

# 2005 WMSP ECONOMIC ASSESSMENT

Conducted for

White Mountain Stewardship Contract Multi-party  
Monitoring Board



Conducted by

Lay James Gibson, Ph.D.

Final Draft

April 24, 2006

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## **Introduction.**

For decades Arizona's forests were managed using the modern conservationist's "multiple use" model. In the 1970's and 1980's, at least in some circles, the notion of "conservation" was replaced by the notion of "preservation" and the multiple use model was sometimes scaled back to become a "limited use" model. The harvesting of forest products was the most conspicuous casualty on the multiple use menu. In some cases harvesting policies were modified, in other cases they were simply suspended. Whereas disruption of harvests was intended to allow for the development and implementation of new procedures designed to strike a better balance between consumptive and non-consumptive management strategies there were unintended consequences. Perhaps most significant was the build-up of forest density and debris which created an environment susceptible to destructive fires and poor forest health. Also significant was a reduction in commercial harvests and the entrepreneurial activity and employment associated with harvesting and manufacturing operations. In many parts of the West the economic dislocations were severe.

The so-called Healthy Forests Initiative and the oversight in the White Mountain Region by the White Mountain Stewardship Multi-party Monitoring Board marked a significant policy shift. Specifically, two notions were formally recognized. First, that thoughtful harvesting plans could improve forest health, reduce forest susceptibility to destructive and unmanageable fires, and assure a flow of harvested material that could meet the needs of processing industries. Secondly, that the goals of a cross-section of constituencies could be served by the creation of a heterogeneous "stewardship board." This board was created to provide an advisory role when it came to strategically thinking about healthy forest management issues.

The study which is the subject of this report was commissioned by the stewardship board. The idea is to have a factual and critical baseline which quantitatively describes changes in firms that harvest and process forest products, which measures the

economic impacts of forest industries on the White Mountain Regional Community, and which points to new ways that the White Mountain Region might capitalize on current and potential industry to get even more economic benefit from the forest cluster.

### **Scope and Nature of the Assignment.**

The Stewardship Committee determined early-on that a focused study with real data would be more useful and more informative than a broader study that traded breadth for depth. They concluded that a study of this sort would be appropriate if it were to achieve three goals:

First. Identify the firms that are directly involved in harvesting and processing the forest products made available through the Future Forest, LLC contract.

Second. Better understand the nature and extent of these firms in general, and their stewardship-related work in particular and the implications for the White Mountain Region's Economic System.

Third. Determine ways that the impacts of the stewardship contract might be enhanced and identify the economic development strategies that will be needed to assure that the White Mountain Region sees even greater economic benefit in the longer term.

**The Region and Procedures.** This project is focused on Arizona's White Mountain Region. For purposes of this study the White Mountain Region is the contiguous area anchored on the east by Springerville-Eagar-Alpine, on the south by Whiteriver, on the west by Show Low and on the northwest by Snowflake-Taylor.

The findings reported in this study come largely from a questionnaire (Appendix A) that was developed in the fall of 2005 and administered in December 2005. The questionnaire was administered to 13 firms engaged in harvesting and processing forest

materials in association with the contract with Future Forest, LLC. Most, but not all, of the significant players in the White Mountains forest economy are included. Questions were designed to provide full contact information for all firms included in the study, detailed employment data, economic base bifurcation data to support multiplier analysis, data on dependence on Future Forest, LLC for material inputs, data on geographic markets for outputs, and data on major expenditures for goods and services by specific type. All data are best estimates provided by a ranking company official.

It is anticipated that the questionnaire will be administered each December through 2014. Inasmuch as most questions will remain the same it will be possible to measure change (growth or decline) in activity by firm as the stewardship harvest evolves. The one question that will change (and improve) at least in the short term is the question on expenditures by firm. The question asked in 2005 was intended to inform researchers about important expenditure types. In 2006 this question will be more focused; additional fine tuning may or may not be required in 2007 and in subsequent years. In any case, the answers to this question will help determine the need for more locally available goods and firms to service and supply the forest harvesting and processing industries.

### **Looking Ahead.**

It is anticipated that the study will be conducted for a second time in December 2006. Data collected will describe the "average situation" for the 2006 calendar year.

Questions 1-8 and 11-12 and 16. No change.

Question 9-10 and 13-14. Hawley Lake, Hon Dah/McNary and Whiteriver/Fort Apache will be dropped as explicit options. The remaining options will be listed as follows:

- Lakeside/Pinetop and vicinity including Hon Dah/McNary

- Show Low and vicinity including Clay Springs
- Snowflake/Taylor and vicinity
- Springerville/Eagar/Alpine and vicinity
- Heber/Overgaard and vicinity.

Inasmuch as these definitions are generally consistent with those used in the oral interviews in December 2005 the data generated in 2006 should be effectively comparable to those collected in the baseline year (2005).

Question 15 will be changed substantially:

15. We know that you purchase labor locally. Now let's talk about other goods (including services). Our 2005 study pointed to several expenditure categories that were on most respondent's top five list. We would like you to comment on these and, if appropriate, add one or two categories that are on your own personal list of top expenditures. In each case please a) estimate your total annual expenditures and b) estimate the portion of those expenditures being spent locally by you in the White Mountain Region.

<b>Good</b>	<b>Total \$ Expenditure Amounts Calendar 2006</b>	<b>Percent Purchased in White Mountains</b>
Raw Material		
Hauling		
Electricity		
Mill Equipment		
Mill Parts		
Transport Equipment		
Petroleum Products		
Vehicle Parts, Tires		
Other		
Other		

## **Findings.**

**Existing Firms.** We identified 13 firms that met our criteria – they were engaged in the harvesting or processing of forest products and they had purchased, or were positioned to purchase, material supplied by Future Forest, LLC. The firms were highly concentrated in just two communities – Springerville/Eagar/Alpine and Snowflake/Taylor although the largest single employer was Phoenix-based. The firms are listed in Table 1 along with the types of inputs received from Future Forest, LLC. A complete directory of firms is offered in Appendix B.

Table 1. Woody Biomass Products Delivered by Future Forest, LLC (2005)

<b>Purchasing Firm</b>	<b>Woody Biomass Inputs</b>			
	<b>Clean Chips</b>	<b>Dirty Chips</b>	<b>Roundwood</b>	<b>Saw Timber</b>
Arizona Log & Timberworks (Eagar)			X	X
Forest Energy Corp. (Show Low)	X		X	
Future Forest (Pinetop)	N/A	N/A	N/A	N/A
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	
Snowflake Lumber Moulding (Snowflake)				X
Southwest Forest Products, Inc. (Phoenix)			X	
TriStar Logging, Inc. (Snowflake)			X	X
WB Contracting (Eagar)	X	X	X	X
Western Renewable Energy (Eagar)		X		
Winner's Circle Soils, Inc. (Taylor)	X	X	X	

Source: Survey by Author, December 2005

**Employment and Cross-Commuting.** Employment data were initially collected by gender and by full-time, part-time, and seasonal status. These data were subsequently converted to a FTE or full-time equivalent value to facilitate comparisons between firms. In many studies the difference between headcount employment and FTE employment is substantial. But in this study the numbers are very close. Most employees are full-time, year-round employees. Only a handful are part-time. And whereas some 10% of all headcount employees are seasonal, most seasonal workers are employed the better part of the year, e.g., 10 months or so.

Headcount employment is 464;

414 of these are full-timers

6 are part-timers and

44 are seasonal

464 total.

The FTE value is 449.9.

The 13 firms included in our survey have employment structures that are male-dominated. Some 86% of the full- and part-time employees are males. Whereas we do not have gender data on seasonal employment we know that most are males.

One more comment on employment is called for before we move on to cross-commuting. Specifically, our definition of an employee includes owners, family members, managers, and of course hourly workers. Our definition covers most all “economically active individuals” who are associated with the firms covered by this study. Most governmental definitions focus on hourly workers and perhaps a few others; our definition is much more comprehensive.

Data on cross-commuting are useful because they describe the extent to which employment and a firm's impacts are spread throughout a region – or even beyond a region (Table 2). For example, Snowflake and Taylor employs 128.4 FTE workers in firms that purchased forest products from Future Forest, LLC. but only 81.9 FTE actually live in Snowflake and Taylor. Show Low, on the other hand only employs 33.3 FTE but it serves as the place of residence for 47.4 FTE. Snowflake/Taylor is an exporter of jobs and the payrolls that come with them whereas Show Low is an importer.

More serious still from a local economic development perspective is that roughly one-half of the 449.9 FTE jobs in the 13 study firms are going to workers who live outside the White Mountain Region – mostly to residents of Phoenix! The State of Arizona benefits but the White Mountain region loses “big time.” The importance of this to local economic development efforts will be discussed later in this report. Are there winners and losers? Yes. Snowflake/Taylor are providing jobs for workers who will contribute very little to the community in economic terms. Show Low, on the other hand, is getting economic benefit from workers who are employed elsewhere. From a regional standpoint it is a zero sum game. From the standpoint of individual communities there are clearly winners and losers.

The importance of this to local economic development efforts will be discussed later in this report.

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	Springerville/ Eagar	Whiteriver/ Fort Apache	Outside Region (including Phoenix)	Total (by place of work)
Lakeside/Pinetop		1.0		1.0			2.0 (0.4%)
Show Low	6.0	15.3	5.0	2.0		5.0	33.3 (7.4%)
Snowflake/Taylor	7.0	28.8	75.9	4.0	1.0	11.7	128.4 (28.5%)
Springerville/Eagar		2.3	1.0	76.4	1.5	5.0	86.2 (19.2%)
Whiteriver/Fort Apache							
Outside Region (except Phoenix)							
Phoenix						200.0	200.0 (44.5%)
Total (by place of residence)	13.0	47.4	81.9	83.4	2.5	221.7	449.9
	(2.9%)	(10.5%)	(18.2%)	(18.5%)	(0.6%)	(49.3%)	(100.0%)

Source: December 2005 Survey by Author.

**Forestry as an “Export Engine.”** Economic base theory tells us that employees who produce goods which are “exported,” i.e., shipped out of the local region are “basic” to the local economy inasmuch as they bring new money into the region. Without these basic jobs there would be no local-serving or non-basic jobs. The way that we express the relationship between total employment and basic employment is the “multiplier”. From a region-building perspective we might say... “any new job is good but basic jobs are especially good because workers support themselves and additional workers through the multiplier process.”

Based on previous research studies we can estimate the average multiplier in the White Mountain Region to be 1.591; this means that on average every export or non-basic employee will support another 0.591 non-basic local serving employees. Using bifurcation estimates reported in the December 2005 field survey we can estimate the full impact of the 13 firms covered by our study.

Table 3 tells an interesting story. First note that the White Mountain Region gets almost no significant benefit from the “material” which is shipped to Phoenix. A few harvesting employees are supported but that is about it. White Mountain Region firms with a Future Forest connection have a total of 228.2 FTE employees. Of these, 76.5 are local serving (non-basic) and 151.7 are basic (export) employees with a multiplier impact. We estimated that these 151.7 basic FTE support another 89.6 non-basic FTE throughout the White Mountain Region. In others words the 12 White Mountain Region firms considered support a total of 317.8 FTE workers.

In the following discussion we will sort out the Future Forest related employment. Up to this point, our intention has been simply to show the general importance of the firms upon which we are focusing.

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	26.6	1.7	28.3
Snowflake/Taylor	95.1	21.6	116.7
Springerville/Eagar	30.0	51.2	81.2
Phoenix	0.0	0.0	0.0
Grand Total	151.7 (66.5%)	76.5 (33.5%)	228.2 (100.0%)

Source: December 2005 Survey by Author.

**The Specific Role of Future Forest, LLC.** The discussion of forestry as an export engine shows that the dozen firms actually located in the White Mountains are major players but they do not tell us about “extra production” that has been made possible by the Stewardship Contract. Those estimates are shown in Table 4.

- Whereas the 12 firms described in Table 3 gave the White Mountain Region 228.2 FTE employees, only 80.6 FTE employees can be traced back to Future Forest, LLC (Table 4).
- Whereas the 12 firms gave the Region another 89.6 FTE employees through the multiplier process only 22.8 of them are tied to Future Forest, LLC.

The estimate effect of Future Forest, LLC is summarized in Table 5.

The dozen “engine firms” which are based in the region directly and indirectly support 317.8 FTE employees who live in the White Mountain Region. Almost one-third of this total (103.4 FTE) have their jobs because of Future Forest, LLC. This number has the potential to grow as Future Forest, LLC increases its production in absolute terms.

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	15.4	1.0	16.4
Snowflake/Taylor	17.9	2.4	20.3
Springerville/Eagar	5.2	36.7	41.9
Phoenix	0	0	0
Grand Total	38.5	42.1	80.6

Source: December 2005 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	228.2	80.6	147.6
Total Indirect Employment Through Multiplier	89.6	22.8	66.8
Total Direct and Indirect	317.8 (100.0%)	103.4 (32.5%)	214.4 (67.5%)

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

**Local Expenditures.** Another important part of the impact equation is expenditures for goods and services. The employment generated has already been accounted for in the discussion of indirect multiplier impacts. But what about the dollar values and the types of goods and services? Table 6 does not provide definitive answers to these questions but it does represent a start. The 2006 economic assessment will build upon the information offered in Table 6 and provide information that can support pro-active economic development initiatives. Specifically, the goal is to internalize more of the expenditures for goods and services within the White Mountain Region. This would benefit the firms that harvest and process forest products by improving their access to critical supplies and it would benefit the region by reducing sales leakage.

It is important to remember when examining Table 6 that the data describe only major expenditures, not total expenditures for the 13 firms included in our study and that the dollar values describe only local (White Mountain Region) expenditures.

Easily the key item is raw material (clean and dirty chips, roundwood, and saw timber). Raw materials are harvested by a number of entities – including, but not limited to, Future Forest, LLC. Next come petroleum products of all kinds. Transport, hauling, and freight; equipment parts and mill parts; and equipment are all “million dollar” categories. Electricity is almost in this category. Less impressive but still substantial are expenditures for tires and truck parts; insurance; and repairs.

The expenditures question in the 2005 survey was “exploratory”. Based on the observation that we uncovered over \$12,000,000 in local expenditures it is clear that future efforts aimed at getting more detail on expenditures are warranted. The bottomline from an economic development perspective is to identify opportunities for existing firms to expand their offerings or for new firms providing goods and services for the forest harvesting and processing industries to enter the White Mountain Region.

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

Goods	Estimated Minimum Local Expenditures
Raw Material (chips, roundwood, etc.)	\$4,655,000
Petroleum Products (gas, oil, diesel, etc.)	\$2,014,000
Transport/Hauling/Freight	\$1,677,000
Equipment Parts/Mill Parts	\$1,133,000
Equipment	\$1,097,000
Electricity	\$921,000
Tires/Truck Parts	\$381,000
Insurance	\$142,000
Repairs	\$105,000
Total-Selected Goods and Services	(\$12,125,000)

Other items: Rent, office supplies, professional fees, interest, water. Expenditures for these items were relatively insignificant.  
 Source: December 2005 survey by author.

## **Conclusions and Recommendations.**

The forest harvesting and processing industries in the White Mountains of Arizona are impressive in a variety of ways – magnitude of employment, number of firms and variety of processes and products. Further, judging from data which describe the role of the White Mountain Stewardship Contract in increasing material supply for the processing industries the contract has already produced positive results. But conclusions at this point are certainly tentative and preliminary. The current study was designed as a pilot project; it is intended to be part “baseline” and part a “work in progress.” The baseline element comes with the list of firms surveyed and the work force and economic base data which have been collected. The 2005 study was designed to be replicated annually in a way that assures comparability from year to year and the power to see changes in the industry over time. The one part of the study that at least now is a “work in progress” is the section dealing with local purchases by firms in the forest harvesting and processing cluster. Indeed, the proposed format for this question in the 2006 industry survey was presented in the early pages of this report.

Before listing specific conclusions and recommendations it is appropriate to briefly point to at least a few of the challenges facing both public and private interests in the White Mountain region. Any discussion of challenges should include consideration of supply, demand, price, and sustainability. “Supply” refers to the ability of the region to produce chips, roundwood, and saw timber in sufficient quantity to meet the needs of existing and perhaps even new processors. “Demand” recognizes that dimension lumber is only one of several uses for harvested material; fuel, energy and a variety of other innovative uses are now part of the demand equation. The questions that must still be answered have to do with market acceptance of processes and products and management of firms to assure survival in a competitive business environment. “Price” refers to the price at which material can be delivered to processors. The history of the past 30 years of environmental awareness is sometimes a history of promising technology being economically uncompetitive when compared to proven, less

environmentally friendly technologies. Finally, there is the critical notion of “maximum sustainable yield” – the maximum rate of use that will not impair the forest’s ability to renew itself.

**Conclusions.** Perhaps two general conclusions 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 13 firms involved, or on the verge of being involved with the Stewardship Contracts suggests substantial acceptance in the market-place;
- 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;
- The “forestry cluster” is a major employer - firms surveyed employ some 450 full time equivalent employees.
- Inasmuch as just one forest processor with almost one-half of “industry employment” is located in Phoenix, the White Mountain Region may be missing a good bet;
- The “forestry cluster” is an important economic engine which indirectly supports an additional 90 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 317.8 FTE who live and work in the White Mountain Region,

almost one-third are employed to harvest and process Future Forest, LLC material – 81 FTE directly and 23 FTE indirectly through the multiplier process;

- Local expenditures by the 13 firms surveyed are substantial; the grand total spent by these firms in the White Mountain Region is over \$12,000,000 annually.

**Recommendations.** At this point in the evaluation process some recommendations are made cautiously. But at least four 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.

Two additional recommendations involve...

- Recruiting additional firms to the forest industries cluster (a special target might be a new division or branch of the Phoenix based firm that is already an important customer of Future Forest, LLC); and
- Starting to explore the potentials for increasing the local availability of goods and services utilized by the forest industries cluster – either by expanding offerings of existing firms or by attracting new firms.

# Appendix A

December 2005

Community \_\_\_\_\_ Subarea \_\_\_\_\_  
Date \_\_\_\_\_ Interviewer \_\_\_\_\_

## White Mountain Area Employer Questionnaire

Hello! I'm \_\_\_\_\_ and I'm a researcher from the University of Arizona. We are working on a study here in the region that we hope will tell us something about the role of forestry in the area's economic structure. May I have a few minutes to ask you some questions?

### A. GENERAL

1. What is the formal name of this establishment? \_\_\_\_\_

2. What is the street address? \_\_\_\_\_

3. PO Box \_\_\_\_\_ Community \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_

4. Who is the principal local official and what is his/her title?

Name \_\_\_\_\_ Title \_\_\_\_\_

5. What is the principal function of this establishment (primary product or service)? \_\_\_\_\_

SIC Code \_\_\_\_\_ NAICS Code \_\_\_\_\_

### B. WORK FORCE DESCRIPTION

6. Including yourself, members of your family, and those on salary, how many employees do you have? (Average for the past 12 months) \_\_\_\_\_

7. How many are:

a. Year-round full-time male employees? \_\_\_\_\_

b. Year-round full-time female employees? \_\_\_\_\_

c. Year-round part-time male employees? \_\_\_\_\_

d. Year-round part-time female employees? \_\_\_\_\_

8. On the average, how many hours per week do these part-time employees work? (Note if total or per employee) \_\_\_\_\_

9. How many of these year-round full-time employees live in the White Mountain Region communities listed below.

Hawley Lake \_\_\_\_\_

Hon Dah/McNary \_\_\_\_\_  
 Lakeside/Pinetop \_\_\_\_\_  
 Show Low \_\_\_\_\_  
 Snowflake/Taylor \_\_\_\_\_  
 Springerville/Eagar \_\_\_\_\_  
 Whiteriver/Fort Apache \_\_\_\_\_  
 Outside the Region \_\_\_\_\_

10. How many of these year-round part-time employees live in the White Mountain Region communities listed below.

Hawley Lake \_\_\_\_\_  
 Hon Dah/McNary \_\_\_\_\_  
 Lakeside/Pinetop \_\_\_\_\_  
 Show Low \_\_\_\_\_  
 Snowflake/Taylor \_\_\_\_\_  
 Springerville/Eagar \_\_\_\_\_  
 Whiteriver/Fort Apache \_\_\_\_\_  
 Outside the Region \_\_\_\_\_

11. How many seasonal employees did you hire during the last year? \_\_\_\_\_

12. How many weeks (annually) did you employ seasonal workers? \_\_\_\_\_

13. How many of your seasonal workers live in the White Mountain Region communities listed below.

Hawley Lake \_\_\_\_\_  
 Hon Dah/McNary \_\_\_\_\_  
 Lakeside/Pinetop \_\_\_\_\_  
 Show Low \_\_\_\_\_  
 Snowflake/Taylor \_\_\_\_\_  
 Springerville/Eagar \_\_\_\_\_  
 Whiteriver/Fort Apache \_\_\_\_\_  
 Outside the Region \_\_\_\_\_

**C. ECONOMIC BASE**

14. Approximately what percent of your sales are made to individuals or firms in the White Mountain communities listed below.

Hawley Lake \_\_\_\_\_  
 Hon Dah/McNary \_\_\_\_\_  
 Lakeside/Pinetop \_\_\_\_\_  
 Show Low \_\_\_\_\_  
 Snowflake/Taylor \_\_\_\_\_  
 Springerville/Eagar \_\_\_\_\_  
 Whiteriver/Fort Apache \_\_\_\_\_

Elsewhere in Arizona \_\_\_\_\_  
 Elsewhere in the U.S. \_\_\_\_\_  
 Non-U.S. \_\_\_\_\_

15. We know that you purchase labor locally. What about other goods – petroleum products, office supplies, utilities, office rental, etc.? What are your five largest local (White Mountain Region) purchases. Can you estimate the dollar value of annual expenditures for your top five?

	<b>Good</b>	<b>Expenditures</b>
1)	_____	_____
2)	_____	_____
3)	_____	_____
4)	_____	_____
5)	_____	_____

16. Finally, what portion of your total production is based on inputs purchased from Dwayne Walker's "Future Forest" company? \_\_\_\_\_ %

## Appendix B

### Firms that had Purchased, or were Positioned to Purchase, Material Supplied by Future Forest, LLC in 2005

#### Contacts: (N=13)

Randy Nicoll, Secretary/Treasurer  
Arizona Log and Timberworks  
1990 W. Central Ave.  
Eagar, AZ 85925  
Phone: 928-333-2751  
Fax: 928-333-2758  
Remanufacture of roundwood.

Curtis Rogers, General Manager  
Forest Energy Corporation  
1001 N. 40<sup>th</sup> St.  
Show Low, AZ 85901  
Phone: 800-246-3192  
Fax: 928-537-1661  
Cell: 928-587-4168  
Email: [crogers@forestenergy.com](mailto:crogers@forestenergy.com)  
Manufacture of densified wood products for fuel and animal bedding.

Dwayne Walker, Manager  
Tina A. Crutchfield, Administrator  
Future Forest, LLC  
1630 E. White Mountain Blvd., Suite C-3  
Pinetop, AZ 85935  
Phone: 928-367-0057  
Fax: 928-367-0059  
Cell: 928-521-4100  
[www.futureforest.info](http://www.futureforest.info)  
[dwalker@futureforest.info](mailto:dwalker@futureforest.info)  
[tcutchfield@futureforest.info](mailto:tcutchfield@futureforest.info)  
Management of forest stewardship contract.

Terry Reidhead, Proprietor  
Reidhead Brothers Lumber, Inc.  
93 County Rd. 2180  
PO Box 84  
Nutrioso, AZ 85932  
Phone: 928-339-4542  
Rough lumber and timbers.

Vanessa Cisco, Manager  
Reidhead Brothers Re-Manufacturing Plant  
804 Airport Rd.  
Springerville, AZ 85938  
Phone: 928-333-5347  
Wood re-manufacture.

Joe Papa, General Manager  
Renegy: Renewable Energy from Biomass  
PO Box 3026/50  
S. Freeman Hollow Rd.  
Snowflake, AZ 85938  
Phone: 928-536-580  
Fax: 928-536-4877  
Cell: 928-242-9422  
Electricity from biomass.

Terry Reidhead, Proprietor  
Round Valley Wholesale Lumber  
Transfer Site Rd.  
PO Box 460  
Eagar, AZ 85928  
Phone: 928-521-2561  
Manufacture of dimension lumber and planing mill.

Charlie Reidhead, General Manager  
Snowflake Lumber Moulding  
1720 W. Snowflake Highway  
Snowflake, AZ  
Phone: 928-536-2428  
Millwork.

Scott Van Der Toorn, Vice President and COO  
Southwest Forest Product, Inc.  
2828 S. 35<sup>th</sup> Ave.  
Phoenix, AZ 85009  
Phone: 602-278-10009  
Fax: 602-278-03298  
Cell: 602-321-4366  
Email: [scottv@southwestforestproducts.com](mailto:scottv@southwestforestproducts.com)  
Pallets.

Steve Reidhead, President  
Tri Star Logging, Inc.  
140 S. Otto Dr.  
Snowflake, AZ 85938  
Phone: 928-536-7848  
Cell: 602-270-4414  
Logging.

Lea Walker, Office Manager  
WB contracting  
1074 S. Line St.  
PO Box 411  
Eagar, AZ 85928  
Phone: 928-333-2866  
Forest thinning and harvesting of forest materials. NAICS code: 115310.

John A. Cantrell, General Manager  
Western Renewable Energy  
PO Box 1480  
Eagar, AZ 85925-1480  
Phone: 928-333-2285  
Fax: 928-333-4983  
Email: [jwre@frontiernet.net](mailto:jwre@frontiernet.net)  
Electricity from biomass.

Keith Baldwin, President  
Winner's Circle Soils, Inc.  
1820 N. Centennial Blvd.  
Taylor, AZ 85939-0128  
Phone: 928-536-7398  
Fax: 928-536-2464  
Email: [wcs@skyboot.com](mailto:wcs@skyboot.com)  
Wood waste is processed to make animal bedding, mulch, potting soil, landscape material.