

Chief Forester Order Respecting the AAC Determination for Tree Farm Licence 23

Section 8 (3.1) of the *Forest Act* stipulates in part that:

If... the chief forester considers that the allowable annual cut...is not likely to be changed significantly with a new determination, then...the chief forester by written order may postpone the next determination...to a date that is up to 15 years after the date of the relevant last determination and must give written reasons for the postponement.

In considering whether to postpone the next allowable annual cut (AAC) determination for Tree Farm Licence (TFL) 23, held by Interfor Corporation (Interfor or the “TFL holder”), I note that the last AAC determination for TFL 23, made on November 30, 2010, set the AAC at 626 503 cubic metres. Effective September 14, 2011, the AAC was reduced by 176 503 to 450 000 cubic metres under the *Forestry Revitalization Act*. In considering all the factors required under Section 8 of the *Forest Act*, I have reviewed the following:

Legislation

- *Forest Act* and regulations, BC Government, current to August 20, 2019.

TFL holder plans and timber supply review documents

- *Allowable Annual Cut Postponement Report – Tree Farm Licence 23*; prepared by Interfor Corporation (December 31, 2018);
- *Forest Stewardship Plan #658* Interfor Application to operations of Castlegar Woods Division and Grand Forks Woods Division in the Selkirk Natural Resource District. Arrow TSA, Boundary TSA & TFLs 3, 8, and 23 for the term of June 29, 2017, to June 28, 2022 (Version 2017-06-29);
- Letter from Interfor Corporation to Diane Nicholls, ADM and Chief Forester (September 21, 2018);
- *Provincial Timber Management Goals, Objectives & Targets, Management Unit Targets: TFL 23 Arrow Lakes* prepared by Ministry of Forests, Lands, Natural Resource Operations and Rural Development (August 29, 2018);
- *Postponement of Allowable Annual Cut, Forest Act, Section 8(3.1) Technical Summary for Tree Farm Licence 23* held by Interfor Corporation prepared by Ministry of Forests, Lands, Natural Resource Operations and Rural Development (August 9, 2019);
- *Rationale for the Allowable Annual Cut Determination for Tree Farm Licence 23* held by International Forest Products Ltd. (November 30, 2010);
- *Timber Supply Analysis Information Package – Tree Farm Licence 23 – Timber Supply Review 2008*; prepared for International Forest Products Ltd. by Timberline Natural Resource Group Ltd. (February 2009);
- *Timber Supply Analysis Management Plan No. 10 – Tree Farm Licence 23*; prepared by Pope and Talbot Ltd. Slocan Division (July 2003); and,

- *Timber Supply Analysis - Tree Farm Licence 23 – Timber Supply Review 2008*; prepared for International Forest Products Ltd. by Timberline Natural Resource Group Ltd. (January 2009).

Land use, forest practices and other documents

- *Kootenay-Boundary Higher Level Plan Order*; prepared by BC Ministry of Sustainable Resource Management (October 2002);
- *Landscape Unit Planning Guide*; prepared by the Ministry of Forests and the Ministry of Environment, Lands and Parks (March 1999);
- *Young Stand Monitoring in the Kootenay Boundary Region: Plot Establishment Report*; prepared by Ministry of Forests, Lands, Natural Resource Operations and Rural Development (draft revised December 3, 2018. Version 2.2).

First Nations

- *First Nations Consultation Report on the TFL 3 and 23 Forest Act Section 8 (3.1) AAC postponement decisions* compiled by Ministry of Forests, Lands, Natural Resource Operations and Rural Development.

TFL 23 is located in the West Kootenay region of the south-central interior of BC. It contains multiple blocks positioned along the eastern and western shores of Arrow Lakes. Glacier National Park bounds the northern extent of the TFL, and Valhalla Provincial Park and TFL 3 bound the southern extent. Communities in the vicinity of the TFL include Castlegar, Nakusp and Revelstoke. The TFL is within the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (“the Ministry”) Kootenay-Boundary Region and is administered from the Selkirk Natural Resource District office in Castlegar. The total area within the TFL boundary is 551 471 hectares, of which 261 701 hectares are considered productive forest.

Since the last AAC determination for TFL 23, changes to the land base, forest management practices and modelling information are as follows:

- *Forest Cover Inventory* – a new Vegetation Resource Inventory (VRI) Phase I photo interpretation project has been completed;
- *Riparian Management Areas* – minor changes to operating procedures within riparian management buffers have occurred. Additionally, as a result of First Nations review of riparian management, stream buffer widths have increased;
- *Wildlife Habitat* – Northern Goshawk stick nests have been identified and protected through the placement of wildlife tree patches, which are excluded from the timber harvesting land base (THLB);
- *Old Growth Management Areas* – the management and tracking of old growth management areas (OGMA) is currently under review by the Kootenay-Boundary Region and the TFL holder. It is unknown what impacts this review will have on the THLB;
- *Biogeoclimatic Ecosystem Classification (BEC)* – BEC data covering the TFL has been updated;

- *Growth and Yield* – the timber yield model used for natural stands, Variable Density Yield Prediction (VDYP7), and the timber yield model used for managed stands, Table Interpolation Program for Stand Yields (TIPSY), have been improved.
- *SIBEC site index* – analysis completed by the TFL holder that produced new SIBEC site index values and updated TIPSY curves for interior Douglas-fir volume which indicate that managed stand yields in the TFL are higher than estimated in the previous timber supply review;
- *Young Stand Monitoring* – young stand monitoring (YSM) ground samples have been collected that indicate managed stand yields in the TFL are higher than estimated in the previous timber supply review;
- *Mountain Pine Beetle* – active management and salvage in mountain pine beetle impacted stands have concluded;
- *Douglas-fir Beetle* – there is increased salvage harvesting of timber impacted by Douglas-fir beetle; and,
- *Armillaria* – there has been increased stump removal for Douglas-fir stands infected with Armillaria root rot.

The base case analysis supporting the last determination projected that an initial harvest level of 450 000 cubic metres per year could be maintained for two decades. In the third decade, the harvest decreases by 11 percent to 402 000 cubic metres per year, then in the tenth decade, it increases to the long-term harvest level of 518 000 cubic metres per year.

As indicated above, a new VRI has been completed for the TFL 23 area since the last AAC determination. The TFL holder has compared the new VRI to the forest cover inventory used in the previous timber supply review. This comparison showed that the estimates of volume per hectare are generally lower in the new VRI, with the magnitude of the differences increasing after age 150 years. The average difference in total volume of all stands greater than 60 years of age was 6.6 percent. The TFL holder stated that the impact of the new lower volume estimates on timber supply is difficult to assess since it is not known how volume estimates have changed on the timber harvesting land base portion of the TFL.

I note that recent updates to growth and yield projection information and models and the preliminary young stand monitoring results suggest that the yields of managed stands (which are estimated independently from the VRI) may be higher than previously estimated. I reason that these higher estimates will act to compensate for the lower natural stand yield estimates and help to support a sustainable timber supply at the levels projected in the previous timber supply review.

With regard to harvest performance, the TFL holder is harvesting a species profile that closely matches the available profile for the TFL, with the exception of cedar which is being harvested at a proportionally higher level than in the profile. A comparison of timber scale data and forest inventory data (used to create the species profile of the THLB) indicate an overharvest of cedar for the period from 2013 to 2017. I am concerned that the harvest profile demonstrated by the TFL holder has not aligned with the inventory species profile projected in the previous analysis, particularly for cedar. Therefore, as noted under '**Implementation**', I expect the TFL holder to review the current Provincial Timber Management Goals, Objectives & Targets for TFL 23 to ensure compliance with performance metrics regarding the species harvest profile.

Regarding OGMA in TFL 23, biodiversity emphasis options (BEO) and requirements for old- and mature-forest retention have been legally established and are specified in the Kootenay-Boundary Higher Level Plan Order (KBHLPO). In landscape units with low BEO, the KBHLPO allows for old-seral stage requirements to be reduced to one-third of the required target, but the full target must be met by the end of the third rotation – a rotation being defined as 80 years in the KBHLPO. In some areas where there is surplus retention for biodiversity, some harvesting (without replacement) has occurred; however, this practice is currently under review by Ministry staff and licensees. Analyses indicate that if harvesting in OGMA (without replacement) continues, the mid-term drop in timber supply could be reduced. Conversely, if replacement areas are retained following harvesting, there is no impact to the projected timber supply. For the next timber supply review, I request that the TFL holder conduct analyses to determine if there would be a timber supply impact from meeting full old-growth targets in low BEO.

I am aware that an increase in the prevalence of Douglas-fir beetle and Armillaria root disease are significant forest health risk factors within TFL 23. The TFL holder is completing management activities to control the spread of these factors and there are increasing opportunities to conduct salvage harvesting for timber damaged by the Douglas-fir beetle. I acknowledge that these factors have the potential to decrease future timber supply. However, at this time I am not concerned that the issues presented by the Douglas-fir beetle and Armillaria will significantly impact timber supply or have a measurable effect on the sustainability of a harvest level at the current AAC. I also reason that because the full AAC has not been harvested during the period since the last determination (from 2015 to 2017 the average volume cut was 66 percent of the AAC) there is additional merchantable volume available to buffer against this uncertainty than was previously projected for this time. As noted under '**Implementation**', I expect the TFL holder to monitor and collect information regarding the impact of these forest health factors on timber supply and apply that information in the next management plan.

No formal public review around a Section 3.1 postponement was conducted or legally required. As required under Section 8 and 2 of the *Forest Act*, the TFL holder will solicit public input on the upcoming management plan for TFL 23.

First Nations Consultation

I am aware of the Province's legal obligation to consult First Nations on proposed forest management decisions and I recognize the importance of First Nations in decision-making with respect to matters that could affect their Aboriginal Interests.

First Nations with asserted traditional territory overlapping TFL 23 include: Adams Lake Indian Band, Little Shuswap Indian Band, Lower Similkameen Indian Band, Neskonlith Indian Band, Okanagan Indian Band, Okanagan Nation Alliance, Osoyoos Indian Band, Penticton Indian Band, Shuswap Indian Band, Splots'in First Nation, Westbank First Nation, Upper Nicola Band, and Ktunaxa Nation Council.

The consultation with First Nations on the proposed AAC determination postponement was carried out by the Rocky Mountain Natural Resource District office in Cranbrook.

On May 3, 2019, initial engagement letters were sent to all potentially affected First Nations which explained the Section 8 (3.1) postponement decision and requested feedback on Aboriginal Interests that may be affected by the postponement. The Upper Nicola Band had no comment and deferred to the Penticton Indian Band, Okanagan Nation Alliance, Westbank First Nation, and Okanagan Indian Band to review and reply; none of those bands submitted a comment. Ktunaxa Nation Council did not submit a comment other than to change the status of the referral to assessment as part of their internal process, indicating an assessment must be completed by them. No other comments have been received.

On November 14, 2019, the TFL holder advised each First Nation that they were requesting that the postponement period be extended to March 30, 2023. In the letters, the company wrote that extending the postponement period would provide First Nations with additional time (2020/2021 field seasons) to conduct cultural use assessments and for community engagement. This extension will also enable the TFL holder to better incorporate First Nation values into timber supply review process.

On December 20, 2019, the Ministry wrote to each First Nation inviting them to inform the Ministry of any concerns that the First Nation has about the TFL holder's request to extend the postponement period. Replies with concerns or question were requested by January 17, 2020. No replies with concerns or comments were received.

In reviewing the consultation processes and responses received from First Nations, I am satisfied that the appropriate measures were taken by the Ministry to consult with First Nations regarding this postponement decision. As noted under '**Implementation**', I expect the TFL holder to work with the First Nations to ensure the collaborative project is completed and a management plan is submitted to the Ministry six months before the end of the postponement period. I note that this Section 8 (3.1) postponement aligns with a Section 8 AAC determination deferral, enabling a longer period for First Nations engagement and consultation. During the postponement period, if additional new information becomes available that might affect timber supply, the AAC could be revisited earlier than the postponement date.

Postponement Decision

From my review of the Section 8 factors, the available supporting information, and results from the timber supply analysis, I conclude that a harvest level equivalent to the current AAC of 450 000 cubic metres is feasible for the next 36 months with no appreciable impact to the mid- or long-term timber supply.

With respect to stand yield estimates, I conclude that the lower natural-stand yield estimates in the new VRI, which are partially off set by higher managed-stand yield estimates, are not likely to cause a significant reduction in the timber supply available over the term of the proposed postponement.

In reviewing the modelling assumptions and methods, I found no major errors or uncertainties with respect to the modelled land base or projected management practices. As such, I consider the harvest flow forecast presented in the 2010 analysis represents a reasonable projection of the current timber supply in TFL 23.

In reviewing the changes to the land base, forest management practices, and recent harvest performance, I have determined that the AAC for TFL 23, last adjusted on September 14, 2011, would not likely change significantly with a new determination at this time. Where I have identified improvement that can be made to the information applied in the next timber supply review, I have specified an implementation instruction.

As discussed under *First Nations Consultation*, I commend the TFL holder for working collaboratively with First Nations to collect additional cultural heritage information in support of a more robust AAC decision that considers impacts to Aboriginal Interests. This decision recognizes the need to gather additional information that may potentially impact the TFL holder's forest management plan and operations. A postponement of my AAC decision will allow time for this dialog to take place.

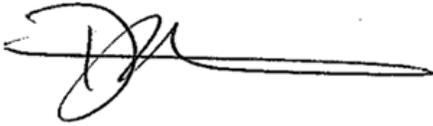
Under my authority as outlined in Section 8 (3.1) of the *Forest Act*, I hereby postpone the next AAC determination to a date on or before March 30, 2023, which is 12 years and four months after the last determination. If additional new information becomes available and/or significant changes in forest management requirements occur that may have a significant effect on timber supply, I am prepared to revisit the next TFL 23 determination at an earlier date.

Implementation

In the period following this decision and during the postponement period, I expect the TFL holder to undertake the following tasks:

1. *Cultural heritage resources* – work collaboratively with First Nations to collect cultural heritage resource information within TFL 23 and revise the timber supply analysis and management plan accordingly;
2. *Revised management plan* – submit a revised management plan to the Ministry, six months before the end of the postponement period;

3. *Forest health monitoring* – monitor and collect information regarding the impact of Douglas-fir beetle and Armillaria root disease within TFL 23 to be included in the next management plan; and,
4. *Harvest performance* – manage and utilize the entire available timber supply in TFL 23 in a manner consistent with the November 30, 2010, AAC determination and the established Provincial Timber Management Goals, Objectives & Targets for TFL 23.



Diane Nicholls, RPF
ADM and Chief Forester

April 15, 2020

