



Prepared August 26, 2013

FOREST MANAGEMENT PLAN OBJECTIVE # 15 - AMENDMENT

ALBERTA-PACIFIC INCIDENTAL CONIFER REPLACEMENT AND ALLOCATION

Incidental conifer refers to conifer wood cut from D and D(C) stands that are managed for deciduous production. Incidental conifer is allocated to Alberta-Pacific, but is not considered a sustainable wood supply as it is highly variable and the growth thereof is not readily measureable after the first harvest.

The Regeneration Standard of Alberta (RSA) requires replacement of conifer stocking for all conifer and mixedwood cover types (i.e. C, CD & DC). The RSA does not require incidental conifer to be replanted, because it occurs in stands being managed for deciduous. Recognizing that the incidental conifer in deciduous stands has ecological and structural value, Al-Pac will continue to encourage regeneration of conifer through understory protection, understory avoidance, and by encouraging ingress through retention of seed trees in its stand structuring program.

In FMUs where Al-Pac has "DC" rights, the conifer component will be replaced in accordance with the silvicultural matrix (FMP Appendix 4) to meet future RSA requirements. In FMUs where conifer Quota Holders have "DC" rights, the conifer component will be replaced in accordance with the silvicultural matrix to meet future RSA requirements.

2006 FMP - OBJECTIVE (#15):

Facilitate the presence of incidental conifer in regenerating deciduous stands (D and D(C)) by encouraging natural recruitment and the protection of existing conifer.

STRATEGIES:

- Encourage the conifer component in reforested stands through retention of residual conifer stems through avoidance tactics and stand structure protocols (See FMP Objective # 12).
- Use retained post-harvest conifer (e.g. high-effort understory protection) to contribute to growing stock for conifer reforestation.



File: 06286-F02-04
06286-010

August 14, 2013

Mr. Dave Cheyne, RPF
Management Forester
Alpac Forest Products Incorporated
P.O. Box 8000
Boyle, AB T0A 0M0

Dear Mr. Cheyne:

**Subject: APPROVAL – ALPAC FOREST PRODUCTS
INCORPORATED FOREST MANAGEMENT PLAN
AMENDMENT (OBJECTIVE 15: INCIDENTAL CONIFER REPLACEMENT)**

The department has completed its review of the October 31, 2012 request to amend Objective 15 – Incidental Conifer Replacement of the Forest Management Plan (FMP) approved January 16, 2006.

The amendment is approved with the following conditions:

1. The following strategies identified within the FMP continue to be relevant and shall remain part of Objective 15:
 - a. Replace incidental conifer from DC (FMU dependant) stands in accordance with the silviculture matrix and to meet a future ARS (see Objective #17), and
 - b. Utilize silviculture methodologies as detailed the Silviculture Strategy Matrix.
2. Alpac shall monitor coniferous within the D and D(C) stands in Performance Surveys and report stocking in Stewardship Reports.
3. A revision to the FMP must be submitted by August 30, 2013. This revision will be made available to the public on the Alberta Environment and Sustainable Resource Development website.

If you have any questions, or require further information please contact Liana Luard, Lead, Forest Planning and Performance Monitoring at (780) 427-0395.

Sincerely,

A handwritten signature in black ink, appearing to read 'Darren Tapp', written over a large, loopy flourish.

Darren Tapp, MBA, MF, RPF
Executive Director

c: Wes Nimco, Acting Forestry Manager, Lac La Biche Area



October 31, 2012

Darren Tapp
Executive Director
Forest Management Branch

Environment and Sustainable Resource Development
7th fl Great West Life Building
9920 - 108 Street
Edmonton, Alberta
T5K 2M4

Dear Mr. Tapp,

RE: Incidental Conifer Replacement – Forest Management Plan Amendment.

Alberta-Pacific (Al-Pac) wishes to confirm with AESRD, the company's progress and process towards amending Objective # 15 ("Incidental Conifer Replacement") within the approved 2006 Al-Pac FMA Area Forest Management Plan (FMP). The rationale and proposal amendment are presented below.

Al-Pac's initial FMA in 1991 contained a clause that required the company to replace all conifer volumes harvested from the pure deciduous landbase through reforestation of FMA lands to conifer. This clause has been enacted through the AESRD approved 2000 DFMP and the approved 2006 FMP by strategies utilizing reforestation and retention of immature conifer in deciduous blocks.

To-date, Al-Pac has reforested over 7,500 hectares of deciduous landbase and delineated these hectares to a conifer or mixedwood stratum declaration. Additionally, over 1,000 hectares of deciduous with an existing immature conifer understorey has undergone "high-effort" understorey protection treatments. Through these actions, Al-Pac has firmly demonstrated their commitment to the original FMA objective and forest management strategies.

In September 2011, the new Al-Pac FMA was signed. The incidental conifer replacement clause was no longer included in this document. However, the 2006 FMP still carries an objective and strategies relating to incidental conifer replacement; Objective # 15 – 2006 FMP. This objective does in fact continue to negatively impact the long-term sustainability of Al-Pac's deciduous AAC.

Since the September 2011 FMA renewal, Al-Pac embarked on a two-tiered strategy to investigate incidental conifer strategies; 1) Review other FMA holder commitments and talk to their company representatives, 2) An empirical analysis of the state of natural regeneration of conifer in Al-Pac's deciduous cutblocks. This investigation revealed a number of compelling points;





1. Other FMAs in Alberta do not explicitly require the replacement of incidental conifer through directed reforestation treatments
2. Other companies' FMPs rely on conifer ingress and harvest avoidance tactics to replace incidental conifer
3. Some deciduous harvest operators plant in-block roads and landings to conifer
4. Conifer ingress and advanced growth on Al-Pac deciduous blocks is providing significant, albeit variable, stocking
5. Understory protection (UP) is supplying future conifer growing stock
6. Prediction of future forest yields from UP and ingress is very complicated and financially onerous

On September 18, 2012, Al-Pac (K.Rymer, D.Cheyne, G.Grover) met with yourself and Dr. Ken Greenway to discuss the current forest management situation with regards to incidental conifer replacement and a forthcoming amendment of our approved forest management plan. Through our discussion of the above six points, it was agreed that Al-Pac could proceed with amending the FMP incidental replacement objective. Prior to the amendment, Al-Pac was to perform a number of communication and analytical tasks. As a follow-up to our September 18, 2012 meeting, Al-Pac has prepared the following information to meet the discussed needs and tasks.

- Al-Pac presented and reviewed the above proposal with Al-Pac's FMA Area Landscape Advisory Group (LAG) (*presented on 11/10/12*), which includes all major conifer Quota Holders. After a discussion on natural regeneration, past conifer liability and potential wording, the LAG had no major objections to Al-Pac proceeding with the FMP amendment. The minutes of the 11/10/12 meeting have been supplied to AESRD-FMB.
- Through a TSA scenario exercise, using the TSA models presented to AESRD in May 2012, Al-Pac reviewed the effect of having no incidental conifer volume replacement in the future forest on the AAC. Two FMUs were examined, S11 and L1 – the review involved two parameter changes:
 - Two "future forest" deciduous yield curves ("D" and "D(C)") with no incidental conifer volume.
 - Post-harvest transition of all current "D" and "D(C)" stands to the new yield forecast.

The analysis tracked the effect of the new yield forecast on long-run incidental conifer AAC (55 year average) and found it to be inconsequential.

- FMU S11 demonstrated a 0.4 % drop in the incidental conifer AAC
- FMU L1 demonstrated a 0.5 % drop in the incidental conifer AAC

The TSA reports are attached to this letter and both FMU models are available to FMD.

- Al-Pac has informed all major conifer Quota Holders of the proposal and the positive impacts of the change to the marketing of conifer logs; reduction in delivered wood costs due to no silviculture surcharge. The major Quota Holders voiced no opposition to the proposal.





**ALBERTA
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- In the discussions leading up the new 2015 FMP, Al-Pac will investigate how best to apportion UP stands in the TSA's future forest.

Based on the above points, Al-Pac is proposing the following change to the approved 2006 FMP. Al-Pac would like AESRD to approve our proposal, retroactive to May 1, 2012. Consequently, all blocks skid-cleared post April 30, 2012 will be subject to this amendment.

Amendment Proposal

FOREST MANAGEMENT PLAN OBJECTIVE # 15

ALBERTA-PACIFIC INCIDENTAL CONIFER REPLACEMENT AND ALLOCATION

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Thank you for your time in reviewing this FMP amendment. If additional documentation and analysis are required, please feel free to call and ask any questions.

Sincerely,

Dave Cheyne, MBA, RPF # 583
Management Forester
Al-Pac Woodlands
780-525-8261
dave.cheyne@alpac.ca

cc: Kim Rymer
Bob Nichol
Roger Butson



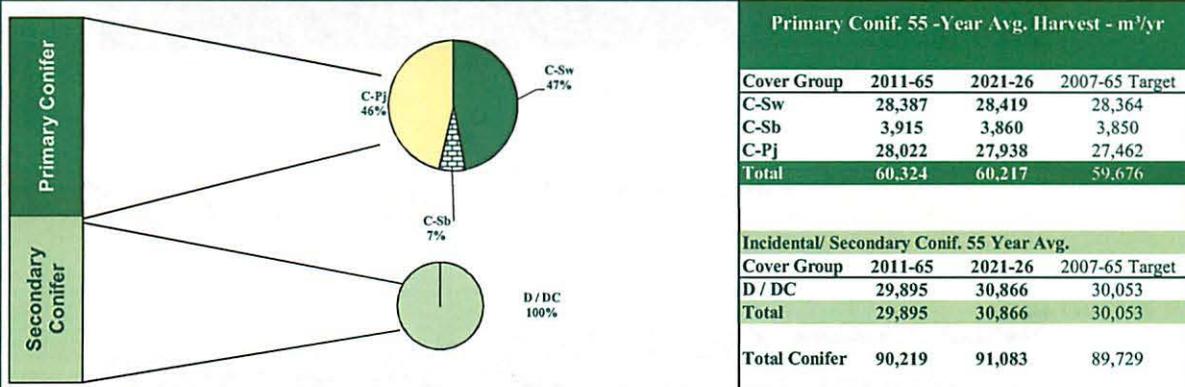
The Alberta-Pacific FMA Area 2011 Timber Supply Analysis

FMU L1

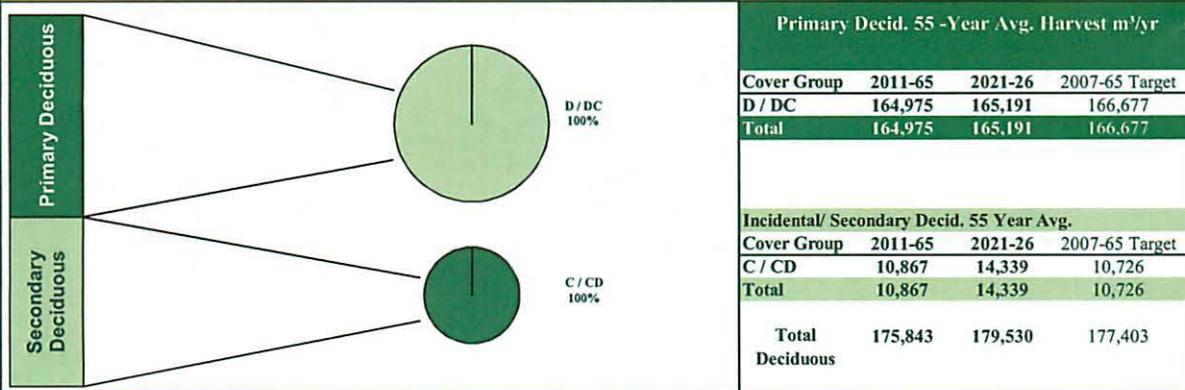


Summary Category	Coniferous	Deciduous	Total
2007 Results			
Net Harvestable Landbase (ha)			122,419
Initial LRSY (m ³ /yr) - Empirical Yield Curves	91,351	194,483	285,834
Woodstock™ Aspatial AAC (m ³ /yr)	59,557	140,241	199,798
PatchWorks™ Spatial AAC (m ³ /yr) (MWM)	59,675	166,677	226,352
Stand Retention Deduction	0%	5%	-
Cull Deduction	2%	4%	-
2011 Updates			
Net Harvestable Landbase (ha)	-	-	127,050
Spatial Primary AAC : 55-Year Average (m ³ /yr)	60,324	164,975	225,299

Coniferous Harvest Summary by Cover Type: 55-Year Average

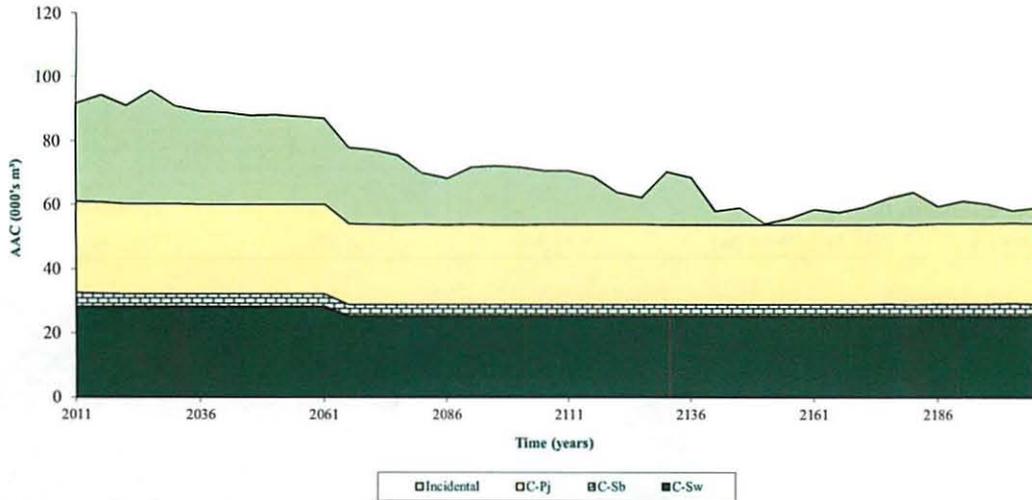


Deciduous Harvest Summary by Cover Type: 55-Year Average

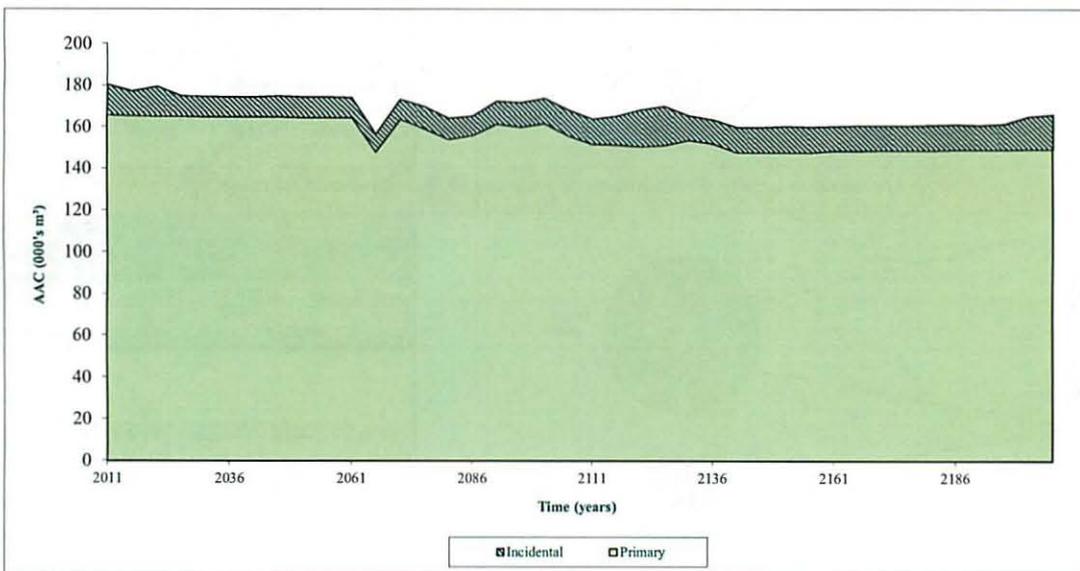




FMU Coniferous AAC by Cover Type

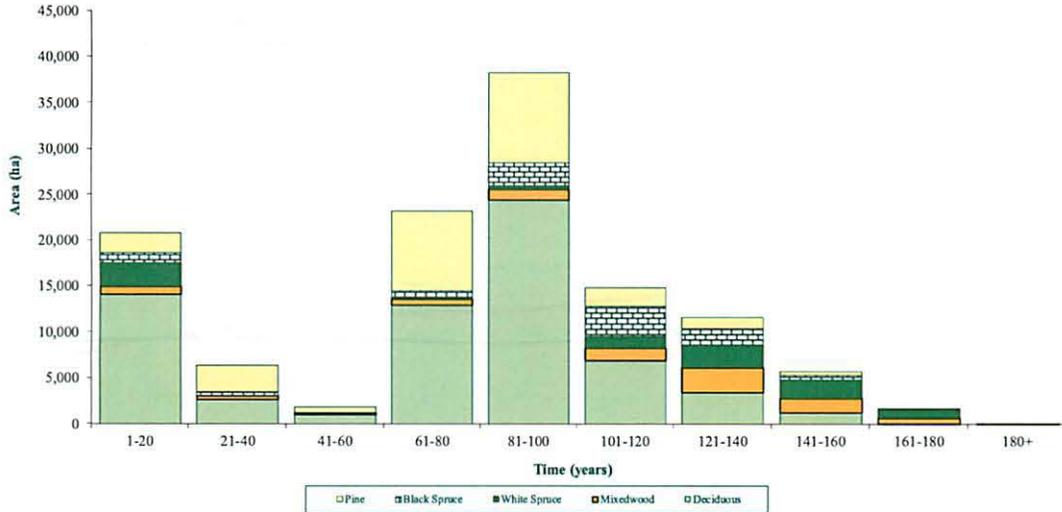


FMU Deciduous AAC by Cover Type

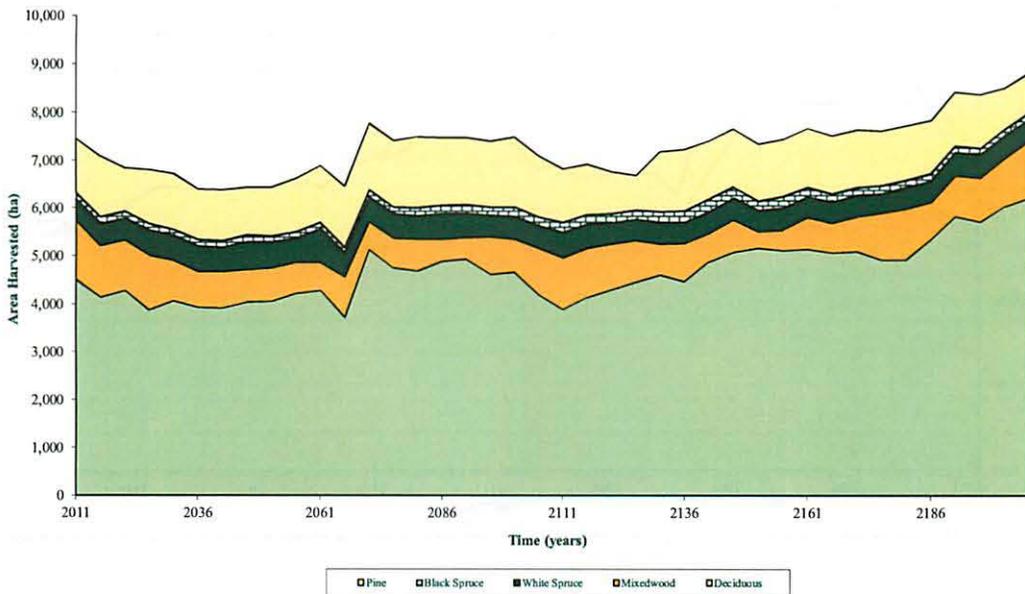




Initial Ageclass Structure by Cover Type



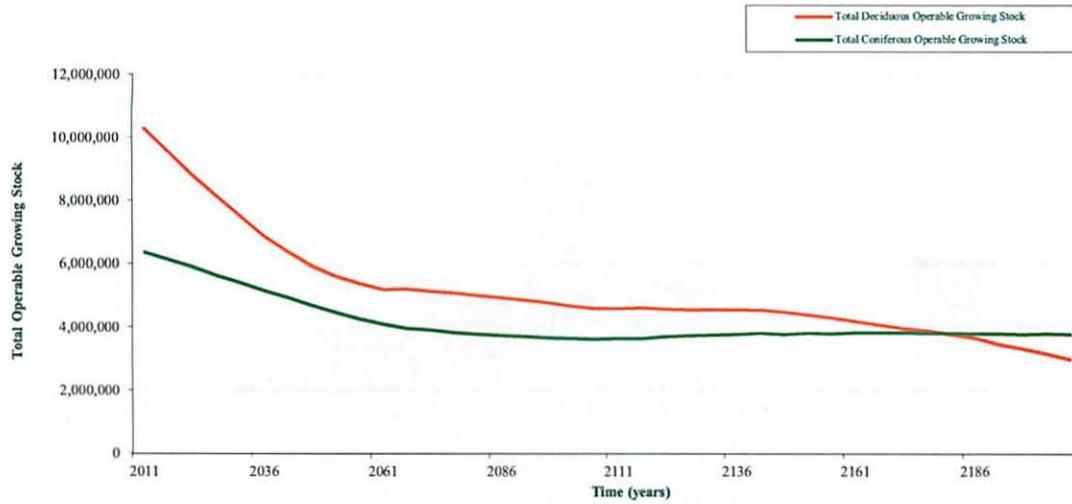
Area Harvested by Cover Type



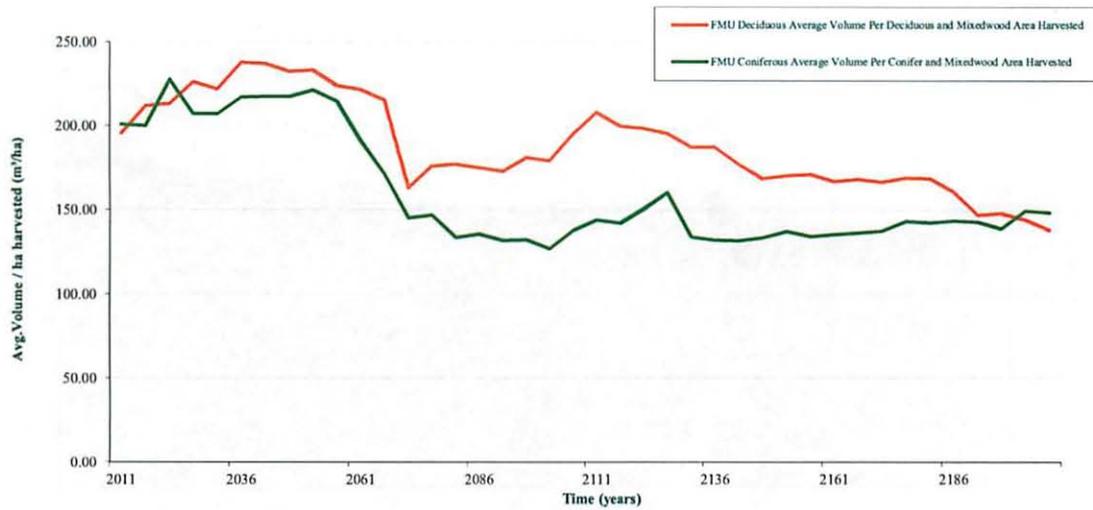
The Alberta-Pacific FMA Area 2011 Timber Supply Analysis
 FMU L1



Growing Stock Over Time

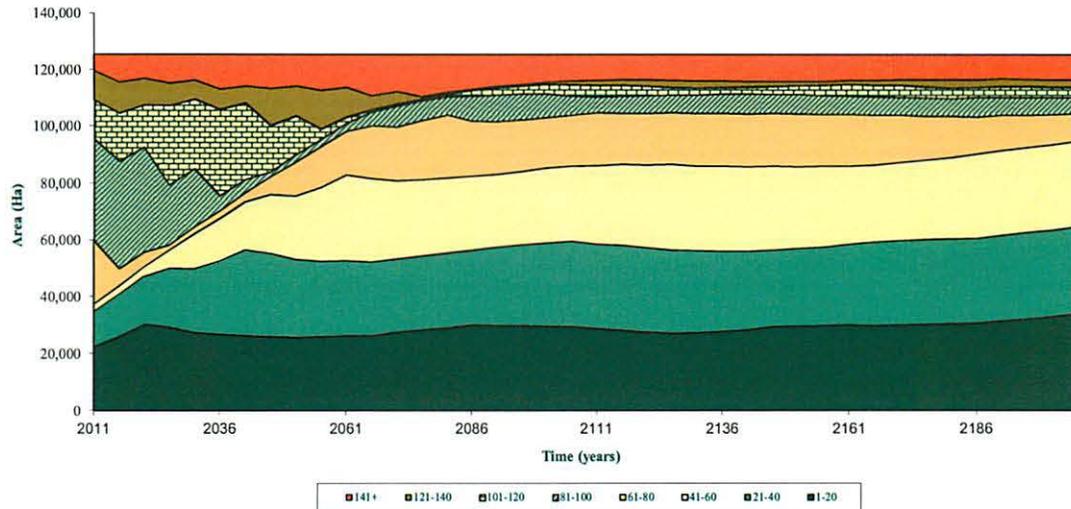


Average Volume Per Ha Harvested Over Time





Age Class Distribution



Average Harvest Ages Over Time

Species Group	Now	+ 50 Years	+ 100 Years	+ 150 Years	+ 200 Years
Deciduous	106	115	78	72	63
Deciduous/Coniferous	80	107	77	63	32
Coniferous/Deciduous	96	150	52	73	64
White Spruce	143	167	90	94	100
Black Spruce	127	129	181	213	151
Pine	128	125	133	105	160

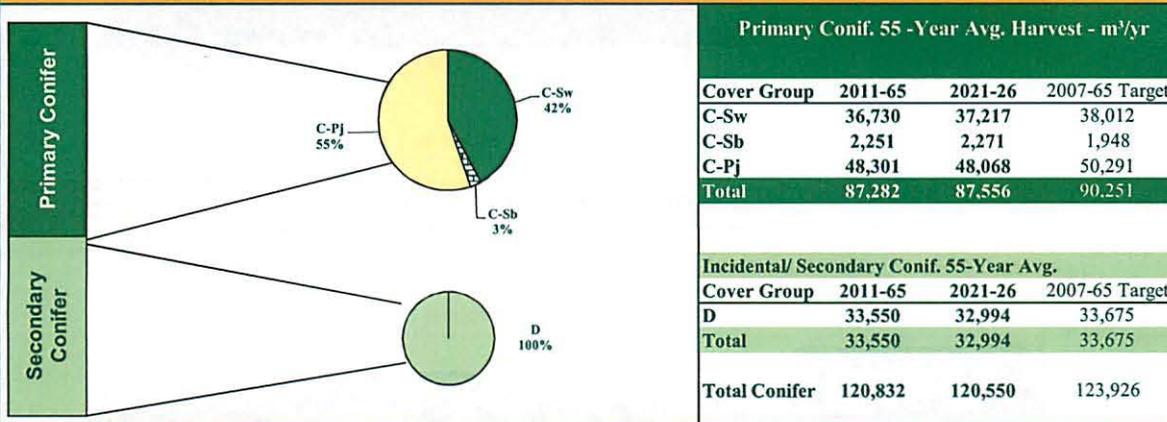
The Alberta-Pacific FMA Area 2011 Timber Supply Analysis

FMU S11

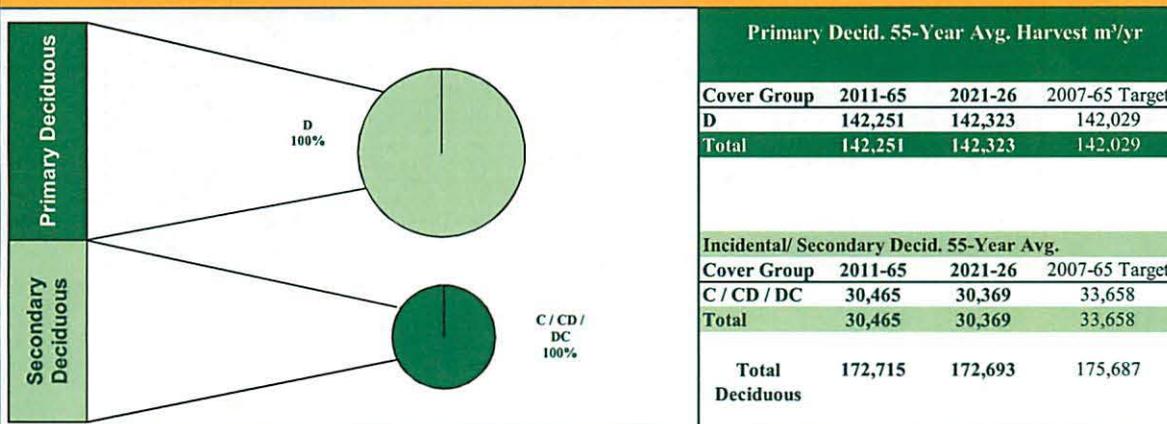


Summary Category	Coniferous	Deciduous	Total
2007 Results			
Net Harvestable Landbase (ha)	-	-	151,507
Initial LRSY (m³/yr)	121,390	196,930	318,320
Woodstock™ Aspatial Primary AAC (m³/yr)	92,339	144,016	236,356
Stanley Spatial Primary AAC (m³/yr)	90,251 98%	142,029 99%	232,280
Stand Retention Deduction	0%	5%	-
Cull Deduction	2%	4%	-
2011 Updates			
Net Harvestable Landbase (ha)	-	-	152,157
Spatial Primary AAC : 55-Year Average (m³/yr)	87,282	142,251	229,533

Coniferous Harvest Summary by Cover Type: 55-Year Average

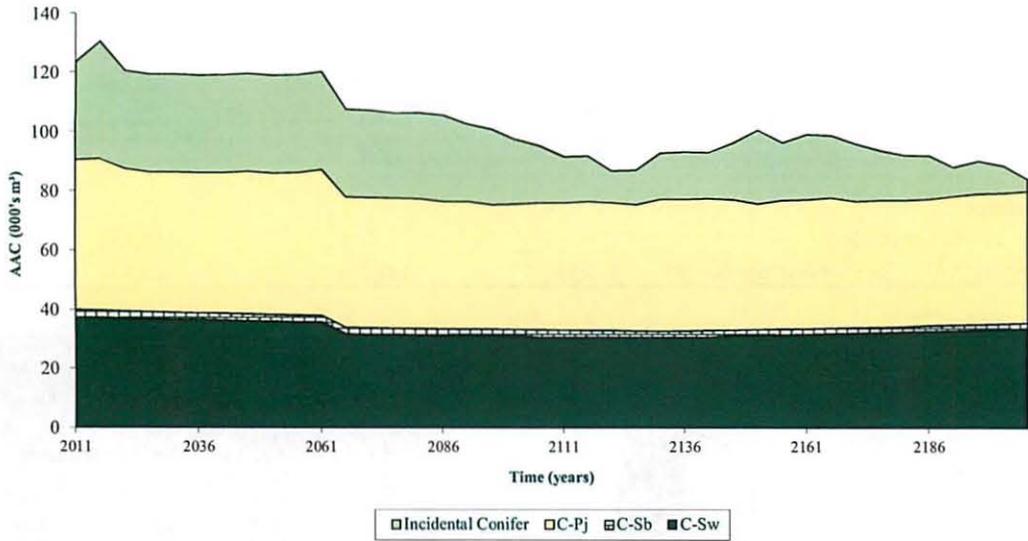


Deciduous Harvest Summary by Cover Type: 55-Year Average

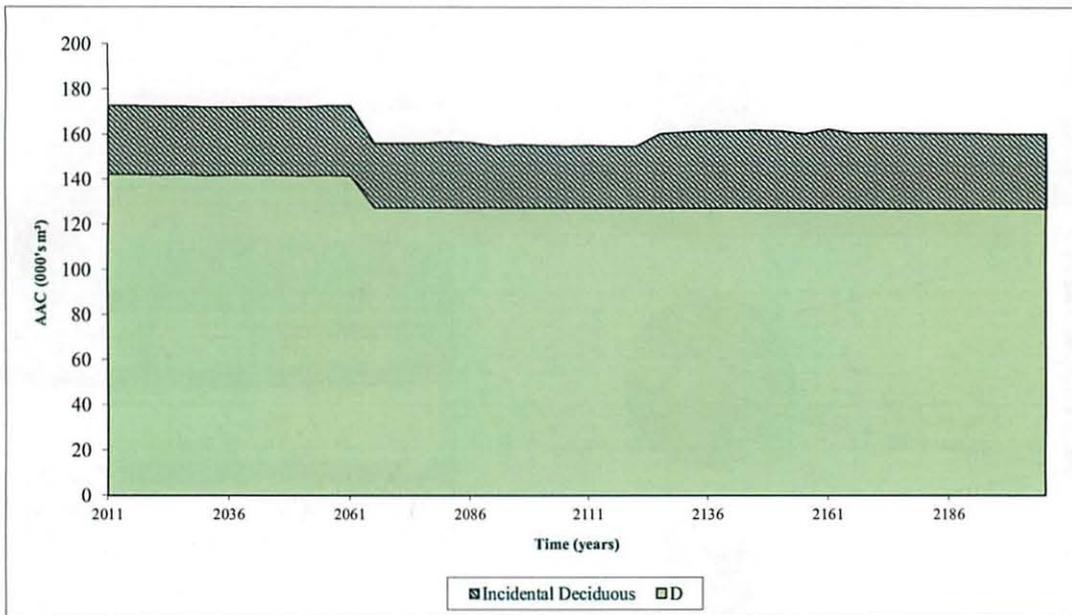




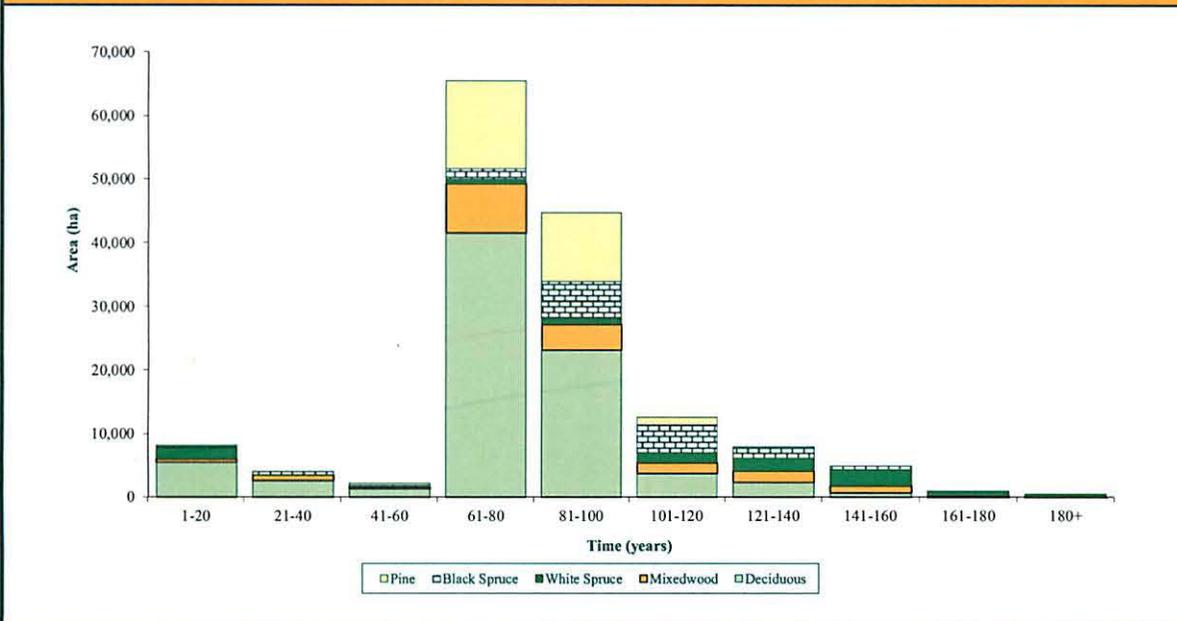
FMU Coniferous AAC by Cover Type



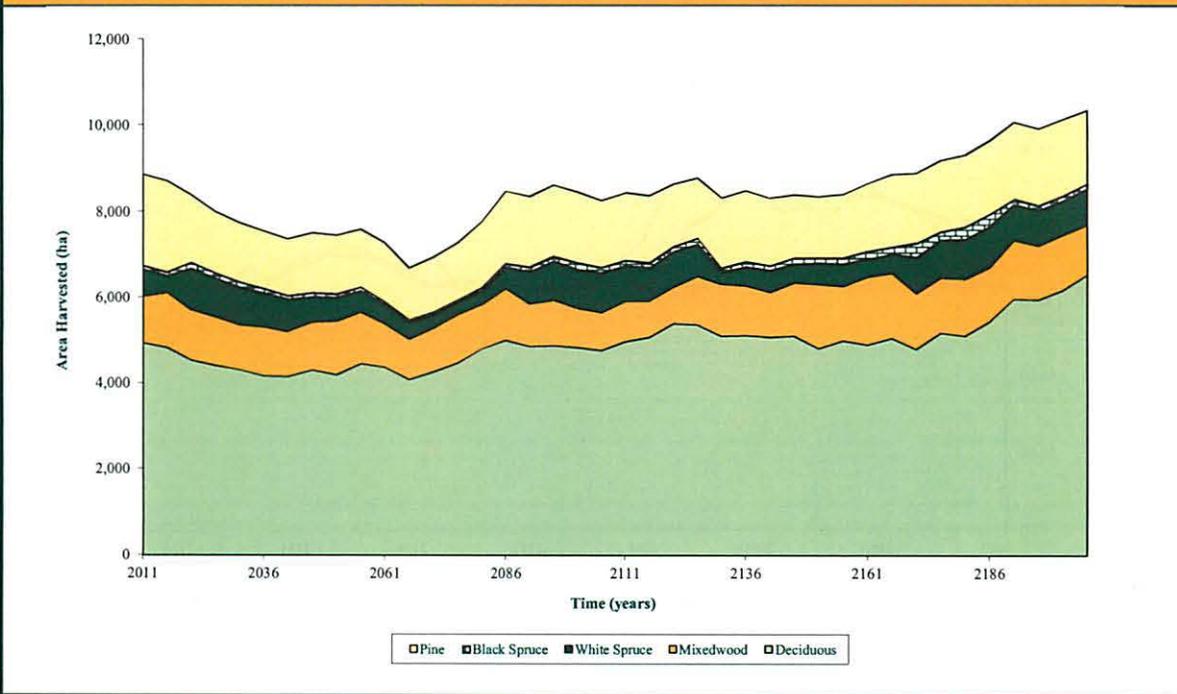
FMU Deciduous AAC by Cover Type



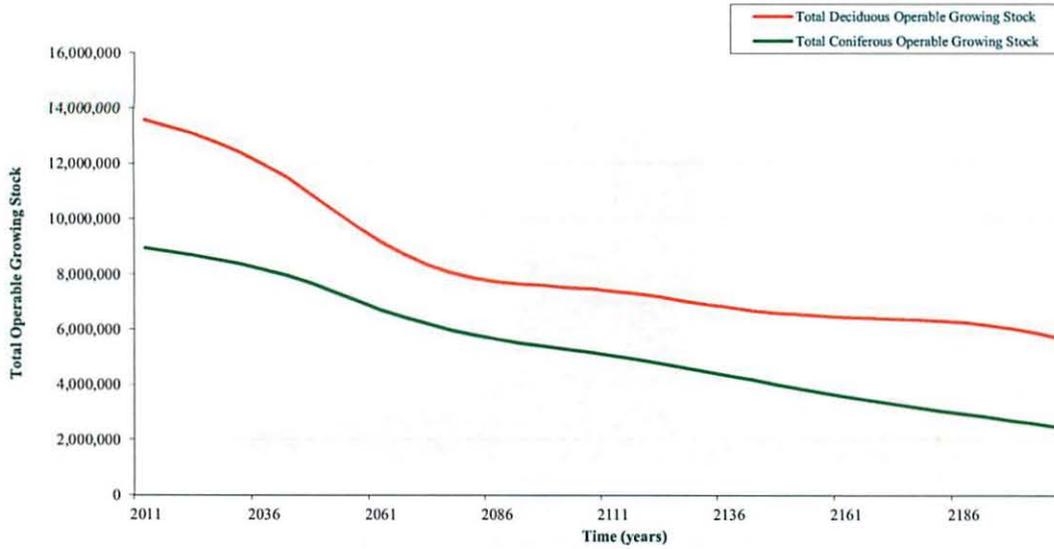
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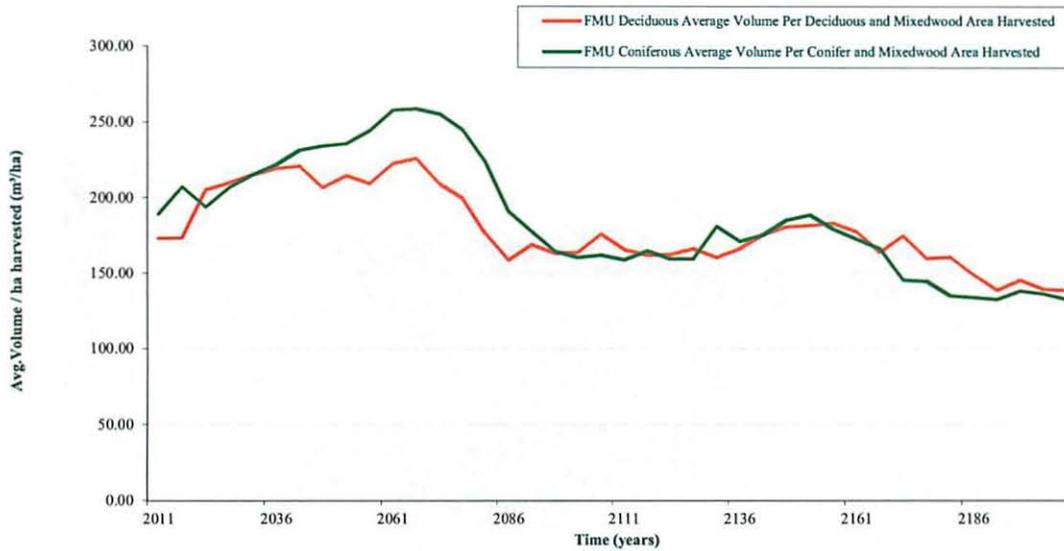
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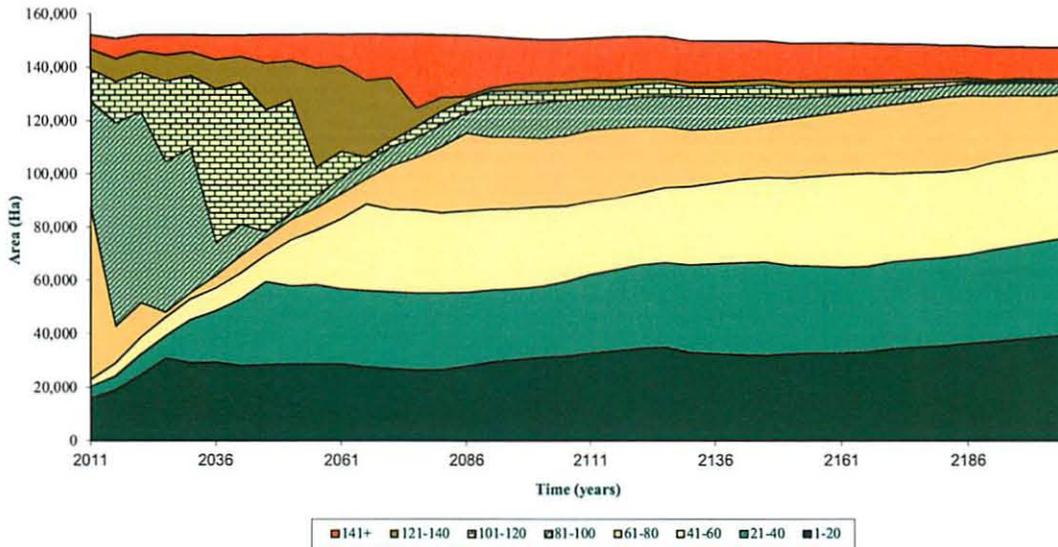
Growing Stock Over Time



Average Volume Per Ha Harvested Over Time



Age Class Distribution



Average Harvest Ages Over Time

Species Group	Now	+ 50 Years	+ 100 Years	+ 150 Years	+ 200 Years
Deciduous	85	120	96	88	78
Deciduous/Coniferous	114	124	70	81	61
Coniferous/Deciduous	123	136	84	96	81
White Spruce	151	160	84	88	80
Black Spruce	116	105	83	206	199
Pine	85	120	90	89	85