

2006 WMSP Economic Assessment

Conducted for

White Mountain Stewardship Contract
Multi-party Monitoring Board



Photo by: Mike Pentecost

Conducted by
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Table 1. Woody Biomass Products Delivered by Future Forest, LLC (2006)

Purchasing Firm	Woody Biomass Inputs				
	Clean Chips	Dirty Chips	Roundwood	Saw Timber	Harvesting Woody Biomass
Arizona Log & Timberworks (Eagar)			X	X	
Forest Energy Corp. (Show Low)	X	X	X		
Future Forest (Pinetop)					X
Mountain Top Wood Products (Snowflake)			X	X	
Nutrioso Logging (Nutrioso)					X
Reidhead Bros. Lumber (Nutrioso)			X	X	
Reidhead Bros. Re-manufacturing plant (Springerville)	N/A	N/A	N/A	N/A	
Renergy: Renewable Energy from Biomass (Snowflake)		X			
Round Valley Wholesale Lumber (Eagar)			X	X	
Snowflake Lumber Moulding (Snowflake)				X	
TriStar Logging, Inc. (Snowflake)			X		X
WB Contracting (Eagar)					X
Western Moulding (Snowflake)				X	
Western Renewable Energy (Eagar)		X			
Winner's Circle Soils, Inc. (Taylor)	X	X	X		

Source: Survey by Author, December 2006

Headcount Employment



2005

414 Full time employees

6 Part time employees

44 Seasonal employees

464 Total

FTE value = 449.90

2006

222 Full time employees

13 Part time employees

28 Seasonal employees

263 Total

FTE value = 245.52

Source: Survey by author. December 2006.

Table 2. Cross Commuting. Estimated Number of FTE Employees by Place of Work and Place of Residence

Place of Residence → Place of Work ↓	Lakeside/ Pinetop	Show Low	Snowflake/ Taylor	Heber/ Overgaard	Springerville/ Eagar	Alpine/ Nutrioso	Whiteriver/ Fort Apache	Outside Region	Total (by place of work)
Lakeside/Pinetop		1.0			1.0				2.0
Show Low	9.0	16.00			1.0	1.0	1.0	8.0	36.0
Snowflake/Taylor	4.0	6.15	59.28	29.88			1.0	18.15	118.46
Heber/Overgaard									
Springerville/Eagar					62.73		0.75		63.48
Alpine/Nutrioso					19.08	4.5		2.0	25.58
Whiteriver/Fort Apache									
Outside Region									
Total (by place of residence)	13.0	23.15	59.28	29.88	83.81	5.5	2.75	28.18	245.52

Source: December 2006 Survey by Author

Table 3. Estimated Basic and Non-basic FTE Employees Living and Working in the White Mountain Region and Employed by Firms with a Future Forest Connection.

Place of Work ↓	Basic FTE Employment	Non-basic FTE Employment	Total FTE Employment
Lakeside/Pinetop	0.0	2.0	2.0
Show Low	26.32	1.68	28.0
Snowflake/Taylor	92.24	8.07	100.31
Springerville/Eagar	17.40	46.08	63.48
Alpine/Nutrioso	8.50	15.08	23.58
Grand Total	144.46 (66.46%)	72.91 (33.54%)	217.37

Source: December 2006 Survey by Author.

Table 4. Estimated Basic and Non-Basic FTE Employees Living and Working in White Mountain Region who are Directly Supported by Material Harvested by Future Forest LLC.

Place of Work ↓	Basic FTE Employment	Non-basic FTE Employment	Total FTE Employment
Lakeside/Pinetop	0	2.0	2.0
Show Low	13.69	0.87	14.56
Snowflake/Taylor	9.8	5.43	15.23
Springerville/Eagar	17.16	26.12	43.28
Alpine/Nutrioso	4.25	10.83	15.08
Grand Total	44.9	45.25	90.15

Source: December 2006 by Author.

Table 5. Estimated Employment Impact of Forest Industries on the White Mountain Region with Future Forest, LLC and without Future Forest, LLC.

	Total	Portion Attributable to Future Forest, LLC.	Portion Independent of Future Forest, LLC.
Total Direct Employment	217.37	90.15	127.22
Total Indirect Employment through Multiplier	85.38	26.54	58.85
Total Direct and Indirect	302.75 (100.0%)	116.69 (38.54%)	186.07 (61.46%)

Source: Estimates provided in Tables 3 and 4. Multiplier estimated by author.

Table 6. Estimated 2006 Expenditures. Estimated Total and Local (White Mountain Region) Expenditures for Selected Goods.

Expenditures for	\$ Expenditures 2006	Share of Total Spent in White Mountain Region
Raw Material	\$8,255,261	\$7,695,261
Hauling (outsourced)	\$3,023,882	\$1,998,452
Electricity	\$1,041,037	\$1,041,037
Mill Equipment	\$2,263,813	\$4,600
Mill Parts	\$638,877	\$247,274
Transport Equipment	\$306,000	\$228,600
Petroleum Products	\$2,519,255	\$2,519,255
Vehicle Parts, Tires	\$467,800	\$413,800
Heavy Equipment	\$3,393,175	\$765,928
Heavy Equipment Parts	\$2,702,563	\$1,054,909
Total	\$22,611,633	\$15,969,116 (70.62%)

Source: December 2006 survey by author.

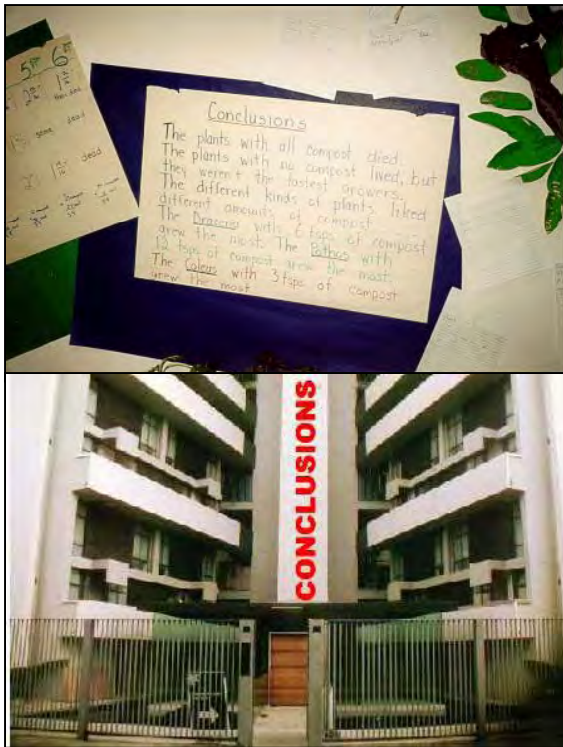
Conclusions

Perhaps two general conclusions reached in the 2005 study and still true today are

- a) The Stewardship Contract has already contributed to “health and safety” and economic well-being in the White Mountain Region and
- b) the Multi-party Monitoring Board helps assure balance in the forest management process.



Additionally we can Conclude that:



- Having an objective basis for measuring the impacts of the Stewardship Contract over time is essential for sound management;
- Having 15 firms involved, or on the verge of being involved with the Stewardship Contracts suggests substantial acceptance in the marketplace;
- Innovative technologies are clearly in play to support demand for a variety of harvest outputs (clean chips, dirty chips, roundwood, and saw timber) including materials that historically had little or no value;
- Impacts are not always localized. Data on cross-commuting suggest that impacts (and community benefits) can be spread over the entire White Mountain Region;

Conclusions - continued



- The “forestry cluster” is a major employer - firms surveyed employ some 245 full time equivalent employees.
- The “forestry cluster” is an important economic engine which indirectly supports an additional 85 FTE employees in the White Mountain Region through the multiplier process;
- Despite the fact that Future Forest, LLC is a new player it is already an important player. Of the 302.8 FTE who live and work in the White Mountain Region, over one-third are employed to harvest and process Future Forest, LLC material – 90 FTE directly and 27 FTE indirectly through the multiplier process;
- Local expenditures by the 15 firms surveyed are substantial; the grand total spent by these firms in the White Mountain Region is almost \$16,000,000 annually.

Recommendations

At this point in the evaluation process some recommendations are made cautiously. But at least five are made boldly;

- Invest substantial effort in monitoring and evaluating supply, demand, price, and maximum sustainable yield information;
- Keep the White Mountain Stewardship Contract Multi-party Monitoring Board fully engaged in the Stewardship Contract process;
- Continue to conduct an annual economic assessment to assure the flow of objective data to describe the outcomes of the Stewardship Contracts;
- Disseminate findings of the economic assessment and other assessments widely to a variety of constituencies including the forest cluster industry itself, the White Mountain Region's business community, and elected officials and public sector managers.
- Encourage local suppliers of good and services.

