Timber Markets Update and Analysis of an Integrated SE Alaska Forest Products Industry

Prepared for:

Southeast Conference

by:

McDowell Group, Inc.

September 21, 2004

Purpose of Study

- Update earlier McDowell Group timber demand and supply research
- Examine the rationale for integrated forest products manufacturing in SE
- Estimate the likely scale of operations and potential economic impacts of an integrated industry

Project Team

- McDowell Group
  - Juneau, Anchorage
- Walt Sheridan Associates
  - Juneau
- Leonard Guss Associates
  - Woodinville, Washington

An “Integrated Industry”

- Multiple types of manufacturing facilities that evolve, or are designed, to make the most of the available raw materials.
- At minimum:
  1. Sawmills
  2. Something to replace the pulp mills as a processor of low-grade wood

Demand Update

- Intense global competition
- Growing use of engineered and kiln dried products in key markets
- Strong US demand for Tongass products
  - Active housing market
  - Stronger Canadian dollar
  - BC forest fires
- Log export remains attractive for timber that is not restricted.

Recent Prices for Typical Tongass Forest Products

	Hem-Fir 2X6 Random Kiln-dried #2 & Better	Spruce-Pine-Fir 2X6 Random Kiln-dried #2 & Better	Western Red Cedar, Green 2X8 #2 & Better	Shop/Mldg & Better Composite Price	Medium Density Fiberboard 3/4” West
1999	362	365	593	788	344
2000	283	287	573	674	358
2001	258	260	599	678	369
2002	263	265	744	702	366
2003	255	259	817	590	337
Aug 2004	480	503	920	897	450

Source: Random Lengths Publications

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Supply Update

- Tongass National Forest
  - Since 1997 less than half the ASQ has been offered and less than half of that has been sold.
  - Approximately 100 MMBF of past years’ sales cancelled because not profitable to harvest.
  - Volume under contract was 70 MMBF in July. FS target is 3-year supply. This would be about 300 MMBF of sawlogs, according to industry representatives
  - About 40 percent of Tongass sale quantities are not sawlog quality.

Recent Tongass Sales

	Allowable Sale Quantity (MMBF)	Quantity Offered (MMBF)	Quantity Sold (MMBF)	Quantity Harvested (MMBF)
2003	267	115.3	36.5	51.3
2002	267	56.9	24.2	33.8
2001	267	67.9	49.6	47.8
2000	187	85.3	170.3	146.9
1999	187	115.3	61.4	145.8
1998	267	187.1	24.1	119.5

Other Sources

- State of Alaska
  - Perhaps 15-18 MMBF annually, mainly lower-quality timber
- Mental Health Trust
  - 120 MMBF in sales expected over next 3 years
  - Little sustainable harvest after that
- ANCSA Corporations (mainly Sealaska)
  - Prefer to export higher grades
  - 20 MMBF of lower grade logs on a sustained basis.
- Canadian Imports
  - Have been restricted. Not significant in near-term

Southeast Products

- Key products
  - Green shop lumber for additional manufacturing in the PNW
  - Spruce cants, mainly for export
  - Cedar log exports
- Other products (mainly for local use)
  - Log building kits
  - Siding
  - Dimension lumber

New Developments

- Dry kilns and planers to supply finished construction lumber locally
- New species designations
  - Alaska Spruce
  - Alaska Yellow Cedar
- Machine stress-rating/yellow cedar glulams
- Other projects of the Sitka Wood Utilization Center, the Ketchikan Wood Technology Center, University of AK, etc.

Rationale for an Integrated Industry

- **Current industry consists only of sawmills.** ***Sawlogs, esp. high-value spruce and cedar, must carry harvest and production costs.***
- **Approx. 40 percent of harvest less than sawlog quality, not profitable.**
- **Little economic use for mill residuals.**
- **Result: many sales cannot attract bidders; industry is becoming more economically precarious.**

Uses for Low-grade Material

- Requires roundwood
  - Veneer/LVL
  - OSB
- Requires only chips, fiber, or utility
  - Chips
  - Ethanol
  - MDF
  - Power production
  - Compost

MDF Plant

- Brackley/Davis model
  - 140 million square feet production capacity
  - 80 MMBF of raw materials (chips, sawdust, lower-grade logs)
  - Careful cost control. Eg. a dedicated buyer to minimize marketing costs
- Minimum harvest including sawlogs for existing mills - 200 MMBF
- Financial feasibility now under study

Potential Harvest with Current ASQ and Strong Sawn-Wood Markets

Source	Volume	Sawlogs Domestic Processing	Sawlogs Export	Cedar	Utility/ Lower Grade Logs
Tongass National Forest	237.0	173.0	0	16.6	47.4
Alaska Native Corps	100.0		73.0	7.0	20.0
State of Alaska	18.0	13.1	0	1.3	3.6
Mental Health Trust	0	0	0	0	0
Canadian Imports	0	0	0	0	0
Total	355	186.1	73.0	24.9	71.0

Potential Economic Impacts

- Current industry employment: 200
- Potential 'integrated' employment with a 200 to 250 MMBF harvest: 1,200 - 1,750 direct and 900 to 1,400 induced jobs
- Potential direct payroll: $55 to $80 MM
- Potential total impact: $90 to $130 MM

Industry Scale

Moving beyond current harvest limitations could make an integrated industry more resilient.

- **Multiple buyers for low-grade wood**
- **Better economies of scale, e.g., for shipping**
- **More opportunities to tailor manufacturing to particular raw materials and markets**

350 mmbf harvest ideal

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