



Idaho's Forest Products Industry and Timber Harvest, 2015

The University of Montana's Bureau of Business and Economic Research (BBER), in conjunction with the Interior West Forest Inventory and Analysis (IW-FIA) Program of the US Forest Service, conducted a census of Idaho's timber processors operating during calendar year 2015. Through a written questionnaire, phone, or in-person interview, timber-processing and residue-utilizing facilities provided information about their calendar year 2015 operations, including:

- Plant location, production, capacity, and employment
- Volume of raw material received, by county and ownership
- Species of timber received and live/dead proportions
- Finished product volumes, types, sales value, and market locations
- Volume, uses, and sales of manufacturing residue

Because this study is based on a census, rather than statistical sample of firms, there is no statistical error associated with the estimates presented. Possibilities of reporting and measurement error exist, but are minimized by checking each facility's data for internal consistency and cross-checking summarized data against other public and private information. Summary data tables and figures are reviewed by wood products researchers, state and federal agency personnel, and members of the state's forest products industry to garner high-level reviews.

Some firms chose not to participate or did not provide complete data. Data for facilities that did not respond were estimated using previous years' surveys, data from similar facilities, and other information. For the 2015 Idaho census, data were received for 47 of the 88 active, in-state facilities, accounting for 81 percent of facilities receiving more than 5 million board feet Scribner of timber. While some estimation was required, responding firms accounted for 79 percent of the state-wide harvest and 78 percent of the timber volume processed in Idaho during calendar year 2015.

The resulting facility-level information was then compiled and summarized as presented here. A glossary is also included to provide additional context and clarity for terminology used in the data tables and subsequent reporting.

A series of research briefs/bulletins are currently being prepared that will include selected tables along with historical information and current industry trends. This is the ninth analysis conducted for Idaho. All BBER reports on Idaho's forest products industry can be found at: http://www.bber.umt.edu/FIR/S_ID.asp

As we continue to finalize the reports, we would like to provide this "core" information to our data users and other interested individuals. We encourage you to contact us if you have any additional questions about the data. However, firm-level data are confidential and will not be released.

The lead analyst on this report is:

Eric A. Simmons

Research Associate, Forest Industry Research Program
Bureau of Business and Economic Research
Eric.Simmons@business.umt.edu
(406) 243-5113



Highlights

- A total of 88 primary wood products facilities were active in Idaho during 2015 (Figure 1):
 - 28 sawmills
 - 18 residue-related facilities producing particleboard, clean chips, pulp and paper, bioenergy, and bark/mulch products
 - 18 post, pole, log furniture and firewood producers
 - 15 log home manufacturers
 - 7 cedar products mills
 - 2 plywood/veneer facilities.
- Idaho's primary wood products industry generated more than \$1.65 billion in sales, including mill residue and residue related products, during 2015. Sales were up approximately 12 percent (in constant 2015 dollars) from 2011, but still below pre-recession levels of \$1.9 to \$2.2 billion.
- The in-state proportion of finished product sales increased from 10 percent of total sales in 2011 to 20 percent (\$174 million) in 2015, marking the highest proportion of in-state sales since 1995.
- Idaho's total 2015 timber harvest was over 1.13 billion board feet (BBF) Scribner, about 6.5 percent higher than 2011, 52 percent higher than the 2009 recession low of 746 million board feet (MMBF) Scribner, and about 1.3 percent higher than the 2006 pre-recession volume of 1.12 BBF Scribner.
- Saw and veneer logs comprised 89.4 percent of the 2015 timber harvest. Clearwater, Bonner, Shoshone, and Benewah counties were the largest contributors to the state's total harvest in 2015, accounting for 57.4 percent of total harvest volume. Private timberlands continue to provide the largest share of the total harvested volume at 65.8 percent.
- At 856 MBF Scribner, the harvest of timber for house logs more than doubled from 2011, indicating some improvement for a sector hit hard by the recession.
- Douglas-fir and true firs remain the major species harvested in Idaho at 64.6 percent of the 2015 harvest, with pines totaling 13.3 percent and Western redcedar accounting for 9 percent.

- Capacity to process sawtimber among sawmills, veneer/plywood plants, and utility pole and log home manufacturers in Idaho exceeded 1.4 BBF Scribner during 2015, about 12 percent higher than in 2011. Capacity utilization among these facilities was 986 MMBF Scribner in 2015, about 68 percent of capacity.
- Because of equipment upgrades at several Idaho mills, sawmill production capacity increased over 26 percent since 2011 to more than 2.4 BBF lumber tally. Lumber production increased 21 percent over the same period to about 1.69 BBF.
- Idaho's 28 active sawmills produced about 1.69 BBF of lumber during 2015, and recovered an average of 1.84 board feet lumber tally per board foot Scribner of log input (figure 3).

Figure 2 traces the flow Idaho's 2015 timber harvest by sector, with all facility inputs and outputs (i.e., products and mill residue) reported in thousand cubic feet (MCF). The following conversion factors, converting Scribner board foot volumes to cubic feet, were developed from log size specifications as well as product and residue recovery information provided by processors of Idaho's 2015 timber harvest:

- 4.60 board feet Scribner per cubic foot for saw and veneer logs
- 4.60 board feet Scribner per cubic foot for house logs
- 2.81 board feet Scribner per cubic foot for pulpwood
- 3.52 board feet Scribner per cubic foot for other products

Idaho's 2015 timber harvest included over 262,739 MCF of wood (without bark) delivered to primary processing facilities. More than 43 percent became finished products including lumber, plywood, log homes, cedar products, and posts and poles. Almost 47 percent was clean chips or mill residue used for pulp, paper, and particleboard. Over 6 percent was mill residue used for energy, 3 percent was mill residue used for mulch and animal bedding, and less than 0.1 percent was unused residue.

Figure 1 –Idaho’s primary wood processing facilities active during calendar year 2015.

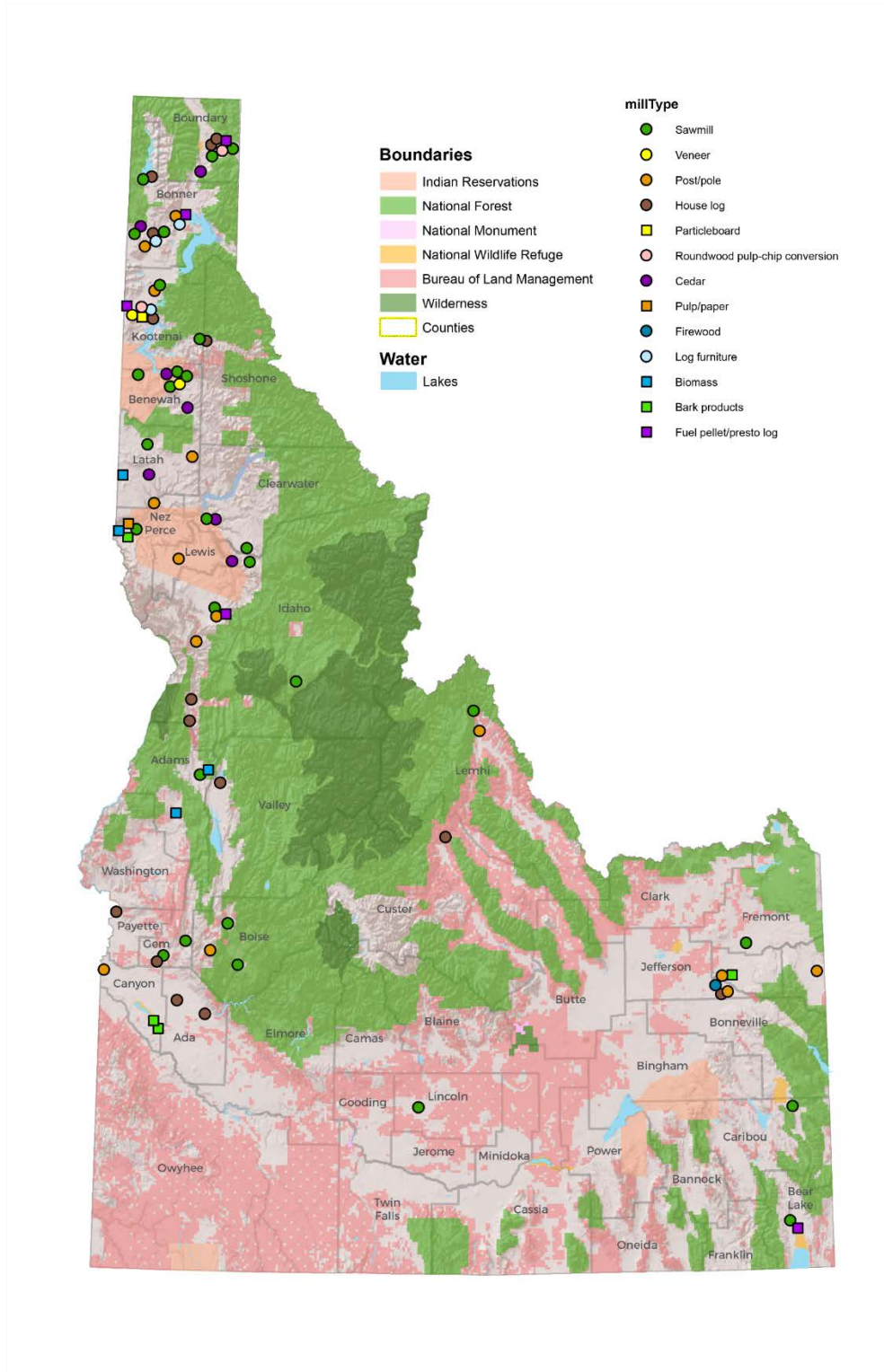
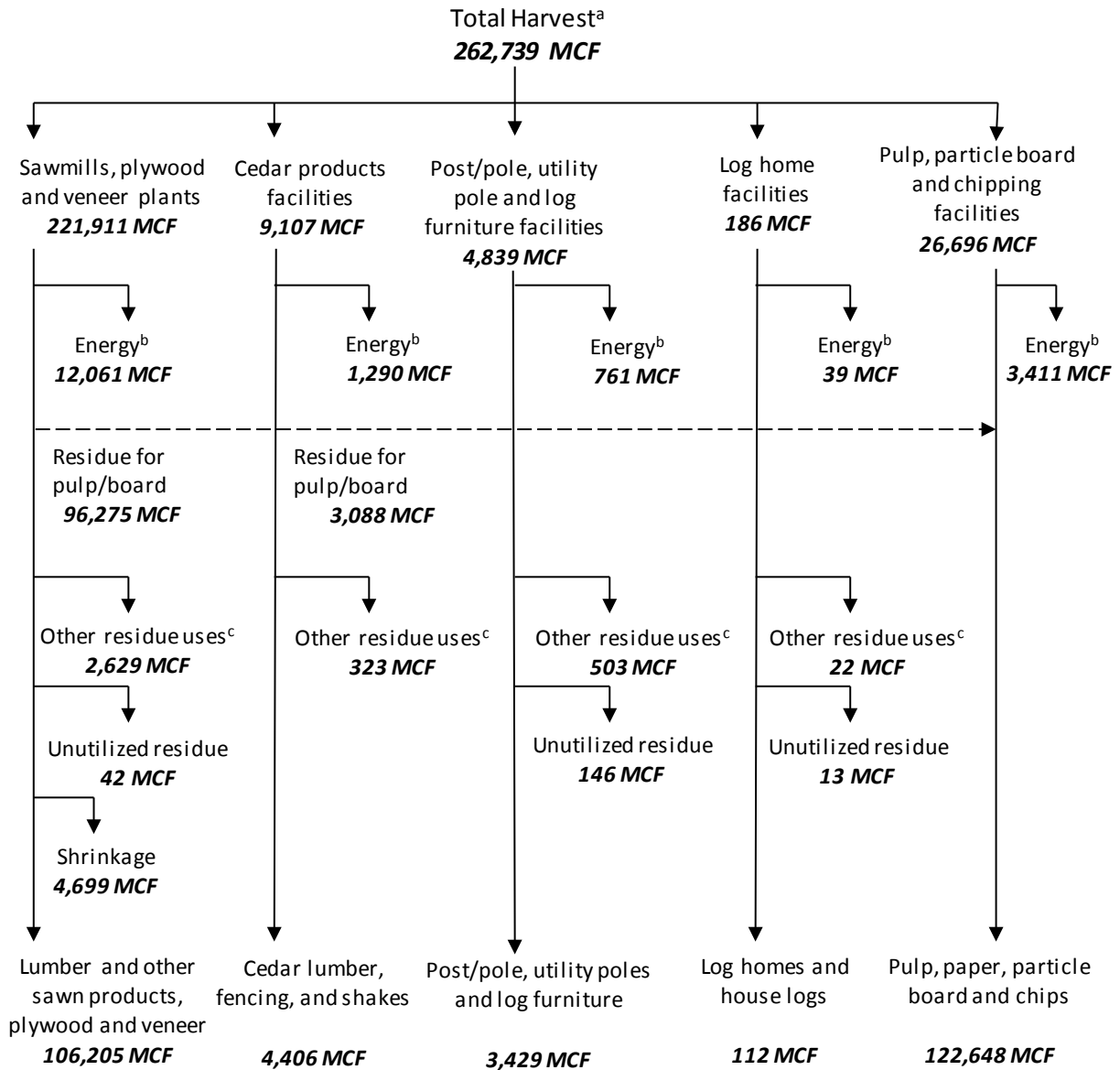


Figure 2 – Utilization of Idaho’s timber harvest, 2015.



^a Harvest volume does not include bark.

^b Energy includes residue used internally for energy or sold for hog fuel, wood pellets, or compressed fuel logs.

^c Other uses include landscape, mulch, and animal bedding.

Figure 3 – Lumber recovery and overrun, select years.

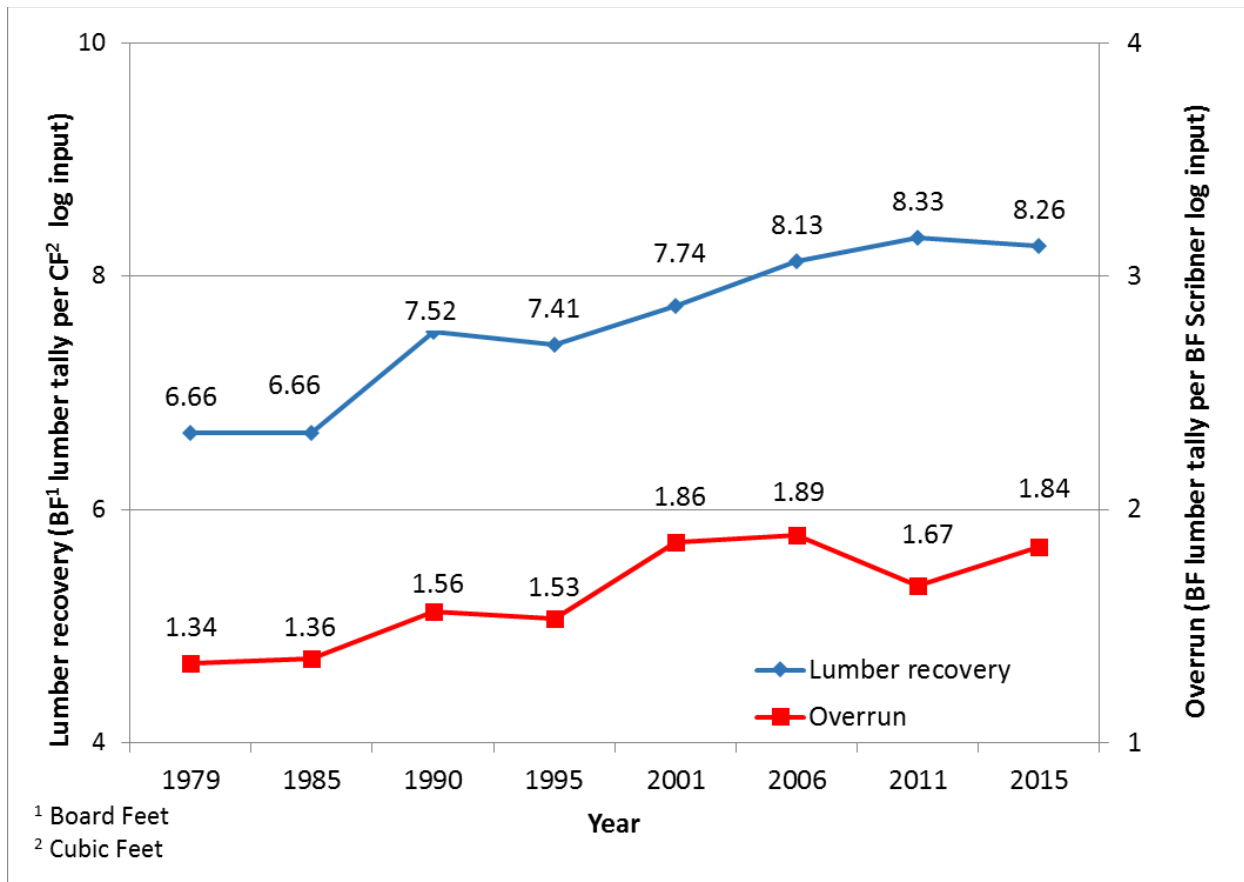


Table 1– Idaho timberland area, sawtimber volume and harvest volume by ownership class, 2015 (Source: Miles 2017).

Ownership class	Acres	Percentage of non-reserved timberland	Net sawtimber volume (MBF)	Percentage of net sawtimber volume	2015 Harvest (MBF Scribner)	Percentage of total harvest
National Forest	11,950,952	72.3	164,376,441	78.1	99,013	8.7
Undifferentiated private	2,856,324	17.3	25,037,999	11.9	747,403	65.8
State	1,122,857	6.8	14,477,264	6.9	288,197	25.4
Bureau of Land Management	576,897	3.5	5,500,665	2.6	706	0.1
Other public	24,801	0.2	1,024,840	0.5	206	0.0
All owners	16,531,831	100	210,417,209	100	1,135,525	100

Totals may not sum due to rounding.

Table 2– Idaho timber harvest (MMBF, Scribner) by county, selected years (sources: Keegan and others 1982, 1988, 1992, 1997; Morgan and others 2004; Brandt and others 2012; Simmons and others 2014).

County	1979		1985		1990		1995		2001		2006		2011		2015	
	MMBF Scribner	Percent of Total	MMBF Scribner	Percent of Total	MMBF Scribner	Percent of Total	MMBF Scribner	Percent of Total	MMBF Scribner	Percent of Total	MMBF Scribner	Percent of Total	MMBF Scribner	Percent of Total	MMBF Scribner	Percent of Total
Northern Idaho																
Benewah	100	5.4	94	5.9	152	9.0	117	8.5	129	12.8	144	12.9	156	14.6	122	10.7
Bonner	142	7.7	175	11.0	197	11.6	139	10.1	124	12.3	93	8.3	98	9.2	150	13.2
Boundary	94	5.1	80	5.0	86	5.1	69	5.0	57	5.7	53	4.8	39	3.6	54	4.8
Clearwater	544	29.4	335	21.0	267	15.8	234	17.1	182	18.1	174	15.6	221	20.7	250	22.0
Idaho	190	10.3	156	9.8	174	10.3	113	8.2	65	6.5	65	5.8	88	8.2	88	7.8
Kootenai	65	3.5	80	5.0	152	9.0	114	8.3	81	8.0	100	8.9	70	6.6	95	8.3
Latah	57	3.1	89	5.6	84	5.0	96	7.0	70	7.0	125	11.2	130	12.2	87	7.7
Lewis	4	0.2	13	0.8	20	1.2	17	1.2	14	1.4	12	1.1	6	0.6	42	3.7
Nez Perce	8	0.4	12	0.8	17	1.0	8	0.6	4	0.4	10	0.9	8	0.8	29	2.6
Shoshone	206	11.1	217	13.6	183	10.8	194	14.2	172	17.1	200	17.8	137	12.9	131	11.5
Northern Idaho	1,410	76.2	1,254	78.7	1,332	78.7	1,100	80.3	899	89.3	976	87.1	953	89.4	1,047	92.2
Southern Idaho																
Adams	52	2.8	66	4.1	87	5.1	28	2.0	25	2.5	30	2.7	24	2.2	32	2.9
Boise	84	4.5	67	4.2	127	7.5	93	6.8	20	2.0	25	2.2	28	2.6	17	1.5
Elmore	25	1.4	14	0.9	5	0.3	38	2.8	7	0.7	^a	^b	^a	^b	0	0
Valley	107	5.8	88	5.5	52	3.1	67	4.9	39	3.9	65	5.8	48	4.5	29	2.5
Washington	4	0.2	9	0.6	4	0.2	6	0.4	0	0.0	^a	^b	5	0.5	1	0.1
Other Counties	20	1.1	3	0.2	6	0.3	11	0.8	1	0.1	6	0.5	^a	^b	^a	^b
Southwestern Idaho	292	15.8	247	15.5	281	16.6	242	17.7	91	9.0	126	11.3	104	9.8	80	7.0
Caribou	4	0.2	10	0.6	3	0.2	5	0.3	5	0.5	4	0.3	^a	^b	^a	^b
Clark	10	0.5	10	0.6	16	0.9	0	0.0	1	0.1	6	0.6	3	0.3	1	0.1
Fremont	76	4.1	43	2.7	20	1.2	2	0.1	3	0.3	1	0.1	3	0.3	1	0.1
Lemhi	34	1.8	11	0.7	16	0.9	6	0.4	1	0.1	1	0.1	^a	^b	^a	^b
Other Counties	24	1.3	19	1.2	24	1.4	15	1.1	7	0.7	7	0.6	3	0.3	6	0.5
Southeastern Idaho	148	8.0	93	5.8	79	4.7	27	2.0	17	1.7	19	1.7	9	0.8	8	0.8
Southern Idaho	440	23.8	340	21.3	360	21.3	269	19.7	108	10.7	145	12.9	113	10.6	88	7.8
Idaho Total	1,850	100	1,594	100	1,692	100	1,370	100	1,007	100	1,121	100	1,066	100	1,136	100

Totals may not sum due to rounding.

^a Less than 0.5 MMBF.

^b Less than 0.05 percent.

Table 3– Idaho timber harvest (MBF, Scribner) by ownership class, selected years (sources: Keegan and others 1982, 1988, 1992, 1997; Morgan and others 2004; Brandt and others 2012; Simmons and others 2014).

Ownership class	1979	1985	1990	1995	2001	2006	2011	2015
<i>Thousand board feet, Scribner</i>								
Private total	808,749	779,109	754,978	829,417	750,590	833,797	615,012	747,403
Industrial	455,721	467,474	364,178	467,518	443,029	485,590	484,176	552,835
Non-industrial private ^a	353,028	311,635	390,800	361,899	307,561	348,207	130,836	194,569
Public total	1,041,719	814,787	937,560	540,296	256,704	286,813	450,893	388,122
National Forest	866,455	631,003	700,715	301,277	77,863	78,613	102,937	99,013
Other public ^b	175,264	183,784	236,845	239,019	178,841	208,200	347,956	289,109
All owners^b	1,850,468	1,593,896	1,692,538	1,369,713	1,007,294	1,120,610	1,065,905	1,135,525
<i>Percentage of annual harvest</i>								
Private	43.7	48.9	44.6	60.6	74.5	74.4	57.7	65.8
Industrial	24.6	29.3	21.5	34.1	44.0	43.3	45.4	48.7
Non-industrial private ^a	19.1	19.6	23.1	26.4	30.5	31.1	12.3	17.1
Public	56.3	51.1	55.4	39.4	25.5	25.6	42.3	34.2
National Forest	46.8	39.6	41.4	22.0	7.7	7.0	9.7	8.7
Other public ^b	9.5	11.5	14.0	17.5	17.8	18.6	32.6	25.5
All owners	100	100	100	100	100	100	100	100

Totals may not sum due to rounding.

^aNon-industrial private includes Tribal harvest.

^bOther public includes state, Bureau of Land Management, and other public ownerships.

Table 4– Idaho timber harvest by ownership class and timber product, 2015.

Ownership class	Saw and veneer logs ^a	Cedar products	House logs	Other timber products ^b	All products
<i>Thousand board feet, Scribner</i>					
Private timberlands	670,528	23,683	512	52,680	747,403
Industrial	507,513	12,771	57	32,494	552,835
Non-industrial private ^c	163,016	10,912	455	20,186	194,569
Public timberlands	344,553	7,485	345	35,739	388,122
National Forest	88,321	1,262	193	9,237	99,013
State	255,320	6,223	152	26,501	288,197
Other ^d	912	0	0	0	912
All owners	1,015,082	31,168	856	88,419	1,135,525
<i>Percentage of harvest by product</i>					
Private timberlands	66.1	76.0	59.8	59.6	65.8
Industrial	50.0	41.0	6.7	36.8	48.7
Non-industrial private ^c	16.1	35.0	53.1	22.8	17.1
Public timberlands	33.9	24.0	40.2	40.4	34.2
National Forest	8.7	4.0	22.5	10.4	8.7
State	25.2	20.0	17.8	30.0	25.4
Other ^d	0.1	0.0	0.0	0.0	0.1
All owners	89.4	2.7	0.1	7.8	100

Totals may not sum due to rounding.

^aSaw and veneer logs combined to prevent disclosure.

^bOther timber products include logs used for pulpwood, posts and poles, utility poles, furniture logs, and bioenergy.

^cNon-industrial private includes Tribal.

^dOther owners include Bureau of Land Management and other public.

Table 5—Proportion of Idaho timber harvest by species, selected years (sources: Setzer 1970; Morgan and others 2004; Brandt and others 2012; Simmons and others 2014).

Species	1969	1979	1985	1990	1995	2001	2006	2011	2015
<i>Percentage of harvest (MBF, Scribner)</i>									
True firs	24	22	27	23	25	24	34	35	36
Douglas-fir	18	20	21	22	27	26	28	24	29
Western redcedar	7	11	10	11	9	10	13	12	9
Ponderosa pine	14	13	12	18	17	7	7	10	8
Western larch	6	6	6	6	6	10	5	6	6
Western hemlock	^a	1	3	3	4	12	4	7	5
Lodgepole pine	4	8	10	10	6	5	5	3	5
Spruce	^a	3	5	3	2	2	2	2	2
Western white pine	19	8	6	5	3	4	1	1	1
Other species ^a	8	9	1	0	2	0	1	0	—
All species	100	100	100	100	100	100	100	100	100

Totals may not sum due to rounding.

^aWestern hemlock and Englemann spruce were included in the other species in 1969.

— Less than 0.5 percent.

Table 6— Idaho timber harvest by species and timber product, 2015.

Species	Saw and veneer logs ^a	Cedar products ^b	House logs	Other timber products ^c	All products
<i>Thousand board feet, Scribner</i>					
True firs	376,811	0	47	31,020	407,877
Douglas-fir	300,871	0	150	25,158	326,179
Western redcedar	59,110	31,168	11	11,545	101,834
Ponderosa pine	89,307	0	131	917	90,355
Western larch	70,197	0	12	548	70,756
Western hemlock	53,638	0	0	5,497	59,135
Lodgepole pine	37,942	0	451	13,624	52,016
Spruce	18,689	0	50	92	18,830
Western white pine	8,386	0	6	19	8,411
Other softwood	132	0	0	0	132
All species	1,015,082	31,168	856	88,419	1,135,525
<i>Percentage of harvest by product</i>					
True firs	37.1	0.0	5.4	35.1	35.9
Douglas-fir	29.6	0.0	17.5	28.5	28.7
Western redcedar	5.8	100.0	1.3	13.1	9.0
Ponderosa pine	8.8	0.0	15.3	1.0	8.0
Western larch	6.9	0.0	0.0	0.6	6.2
Western hemlock	5.3	0.0	0.0	6.2	5.2
Lodgepole pine	3.7	0.0	52.6	15.4	4.6
Spruce	1.8	0.0	5.8	—	1.7
Western white pine	0.8	0.0	0.7	—	0.7
Other softwood	—	0.0	0.0	0.0	—
All species	89.4	2.7	0.1	7.8	100

Totals may not sum due to rounding.

^aSaw and veneer logs combined to prevent disclosure of firm level data.

^bCedar products include logs used for cedar shakes, shingles and split rail fencing.

^cOther timber products include logs used for pulpwood, posts and poles, utility poles, firewood, log furniture, and bioenergy.

— Less than 0.5 MBF or 0.5 percent.

Table 7– Log flow into and out of Idaho, 2015.

Timber products	Log flow into Idaho	Log flow out of Idaho	Net inflow (net outflow)
<i>----- Thousand board feet, Scribner-----</i>			
Saw and veneer logs	76,565	84,959	(8,395)
House logs	1,423	128	1,295
Cedar products	4,300	968	3,332
Other products ^a	1,978	10,451	(8,473)
All products	84,266	96,506	(12,240)

^aOther products include logs for pulpwood, posts and poles, log furniture, and bioenergy.

Table 8– Intra-state and inter-state timber flow of 2015 Idaho timber harvest.

Region of harvest	Intra-state timber flow						Inter-state timber flow		
	Delivered to county of harvest	Delivered to adjacent ID county	Delivered to non-adjacent ID county	Total delivered to Northern Idaho	Total delivered to Southwestern Idaho	Total delivered to Southeastern Idaho	Total delivered to Idaho	Total delivered out-of-state	Total harvest
<i>----- Thousand board feet, Scribner-----</i>									
Northern Idaho	300,781	536,626	138,859	970,651	5,585	30	976,266	71,227	1,047,493
Southwestern Idaho	12,870	46,889	1,037	25,324	35,459	13	60,795	19,020	79,815
Southeastern Idaho	1,138	338	482	—	375	1,583	1,958	6,259	8,217
Idaho total	314,789	583,853	140,377	995,974	41,419	1,625	1,039,019	96,506	1,135,525

Totals may not sum due to rounding.
 — Less than 0.5 MBF or 0.5 percent.

Table 9– Active Idaho primary wood products facilities by county and product, selected years (sources: Keegan and others 1997; Morgan and others 2004; Brandt and others 2012; Simmons and others 2014).

County	Lumber	Veneer/ plywood	Post, poles, log furniture, and firewood	Log homes	Cedar products	Residue-related products ^a	All products
North							
Benewah	4	1	—	—	2	—	7
Bonner	3	—	5	2	1	1	12
Boundary	2	—	—	2	1	2	7
Clearwater	2	—	—	—	1	—	3
Idaho	3	—	1	2	—	1	7
Kootenai	2	1	2	1	—	3	9
Latah	1	—	2	—	1	1	5
Lewis	—	—	1	—	1	—	2
Nez Perce	1	—	—	—	—	4	5
Shoshone	—	—	—	1	—	—	1
Region total	18	2	11	8	7	12	58
Southwest							
Ada	—	—	—	2	—	1	3
Adams	1	—	—	—	—	2	3
Boise	2	—	1	—	—	—	3
Canyon	—	—	1	—	—	1	2
Gem	2	—	—	1	—	—	3
Payette	—	—	—	1	—	—	1
Valley	—	—	—	1	—	—	1
Region total	5	0	2	5	0	4	16
Southeast							
Bear Lake	1	—	—	—	—	1	2
Caribou	1	—	—	—	—	—	1
Custer	—	—	—	1	—	—	1
Fremont	1	—	—	—	—	—	1
Jefferson	—	—	2	1	—	—	3
Lemhi	1	—	1	—	—	—	2
Lincoln	1	—	—	—	—	—	1
Madison	—	—	1	—	—	1	2
Teton	—	—	1	—	—	—	1
Region total	5	0	5	2	0	2	14
2015 Total	28	2	18	15	7	18	88
Past years							
2011 Total	27	2	17	16	8	18	88
2006 Total ^b	38	3	21	26	8	18	114
2001 Total	35	4	22	21	10	17	109
1995 Total	62	6	32	32	15	15	162
1990 Total	80	6	27	22	26	11	172
1985 Total	90	7	26	20	25	6	174
1979 Total	133	8	35	15	44	7	242

^aResidue-related products include particleboard, chips, pulp and paper products, bioenergy products, and decorative bark.

^bRevised.

Table 10– Timber received by Idaho processors by ownership class and product, 2015.

Ownership class	Saw and veneer logs ^a	Cedar products	House logs	Other products ^b	All products
<i>Thousand board feet, Scribner</i>					
Private	670,540	23,733	1,595	47,867	743,734
Industrial	503,887	13,296	748	29,684	547,615
Non-industrial private ^c	166,653	10,437	847	18,182	196,119
Public	323,479	8,567	498	31,825	364,368
National Forest	92,667	2,362	205	8,302	103,536
State	230,372	6,205	228	23,523	260,328
Other ^d	440	—	65	—	505
Canadian and unspecified^e	12,668	2,200	59	255	15,182
All owners	1,006,687	34,500	2,152	79,946	1,123,285

^aSaw and veneer logs combined to prevent disclosure.

^bOther products include logs used for pulpwood, posts and poles, utility poles, cants, log furniture, and bioenergy.

^cNon-industrial private includes Tribal harvest.

^dOther owners include Bureau of Land Management, other public lands and unspecified ownerships.

^eIncludes timber received from Canada and unspecified out-of-state sources.

— Less than 0.5 MBF.

Table 11– Timber received by Idaho processors by species and product, 2015.

Species	Saw and veneer logs ^a	Cedar products	House logs	Other products ^b	All products
<i>Thousand board feet, Scribner</i>					
True firs	378,269	0	130	26,453	404,852
Douglas-fir	294,463	0	601	22,386	317,450
Western redcedar	64,107	34,500	56	11,500	110,164
Western larch	75,339	0	54	313	75,705
Ponderosa pine	67,604	0	131	1,027	68,761
Western hemlock	59,305	0	0	3,400	62,705
Lodgepole pine	39,562	0	947	14,850	55,359
Engleman spruce	17,664	0	207	0	17,872
Western white pine	10,140	0	27	18	10,185
Other species ^c	234	0	0	0	234
All species	1,006,687	34,500	2,152	79,946	1,123,285
<i>Percentage of volume received by product</i>					
True firs	37.6	0	6.0	33.1	36.0
Douglas-fir	29.3	0	27.9	28.0	28.3
Western redcedar	6.4	100	2.6	14.4	9.8
Western larch	7.5	0	2.5	0.4	6.7
Ponderosa pine	6.7	0	6.1	1.3	6.1
Western hemlock	5.9	0	0.0	4.3	5.6
Lodgepole pine	3.9	0	44.0	18.6	4.9
Engleman spruce	1.8	0	9.6	0.0	1.6
Western white pine	1.0	0	1.2	0.0	0.9
Other species ^c	0.0	0	0.0	0.0	—
All species	89.6	3.1	0.2	7.1	100

Totals may not sum due to rounding.

^aSaw and veneer logs combined to prevent disclosure.

^bOther products include logs used for pulpwood, posts and poles, log furniture, and bioenergy.

^cOther species include: red alder, and other unknown species.

— Less than 0.5 MBF or 0.05 percent.

Table 12– Sales value of Idaho's primary wood products including mill residue and residue-related products, selected years (sources:Keegan and others 1982, 1988, 1992, 1997; Morgan and others 2004; Brandt and others 2012; Simmons and others 2014).

Product	1979	1985	1990	1995	2001	2006	2011	2015
----- Million 2015 dollars -----								
Lumber, timbers, other sawn products	1,506.6	846.2	918.5	1,044.5	897.8	908.4	538.4	746.7
Residue-related products ^a	726.7	764.5	943.1	1,008.1	1,061.0	892.7	830.4	783.6
Plywood and veneer	255.4	160.1	177.8	251.6	91.3	^b	^b	^b
Cedar products	39.2	15.9	23.9	20.5	39.7	39.0	55.6	69.8
Posts, poles, and log furniture	49.4	24.9	44.7	38.3	29.0	38.6	40.5	45.3
House logs and log homes	23.4	6.5	17.2	30.6	33.3	44.1	8.4	9.6
All products	2,600.6	1,818.1	2,125.2	2,393.5	2,152.0	1,922.7^c	1,473.3	1,655.0

^aResidue-related products include particleboard, chips, pulp and paper products, bioenergy products, decorative bark, and mill residues sold within and outside the state.

^bPlywood and veneer sales included with lumber to prevent disclosure.

^cRevised.

Table 13– Destination and value of Idaho's 2015 primary wood products sales^a (Sources: Keegan and others 1982, 1988, 1992, 1997; Morgan and others 2004; Brandt and others 2012; Simmons and others 2014).

Product	Idaho	Rocky Mountain	Far West	North-Central	Northeast	South	Other countries	Unknown	Total
----- Sales value in thousand 2015 dollars -----									
Lumber, timbers, other sawn products, plywood and veneer ^b	150,069	179,507	106,630	150,891	46,097	106,694	6,844	—	746,732
Cedar products	1,606	31,747	2,506	30,533	956	2,213	255	—	69,815
Posts, poles, and log furniture	18,737	8,444	12,722	3,733	750	0	876	—	45,262
House logs and log homes	3,631	3,676	915	640	381	341	0	—	9,584
2015 All products total	174,043	223,374	122,773	185,797	48,184	109,248	7,975	—	871,393
Previous years									
2011 Total	65,543	142,158	121,618	165,563	46,382	83,840	17,886	—	642,989
2006 Total	137,379	273,112	211,610	232,734	66,891	74,415	12,502	—	1,008,642
2001 Total	155,372	250,152	262,517	214,683	110,476	80,829	16,823	—	1,090,852
1995 Total	267,523	306,168	247,422	306,609	131,707	112,588	13,345	—	1,385,361
1990 Total	157,585	153,594	226,772	285,341	188,362	125,642	19,098	25,844	1,182,238
1985 Total	110,999	189,602	149,162	221,129	139,499	129,600	2,536	111,208	1,053,735
1979 Total	200,010	381,188	168,957	475,087	192,839	196,025	18,774	240,929	1,873,809

^aDoes not include mill residue sales or sales by the residue-utilizing sector.

^bLumber, timbers, and other sawn products includes plywood and veneer sales value to prevent disclosure.

Table 14– Idaho lumber production by geographic area, selected years (sources: Keegan and others 1997; Morgan and others 2004; Brandt and others 2012; Simmons and others 2014).

County group	1979	1985	1990	1995	2001	2006	2011	2015
----- MBF ^a , lumber tally -----								
Bonner, Boundary, Benewah, Kootenai, Shoshone	930,446	930,447	930,448	930,449	930,450	930,451	930,452	944,111
Latah, Lewis, Nez Perce, Clearwater, Idaho	609,764	427,425	517,484	422,786	431,288	532,063	593,783	667,851
Northern Idaho	1,540,210	1,276,355	1,699,039	1,444,788	1,656,279	1,746,050	1,363,012	1,611,962
Southern Idaho	391,791	389,020	355,511	228,571	102,471	59,063	44,561	78,716
Idaho Total	1,932,001	1,665,375	2,054,550	1,673,359	1,758,750	1,805,113	1,407,573	1,690,678

^aMBF = thousand board feet lumber tally.

Table 15 – Active Idaho sawmills, lumber production capacity, lumber production, and capacity utilization by size class, 2015.

Production capacity class	Annual capacity				Annual production			
	Number of mills	Capacity MBF ^a	Percentage of total capacity	Average capacity by mill class	Production MBF ^a	Percentage of total production	Average production by mill class	Capacity utilization
100+ MMBF ^b	10	2,045,000	84	204,500	1,449,171	86	144,917	71
10 to 100 MMBF	5	371,000	15	74,200	229,389	14	45,878	62
1 to 10 MMBF	9	20,740	1	2,304	8,745	1	972	42
Less than 1 MMBF	4	1,366	—	342	516	—	129	38
Total	28	2,438,106	100	87,075	1,687,821	100	60,279	69

^aMBF = Thousand board feet lumber tally.

— Less than 0.5 percent.

Table 16– Number of Idaho sawmills by annual lumber production, selected years (sources: Setzer and Wilson 1970; Keegan and others 1982, 1988, 1992, 1997; Morgan and others 2004; Brandt and others 2012; Simmons and others 2014).

Year	Less than 10 MMBF	10 to 50 MMBF	Over 50 MMBF	Unknown	Total number of sawmills
2015	13	3	12	—	28
2011	13	5	9	—	27
2006	18	3	14	—	35
2001	12	9	14	—	35
1995	29	17	16	—	62
1990	40	22	18	—	80
1985	52	24	14	—	90
1979	88	31	14	—	133
1973	67	39	6	10	122
1966	123	45	^a	—	168
1962	151	42	^a	—	193
1956	274	37	^a	—	311

^aMills with lumber production in excess of 50 million board feet (MMBF) were included in the 10 to 50 MMBF category for these years.

Table 17– Estimated capacity to process sawtimber and capacity utilized for sawmills, plywood/veneer plants, utility pole and house log plants in Idaho, selected years (sources: Keegan and others 1982, 1988, 1992, 1997; Morgan and others 2004; Brandt and others 2012; Simmons and others 2014).

Plant type	Capacity to process	Volume processed	Percentage of
	sawtimber		capacity utilized
----- MMBF ^a , Scribner -----			
2015			
Sawmills and plywood/veneer plants	1,408	973	69
Plywood/veneer plants	b	b	b
Utility pole and house log plants	39	13	33
Total	1,447	986	68
2011			
Sawmills and plywood/veneer plants	1,256	903	72
Plywood/veneer plants	b	b	b
Utility pole and house log plants	31	10	33
Total	1,287	914	71
2006^c			
Sawmills and plywood/veneer plants	1,304	1,024	79
Plywood/veneer plants	b	b	b
Utility pole and house log plants	38	21	55
Total	1,342	1,045	78
2001			
Sawmills	1,140	948	83
Plywood/veneer plants	126	72	57
Utility pole and house log plants	28	16	57
Total	1,294	1,036	80
1995			
Sawmills	1,318	1,097	83
Plywood/veneer plants	202	184	91
Utility pole and house log plants	41	20	49
Total	1,561	1,301	83
1990			
Sawmills	1,459	1,316	90
Plywood/veneer plants	227	214	94
Utility pole and house log plants	31	14	45
Total	1,717	1,544	90
1985			
Sawmills	1,666	1,229	74
Plywood/veneer plants	265	208	78
Utility pole and house log plants	34	15	44
Total	1,965	1,452	74
1979			
Sawmills	1,809	1,437	79
Plywood/veneer plants	221	210	95
Utility pole and house log plants	33	20	61
Total	2,063	1,667	81

^aMMBF = million board feet.

^bPlywood and veneer figures included with lumber to prevent disclosure.

^cRevised.

Table 18– Idaho sawmill residue factors, selected years (source: Keegan and others 1982, 1988, 1992, 1997; Morgan and others 2004; Brandt and others 2012; Simmons and others 2014).

Type of residue	1979	1985	1990	1995	2001	2006	2011	2015
<i>BDU per MBF lumber tally^a</i>								
Coarse	0.47	0.53	0.43	0.45	0.42	0.39	0.39	0.41
Sawdust	0.25	0.21	0.18	0.18	0.17	0.15	0.15	0.13
Planner shavings	0.22	0.20	0.15	0.15	0.13	0.09	0.08	0.09
Bark	0.30	0.19	0.18	0.18	0.20	0.20	0.24	0.17
Total	1.24	1.13	0.94	0.96	0.92	0.83	0.86	0.81

^aBone-dry unit (BDU = 2,400 lb of oven-dry wood) of residue generated for every 1,000 board feet of lumber manufactured.

Table 19– Volume and disposition of wood residue generated by Idaho primary wood products facilities, 2015.

Residue type	Wood residue			Percentage of type		Percentage of total
	Used	Unused	Total	Used	Unused	
<i>Bone-dry units^a</i>			<i>Percent of total</i>			
Coarse	776,739	427	777,166	99.9	0.1	48.7
Fine ^b	435,089	2,283	437,372	99.5	0.5	27.4
Bark	377,150	3,654	380,804	99.0	1.0	23.9
Total	1,588,978	6,365	1,595,343	99.6	0.4	100

^aBone-dry unit (BDU = 2,400 lb of oven-dry wood) of residue generated for every 1,000 board feet of lumber manufactured.

^bFine residue includes sawdust and planer shavings.

Table 20– Production and disposition of residues by Idaho sawmills and plywood/veneer plants, selected years (sources: Keegan and others 1997; Morgan and others 2004; Brandt and others 2012; Simmons and others 2014).

Type of residue	Total utilized	Reconstituted products	Hogfuel	Other uses	Unused	Total ^c
Coarse						
----- <i>Thousand Bone Dry Units (bdus)</i> ^a -----						
2015	729	684	38	7	^b	729
2011	591	572	18	1	^b	591
2006	735	639	86	10	^b	735
2001	806	773	30	3	3	810
1995	885	872	3	10	1	886
1990	1001	988	0	13	5	1006
1985	976	930	28	18	14	990
1979	987	957	10	20	21	1008
Sawdust						
2015	226	182	43	1	^b	226
2011	212	206	5	1	^b	212
2006	266	224	40	2	^b	266
2001	237	80	148	9	^b	237
1995	306	158	133	15	4	310
1990	365	175	167	23	13	378
1985	308	176	115	17	22	330
1979	399	197	164	38	58	457
Planer Shavings						
2015	147	91	38	18	^b	147
2011	118	106	12	^b	^b	118
2006	161	125	34	2	^b	161
2001	307	193	113	1	^b	307
1995	250	130	113	7	8	258
1990	310	221	88	1	9	319
1985	288	128	155	5	17	305
1979	340	215	112	13	20	360
Bark						
2015	326	0	320	6	^b	326
2011	358	0	283	75	^b	358
2006	357	0	333	24	^b	357
2001	401	0	384	17	^b	401
1995	358	0	343	15	10	368
1990	395	0	344	51	19	414
1985	282	0	263	19	73	355
1979	473	0	429	44	174	647
Total^c						
2015	1428	957	439	32	1	1429
2011	1279	884	318	77	^b	1279
2006	1519	988	493	38	^b	1519
2001	1751	1046	675	30	3	1755
1995	1799	1160	592	47	23	1822
1990	2071	1384	599	88	46	2117
1985	1854	1234	561	59	126	1980
1979	2199	1369	715	115	273	2472

^aBone dry unit = 2,400 lb of oven-dry wood.

^bLess than 500 bdus.

^cTotals may not sum due to rounding.

Glossary

Bioenergy wood – Refers to wood used for firewood, fuel for the production of industrial heat and steam, as well as for products like wood pellets, charcoal, or liquid fuels.

Board foot – A unit of measure applied to lumber that is 1-ft long, 1-ft wide and 1-in thick (or its equivalent) and also associated with roundwood as to its potential yield of such products.

Bone dry unit (BDU) – The amount of wood residue that weights 2,400 lbs. (1,088 kg) at 0 percent moisture content. One BDU equals approximately 9.49 yd³ or 96 ft³ of solid wood.

Cubic foot – A unit of true volume that measures 1 ft. by 1 ft. by 1 ft. (30.48 by 30.48 by 30.48 cm).

House log – Roundwood timber used to construct log homes. Products manufactured from house logs can be sawn, scribed by hand, notched or milled by lathe to meet customer construction needs. House log timber is often dead prior to harvesting.

Lumber tally – The volume of sawn products, usually expressed in board feet.

MBF – thousand board feet

Production capacity – The potential volume of output a facility can produce on a shift or annual basis, assuming firm market demand for products, sufficient supply of raw materials, and ordinary downtime for maintenance.

Recovery – The volume of output from a facility per unit of input, a measure of mill efficiency.

Residue – The wood-fiber or bark by-product remaining after timber processing of a primary product like lumber, plywood, posts and poles, house logs, etc. Three types of residue are generally generated:

Coarse – chips, edgings, slabs, trim, and log ends

Fine – sawdust and planer shavings

Bark.

Sawlog – A log that meets minimum regional standards of diameter, length, and defect, intended for sawing.

Scribner – A diagram log scale rule originating in the 1840s, designed to estimate the net yield of lumber from a log. It assumes 1-in (2.54 cm) boards and 0.25 in (0.64 cm) kerf, and is based on diameter at the small end of the log.

Timber-processing capacity – The volume of timber reported in MBF Scribner that could be processed, given sufficient supplies of raw material and firm market demand for products. Timber-processing capacity is estimated for each facility and gauges the volume of timber that could be used annually if the facility operated at its self-reported production capacity. A facility's timber-processing capacity is calculated by dividing its production capacity by its product recovery.