Fibre Utilization – Locally focused discussion on applicable utilization and waste policy - Interior

February 23, 2021

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Outline

- Fibre supply and demand
- Interior Forest
 Sector Renewal
- Successes and Trends
- Residual fibre scaling systems
- New Waste Management Policy
- Fibre Recovery Process
- Fibre Recovery Tenures
- Available Resources
- Questions





Recent Initiatives

- Greater emphasis on reducing unnecessary slash burning of residual fibre (employment/air quality/CO2)
- Concurrent Residual Harvest System (CRHS)
- Interior Forest Sector Renewal
- Pulp and Paper Task Force
- Proposed Fort Nelson Pellet Plant Peak Renewables





Interior versus Coast

Interior

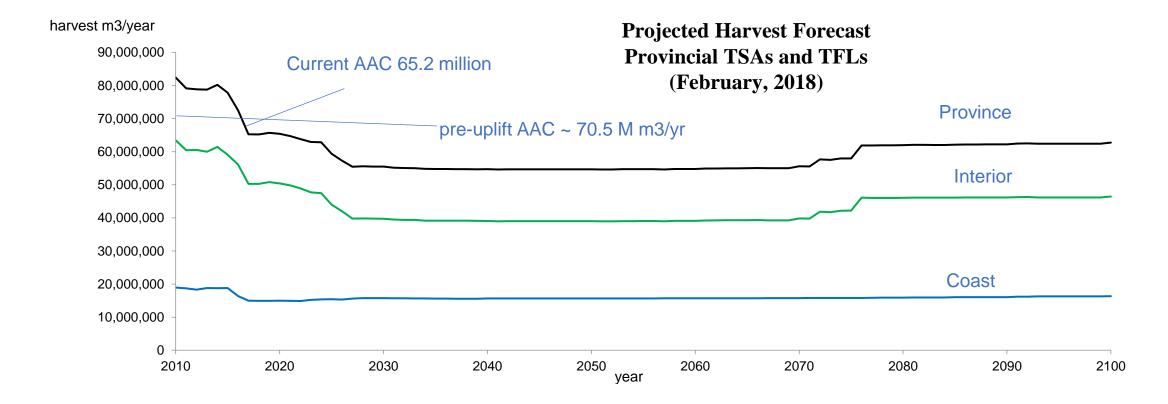
- Many commodity lumber mills lots of residual chips/ sawdust
- Similar sized timber/ lower harvesting costs increased efficiency
- Diverse sector using residuals pellet facilities, pulp mills, OSB plants, bioenergy plants, etc.
- Vertical integration of large players (sawmill/plywood/pulp)

Coast

- More expensive harvesting/larger, higher value logs
- Fewer sawmills less residuals from sawmilling
- Transportation issues (salt water) difficult to make pellets for use in bioenergy facilities
- Pulp sector not as integrated with sawmills



Future Timber Supply

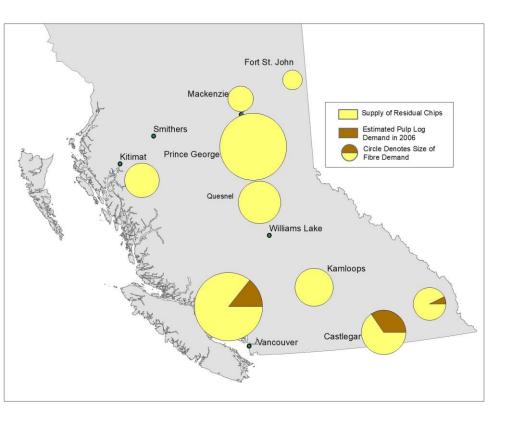


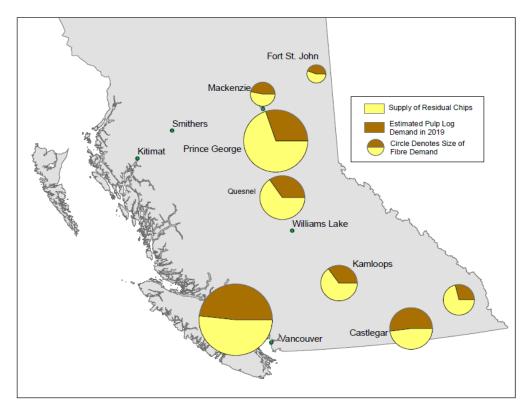


Pulp mill Demand and Supply

2006

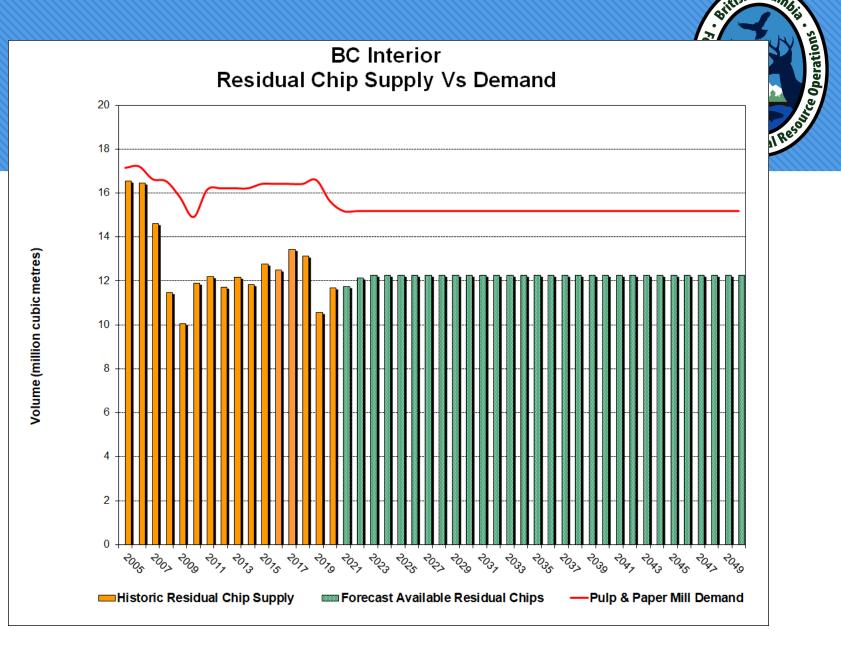
2019





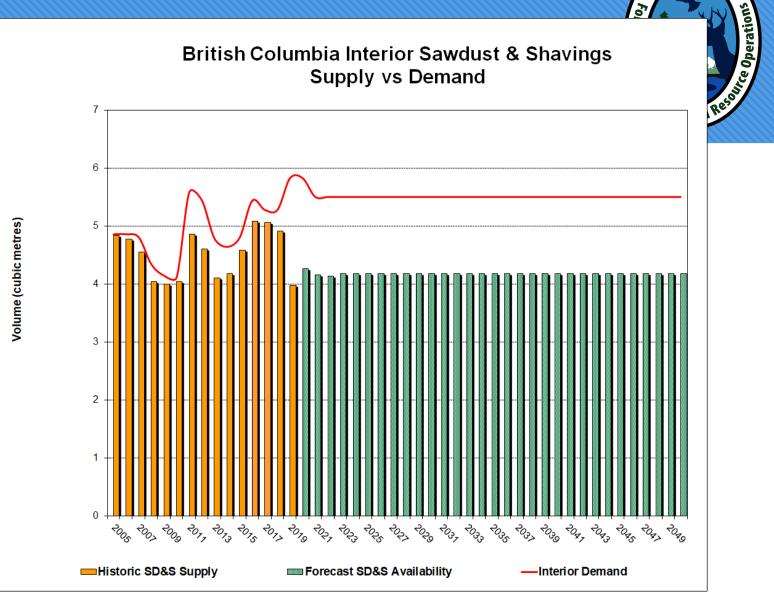
Source: R. Schutz, RPF, Industrial Forestry Service Ltd.

BC Interior Pulp Chip Demand and Supply



Source: R. Schutz, RPF, Industrial Forestry Service Ltd.

BC Interior Sawdust and Shavings Supply and Demand



Source: R. Schutz, RPF, Industrial Forestry Service Ltd



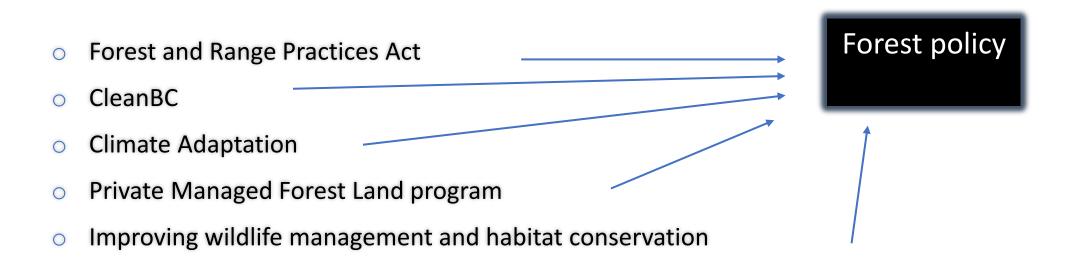
Interior Forest Sector Renewal

- Process established Spring 2019
- What We Heard Report released February 2020
 - 468 online survey responces
 - 92 written submissions
 - 36 community engagements
- Government currently reviewing report and considering next steps
- Interior Forest Sector Renewal process included in Minister's Mandate Letter



Interior Forest Sector Renewal

Examples of other Government Public engagement with Communities on Policy Initiatives



Interior Fibre Utilization



- Improve utilization of fibre and increase fibre available for Pulp mills, pellet and energy plants
- The ministry encourages fibre utilization through take or pay policy resulting in B2B agreement and where necessary, the use of fibre recovery process.
- Alternative scaling methods available to promote concurrent harvesting
- FESBC and LCEF provided funding for fibre utilization projects

Pulp Fibre Task Force

Purpose:

Identify immediate pulpwood opportunities in beetle salvage and fire damaged stands that can be harvest ready in the short-term





Successes and Trends

- Where an economic supply and demand exists fibre is moving and investments are being made
- Interior Forest Sector Renewal public engagement initiative
- Long term contracts to supply power plants in Japan and UK with pellets
- Diversification and investment in the Secondary Fibre Industry (Pulp, Pellet and Energy)
- Interior pulp mills continued to operate through the down turn



FESBC Utilization Support

Enhanced utilization of residual fibre to avoid forest carbon emissions:

- 2018/19 Actual **233,610 m3**
- 2019/20 Actual 864,660 m3
- 2020/21 Forecast **1,436,000 m3**,

Future years:

- 2021/22 target 862,000m3
- 2022/23 target 159,000m3

Non carbon eligible rehabilitation, fibre recovery and utilization projects:

• 486,740m3 in total over the last 3 years



FFT Support

BCTS sold and volume harvested on behalf of FFT.

Volume harvested by calendar year based on areas with harvest start. 2019 403,863 m3 2020 279,834 m3

Volume Sold by fiscal year sold. 2019/20 **376,000 m3**

District volume sold 2019/20 114,102m3 Most of this volume is in PG, some in Burns Lake.

Concurrent Residual Harvest System (CRHS) – Interior

- Introduced April 1, 2019
- Allows low-quality fibre to move with sawlog
- Default Vol/Wt ratios & grade profiles in place by stratum type
- Licensee applies to District and must fit requirements
- Living document
- Not available for BC Timber Sales licenses



CRHS - activity



Volume Delivered since April 1, 2019

Southern Interior

- 737,210 m3
- Northern Interior
- 596,378m3

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Pulp Volume/Weight Ratio and Grade Profile Tables

Stratum Description	Vol/Wt Ratio	Grade 1 %	Grade 2 %	Grade 4 %	Grade 6 %	Grade Z %
Green HE Pulp <15% (G1&2) >70% Green	0.99	1.02	8.73	88.84	0.13	1.28
Green FI/LA Pulp < 15% (G1&2) >70% Green	1.26	1.28	13.13	76.27	5.18	4.14
Green Whitewood Pulp < 15% (G1&2)>70% Green	1.31	0.51	9.04	83.46	1.67	5.32
Dry Pulp < 15% (G1&2) >50% Dry	1.51	1.35	6.21	90.29	0.54	1.61
Cedar Pulp <20% (G1&2)	1.32	0.70	16.08	76.78	1.83	4.61



Unattended Weigh Scales

- Applications must first be submitted to the local district manager.
- Can be used with CRHS
- 3 sets of procedures





New Waste Measurement Procedures



Goal: Improve measurement of waste



Waste Measurement Details

- Based on a joint industry/government Technical Waste Working Group (TWWG)
- Designed to improve the accuracy and consistency of waste measurements
- Utilizes ratio adjustment sampling principles to improve sampling efficiency
- Important dates: April 1, 2021 & April 1, 2022
- Eforwaste and HRC applications have been developed





Fibre Recovery Process (FRP)

- District Manager (DM) or BC Timber Sales Manager (TSM) leads the process
- Implement where economics allow and demand for residual fibre exists
- Encourages Business to Business (B2B) between Primary Harvesters (PH) and Secondary Users (SU)
- Last resort approach when B2B cannot be worked out
- DM/TSM has tools to further encourage utilization if necessary



Fibre Recovery Process (FRP) con't

- Informal process to encourage B2B:
 - Preliminary Review
 - Letter of Expectation to PH(s)
 - Greater emphasis on utilization
 - Information Sharing and planning
 - Identification of blocks or piles
 - Goal integrated harvesting while cutting permit is acting



Fibre Recovery Process (FRP) con't



•If B2B not working out:

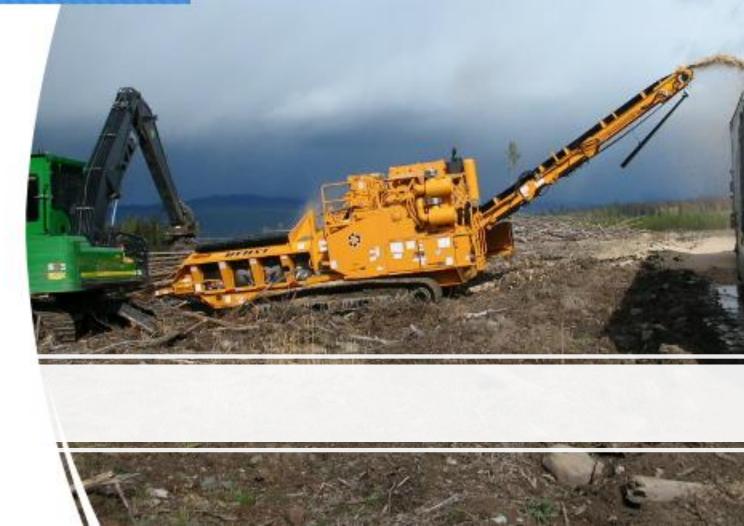
•Formal request to provide information on any residual fibre that may remain (mandatory PH reporting)

- •If economic, Do Not Damage Orders on PH cutting permit
- •Fibre Recovery Tenures on abandoned residual fibre

•Handling Regulation – ability for Government to provide direction on handling of residual fibre for efficient harvest

Special Forest Products

- Available for use on blocks with completed waste surveys
- Allows for the option to manufacture product on block
- Reduced effort to scale volume
- Products Include: Chips, Hog, and Firewood





Fibre Recovery Tenures

Fibre Forestry Licence to Cut

 Short term opportunity for specific site (months)

Fibre Supply Licence to Cut with cutting permits

- Terms up to 10 years for a geographic area
- 1st right of refusal to any residual fibre abandoned

Decked Timber FLTC

• To remove decked merchantable from a specific site





Fibre Recovery Tenures – When to us

Forestry Fibre License to Cut

- Provide access to abandoned residual fibre on individual Cutting Permits/blocks
- Ideal for small/short term volume requirements (commercial Firewood, pulp wood)

Fibre Supply License to Cut

• Provide longer term fibre security for an established secondary facility

Decked Timber License to Cut

 Provide access to abandoned decked timber on individual Cutting Permits/blocks

Tenures to be used for situations where the fibre cannot be harvested under a B2B agreement and the Primary Harvester's harvest rights have expired.



Tenure Obligations

- Hazard abatement for roadside and landing residual fibre automatically transfers to holder of recovery tenure upon issuance
- No impact on free-growing obligations
- Forest Planning and Practices Regulation speaks to road maintenance requirements outside license area
- Can use clauses in tenure to deal with road deactivation within license area
- Manage soil disturbance limits along roadside



Upcoming Tools

- Additional Biomass Inventories Remaining Timber Supply Areas and potentially some Tree Farm Licenses
- Heat maps of Biomass Inventories
- BC Forest BioGIS tool
- BIOS App



Available Resources

Additional information on Resource Tenures Branch website

<u>https://www2.gov.bc.ca/gov/content/industry/forestry/forest-tenures/forest-tenure-administration/residual-fibre-recovery</u>

- Fibre Recovery Process
- Biomass Handling Guidelines
- FPInnovations Biomass Inventories
- Information about residual fibre policies
- CRHS
 - <u>https://www2.gov.bc.ca/gov/content/industry/forestry/competitive-forest-industry/timber-pricing/timber-scaling/alternate-methods-of-scale</u>
- Unattended weigh scales
 - <u>https://www2.gov.bc.ca/gov/content/industry/forestry/competitive-forest-industry/timber-pricing/timber-scaling/unattended-weigh-scales</u>



Available Resources con't.

• Waste Measurement Procedures

•<u>https://www2.gov.bc.ca/gov/content/industry/forestry/competitive-forest-industry/timber-pricing/forest-residue-waste</u>

- Questions: ForestTenuresBranch@gov.bc.ca
- For opportunities to access residual fibre contact your local Natural Resource District or Front Counter BC

Questions?

