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

SOUTHERN CALIFORNIA FIRESHED ACTIVE FOREST MANAGEMENT STRATEGY AREA

Introduction:

This document provides information about the Southern California Fireshed 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 Southern California Fireshed 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.

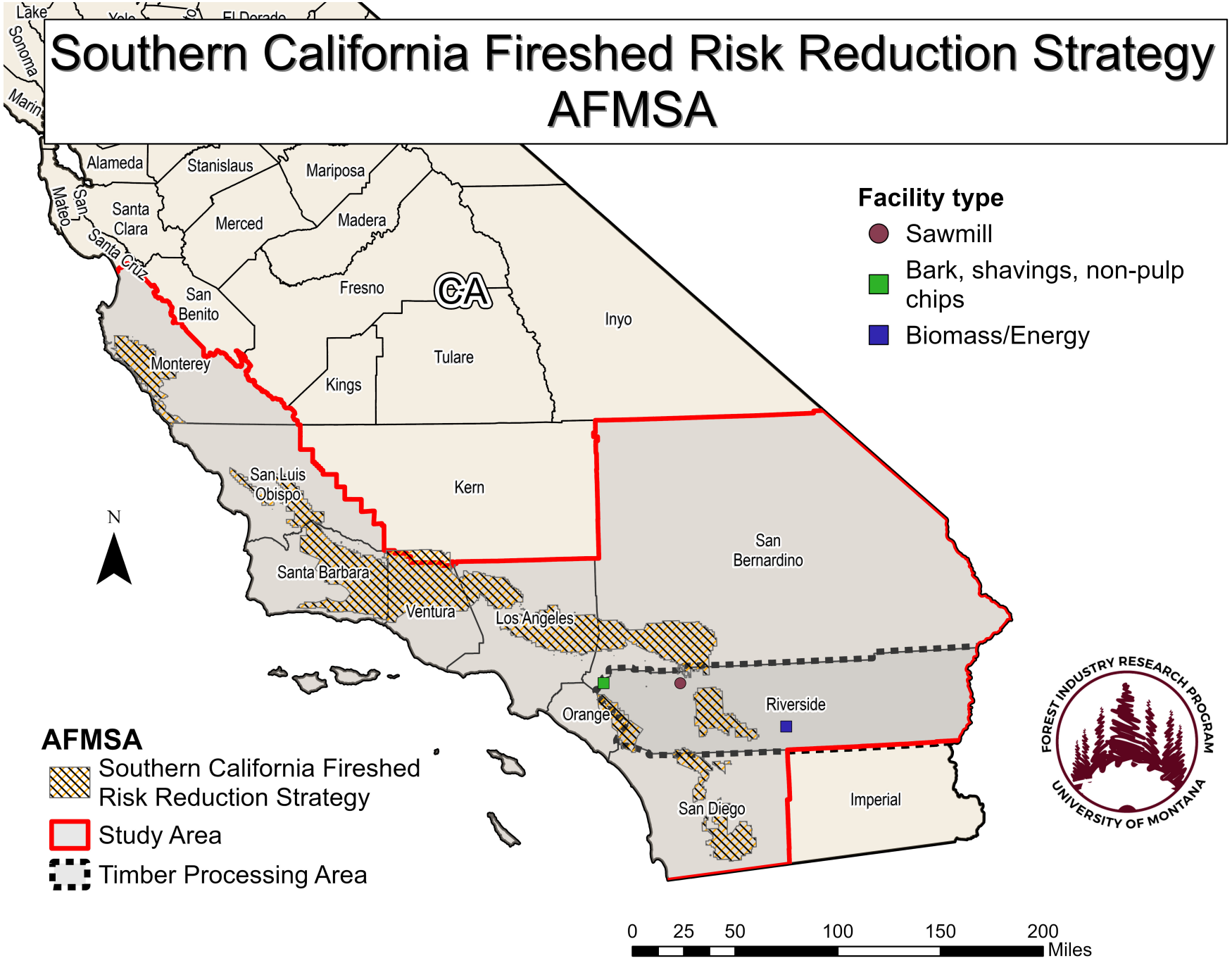

Figure 1. Southern California Fireshed AFMSA landscape, Study Area, Timber-Processing Area, and facility locations

SOUTHERN CALIFORNIA FIRESHED STUDY AREA COUNTIES

Table 1. Southern Callifornia Fireshed Study Area counties

County	State
Los Angeles	CA
Monterey	CA
Orange	CA
Riverside	CA
San Bernadino	CA
San Diego	CA
San Luis Obispo	CA
Santa Barbara	CA
Ventura	CA

SOUTHERN CALIFORNIA FIRESHED STUDY AREA HARVEST

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

Species group	2020	2021	2022	2023
Ponderosa pine	100%	94%	100%	100%
Douglas-fir	0%	6%	0%	0%
All species	**100%**	**100%**	**100%**	**100%**

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

	----------Percentage from national forests----------			
Timber product type	**2020**	**2021**	**2022**	**2023**
Sawlog	0%	0%	0%	0%
Other fiber log	0%	0%	0%	0%
Study Area total	0%	0%	0%	0%

SOUTHERN CALIFORNIA FIRESHED TIMBER-PROCESSING AREA COUNTIES

Table 4. Southern Callifornia Fireshed Timber-Processing Area (TPA) counties

County	State
Riverside	CA
San Bernardino	CA

SOUTHERN CALIFORNIA FIRESHED TIMBER-PROCESSING AREA FACILITIES LIST

Table 5. Timber-processing facilities within the Southern Callifornia Fireshed TPA (2025)

Facility name	Status	Facility type	State	County	Input size class	Included in capacity analysis
Desert View Power	Active	biomass/energy	CA	Riverside	No Roundwood	no
Priority Pallets	Active	sawmill	CA	Riverside	<250 MCF	yes
Viramontes Express	Active	bark, shavings, non-pulp chips	CA	Riverside	1000 TO 4999 MCF	yes
Kellogg Supply, Inc. - Ontario	Active	bark, shavings, non-pulp chips	CA	San Bernardino	No Roundwood	no
Arrowhead Enterprises	Active	sawmill	CA	San Bernardino	<250 MCF	yes

TIMBER RECEIVED BY TIMBER-PROCESSING FACILITIES IN THE SOUTHERN CALIFORNIA FIRESHED TIMBER-PROCESSING AREA

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

Species group	2020	2021	2022	2023
Ponderosa pine	100%	100%	100%	100%
All species	**100%**	**100%**	**100%**	**100%**

Table 7. Percentage of timber from national forests received by facilities in the Southern California Fireshed TPA, by timber product group (2020-2023)

	----------Percentage from national forests----------			
Timber product type	**2020**	**2021**	**2022**	**2023**
Sawlog	0%	0%	0%	0%
Other fiber log chipped in woods	0%	0%	0%	0%
Total	**0%**	**0%**	**0%**	**0%**

TIMBER-PROCESSING CAPACITY AND CAPABILITY OF TIMBER-PROCESSING FACILITIES WITHIN THE SOUTHERN CALIFORNIA FIRESHED TIMBER-PROCESSING AREA

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

	---------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
Riverside & San Bernardino	-	100-500	1,000-5,000	-	500-700	5,000-7,000

Table 9. Timber-processing capacity and capability by tree dbh class of facilities in the Southern California Fireshed TPA, by timber product type (2021)

	---------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
All log products	-	100-500	1,000-5,000	-	500-700	5,000-7,000

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

	----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.	-	-	-	-	n/a
7 - 9.9 in.	100-500	500-700	50-80	50-200	10-20%
≥10 in.	1,000-5,000	5,000-7,000	500-2,500	1,000-5,000	50-70%
Total	**1,100-5,500**	**5,500-7,700**	**550-2,580**	**1,050-5,200**	**55-65%**

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

Timber Processing Area	**Thousand board feet, Scribner (MBF)**	**Hundred cubic feet (CCF)**
Riverside & San Bernardino	1,600-2,000	2,000-3,080

Table 12. Unused timber-processing capacity of facilities in the Southern California Fireshed TPA, by timber product type (2021)

Timber product type	**Thousand board feet, Scribner (MBF)**	**Hundred cubic feet (CCF)**
Sawlogs	1,600-2,000	2,000-3,080

RESIDUALS GENERATED BY TIMBER-PROCESSING FACILITIES IN THE SOUTHERN CALIFORNIA FIRESHED TIMBER-PROCESSING AREA

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

	BDUs[a]	Percent of total volume
Utilized residuals volume	1,658,616	99.88%
Unutilized residuals volume	1,986	0.12%
Total volume generated	**1,660,602**	**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 Southern Callifornia Fireshed TPA, by type of residual (2021)

Type of residual	BDUs[a]	Percent of total volume
Coarse[b]	899,426	54%
Fine[c]	409,008	25%
Bark	352,168	21%
Total, all residual types	**1,660,602**	**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 Southern Callifornia Fireshed TPA, by type of utilization (2021)

Type of utilization	BDUs[a]	Percent of total volume
Fiber[b]	996,696	61%
Fuel[c]	415,325	26%
Sold as raw material for other products	131,880	8%
Mulch/soil addititves	60,915	4%
Animal bedding	8,735	1%
Decorative landscaping	11,203	1%
Used on-site for other products	2	0%
Unused	1,986	0%
Total, all types of utilization	**1,626,743**	**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.