



STANISLAUS ACTIVE FOREST MANAGEMENT STRATEGY AREA

Introduction:

This document provides information about the Stanislaus 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 Stanislaus 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.

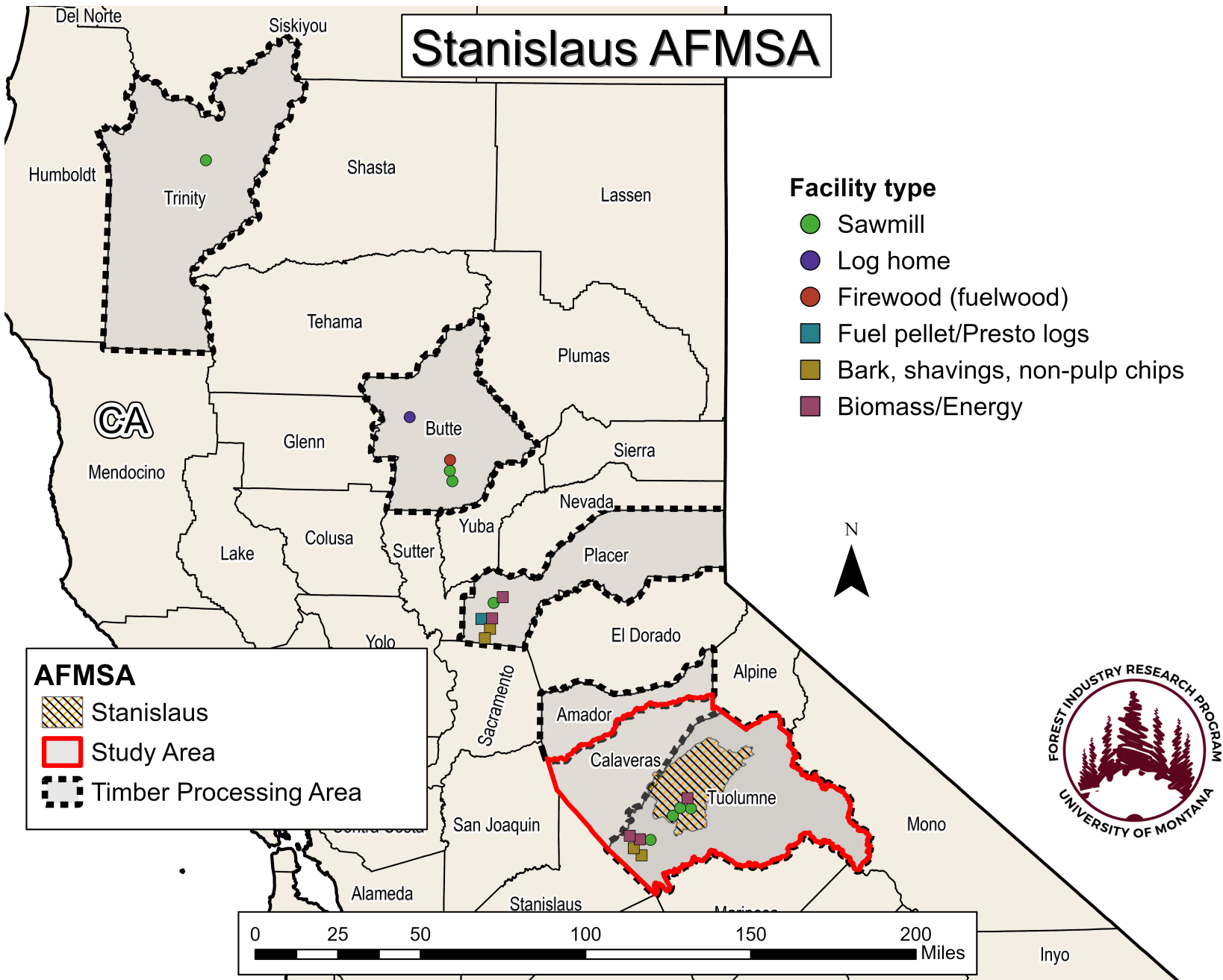


Figure 1. Stanislaus AFMSA landscape, Study Area, Timber Processing Area and facility locations

STANISLAUS STUDY AREA COUNTIES

Table 1. Stanislaus Study Area counties

County	State
Calaveras	CA
Tuolumne	CA

STANISLAUS STUDY AREA HARVEST

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

Species group	2020	2021	2022	2023
Ponderosa pine	56%	46%	62%	61%
White fir	18%	22%	13%	14%
Other pines	11%	8%	11%	11%
Incense cedar	8%	15%	2%	2%
Douglas-fir	6%	6%	8%	9%
Lodgepole pine	1%	2%	4%	4%
All species	100%	100%	100%	100%

Table 3. Percentage of timber harvest from national forest lands within the Stanislaus Study Area, by timber product type (2020-2023)

	-----Percentage from national forests-----			
Timber product type	2020	2021	2022	2023
Sawlogs	13%	15%	13%	13%
Fiberlog	100%	100%	100%	100%
Energy logs chipped in woods	100%	n/a	n/a	n/a
Study Area total	17%	21%	24%	23%

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

STANISLAUS TIMBER-PROCESSING AREA COUNTIES

**Table 4. Stanislaus Timber-Processing Area (TPA)
counties**

County	State
Butte	CA
Placer	CA
Tuolumne	CA
Trinity	CA

STANISLAUS TIMBER-PROCESSING AREA FACILITIES LIST

Table 5. Timber-processing facilities within the Stanislaus TPA (2025)

Facility name	Status	Facility type	State	County	Input size class	Included in capacity analysis
Apex Lumber Co	Active	sawmill	CA	Butte	<250 MCF	yes
Hot Wood - California	Active	firewood (fuelwood)	CA	Butte	1000 TO 4999 MCF	yes
Sierra Log Homes	Active	log home	CA	Butte	<250 MCF	yes
SPI - Oroville Sawmill	Active	sawmill	CA	Butte	5000 MCF or more	yes
Mallard Creek - Animal Bedding	Active	bark, shavings, non-pulp chips	CA	Placer	No Roundwood	no
Mallard Creek - Bark	Active	bark, shavings, non-pulp chips	CA	Placer	No Roundwood	no
Mallard Creek - Pellets	Active	fuel pellet/presto logs	CA	Placer	No Roundwood	no
Rio Bravo Rocklin	Active	biomass/energy	CA	Placer	No Roundwood	no
SPI - Lincoln Cogen	Active	biomass/energy	CA	Placer	No Roundwood	no
SPI - Lincoln Sawmill	Active	sawmill	CA	Placer	5000 MCF or more	yes
TRL - Trinity River Lumber Co	Active	sawmill	CA	Trinity	5000 MCF or more	yes
American Wood Fibers - California Wood Shavings	Active	bark, shavings, non-pulp chips	CA	Tuolumne	1000 TO 4999 MCF	yes
Deutschman Lumber Co.	Inactive	sawmill	CA	Tuolumne	<250 MCF	yes
Garber Lumber and Moulding	Active	sawmill	CA	Tuolumne	<250 MCF	yes
Pacific Ultrapower Chinese Station	Active	biomass/energy	CA	Tuolumne	No Roundwood	no
SPI - Bark Operations	Active	bark, shavings, non-pulp chips	CA	Tuolumne	No Roundwood	no
SPI - Chinese Camp Sawmill	Active	sawmill	CA	Tuolumne	5000 MCF or more	yes
SPI - Sonora Cogen	Active	biomass/energy	CA	Tuolumne	No Roundwood	no
SPI - Sonora Sawmill	Active	sawmill	CA	Tuolumne	5000 MCF or more	yes
Tuolumne Biomass	New	biomass/energy	CA	Tuolumne	No Roundwood	no

TIMBER RECEIVED BY TIMBER-PROCESSING FACILITIES IN THE STANISLAUS TIMBER-PROCESSING AREA

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

Species group	2020	2021	2022	2023
Ponderosa pine	39%	39%	44%	40%
White fir	24%	23%	23%	21%
Douglas-fir	14%	13%	16%	14%
Cedar	13%	12%	2%	10%
Sugar pine	10%	10%	12%	11%
Oak	0%	1%	2%	2%
Western white pine	0%	1%	1%	1%
Other species	0%	1%	1%	1%
All species	100%	100%	100%	100%

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

Timber product type	-----Percentage from national forests-----			
	2020	2021	2022	2023
Sawlog	30%	6%	5%	5%
House log	100%	100%	100%	100%
Fiber log	100%	100%	100%	100%
Firewood	100%	0%	0%	0%
Energywood chipped in woods	100%	n/a	n/a	n/a
Total	32%	8%	6%	7%

Note: "n/a" indicates that no timber of this product type was received by mills within the TPA.

**TIMBER-PROCESSING CAPACITY AND CAPABILITY OF TIMBER-PROCESSING FACILITIES WITHIN THE STANISLAUS
TIMBER-PROCESSING AREA**

Table 8. Timber-processing capacity and capability by tree dbh class of facilities in the Stanislaus TPA, by county or county group (2021)

Timber Processing Area	-----Thousand board feet, Scribner (MBF)-----			-----Hundred cubic feet (CCF)-----		
	<7 in. dbh	7 - 9.9 in. dbh	≥10 in. dbh	<7 in. dbh	7 - 9.9 in. dbh	≥10 in. dbh
Butte & Trinity	2,044	23,922	103,221	4,269	49,372	204,400
Placer & Tuolumne	2,996	25,494	331,373	5,931	50,478	656,177
Total	5,039	49,416	434,594	10,200	99,850	860,576

Table 9. Timber-processing capacity and capability by tree dbh class of facilities in the Stanislaus TPA (2021)

Timber product type	-----Thousand board feet, Scribner (MBF)-----			-----Hundred cubic feet (CCF)-----		
	<7 in. dbh	7 - 9.9 in. dbh	≥10 in. dbh	<7 in. dbh	7 - 9.9 in. dbh	≥10 in. dbh
All log products	5,039	49,416	434,594	10,200	99,850	860,576
Total	5,039	49,416	434,594	10,200	99,850	860,576

Table 10. Total timber-processing capacity, timber consumption, and capacity utilization of facilities in the Stanislaus TPA, by dbh class (2021)

Tree dbh	----Capacity to process timber----		-----Timber consumption-----		Capacity utilization
	Thousand board feet, Scribner (MBF)	Hundred cubic feet (CCF)	Thousand board feet, Scribner (MBF)	Hundred cubic feet (CCF)	
<7 in.	5,039	10,200	340	673	7%
7 - 9.9 in.	49,416	99,850	20,378	42,168	42%
≥10 in.	434,594	860,576	406,802	805,584	94%
Total	489,050	970,626	427,521	848,425	87%

Table 11. Unused timber-processing capacity of facilities in the Stanislaus TPA, by county group (2021)

Timber Processing Area	Thousand board feet, Scribner (MBF)	Hundred cubic feet (CCF)
Butte & Trinity	11,971	2,408
Placer & Tuolumne	49,558	9,812
Total	61,529	12,220

Table 12. Unused timber-processing capacity of facilities in the Stanislaus TPA (2021)

Timber product type	Thousand board feet, Scribner (MBF)	Hundred cubic feet (CCF)
All log products	61,529	12,220
Total	61,529	12,220

RESIDUALS GENERATED BY TIMBER-PROCESSING FACILITIES IN THE STANISLAUS TIMBER-PROCESSING AREA

Table 13. Mill residuals generated by timber-processing facilities within the Stanislaus TPA (2021)

	BDUs ^a	Percent of total volume
Utilized residuals volume	577,302	100.00%
Unutilized residuals volume	25	0.00%
Total volume generated	577,327	100.00%

^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 Stanislaus TPA, by type of residual (2021)

Type of residual	BDUs ^a	Percent of total volume
Coarse ^b	227,440	39%
Fine ^c	216,798	38%
Bark	133,088	23%
Total, all residual types	577,327	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 Stanislaus TPA, by type of utilization (2021)

Type of utilization	BDUs ^a	Percent of total volume
Fuel ^b	271,255	47%
Animal bedding	86,634	15%
Fiber ^c	81,229	14%
Mulch/soil additives	79,644	14%
Sold as raw material for other products	50,220	9%
Decorative landscaping	8,320	1%
Used on-site for other products	-	0%
Unused	25	0%
Total, all types of utilization	577,327	100%

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

^b Includes firewood, biomass, hogfuel, and pellets.

^c Includes pulp, composite panels, and MDF.