FOREST INDUSTRY RESEARCH PROGRAM
UNIVERSITY OF MONTANA

Forest Industry Research Program
Bureau of Business and Economic Research
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www.business.umt.edu/FIR/

COLVILLE-NORTHEAST WASHINGTON ACTIVE FOREST MANAGEMENT STRATEGY AREA

Introduction:

This document provides information about the Colville-Northeast Washington Active Forest Management Strategy Area (AFMSA). It was generated by the Forest Industry Research Program of the Bureau of Business and Economic Research (BBER) at the University of Montana - Missoula. The mill survey data underlying these analyses were collected under joint venture agreements with the USDA Forest Service's Forest Inventory and Analysis program at the Pacific Northwest Research Station (#21-JV-11261979-053) and Rocky Mountain Research Station (#20-JV-11221638-171). The landscape analyses and summary tables were developed under agreement #23-PA-11132400-368, and the residuals tables were developed under agreement #25-JV-11261936-106.

The data used in these analyses are the results of periodic censuses of each of the western states, as well as annual sample surveys of the same. Using data from both types of surveys allows us to provide time-series data, though it necessitates providing estimates as percentages rather than actual volume.

While BBER collects data at the mill level, mill-level data are confidential and will not be released.

Methods and Definitions:

The Colville-Northeast Washington AFMSA covers a defined area that includes pieces of several counties. The combined area of the counties "touched" by this area constitutes its "Study Area" (for details, see fig. 1 and table 1). Defining a Study Area that covers entire counties is necessary to enable analysis, as the county is the smallest geographic area of mill survey data by BBER and FIA-TPO.

Further, BBER analysis of timber flow indicates that timber harvested within the Study Area is processed by facilities located both inside and outside this specific area. All counties that contain one or more facilities that process timber harvested within the Study Area constitute the "Timber Processing Area" (TPA) (for details, see fig. 1 and table 4).

In these tables, “capacity” refers to the maximum total volume of timber (excluding pulpwood and fuelwood) that existing timber processors could utilize annually, given firm market demand for products, sufficient raw material, and ordinary downtime for maintenance. Also known as “timber-processing capacity”, it is a measure of mills’ timber input capacity and is expressed in thousand board feet (MBF) Scribner and hundred cubic feet (CCF) per year. Input capacity is a useful measure when attempting to express the capacity of multiple types of mills in a common unit of measure. It is estimated from production (output) capacity information provided by facilities.

Estimates in these tables include the capacity of active facilities as well as idle (inactive) facilities with equipment still in place. Facilities that are permanently closed are not included. This analysis focuses on facilities that exclusively use timber in round form; this includes sawmills, veneer mills, and facilities processing timber into house logs/log homes, posts, small poles, utility poles, cedar products (e.g., shakes and shingles), and log furniture. Facilities (e.g., pulp mills, wood pellet manufacturers, and biomass energy facilities) that use a mix of roundwood and non-roundwood inputs (i.e., mill residuals such as chips, sawdust, shavings, and bark) are not included in the capacity analysis because the combination of roundwood and non-roundwood inputs can vary widely from year to year, potentially over- or under-estimating capacity and use of roundwood by substantial margins.

“Capability” refers to the volume of trees of a certain size class (measured as diameter at breast height, or dbh) that existing timber processors can economically process annually. The three dbh classes are <7”, 7" to 9.9”, and ≥10”. Some facilities are designed to operate using only trees of a given size class (e.g., veneer/ plywood plants typically only use trees ≥10” dbh, and post manufacturers primarily use trees <10” dbh). The capability of these facilities is readily classified into just one size class. Many facilities can use timber from more than one size class.

“Use” refers to the volume of timber, both in total and by tree dbh class, that facilities are currently using.

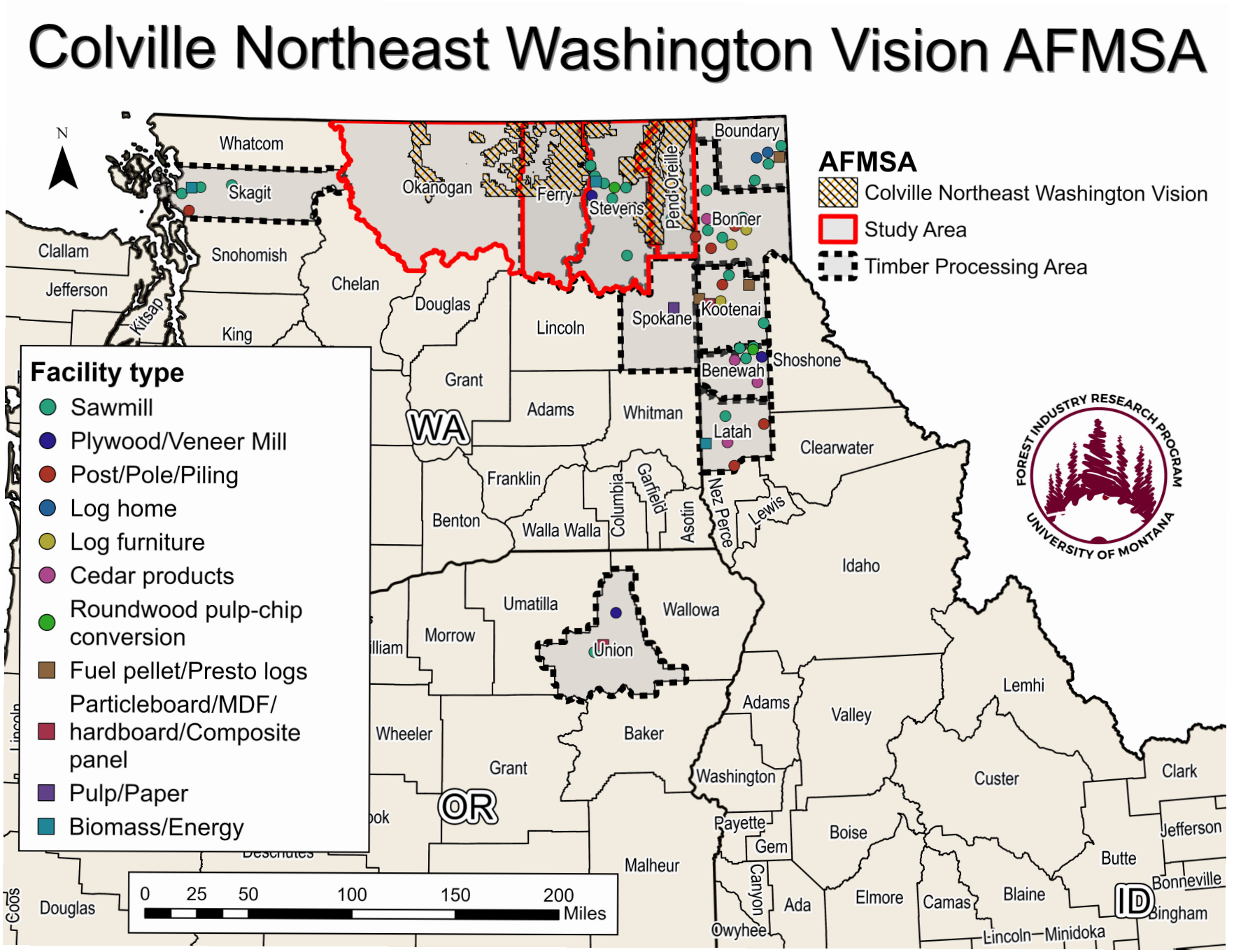

Figure 1. Colville-Northeast Washington AFMSA landscape, Study Area, Timber Processing Area, and facility locations

COLVILLE-NORTHEAST WASHINGTON STUDY AREA COUNTIES

Table 1. Colville-Northeast Washington Study Area Counties

County	State
Ferry	WA
Okanogan	WA
Pend Oreille	WA
Stevens	WA

COLVILLE-NORTHEAST WASHINGTON STUDY AREA HARVEST

Table 2. Timber harvest from the Colville-Northeast Washington Study Area counties (all ownerships), percentage distribution by species (2020-2023)

Species group	2020	2021	2022	2023
Douglas-fir	57%	59%	61%	47%
Ponderosa pine	15%	10%	10%	22%
True firs	11%	11%	11%	8%
Cedars	5%	5%	3%	7%
Lodgepole pine	5%	6%	4%	1%
Western larch	3%	2%	4%	7%
Spruces	2%	2%	1%	1%
Hemlock	2%	4%	5%	7%
All species	**100%**	**100%**	**100%**	**100%**

Table 3. Percentage of timber harvest from national forest lands within th Colville-Northeast Washington Study Area, by timber product type (2020-2023)

	----------Percentage from national forests----------			
Timber product type	**2020**	**2021**	**2022**	**2023**
Pulpwood	36%	36%	36%	20%
Saw logs	26%	24%	25%	19%
Veneer logs	19%	13%	13%	7%
Study area total	**26%**	**23%**	**22%**	**17%**

COLVILLE-NORTHEAST WASHINGTON TIMBER-PROCESSING AREA COUNTIES

Table 4. Colville-Northeast Washington Timber-processing Area (TPA) counties

County	State
Benewah	ID
Bonner	ID
Boundary	ID
Kootenai	ID
Latah	ID
Union	OR
Ferry	WA
Pend Oreille	WA
Skagit	WA
Spokane	WA
Stevens	WA

COLVILLE-NORTHEAST WASHINGTON TIMBER-PROCESSING AREA FACILITIES LIST

Table 5. Timber-processing facilities within th Colville-Northeast Washington TPA (2025)

Facility name	Status	Facility type	State	County	Input size class	Included in capacity analysis
American Cedar	A	cedar products	Idaho	Benewah	500 to 999 MCF	yes
DLM Shake	A	cedar products	Idaho	Benewah	<250 MCF	yes
PotlatchDeltic--St Maries (lumber)	A	sawmill	Idaho	Benewah	5000 MCF or more	yes
PotlatchDeltic--St. Maries (plywood)	A	plywood/Veneer Mill	Idaho	Benewah	5000 MCF or more	yes
Roland Timber Company	I	sawmill	Idaho	Benewah	<250 MCF	yes
Stimson Lumber Company (St. Maries)	A	sawmill	Idaho	Benewah	5000 MCF or more	yes
Swan Lake Fiber	A	roundwood pulp-chip conversion	Idaho	Benewah	1000 to 4999 MCF	yes
Barretts Busy B	A	cedar products	Idaho	Bonner	<250 MCF	yes
Bell Lumber & Pole - Oldtown	A	post/pole/piling	Idaho	Bonner	250 to 499 MCF	yes
Idaho Forest Group - Laclede	A	sawmill	Idaho	Bonner	5000 MCF or more	yes
Johns Rough Cut	A	log furniture	Idaho	Bonner	<250 MCF	yes
Misty Mountain Furniture	A	log furniture	Idaho	Bonner	<250 MCF	yes
Panhandle Forest Products	A	post/pole/piling	Idaho	Bonner	250 to 499 MCF	yes
Priest Lake Lumber Company, Inc.	I	sawmill	Idaho	Bonner	<250 MCF	yes
Specialty Beams	A	sawmill	Idaho	Bonner	<250 MCF	yes
Stella Jones - McFarland Cascade Sandpoint	A	post/pole/piling	Idaho	Bonner	1000 to 4999 MCF	yes
Stimson Lumber Company (Priest River)	A	sawmill	Idaho	Bonner	5000 MCF or more	yes
Alta Forest Products LLC	A	sawmill	Idaho	Boundary	5000 MCF or more	yes
Caribou Creek Log & Timber	A	log home	Idaho	Boundary	<250 MCF	yes
Idaho Forest Group - Moyie Springs	A	sawmill	Idaho	Boundary	5000 MCF or more	yes
North Idaho Energy Logs, Inc.	A	fuel pellet/presto logs	Idaho	Boundary	No Roundwood	no
Structures Unlimited, Inc.	I	log home	Idaho	Boundary	<250 MCF	yes
Thick 'N' Thin Beams and Lumber	A	sawmill	Idaho	Boundary	<250 MCF	yes
Idaho Forest Group - Chilco	A	sawmill	Idaho	Kootenai	5000 MCF or more	yes
Lignetics, Inc.	A	fuel pellet/presto logs	Idaho	Kootenai	No Roundwood	no
North Idaho Energy Logs, Inc	A	fuel pellet/presto logs	Idaho	Kootenai	No Roundwood	no
North Idaho Log Furniture Co.	A	log furniture	Idaho	Kootenai	<250 MCF	yes
North Idaho Post and Pole	A	post/pole/piling	Idaho	Kootenai	<250 MCF	yes
Plummer Forest Products	A	particleboard/MDF/hardboard/composite panel	Idaho	Kootenai	No Roundwood	no
Whiteman Lumber Company, Inc.	A	sawmill	Idaho	Kootenai	500 to 999 MCF	yes
Bennett Lumber Products - Princeton ID	A	sawmill	Idaho	Latah	5000 MCF or more	yes
Idaho Cedar Sales LLC	A	cedar products	Idaho	Latah	500 to 999 MCF	yes
Stella-Jones - Julietta	A	post/pole/piling	Idaho	Latah	1000 to 4999 MCF	yes
Timber Works, Inc.	A	post/pole/piling	Idaho	Latah	<250 MCF	yes
University of Idaho Steam Plant	A	biomass/energy	Idaho	Latah	No Roundwood	no

Table 5. Timber-processing facilities within th Colville-Northeast Washington TPA (2025), continued

Facility name	Status	Facility type	State	County	Input size class	Included in capacity analysis
Boise Cascade Elgin Plywood	Active	plywood/Veneer Mill	Oregon	Union	5000 MCF or more	yes
Woodgrain - Particleboard	Active	particleboard/MDF/hardboard/composite panel	Oregon	Union	No Roundwood	no
Woodgrain Millwork - La Grande	Active	sawmill	Oregon	Union	1000 to 4999 MCF	yes
Columbia Cedar, Inc.	Active	sawmill	Washington	Ferry	1000 to 4999 MCF	yes
Vaagen Bros. – Usk sawmill	Active	sawmill	Washington	Pend Oreille	5000 MCF or more	yes
Bell Lumber & Pole - Longview	Active	post/pole/piling	Washington	Skagit	1000 to 4999 MCF	yes
Iron Mountain Sawmill	Active	sawmill	Washington	Skagit	No Roundwood	no
Pacific Rim Tonewoods	New	sawmill	Washington	Skagit	No Roundwood	no
SPI - Mount Vernon Cogen	Active	biomass/energy	Washington	Skagit	No Roundwood	no
SPI - Mt Vernon	Active	sawmill	Washington	Skagit	5000 MCF or more	yes
Inland Empire Paper Co.	Active	pulp/paper	Washington	Spokane	No Roundwood	no
Boise Cascade - Arden Lumber Mill	Active	sawmill	Washington	Stevens	5000 MCF or more	yes
Boise Cascade - Kettle Falls lumber	Active	sawmill	Washington	Stevens	5000 MCF or more	yes
Boise Cascade - Kettle Falls Plywood	Active	plywood/Veneer Mill	Washington	Stevens	5000 MCF or more	yes
Kettle Falls Generating Station	Active	biomass/energy	Washington	Stevens	No Roundwood	no
Skagit River - Springdale	New	sawmill	Washington	Stevens	No Roundwood	no
Vaagen Bros. – Colville chipping	Active	roundwood pulp-chip conversion	Washington	Stevens	1000 to 4999 MCF	yes
Vaagen Bros. – Colville sawmill	Active	sawmill	Washington	Stevens	5000 MCF or more	yes
WEBLEY LUMBER CO	Active	sawmill	Washington	Stevens	No Roundwood	no

TIMBER RECEIVED BY TIMBER-PROCESSING FACILITIES IN THE COLVILLE-NORTHEAST WASHINGTON TIMBER-PROCESSING AREA

Table 6. Timber received by facilities in the Colville-Northeast Washington TPA, percentage distribution by species (2020-2023)

Species	2020	2021	2022	2023
Douglas-fir	41%	46%	43%	39%
True firs	19%	17%	19%	14%
Western redcedar	10%	9%	8%	9%
Hemlock	9%	7%	9%	12%
Ponderosa pine	8%	9%	9%	14%
Western larch	5%	5%	6%	7%
Lodgepole pine	5%	5%	4%	3%
Engelmann spruce	2%	1%	1%	1%
Other pines	1%	1%	1%	1%
All species	**100%**	**100%**	**100%**	**100%**

Table 7. Percentage of timber from national forests received by facilities in the Colville-Northeast Washington TPA, by product type (2020-2023)

	----------Percentage from national forests----------			
Timber product type	**2020**	**2021**	**2022**	**2023**
Fiber logs	27%	25%	24%	12%
Veneer logs	15%	11%	11%	6%
Saw logs	13%	15%	12%	18%
House logs	3%	n/a	n/a	0%
Posts/Poles/Furniture logs	1%	6%	1%	2%
Cedar logs	0%	0%	0%	9%
Pilings/Utility poles	0%	0%	0%	18%
Study area total	**13%**	**14%**	**12%**	**16%**

Note: "n/a" indicates that no timber of this product type was harvested.

TIMBER-PROCESSING CAPACITY AND CAPABILITY OF TIMBER-PROCESSING FACILITIES WITHIN THE COLVILLE-NORTHEAST WASHINGTON TIMBER-PROCESSING AREA

Table 8. Timber-processing capacity and capability by tree dbh class of facilities in the Colville-Northeast Washington TPA, by county or county group (2020, 2022, 2023)

	---------Thousand board feet, Scribner (MBF)---------			----------Hundred cubic feet (CCF)----------		
Timber Processing Area	<7 in. dbh	7 - 9.9 in. dbh	≥10 in. dbh	<7 in. dbh	7 - 9.9 in. dbh	≥10 in. dbh
Idaho	**41,795**	**271,193**	**454,114**	**107,197**	**609,854**	**977,012**
Benewah	8,350	57,291	139,993	28,797	146,576	283,533
Bonner	5,051	67,211	98,169	12,424	147,005	212,998
Boundary	13,274	60,245	60,685	28,326	128,578	129,530
Kootenai	14,161	62,753	67,100	32,360	134,831	143,192
Latah	959	23,693	88,168	5,290	52,864	207,759
Oregon & Washington	**29,181**	**226,776**	**511,660**	**96,562**	**588,806**	**1,188,381**
Union, OR; Skagit, WA	15,392	75,132	161,261	35,547	174,416	361,606
Ferry, Pend Oreille, Stevens, WA	13,790	216552.708	252,202	61,016	414,390	826,775
Total	**70,976**	**497,969**	**965,774**	**203,759**	**1,198,660**	**2,165,393**

Table 9. Timber-processing capacity and capability by tree dbh class of facilities in the Colville-Northeast Washington TPA, by timber product type (2020, 2022, 2023)

	----Thousand board feet, Scribner (MBF)----			----------Hundred cubic feet (CCF)----------		
Timber product type	<7 in. dbh	7 - 9.9 in. dbh	≥10 in. dbh	<7 in. dbh	7 - 9.9 in. dbh	≥10 in. dbh
Saw logs	51,916	446,501	692,184	113,490	988,250	1,539,590
Pulpwood logs	17,783	39,122	14,226	80,514	177,132	64,412
Post or poles	1,187	11,224	19,903	9,299	29,681	47,730
Furniture logs	91	30	-	456	152	-
Veneer logs	-	-	220,926	-	-	453,137
House logs	-	128	239	-	289	537
Cedar logs	-	963	18,296	-	3,157	59,987
Total	**70,976**	**497,969**	**965,774**	**203,759**	**1,198,660**	**2,165,393**

Table 10.Total timber-processing capacity, timber consumption, and capacity utilization of facilities in the Colville-Northeast Washington TPA, by dbh size class (2020, 2022, 2023)

	----Capacity to process timber-----		--------Timber consumption---------		
Tree dbh	Thousand board feet, Scribner (MBF)	Hundred cubic feet (CCF)	Thousand board feet, Scribner (MBF)	Hundred cubic feet (CCF)	**Capacity utilization**
<7 in.	70,976	203,759	5,090	23,643	12%
7 - 9.9 in.	497,969	1,198,660	148,842	367,684	31%
≥10 in.	965,774	2,165,393	1,109,943	2,459,573	114%
Total	**1,534,719**	**3,567,812**	**1,263,875**	**2,850,900**	**80%**

Table 11. Unused timber-processing capacity of facilities in the Colville-Northeast Washington TPA, by county or county group (2020, 2022, 2023)

Timber Processing Area	**Thousand board feet, Scribner (MBF)**	**Hundred cubic feet (CCF)**
Idaho	**154,244**	**388,512**
Benewah	23,575	83,815
Bonner	20,029	46,155
Boundary	34,769	74,231
Kootenai	23,664	52,863
Latah	52,208	131,447
Oregon & Washington	**116,600**	**328,402**
Union, OR; Skagit, WA	15,969	35,229
Ferry, Pend Oreille, Stevens, WA	100,631	293,173
Total	**270,844**	**716,914**

Table 12. Unused timber-processing capacity of facilities in the Colville-Northeast Washington TPA, by timber product type (2020, 2022, 2023)

Timber product type	Thousand board feet, Scribner (MBF)	Hundred cubic feet (CCF)
Saw logs	187,572	414,222
Pulpwood logs	40,928	186,683
Cedar logs	15,344	50,308
Veneer logs	13,937	28,838
Posts or poles	12,657	35,630
House logs	291	655
Furniture logs	115	577
Total	**270,844**	**716,914**

RESIDUALS GENERATED BY TIMBER-PROCESSING FACILITIES IN THE COLVILLE NORTHEAST WASHINGTON TIMBER-PROCESSING AREA

Table 13. Mill residuals generated by timber-processing facilities within the Colville Northeast Washington TPA (2020, 2023)

	BDUs[a]	Percent of total volume
Utilized residuals volume	1,951,476	99.99%
Unutilized residuals volume	233	0.01%
Total volume generated	**1,951,709**	**100%**

[a] One bone dry unit (BDU)= 2,400 pounds of oven-dry wood or bark.

Table 14. Mill residuals generated by timber-processing facilities within the Colville Northeast Washington TPA, by type of residual (2020, 2023)

Type of residual	BDUs[a]	Percent of total volume
Coarse[b]	999,243	51%
Fine[c]	493,598	25%
Bark	458,868	24%
Total, all residual types	**1,951,709**	**100%**

[a] One bone dry unit (BDU) = 2,400 pounds of oven-dry wood or bark.

[b] Includes slabs, edgings, and trimmings from lumber manufacturing; log ends; pieces of veneer not suitable for manufacturing plywood; and plywood peeler cores not sawn into lumber.

[c] Includes sawdust, peelings and shavings.

Table 15. Mill residuals generated by timber-processing facilities within the Colville Northeast Washington TPA, by type of utilization (2020, 2023)

Type of utilization	BDUs[a]	Percent of total volume
Fiber[b]	1,035,839	53%
Fuel[c]	685,038	35%
Decorative landscaping	82,510	4%
Sold as raw material for other products	62,550	3%
Mulch/soil addititves	51,780	3%
Animal bedding	33,759	2%
Used on-site for other products	-	0%
Unused	233	0%
Total, all types of utilization	**1,951,709**	100%

[a] One bone dry unit (BDU) = 2,400 pounds of oven-dry wood or bark.

[b] Includes pulp, composite panels, and MDF.

[c] Includes firewood, biomass, hogfuel, and pellets.