BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

121 7th Place East, Suite 350 St. Paul, MN 55101-2147

In the Matter of Otter Tail Power's Petition to Ensure Competitive Electric Rates for Energy-Intensive Trade-Exposed Customers PUC Docket No. E-017/M-16-533

AFFIDAVIT OF PETER AUBE

STATE OF MINNESOTA)

) ss.

COUNTY OF BELTRAMI)

I, Peter Aube, being first duly sworn upon oath, state as follows:

1. I am the Lumbermill Manager at the Potlatch lumber mill in Bemidji, Minnesota (the "Potlatch Mill"), the largest lumber producer in the State. The Potlatch Mill produces precision cut studs (in 2"x4" and 2"x6" sizes, 7' to 9' in length).

The Potlatch Mill's Contributions to Minnesota

2. The Potlatch Mill is a large employer in northwest Minnesota, employing 108 people as of March 2016. The total wages for these employees are close to [TRADE SECRET DATA BEGINS...

...TRADE SECRET DATA ENDS], the total benefits are approximately [TRADE SECRET DATA BEGINS...

SECRET DATA ENDS], and the payroll for the Potlatch Mill is roughly [TRADE SECRET DATA BEGINS...

...TRADE SECRET DATA ENDS].

Average compensation at the Potlatch Mill is [TRADE SECRET DATA BEGINS...

...TRADE SECRET DATA ENDS] per year, and turnover averages less than 5%.

3.	In 2015, the Potlatch Mill paid in excess of	TTRADE SECRET DATA BEGINS
	TRADE SECRET DATA END	OS] in property and corporate franchise taxes
	[TRADE SECRET DATA BEGINS	
		TRADE SECRET DATA ENDS].

- 4. The annual budget for the Potlatch Mill is approximately [TRADE SECRET DATA BEGINS... TRADE SECRET DATA ENDS].
- 5. According to the UMD Labovitz School of Business study entitled "The Economic Impact of Minnesota's Forestry-Related Industries on the State of Minnesota" (the "Labovitz DNR Study"), a copy of which is attached to the affidavit of Wayne Brandt, the Potlatch Mill's [TRADE SECRET DATA BEGINS... ...TRADE SECRET DATA ENDS] annual budget multiplies 12.43 times through the northern Minnesota economy, leaving an economic impact of over [TRADE SECRET DATA BEGINS... ...TRADE SECRET DATA ENDS] million per year.
- 6. The Labovitz DNR Study also found that Minnesota sawmills like the Potlatch Mill provide 752 direct jobs and 2,180 indirect jobs across other sectors.
- 7. The Potlatch Mill's operations also directly support the community. Attached as Exhibit A to my affidavit is a Minnesota Forest Industries PowerPoint presentation detailing the State revenues collected from the Minnesota forest products industry. Half of the Potlatch Mill's raw material comes from public forests, and revenue from these sales contributes to school trust funds and the State general fund. In addition, the economic activity generated by timber sales is significant. For every dollar spent on public stumpage, \$41 dollars of economic activity are generated. The Potlatch Mill's

contribution from this activity is therefore approximately [TRADE SECRET DATA

BEGINS... TRADE SECRET DATA ENDS] dollars annually.

8. Without the Potlatch Mill, the average market for red pine (spread across sawtimber, pulp and bolts, and pulpwood) could be dramatically reduced, resulting in a decrease in value of the State's red pine forests. Attached as Exhibit B to my affidavit is the 2015 Public Stumpage Review and Price Indices dated May 1, 2015 ("Stumpage Review"). The summary table on page 9 of the Stumpage Review details the prices for various species of wood sold by Minnesota public agencies. Of import here is the value of red pine, and the level of the Potlatch Mill's consumption. The Potlatch Mill consumes approximately TRADE SECRET DATA BEGINS... ...TRADE SECRET DATA ENDS annually, of which approximately [TRADE SECRET DATA BEGINS...] ...TRADE SECRET DATA ENDS is red pine. Of the red pine sold by Minnesota public agencies, the Potlatch Mill purchases the vast majority, nearly TRADE SECRET DATA BEGINS... ... TRADE SECRET DATA ENDS), or over [TRADE SECRET DATA BEGINS,... ... TRADE SECRET DATA ENDS]. If the Potlatch Mill were not operating, that red pine would be valued as pulpwood, which could have two detrimental impacts. First, the dollar multiplier for money spent on public stumpage could significantly decrease because of the drop in value from \$43.09 per cord to \$12.44 per cord. Second, and more broadly speaking, the value of the State's pine forest could drop precipitously. Current prices for red pine pulpwood are approximately 29% of the value of sawbolts. If the State's red pine forests were valued as pulpwood, the resource could lose approximately 71% of its value. Given the fact that Potlatch uses approximately [TRADE SECRET DATA BEGINS...]

...TRADE SECRET DATA ENDS] of the red pine in the state that is used for pulp and bolts, a closure of the Potlatch Mill could result in more than a [TRADE SECRET DATA BEGINS... ...TRADE SECRET DATA ENDS] decrease in the value of the State's red pine forests (private, State, county, and federal).

- 9. As a result of the market the Potlatch Mill provides, pine forests on private and public lands are managed for a variety of forest uses such as wildlife, recreation, and forest products Minnesotans use every day.
- 10. The Potlatch Mill takes its forest stewardship role very seriously. In the past five years, the Potlatch Mill has been instrumental in the cleanup of hundreds of thousands of acres following several significant windstorms and forest fires that devastated public lands by providing a market for damaged lumber that other mills could not or would not use. Public officials such as Senator Al Franken, National Forest Service Supervisor Darla Lenz, and State Forester Forrest Boe have recognized the Potlatch Mill's contributions to this vital effort.
- 11. In addition to the Potlatch Mill's forest stewardship, our employees are active in the local community.
- 12. Our employees volunteer as youth sports coaches, church leaders, and with other civic organizations. Our leaders hold board positions in many organizations including the Greater Bemidji economic development organization, the Bemidji Leads! project, the

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¹ [TRADE SECRET DATA BEGINS... ...TRADE SECRET DATA ENDS] of a 71% reduction is approximately [TRADE SECRET DATA BEGINS... ...TRADE SECRET DATA ENDS].

Chamber of Commerce, and the Minnesota Safety Council. Our leaders also participate on the boards of local hospitals, school academies, and career development organizations.

13. For example, the Potlatch Mill annually donates \$10,000 to the Greater Bemidji organization and the Boys and Girls Clubs of Bemidji and Cass Lake, and has recently donated \$50,000 to the North Country Health Services for its Baby Nursery, \$50,000 to the youth hockey arena in Bemidji, \$25,000 to the Bemidji Library, \$10,000 to the Sanford Health Foundation for its Cancer Center, and \$10,000 to the Lakeland public television station. Unfortunately, we have had to reduce charitable giving over the years due to the reduction of the Potlatch Mill's Minnesota footprint from 2,000 to 108 employees, largely due to global competitive pressures.

Electric Rates for the Potlatch Mill are Uncompetitive

- 14. One of the major challenges in the Potlatch Mill's operations is energy costs, which represent approximately [TRADE SECRET DATA BEGINS... ...TRADE SECRET DATA ENDS] of the Potlatch Mill's cost of production. When the cost of wood is removed from the equation, energy costs represent [TRADE SECRET DATA BEGINS... ...TRADE SECRET DATA ENDS] of the cost of production. This means that energy costs are nearly equal to all other outside costs to make lumber, including saws, knives, fuels, lubes, repair costs, equipment leases, and contractor costs.
- 15. The Potlatch Mill is serious about conserving electricity. Through Otter Tail Power's Conservation Improvement Program, the Potlatch Mill invested [TRADE SECRET DATA BEGINS... ...TRADE SECRET DATA ENDS] in a full modernization of our facility, which included [TRADE SECRET DATA BEGINS...

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...TRADE SECRET DATA ENDS] for conservation programs such as efficient plant lighting, energy efficient motors, utilization of frequency drives to manage loads, and utilizing independent professional audits on compressed air utilization and efficiency. The Potlatch Mill has been able to increase production by [TRADE SECRET DATA BEGINS... ...TRADE SECRET DATA ENDS] while reducing our electricity consumption by [TRADE SECRET DATA BEGINS... ...TRADE SECRET DATA ENDS] and our demand by [TRADE SECRET DATA BEGINS... ...TRADE SECRET DATA ENDS].

- 16. Because energy is a significant cost to our operations, it is important to compare our energy costs to our competitors in order to understand our overall competitiveness. Attached as Exhibit C to my affidavit is a true and correct copy of pertinent portions of a 2013 study on competitiveness of various lumber mills conducted by the Beck Group (the "Competitiveness Study"). The 17 other studmills in the study are located in Oregon, Washington, Idaho, Montana, Michigan, British Columbia, and Saskatchewan.²
- 17. Page 26 of the Competitiveness Study shows the various mills' average electrical power rate. To put the Potlatch Mill's rates in comparison, it was paying a rate of approximately [TRADE SECRET DATA BEGINS... ...TRADE SECRET DATA BEGINS... ...TRADE SECRET DATA BEGINS... ...TRADE SECRET DATA BEGINS... ...TRADE SECRET DATA ENDS] out of 17 mills. Since the

² The Potlatch Mill was not included in the study, but another Potlatch mill in Gwinn, Michigan was included (the "Potlatch Gwinn Mill"), which is why we were permitted to see the results.

Competitiveness Study was completed, the Potlatch Mill's rates have increased approximately 17% with another roughly 13% increase pending before the Commission.

The Potlatch Mill is Subject to Global Pressures

- 18. In addition to high electric rates, the Potlatch Mill faces intense competition from Canadian mills that have many advantages beyond the Potlatch Mill's control, including weaker Canadian currency, the expiration of tariffs and quotas that protected American mills, lower environmental standards, and subsidies from the Canadian government. Attached as Exhibit D to my affidavit is a graph showing that in 2015, lumber prices have fallen by about 34%. In light of the current exchange rate, Canadian mills are therefore able to sell lumber 25-30% cheaper than 2014 while making the same profit. As a result of these advantages, Canadian mills are adding shifts and restarting mothballed facilities, while American mills are curtailing operations. For example, after dipping to a low of 40% in 2011, the share of Canadian lumber that is exported to the U.S. has increased by 10% each year. Without tariffs and quotas to protect the market, as well as the currency exchange imbalance, it is not unreasonable to expect that Canadian mills will go back to significantly higher imports that we saw in the late 1990s and early 2000s, which will place additional competitive pressures on our Minnesota operation. See, e.g., ¶¶ 13-15 of the affidavit of Wayne Brandt.
- 19. These pressures from the global market are real and have recently claimed a couple of casualties. In the last three months, two mills in the Pacific Northwest included in the Competitiveness Study have ceased operations.

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Consequences of Inaction are Significant

20. [TRADE SECRET DATA BEGINS...

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21. There would be significant costs to the region and the State if the Potlatch Mill were to

shut down, including lost jobs, decreased tax revenue, lower community investment, and

diminished forest stewardship.

22. If the Potlatch Mill receives a 20% rate reduction as a result of the EITE tariff, it is

reasonably likely that this discount could be one of the factors that will keep the Potlatch

Mill viable.

FURTHER YOUR AFFIANT SAYETH NOT.

Dated: June 28, 2016

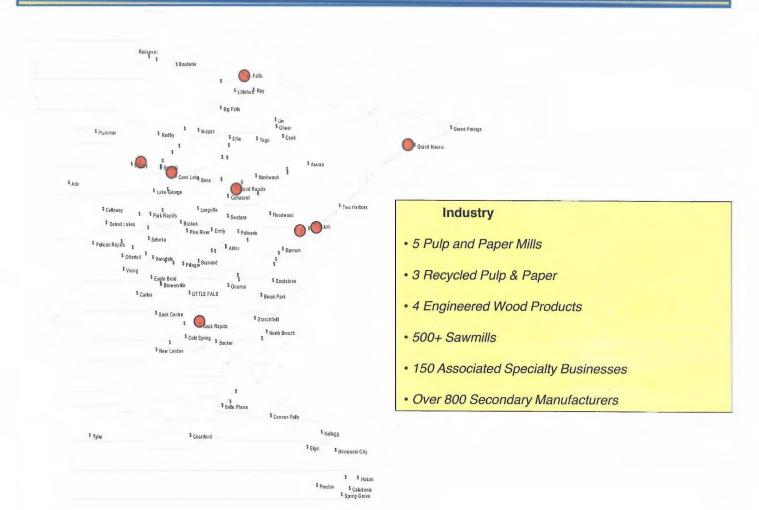
/s/ Peter Aube

Peter Aube, Lumbermill Manager

Potlatch Corporation

EXHIBIT A

Primary Mill Locations



PUBLIC DOCUMENT TRADE SECRET DATA EXCISED Economic Impact of the Forest Products Industry 2010

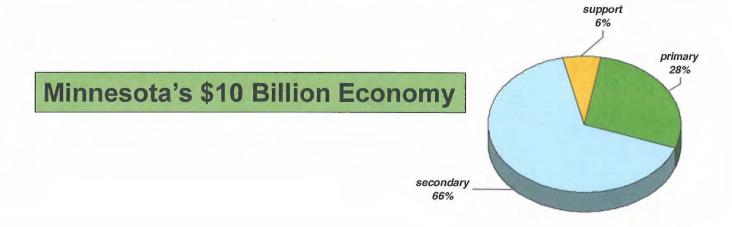
Value of Outputs (value of production)

Primary Forest Product Manufacturing \$2.9 Billion

Secondary Forest Products Manufacturing \$6.8 Billion

Forestry and Logging (support activities) \$671 Million

Total value \$10.4 Billion



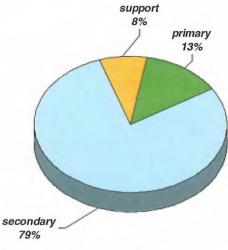
PUBLIC DOCUMENT TRADE SECRET DATA EXCISED Direct Employment of the Forest Products Industry 2010

Employees

Total employment	40,368
Forestry and Logging (support activities)	<u>3,273</u>
Secondary Forest Products Manufacturing	<u>31,743</u>
Primary Forest Product Manufacturing	<u>5,353</u>

More than 40,000 direct employees

- Additional jobs created
 - •Indirect 24,289
 - •Induced 28,082
 - •4th largest manufacturing industry in state



Source: UMD Labovitz School of Business. The Economic Impact of Minnesota's Forestry -Related Industries on the State of Minnesota, 2010

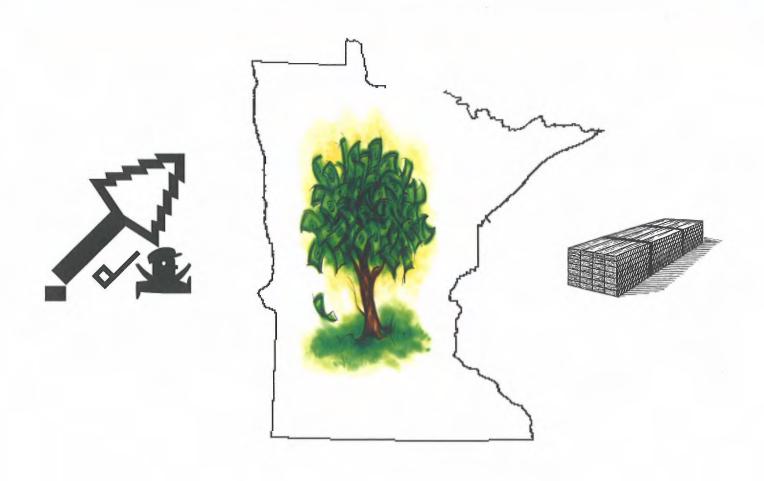
PUBLIC DOCUMENT TRADE SECRET DATA EXCISED TRADE SECRET DATA EXCISED 2010

Value Added (wages and profits)

Total employment	\$3.2 Billion
Forestry and Logging (support activities)	\$201 Million
Secondary Forest Products Manufacturing	\$ <u>2.2 Billion</u>
Primary Forest Product Manufacturing	\$ <u>776 Million</u>

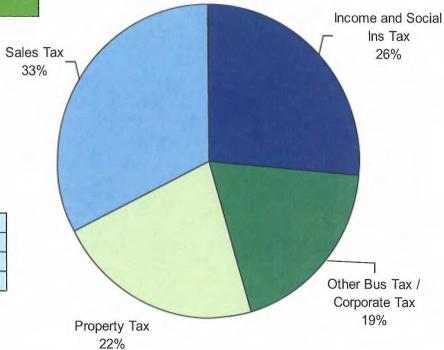


PUBLIC DOCUMENT TRADE SECRET DATA EXCISED State Revenues Collected from Forest Products Industry



PUBLIC DOCUMENT TRADE SECRET DATA EXCISED State and Local Taxes Collected from Forest Products Industry 2010

State and Local tax revenues exceed \$715 million annually as a result of the forest products industry economic activity.

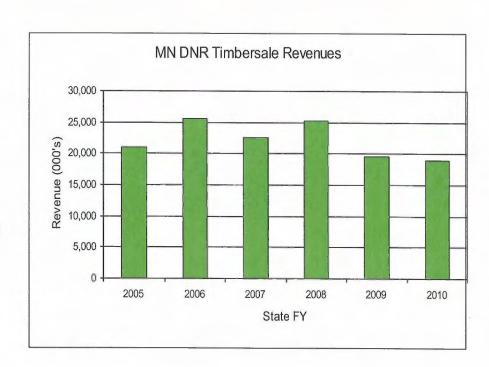


Income and Social Ins Tax	\$ 189,120,828
Other Bus Tax / Corporate Tax	\$ 136,424,934
Property Tax	\$ 157,099,237
Sales Tax	\$ 233,088,976

Source: UMD Labovitz School of Business. The Economic Impact of Minnesota's Forestry -Related Industries on the State of Minnesota, 2010

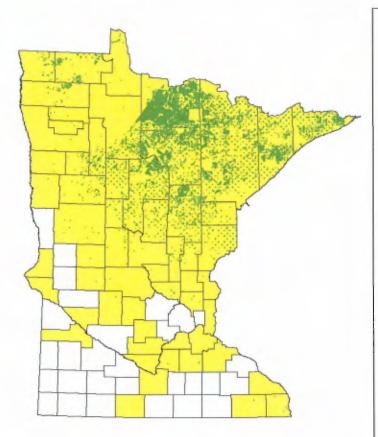
PUBLIC DOCUMENT TRADE SECRET DATA EXCISED State Revenues Collected from Forest Products Industry

- From 2005-2010 the state timber sale revenues have averaged more than \$22 million, annually.
- For every FTE the state invests in the timber program more than \$250 thousand are generated in timber sale revenue.
- Every dollar spent to purchase timber generates more than \$41 of economic activity.



Source: MN-DNR, MFI

PUBLIC DOCUMENT TRADE SECRET DATA EXCISED Minnesota DNR – School Trust Lands



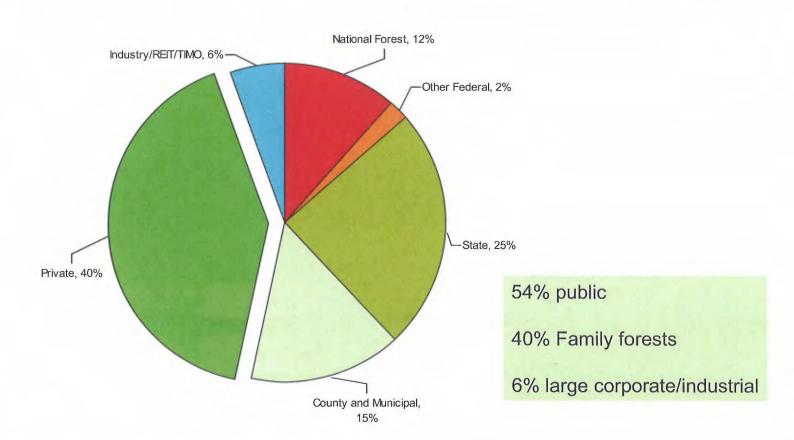
- Established by U.S. Congress when new states joined the Union. MN entered the Union in 1858.
- Income earned from the School Trust Principal is distributed to schools. In 2009, \$27 million was distributed to public schools.
- MN has nearly 2.5 million acres of School Trust Land throughout the majority of MN counties.
- Sixty percent of the School Trust Land is considered commercial forest land.
- Revenue generated by timber harvest from these lands exceeds \$10 million annually, a portion of this revenue is returned to the "trust" account.
- Opportunities to increase revenues from School Trust Lands is possible through improved forest management.

Source: MN-DNR

Forest Land Ownership and Harvest

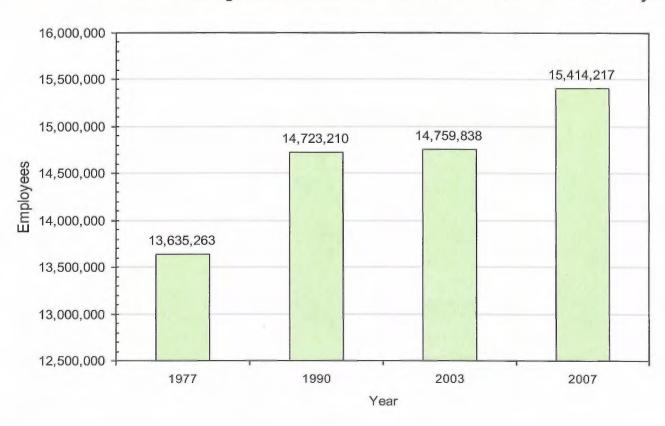


PUBLIC DOCUMENT TRADE SECRET DATA EXCISED Minnesota's Timberland Ownership — 15.4 Million Acres



PUBLIC DOCUMENT TRADE SECRET DATA EXCISED Minnesota Timberland Acreage

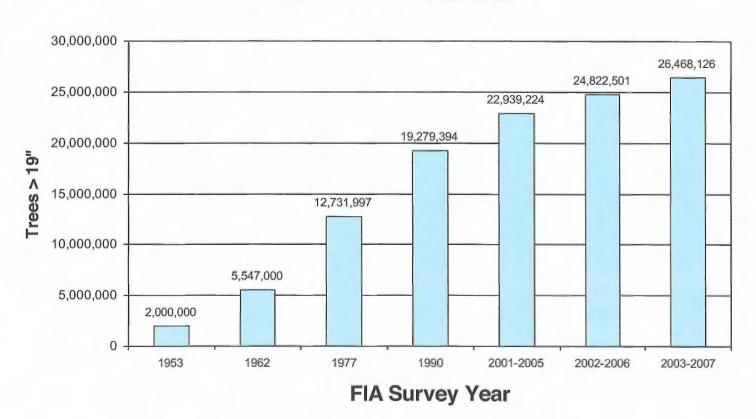
Timberland acreage has increased 1.8 million acres in the last 30 years



Source: NCES-FIA (survey methods changed in 2000. This may account for a portion of increased acreage).

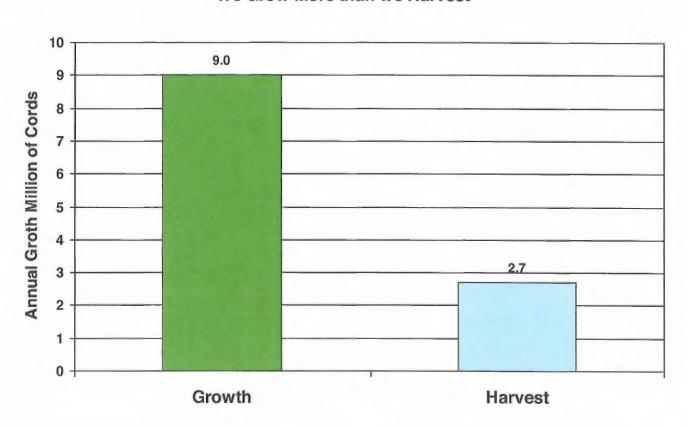
PUBLIC DOCUMENT TRADE SECRET DATA EXCISED Minnesota Timberland—Trees Greater than 19 inches in Diameter

Number of Trees Greater than 19" in Diameter on Timberlands/Forest Lands in MN



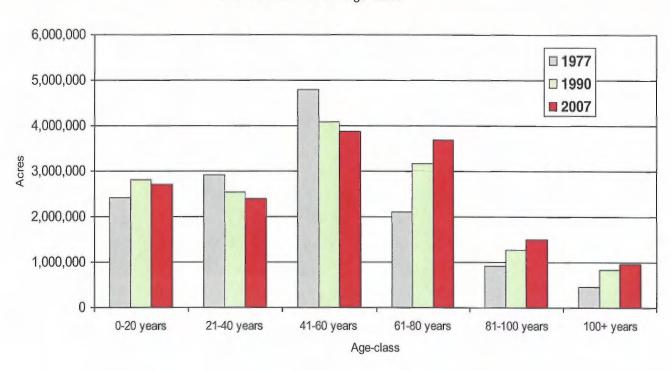
PUBLIC DOCUMENT TRADE SECRET DATA EXCISED Minnesota Timber Volume Harvested Compared with Annual Growth (2008)

We Grow More than we Harvest

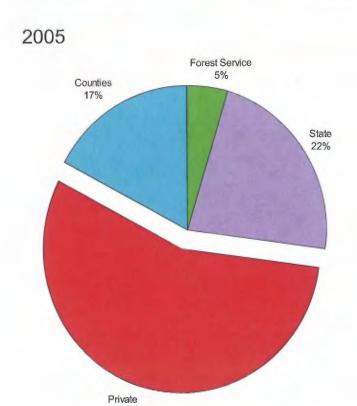


PUBLIC DOCUMENT TRADE SECRET DATA EXCISED Minnesota Timberland Age-class

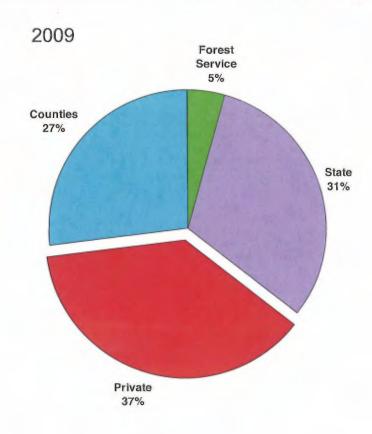
Minnesota Timberland Age-Class



PUBLIC DOCUMENT TRADE SECRET DATA EXCISED Who Supplies the Timber—2005 and 2009

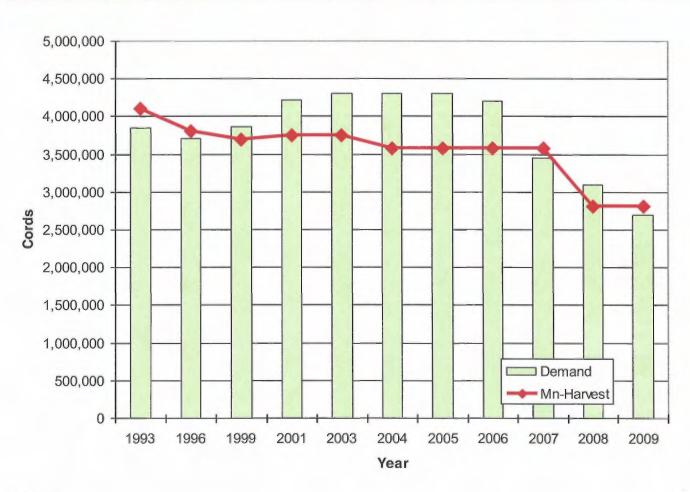


56%



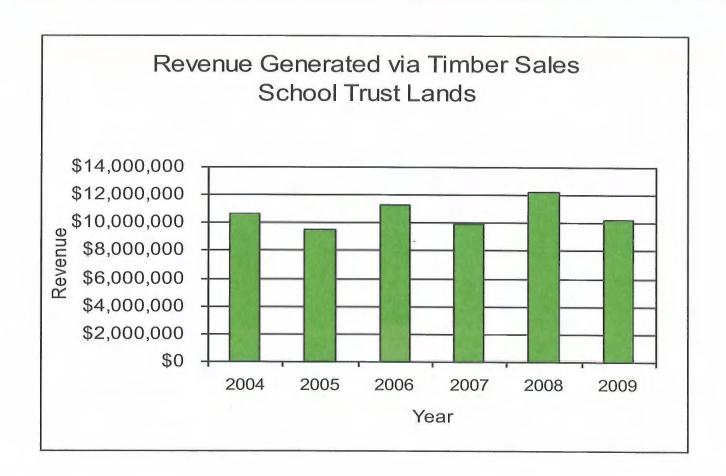
Source: MFI, MN-DNR

PUBLIC DOCUMENT TRADE SECRET DATA EXCISED Harvest Compared with Industrial Demand--MN

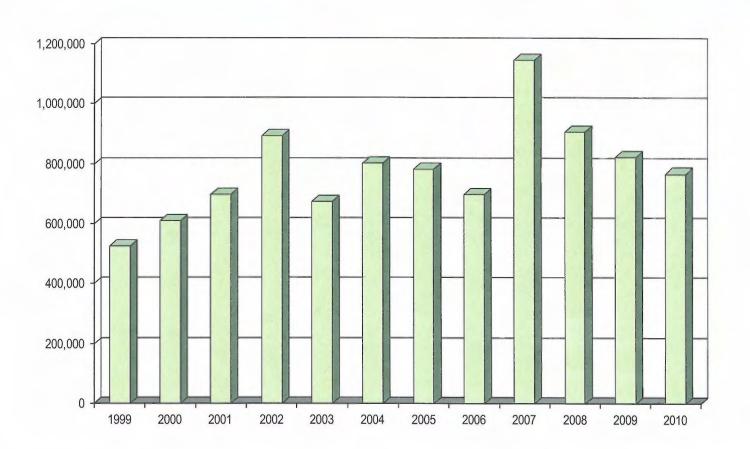


Source: MFI, MN-DNR

PUBLIC DOCUMENT TRADE SECRET DATA EXCISED Minnesota DNR – School Trust Lands

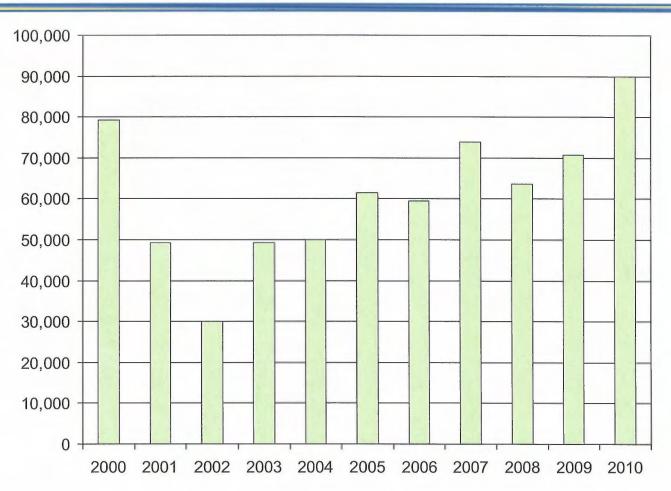


PUBLIC DOCUMENT TRADE SECRET DATA EXCISED Minnesota DNR – Timber Volume Sold (Cords)



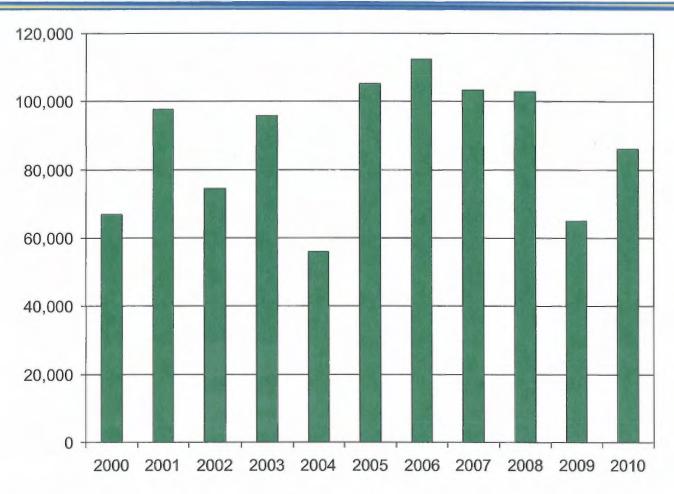
Source: Public Stumpage Review

PUBLIC DOCUMENT TRADE SECRET DATA EXCISED (Cords) Chippewa National Forest – Timber Volume Sold (Cords)

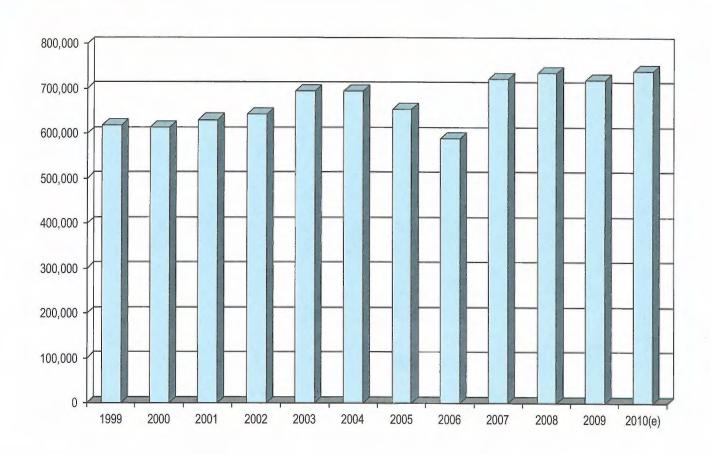


Source: USFS

PUBLIC DOCUMENT TRADE SECRET DATA EXCISED Superior National Forest — Timber Volume Sold (Cords)



PUBLIC DOCUMENT TRADE SECRET DATA EXCISED MN County Timber Programs – Timber Volume Sold (Cords)



Source: Public Stumpage Review

EXHIBIT B



MINNESOTA

2014 Public Stumpage Price Review and Price Indices

Download from Minnesota DNR – Forestry at URL:

http://www.dnr.state.mn.us/forestry/timbersales/stumpage.html

Highlights

In 2014, stumpage sold by public agencies totaled 1.84 million cord equivalents with a bid value of \$48.3 million as compared to 2013 with 1.68 million cords sold with a bid value of \$37.7 million, a year-over-year volume increase of 163,200 cords or 9.7 percent and a year-over-year value increase of \$10.6 million or 28.1 percent.

Average public stumpage prices received for all-species cord products increased to \$24.77 per cord in 2014 from \$21.04 per cord in 2013, an increase of \$3.73 per cord or 17.7 percent.

In 2014, the average public agency <u>aspen</u> cord products stumpage price received was \$30.80 per cord compared to \$24.99 per cord in 2013, an increase of \$5,81 per cord or 23.2 percent (Figure 1).

The average <u>red pine</u> cord products stumpage price was \$39.42 per cord in 2014 as compared to \$31.93 per cord in 2013, a year-over-year increase of \$7.49 per cord or 23.5 percent (Figure 2).

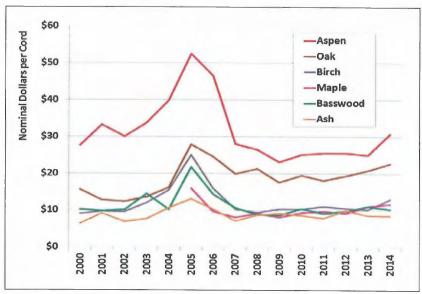


Figure 1: Hardwood cord products prices, nominal dollars per cord.

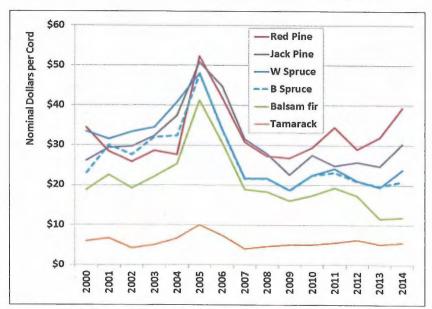


Figure 2: Softwood cord products prices, nominal dollars per cord.

Highlights - continued

In 2014, a total 24.8 MMbf of sawtimber was sold by public agencies as compared to 23.0 MMbf sold in 2013, a year-over-year volume increase of 8 percent.

The all-species average public agency sawtimber stumpage price was \$156.53 per Mbf in 2014 as compared to \$130.39 per Mbf in 2013, a year-over-year price increase of \$26.14 per Mbf or 20.0 percent (Figure 3).

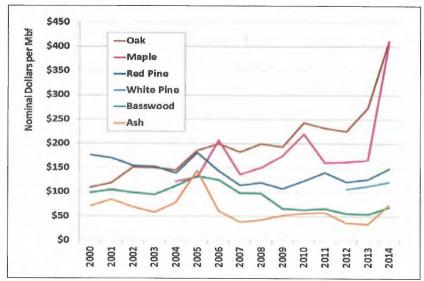


Figure 3: Sawtimber stumpage prices, nominal dollars per Mbf.

Chained Dollar Stumpage Price Indices

Using the Implicit Price Deflator for Gross Domestic Product (GDP) as baseline inflation (base year 2000=100), the all-agencies all-species Pulpwood Composite Price Index decreased 4.4 percent yearover-year from 100.2 in 2012 to 95.8 in 2013. The Pulp & Bolts Composite Price Index increased 11.1 percent year-over-year from 93.6 in 2012 to 104.0 in 2013. The Mbf Composite Price Index increased 7.2 percent year-over-year from 113.6 in 2012 to 121.9 in 2013 (Figure 4).

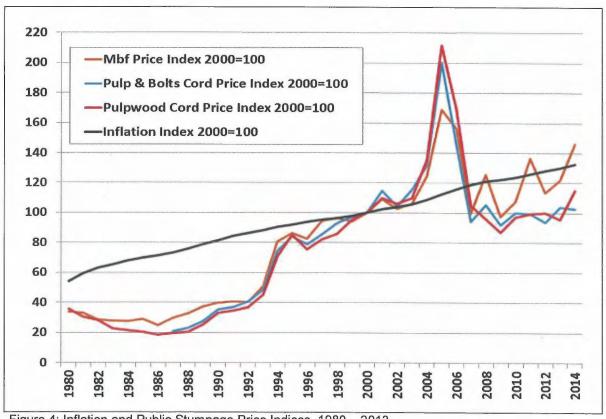


Figure 4: Inflation and Public Stumpage Price Indices, 1980 - 2013.

Price Trends

The 10-year price tables 1-2 with year-over-year changes are new products for 2014. These tables are the numerical basis for summary figures 1-4 and provide additional species detail.

Table 1: Statewide Average Cord Prices Received for Stumpage Sold by Public Land Agencies in Minnesota. (a)

Cord Products	2005	2006	2007	2008	2009	2010	2011	2012	2012	2014	14/13	14/13
(Nominal \$/Cord)							2011	2012	2013	2014	Δ\$ y/y	Δ% y/y
Aspen	\$52.50	\$46.62	\$28.00	\$26.57	\$23.11	\$25.16	\$25.55	\$25.59	\$24.99	\$30.80	\$5.81	23.2%
Balm of Gilead	\$47.09	\$37.17	\$21.75	\$21.18	\$20.83	\$21.22	\$20.01	\$22.77	\$20.56	\$24.80	\$4.24	20.6%
Birch	\$25.00	\$15.95	\$10.33	\$9.40	\$10.37	\$10.37	\$11.06	\$10.54	\$10.18	\$13.00	\$2.82	27.7%
Ash	\$13.10	\$10.32	\$7.12	\$8.76	\$9.16	\$8.60	\$7.92	\$10.02	\$8.66	\$8.51	(\$0.15)	-1.7%
Oak	\$27.94	\$24.62	\$19.88	\$21.27	\$17.61	\$19.51	\$18,14	\$19.38	\$20.89	\$22.68	\$1.79	8.6%
Basswood	\$21.70	\$14.42	\$10.62	\$8.83	\$8.58	\$10.45	\$9.15	\$9.79	\$11.13	\$10.30	(\$0.83)	-7.5%
Maple	\$15.96	\$9.65	\$8.05	\$9.15	\$8.14	\$9.36	\$9.71	\$9.27	\$11.10	\$11.72	\$0.62	5.6%
Mixed/Other Hdwds	\$23.78	\$13.83	\$12.16	\$10.97	\$11.78	\$12.29	\$11.84	\$12.23	\$10.71	\$13.90	\$3.19	29.8%
Balsam fir	\$41.36	\$30.58	\$18.93	\$18.26	\$16.04	\$17.38	\$19.25	\$17.25	\$11.54	\$11.83	\$0.29	2.5%
W Spruce	\$48.00	\$33.95	\$21.64	\$21.62	\$18.64	\$22.43	\$24.08	\$21.01	\$19.41	\$23.78	\$4.37	22.5%
B Spruce	\$48.00	\$33.95	\$21.64	\$21.62	\$18.64	\$22.43	\$23.14	\$20.87	\$19.68	\$20.84	\$1.16	5.9%
Tamarack	\$10.07	\$7.42	\$3.97	\$4.62	\$5.01	\$5.03	\$5.51	\$6.30	\$5.17	\$5.54	\$0.37	7.2%
Cedar	\$7.47	\$11.91	\$8.47	\$5.30	\$5.69	\$6.19	\$8.21	\$5.12	\$7.86	\$6.34	(\$1.52)	-19.3%
Jack Pine	\$50.88	\$44.74	\$31.54	\$27.85	\$22.59	\$27.42	\$24.85	\$25.75	\$24.67	\$30.31	\$5.64	22.9%
Red Pine (b)	\$52.34	\$41.97	\$30.79	\$27.23	\$26.71	\$29.42	\$34.45	\$29.02	\$31.93	\$39.42	\$7.49	23.5%
White Pine							\$31.42	\$21.74	\$30.06	\$23.23	(\$6.83)	-22.7%
Pulp Composite	\$44.45	\$35.50	\$22.03	\$20.13	\$18.29	\$20.39	\$20.90	\$21.05	\$20.12	\$24.16	\$4.04	20.1%
Pulp & Bolts Composite	\$51.66	\$37.40	\$24.32	\$27.21	\$23.68	\$25.87	\$25.64	\$24.14	\$26.82	\$26.47	(\$0.35)	-1.3%

a) Pulp & Bolts and Pulpwood cord products only.

b) Prices are combined Red & White Pine, 2005-2010.

Table 2: Statewide Average Mbf Prices Received for Stumpage Sold by Public Land Agencies in Minnesota, 10-year history.

Sawtimber Products (Nominal \$/Mbf) (a)	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	14/13 Δ\$ y/y	14/13 Δ% y/y
Birch	\$128.30	\$52.06	\$27.24	\$32.04	\$19.82	\$38.92	\$42.15	\$35.70	\$36.97	\$47.04	\$10.07	27.2%
Ash	\$144.62	\$61.41	\$38.21	\$42.41	\$51.89	\$56.27	\$58.09	\$36.12	\$34.06	\$73.41	\$39.35	115.5%
Elm	\$86.52	\$86.00	\$85.22	\$60.08	\$53.99	\$45.08	\$60.43	\$42.45	\$41.41	\$42.19	\$0.78	1.9%
Oak	\$185.90	\$200.00	\$182.83	\$200.00	\$193.61	\$243.09	\$232.20	\$225.36	\$274.54	\$411.34	\$136.80	49.8%
Basswood	\$133.10	\$124.73	\$97.73	\$97.33	\$66.24	\$63.47	\$66.11	\$55.87	\$54.44	\$68.87	\$14.43	26.5%
Maple	\$131.53	\$206.45	\$137.00	\$150.62	\$175.00	\$219.83	\$160.78	\$162.50	\$166.65	\$406.70	\$240.05	144.0%
Mixed/Other Hdwds	\$66.62	\$71.63	\$52.91	\$52.86	\$37.72	\$29.80	\$48.31	\$36.88	\$28.56	\$65.40	\$36.84	129.0%
Balsam fir	\$121.19	\$90.00	\$76.47	\$72.75	\$58.34				\$66.51			
W. Spruce	\$124.98	\$113.02	\$96.41	\$81.57	\$87.05	\$102.15	\$64.23	\$83.12	\$87.57	\$61.12	(\$26.45)	-30.2%
Cedar	\$26.38	\$25.00	\$16.20									
Jack Pine	\$184.79	\$124.11	\$115.21	\$109.95	\$106.19	\$105.00	\$145.76	\$138.95	\$112.00	\$89.56	(\$22.44)	-20.0%
Red Pine (b)	\$181.21	\$143.45	\$114.04	\$119.51	\$107.40	\$123.36	\$140.46	\$121.15	\$126.48	\$148.33	\$21.85	17.3%
White Pine								\$106.66	\$112.79	\$121.29	\$8.50	7.5%
Mbf Composite	\$180.73	\$167.09	\$106.92	\$134.24	\$104.49	\$115.16	\$145.88	\$121.59	\$130.39	\$156.53	\$26.14	20.0%

a) Scribner Decimal C.
 b) Prices are combined red and white pine, 2005-11.

Value Trends

In 2014, Minnesota public agencies sold \$48.3 million in stumpage compared to \$37.7 million in 2013, an increase of \$10.6 million or 28.1 percent year-over-year (Figure 5, Table 3).

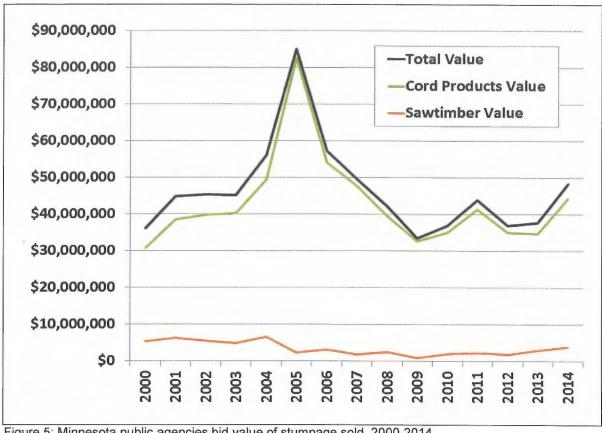


Figure 5: Minnesota public agencies bid value of stumpage sold, 2000-2014.

Table 3: All Minnesota Public Agencies Bid Value of Stumpage Sold, 2000-2014.

Year	Sawtimber Value	Cord Products Value	Total Value	Δ\$ y/y	Δ% γ/γ
2000	\$5,448,682	\$30,713,890	\$36,162,573		
2001	\$6,376,200	\$38,534,245	\$44,910,445	\$8,747,872	24.2%
2002	\$5,542,413	\$39,789,080	\$45,331,494	\$421,049	0.9%
2003	\$4,936,971	\$40,227,105	\$45,164,076	(\$167,418)	-0.4%
2004	\$6,690,588	\$49,500,995	\$56,191,584	\$11,027,508	24.4%
2005	\$2,377,426	\$82,631,761	\$85,009,187	\$28,817,603	51.3%
2006	\$3,114,194	\$54,106,947	\$57,221,141	(\$27,788,046)	-32.7%
2007	\$1,949,798	\$47,688,386	\$49,638,184	(\$7,582,957)	-13.3%
2008	\$2,581,705	\$39,556,646	\$42,138,351	(\$7,499,832)	-15.1%
2009	\$868,862	\$32,672,750	\$33,541,612	(\$8,596,740)	-20.4%
2010	\$2,017,522	\$34,986,480	\$37,004,002	\$3,462,391	10.3%
2011	\$2,394,396	\$41,490,200	\$43,884,596	\$6,880,593	18.6%
2012	\$1,952,204	\$35,047,126	\$36,999,330	(\$6,885,266)	-15.7%
2013	\$3,002,852	\$34,731,261	\$37,734,113	\$734,783	2.0%
2014	\$3,887,081	\$44,457,180	\$48,344,261	\$10,610,148	28.1%

Volume Trends

In 2014, Minnesota public agencies sold 1,844,771 cord equivalents of sawtimber, pulp & bolts, and pulpwood compared to sales of 1,681,563 cord equivalents in 2013, a 9.7 percent increase year-over-year. In 2014, aspen/balm of Gilead sold volume increased to 927,010 cords from 849,626 cords in 2013, a 77,384-cord or 9.1 percent increase year-over-year. In 2014, pine volume sold decreased to 202,962 cord equivalents from 220,209 cord equivalents in 2013, a 17,246-cord or 7.8 percent decline. In 2014 spruce volume sold decreased to 152,298 cords from 160,644 cords in 2013, an 8,345 or 5.2 percent decline (Figure 6, Table 4).

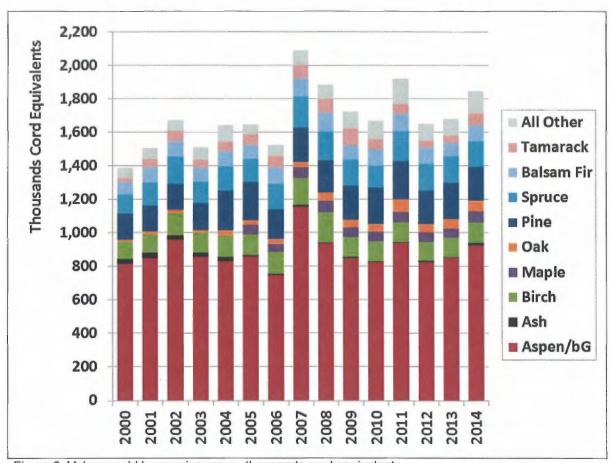


Figure 6: Volume sold by species group, thousands cord equivalents.

Figure 6 Notes:

Products include: sawtimber converted at 2 cords per Mbf, pulp & bolts cords, and pulpwood cords. Does not include (fuelwood 13,063 cords) or biomass (61,799 green tons). 2007 sold volume includes ~450,000 cords forfeited and resold state volume. 2008 sold volume includes ~300,000 cords forfeited and resold state volume.

Table 4: All Minnesota Public Agencies Volume Sold Cord Equivalents, 2000-2014

Year	Ash	Aspen/bG	Birch	Maple	Oak	Spruce	Pine	Balsam Fir	Tamarack	All Other	Total	Δ% y/y
2000	27,899.2	814,783.9	103,031.0		13,776.4	114,402.9	153,842.1	74,730.0	20,775.9	64,256.3	1,387,497.7	
2001	33,406.3	848,574.6	111,557.6		13,885.3	138,038.1	153,692.4	92,788.0	46,581.5	66,131.8	1,504,655.6	8.4%
2002	25,698.5	958,983.8	132,483.9		18,298.2	164,597.9	154,276.7	91,830.8	65,224.4	61,822.2	1,673,216.4	11.2%
2003	25,910.0	853,447.1	121,405.1		14,168.5	125,711.3	163,365.6	83,722.8	49,246.2	72,826.5	1,509,803.0	-9.8%
2004	26,352.4	829,113.1	127,858.5		29,507.8	145,013.1	238,929.8	89,270.6	55,552.0	101,090.2	1,642,687.5	8.8%
2005	8,173.1	859,569.4	121,440.4	57,180.4	28,596.8	135,030.6	228,974.0	87,083.4	62,232.8	59,938.3	1,648,219.1	0.3%
2006	8,388.7	747,407.9	129,005.6	46,572.3	29,978.7	150,876.5	178,471.0	102,101.6	63,925.9	68,526.1	1,525,254.3	-7.5%
2007	10,302.9	1,155,112.0	159,154.4	65,436.8	30,832.9	184,220.7	208,896.3	111,690.1	77,649.2	87,662.6	2,090,957.9	37.1%
2008	2,644.7	937,598.1	181,954.1	69,493.4	48,438.9	169,772.8	193,034.4	112,445.4	83,207.3	84,985.2	1,883,574.4	-9.9%
2009	8,621.9	848,016.4	115,236.0	62,319.7	43,886.7	156,408.0	202,220.9	85,917.6	97,270.4	104,719.7	1,724,617.3	-8.4%
2010	4,203.8	824,134.7	119,493.5	59,574.7	44,530.2	130,870.2	216,865.5	98,516.9	60,380.4	110,644.5	1,669,214.3	-3.2%
2011	2,624.6	940,668.7	119,532.5	63,752.2	74,255.8	176,260.4	227,487.4	106,658.0	58,117.7	151,742.3	1,921,099.6	15.1%
2012	8,052.4	826,340.2	107,628.5	60,741.1	48,524.8	160,321.9	199,580.9	97,255.5	43,303.2	98,306.7	1,650,055.2	-14.1%
2013	6,723.5	849,625.6	114,660.9	55,873.8	51,911.8	160,643.5	220,208.5	75,940.4	45,470.6	100,504.7	1,681,563.3	1.9%
2014	11,717.9	927,009.9	122,492.8	67,116.5	62,050.2	152,298.4	202,962.4	95,888.8	71,716.7	131,517.6	1,844,771.2	9.7%

a)Products include: sawtimber converted at 2 cords per Mbf, pulp & bolts cords, and pulpwood cords.

The Public Stumpage Price Review is compiled by the Division of Forestry in cooperation with all other public land management agencies in Minnesota. Distribution is 100 percent electronic and is available for download from the MNDNR website.

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Methods

This report contains average stumpage prices received by all Minnesota public agencies for the following product classifications: sawtimber, pulp & bolts, pulpwood, fuelwood, and biomass. Information presented may be useful for determining the total volume and value of stumpage sold and for comparing relative volumes and values of stumpage sold during the reporting period.

Public agencies have different fiscal years. The reporting period for each agency is included as part of the agencies information. The fiscal year used by the counties is the same as the calendar year. Federal agencies (USFS and BIA) fiscal year runs from October 1 – September 30. The state's (Minnesota DNR Forestry) fiscal year runs from July 1 – June 30, but to make the data reported more consistent with the other agencies, the time period for state data included in the report is for CY2014. Some agencies report their data based on timber appraisal estimates from timber sales sold, while others report based on actual scale receipts from timber harvested and scaled. The reporting basis for each agency is noted in the report.

DISCLAIMER: The timber sales data includes different products and units of measure by species. Reported volumes and values are adjusted to account for variability in product specifications at the discretion of the state forest economist. The reader should use caution when comparing the prices shown in this report with actual prices received or expected on any specific timber sale. Individual sale prices may vary significantly (±30 percent) from the averages shown in this report because of variability in both local markets and site specific conditions.

Definitions

Average price: volume weighted (mean) total value divided by total volume for each listed species and product classification.

Biomass: dead trees and logging residues including tops, limbs, and cull reported in green tons. **Board foot:** a piece of wood 1" thick by 12" long by 12" wide.

Bolt: short length log, in the Lake States usually 100" in length with minimum 6" top dib. Depending on species and quality, may be suitable for the production of dimensional lumber (2x4s), industrial grade lumber (pallets), for manufacturing turned forest products, or for peeling.

Inflation Index: Base year 2000=100, indexed to general price changes as measured by the Implicit Price Deflator for Gross Domestic Product (GDP) compiled by the U.S. Department of Commerce, Bureau of Economic Analysis.

Cord (Standard): cubic volume measure 4-feet wide by 4-feet high by 8-feet in length, or equivalent containing 128 cubic feet of well stacked roundwood, including bark and air space, with an average of 79 cubic feet of solid wood. By state statute, fuelwood is measured in standard cords.

Cord (100-inch): cubic volume measure 4-feet wide by 4-feet high by 8.3-feet (100-inch) in length, or equivalent containing 133.3 cubic feet of well stacked roundwood, including bark and air space, with an average of 82.3 cubic feet solid wood. The majority of cord products are cut to 100-inch.

Mbf: one thousand board feet; stumpage volume measured using Scribner log or tree scale.

Mbf Composite Price Index: Base year 2000=100, volume weighted (total all-species MBF value divided by total all-species MBF volume) sawtimber price index.

MMbf: one million board feet; stumpage volume measured using Scribner log or tree scale Pulpwood: stem suitable for fiber used for paper and oriented strand board (OSB) manufacturing. Pulpwood Composite Price Index: Base year 2000=100, volume weighted (total all-species pulpwood value divided by total all-species pulpwood volume) price index.

Pulp & Bolts: stem containing the mixed products of pulpwood and bolts.

Pulp & Bolts Composite Price Index: Base year 2000=100, volume weighted (total all-species pulp & bolts value divided by total all-species pulp & bolts volume) price index.

Sawtimber: stem suitable for production of graded boards and/or dimension lumber.

Stumpage: value paid to a landowner to harvest standing timber.

2014 SUMMARY TABLE --- ALL MINNESOTA PUBLIC AGENCIES

II Agencies			Reporting	Period: 2014			Reporting E	Basis: Multip	ole	
All Agencies	Sav	vtimber	Pulp	and Bolts	Pulp	wood	Fue	lwood	Biom	nass
Species Name	MBF	Avg Price	Cords	Avg Price	Cords	Avg Price	Cords	Avg Price	Tons A	vg Price
Aspen	0.0	\$0.00	30,359.0	\$36.16	886,043.3	\$30.62	15.0	\$1.87	835.0	\$4.74
Balm of Gilead	0.0	\$0.00	0.0	\$0.00	10,607.6	\$24.80	0.0	\$0.00	0.0	\$0.00
Birch Species	31.6	\$47.04	70,258.1	\$15.31	52,171.5	\$9.89	28.0	\$3.21	18.0	\$2.00
Ash Species	72.8	\$73.41	11,572.3	\$11.59	21,083.2	\$6.82	610.8	\$6.09	0.0	\$0.00
Elm Species	5.5	\$42.19	0.0	\$0.00	12.0	\$3.02	0.0	\$0.00	0.0	\$0.00
Oak Species	1,384.7	\$411.34	53,995.1	\$23.62	5,285.7	\$13.10	497.1	\$5.19	0.0	\$0.00
Basswood	309.0	\$68.87	13,486.0	\$12.03	15,785.7	\$8.82	0.0	\$0.00	0.0	\$0.00
Other Hardwoods	104.3	\$65.40	30,624.0	\$16.02	44,497.7	\$12.44	773.7	\$5.20	0.0	\$0.00
Balsam Fir	0.0	\$0.00	15,870.9	\$17.93	80,017.9	\$10.62	33.1	\$2.06	0.0	\$0.00
White Spruce	1,001.2	\$61.12	32,896.0	\$29.57	26,328.4	\$16.55	12.9	\$2.00	0.0	\$0.00
Black Spruce	0.0	\$0.00	33,154.9	\$27.90	57,916.7	\$16.80	0.0	\$0.00	0.0	\$0.00
Tamarack	0.0	\$0.00	1,000.0	\$15.54	70,716.7	\$5.40	6,169.9	\$2.51	98.0	\$1.00
White Cedar	0.0	\$0.00	205.5	\$13.04	1,322.8	\$5.30	0.0	\$0.00	0.0	\$0.00
Jack Pine	72.0	\$89.56	49,361.5	\$32.06	5,113.0	\$13.41	584.4	\$2.97	272.6	\$1.00
Red Pine	20,591.5	\$148.33	90,154.0	\$43.09	12,261.5	\$12.44	40.0	\$2.75	0.0	\$0.00
White Pine	1,232.6	\$121.29	1,811.9	\$24.95	468.3	\$16.56	0.0	\$0.00	0.0	\$0.00
Maple Species	26.9	\$406.70	33,987.1	\$13.57	33,075.6	\$9.82	0.0	\$0.00	625.0	\$1.00
Mixed Species	0.0	\$0.00	0.0	\$0.00	3,663.1	\$9.35	4,298.1	\$3.35	59,950.3	\$1.02

2014 MINNESOTA COUNTIES

Agency Name: Aitkin Co.		Repo	rting Period	: 01/14 to 12/1	4	Re	porting Bas	sis: Appraisal	Reports	
Species Name	Sa ¹ MBF	wtimber Avg Price		and Bolts Avg Price	Pulpy Cords A			elwood Avg Price		mass Avg Price
Aspen	0.0	\$0.00	18,061.0	\$34.10	3,752.0	\$22.48	0.0	\$0.00	0.0	\$0.00
Balm of Gilead	0.0	\$0.00	0.0	\$0.00	26.0	\$17.54	0.0	\$0.00	0.0	\$0.00
Birch Species	27.0	\$49.11	3,422.0	\$16.30	367.0	\$9.70	0.0	\$0.00	0.0	\$0.00
Ash Species	47.5	\$78.34	3,111.0	\$10.76	463.0	\$6.03	256.0	\$8.07	0.0	\$0.00
Elm Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Oak Species	370.6	\$112.29	3,296.0	\$23.93	328.0	\$8.15	100.0	\$8.00	0.0	\$0.00
Basswood	134.0	\$62.60	3,423.0	\$12.46	381.0	\$6.41	0.0	\$0.00	0.0	\$0.00
Other Hardwoods	9.0	\$57.56	2,832.0	\$12.58	1,550.0	\$9.31	332.5	\$7.14	0.0	\$0.00
Balsam Fir	0.0	\$0.00	346.0	\$21.67	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
White Spruce	0.0	\$0.00	130.0	\$27.98	60.0	\$15.33	0.0	\$0.00	0.0	\$0.00
Black Spruce	0.0	\$0.00	0.0	\$0.00	645.0	\$12.00	0.0	\$0.00	0.0	\$0.00
Tamarack	0.0	\$0.00	0.0	\$0.00	1,740.0	\$6.00	10.0	\$5.00	0.0	\$0.00
White Cedar	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Jack Pine	0.0	\$0.00	50.0	\$30.36	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Red Pine	7.8	\$270.26	1,142.0	\$25.81	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
White Pine	1.0	\$129.00	0.0	\$0.00	0.5	\$16.00	0.0	\$0.00	0.0	\$0.00
Maple Species	1.5	\$50.00	6,738.0	\$12.44	2,348.0	\$10.57	0.0	\$0.00	0.0	\$0.00
Mixed Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	32.5	\$1.42
Aitkin Co. All Species	598.4	\$96.72	42,551.0	\$23.23	11,660.5	\$13.26	698.5	\$7.57	32.5	\$1.42

Agency Name: Becker Co.		Repor	ting Period:	01/14 to 12/	14	Rej	orting Bas	is: Appraisal	Reports	
Species Name	Sa MBF	wtimber Avg Price		nd Bolts Avg Price	Pulpy Cords A			elwood Avg Price		nass Avg Price
Aspen	0.0	\$0.00	0.0	\$0.00	10,800.0	\$33.19	0.0	\$0.00	0.0	\$0.00
Balm of Gilead	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Birch Species	0.0	\$0.00	954.0	\$13.54	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Ash Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Elm Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Oak Species	0.0	\$0.00	115.0	\$17.23	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Basswood Other Hardwoods	0.0	\$0.00 \$0.00	0.0	\$0.00 \$0.00	0.0	\$0.00 \$0.00	0.0	\$0.00 \$0.00	0.0	\$0.00 \$0.00
Balsam Fir	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
White Spruce	0.0	\$0.00	0.0	\$0.00	150.0	\$18.30	0.0	\$0.00	0.0	\$0.00
Black Spruce	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Tamarack	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
White Cedar	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Jack Pine	0.0	\$0.00	300.0	\$21.86	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Red Pine	0.0	\$0.00	720.0	\$19.23	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
White Pine	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Maple Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Mixed Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	462.0	\$2.08	0.0	\$0.00
Becker Co. All Species	0.0	\$0.00	2,089.0	\$16.90	10,950.0	\$32.99	462.0	\$2.08	0.0	\$0.00

Agency Name: Beltrami Co.		Repor	ting Period	01/14 to 12/1	14	Re	porting Bas	is: Appraisal	Reports	
Species Name	Sav MBF	wtimber Avg Price		nd Bolts Avg Price	Pulpy Cords A			elwood Avg Price		nass Avg Price
Aspen	0.0	\$0.00	0.0	\$0.00	16,161.2	\$35.85	0.0	\$0.00	0.0	\$0.00
Balm of Gilead	0.0	\$0.00	0.0	\$0.00	788.2	\$33.19	0.0	\$0.00	0.0	\$0.00
Birch Species	0.0	\$0.00	355.0	\$25.14	1,733.1	\$15.55	0.0	\$0.00	0.0	\$0.00
Ash Species	0.0	\$0.00	0.0	\$0.00	440.5	\$11.22	0.0	\$0.00	0.0	\$0.00
Elm Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Oak Species	0.0	\$0.00	220.0	\$16.05	362.7	\$13.40	0.0	\$0.00	0.0	\$0.00
Basswood	0.0	\$0.00	70.0	\$16.30	879.1	\$11.28	0.0	\$0.00	0.0	\$0.00
Other Hardwoods	0.0	\$0.00	0.0	\$0.00	546.7	\$9.97	0.0	\$0.00	0.0	\$0.00
Balsam Fir	0.0	\$0.00	613.1	\$24.07	2,114.9	\$14.51	0.0	\$0.00	0.0	\$0.00
White Spruce	0.0	\$0.00	540.0	\$18.89	162.4	\$15.38	0.0	\$0.00	0.0	\$0.00
Black Spruce	0.0	\$0.00	0.0	\$0.00	696.0	\$26.06	0.0	\$0.00	0.0	\$0.00
Tamarack	0.0	\$0.00	0.0	\$0.00	678.0	\$10.76	0.0	\$0.00	0.0	\$0.00
White Cedar	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Jack Pine	0.0	\$0.00	2,521.3	\$39.49	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Red Pine	21.0	\$165.05	4,667.0	\$55.68	219.0	\$6.89	0.0	\$0.00	0.0	\$0.00
White Pine Maple Species	80.5 0.0	\$140.40 \$0.00	0.0	\$0.00 \$0.00	8.0 975.5	\$12.00 \$14.11	0.0	\$0.00 \$0.00	0.0	\$0.00 \$0.00
Mixed Species	0.0	\$0.00	0.0	\$0.00	479.1	\$4.40	730.0	\$2.18	0.0	\$0.00
Beltrami Co. All Species	101.5	\$145.50	8,986.4	\$44.28	26,244.4	\$27.96	730.0	\$2.18	0.0	\$0.00

Agency Name: Carlton Co.		Repor	ting Period	: 01/14 to 12/14		Ren	orting Bas	is: Appraisal	Reports	
Species Name	Sa MBF	wtimber Avg Price		nd Bolts Avg Price	Pulpy Cords A			elwood _Avg Price		mass Avg Price
Aspen	0.0	\$0.00	0.0	\$0.00	9,450.0	\$33.76	0.0	\$0.00	0.0	\$0.00
Balm of Gilead	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Birch Species	0.0	\$0.00	390.0	\$13.33	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Ash Species	0.0	\$0.00	40.0	\$10.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Elm Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Oak Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Basswood	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Other Hardwoods	0.0	\$0.00	1,310.0	\$13.09	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Balsam Fir	0.0	\$0.00	0.0	\$0.00	440.0	\$15.00	0.0	\$0.00	0.0	\$0.00
White Spruce	0.0	\$0.00	0.0	\$0.00	61.0	\$14.75	0.0	\$0.00	0.0	\$0.00
Black Spruce	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Tamarack	0.0	\$0.00	20.0	\$10.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
White Cedar	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Jack Pine	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Red Pine	0.0	\$0.00	0.0	\$0.00	1,955.0	\$18.73	0.0	\$0.00	0.0	\$0.00
White Pine	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Maple Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Mixed Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	71.0	\$1.51
Cariton Co. All Species	0.0	\$0.00	1,760.0	\$13.04	11,906.0	\$30.50	0.0	\$0.00	71.0	\$1.51

									is: Appraisal		
	Cassias Nama		wtimber		nd Bolts	Pulpy			lwood		mass
	Species Name	MBF	Avg Price		Avg Price	Cords A	_		Avg Price		Avg Price
	Aspen	0.0	\$0.00	0.0	\$0.00	27,927.0	\$26.71	0.0	\$0.00	0.0	\$0.00
	Balm of Gilead	0.0	\$0.00	0.0	\$0.00	53.0	\$12.40	0.0	\$0.00	0.0	\$0.00
	Birch Species	0.0	\$0.00	10,469.5	\$16.90	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
	Ash Species	0.0	\$0.00	2,440.0	\$11.55	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
	Elm Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
	Oak Species	0.0	\$0.00	17,156.0	\$27.89	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
	Basswood	0.0	\$0.00	4,776.0	\$11.68	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
	Other Hardwoods	0.0	\$0.00	0.0	\$0.00	42.0	\$8.31	0.0	\$0.00	0.0	\$0.00
	Balsam Fir	0.0	\$0.00	0.0	\$0.00	2,235.5	\$13.99	0.0	\$0.00	0.0	\$0.00
	White Spruce	0.0	\$0.00	962.0	\$28.95	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
	Black Spruce	0.0	\$0.00	0.0	\$0.00	348.0	\$19.63	0.0	\$0.00	0.0	\$0.00
	Tamarack	0.0	\$0.00	0.0	\$0.00	805.0	\$3.53	0.0	\$0.00	0.0	\$0.00
	White Cedar	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
	Jack Pine	0.0	\$0.00	2,262.0	\$30.99	133.0	\$8.87	0.0	\$0.00	0.0	\$0.00
	Red Pine	472.2	\$135.46	2,709.5	\$19.50	364.0	\$10.75	0.0	\$0.00	0.0	\$0.00
	White Pine	332.3	\$120.67	2.5	\$32.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
	Maple Species	0.0	\$0.00	5,043.5	\$14.83	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
	Mixed Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	820.0	\$2.50	0.0	\$0.00
Cass Co.	All Species	804.5	\$129.35	45,821.0	\$21.06	31.907.5	\$24.85	820.0	\$2.50	0.0	\$0.00

Agency Name: Clearwater Co.		Repor	ting Period	: 01/14 to 12/14	1	Re	porting Bas	is: Appraisal	Reports	
	Sa	wtimber	Pulp a	ind Bolts	Pulpv	vood	Fue	elwood	Bior	nass
Species Name	MBF	Avg Price	Cords	Avg Price	Cords A	vg Price	Cords	Avg Price	Tons A	Avg Price
Aspen	0.0	\$0.00	0.0	\$0.00	7,927.0	\$30.69	0.0	\$0.00	0.0	\$0.00
Balm of Gilead	0.0	\$0.00	0.0	\$0.00	180.0	\$18.00	0.0	\$0.00	0.0	\$0.00
Birch Species	0.0	\$0.00	0.0	\$0.00	1,634.0	\$13.04	0.0	\$0.00	0.0	\$0.00
Ash Species	13.0	\$85.00	0.0	\$0.00	7.0	\$10.00	0.0	\$0.00	0.0	\$0.00
Elm Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Oak Species	23.2	\$84.96	484.0	\$17.93	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Basswood	0.0	\$0.00	0.0	* \$0.00	555.0	\$7.03	0.0	\$0.00	0.0	\$0.00
Other Hardwoods	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Balsam Fir	0.0	\$0.00	0.0	\$0.00	237.0	\$4.56	0.0	\$0.00	0.0	\$0.00
White Spruce	8.2	\$87.68	0.0	\$0.00	118.0	\$8.33	0.0	\$0.00	0.0	\$0.00
Black Spruce	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Tamarack White Cedar	0.0	\$0.00 \$0.00	0.0	\$0.00 \$0.00	0.0	\$0.00 \$0.00	0.0	\$0.00 \$0.00	0.0	\$0.00 \$0.00
Jack Pine	0.0	\$0.00	635.0	\$25.52	288.0	\$10.00	0.0	\$0.00	0.0	\$0.00
Red Pine	30.0	\$100.00	506.0	\$17.50	30.0	\$14.00	0.0	\$0.00	0.0	\$0.00
White Pine	1.5	\$100.00	0.0	\$0.00	9.0	\$14.00	0.0	\$0.00	0.0	\$0.00
Maple Species	0.0	\$0.00	0.0	\$0.00	923.0	\$11.30	0.0	\$0.00	0.0	\$0.00
Mixed Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	267.0	\$3.82	0.0	\$0.00
Clearwater Co. All Species	75.9	\$91.50	1,625.0	\$20.76	11,908.0	\$24.17	267.0	\$3.82	0.0	\$0.00

Agency Name: Crow Wing Co.		Repoi	rting Period	: 01/14 to 12/1	4	Rep	orting Bas	is: Appraisa	I Reports	
Species Name	Sav MBF	wtimber Avg Price		and Bolts Avg Price	Pulpy Cords A			elwood Avg Price		mass Avg Price
Aspen	0.0	\$0.00	0.0	\$0.00	10,562.0	\$21.45	0.0	\$0.00	0.0	\$0.00
Balm of Gilead	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Birch Species	0.0	\$0.00	2,302.0	\$12.29	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Ash Species	0.0	\$0.00	540.0	\$11.96	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Elm Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Oak Species	0.0	\$0.00	6,862.0	\$21.16	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Basswood	0.0	\$0.00	1,366.0	\$12.13	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Other Hardwoods	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Balsam Fir	0.0	\$0.00	0.0	\$0.00	132.0	\$15.67	0.0	\$0.00	0.0	\$0.00
White Spruce	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Black Spruce	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Tamarack	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
White Cedar	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Jack Pine	0.0	\$0.00	108.0	\$13.04	60.0	\$6.33	0.0	\$0.00	0.0	\$0.00
Red Pine	300.0	\$218.40	2,485.0	\$30.03	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
White Pine	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Maple Species	0.0	\$0.00	0.0	\$0.00	1,856.0	\$10.74	0.0	\$0.00	0.0	\$0.00
Mixed Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	1,260.8	\$1.00
Crow Wing Co. All Species	300.0	\$218.40	13,663.0	\$19.95	12,610.0	\$19.74	0.0	\$0.00	1,260.8	\$1.00

	Sav	wtimber	Pulp an	d Boits	Pulpv	vood	Fue	elwood	Bior	nass
Species Name	MBF	Avg Price	Cords /	Avg Price	Cords A	vg Price	Cords	Avg Price	Tons A	Avg Price
Aspen	0.0	\$0.00	0.0	\$0.00	33,544.0	\$31.60	0.0	\$0.00	0.0	\$0.00
Balm of Gilead	0.0	\$0.00	0.0	\$0.00	31.0	\$6.23	0.0	\$0.00	0.0	\$0.00
Birch Species	0.0	\$0.00	0.0	\$0.00	7,785.0	\$11.47	0.0	\$0.00	0.0	\$0.00
Ash Species	0.0	\$0.00	0.0	\$0.00	143.0	\$5.67	0.0	\$0.00	0.0	\$0.00
Elm Species	0.0	\$0.00	0.0	\$0.00	1.0	\$5.00	0.0	\$0.00	0.0	\$0.00
Oak Species	0.0	\$0.00	4,360.0	\$17.47	807.0	\$13.91	0.0	\$0.00	0.0	\$0.00
Basswood	0.0	\$0.00	0.0	\$0.00	1,481.0	\$9.65	0.0	\$0.00	0.0	\$0.00
Other Hardwoods	0.0	\$0.00	0.0	\$0.00	1,309.0	\$5.06	0.0	\$0.00	0.0	\$0.00
Balsam Fir	0.0	\$0.00	0.0	\$0.00	2,316.0	\$16.43	0.0	\$0.00	0.0	\$0.00
White Spruce	0.0	\$0.00	470.0	\$37.29	47.0	\$10.87	0.0	\$0.00	0.0	\$0.00
Black Spruce	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Tamarack	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
White Cedar	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Jack Pine	0.0	\$0.00	3,036.0	\$39.41	24.0	\$27.25	30.0	\$2.33	0.0	\$0.00
Red Pine	437.5	\$139.48	1,710.0	\$57.21	77.0	\$28.60	0.0	\$0.00	0.0	\$0.00
White Pine	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Maple Species	0.0	\$0.00	0.0	\$0.00	1,039.0	\$4.45	0.0	\$0.00	0.0	\$0.00
Mixed Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	363.0	\$1.00
d Co. All Species	437.5	\$139.48	9,576.0	\$32.49	48.604.0	\$25.27	30.0	\$2.33	363.0	\$1.00

	Say	wtimber	Pulo a	ind Bolts	Pulpv	vood	Fue	elwood	Rior	nass
Species Name	MBF	Avg Price		Avg Price	Cords A			Avg Price		Avg Price
Aspen	0.0	\$0.00	0.0	\$0.00	42,801.0	\$40.25	0.0	\$0.00	0.0	\$0.00
Balm of Gilead	0.0	\$0.00	0.0	\$0.00	476.0	\$20.79	0.0	\$0.00	0.0	\$0.00
Birch Species	0.0	\$0.00	7,660.0	\$12.07	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Ash Species	0.0	\$0.00	2,381.0	\$11.01	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Elm Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Oak Species	0.0	\$0.00	2,033.0	\$31.04	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Basswood Other Hardwoods	0.0	\$0.00 \$0.00	3,527.0 0.0	\$11.88 \$0.00	0.0	\$0.00 \$0.00	0.0	\$0.00 \$0.00	0.0	\$0.00 \$0.00
Balsam Fir	0.0	\$0.00	6,192.0	\$19.31	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
White Spruce	0.0	\$0.00	2,263.0	\$30.55	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Black Spruce	0.0	\$0.00	8,257.0	\$30.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Tamarack	0.0	\$0.00	0.0	\$0.00	3,303.0	\$5.79	0.0	\$0.00	0.0	\$0.00
White Cedar	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Jack Pine	0.0	\$0.00	4,749.0	\$36.46	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Red Pine	5,696.0	\$116.66	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
White Pine	181.0	\$169.66	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Maple Species	0.0	\$0.00	0.0	\$0.00	5,301.0	\$10.17	0.0	\$0.00	0.0	\$0.00
Mixed Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	5,433.0	\$1.00
Itasca Co. All Species	5,877.0	\$118.29	37,062.0	\$22.48	51,881,0	\$34.81	0.0	\$0.00	5,433.0	\$1.00

Agency Name: Koochiching Co.		Repor	ting Period	01/14 to 12/1	4	Re	porting Bas	is: Appraisal	Reports	
Species Name	Sav MBF	wtimber Avg Price		nd Bolts Avg Price	Pulpv Cords A			elwood Avg Price		nass Avg Price
Aspen	0.0	\$0.00	0.0	\$0.00	55,434.0	\$36.15	0.0	\$0.00	0.0	\$0.00
Balm of Gilead	0.0	\$0.00	0.0	\$0.00	3,384.0	\$27.04	0.0	\$0.00	0.0	\$0.00
Birch Species	0.0	\$0.00	0.0	\$0.00	3,150.0	\$5.87	0.0	\$0.00	0.0	\$0.00
Ash Species	0.0	\$0.00	0.0	\$0.00	2,819.0	\$4.53	40.0	\$3.13	0.0	\$0.00
Elm Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Oak Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Basswood	0.0	\$0.00	0.0	\$0.00	755.0	\$5.75	0.0	\$0.00	0.0	\$0.00
Other Hardwoods	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Balsam Fir	0.0	\$0.00	0.0	\$0.00	7,243.0	\$10.46	0.0	\$0.00	0.0	\$0.00
White Spruce	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Black Spruce	0.0	\$0.00	0.0	\$0.00	8,859.0	\$25.21	0.0	\$0.00	0.0	\$0.00
Tamarack	0.0	\$0.00	0.0	\$0.00	2,087.0	\$6.25	0.0	\$0.00	0.0	\$0.00
White Cedar	0.0	\$0.00	0.0	\$0.00	198.0	\$5.83	0.0	\$0.00	0.0	\$0.00
Jack Pine	0.0	\$0.00	1,786.0	\$30.70	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Red Pine	0.0	\$0.00	2,091.0	\$28.08	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
White Pine Maple Species	0.0	\$0.00 \$0.00	0.0	\$0.00 \$0.00	0.0 281.0	\$0.00 \$6.02	0.0	\$0.00 \$0.00	0.0	\$0.00
Mixed Species	0.0	\$0.00	0.0	\$0.00	227.0	\$4.39	275.0	\$2.82	40.0	\$0.50
Coochiching Co. All Species	0.0	\$0.00	3,877.0	\$29.29	84,437.0	\$28.98	315.0	\$2.86	40.0	\$0.50

		Sav	wtimber	vtimber Pulp and Bolts			vood	Fue	elwood	Biomass	
	Species Name	<u>MBF</u>	Avg Price	Cords	Avg Price	Cords A		Cords	Avg Price	Tons A	Avg Price
	Aspen	0.0	\$0.00	0.0	\$0.00	4,455.0	\$23.92	0.0	\$0.00	0.0	\$0.00
	Balm of Gilead	0.0	\$0.00	0.0	\$0.00	199.0	\$7.01	0.0	\$0.00	0.0	\$0.00
	Birch Species	0.0	\$0.00	4,757.0	\$12.04	60.0	\$5.00	0.0	\$0.00	0.0	\$0.00
	Ash Species	0.0	\$0.00	1,706.0	\$10.60	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
	Elm Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
	Oak Species	0.0	\$0.00	510.0	\$24.22	15.0	\$6.00	0.0	\$0.00	0.0	\$0.00
	Basswood	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
	Other Hardwoods	0.0	\$0.00	0.0	\$0.00	788.0	\$5.66	0.0	\$0.00	0.0	\$0.00
	Balsam Fir	0.0	\$0.00	0.0	\$0.00	1,908.0	\$7.08	0.0	\$0.00	0.0	\$0.00
	White Spruce	0.0	\$0.00	0.0	\$0.00	1,386.0	\$18.05	0.0	\$0.00	0.0	\$0.00
	Black Spruce	0.0	\$0.00	0.0	\$0.00	512.0	\$21.48	0.0	\$0.00	0.0	\$0.00
	Tamarack	0.0	\$0.00	0.0	\$0.00	125.0	\$4.32	0.0	\$0.00	0.0	\$0.00
	White Cedar	0.0	\$0.00	200.0	\$12.64	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
	Jack Pine	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
	Red Pine	0.0	\$0.00	0.0	\$0.00	176.0	\$11.70	0.0	\$0.00	0.0	\$0.00
	White Pine	0.0	\$0.00	350.0	\$18.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
	Maple Species	0.0	\$0.00	8,377.0	\$12.11	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
	Mixed Species	0.0	\$0.00	0.0	\$0.00	30.0	\$18.00	43.0	\$4.00	0.0	\$0.00
Lake Co	. All Species	0.0	\$0.00	15,900.0	\$12.45	9,654.0	\$17.14	43.0	\$4.00	0.0	\$0.00

Agency Name: Pine Co.		Repor	ting Period	: 01/14 to 12/1	Rep	Reporting Basis: Appraisal Reports					
Species Name	Sa MBF	wtimber Avg Price		nd Bolts Avg Price	Pulpy Cords A			elwood Avg Price		mass Avg Price	
Aspen	0.0	\$0.00	0.0	\$0.00	12,441.0	\$40.92	0.0	\$0.00	0.0	\$0.00	
Balm of Gilead	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Birch Species Ash Species	0.0	\$0.00 \$0.00	1,526.0 1,296.0	\$19.90 \$15.52	0.0 0.0	\$0.00 \$0.00	0.0	\$0.00 \$0.00	0.0	\$0.00 \$0.00	
Elm Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Oak Species	0.0	\$0.00	763.0	\$36.56	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Basswood	0.0	\$0.00	279.0	\$12.27	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Other Hardwoods	0.0	\$0.00	120.0	\$14.56	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Balsam Fir	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
White Spruce	0.0	\$0.00	0.0	\$0.00	15.0	\$8.00	0.0	\$0.00	0.0	\$0.00	
Black Spruce	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Tamarack	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
White Cedar	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Jack Pine	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Red Pine	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
White Pine	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Maple Species	0.0	\$0.00	1,897.0	\$16.51	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Mixed Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Pine Co. All Species	0.0	\$0.00	5,881.0	\$19.53	12,456.0	\$40.88	0.0	\$0.00	0.0	\$0.00	

Agenc	y Name: St. Louis Co.		Repo	rting Period	: 01/14 to 12/	14	Reporting Basis: Appraisal Reports					
	Species Name	Sawtimber MBF Avg Price			and Bolts Avg Price		Pulpwood Cords Avg Price		elwood Avg Price	Biomass Tons Avg Price		
	Aspen	0.0	\$0.00	0.0	\$0.00	85,715.0	\$38.14	0.0	\$0.00	0.0	\$0.00	
	Balm of Gilead	0.0	\$0.00	0.0	\$0.00	1,942.0	\$36.09	0.0	\$0.00	0.0	\$0.00	
	Birch Species	0.0	\$0.00	24,534.0	\$14.34	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
	Ash Species	0.0	\$0.00	0.0	\$0.00	4,036.0	\$6.50	0.0	\$0.00	0.0	\$0.00	
	Elm Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
	Oak Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
	Basswood	0.0	\$0.00	0.0	\$0.00	1,185.0	\$9.92	0.0	\$0.00	0.0	\$0.00	
	Other Hardwoods	0.0	\$0.00	625.0	\$20.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
	Balsam Fir	0.0	\$0.00	0.0	\$0.00	19,342.0	\$9.54	0.0	\$0.00	0.0	\$0.00	
	White Spruce	0.0	\$0.00	5,656.0	\$31.81	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
	Black Spruce	0.0	\$0.00	12,948.0	\$30.55	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
	Tamarack White Cedar	0.0	\$0.00 \$0.00	0.0 0.0	\$0.00 \$0.00	8,700.0 0.0	\$4.07 \$0.00	0.0	\$0.00 \$0.00	0.0	\$0.00 \$0.00	
	Jack Pine	0.0	\$0.00	3,725.0	\$33.10	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
	Red Pine	0.0	\$0.00	4,888.0	\$37.53	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
	White Pine	344.0	\$126.21	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
	Maple Species	0.0	\$0.00	0.0	\$0.00	13,570.0	\$10.16	0.0	\$0.00	0.0	\$0.00	
	Mixed Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
St. Lou	is Co. All Species	344.0	\$126.21	52,376.0	\$23.80	134,490.0	\$27.77	0.0	\$0.00	0.0	\$0.00	

Agency Name: Wadena Co.		Report	ing Period:	01/14 to 12/14	Reporting Basis: Appraisal Reports						
Species Name	Sawtimber MBF Avg Price		Pulp and Bolts Cords Avg Price		Pulpwood Cords Avg Price		Fuelwood Cords Avg Price		Biomass Tons Avg Price		
Aspen	0.0	\$0.00	0.0	\$0.00	18.0	\$18.72	0.0	\$0.00	0.0	\$0.00	
Balm of Gilead	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Birch Species	0.0	\$0.00	0.0	\$0.00	3.0	\$8.67	0.0	\$0.00	0.0	\$0.00	
Ash Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Elm Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Oak Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Basswood	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Other Hardwoods	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Balsam Fir	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
White Spruce	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Black Spruce	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Tamarack	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
White Cedar	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Jack Pine	0.0	\$0.00	370.0	\$22.45	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Red Pine	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
White Pine	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Maple Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Mixed Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	200.0	\$1.00	
Wadena Co. All Species	0.0	\$0.00	370.0	\$22.45	21.0	\$17.29	0.0	\$0.00	200.0	\$1.00	

2014 MINNESOTA FEDERAL AGENCIES

	Sa	wtimber	Pulp ar	nd Bolts	Pulpy	Pulpwood		elwood	Bior	mass
Species Name	MBF	Avg Price		Avg Price	Cords A			Avg Price		Avg Price
Aspen	0.0	\$0.00	0.0	\$0.00	38,998.9	\$17.17	0.0	\$0.00	0.0	\$0.00
Balm of Gilead	0.0	\$0.00	0.0	\$0.00	3,528.4	\$16.86	0.0	\$0.00	0.0	\$0.00
Birch Species	0.0	\$0.00	2.6	\$12.31	1,342.1	\$7.89	28.0	\$3.21	18.0	\$2.00
Ash Species	0.0	\$0.00	58.3	\$20.82	43.4	\$5.09	248.3	\$5.34	0.0	\$0.00
Elm Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Oak Species	2.3	\$79.13	10.1	\$20.79	161.4	\$6.13	64.6	\$5.05	0.0	\$0.00
Basswood	0.0	\$0.00	0.0	\$0.00	230.1	\$6.89	0.0	\$0.00	0.0	\$0.00
Other Hardwoods	0.0	\$0.00	0.0	\$0.00	122.0	\$6.39	380.0	\$3.31	0.0	\$0.00
Balsam Fir	0.0	\$0.00	0.0	\$0.00	1,859.9	\$11.30	0.0	\$0.00	0.0	\$0.00
White Spruce	0.0	\$0.00	249.0	\$18.62	619.3	\$15.53	0.0	\$0.00	0.0	\$0.00
Black Spruce	0.0	\$0.00	42.9	\$17.97	2,814.9	\$13.78	0.0	\$0.00	0.0	\$0.00
Tamarack	0.0	\$0.00	0.0	\$0.00	1,035.8	\$3.49	0.0	\$0.00	0.0	\$0.00
White Cedar	0.0	\$0.00	5.5	\$27.64	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Jack Pine	0.0	\$0.00	791.2	\$24.17	2,278.0	\$16.95	57.1	\$10.42	0.0	\$0.00
Red Pine	85.8	\$102.84	1,714.1	\$26.68	953.4	\$13.80	0.0	\$0.00	0.0	\$0.00
White Pine	56.6	\$99.22	36.7	\$25.78	180.0	\$24.57	0.0	\$0.00	0.0	\$0.00
Maple Species	0.0	\$0.00	0.0	\$0.00	78.2	\$8.01	0.0	\$0.00	0.0	\$0.00
Mixed Species	0.0	\$0.00	0.0	\$0.00	5.0	\$12.00	195.1	\$1.00	0.0	\$0.00
USDI-BIA All Species	144.7	\$101.05	2,910.4	\$25.02	54,250.8	\$16.10	973.1	\$3.89	18.0	\$2.00

Agency Name: Chippewa N.F.		Repo	rting Period	: 10/13 to 09/1	4	Reporting Basis: Appraisal Reports						
Species Name		Sawtimber MBF Avg Price		Pulp and Bolts Cords Avg Price		Pulpwood Cords Avg Price		Fuelwood Cords Avg Price		Biomass Tons Avg Price		
Aspen	0.0	\$0.00	0.0	\$0.00	37,959.0	\$29.68	0.0	\$0.00	0.0	\$0.00		
Balm of Gilead	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00		
Birch Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00		
Ash Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00		
Elm Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00		
Oak Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00		
Basswood Other Hardwoods	0.0	\$0.00 \$0.00	0.0 2,436.0	\$0.00 \$16.41	0.0 18,122.0	\$0.00 \$15.12	0.0	\$0.00 \$0.00	0.0	\$0.00 \$0.00		
Balsam Fir	0.0	\$0.00	0.0	\$0.00	3,717.0	\$15.69	0.0	\$0.00	0.0	\$0.00		
White Spruce	167.0	\$70.02	1,072.0	\$28.32	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00		
Black Spruce	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00		
Tamarack	0.0	\$0.00	980.0	\$15.65	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00		
White Cedar	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00		
Jack Pine	72.0	\$89.56	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00		
Red Pine	9,327.0	\$178.23	12,420.0	\$34.80	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00		
White Pine	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00		
Maple Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00		
Mixed Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	1,246.0	\$4.04	1,182.0	\$0.20		
Chippewa N.F. All Species	9,566.0	\$175.67	16,908.0	\$30.63	59,798.0	\$24.40	1,246.0	\$4.04	1,182.0	\$0.20		

Agency Name: Superior N.F.		Repor	ting Period	: 10/13 to 09/	Re	Reporting Basis: Appraisal Reports					
Species Name	Sa ⁿ MBF	Sawtimber MBF Avg Price		Pulp and Bolts Cords Avg Price		Pulpwood Cords Avg Price		Fuelwood Cords Avg Price		Biomass Tons Avg Price	
Aspen	0.0	\$0.00	0.0	\$0.00	37,504.0	\$14.42	0.0	\$0.00	0.0	\$0.00	
Balm of Gilead	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Birch Species	0.0	\$0.00	498.0	\$14.15	14,144.0	\$7.52	0.0	\$0.00	0.0	\$0.00	
Ash Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Elm Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Oak Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Basswood	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Other Hardwoods	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Balsam Fir	0.0	\$0.00	0.0	\$0.00	7,410.0	\$5.78	0.0	\$0.00	0.0	\$0.00	
White Spruce	826.0	\$59.06	0.0	\$0.00	468.0	\$5.53	0.0	\$0.00	0.0	\$0.00	
Black Spruce	0.0	\$0.00	0.0	\$0.00	9,114.0	\$12.70	0.0	\$0.00	0.0	\$0.00	
Tamarack	0.0	\$0.00	0.0	\$0.00	690.0	\$5.50	0.0	\$0.00	0.0	\$0.00	
White Cedar	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Jack Pine	0.0	\$0.00	3,124.0	\$14.31	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	
Red Pine	3,595.0	\$111.64	0.0	\$0.00	6,014.0	\$12.96	0.0	\$0.00	0.0	\$0.00	
White Pine Maple Species	0.0	\$0.00 \$0.00	0.0	\$0.00 \$0.00	258.0 1,746.0	\$11.38 \$6.29	0.0	\$0.00 \$0.00	0.0	\$0.00 \$0.00	
Mixed Species	0.0	\$0.00	0.0	\$0.00	2,922.0	\$10.45	260.0	\$10.00	1,946.0	\$0.50	
Superior N.F. All Species	4,421.0	\$101.82	3,622.0	\$14.29	80,270.0	\$11.64	260.0	\$10.00	1,946.0	\$0.50	

MINNESOTA DEPARTMENT OF NATURAL RESOURCES - FORESTRY

	Sav	wtimber	Pulp a	Pulp and Bolts		Pulpwood		lwood	Biomass	
Species Name	MBF	Avg Price	Cords	Avg Price	Cords A	vg Price	Cords	Avg Price	Tons A	Avg Price
Aspen	0.0	\$0.00	12,298.0	\$39.18	450,594.2	\$30.10	15.0	\$1.87	835.0	\$4.74
Balm of Gilead	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00
Birch Species	4.6	\$34.85	13,388.0	\$18.55	21,953.3	\$10.89	0.0	\$0.00	0.0	\$0.00
Ash Species	12.3	\$42.13	0.0	\$0.00	13,131.3	\$7.31	66.5	\$3.09	0.0	\$0.00
Elm Species	5.5	\$42.19	0.0	\$0.00	11.0	\$2.84	0.0	\$0.00	0.0	\$0.00
Oak Species	988.6	\$531.87	18,186.0	\$20.84	3,611.6	\$13.69	332.5	\$4.38	0.0	\$0.00
Basswood	175.0	\$73.67	45.0	\$15.30	10,319.5	\$8.82	0.0	\$0.00	0.0	\$0.00
Other Hardwoods	95.3	\$66.14	23,301.0	\$16.46	22,018.0	\$11.23	61.2	\$6.30	0.0	\$0.00
Balsam Fir	0.0	\$0.00	8,719.8	\$16.38	31,062.6	\$11.07	33.1	\$2.06	0.0	\$0.00
White Spruce	0.0	\$0.00	21,554.0	\$29.20	23,241.7	\$16.77	12.9	\$2.00	0.0	\$0.00
Black Spruce	0.0	\$0.00	11,907.0	\$23.58	34,927.8	\$15.79	0.0	\$0.00	0.0	\$0.00
Tamarack	0.0	\$0.00	0.0	\$0.00	51,552.9	\$5.55	6,159.9	\$2.51	98.0	\$1.00
White Cedar	0.0	\$0.00	0.0	\$0.00	1,124.8	\$5.20	0.0	\$0.00	0.0	\$0.00
Jack Pine	0.0	\$0.00	25,904.0	\$32.58	2,330.0	\$10.66	497.3	\$2.15	272.6	\$1.00
Red Pine	619.2	\$190.78	55,101.4	\$47.68	2,473.1	\$5.96	40.0	\$2.75	0.0	\$0.00
White Pine	235.7	\$76.74	1,422.7	\$26.63	12.8	\$13.19	0.0	\$0.00	0.0	\$0.00
Maple Species	25.4	\$427.76	11,931.6	\$14.22	4,957.9	\$9.31	0.0	\$0.00	625.0	\$1.00
Mixed Species	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	0.0	\$0.00	49,422.0	\$1.06

EXHIBIT C

Exhibit C provided with the non-public version of this affidavit has been marked "Trade Secret" in its entirety. Pursuant to Minn. R. 7829.0500, subp. 3, OTP-EITE provides the following description of the excised material:

- 1. Nature of the Material: Exhibit C is an excerpt from a competitive assessment of the electricity rates of western stud/short lumber mills that was commissioned by the participants in the study. It show the results of a survey of participants' electrical power rates, electrical power costs, and power usage.
 - 2. Authors: The study was authored by The Beck Group.
- 3. **Importance:** The excerpt contains sensitive business information that was provided by participants on the condition that the information would be kept confidential.
- 4. **Date the Information was Prepared:** The study was prepared in December 2013.

EXHIBIT D

Year-to-date performance of major commodities

