Montana's Forest Industry & Wood Products

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Montana Forests & Timber

25.9 million acres 69% federal ownership

National Forests

61% of timberland 76% of timber volume 20-25% of annual harvest 60% of burned forest area 80% of insect impact area

County	Forest acres (thousand)	National Forest
Cascade	332	53%
Flathead	2,794	63%
Gallatin	902	66%
Lewis & Clark	1,391	71%
Lincoln	2,182	80%
Missoula	1,410	51%
Ravalli	1,192	88%
Silver Bow & Deer Lodge	534	63%
Yellowstone	143	0%
All counties	25,912	60%

Source: USDA Forest Service, FIA Program



Montana Forest-Related Employment

Private sector	Jobs
Wood & paper products	3,011
Forestry support activities	2,690
Forestry & logging	1,534
Total	7,235

Public sector	Jobs
US Forest Service	2,817
National Park Service	346
BLM & BIA	307
DNRC & FWP	280
Total	3,750

About 11,000 forest-related workers

Private sector: >\$320 million in earnings

Public agencies: >\$220 million in earnings



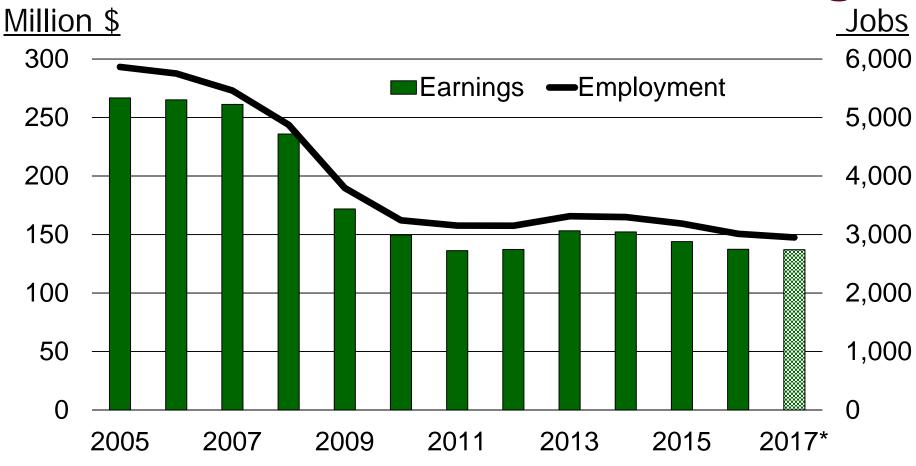
Montana Forest Industry (Private Sector)

	<u>2005</u>	2009	2016
Workers	9,821	7,620	7,235
Earnings (millions)	\$396	\$277	\$320
Primary sales (million	s) \$1,078	\$592	\$563
Lumber production (N	IMBF) 1,001	418	506

Sources: Bureau of Economic Analysis, Western Wood Products Association, BBER.



Montana Wood Products Manufacturing



Sources: Bureau of Economic Analysis, Western Wood Products Association, BBER.

*2017 Estimated.



Montana's Wood Products Industry

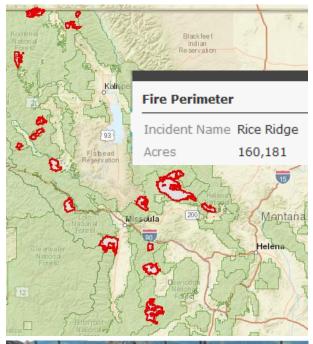
- ~140 establishments
- ~80 timber users
- 8 larger, 20+ small sawmills
- Plywood, MDF, particleboard
- Log homes, post & pole
- Pellets, bark, fuels-for-schools





- Mostly small, privately held
- Most don't own forest land
- Nearly all rely on some timber from public lands

Fire, Smoke & Salvage





2017 Montana wildfires = 1,276,479 acres

- Forest Service > 600,000 acres
- Average = 175,000 acres

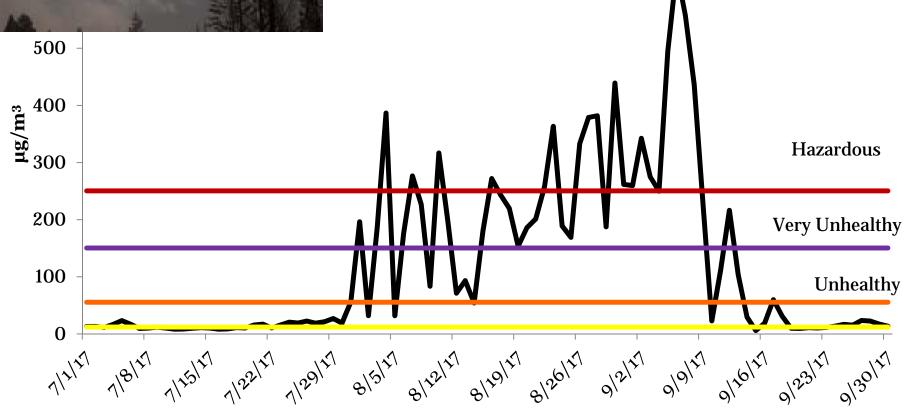
Suppression costs

- National cost: \$ 2.7 Billion
- MT (total) costs = \$393 million
- MT (State) costs = \$74 million

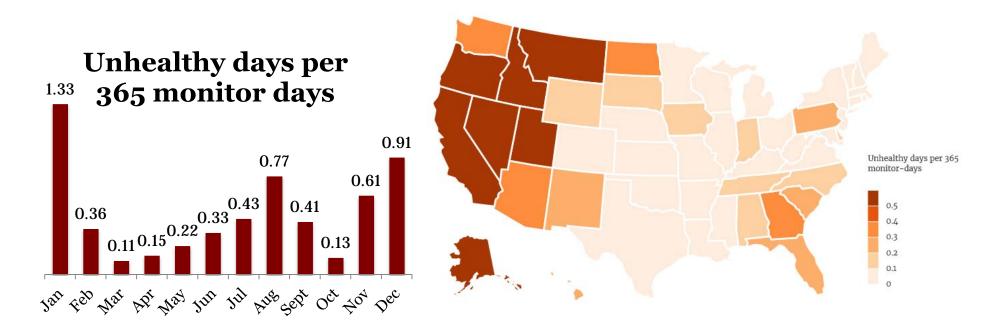




24-Hour Average $PM_{2.5}$ Seeley Lake, MT



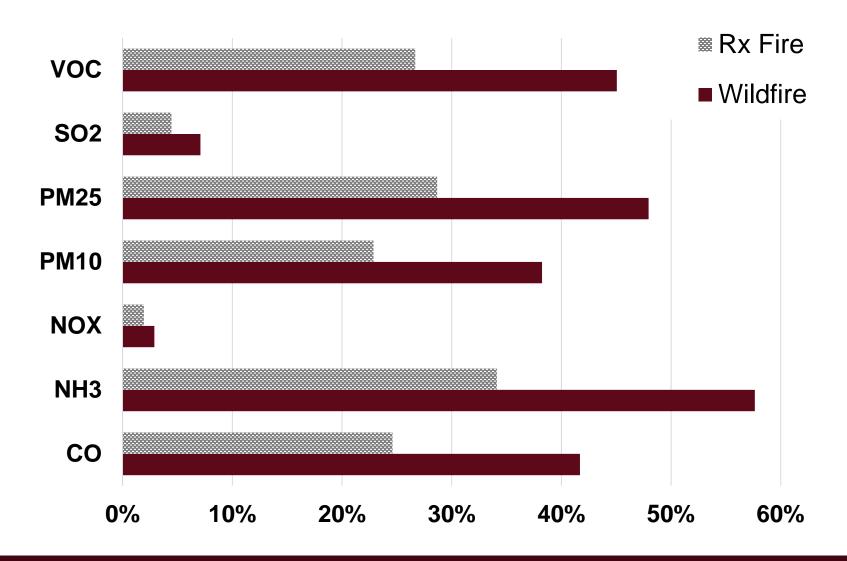
In Western states, unhealthy days are frequently the result of wildfire smoke, and we have more of them. 81% of unhealthy days occurred in AK, CA, ID, MT, NV, UT, and WA. These states average 1.6 unhealthy days per 365 monitor days; other states average 0.11 unhealthy days.



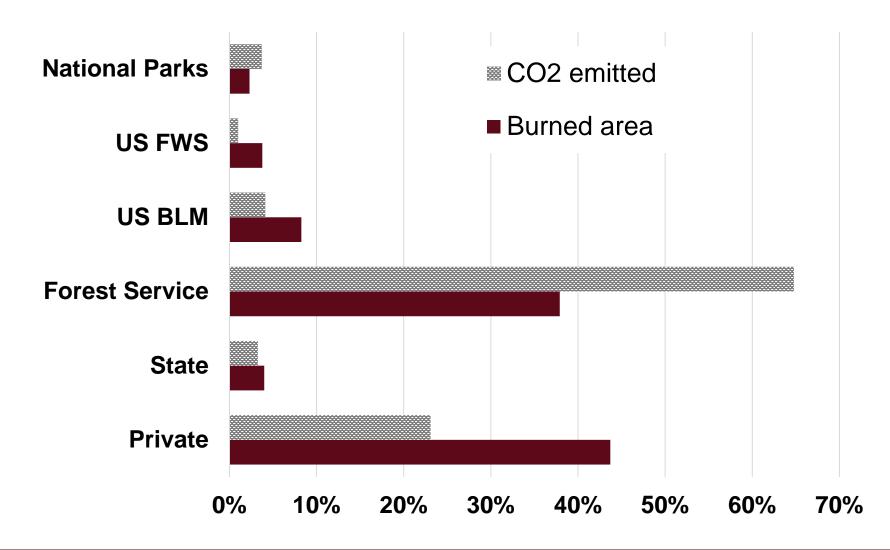
Source: Bryce Ward, BBER analysis of EPA daily PM2.5 monitor data for all days and monitors from 2007-2016.



Montana annual air pollution emissions



Montana wildfire by ownership, 2003-2015





Forest Service Burned Area Response

Sheep Gap Fire	Acres
Total burned area	27,182
Outside of exclusion areas	18,956
Accessible (roads & slope)	11,352

Strategic approach

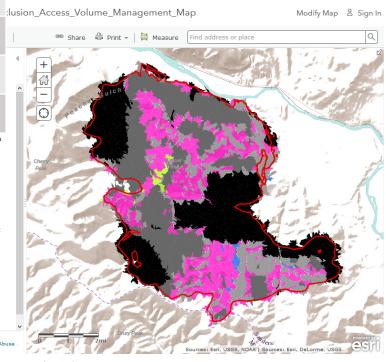
Considered for timber mgmt.

- 25 additional staff
- Incident Command Structure

Highest value & slowest deterioration

Emergency Situation
 Determination requests





Source: https://usfs.maps.arcgis.com/apps/Cascade/index.html?appid=d3b3a962ed784e7096fbebfb75031a75

6,719

6,390

Sheen Gan Exclusion

Sheep Gap Managemer





SmartLam & CLT

- Cross-Laminated Timber (CLT)
- First U.S. manufacturer of CLT
- Columbia Falls, MT
- Buy & use softwood lumber



Image from APA



Images from SmartLam





Softwood Lumber (dis)Agreement



Canada supplies about 1/3 of lumber in US

- 90-95% of lumber imports come from Canada
- 70-80% of Canadian lumber is exported to US
- Canadian companies now own 40+ US mills
 - Prepared for tariffs & log supply issues
 - Closer to wood supply & housing markets
 - Have funds to buy US mills

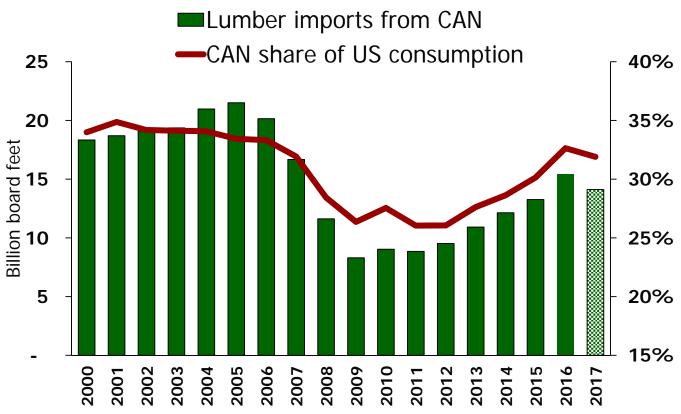
Canadian Lumber

Volume & share of US market down in 2017

 US Commerce Department's 20% tariffs

 Bark beetles & fires impacted BC timber supply

Chinese markets improved





Montana's Forest Industry & Wood Products Outlook

High expectations not met in 2017 Expectations mostly positive for 2018

- Broader US economic conditions
- National homebuilding
- Softwood lumber & other trade
- Eyes on the Forest Service fire salvage
- Agriculture markets & weather

Thank you!



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