

New England SAF Quebec City

March 25, 2004

Are We Wasting Money on Intensive Management?

*...quote from New Brunswick
Officials, Feb. 2004*

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Outline

- Some definitions
- Recent Events
- Analytical Issues
- Who is “WE?”
- Neilson review & other considerations
- What’s the answer?

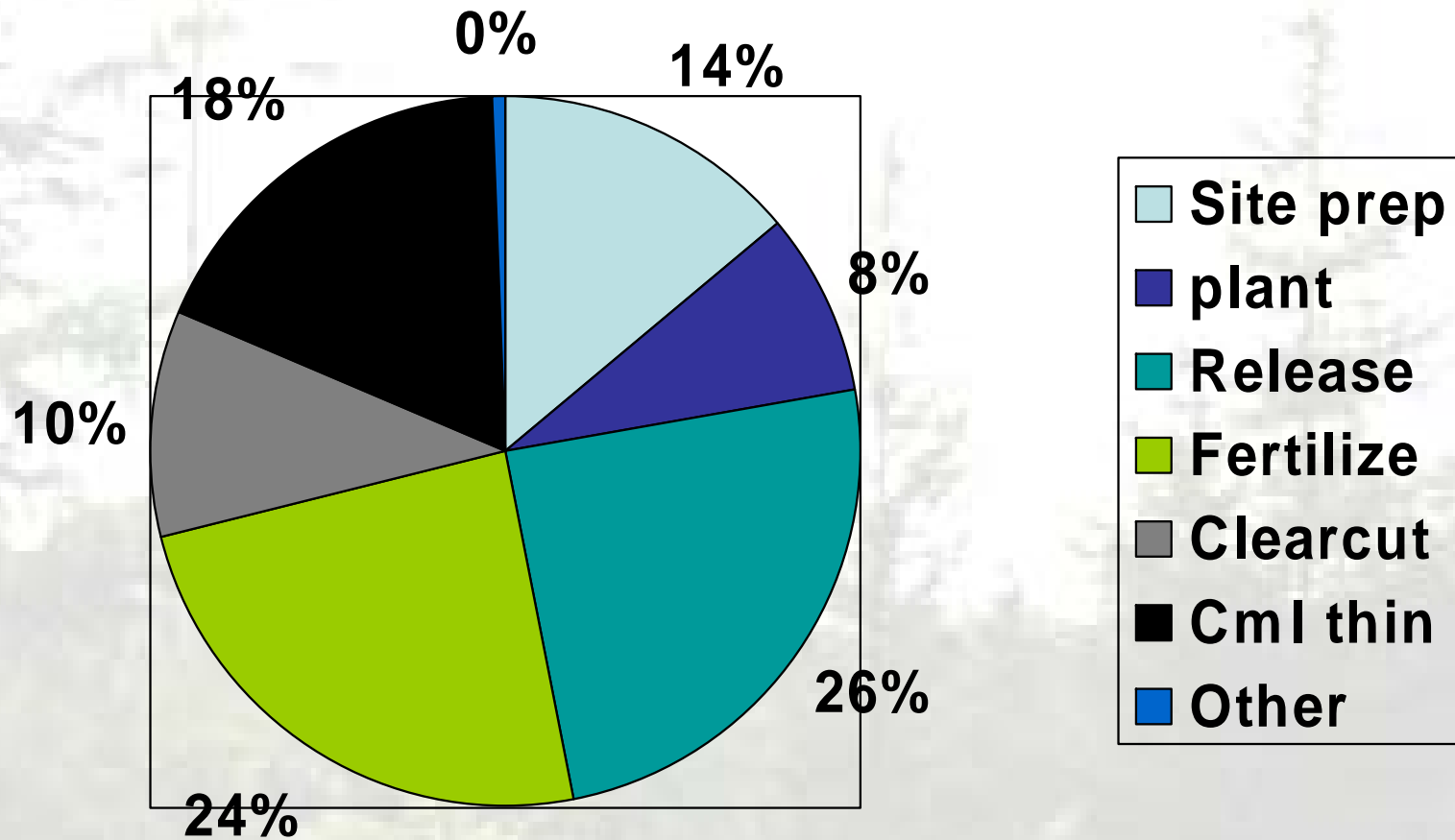
Definitions

- Intensive Management: capital per acre
 - Only plantations?
 - Regimes, not treatments
- Why not existing stands???
- Why not include nontimber goals?
- Include labor/skill intensity as well as capital

Definitions...

- What values are we counting?
- Restoration
 - Longleaf
 - Redpine?
 - Big Trees (EWP in Minn)
 - Streamside buffer strips
 - Output is trout & clean water...

Activities: Example



Results:

Midsouth Plantation recently cut

- Age 23
- Yield
 - plylogs
 - CNS
 - Canterwood
 - Pulp
- Stumpage \$42/ton
- 28
- 17
- This is the third thinning (!)
- Trees cut 8-16" dbh
- Final Harvest 5-6 yrs

Results...

- Entire new industries created
- New land use/environmental issues
- Mead: volume yields doubled every 20 yrs and plan to do it again...
 - Q: effect on \$\$ returns?

Extent of Int. Mgt

- Maine:
 - 8.6 MM A cut 1982-2002
 - Only 1.3 MM intensively treated (15%)
 - Allow for Overlap: approx 900,000 A.
- NB Crown: 14.5% planted by 2025(Erdle)
- Alabama: in one 3.5 MM Surv. Unit, Softwood type is 61% planted (1999)
- NZ, Chile, Brazil, entire forests 100% planted

Recent Events

- FCF sells all its lands
- CHH writes down by NZ\$ 876 MM
- Also in NZ, Huaguang Forests (former.Rayonier lands) Bankrupt.
- Stora sells off Wisc lands
 - Sweden too
 - Norske Skog sells
- Paper companies sell off
 - Abandoning large sunk investments

Events...

- In large areas of US South:
 - Hardwood pulp from unmanaged stands
Now sells for significantly more than pine from expensively managed stands
- UK tree farm performance poor (Neilson)
- But, UK self-suff. in softwood up, will continue to rise

Events...

- Arauco commissions US \$900 MM Mill in Chile – supported by \$300 MM plantation investment

-- Quiz: anybody remember the last US greenfield mill?

Aracruz is lowest cost Mkt pulp mill in world

--100% plantation wood

-- New 900,000 tpy mill Bahia online 2005

-- Quiz: know what BEK is?

Events...

- Some environmentalists making plantation-friendly noises
- FSC!
- WWF!

... IS THIS REAL???

Uncle Willie

- Retired landowner in SC
- Second planted rotation since Connie a child
- Planted too close spacing
- Thinned late – lucky to get done at all
- SPB and fungus
- Ice storm
- There are a LOT of Uncle Willies

Analytical Issues

- Obsession with bare land analysis
 - Calcs are easier?
- What are plausible yield/cost/price assumptions
 - (rabbits in the hat)
- Stand by Stand vs whole forest analysis
 - Tools are now tremendous (e.g. Woodstock)
 - ACE
 - Investments as maintenance cost (Reed, Webster)
- CAPM -- suited to this issue?
 - Probably not

Analytical...

- **How to treat macro risks**
 - E.g. “kiwi” dollar
 - Country risk
 - Assumption that nobody else will do it (prices)
 - Other
- **Plausible baseline scenarios**
 - What if we DON'T invest?
 - Here is where bare land is easy...
- **Need to validate assumptions**
 - Growth rates
 - Treatment response
 - Treatment costs
 - Shadow prices, social costs, market distortions

Analytical How we present results

- Presentations leave room for improvement
 - (many pub. In pre-Excel age)
- Variant views on investment criterion
 - IRR? PNW, something else?
 - Investment analysis theology
- Assumptions often not fully explained
- Key interim results omitted
- Later analysts cannot update, modify, or “what-if” the results.

So, who is “We”?

- The industry
- Affected communities
- The government (taxpayers)
 - Respecting pvt lands
 - Publicly owned lands
 - Many governments offer deep subsidies...
- Consumers

Who is “WE”?... Accounting Stance

Time	Stand	Owner ship	Region	Nation/ Prov.
Liqui- dator				
10 Yr (timo)				
1 Rotn				
Long				

Dennis Neilson Review

- 80 countries
- 34 sp
- 139 regimes
- Investment attractiveness rating

Neilson ...

- Attractiveness:
 - Finland #1
 - Canada #2
 - USA Mainland #3
 - Australia #4
 - NZ #5
 - Estonia #6
 - Chile #7

Neilson...

- Range in growing cost is 10X
 - Between Portugal (*E. globulus*) \$200/ tonne pulp
 - Ecuador (*E. urophylla*) \$22.00
- Many of IRR's very low
- Only 28 of 96 sawlog options had IRR > 7% Most in risky places
- “There are few free lunches”

Silvicultural Issues

- Rotations shortened in past
- Newer Owners/Managers reversing this trend
 - US South (esp. TIMO's)
 - E.Canada
 - Selected tropical situations
- Mixtures largely ignored
- “Ecosystem management” costs/yield penalties not well known
- Hedging against pest risks? (some in denial)
- What if follow-thru on regime cannot be assured? (e.g So. pine plt thinning)

Market Issues

- US markets for white birch, white pine blasted by imports .. Others to come?
- Timberland Sales prices oft. exceed Valuations based on DCF analyses
 - how to explain?
 - a sustainable situation?
 - How to handle risks of major structural change? (e.g. NZ)
- Is there an emerging glut of small wood?
- Will plantations drive out the natural forest?

Wood Quality Issues

- Uniformity of size – cost leverage
- Uniformity of fiber traits in monocultures
- Juvenile wood well known
- Some So. CNS mills refuse wood less than threshold age (or say they do)
- Some indications that older planted stands can have wood quality problems (D fir, N Vancouver Is.)

Quality ...

- Yields will be high in small,
Lower quality stems/species in early yrs
- High Quality logs come later
- Treatment/logging costs may be higher
 - Forester: “as logging, this is expensive, as silviculture, it’s cheap”

Value Engineering Intensive Mgt.

- Match regimes to site
- Treatment Costs
- Resilience for future change
- Grow for Value?
 - So far, better at boosting physical yield than \$\$ return or ROI
- Curious situation – much of plantation wood used for lowest value products

What is the Answer?

- For our Region, answer is NO, but we need a lot of value engineering!
- For some places, answer may be Yes!
- View options from where we are now!
- Better answer to Competitive issues
 - Have lost in growing for tons.
- Better analysis of macro risks

What's answer...

- Need a better answer for “what if we don't do intensive management?”
- Need better understanding of accounting stance issue – who is the We?