Capacity and Capability of Mills in the Kootenai National Forest Impact Zone

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In this report, "capacity" refers to the total volume of timber (excluding pulpwood) that existing mills could utilize annually, and "capability" refers to the volume of trees of a certain size class that existing mills can efficiently process annually. Volumes of timber reported as harvested or processed include timber used to produce manufactured wood products (e.g., lumber, veneer, plywood, posts, utility poles, log homes, and log furniture). The roundwood pulpwood and industrial fuelwood components of the harvest are dealt with in a separate report covering Region One.

Virtually all of the Kootenai National Forest non-reserved timberland is in two Montana counties: Lincoln and Sanders. More than 35 percent of the recent (1998) timber harvest in this two-county area originated from the Kootenai National Forest. Most (84 percent) of the timber harvested from these counties consisted of green (live) trees. The species composition of the harvested volume in this two-county area was: Douglas-fir approximately 38 percent, lodgepole pine 27 percent, and western larch 14 percent, true firs and ponderosa pine each accounted for 8 percent, Engelmann spruce, western redcedar, western hemlock, and western white pine combined accounted for the remaining 6 percent. Sawmills and veneer/plywood manufacturers received over 90 percent of the volume harvested from these two counties. Other products, including house logs, posts and poles, and cedar products accounted for the remaining timber harvest volume.

The Kootenai National Forest identified a 5-county area as the "Kootenai National Forest Impact Zone". The counties comprising the Kootenai National Forest Impact Zone are Bonner and Boundary counties in Idaho; and Flathead, Lincoln, and Sanders counties in Montana. Within the 5-county Kootenai National Forest Impact Zone there are 63 timber-processing facilities currently operating: 25 sawmills, 17 log home manufacturers, 8 post and small pole plants, 5 log furniture manufacturers, 3 veneer and plywood facilities, 2 utility pole plants, 2 cedar products manufacturers, and one pulp and paper mill.

As of September 1, 2005, capacity to process timber in the Kootenai National Forest Impact Zone is 191,020 thousand cubic feet (MCF), with slightly less than 78 percent of capacity

being used. Mills in the Kootenai National Forest Impact Zone are currently using about 148,899 MCF of timber annually (Table 1). Slightly less than 87 percent (129,209 MCF) of the volume processed in the Impact Zone is composed of trees with diameter at breast height (dbh) ≥ 10". Nearly 13 percent (18,977 MCF) of the volume processed comes from trees 7.0 - 9.9" dbh, while less than 1 percent (714 MCF) of processed volume comes from trees < 7" dbh.

Table 1. Annual Volume of Timber Processed by Tree Size Class (Excluding Pulpwood) for the Kootenai National Forest Impact Zone

Thousand Cubic Feet of Timber		Thousand Board Feet Scribner of Timber	
Tree dbh	**Volume Used**	**Tree dbh**	**Volume Used**
<7 in	714	<7 in	714
7-9.9 in	18,977	7-9.9 in	72,872
10+ in	129,209	10+ in	547,021
Total	148,899	Total	620,607

About 74 percent (141,203 MCF) of existing capacity in the Kootenai National Forest Impact Zone is not capable of efficiently utilizing trees < 10" dbh (Table 2). Slightly less than 50,000 MCF of timber-processing capacity is capable of utilizing trees < 10" dbh, and nearly all of this is in the 7 - 9.9" dbh class.

Table 2. Annual Total Capacity and Capability* to Process Trees by Size Class (Excluding Pulpwood) for the Kootenai National Forest Impact Zone

Thousand Cubic Feet of Timber		Thousand Board Feet Scribner of Timber	
Tree dbh	**Capability**	**Tree dbh**	**Capability**
<7 in	1,873	<7 in	1,873
7-9.9 in	47,944	7-9.9 in	184,105
10+ in	141,203	10+ in	610,185
Total Capacity	191,020	Total Capacity	796,164

* Note: Capability in <7 and 7-9.9 in. classes is maximum volume capable of being used efficiently; capability in 10+ in. class is portion of total capacity NOT capable of efficiently using trees with dbh<10 in.

A substantial amount of the capacity capable of utilizing smaller diameter trees is being used to process larger trees or going unused. Only about 38 percent of capacity in the < 7" dbh category is currently utilized to process trees < 7" dbh, and just 40 percent of capacity in the 7 - 9.9" dbh category is being used to process trees 7 - 9.9" dbh. More than 18,000 MCF of capacity capable of using trees 7 - 9.9" dbh are used annually to process trees ≥ 10" dbh.