

Biomass Availability

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Biomass Availability Factors

- Inventory
 - Current Volume
 - Growth & Mortality
- Access
 - Ecological Constraints (e.g. slopes $> 35\%$)
 - Economic Constraints (e.g. greater than 1000' from road)
- Management Objectives
 - Land Allocation (wilderness, timber, wildlife, etc.)
 - Social Issues (roadless, NIMBY, etc.)
- Organizational Capacity
 - Staffing
 - Funding

Five-Year Action Plans

- Project Areas (need for action)
- NEPA (proposal, analysis, decision)
- Preparation (designation, appraisal)
- Contract Award
 - Targets
 - Funding

**Arapaho and Roosevelt National Forests
Coordinated Resource Offering Protocol (CROP)**

<http://www.crop-usa.com/colorado/>

Annual Average 2006-2010

Administrative Unit	< 7" DBH Biomass (Green Tons)	< 7" DBH Biomass (MMBF)	7-12" DBH Sm. Sawlog (MMBF)	12"+ DBH Lg. Sawlog (MMBF)	Total MMBF)
Boulder RD	4,880	1.0	0.3	0.1	1.4
Canyon Lakes RD	14,940	3.0	2.6	0.4	6.0
Clear Creek RD	880	0.2	0.1	0.0	0.3
Sulphur RD	6,950	1.4	9.9	0.8	12.1
Arapaho/Roosevelt Total	27,650	5.5	12.9	1.2	19.7
Arapaho/Roosevelt Total	Sold (MMBF)				Planned
	2006	2007	2008	2009	2010
	15.9	12.2	10.6	9.6	7.7

**Medicine Bow and Routt National Forests
Coordinated Resource Offering Protocol (CROP)**

<http://www.crop-usa.com/colorado/>

Annual Average 2006-2010

Administrative Unit	< 7" DBH Biomass (Green Tons)	< 7" DBH Biomass (MMBF)	7-12" DBH Sm. Sawlog (MMBF)	12"+ DBH Lg. Sawlog (MMBF)	Total (MMBF)
Brush Creek/Hayden RD	204	0.0	2.4	2.0	4.4
Laramie RD	1,766	0.4	2.7	2.2	5.2
Hahns Peak/Bears Ears RD	138	0.0	1.7	1.3	3.1
Parks RD	523	0.1	5.7	5.0	10.8
Yampa RD	281	0.1	3.2	2.7	6.0
Medicine Bow/Routt Total	2,912	0.6	15.7	13.2	29.4
Medicine Bow/Routt Total	Sold (MMBF)				Planned
	2006	2007	2008	2009	2010
	30.7	37.6	49.0	43.4	35.0

White River National Forest
 Coordinated Resource Offering Protocol (CROP)
<http://www.crop-usa.com/colorado/>
 Annual Average 2006-2010

Administrative Unit	< 7" DBH Biomass (Green Tons)	< 7" DBH Biomass (MMBF)	7-12" DBH Sm. Sawlog (MMBF)	12"+ DBH Lg. Sawlog (MMBF)	Total (MMBF)
Aspen/Sopris RD	500	0.1	1.0	0.3	1.4
Blanco RD	1,840	0.4	1.2	0.0	1.6
Dillon RD	4,780	1.0	4.0	2.2	7.1
Holy Cross/Eagle RD	1,600	0.3	3.7	1.7	5.7
Rifle RD	-	0.0	1.6	0.2	1.8
White River Total	8,720	1.8	11.6	4.4	17.7
White River Total	Sold (MMBF)				Planned
	2006	2007	2008	2009	2010
	12.4	31.0	12.9	29.2	12.5

Pike and San Isabel National Forests
Coordinated Resource Offering Protocol (CROP)
<http://www.crop-usa.com/colorado/>
Annual Average 2006-2010

Administrative Unit	< 7" DBH Biomass (Green Tons)	< 7" DBH Biomass (MMBF)	7-12" DBH Sm. Sawlog (MMBF)	12"+ DBH Lg. Sawlog (MMBF)	Total (MMBF)
Pikes Peak	1,334	0.3	0.9	0.2	1.3
South Park	1,358	0.3	2.1	0.3	2.6
South Platte	1,606	0.3	1.0	0.2	1.6
Leadville	1,970	0.4	0.6	0.1	1.1
Salida	-	0.0	1.4	0.5	1.9
Pike/San Isabel Total	6,268	1.3	6.0	1.3	8.5
Pike/San Isabel Total	Sold (MMBF)				Planned
	2006	2007	2008	2009	2010
	8.3	5.0	5.1	18.1	7.1

Table Shell Example for Forest Inventory Analysis Data

Arapaho and Roosevelt National Forests Lodgepole Pine Cover Type Represents xxx acres and xx% of the Available Biomass Area (outside Wilderness, Roadless, <35% Slope, within 1000' of Road)									
Size Class (DBH)	Lodgepole Pine (CCF/Ac & TPA)			Engelmann Spruce (CCF/Ac & TPA)			Quaking Aspen (CCF/Ac & TPA)		
	Live	Annual Increment	Dead	Live	Annual Increment	Dead	Live	Annual Increment	Dead
0-4.9"									
5-7.9"									
8-11.9"									
12"+									

Biomass (Dead): 1 Cubic Foot = 40 lbs.

1 CCF = 2 Tons

1 MBF = 2 CCF

Biomass (Green): 1 Cubic Foot = 55 lbs.

1 CCF = 2 ¾ Tons

Biomass Potential

Thinning/Restoration

25 Tons/Acre

4,000 Acres/Year

100,000 Tons/Year

Lodgepole Pine Salvage

50 Tons/Acre

10,000 Acres/Year

500,000 Tons/Year