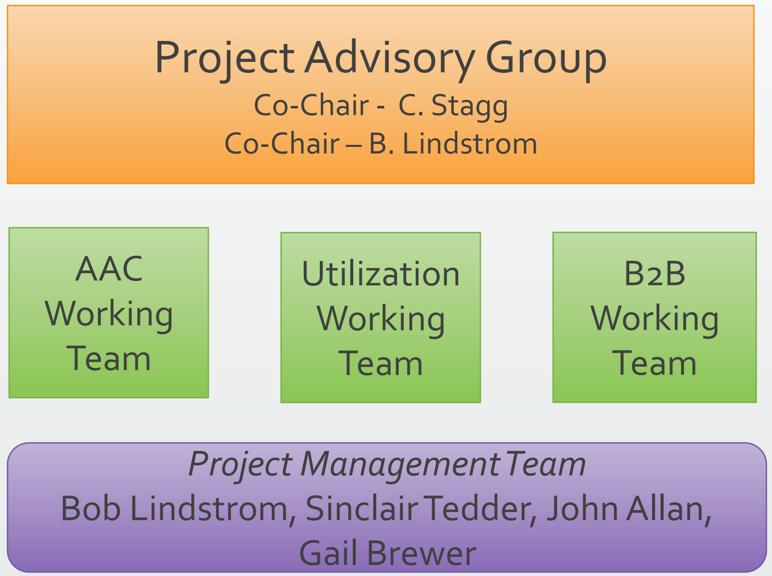
Presentation of the Coast Pulp Fibre Project

March 31, 2018

2. Approach of Review

- **Minister's Mandate:**
  - Develop proposals to improve the pulp fibre supply for the BC Coast Pulp & Paper mills
  - Provide a report with short term and longer term strategic proposals by March 31, 2018
- **Multi-stakeholder process**
  - Included participation by 38 individuals representing various parts of forest sector, communities, research and government
  - First Nations Representative attended two meetings – requested information
- **Project Advisory Group**
  - Multi-stakeholder Group oversaw development of proposals
  - Met 5 times as a whole along with a number of sub-group meetings to consult on report
- **Working Teams**
  - 3 Working Teams established to examine technical and operational level details of issues and develop proposals for consideration by Advisory Group

PROJECT STRUCTURE



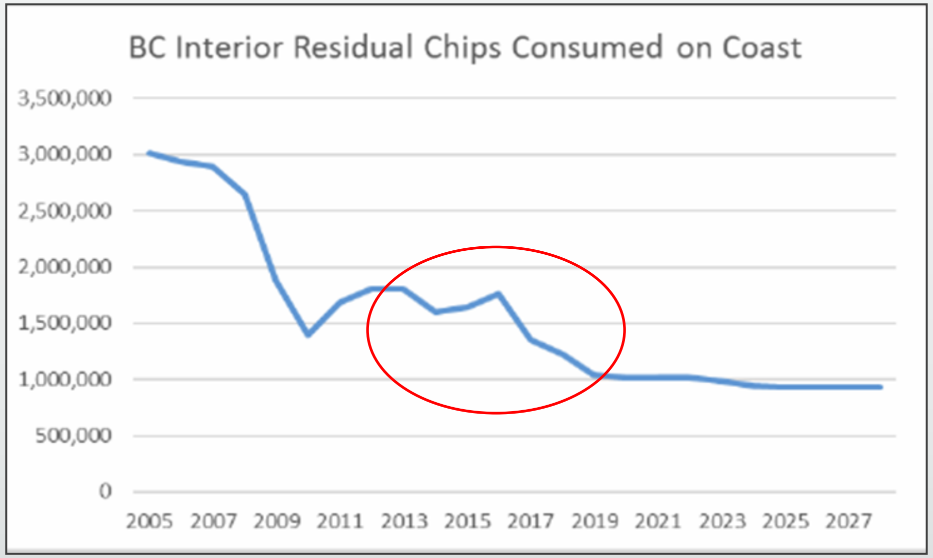
- Project Management Team
  - Directed and managed work of teams
  - Oversaw development of report

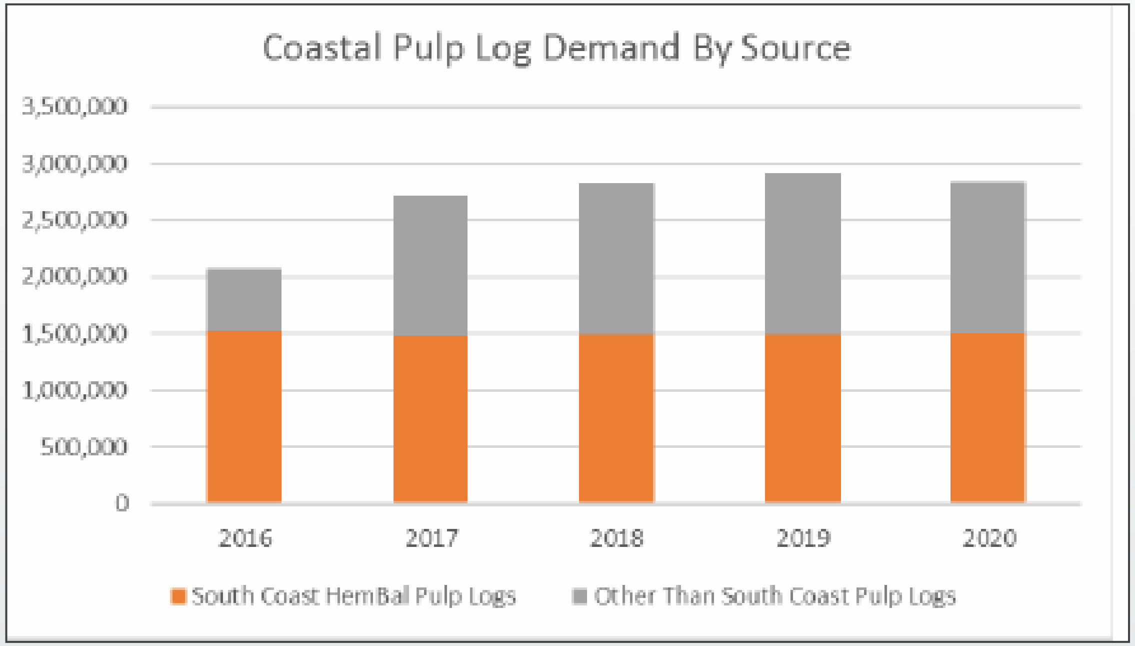
Overview of Coast Pulp and Paper Fibre Supply

- Vitally linked to the forest sector as an outlet for pulp logs and residual chips, sawdust, hog fuel from sawmills (over 38% chips provided by coast sawmills)
- AAC reductions, 2017 fire season and sawmill closures creating critical chip supply shortages and cost increases leading to pulp & paper mill curtailments and reduced competitiveness
- Additional high cost pulp fibre brought in from northwest U.S., North BC Coast and Alaska
- Harvesting of stands heavy to pulp generally not economic
  - Logging costs approximately \$90/m^3; Vancouver log market price for pulp logs approximately \$50/m^3
- Constrained fibre supply for domestic sawmills
- Fibre supply shortages in pulp and paper mills resulting in reduced operating rates
- Coast pulp & paper mills overall fibre costs are about 20% higher than BC interior mills

Coast Chip Supply: Actual and Forecast

- The BC Interior has supplied about 23% of BC Coast fibre supply and is declining to 16% by 2019
  - Represents decline of approximately 500,000 m^3 / yr since 2012





- Increased consumption of more costly chips (gray bar) produced from whole logs is forecast and could eventually make up to 20% of total chip consumption the coast.
- Cost for "other" pulp logs also forecast to rise from estimate of $65/$m^3$ to $78/$m^3$

(M.D.T. 27)

Residual (Waste) Fibre Opportunity

- The *Forest Act (s.103.1)* allows companies harvesting on Crown land to leave merchantable timber (waste) as long as they pay applicable stumpage ("take or pay policy")
- Harvest billing system records an average of 2.1 million m3 of Avoidable waste in the BC Coast regions over past five years
- Estimated average of between 500,000 to 600,000 m^3 [i] /year of the total volume of fibre currently left as waste on coast could be used for making pulp and paper
- Volume of potential pulp wood (all softwood species) left as waste presents potentially significant opportunity to offset supply shortages
- Barriers impacting waste removal include
  - Extraction costs that outweigh value of fibre
  - Lack of coordination with committed buyers (so that fibre can be extracted concurrent with harvest)
  - Transportation challenges (e.g. capacity to move low value fibre)
  - Policies (e.g. scaling requirements)

i. Based on studies done by FPInnovations and M.D.T.

Fibre Supply Overview Considerations

- Analysis of coastal fibre supply and demand indicates pulp fibre supply gap of 500,000 m3/yr increasing to 1 million m3/yr as chip supply from interior mills declines
  - Assumes coastal mill production stays constant and no additional users of pulp fibre
- Increased harvest costs translate to higher costs for sawlogs, residuals and pulp logs
  - Priority is to ***improve business to business relationships*** to increase efficiencies in supply chain - from harvest operations to mill gate
- Harvest in decadent coastal old growth stands results in significant residual fibre (waste) which presents potential incremental pulp fibre supply
  - Priority is to ***maximize utilization of waste*** during first pass harvest operations to reduce operational costs
- Residual chips from sawmills are lowest cost fibre option
  - Priority is to ***maximize harvest levels (AAC)*** to increase volume of sawlogs going to coastal sawmills

Proposals

- The following section sets out proposals developed by the Advisory Group to address the project goal of increasing coastal pulp fibre supply
  - Targeted volume (m^3/yr): minimum 500,000 rising to 1 million
  - **Objectives**:
    - Improve sector business to business relationships
    - Maximize utilization of waste
    - Maximize harvest of AAC
    - Identify and address barriers
  - **Principles:**
    - Proposals not intended to strictly shift costs to another party (may be cost sharing for mutual benefit)
    - Proposals intended to increase volume of fibre available to pulp mills
    - Proposals intended to increase volume of logs processed in BC sawmills and get highest value from each log
    - Proposals not intended to impact softwood or ground wood litigation

Strategic Proposals

Objectives	#	Strategic Proposals	Potential Impact
Improve Sector Business to Business Relationships	1	Increase Pulp & Paper company involvement in pre-harvest planning with major licensees and ensure demand is communicated widely – FNs and the forest sector	High
	2	Improve BCTS / Pulp Sector communications – hold quarterly meetings to identify opportunities/demands for next 6-12 months	High
	3	Pilot: Examine timber harvest to mill gate value chain efficiencies	High
Maximize Utilization of Waste	4	Pilot Fibre Recovery Process – South Island District, evaluate process and expand to other coastal districts	High
	5	Develop low value stand authorization	High
	6	Disposition of underutilized volumes with utilization requirement	Moderate
	7	Increase efficiencies in pulp log handling and scale sampling methodology	High
	8	Fibre Recovery – Additional Regulatory Tools to Complement #4	Moderate
	9	Policy enabling licensee to cede ownership or allocate waste to secondary user	Moderate

Strategic Proposals

Objectives	#	Strategic Proposals	Potential Impact
Maximize Harvest of AAC	10	Increase pulp fibre supply through commercial thinning and low value stand conversion	
Supporting analysis and policy development actions	11	Continue to pursue/support options to address critical hog fuel surplus	Moderate
	12	Additional actions required to support resolution of barriers – e.g., potential development of slash burning policy, roadside handling requirements	Unrated

Risks and Constraints

- High costs of harvesting and transportation of more remote and challenging sites
- Transportation challenges, configurations, equipment, labour
- Skilled labour shortage, resourcing issue
- Limited space available at roadside / requires flexible handling environment
- Systems issues – potential revisions to FTA, HBS
- B2B and FLNR led proposals rely on good faith planning and commercial arrangements
- Support for harvesting forest profile and incorporating higher utilization in operations
- Timing of decision by licensee to support first pass operation / timing of government policy intervention
- Hog fuel surplus (electricity contracts, landfill permits)
- Timber pricing policies

Next Steps

- Minister has given support in principle for report proposals and implementation mandate
- Fully develop implementation plan with key milestones and accountabilities
  - Timber Pricing, Forest Tenures, South Island District, Regional Operations
- Develop performance measures/metrics to track progress
- Communicate report proposals and plans across Forest Industry and all affected parties
- Quarterly tracking and evaluation by FLNRO and Pulp and Paper sector
- Report back to Minister on progress in six months or sooner
- Re-engage Advisory Group to evaluate progress in 6 months