:

- (a) paragraph 5.2.5.2&3 Result replacing section 66:
  - (i) rather than use *Cutblocks* harvested in any fiscal calendar year this result uses all *Cutblocks* belonging to *CPs* issued in each calendar year;
  - (ii) the total WTR will be a minimum of 7% of the total Gross Block Area of all *Cutblocks* in the *CPs* issued and will be a minimum of 3.5% for single *Cutblocks* > 5 ha.

Gross Block Area has been defined as the sum of the ‘net area to be reforested’ (NAR) and the ‘area occupied by permanent access structures’. This comes from discussions at the FSP committee meetings, and specifically directions from district staff. In short, we do not include internal WTP’s in the area as that would be ‘double counting.’ Also, we do not include swamps and NP ground, but do include permanent road even if it is pre-existing; thus, the area we have used is the sum of (NAR + permanent road area).

The *FSP* identifies a block level commitment and a commitment over an annual harvest. This is aligned with the *FPPR*. We have not included a block obligation for WTR on blocks less than 5 ha. This was done in recognition of:

- (a) while there is no obligation to assign WTR to these small blocks, the obligation on the annual harvest will include the blocks less than 5 ha;
- (b) the currently accepted approach within the TSA to WTPs has been to not have WTPs assigned to blanket salvage *Cutblocks*; and
- (c) the block level WTR obligation resulting from small *Cutblocks* would result in very small WTP’s, which may be more difficult to manage; may be overly fragmented; and may not be located in the best potential sites. In many cases, single tree and dispersed retention is standard practice which contributes to WTR in all sizes of *Cutblocks*.

**Paragraph 5.2.5.4 Result replacing section 67:**

- (a) Additions to this result include a replacement strategy for when WTR is harvested, and for safety and road maintenance activities;
- (b) whereas section 67 has been exempted, through a conditional exemption section 12.5(2) the exemption section 91(2) does not apply anymore since it is specific to section 67. Section 91(2) only would apply to FSP holders who adopted section 67;
- (c) we believe the intent of the conditional exemption would allow and likely there is an expectation to include similar language in the replacement piece. This has been done in the writing of this result.

### 5.2.6 Cultural Heritage Resources

The result and strategy commits to communication with potentially affected First Nations and/or Tribal Council(s). The intent of this result and strategy is to maintain the status quo in regards to our relationships and processes with First Nations and/or Tribal Council(s). The intent is to also follow any specific agreements that the *FSP* holder has with any *First Nation Band* or Tribal Council.

The potentially affected *FNs* are now defined by the Consultative Areas Database and also include those who have directly expressed an interest to the *FSP* Holder.

There is also a commitment to follow a *CHR Evaluation Protocol*, which is a signed agreement between the *FSP* Holder and the *FN*.

In the absence of a formal protocol, there is a process that outlines how to identify where a *CHR evaluation* is recommended.

There is a commitment to, jointly with the First Nation Band, create a *CHR Mitigation Strategy*, based on the above CHR evaluations.

There is also a process to deal with disagreements or unclear advice in regards to the recommendations and strategies chosen.

Community-specific commitments, following St'at'imc-specific protocols and agreements, have been established outside the framework of the FSP that include management of high-value project aspects cultural heritage resources, wildlife, access management and water (to name a few).

### 5.2.7 Water in Community Watersheds

This Strategy requires a *Community Watershed Assessment* to be done prior to carrying out timber harvesting or road construction and that all primary forest activities are conducted consistent with the assessment.

It is normal practice to communicate with the licensed water user community that may be affected, where applicable as part of an annual referral process.

Alternatively, if feedback or concerns are received, then extended dialogue may occur as necessary.

### **5.3 Other Designations and Objectives Established or Continued under FRPA**

#### **5.3.1 Scenic Areas with Established VQO's**

The proposed result and strategy addresses the various established visual quality objectives, as established by the Cascades Forest District Manager, and as defined by section 1.1 of the Forest Planning and Practices Regulation.

This result commits to being consistent with the *VQO*, at the completion of harvesting and/or road construction.

Alternative results and strategies include those where harvesting for safety reasons, where engineering constraints limit the location of roads, and where linear boundaries already exist, and to recover *Damaged Timber*.

##### **5.3.1.4**

In the case of *Damaged Timber*, the Alternative result and strategy, is subject to an exemption by the Minister under *FPPR* sec 12(7) and any conditions imposed. The alternative result and strategy outlines measures to ensure the extent of alteration is bounded by the extent of the *Damaged Timber*, and considers all of the design elements of the *VQO*.

#### **5.3.2 Scenic Areas without Established VQO's**

Scenic areas in the TSA will be managed to the applicable Visual Sensitivity Class (in lieu of Visual Quality Objective) and, where applicable, to the same standards of practice as areas with established objectives.

#### **5.3.3 Interpretive forest site, recreation site or recreation trails – without objectives**

When managing within interpretive forest sites, recreation sites and/or recreation trails, the licensee will not only seek DM exemption, but will employ best management practices as outlined as a minimum to ensure protection of the recreation resource.

## 6. Stocking Standards

**Appendix A, Section 1.1 - Regeneration commencement date:** Setting the regeneration commencement date on December 1 in the year that harvest on a *Cutblock* commences has two significant advantages.

- (a) A December 1 regeneration date will enable growing seasons to be measured for regeneration establishment as opposed to years and will enable 5 growing seasons on natural regeneration blocks prior to surveying. With the current regeneration delay system a block will have either have 4 or 5 growing systems depending on the months that harvesting occurs. The following timeline outlines two harvesting scenarios.

### **Scenario 1**

Harvesting commences on a natural block-	February 2006
Harvest completed-	October 2006
Regeneration due current system-	February 2013
Proposed Regeneration Date-	December 1, 2013

With a February, 2013 regeneration delay date the block must be stocked and surveyed by the summer of 2012. To meet this deadline a survey must be conducted in 2010 to allow sowing to occur if planting is required. This allows for 4 growing seasons if the survey is conducted in the fall of 2010. A significant portion of the blocks harvested between February and August will only have 4 growing seasons prior to a survey being conducted.

With the proposed regeneration commencement date this block could be surveyed in 2011 and planted in the summer of 2013 which enables 5 growing seasons.

### **Scenario 2**

Harvesting commences on a natural block-	November 2006
Harvest completed -	February 2007
Regeneration due -	November 2013
Proposed Regeneration Date-	December 1, 2013

With a November, 2013 regeneration delay date the block must be stocked and surveyed by the summer of 2013. To meet this deadline a survey must be conducted in 2011 to allow sowing to occur if planting is required. This allows for 5 growing seasons if the survey is conducted in the fall of 2011. The proposed regeneration commencement date has no impact on the amount of growing seasons for blocks where harvest commences between September and December 31.

- (b) The second is an administrative advantage. Having the regeneration delay for every block on December 1 of each year simplifies the current system. It allows planting and surveying to occur in the year that regeneration delay is due. Currently when querying regeneration delay year, you must look at the month because any blocks with harvest commencement months in the first half of the year must be stocked and surveyed the previous summer.

Regeneration delay is always met in the summer, usually through spring planting. The December 1 date was chosen as the summer is the field season for silviculture staff and they may not have time to report regeneration met to *MFLNRO* until December.

This change to the regeneration commencement date will only impact blocks where natural regeneration is being relied on for stocking. If planting is prescribed it is within the Licensee's best interest to establish trees on the site as soon as possible to minimize competition from competing vegetation and to take advantage of the nutrient flush following harvest. The Lillooet TSA Sustainable Forest Management Plan (SFM) has a commitment of achieving 90% of areas prescribed for planting completed within the third growing season from the start of harvest. We have consistently exceeded this target since the inception of these SFM plans.

It is anticipated that using a December 1 regeneration commencement date will not have a measurable impact on the average regeneration delay for blocks harvested under this FSP.

#### **Appendix A, Section 3.0 - Species and free growing height:**

Free growing heights are consistent and species are generally consistent with the currently approved FSP's for the licenses within this FSP.

##### ***Broadleaf Species***

Broadleaf species as specified in these stocking standards as acceptable only if they are residual stems and will contribute to biodiversity.

#### **Appendix A, Section 6.1- Minimum inter-tree distance (MITD):**

There are a variety of reasons to vary from the ideal 2.0 m spacing, as outlined under *FSP* Appendix A, section 6.1.

It is also acknowledged that microsite selection at the time of planting is critical to the survival and performance of the seedling.

In order to exploit and maximize the growing capacity on specific limiting sites, flexibility in the inter-tree distance must be available.

The situations where the MITD will be reduced are consistent with situations specified in the Establishment to Free growing Guidebook: KFR.

Where a reduced inter-tree spacing is applied, the limiting or constraining site factor must be identified in the Site Plan and the inter tree spacing should only be reduced to the extent necessary to ensure adequate stocking of the site can be achieved utilizing preferred microsites.

Guidance from the ongoing Thompson Okanagan Stocking Standards Working Group has been included in the variances section. An amendment may be submitted upon completion of any changes to the stocking standards made by this group.

## 7. Measures to Prevent the Introduction or Spread of Invasive Plants

Measures are identified in the plan.

- (a) Risk: Under our *FSP* and the *FPPR* s. 40, we have two different obligations to apply seed to address two different values. The *FSP* obliges applying seed, where it is likely that an invasive plant will be introduced or spread. Section 40 of the *FPPR* requires revegetation of a constructed or deactivated road if it reasonable to foresee that erosion would cause sediment to enter a stream.

Because of the complexity of managing two similar but different obligations, in practice we will manage the two issues with a single, broad, overarching practice that accommodates both. This will mean that our practices will need to:

- (i) apply to a broad enough area to address both invasive plants and erosion potential into streams (or other s.149(1) objectives);
  - (ii) include sufficient rigor and monitoring to ensure sufficient catch (i.e. revegetation) required under s. 40; and
  - (iii) include sufficient rigor and monitoring to ensure the catch has occurred within the timelines required under s. 40 (2 years).
- (b) Likely: Section 17 of the *FPPR* requires that a measure be specified if the introduction or spread is likely to be the result of the person's forest practices. If the spread is not likely, then a measure is not required.

The “FRPA Administration Bulletin Number 3: Interpretative Guidance Respecting Forest Stewardship Plan Questions” addresses the question of ‘Likely’. It identifies the following factors in determining likelihood:

- (i) are there or has there ever been a history of a particular species of invasive plant growing within the *FDU*;
- (ii) is it likely that any of the identified invasive plants would survive or spread if seed was introduced to an area within an identified *FDU*;



- (iii) if the harvesting is largely limited to winter operations, is it likely that seed could be introduced by the harvesting or that conditions would be created for seed establishment in the summer.

Based on this, an assessment of ‘likely’, under the FSP, will take into consideration aspects such as:

- (i) presence or absence of invasive plants;
- (ii) abundance of invasive plants;
- (iii) proximity of invasive plant species to operations;
- (iv) preferred habitat of the plant species, compared to site conditions such as:
  - (A) the elevation;
  - (B) biogeoclimatic zone, subzone and variant;
  - (C) moisture regime; and
  - (D) aspect;
- (v) season of operations.

At this point, we do not have a reliable tool to implement to determine ‘likely’, and until such time as a reliable tool exists, grass seeding will be applied broadly.

Here are some of the changes over the initial **FSP** Measures:

- (i) the High Hazard Invasive Plants (HHIP) list has been derived from consultation with the three Invasive Plant Committees within the district;
- (ii) these High Hazard Invasive Plants have been earmarked for training of personnel and for identification and reporting. These are two new measures;
- (iii) the seeding of exposed mineral soil exceeding 0.1 contiguous ha within **Cutblocks** for other than permanent structures has been expanded to cover all invasive plants and not just the HHIPs;
- (iv) the commitment to reseed has been set at <10% cover and is limited within an Invasive Plant zone;
- (v) the inspection and cleaning of equipment has been broadened to include all Invasive Plants rather than just the HHIPs. Inspection frequency, timing and cleaning are outlined as part of the Aspen SFM/EMS management program; and

- (vi) inspection results for grass catch are documented on road inspections and grass catch successes are tracked in Phoenix.

As per section 7.5 of the **FSP** (Timing and Seed Quality) - Target 90% seeded areas prior to July 1<sup>st</sup> - as per the flexibility in percentage of areas seeded by July 1<sup>st</sup> is required to allow for instances where operational constraints (seasonal) may prevent 100% of the grass seeding area to be completed by July 1<sup>st</sup> of the immediately following calendar year, but the commitment remains to achieve 100% grass seeding, nonetheless, prior to December 31<sup>st</sup> of the immediately following calendar year.

## **8. Measures to Mitigate the Effect of Removing or Rendering Ineffective Natural Range Barriers**

Some highlights are:

- (a) mitigative actions and strategies are defined to include subject to Ministry standards and approval and also ensured they are measurable in regards to who, what, where, when;
- (b) measures include a commitment to refer on an annual basis, the location of new harvest and road building activities, and request from the range agreement holder, the location of NRBs that may be affected, and to conduct activities consistent with the NRB Mitigation Strategy;
- (c) also included is a commitment to refer to the **MFLNRO** where the range tenure is not currently assigned.

## 9. Notice, Review and Comment

### 9.1 Advertisement

- (a) As per section 22(2)(a) of the *FPPR*, the following are a copies of the notices published under section 20 of the *FPPR*. Notices were advertised in the Lillooet News on August 2<sup>nd</sup>, 2017.



### Aspen Planers Ltd. – Lillooet Division Forest Stewardship Plan

Aspen Planers Ltd replacement forest stewardship plan (FSP) for the Lillooet Timber Supply Area is available for public review and comment between August 2<sup>nd</sup> and October 3<sup>rd</sup>, 2017.

The FSP outlines the results, strategies or measures that Aspen Planers must achieve in order to be consistent with government objectives for forest values including: timber, biodiversity, cultural heritage resources, visual quality and recreation resources.

This plan is publicly available for review and for written comment. Those wishing to review this plan may do so by appointment, during normal working hours at the Lillooet Woodlands office located at 530 Main Street, Lillooet BC, as well as the Merritt Woodlands office at 1375 Houston Street, Merritt, BC. To make an appointment to review the plan, please telephone (250) 315-4250 or (250) 315-4218.

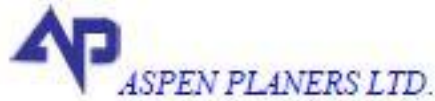
Alternately, the plan can be viewed online at: <http://aspenplaners.ca/sustainability/>

Written comments may be mailed, faxed, or emailed to Brent Turmel, R.P.F., Planning Forester, Aspen Planers Ltd, PO Box 160, Merritt B.C. V1K 1B8, Tel: 250 315-4218; Fax: 250 315-4239. Email: [BrentTurmel@apgroup.ca](mailto:BrentTurmel@apgroup.ca)  
Written comments may also be submitted in person to the address above.

**Public media advertisement, as shown in the Bridge River - Lillooet News (to run week of August 2<sup>nd</sup>, 2017):**

DRAFT

The following is an example of the FSP referral letter, dated July 25, 2017, was sent to 121 parties inviting participation in this process – see appendix B for referral list (2 pages):



July 25, 2017

Address:

Attention:

Re: Aspen Planers New Forest Stewardship Plan

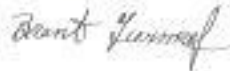
Aspen Planers Ltd. replacement forest stewardship plan (FSP) for the Lillooet Timber Supply Area will be available for public review and comment starting August 2, 2017 and can be found using the following Link: <http://aspenplaners.ca/sustainability/>

This is a new FSP that replaces the current FSP that was developed in 2007. The FSP outlines the results, strategies or measures that Aspen Planers must achieve in order to be consistent with government objectives for forest values including: timber, biodiversity, cultural heritage resources, visual quality and recreation resources.

Aspen Planers Ltd. requests a meeting at your earliest convenience to discuss this FSP and the referral process. We are planning on submitting the FSP for approval within the next few months and would appreciate your input prior to submission. Please call our office during normal working hours to set up an appointment.

I have attached a summary of key new Results & Strategies to the new FSP that are based on updated "Best Management Practices" and/or new Government Action Regulations (GAR Orders) that are a significant improvement over the original FSP.

Sincerely,



Brent Turmel, RPF  
Planning Forester  
Aspen Planers Ltd.  
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Attachment: Summary of New FSP Results & Strategies





A forest stewardship plan (FSP) must be prepared by all Major License (ML) holders under the Forest Act.

The FSP has a term of five years and may be renewed for an additional term. It contains a description of the forest development units where harvesting and road building may occur and must specify results or strategies that describe how a ML holder will meet the objectives set by government for the 11 resource values of: Soils, Timber, Wildlife, Water, Fish, Biodiversity, Visual Quality, Cultural Heritage, Recreation, Invasive Plants and Natural Range Barriers. The provincial government must approve an FSP before associated permits can be issued to the agreement holder. Review and Comment FSPs must be made publicly available for review and comment. A licensee must advertise that the plan is available and allow at least 60 days for comments to be received. This process allows other tenure holders, professionals, communities, stakeholders, and the public to provide input on these plans. FSPs must also be shared and discussed with affected First Nations as part of the licensee's obligation to consultation.

- [Get Involved in FSP Review \(PDF\)](#)

### Summary of Aspen Planers Ltd. New FSP Results & Strategies:

- 1) **Old Growth Management Area (OGMA) – No Change** - Commitment to follow Non-spatial OGMA order and Lillooet TSA Committee OGMA replacement process.
- 2) **Soils** – Increased commitments for Rehabilitation where it is necessary.
- 3) **Wildlife** – Mule Deer, Bighorn Sheep & Elk are covered under the current a Draft Government Actions Regulation (GAR) Order. Grizzly Bear & Goat are covered off under established Wildlife Habitat Areas (WHA's). Addition commitments and best management practices have been incorporated for Mule Deer, Moose, Coastal Tailed Frog, Gopher Snake and Spotted Bat.
- 4) **Water, Fish, Wildlife & Biodiversity within Riparian Management Areas** – Significant commitment in all of the Riparian Categories for Increased Basal Area Retention (or Reserve) within a stream or wetland Riparian Management Zones.
- 5) **Wildlife and Biodiversity – Landscape Level – No Change**
- 6) **Wildlife and Biodiversity – Stand Level** – Increased commitment for Wildlife Tree Retention (WTR) to 7.0% for all Biogeoclimatic Ecosystem Classification (BEC) zones.
- 7) **Cultural Heritage** – Enhanced to be consistent with any Cultural Heritage Resource (CHR) Protocol established with a First Nation Group and commitment provide information (may be protocol specific) prior to any road building or harvesting activities and conduct an CHR Evaluation and follow the recommendations of the CHR Evaluation.
- 8) **Water in Community Watersheds** – Increased commitment to conduct Community Watershed Assessments based on all levels of activity within a Community Watershed.
- 9) **Scenic Areas "Visual Quality"** – More defined alternate results & strategies in scenic areas where forest health factors are to be addressed and commitment to seek a District Manager Amendment to conduct forest management in Scenic Areas for Forest Health factors.
- 10) **Recreation** – Increase commitment and best management practices for operations that proposed within a recreation site or trail.
- 11) **Invasive Plants** – Significant increased commitment for grass seeding, reporting, education and training.
- 12) **Natural Range Barriers** - Significant increased commitment for management and use of best management practices for Natural Range Barriers.

## **9.2 Copies of Written Comments Received**

As per section 22(2)(b) of the *FPPR*, below is a copy of written comments received under section 21 of the *FPPR*:

- (a) As per the table below outlined in Appendix A of this document.

## **9.3 Description of Changes Made to the Plan as a Result of Comments**

As per section 22(2)(c) of the *FPPR*, the following changes were made to the plan as a result of comments received under section 21 of the *FPPR*:

- (a) As per the table below outlined in Appendix A of this document.

## **9.4 Efforts to Meet with First Nation Groups Affected by the Plan**

As per section 22(2)(d) of the *FPPR*, below is a description of efforts made to comply with the requirements of 21(1)(d):

Concurrent with advertisement of the draft FSP, correspondence (phone and email follow up) was conducted with all Lillooet TSA core First Nations to request meeting and discussion regarding the draft FSP.

Meeting and discussion with First Nations and specific discussion listed in Appendix A of this document.

## **9.5 Efforts to Meet with All/Other Stakeholders Affected by the Plan**

As per section 22(2)(d) of the *FPPR*, below is a description of efforts made to comply with the requirements of 21(1)(d):

Concurrent with advertisement of the draft FSP, correspondence (phone and email follow up) was conducted with all Lillooet TSA stakeholders to request meeting and discussion regarding the draft FSP.

Meeting and discussion with stakeholders and specific discussion listed in Appendix A of this document.