Timber-processing Capacity in the Western United States

Timothy P. Spoelma, Todd A. Morgan, and Charles E. Keegan, III

Location of timber-processing capacity

Defining timber-processing capacity—The volume of timber that a facility can process annually given firm demand for its products and an adequate supply of logs is its timber-processing capacity (Keegan et al. 2006).

Knowledge of timber-processing capacity is an important component of strategic forest management planning. With increasing emphasis on forest health, fire/fuels hazard reduction, and ecological restoration, having an outlet for material removed during such treatments is critical. While mills exist throughout the West (Figure 1), the amount of timber-processing capacity in each region leaves some areas better prepared than others to undertake such activities. The Pacific Coast region, particularly northern California, western Oregon, and western Washington, contains both a large number of mills and high levels of timber-processing capacity. The same is true of northern Idaho and northwestern Montana. However, throughout the Four Corners states, Wyoming, southern Idaho, and eastern Montana, low levels of timber-processing capacity are found despite a wide distribution of mills. Mills in these regions tend to be small, family-run operations, and are also among the most dependent on federal timber. Examining timber-processing capacity by tree size also provides insight into the ability of mills in each region to handle the kinds of material, particularly small-diameter timber, that may result from treatments.

Figure 1—Mill locations and annual timber-processing capacity (million cubic feet) in the western U.S., 2003.

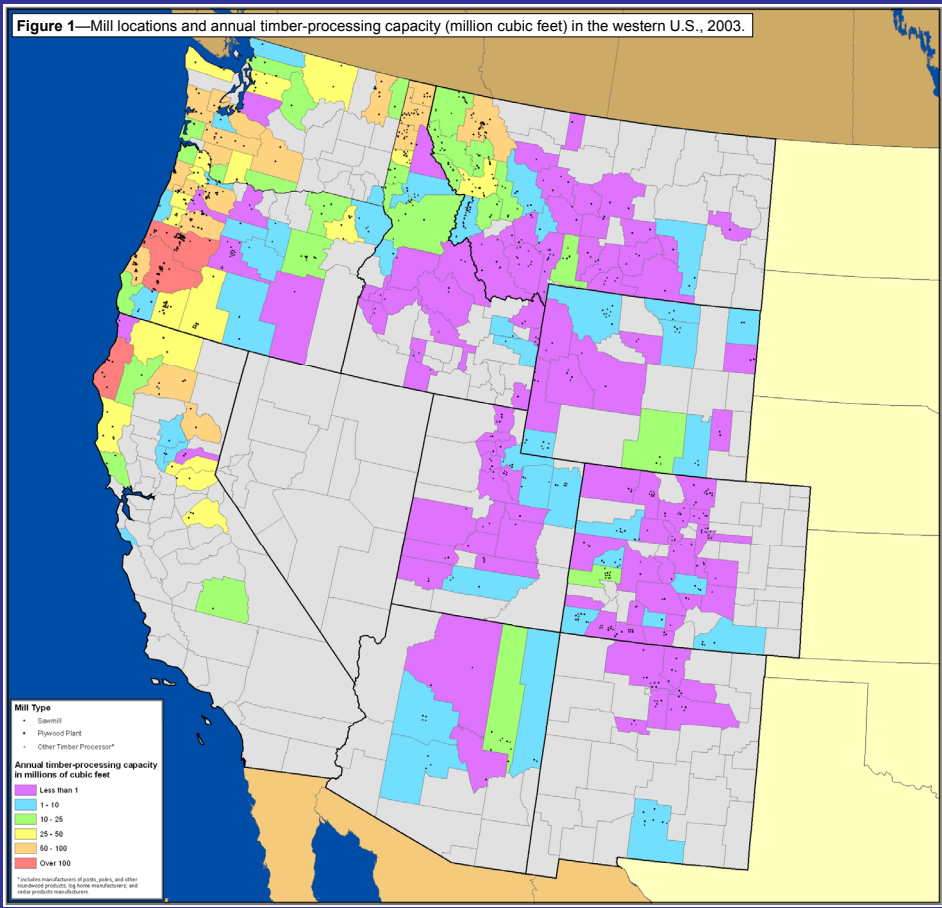
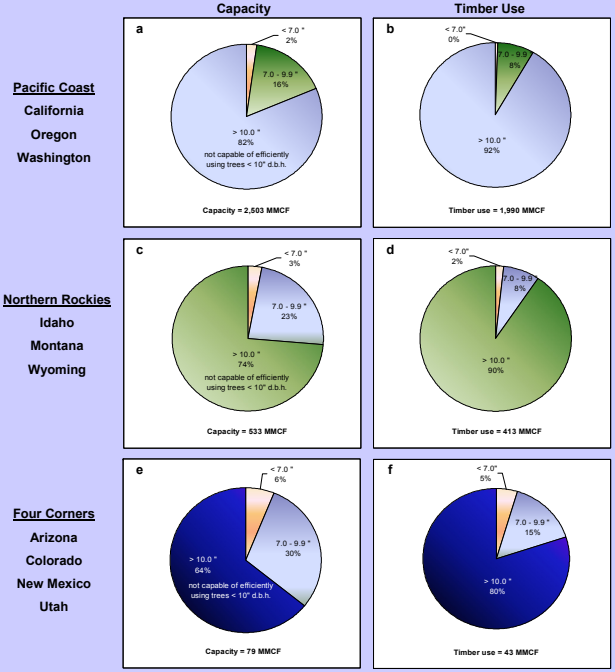


Figure 2—Annual timber-processing capacity and use by region, 2003.



Capacity and timber use by size class

Pacific Coast—the Pacific Coast region contained 2,503 million cubic feet (MMCF) of timber-processing capacity in 2003, and used nearly 80% of that capacity (Figure 2a and 2b). The bulk of that capacity (82%) is not capable of efficiently processing trees smaller than 10" d.b.h. Although the proportion (18%) of capacity capable of using trees <10" d.b.h. is the smallest among all regions, the amount (464 MMCF) of capacity capable of using such material is the highest among all regions.

Northern Rockies—the Northern Rockies contained 533 MMCF of timber-processing capacity in 2003 and used 77% of that capacity (Figure 2c and 2d). About 26% of the capacity is capable of using trees smaller than 10" d.b.h. Most capacity in this region is found in northern Idaho and northwestern Montana, which could pose difficulty for outlying areas to find a mill capable of handling small-diameter material.

Four Corners—the Four Corners has the least timber processing capacity, 79 MMCF, and just 55% of that capacity was utilized in 2003 (Figure 2e and 2f). However, this region has the highest proportion (36%) of capacity capable of using small-diameter material. The lack of capacity compared to other regions presents a great challenge to undertaking forest management activities. The low level of utilization suggests that additional timber from such activities would not only be welcome but is also needed to maintain the industry.

Acknowledgements

USDA Forest Service: Washington Office, Rocky Mountain Research Station, Pacific Northwest and Interior West Forest Inventory and Analysis programs

Literature Cited

Keegan, C.E., T.A. Morgan, K.M. Gebert, J.P. Brandt, K.A. Blatner, and T.P. Spoelma. 2006. Timber-processing capacity and capabilities in the Western United States. J. Forestry 104(5): 262-268.

Contact Us

For more information about this study, contact:
Tim Spoelma: tim.spoelma@business.umt.edu
Todd Morgan: todd.morgan@business.umt.edu
Or visit us on the web: www.bber.umt.edu

BUREAU OF BUSINESS AND ECONOMIC RESEARCH
The University of Montana