

Montana Forest Biomass Supply

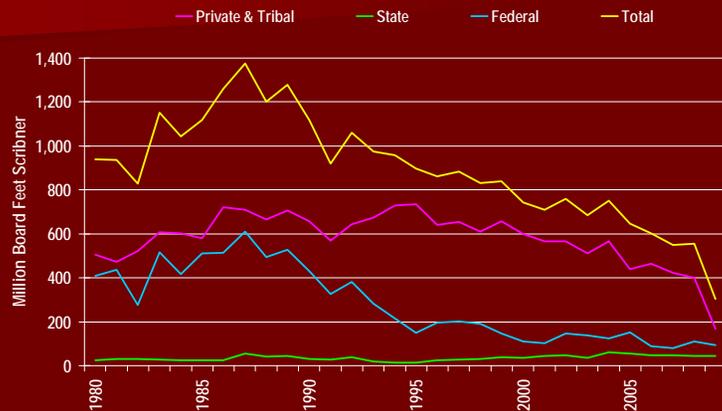
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 Environmental Quality Council
 Helena, MT

Montana's Timber Harvest & Forest Products Industry



Montana Annual Timber Harvest 1980-2009



Montana's Timber Resource Non-reserved Timberlands 2003-2007

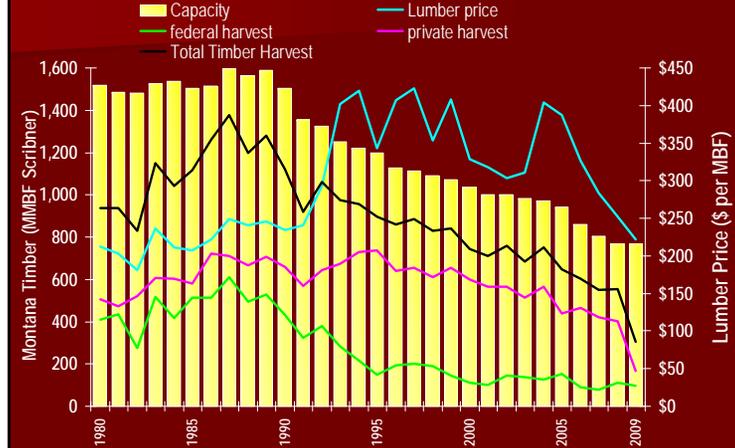
Growing stock volume	36,733 MMCF
Annual (gross) growth	862
Annual mortality	456
Annual harvest (2004)	198
(2007)	147
(2009)	82

Montana's Timber Resource Non-reserved Timberlands 2003-2007

	<u>Public</u>	<u>Private</u>
Net Growth (MMCF/yr)	268	137
2007 Removals (MMCF)	35	112
Ratio	7.6 : 1	1.2 : 1

Sources: Miles & Hansen, Fri, Aug 1, 2008: Forest Inventory EVALIDator web-application version 1.0 <http://199.128.173.26/evalidator/tmattribute.jsp>

Montana Timber-Processing Capacity & U.S. Lumber Prices, 1980-2008



US Housing & MT Wood, 1976-2009

Sources: U.S. Census Bureau; BBER



Forest Biomass Terminology

- Timberland
 - Live tree woody biomass
 - Standing dead tree woody biomass
- Logging residue
- Mill residue

Montana Forest-based Woody Biomass

- Current use: ~2.5 million dry tons (MDT) per year
 - More than 50% used by one facility
 - Less than 50% comes from in-state mill residue
 - Biomass & pulpwood < 10% of harvest volume

Montana Forest-based Woody Biomass

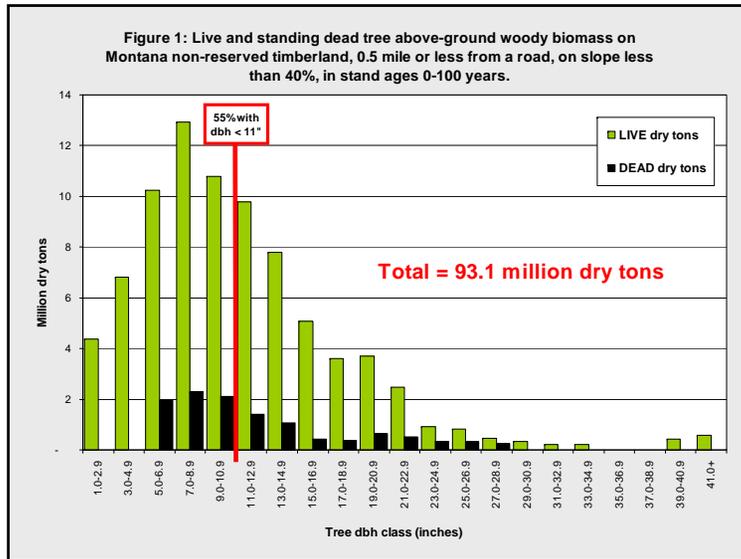
- Logging residue: < 0.6 MDT per year
 - Amount produced is declining
- Mill residue: < 1.5 MDT per year
 - More than 99% already used
 - Amount produced is declining

Montana Forest-based Woody Biomass

- Timberland: 20 million acres
 - 61% is national forests
 - Live trees: 725 MDT
 - 74% in national forests
 - Dead trees: 136 MDT
 - 85% in national forests

“Filtered” forest inventory

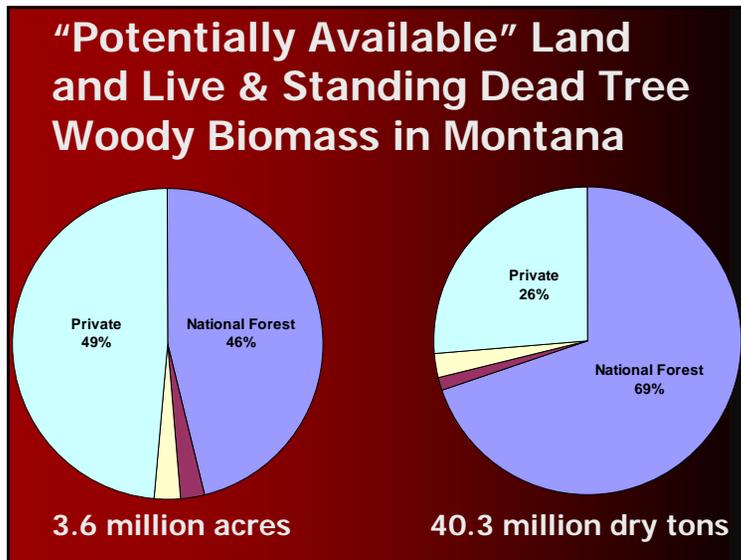
- Stands within ½ mile of a road
- Stand ages of 0 to 100 years
- Slope of 0 to 40%
- Tree dbh of 5.0 to 10.9 inches



Woody Biomass Opportunity

“Potentially available”

- 3.6 million acres
 - 18% of total timberland
 - less than 1/3 of currently roaded
- 40.3 MDT in live & dead trees
 - 70% in national forests
 - 5% of total biomass on timberland



Biomass supply is NOT an issue.

Multi-decade supply potentially available.

Availability is an issue!

- Land ownership & accessibility
- National forests are vitally important

Sawmills need sizeable residue users.

Landowners need small tree & slash users.



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