

September 23, 2020

## **1 Review of Forest Stewardship Council reports for Taan Forest Products, Summer 2020**

Zimmfor Forest Management sent me three report to review:

- 1) Environmental Values Assessment May 2020-DRAFT.
- 2) High Conservation Value Assessment Report. May 2020-DRAFT. Prepared in support of Taan Forest LP FSC® Forest Management Certification on Xaayda Gwaay.yaay Haida Gwaii by Zimmfor management services Ltd.
- 3) FSC® Management Plan – Appendix 3 Annual Monitoring Report 2019

All three reports were written by Zimmfor management services Ltd in support of Taan Forest LP FSC® Forest Management Certification on Xaayda Gwaay.yaay Haida Gwaii.

I have reviewed the Annual Monitoring report in previous years, and also reviewed previous versions of the High Conservation Values Assessment. This is the first time I have seen the Environmental Values Assessment, although it too has been prepared in previous years. Past reviews generally included just marginal notes with follow-up phone calls and discussions. This year, my peer reviews are to be made publically available, hence this summary report. I still included marginal notes and had telephone discussions as follow up. After seeing my report, marginal notes, and after discussion, Zimmfor has revised the reports to address all the issues I identified. Hence to understand my review, the interested pubic will need to refer to the versions with my marginal notes. Those are available from Jillene West at Zimmfor.

I address each of the three documents in order listed above. I used the FSC Management Plan (June 20 draft) as a reference (and have a few minor comments in the margins of that report, none of consequence).

## **2 Environmental Values Assessment May 2020-DRAFT**

The Environmental Values Assessment (including analysis of Range of Natural Variation) was prepared by Jillene West, RPF of Zimmfor Management Services Ltd. in support of

the Taan Forest Limited Liability Partnership Forest Stewardship Council® (FSC®) Forest Management Certification on Xaayda Gwaay.yaay Haida Gwaii (HG). This report is one I have not reviewed or read in previous years.

The assessment has been designed to meet the requirements of the FSC National Forest Stewardship Standard of Canada FSC-STD-CAN-01-2018 V 1-0 (further referred to as The Standard) and the Ministry of Environment, Lands and Parks “Framework for Completing an Environmental Risk Assessment” (2000).

The Environmental Values Assessment uses Holt’s 1995 document ‘Environmental Conditions Report for the Haida Gwaii/ Queen Charlotte Islands Land Use Plan’ as a baseline, then updates her risk findings based on the implementation of the LUO, considering the scale and intensity of forest management.

## 2.1 General Findings,

This summary review should be considered along with my marginal notes. I have only a few substantive comments and several more minor ones. Although I did not provide an English edit/grammar review, I corrected spelling and grammar as I noticed mistakes.

The substantive comments include:

- 1) The report addresses risk of old and mature forest in relation to rates of natural variation (RONV) at the scale of BEC subzones. This is likely too broad a scale to make definitive statements about mature and old forest being low risk. More emphasis should be made in the report about the requirement for site series to also be represented at the levels set in the LUO that are based on Holt’s definitions of low risk.
  - a. If site series representation summaries are not provided, then consider adding some broad assessment of productivity in protected areas and LUO constrained areas as compared to the managed forest.
- 2) Although forest age is often used as an element of detail, sometimes the tables are difficult to interpret. The absolute number of hectares, rather than just percents, would help the reader understand what appear to be large changes in amounts of early and old seral. Those changes, especially the increase in intact forest patches, while early seral increased and old seral decreased, must be explained in more detail.
- 3) Provide more detail on monitoring in some sections. Simply having a measure in the LUO does not necessarily mean it is implemented appropriately and will result in low risk to an environmental value. One of the strengths of Taan’s approach is

the annual and 5 year monitoring. That monitoring should be more strongly tied to this report.

- 4) There are some tables and details I found confusing, some tables I suggest restructuring or re-ordering for clarity. More specific comments follow in Section 2.2.
- 5) Is there a reason roads and connectivity are not addressed, perhaps under the intact forest section?
- 6) The conclusion basically states everything is at low risk. I would assume some items are more low risk than others – is there anything that needs more attention than other things? The risk assessment is to help direct energy and funds, so anything that can be done to highlight areas of potential concern would be helpful.

## 2.2 Specific issues

- Make clear when the 5 year reporting periods are.
- Page 6. Under the natural disturbance regime section, begin with an introduction that outlines that Taan has considered historical guidelines but updated those for recent science. The section starts with historical as defined by NDTs and what we thought were the return intervals in 1995 when the Biodiversity Guidebook (BGB) was written, then moves to more recent science such as the background report and other reports that supported Ecosystem Based Management in the Great Bear Rainforest (GBR). There is plenty of new science that shows the old NDTs seriously underestimated the return intervals for stand replacing disturbances and that patch size guidance in the BGB is out of date.
- P. 10. Discuss that protected areas are weighted to poorer ecosystems; whereas Taan MU has mostly good productivity, so it is important to manage it well.
- P. 11. Note that the variant level is a broad scale and may not be the best for assessing how well forests are protected. Point to (or summarize) analyses that look at protection by site series and/or productivity. References to table 25 and 26 are by seral stage, not site series, so those tables, while interesting, do not add sufficient detail.
- P. 12. – Do you know how stand level retention adds to the landscape? In the GBR there is overlap where stand level is sometimes allowed in the landscape reserve, so potential to double count and not always clear how to separate or add together.
- P. 16 Describe how protection works for the various riparian features (tree height buffer, etc.)

- P 17. Figures 1 and 2 – these species and age comparisons are interesting and bring no concerns to mind regarding unbalanced timber harvest. I wonder about doing productivity comparisons between harvested areas and protected/constrained? I think at least 30% (as much as required by representation?) of the good productivity in reserves? As long as the representation required is indeed by Site Series, then additional analyses of productivity are not necessary.
- P. 19. Taan has 26% of the early seral in HG, but that is not as interesting as compared to how much of HG is early seral? How much of Taan area is early seral? Put in actual numbers since percents can be deceptive and annoying. I have suggested re-ordering Tables 15,16,17 to have better flow of ideas.
- P. 19. Table 16. Better to lead with the description in Tables 17, then go to this less important distribution. (i.e., start with Table 15, then Table 17, then Table 16; distribution in HG, distribution in tenures, then distribution within each tenure. Check if areas in blue and red in Figure 4 add to the same overall total? If they are not the same total then explain why.
- Throughout report - add absolute numbers to the tables with percents, at least in the 'total' column so the percents can be understood.
- P. 21. In the changes of seral stage ... is decrease of 10% old forest because of new mapping, or over time by harvest? Over what time period– a year? 5 years? If old seral is being harvested at 10% per year that is likely an issue that needs attention. It is more likely a forest cover mapping change, but need to be sure.
- P. 22. Regarding large patches, are Tables 18 and 19 congruent in what they report? In Table 19 it reports only constrained? Is rest (95,514-36,257) protected or large patches of managed forest? Did not include managed forest patches in Table 18. I need more clarity to understand this table.
- P. 27. Intact forest assessment: Why has there been such an increase and over what time period? That is a massive increase. Explain it well.
- P. 31. Table 28. The seral stage representation table is confusing to me. Numbers might help me figure out 'percent of what, where'.

- P. 31. As well as indicating how much of old and mature is protected, please also state how much of protected area is old and mature. I realize that info is somewhere earlier, but makes sense to repeat here.
- P. 31. Recognize that protecting 70 percent for low risk and 30% for high risk referred to natural levels, not of existing old or existing mature. This is a good place to talk about the site series representation requirements to get to those risk numbers compared to historically old forest.
- P. 37. Goshawk – note that HG may have only areas of province where foraging habitat protected. That's a good thing.
- P. 39. Be careful to indicate if there is any evidence that a measure is effective before coming to the conclusion that all is well for a value. Just having a measure does not necessarily mean it is working, hence monitoring important. State how monitoring will allow effectiveness to be assessed – in this section and perhaps other sections as well. Monitoring must also link to management and that is addressed in the annual monitoring report.
- Figures: sometimes the MU is indicated with yellow fill which is then covered by other colours. Outline for the MU (rather than fill) would work better for a few more figures.
- See marginal notes for further details.

### 3 High Conservation Value Assessment Report

The High Conservation Value (HCV) Assessment was prepared by Shayne Boelk, RPF, Jillene West, RPF and Marika Forge, RPBio of Zimmfor Management Services Ltd. in support of the Taan Forest Limited Liability Partnership FSC Forest Management Certification on Xaayda Gwaay.yaay Haida Gwaii. The assessment was designed to meet the requirements of the FSC National Forest Stewardship Standard of Canada FSC-STD-CAN-01-2018 V 1-0 (further referred to as the National Standard) including Annex D: High Conservation Value (HCV) Framework.

The MU was evaluated according to the six HCV categories provided in the National Standard. The authors state that wherever possible and appropriate, the assessment used the best available information, criteria and guidance provided within the HCV Framework

and consistent with applicable information sources noted within Indicator 6.1.1 of the National FSC Standard. The assessment was generated using the recently updated forest cover information from the Timber Supply Review 2019.

I have no broad comments to address in this report. Specific comments follow

### **3.1 Specific comments**

P. 7. Make it clear that Table 2 is a summary and include a footnote saying where details can be found supporting the specific numbers.

In each following main section, think about adding a conclusion for each HCV. It could be a short table that puts yes or no for each indicator. Or perhaps Table 2 good enough but a bit difficult to jump back to the beginning of the document to refer to it.

#### **HCV 1:**

P. 15. Could note that bats experience white nose syndrome in other parts of North America which is why they are listed at more risk than in BC where we have not yet seen the fungus.

P. 15. Check if there is a moss or Fungi that is listed. Latin and plant type don't match.

P. 20. Add details on extent of cedar zone and how it is managed.

#### **HCV 2**

P. 23. Discuss likely trends in size of IFLs.

#### **HCV 3**

P. 29. The 70/30 is backwards here but is correct later on.

P. 31. Intact forests mostly not in tenure, and mostly protected thus not rare, but they are of high conservation value. Their importance captured in HCV 2 item 7, so I suppose okay because they are not rare means they are not HCV for item 10.

P. 32. How much of spruce ecosystem captured in riparian zones – that is a practical monitoring question.

#### **HCV 4**

P. 36. Riparian – indicate how area calculated; define AFU.

P. 38 .Indicate which adjacent ALR actually being used for agriculture.

#### **HCV 5** item 17

P. 43. Focus on mushrooms seems narrow. As well there are trap lines, recreational use, etc. So non timber conclusion can be broader. As well this topic may be broader than non timber forest products?

#### **HCV 6** item 19

There is no Table 22 in the Appendix, see all other references to that table in the report as well.

For the management and monitoring sections I don't have many comments. See text for some minor suggestions for clarity in text and Figures. Taan should acknowledge that efforts to consider active adaptive management have so far not been implemented on HG because of complexities of scale but also because the available options under the LUO are very narrow and so no approaches are expected to lead to testable, different results without going outside of LUO guidelines, which no one is keen to do.

## **4 Annual Monitoring Report 2019 (FSC Appendix 3)**

Each year, a monitoring report is produced by Zimmfor Management Services with support and data provided by several key staff at Taan Forest LP (and BC Timber Sales for their activities within the Management Unit). Performance reporting for several key indicators was also generated utilizing the Forest and Range Evaluation Program (FREP) monitoring data. Each year monitoring reports are completed, with more intensive analyses every 5 years.

The indicators used in the monitoring report were developed in 2012 by Jillene West, RPF and Shayne Boelk, RPF, BIT (Zimmfor Management Services Ltd.) and I, Laurie Kremsater, M.Sc., RPF, RPBio. After helping develop the indicators, I also have reviewed each year's monitoring report. Those reviews have not needed to be public in the past, nor is it required this year, but a summary of main comments is included here for completeness.

As always, I made grammar/clarity comments in places, but did not focus on an English edit. I have several minor observations or questions in the marginal notes that are not repeated here.

#### **4.1 General comments:**

The indicators and how they are monitored are a powerful tool, but only if the monitoring results are used to influence management. Preparing monitoring reports, without intending to tie results to management action is misleading. Some of the indicators clearly affect management; for others, the tie is not clear. For example, there should not be monitoring findings that persist over several years (for example windthrow problems) without a clear path to address those findings. As another example, recommendations to strengthen connectivity, minimize roads, and be cautious with old forest levels, need to be actually used in planning of cutblock locations – they are not issues that can be dealt with appropriately within a cutblock after it is located on the ground. It is not clear that any of the recommendations around connectivity, roads and reducing harvest in areas where old forest is low, have been implemented. The monitoring report, or a summary of key points, could present the most important findings/issues in such a way that they can be clearly identified by managers, then action developed. It is difficult for planners/managers to read these large tomes, so key point sin executive summaries or other focused summaries for planning are important.

#### **4.2 Specific comments:**

P. 7. Forest products yield. Is Taan harvesting the profile? Make sure not too heavy to spruce and cedar; check if regen also replaces what was cut.

P. 24. Growth and Yield. Relying on government for growth and yield information for crown land seems reasonable, but may not be. If FREP does not do monitoring then Taan needs to consider doing some, perhaps using FREP methodology. This page is about growth and yield, but the same comment applies for streams, down wood, stand retention, soils, etc. There needs to be a plan B when FREP is not active in the MU/HG.

P. 47. Stand level biodiversity effectiveness. Explain the change in tracking of ecosystem representation better.

P. 56 -66. One of the most important parts of the document for me was checking on the species at risk sections, and putting new species in Species Accounting groups for monitoring. There is a comment from Zimmfor regarding fungi in HCV that I need to

pursue – are there more fungi at risk that should be included on the tables? Perhaps more lichens.

P. 90-93. FSC riparian budgets – stand level. What is monitored now for riparian protection after some indicators no longer required? Outline why it is ok for FSC to drop these indicators.

P. 98. Research and Monitoring projects. Taan is not contributing to much research this year. Seems like there was healthy revenue paid to government (p 101), and some funds should be available to continue to support research/community activities?

Under HCVF section:

P 121. Landscape overview table. Forest interior decreased since 2016. Changes in old and mature and old a bit difficult to interpret due to new forest cover mapping.

Old forest ha have decreased but percent old has increased? How?

Skidegate old forest ha went way down, 1000 ha I think comparing 2016 to 2019. How did that happen when it was so close to the limits? Previous reports recommended 2 blocks a year in Skidegate for ECA -- did that happen? Some Table said old percent in Skidegate went up? Check.

Forest interior has gone down substantially, looking at where blocks were placed to cause this would be useful.

At the scale of maps I have, I can't see changes in connectivity but if interior forest has decreased, then I expect connectivity may also have decreased. Seeing the location of the 1500 ha or so of cutblocks since 2016 would help assessment.

Is anything done with the landscape vulnerability / connectivity/ interior/ roads assessments? Does the information actually affect management?

P 167. Invasive plants. Some of the new ones not in top 5 are worth jumping on – like Japanese knotweed.

P. 178. Windthrow. 100% target is ambitious. Windthrow seems to be continuing issue, are there plans to address?

p. 182. Cultural heritage. Management of Yew seems to be an issue. Can you clarify some of the statements there – this gives the sense that almost all the yew on HG affected by poor practice.

## 5 Closure

The comments on the three reports should be read in tandem with the marginal notes on the drafts I reviewed. The final reports have all the comments presented here. I am available should Taan or the public wish to ask me questions after reading my reviews; Zimmfor can provide my contact information.

Yours truly,

*\*This is a digitally signed duplicate of the official manually signed and sealed document.*



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