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Dr. Kari Stuart-Smith, PhD., RPBio. Canadian Forest Products Ltd., 1000 Industrial Rd # 1, Box 2200, Cranbrook, BC, V1C 4C6

RE: Review of HCVF Assessment entitled - High Conservation Value Assessment for HCV 1-3 in Canfor's Operating Area in the East Kootenay Region of Southeastern British Columbia - 2015 Compilation and Update

Kari.

Thank you for the opportunity to review the Canfor Kootenay Forest HCV assessment.

I have attached an electronic copy of this review, my CV, and the HCV Resource Network process which I have used as guidance in preparing this review.

I use the review process described by the HCV Resource Network Technical Panel, but this review is not conducted under their auspices, or their oversight. The opinions are solely mine.

The HCV RN document is described as a means:

- To provide HCV practitioners with a checklist of the key elements which should be covered in an HCV report
- To support reviewers in assessing the key elements of an HCV report,
- To facilitate the discussion of key findings of an HCV report, and
- To ensure that reviews of HCV reports are consistent and comparable across different applications of the HCV approach.

The review follows Checklist C of that document, (parts 6.3 and 8.1 are not applicable -- related to land conversion such as palm oil). This review is for a process that is following a credible natural resource certification scheme - in this case FSC.

Overall, I found your report to be an excellent assessment of HCVs in the forest. The process for consultation appears to be robust with a strong Technical Advisory Group (TAG) that was committed to the project. The report appropriately based its decisions on the BC toolkit and references it. It also provides a description of the evolution of the framework, which is helpful.

The assessment team conducted a lengthy and thorough evaluation of the forest. If there are any information gaps, they would not be easily bridged. The report conveys the role and discussions of TAG. The use of a Decision Makers Group (DMG) was appropriate and efficient. The terms of reference would be interesting to see as part of this document, if it can be shared.

Regarding the HCV designations, the report provides a short description of the most significant points for each HCV designation decision. There is enough detail for most informed readers to judge the appropriateness. There is a minor concern listed below about adding links to some of the more substantial discussion in other documents.

Most notable is the high level of technical analysis that was used to assess the values. The report conveys the nature of the analysis without being burdensome.

I have made a number of minor recommendations and these are listed in the detailed review that follows this letter. Most of these address some minor readability improvements for technical information. Here are some of them:

- In the report a unified list of the designated HCVs would be helpful. It is important to give some perspective by showing the "designated" HCVs that are covered by the precautionary principle, even if management is covered in a companion document.
- Links to supporting documents could be stronger. In some cases I was wondering about the nature of the original information. Links to online sources could convey that information.
- The connection with the <u>Forest Management Plan</u>, and the Guidance documents might help to clarify the science background and source of expertise, as required in the FSC standard.
- The report does not really discuss the precautionary approach required in the FSC Standard. It
 does refer to it being covered in the management companion document. Currently the report
 does not fully explain how the precautionary approach is fulfilled.
- The authors could consider providing the names of specific experts responsible for each HCV with contact information. We noted the names of some experts were attached to some values, like Grizzly Bears. If it is feasible, experts for each value would be helpful.
- There are a few typographical errors still in the report. Numbered headings, while bureaucratic looking, could help the reader to follow the discussion. This includes heading consistency Appendix 2 or Appendix B?

These minor recommendations and some other listed below would help to bring the report into line with the current application of the HCV Resource Network Review Guidance document. They are not a requirement. This is an excellent assessment of HCVs in the forest.

For reference purposes for your auditors, my level of effort in preparing this review was 9 hours. I have examined the process carefully. I did not assess the management plans and monitoring plans as it was out of scope for this review, as were some of the elements of the framework.

Again, thank you for the opportunity.

Sincerely,

Tom Clark

Attachments:
Electronic copy of this review
HCV RN review guide
CV for Tom

J/2 CQ

Review of the HCV Assessment for the license forest area of Canfor's Operating Area in the East Kootenay Region of Southeastern British Columbia, Canada

The following forms are based on the Peer Review procedure from the HCV Resource Network. They have been modified by CMC to fit into a form structure, but otherwise follow all of the requirements.

For questions contact Tom Clark at 705 645 2580 or tom@tomclark.ca.

In the following review the findings are classified as none, major, minor, or not applicable (N/A) . Note that major/minor issues do not affect the management or monitoring of the HCVs in the field. These are issues with documentation or other aspects of the report.

- Minor findings show inconsistency with the guidelines and intent of the HCV RN review protocol.
- Major findings should be addressed by the authors because the report is missing a key piece of information.
- Major/minor is not equivalent to an audit finding.

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1. Executive summary of the document

In this section the review evaluates:

- a) Are the key findings clearly presented and summarized?
- b) Does the summary accurately reflect the findings and recommendations of the main document?

Findings:

There is a brief executive summary for this assessment. For the purposes of this review, we have treated the introduction and Table of Contents as part of the Executive Summary.

These sections contain:

- A description of the evolution of the standard in general.
- History of HCV Assessment in the East Kootenay I particular, which puts the headings into perspective.
- The Methods section describes primarily the work with stakeholders and indigenous people to establish the original HCVs.

The Table of Contents (ToC) was useful for an overview of the subjects covered in the assessment.

As a minor point, it would be helpful to have a Table or an Appendix that lists in one location all of the HCVs on the forest you category and element. This is partially done for example in Table 1 for species at risk, but the complete list is not available. It may be in a companion document which was not available. Taken together Table 1, Appendix B – Table 1, and Appendix 1 - Table 3 appear to be designated HCVs. There are some other Tables (Appendix B Table 5) that might be designated, but it is not clear.

Issues: None Minor Major N/A
Minor - Somewhere in the report a unified list of the designated HCVs would be helpful. It is important to
give some perspective by showing the "designated" HCVs that are covered by the precautionary principle,
even if management is covered in a companion document.

2. Scope of the assessment

In this section the review evaluates:

- a) Is the assessment area and surrounding landscape clearly defined?
- b) Is there a basic summary of the company and its operations in the area?
- c) Are the impact and scale of proposed operations adequately described?

Findings:

The report covers HCV 1, 2 and 3 and the assessment. There are companion reports that describe HCV 4,5,6 and management strategies that are not covered by this review:

- 1. An updated assessment for ecosystem services (HCV 4; HCVF Category 3) was completed in 2014 by a professional geomorphologist and a geotechnical engineer, including the management strategies for the associated HCV areas (Green and Halloran, 2014).
- The assessments for HCV 5 and 6 (HCVF Category 4) for community needs and cultural values
 were completed in a collaborative fashion between the company and First Nations. The results of
 these assessments have not changed since the dates of their original assessment (Lower
 Kootenay Band, Cathro 2008, Tabacco Plains 2012; St. Mary's Akisqanuk 2012).
- 3. Management strategies for the HCV Areas can be found in a separate document, due to their length. The management strategies are intended to maintain or restore identified HCVs consistent with a precautionary approach, as per FSC requirements.

In this review "scope" refers to whether the assessment describes the area, operations and impacts. The Canfor report covers a long time line and a large amount of HCV discussion in a very succinct manner at a high level. It provides enough information that an informed member of the public or an auditor would be able to enquire about how a particular HCV was designated, or not. It provides details for these decisions in Appendix B (Details pertaining to HCV in Category 1 and 2). This table is quite cryptic, using acronyms and other information that is not easily understood to outside readers. However, it does provide documentation of the nature of the decision and concerned readers can use this as a basis for further inquiry. Given the open nature of the documentation on these public forests, the lack of transparency of this particular table is a minor concern. In short, the scope of the HCV assessment itself is appropriate, although references to additional discussion about how HCV designations are made would be useful to some readers.

Part of the "scope" is the time frame. On page 6 is a reference to the consultation which is "anticipated to conclude by March 2016." The date is confusing.

It is challenging to follow some discussion because only part of the framework is covered and the discussion of management or monitoring is elsewhere. That is not a problem except that it makes the context for some values obscure – it would be helpful at times to see what the actual prescriptions are for some of the species.

As a suggestion numbering the sections may give some perspective for readers.

Issues: None Minor Major N/A
Minor - A summary of the operations by Canfor is not described. These are public information and easily available elsewhere, but to outside readers the report would benefit from a summary of the harvest level and areas. Maps are available in the companion document which provides more information.
Minor - Ensure all references to time are updated.

3. Wider landscape context and significance of the assessed area

In this section the review evaluates:

- a) Is the wider landscape convincingly and adequately described?
- b) Are the key social and biological features of the wider landscape clearly described?

Findings:

The report does not discuss the "social and biological features of the wider landscape". It leaves this to other documents such as the Canfor Forest Management Plan. This requirement is part of the HCV RN guide because it is multi-standard and global in use. In some jurisdictions, like the US, there are no public companion documents, even FMPs are confidential. The reader has only the HCV report to base their assessment. Although the Canfor report does not provide the landscape background, it is regarded as a minor concern here.

This is not to say that LLLF is not discussed. The challenges with LLLF consultation are well described and this is helpful in judging the merits of the HCV assessment process. However that is a separate question from the background description.

Issues: None Minor Major N/A
Minor – Authors could consider a brief general discussion of the surrounding landscape and social context that leads up to the HCV designations. Alternatively, a reference to the <u>plan</u> and particular sections would also give context.

4. HCV assessment process including consultation processes

4.1 Composition and qualifications of the assessment team

In this section the review evaluates:

a) Was there adequate access to relevant expertise to assess biological and social values?

Findings:

There are a number of references to the TAG team. It was clear that consultation was genuine and ongoing. There was continuity over a long period between the earlier process and the current process.

The expertise of the team appears strong. However the report does not actually allow the reader to assess the expertise of TAG. This was noted as a minor concern. A small paragraph on the background of each of the TAG members would allow the reader to judge the expertise. Expertise is important because most of the standards like FSC require "expert opinion" and this should be established in the report, or by a link to contact information.

The authors could consider providing the names of specific experts responsible for each HCV with contact information. The overall expertise of TAG is good, but some values need more specific expertise as the report says. The report provided the names of experts for some values, like Grizzly Bears. If it is feasible, experts for each value would be helpful.

The report refers to meeting minutes of the first and second sessions of the TAG. If they are public domain they could be referenced in this report as it adds credibility. Even if confidential, a list of the dates and meetings would add to the credibility. A minor comment is made.

Issues: None Minor Major N/A
Minor – A brief bio for each of the tag team members could be included for added credibility.
Minor – Experts for each value would be helpful if feasible.
Minor - The TAG team seems to have been heavily involved in the report. Documentation of the level of effort of the TAG team was not discussed. Information about the number of meetings and the time frame would be useful in assessing the input.

4.2. Data sources and data collection methodologies

In this section the review evaluates:

- a) Are data sources and data collection methodologies clearly described or referenced and summarized (and presented in annexes if appropriate), and are they adequate to identify HCVs?
- b) Were reasonable efforts made to fill gaps in the data, proportionate to the impact and scale of the operations?

Findings:

The data sources are referenced clearly. An informed reader can base questions on the information. Some of the information could be linked to for better illustration and convenience, but this is not essential. Note that this review protocol suggests providing "annexes if appropriate." These were not provided for

this review although they are available. These include the management and monitoring section of the report, as well as other sources of information about social issues. The FMP is a notable source that is only listed in the References as "Canfor. 2015. Sustainable Forest Management Plan." An online link such as this - Forest Management Plan - is more useful and easier to include than a formal citation. This is important for transparency although not essential for this review. We have noted this as a minor issue.

Based on the discussion provided it does not appear there are "gaps" that can be easily filled. The assessment team conducted a lengthy and through evaluation of the forest and if there are other information gaps, they would not be easily bridged. Most important, the information is ample to identify and designate HCVs.

4.3. Consultation processes

In this section the review evaluates consultation for identification, management and monitoring:

- a. Were relevant stakeholders appropriately consulted?
- b. Is this documented in a verifiable manner?
- c. Were their views or the information they provided incorporated into the relevant process?

Findings:

It appears a long process was involved both in the first and latest assessments. The report would benefit from a description of the level of effort to the TAG. This was noted above and is not repeated.

Minutes were kept that documents the consultation as required here. A note has been made above in this review about making minutes available or a list of the minutes if confidentiality is required. It is not repeated.

The report acknowledges that some stakeholders were not in agreement with some points. The report does not describe the exact differences of opinion but outlines the process for disputes (Decision Makers Group, DMG). The process is documented and seems fair. It is open to audit. It was not a concern in this review.

Issues:	None 🔀	Minor 🗌	Major 🗌	N/A 🗌

5. Identification, location and status of each HCV

5.1. Addressing all six HCVs

In this section the review evaluates how the report assesses the individual 19 elements. Some of these are not in the scope of this review. The numbering of the elements below is not consistent with the framework. All elements that are in scope are covered.

Findings:

Cat 1 (A) Element 1:

Detailed in Table 1. HSV designation is clear, though not done in a consistent manner with other HCVs. A note was made above.

Element 3: Concentrations of Vertebrates - Appropriate discussion.

Element 4: Refugia - Appropriate discussion.

Element 5: Biodiversity Hotspots - Biodiversity Hotspots. Additional websites could be consulted, but not likely to identify new values. Appropriate discussion.

Element 6: Ecological or evolutionary phenomena - Appropriate discussion.

Cat 2 (B) - Element 7 - Forests designated as threatened or endangered- Appropriate discussion.

Cat 3 (C) - Element 8 - Red and Blue-listed Plant Communities - Appropriate discussion.

Element 9: Old and mature forests where these are age classes are becoming rare due to human activities - Appropriate discussion.

Element 10: Rare ecosystems - Appropriate discussion.

Element 11: Ecosystems Under-Represented in Protected Areas - Appropriate discussion.

Cat 4 to 6. Not part of this review

Issues:	None 🔀	Minor 🗌	Major 🗌	N/A

5.2. Data quality

In this section the review evaluates:

- a. Whether data is detailed, recent and complete enough to make informed decisions on HCVs.
- b. Is the precautionary principle appropriately invoked in the use of data?

Findings:

The point of this updated Canfor HCV report was to ensure the data and consultation is recent. As such the report conveys the recent process well. Note that a minor comment was made above about clarifying some dates in the report which make it appear to be out of date.

The precautionary principle is not discussed in this assessment directly. It is part of the companion document on management activities for HCV. A minor comment is made about providing an explanation of how the precautionary principle guides management in this forest. The nature of how the TAG and the managers achieved a precautionary approach while doing industrial forestry is an important aspect of HCVs. For example, in the FMP, the discussion on page 72 of "How are targets established?" discusses the precautionary approach. That level of discussion should be highlighted or at least referenced in the HCV report. It is possible that this does occur in the Management companion document which is not available. It is apparent that Canfor is trying to use a precautionary approach and it could be discussed or referenced more in the HCV assessment itself.

Issues: None Minor Major N/A	
The precautionary principle could be briefly discussed or referenced early on in this HCV assessment to provide context for the overall approach to HCVs.	Ю.

5.3. Reference to HCV toolkits

Findings: The report appropriately based its decisions on the BC toolkit and references it. It also provides a description of the evolution of the framework, which is helpful.
Issues: None Minor Major N/A
5.4. Decision on HCV status
In this section the review evaluates whether the HCV decisions are clear
Findings: As discussed above under Scope (section 2) the HCV designation is provided in a very succinct manner at a high level. It provides enough information that an informed member of the public or an auditor would be able to enquire about how a particular HCV was designated, or not. The final decision of the TAG is clear and unambiguous, which is the essence of this requirement.
It provides details for these decisions in Appendix B (Details pertaining to HCV in Category 1 and 2). This table is cryptic, but provides documentation of the nature of the decision. Given the open nature of the documentation on these public forests, and Canfor's easily accessible website, the lack of transparency of this particular table is a minor concern. The status of the HCVs themselves is clear.
Issues: None Minor Major N/A
5.5. Mapping decisions In this section the review evaluates how the report provides maps of HCVs, including the protection of maps for values that are confidential.
Findings: Maps are not provided directly in this report. The FMP, which is not directly linked to in this HCV assessment does provide many maps. Others are no doubt available. A minor comment is made about linking to some of these excellent maps. This HCV report read on its own may lead to the conclusion that the maps are not easily available. Some HCV reports emphasize the communications of how values are conserved. This report is more technical. As a technical report it is excellent. As a communications vehicle it could use more linkages to some supporting documentation which is available online.
Issues: None Minor Major N/A
Minor – linkages to maps within the FMP itself would suffice to provide more context for some of the HCV

6. Management of HCVs- Not Applicable

designations.

6.1. Assessment of threats or risks to each HCV within the landscape context

In this section the review evaluates how the report assesses threats or risks from current or planned management activities to each HCV within the assessment area identified.

Findings:
This was not part of the scope of this review.
Issues: None Minor Major N/A
6.2. Do proposed management plans adequately maintain or enhance HCVs?
Findings:
This was not part of the scope of this review.
Issues: None Minor Major N/A
6.3. Protection of HCVs from land use conversion
Findings:
This was not part of the scope of this review.
Issues: None Minor Major N/A
7. Monitoring of HCVs – Not Applicable
7.1. Are monitoring plans clearly described?
In this section the review evaluates whether methodologies are clearly described and appropriate to meet stated objectives?
Findings:
This was not part of the scope of this review.
Issues: None Minor Major N/A

7.2. Are monitoring plans adequate?

In this section the review evaluates whether monitoring plan adequately deal with significant changes arising from management operations or likely external threats/risks to HCVs

Findings:

This was not part of the scope of this review.

Issues: None Minor Major N/A
7.3. Are plans for a regular review of data built in to the management and monitoring plan
In this section the review evaluates how the report will be updated in future.
Findings:
This was not part of the scope of this review.
Issues: None Minor Major N/A
8. Responsible management of other conservation values - Not Applicable
This was not part of the scope of this review.
8.1. Conversion of non-HCV ecosystems
Issues: None Minor Major N/A
8.2. Responsible management of other conservation Values
Issues: None Minor Major N/A

Disclaimer:

This review was conducted by Tom Clark in good faith on the basis of information provided by Canfor. Tom Clark can take no responsibility for the accuracy of information provided the reviewee and cannot be held liable in any way for any damage or loss resulting from the use or interpretation of this review by Canfor or any third party.

Acronyms

HCV High Conservation Value

HCV RN HCV Resource Network

FMP Forest Management Plan

FSC Forest Stewardship Council

SFM Sustainable Forest Management

DFA Defined Forest Area

RPF Registered Professional Forester

COSEWIC Committee on the Status of Endangered Wildlife in Canada

COSSARO Committee on the Status of Species at Risk in Ontario

IUCN International Union For the Conservation of Nature

LLLF Large Landscape Level Forests (LLLF)