

**PG TSA Spruce Beetle Working Group
Meeting Minutes**

Date: Thursday, October 6, 2016, 9:00 AM – 11:00 AM

Location: Main Boardroom, Prince George Forest District Office

Chair: Alena Charlston

Attendees:

FLNRO: Alena Charlston, Dave Banham, Jason Caswell, Shannon Carson, Jeanne Robert, Duncan McColl, Cindy Holland, Robert Hodgkinson, Traci Van Spengen, John Huybers, Nikolaus McEwan, Tim Ebata

Forest Licensees: Sara Cotter (Canfor), Ralph Hausot (Canfor), Cecil Gray (Sinclar Group – Lakeland), Keith Taite (Carrier Lumber), Carl Pollard (CNC Research Forest), Doug Perdue (Dunkley), Cheryl Hodder (Conifex), Jonathan Taylor (BCTS)

Regrets: Lee Evans (BCTS), Jeremy Greenfield (BCTS), Anna McIndoe (MoE Parks), Trevor Joyce (L&M)

Objective: Work together with the Forest Licensees/BCTS at the operational level to address the Spruce Beetle in the Prince George TSA.

1. **Introductions & Meeting Objectives – Alena Charlston**

2. **Review of Omineca Guidelines for SB Treatments in Special Management Areas & Decision Tree for IBS Treatment (Released July 2016) – Shannon Carson**

Highlights and Discussions:

- Generally, the use of conventional trap trees or no harvest treatments are preferred options to address SB in special management areas (SMA's).
- Prerequisites to Treatment
 - In SMA's harvesting or treatment shouldn't be initiated unless we have control on the areas outside of the SMA's.

Questions/ Suggestions: Established Landscape Biodiversity Areas (LBA's) in A4 from Recruitment Strategy

- Suggest that with up to a 5% incursion as allowed in the approved Recruitment Strategy to address operational changes with replacement areas only require notification from the licensee rather than approval for efficiency. (Licensee)
- Concern with potential for having fragmented small locations of replacement areas throughout the landscape with replacement areas via WTP's. Monitoring required ensuring replacement areas meet targets and as well as updated locations. (FLNRO)

Action: FLNRO provide guidance to licensees around replacement areas, and utilize professional reliance with a rationale on file, rather than approval process for incursions up to 5% in established LBA's. Format required for tracking these replacement areas.

• **Decision Tree – Shannon Carson**

- Feedback is welcomed in regards to special management areas that you manage, always looking to make the flow chart better.
- The main difference between the two sides of the flow chart. One side for OGMA/LBA where the decision maker is the district DM. The other for Critical Fish Area, FSW, WHA

or UWR orders with objectives to follow in regards to harvest and an exemption may be required if outside the objectives (decision maker is not the district DM)

- FSW's is a bit different than some of the other smaller spatially defined areas. They include a large area and are managed through objectives. There are different ways for how to harvest, where, and how to manage the units as a whole that professionals must consider in order to tackle the SB issue. If harvesting exceeds thresholds, then this is when you need to consult the flow chart and consider adjacency and area of impact with SB. There will be exceptions that we will need to look at and deal with in a rationale way.

Questions: If a concern with to losing the values in the LBA's if licensees don't do anything to address SB in these areas?

- There is the potential in some areas, but do not expect in the majority of areas. Let nature take its course in some areas, as it is part of a longer ecological process that we are trying to manage for values other than fibre. Can use trap trees to draw out the SB. (FLNRO)

3. **Trap Tree Trails – Nikolaus McEwan** (Presentation attached)

- Timing is key, must be in place prior to the flight (which can occur May/early June).
- Remove trap trees prior to the following year flight of the following year. Highly recommended to remove prior to snow.
- Trap tree locations – ensure access is available to remove. Consider what could happen in the next year with access. Mackenzie District had a big issue with some of the locations of their trap tree trails: had spots that we punched in 2 yrs. ago and put a trap tree trail and then the road would be washed out or deactivated and had issues with access.
- Butts should be facing your main access road, so you can go in easily to load trees;
- Best to have trap trees shaded, in which SB favors. Options for Pilling of brush on top of the trap trees, tuck them into the bush, aspect.
- Only use green trees as trap trees.

Questions: What level of attack would a trap tree be effective?

- Low to moderate populations, over a larger area. Moderate to heavy populations in a much smaller area. If you have a large population over a large area, you'll catch SB in trap trees but will it make a difference. If you have around 1000 infected trees in the stand then you will want to put in a minimum 100 trap trees. **1 to 10(or 8) Ratio for Trap trees** (FLNRO)

4. **Licensee Updates**

A) **Canfor: (Sara Cotter)**

- Winter 2016/2017 Harvest plan just over 50% will be in Spruce stands with SB infestation in PG TSA. Total winter plan is almost 1.5 million, 800,000 m3 Volume associated including none Spruce volume (total block volume). Minimum of 10% green attack from the cruise to identify that volume as SB.
- Northeast section of TFL (Hayden) found 27% of Green attack as per cruise. In FSW, therefore did trap tree program in Seebach, Hayden to attract beetles and stay under limits. Around 500

m3 of trees felled by hand. Found to be really expensive for this little amount. Learned a lot with setting trap trees. Will try to set trap tree trails instead going forward.

- McGregor suspension bridge is an access issue and capital plan for 2018. SB activity in area, including north of bridge. Also need to address NDU A25 biodiversity objectives that are in deficit. Spatial areas being planned, in which includes planned areas in the Dezaiko Lodge operating area. Also did a trap tree program this spring along the Sande FSR.
- Anzac has the highest SB infestation in Canfor's operating area, and lots of Cariboo values and tons of grizzlies. Did some baiting on 4 blocks in March and April, no trap trees. Due to the long travel times, a camp was set up in Anzac.
- Mackenzie operating area: 30% of Canfor's planned winter volume will come out of Mackenzie, which has SB. Successful bidder for an under developed Timber Sale of about 190,000 m3 in an area affected by SB.
- Fort St. James operating area: No Severe or high polygons. SB just starting to creep into the Fort St. James area, but nothing alarming.

B) Sinclair: (Cecil Gray)

- Planned 2016/2017 winter harvest to address SB: Parsnip 100,000 m3, Bills Creek 90,000 m3.
- Still need to pick up trap trees felled last winter. Plan to fall more trap trees adjacent to areas harvesting this winter.
- Permitted blocks in Merton/Slender Lake area found 47% attack with SB and Fdi Beetle, plus had dead Pli.
- Access issues with 700 Chuchinka Road in Parsnip area needs to be addressed. Need to have discussions with FLNRO appraisals group on rebuilding and brushing old roads. **Action – FLNRO to set up this discussion**
- Bill's Creek 900 Road – Need to confirm if entire road has been de-gazetted from FSR status and confirm if all required access is under permit. **Action - FLNRO**

C) Dunkley: (Doug Perdue)

- Planned 2016/2017 winter harvest in Bills Creek 250,000 m3.
- Working through operational issues which include roads that haven't been addressed for 20 years but still under a road permit. Need to confirm appraisal allowances on these roads (maintenance versus re-build). Item Actioned above.

D) Carrier: (Keith Taite)

- Planned 2016/2017 winter harvest in Wichika and Bills Creek - 180,000 m3.
- Working with Sinclair on looking at areas for next year to address SB.

Questions/ Suggestions: Road access issues and they take time to fix to allow access to the area to harvest. Would help operationally if can submit the RP prior to the CP to get the RP approved ahead of the CP.

- FLNRO - No issues with doing this if request made.

E) CNC Research Forest: (Carl Pollard)

- Goal to remove all damaged and active beetle by spring 2017, but unlikely able to.
- Caine Creek: Unit C and D. About 80% of the remaining mature timber (post MPB) has SB. About 215,000m³ in Unit C and 180,000m³ in Unit D planned for harvest to address SB. Stands consist of about 50% Sx and cruise found 65% of Sx hit by SB prior to spring 2016 flight. Predict 90%+ of Sx to be hit by SB in 2016 (after flight).
 - Concern with old growth and watershed function in these units that have been impacted by MPB and now SB. Goal to retain 22% old growth.
- McEwan: Set trap trees and baited 15 ha to fool the beetles. Trap trees were highly effective, baiting is highly effective but hard to tell because most Spruce trees were attacked so couldn't hang baits on them.
- Tacheeda Lake: Small sanitation blocks and trap trees planned for 2017 to address SB.
- Units F (Chuchinka area): Logged in winter 2015. 50 ha of clean-up remaining
- In the areas heavily impacted with SB, found that the 2016 flight hit every Spruce down to 15cm diameter.
- **Funnel Trap Trial:** Installed 2 medium sized funnel trap trials in Chuchinka and Caine Creek areas. Overall not too successful. Worked best in the freshly logged cut block for mopping up SB.
- Also have Douglas-fir beetle showing up in Caine Creek/Summit Lake area.

F) **BCTS (Jonathon Taylor)**

- 250,000 m³ estimated in Colbourne & Summit lake area for 2016/2017 Winter Harvest.
- Operating plans were held back until received 2016 Aerial Overview Survey (AOS). Will set up 2017/2018 multiphase program to address the AOS areas. Not sure of specific numbers for 2017/18, but end of October should be able to give more detail.
- No trap trees planned for this year, but will be addressing this in the following year with plans to set up a contract to implement a trap tree program.

Fort St. James (Cindy Holland)

- Mackenzie District is taking the lead just north of Chuchi on carrying out low-level sketchmapping and potential for ground probe surveys.
- Have not found much SB activity this year. Found an area with blowdown, which may be associated with tomentosus, with no evidence of SB and has been addressed.

5. **Understanding of AOS Results and BMU's (Tim Ebata)**

Aerial Overview:

- 2016 AOS information currently available as scanned geo referenced JPEG's on FTP site. Hoping to have the digital data available by the end of October for entire province.
- Interim shapefile data for Spruce Beetle currently available from 2016 AOS. Will have tabular data available soon.
- Link to 2016 AOS: ftp://ftp.for.gov.bc.ca/HFP/external/!publish/Aerial_Overview/2016/

Beetle Management units:

- Generally encompasses large units. Most of the DPG BMUs follow Landscape Unit Boundaries.

- A strategy is set for each BMU, which are reassessed on an annual basis and usually updated in March with the annual Forest Health Strategy. The BMUs can be updated earlier if all info is available.
- Rationale behind setting strategy to identify areas where we can strategically decide whether or not impressionable to salvage or log.

6. **PG TSA Update (Alena)** Presentation attached

Review of 'known' spruce beetle infestation levels in PG

- 2016 AOS Results (high level fixed wing survey completed in August)
 - Interim SB shapefiles available on FTP site
 - 133,565 ha SB in DPG. 84,162 ha from 2015 AOS. Total SB Impact from 2015/2016 AOS 170,394 ha (47,333 ha actual overlap of 2015/2016 data)
 - Aerial Surveys report on the red/faders, these are trees that were attacked in 2015. A polygon that was severe in 2015 could drop to trace in 2016. Need to review the cumulative attack with overlaying current and previous AOS results for full picture.
- 2016 Low level aerial sketch-mapping results
 - Started early September with the helicopters at a low level.
 - Completed to date: McGregor, Herrick, and upper Parsnip. Sent out McGregor information to everyone (posted on FTP site). Just received shapefiles for Herrick and upper Parsnip yesterday – will post on FTP and re-send link to group tomorrow **(Action)**
 - Link for current 2016 Low-level aerial sketch-mapping shapefiles:
<ftp://ftp.for.gov.bc.ca/DPG/external/!publish/Spruce%20Beetle/FH17824007/>
 - Weather has been a huge problem in causing delays.
 - Will not be collecting information in the areas that have been repeatedly hit with high attack such as Bill's Creek.
- Spruce beetle Probing contracts
 - Have funds for SB probing, as very important get on the ground and confirm the amount of green attack.
 - Once receive information from aerial sketch mapping and confirm with licensees on areas to ground probe, will set up contracts. Want to focus on areas that actually need to get on the ground to give relevant information for the licensee.

Next steps

- FLNRO to provide assistance and guidance with addressing SB issues, bringing information to licensees.

Questions/Action item: FLNRO to produce a Base Map for licensees showing information on known spruce beetle infestation, susceptible Sx stands, operability/THLB, Special Management Areas, licensee operating areas, etc. This should give a better idea of the current situation and what areas can be addressed quickly and the areas that will take more time with considerations of other values for the licensees to work with on addressing Spruce Beetle

Post-Harvest Mop up Plan Recommendations:

- Slash Piles – concern with SB in piles that can escape. Recommend not to put logs in the shade, Ensure no long butts, Buck the logs into smaller dimensions and spread the logs to dry out
- Waste Assessments –FLNRO can look into the option to monitor waste as the block is harvested, if this would be beneficial for the licensees. Licensees need to bring this up if requesting.

To bring up at following PG TSA Steering meeting on afternoon of October 6th:

- Base map for Total Chance Planning
- Appraisal issues with existing old roads

Next Meeting: November/December 2016

List of Action Items updated to October 28, 2016

Action Item	Person Responsible	Date Required	Updated Status
FLNRO provide guidance to licensees around replacement areas, and utilize professional reliance with a rationale on file, rather than approval process for incursions up to 5% in established LBA's. Format required for tracking these replacement areas.	FLNRO – Alena Lead Stewardship Group	Started and in Progress Nov15/30, 2016	Draft revisions are currently being reviewed by FLNRO Stewardship for finalization and should be released in the near future. FLNRO Stewardship currently working on guidelines for professionals to consider with proposed incursions on assessing current LBAs and proposed mitigation strategies and recruitment areas. Expect to be finalized by end of November 2016.
Set up discussions with FLNRO appraisals group on rebuilding and brushing old inactive RP/FSR's.	FLNRO – John Huybers	Completed Oct 14/16	Group met with FLNRO District and Regional Appraisal staff and licensees to discuss. Process in place to address allowances for reactivation and maintenance costs in appraisal manual.
Bill's Creek 900 Road – Confirm if entire road has been de-gazetted from FSR status and confirm if all required access is under permit.	FLNRO – Alena Charlston	Completed Oct 7/16	Review of current road status in LRDW confirmed that Bill's Creek FSR is deactivated and all sections required to access currently pending and active CP's are under an active RP.
Post new shapefiles from the low-level sketchmapping shapefiles for Herrick and upper Parsnip on FTP that were just received from the contractor and re-send link to group.	FLNRO - Alena Charlston	Completed Oct 7/16	Link for new shapefiles sent out to PG TSA SB WG. Link for current 2016 Low-level aerial sketch-mapping shapefiles: ftp://ftp.for.gov.bc.ca/DPG/external/!publih/Spruce%20Beetle/FH17824007/
FLNRO to produce a Base Map for licensees showing information on known spruce beetle infestation, susceptible Sx stands, operability/THLB, Special Management Areas, licensee operating areas, etc.	FLNRO – GIS Dan Crawford / Alena Charlston	Completed Oct 21/16	Base Map Package sent out Licensees and PG TSA SB WG. Next Steps: Licensees to work together on who is doing what and where to address SB to develop a Total Chance Plan as well as identify issues that need to be addressed with FLNRO such as access barriers.