

***State of Utah CROP (entire state)***

***A Summary of CROP Landscape Analyses Results***

***(2008-2012)***

**Presented by**

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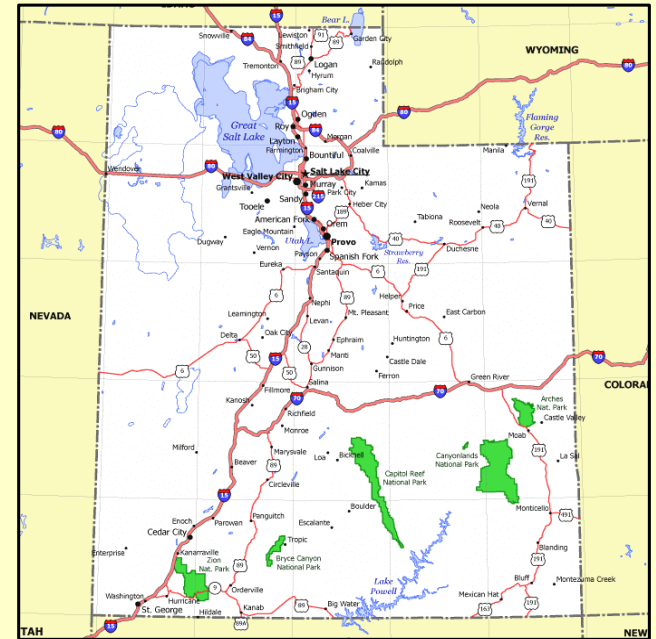
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# State of Utah CROP (entire state)

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## State of Utah CROP (entire state)

- 7 National Forests (27 ranger districts)
- 3 States
- State Depts. of Transportation
- 18 BLM districts
- 29 Counties



October 2008

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**National Forests: 27 Ranger Districts**

- **Ashley NF:** Vernal, Roosevelt/Duchesne, Flaming Gorge
- **Dixie NF:** Escalante, Cedar City, Pine Valley, Powell
- **Fishlake NF:** East Zone (Fremont, Richfield)  
West Zone (Beaver, Fillmore)
- **Kaibab NF:** North Kaibab
- **Manti-La Sal NF:** Ferron/Price, Moab, Monticello, Sanpete
- **Uinta NF:** Heber, Spanish Fork, Pleasant Grove
- **Wasatch-Cache NF:** Mountain View/Evanston, Ogden, Logan, Salt Lake, Kamas

**18 BLM Districts**

**UT:**

Price, Cedar City, Fillmore, Richfield, St. George, Kanab, Grand Staircase Escalante National Monument (GSENM), Monticello, Salt Lake, Moab

**AZ:**

Phoenix, Arizona Strip and Grand Canyon Parashant National Monument (GCPNM)

**CO:**

Little Snake, White River

**WY:**

Kemmerer, Pinedale, Rawlins, Rock Springs

*29 Counties:*




All counties in Utah were contacted.

All either do not own forest land or plan no removal during next 5 years.

What we asked for:

- **Volume** (by mmbf, green tons, ccf, etc.)
- **Diameter sizes** <4" 4"-7" 7"-9" 9"-12" >12"
- **Species** (all species evaluated for resource flow)
- **Harvest "type"**: fuel load reduction, timber sale, etc.
- **Location** of resource offering

- **NEPA Phase**
  - **Road accessibility**
- } USFS Pilots

 = biomass (gT)  
 = small logs (mmbf)  
 = large logs (mmbf)

**So, let's take a look at  
the final results . . .**

# Overall:

Year	Total Biomass (432,861 gT)	% of 5-yr volume
2008	118,942	27%
2009	79,442	18%
2010	89,398	21%
2011	72,017	17%
2012	73,060	17%

Total Small Log (295.68 mmbf)	% of 5-yr volume
74.37	25%
58.89	20%
53.30	18%
53.18	18%
55.94	18%

Total Large Log (139.77 mmbf)	% of 5-yr volume
28.82	21%
33.72	24%
24.15	17%
24.55	18%
283.51	20%

*Biomass = 17%*  
*(up to 7" dbh)*

*Small Logs = 57%*  
*(>7" – 12" dbh)*

*Large Logs = 27%*  
*(>12" dbh)*



# State of Utah CROP (entire state)

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## Who's providing what?

Agency	5-yr total <i>Biomass (gT)</i>	5-yr total <i>Small Log (mmbf)</i>	5-yr total <i>Large Log (mmbf)</i>	% of 5-yr total
Ashley NF	81,355	32.31	11.97	12%
Dixie NF	60,000	28.70	43.55	16%
Fishlake NF	59,610	24.39	11.53	9%
Kaibab NF	24,106	13.24	26.99	9%
Manti-La Sal NF	1,500	5.6	16.16	4%
Uinta NF	11,300	4.84	4.84	2%
Wasatch-Cache NF	11,900	15.86	9.13	5%
Utah Trust Lands	1,180	11.56	0.0	2%
AZ BLM	21,875	3.13	.5	2%
CO BLM	21,003	39.2	1.6	9%
UT BLM	137,004	114.47	13.43	30%
WY BLM	2,027	2.29	.18	1%

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# State of Utah CROP (entire state)

**Ashley NF:** ( $gT = 81,355$ ; Small log = 32.3 mmbf; Large log = 11.97 mmbf)

Ranger Districts	5-yr total (Biomass = gT)	5-yr total Small log (mmbf)	5-yr total Large log (mmbf)
Flaming Gorge	16,283	9.99	3.50
Roosevelt/Duschesne	13,476	4.62	6.62
Vernal	51,595	17.69	1.85 %

**Dixie NF:** ( $gT = 60,000$ ; Small log = 12.83 mmbf; Large log = 43.55 mmbf)

Ranger Districts	5-yr total (Biomass = gT)	5-yr total Small log (mmbf)	5-yr total Large log (mmbf)
Escalante	5,000	11.85	18.1
Cedar City	32,500	9.45	18.35
Pine Valley	10,000	0	0
Powell	12,500	7.4	7.1

# State of Utah CROP (entire state)

**Fishlake NF:** (*gT = 59,610; Small log = 24.39 mmbf; Large log = 11.53 mmbf*)

Ranger Districts	5-yr total (Biomass = gT)	5-yr total Small log (mmbf)	5-yr total Large log (mmbf)
East Zone	46,725	19.68	9.18
West Zone	12,885	4.71	2.35

**Kaibab NF:** (*gT = 24,106; Small log = 13.24 mmbf; Large log = 26.99 mmbf*)

Ranger Districts	5-yr total (Biomass = gT)	5-yr total Small log (mmbf)	5-yr total Large log (mmbf)
North Kaibab	24,106	13.24	26.99

# State of Utah CROP (entire state)

**Manti-La Sal NF:** (gT = 1,500; Small log = 5.7 mmbf; Large log = 16.06 mmbf)

Ranger Districts	5-yr total (Biomass = gT)	5-yr total Small log (mmbf)	5-yr total Large log (mmbf)
Ferron-Price	1,500	2.65	12.10
Moab	0	.58	.58
Monticello	0	2.17	2.18
Sanpete	0	.30	1.20

**Uinta NF:** (gT = 11,300; Small log = 4.84 mmbf; Large log = 4.84 mmbf)

Ranger Districts	5-yr total (Biomass = gT)	5-yr total Small log (mmbf)	5-yr total Large log (mmbf)
Heber	11,300	4.84	4.84

# State of Utah CROP (entire state)

**BLM:** (gT = 181,910; Small log = 159.09 mmbf; Large log = 15.71 mmbf)

Agency	Field Offices	5-yr total (Biomass = gT)	5-yr total Small log (mmbf)	5-yr total Large log (mmbf)
<b>UT BLM</b> gT= 137,004 Small log = 114.48 mmbf Large log = 13.43 mmbf	Cedar City	36,185	29.07	.5
	Fillmore	8,508	6.32	1.4
	GSENM	2,000	1.6	0
	Kanab	43	.02	.01
	Moab	9,000	7.45	1.35
	Monticello	18,850	15.13	3.8
	Price	1,275	.52	0
	Richfield	46,962	36.91	.12
	Salt Lake	14,135	17.42	6.5
St. George	43	.02	.01	

*(BLM continued) >>>*

# State of Utah CROP (entire state)

## BLM : (continued)

Agency	Field Offices	5-yr total (Biomass = gT)	5-yr total Small log (mmbf)	5-yr total Large log (mmbf)
<b>AZ BLM</b> gT= 21,875 Small log = 3.13 mmbf Large log = .50 mmbf	<b>Arizona Strip &amp; GCPNM</b>	<b>21,875</b>	<b>3.13</b>	<b>.50</b>
<b>CO BLM</b> gT= 21,003 Small log = 39.2 mmbf Large log = 1.6 mmbf	<b>Little Snake</b>	<b>1,403</b>	<b>0</b>	<b>0</b>
	<b>White River</b>	<b>19,600</b>	<b>39.2</b>	<b>1.6</b>
<b>WY BLM</b> gT= 2,027 Small log = 2.29 mmbf Large log = .18 mmbf	<b>Kemmerer</b>	<b>962</b>	<b>1.35</b>	<b>.08</b>
	<b>Pinedale</b>	<b>953</b>	<b>.78</b>	<b>.06</b>
	<b>Rock Springs</b>	<b>111</b>	<b>.16</b>	<b>.03</b>

Agency	5-yr total (Biomass = gT)	5-yr total Small log (mmbf)	5-yr total Large log (mmbf)
UT Trust Lands	1,180	11.564	0

*Private lands:* No historical data exists for removal patterns.

# State of Utah CROP (entire state)

<i>By Species</i>	<b>5-yr total (Biomass = gT)</b>	<b>5-yr total Small log (mmbf)</b>	<b>5-yr total Large log (mmbf)</b>
<b>Pinyon pine/juniper</b> (33% of 5-yr. total)	202,831	115.98	14.30
<b>Engelmann spruce</b> (16% of 5-yr. total)	29,875	27.31	50.26
<b>Ponderosa pine</b> (12% of 5-yr. total)	53,400	20.41	32.35
<b>Aspen</b> (11% of 5-yr. total)	27,681	44.54	6.02
<b>Lodgepole pine</b> (10% of 5-yr. total)	54,344	32.39	10.88
<b>Douglas fir</b> (9% of 5-yr. total)	30,728	33.47	9.10
<b>Subalpine fir</b> (6% of 5-yr. total)	32,628	16.14	10.78
<b>White fir</b> (2% of 5-yr. total)	187	4.39	5.32
<b>Mixed firs</b> (<1% of 5-yr. total) (DF, SaF, WF, ES/SaF, BS, OC)	985	.93	.53
<b>Hardwoods</b> (<1% of 5-yr. total)	200	.12	.24



Fairly good picture for small log processing where largest percentage of volume is projected to be in the >9"-12" log strata (best grade recovery).

(5-yr total = 113.30 mmbf for >7"- 9"; 149.12 mmbf for 9"- 12")

(% of total volume)	4"-7"	>7"-9"	>9"-12"
<i>Pinyon Pine/Juniper</i>	22%	42%	26%
<i>Engelmann Spruce</i>	7	5	28
<i>Ponderosa Pine</i>	13	10	22
<i>Aspen</i>	6	12	48
<i>Lodgepole Pine</i>	15	24	36
<i>Douglas Fir</i>	10	11	15
<i>SubAlpine Fir</i>	11	12	32
<i>White Fir</i>	0	7	38
<i>Mixed Firs</i>	12	29	27
<i>Hardwoods</i>	9	10	20

## **Resource Offering Maps (ROMS):**

*Here's what you get for each species . . .*

- ✓ Who will supply?
- ✓ When will supply be offered?
- ✓ How much will be offered?
- ✓ What diameter size will it be offered in?
- ✓ Will supply be consistent and levelized over time to invite purchase and investment?

*For each species:*

- ✓ **Locator map** per specific supplier
- ✓ **Summary sheet**
- ✓ **Detailed supply breakouts** by volume, diameter, and year per supplier

*Let's look at Pinyon Pine/Juniper  
as an example . . .*

# State of Utah CROP (entire state)

State of Utah CROP: *Pinyon Pine-Juniper* offering/removal '08 - '12  
(gT = 202,830 / S = 115.98 mmbf / L = 14.3 mmbf)  
(170.85 total mmbf)

ROM # Pp-J 1.1

*Pp-J* = pinyon pine-juniper

## BLM:

**A** Arizona Strip FO\* & GCPNM (AZ)  
**B** Little Snake FO (CO)  
**C** White River FO (CO)  
**D** Cedar City FO (UT)  
**E** Fillmore FO (UT)  
**F** GSENM (UT)  
**G** Kanab FO (UT)  
**H** Moab FO (UT)  
**I** Monticello FO (UT)  
**J** Price FO (UT)  
**K** Richfield FO (UT)  
**L** Salt Lake FO (UT)  
**M** St. George FO (UT)  
**N** Kemmerer FO (WY)  
**O** Pinedale FO (WY)  
**P** Rock Springs FO (WY)

## Ashley NF:

**Q** Flaming Gorge RD  
**R** Roosevelt-Duchesne RD  
**S** Vernal RD

## Dixie NF:

**T** Cedar City RD  
**U** Escalante RD  
**V** Pine Valley RD  
**W** Powell RD

## Fishlake NF:

**X** East Zone: Fremont/Richfield RD  
**Y** West Zone: Beaver/Fillmore RD

## Kaibab NF:

**Z** North Kaibab RD

## Manti-La Sal NE:

**AA** Ferron-Price RD  
**BB** Moab RD  
**CC** Monticello RD  
**DD** Sanpete RD

## Uinta NE:

**EE** Heber RD

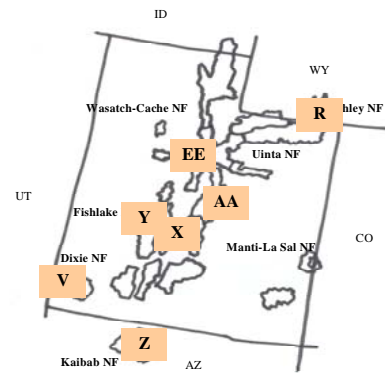
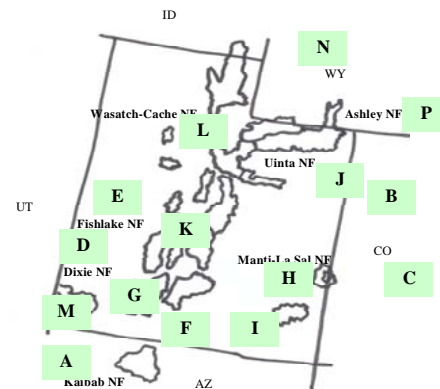
## Wasatch-Cache NF:

**FF** Kamas RD  
**GG** Logan RD  
**HH** Mountain View/Evanston RD  
**II** Ogden RD

## Utah State Trust Lands:

**JJ** Utah State Trust Lands

*\*italics/bold = species offering in CROP*



**Locator map**

# Summary Sheet

## State of Utah CROP (entire state)

State of Utah CROP: *Pinyon Pine-Juniper* offering/removal '08 - '12  
 (gT = 202,830 / S = 115.98 mmbf / L = 14.3 mmbf)  
 (170.85 total mmbf)

ROM # Pp-J 1

Ashley NF: 1 RD - <1%  
 (gT = 1,174 / S = .47 / L = .78)

Dixie NF: 1 RD - 1%  
 (gT = 10,000 / S = 0 / L = 0)

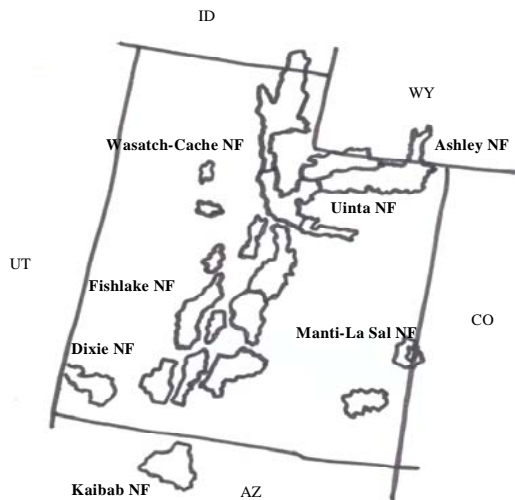
\*Fishlake NF: 2 Zones - 3%  
 (gT = 19,625 / S = .765 / L = .15)  
 \*some volume not currently accessible by roads

Kaibab NF: 1 RD - <1%  
 (gT = 287 / S = .23 / L = .45)

Manti-La Sal NF: 1 RD - <1%  
 (gT = 1,500 / S = 0 / L = 0)

Uinta NF: 1 RD - 1%  
 (gT = 11,150 / S = 0 / L = 0)

gT = green tons (up to 7" dbh)  
 S = small log mmbf (>7"-12" dbh)  
 L = large log mmbf (>12" dbh)



AZ-BLM: 1 FO - 3%  
 (gT = 19,062 / S = 1.5 / L = .187)

CO-BLM: 2 FOs - 1%  
 (gT = 5,003 / S = 0 / L = 0)

\*UT-BLM: 10 FOs - 90%  
 (gT = 134,804 / S = 113.02 / L = 13.43)  
 \*some volume not currently accessible by roads

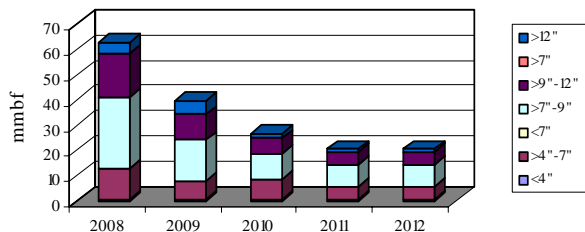
WY-BLM: 2 FOs - <1%  
 (gT = 225 / S = 0 / L = 0)

### All Agencies: Pinyon Pine-Juniper (5-yr total = 170.849 mmbf)

40.56 mmbf is <7" = 202,830 gT of biomass

115.98 mmbf is >7"-12" = small logs

14.302 mmbf is >12" = large logs



Pinyon Pine-Juniper	gT			mmbf		
	Biomass	Small Log	Large Log	Biomass	Small Log	Large Log
2008	64710.7875	45.47535	4.56415			
2009	39301.2875	26.47895	5.52015			
2010	42016.29	16.32845	1.97765			
2011	28401.29	13.84895	1.12015			
2012	28401.29	13.84895	1.12015			
Totals	202830.945	115.98065	14.30225			
%	24%	68%	8%			
mmbf	40.566189					

170.849089

# State of Utah CROP (entire state)

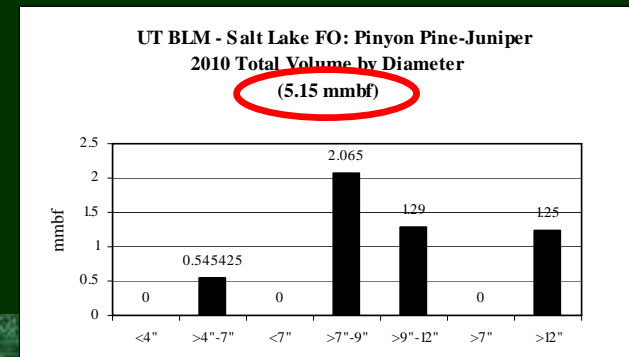
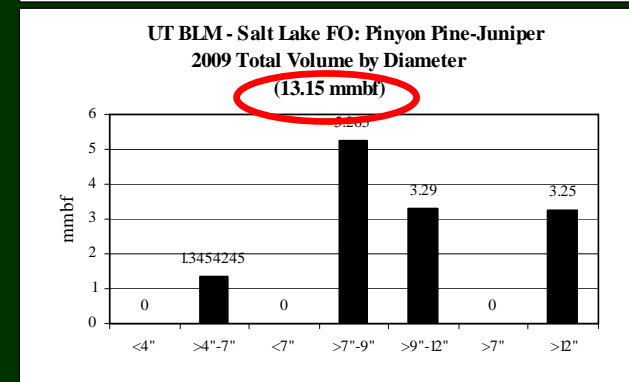
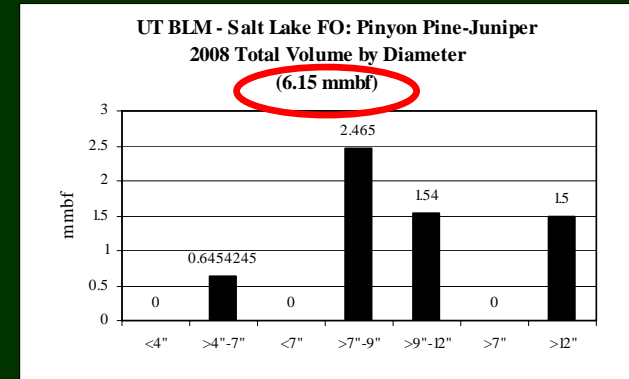
Pinyon Pine-Juniper CROP offering/removal '08 – '12  
(by agency)

ROM # Pp-J 1.10

## Detailed Breakout by Supplier

<b>Pinyon pine/Juniper UT BLM: Salt Lake FO</b>	<b>5-yr = 26.75 mmbf</b>
	<ul style="list-style-type: none"> <li>Unlevel supply from year to year</li> </ul>
<b>gT = 14,135</b>	<ul style="list-style-type: none"> <li>&lt;4" = 0% (0 mmbf)</li> <li>&gt;4"-7" = 11% (2.827 mmbf)</li> <li>&lt;7" = 0% (0 mmbf)</li> </ul>
<b>S = 17.425</b>	<ul style="list-style-type: none"> <li>&gt;7"-9" = 40% (10.725 mmbf)</li> <li>&gt;9"-12" = 25% (6.7 mmbf)</li> <li>&gt;7" = 0% (0 mmbf)</li> </ul>
<b>L = 6.5</b>	<ul style="list-style-type: none"> <li>&gt;12" = 24% (6.5 mmbf)</li> </ul>

gT = green tons (up to 7" dbh)  
S = small log mmbf (>7"-12" dbh)  
L = large log mmbf (>12" dbh)



SO ... with CROP, we're able to look at:

- *performance between different public agencies* to identify needed coordination of supply; *and*
- *performance between ranger districts in a single NF* to see where coordination of supply offering might be needed.

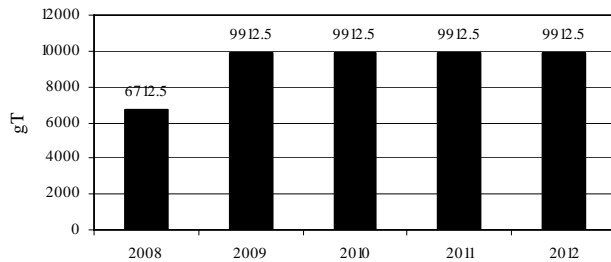
*Let's take a look ...*

# State of Utah CROP (entire state)

## Pinyon Pine/Juniper: Utah BLM - 3 FOs – biomass offerings

### Richfield FO

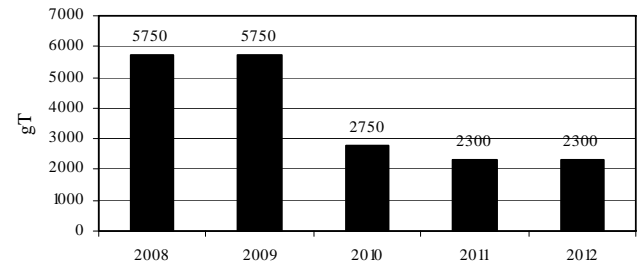
Utah BLM - Richfield FO: Pinyon Pine/Juniper  
Total 5-yr Biomass (up to 7" dbh) by Specie  
(46,362 gT)



34%

### Monticello FO

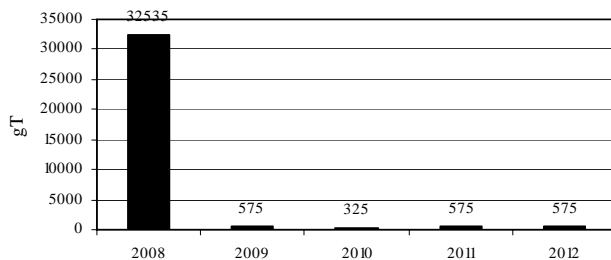
Utah BLM - Monticello FO: Pinyon Pine/Juniper  
Total 5-yr Biomass (up to 7" dbh) by Specie  
(18,850 gT)



14%

### Cedar City FO

Utah BLM - Cedar City FO: Pinyon Pine/Juniper  
Total 5-yr Biomass (up to 7" dbh) by Specie  
(34,585 gT)



26%

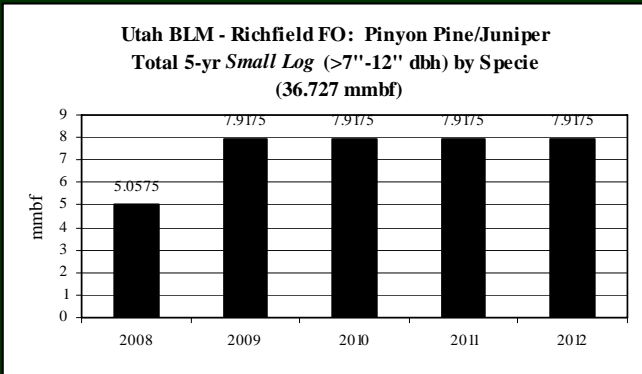
Only one field office offering relatively levelized supply.



# State of Utah CROP (entire state)

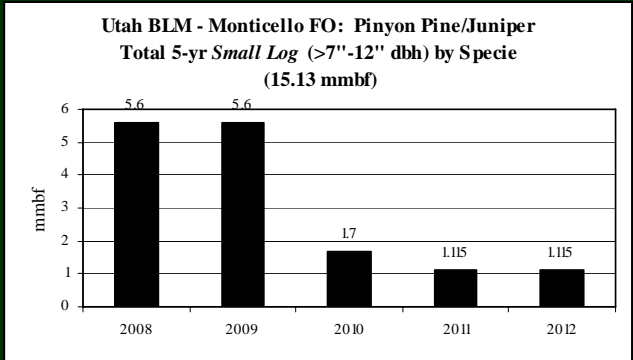
## Pinyon Pine/Juniper: Utah BLM – 3 FOs – small log offerings

### Richfield FO



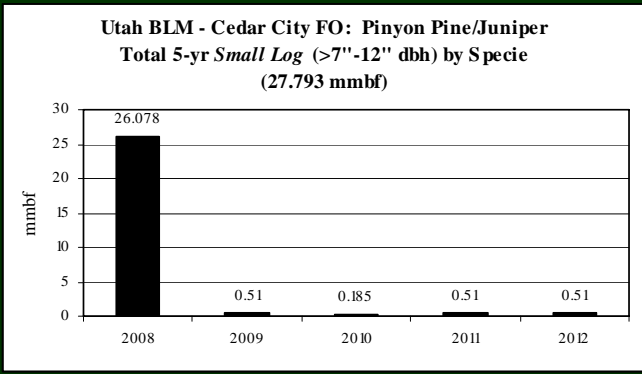
32%

### Monticello FO



13%

### Cedar City FO



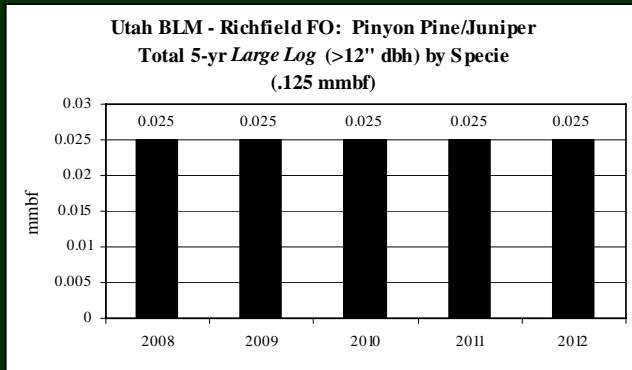
25%

Only one field office offering relatively levelized supply.

# State of Utah CROP (entire state)

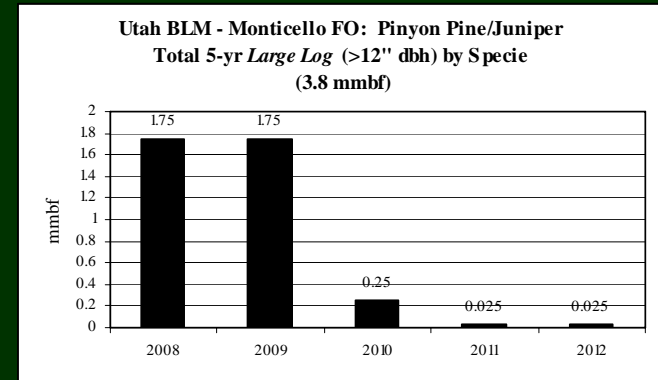
## Pinyon Pine/Juniper: Utah BLM – 3 FOs – large log offerings

### Richfield FO



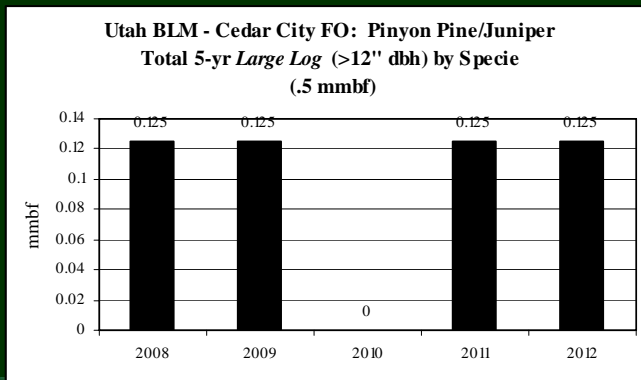
1%

### Monticello FO



28%

### Cedar City FO



4%

**Only Richfield FO  
with levelized supply  
for all 5 years.**

*Let's look at species Summary Sheets for the other top State of Utah CROP species . . .*

# State of Utah CROP (entire state)

State of Utah CROP: **Engelmann Spruce** offering/removal '08 - '12  
 (gT = 29,875 / S = 27.31 mmbf / L = 50.26 mmbf)  
 (83.55 total mmbf)

ROM # ES.1

**Ashley NF: 3 RDs - 4%**  
 (gT = 996 / S = 2.09 / L = .914)

**\*Dixie NF: 4 RDs - 50%**  
 (gT = 22,500 / S = 11 / L = 26.05)  
 \*some volume not currently accessible by roads

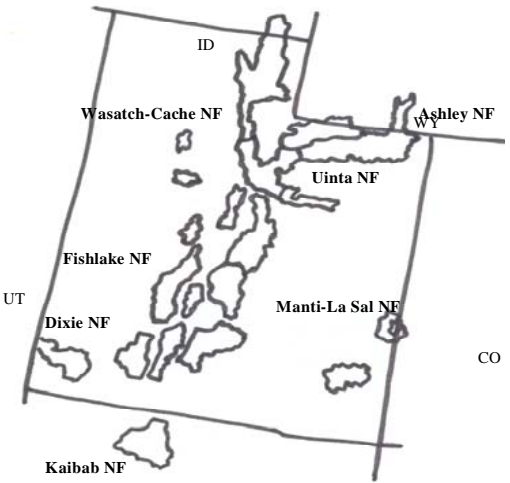
**\*Fishlake NF: 2 Zones - 22%**  
 (gT = 5,575 / S = 9.71 / L = 7.64)  
 \*some volume not currently accessible by roads

**Kaibab NF: 1 RD - 1%**  
 (gT = 794 / S = .318 / L = .03)

**Manti-La Sal NF: 2 RDs - 16%**  
 (gT = 0 / S = 1.95 / L = 11.538)

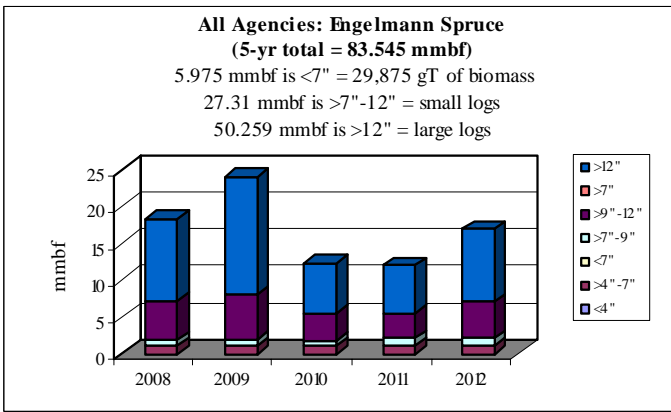
**\*Uinta NF: 1 RD - 4%**  
 (gT = 0 / S = .87 / L = 2.205)  
 \*some volume not currently accessible by roads

gT = green tons (up to 7" dbh)  
 S = small log mmbf (>7"-12" dbh)  
 L = large log mmbf (>12" dbh)



**Wasatch-Cache NF: 3 RDs - 4%**  
 (gT = 0 / S = 1.3 / L = 1.875)

**WY-BLM: 3 FOs - <1%**  
 (gT = 9 / S = .07 / L = .007)



Engelmann spruce	gT	mmbf	
	Biomass	Small Log	Large Log
2008	5884.375	6.09586	11.03984
2009	6139.875	6.83646	15.87184
2010	5921.125	4.24771	6.99684
2011	5952.375	4.24396	6.55184
2012	5977.375	5.88646	9.79934
Totals	29875.125	27.31045	50.2597
%	7%	33%	60%
mmbf	5.975025		

83.545175

# State of Utah CROP (entire state)

**State of Utah CROP: Ponderosa Pine offering/removal '08 - '12**  
 (gT = 53,400 / S = 20.4 mmbf / L = 32.35 mmbf)  
 (63.433 total mmbf)

ROM # PP 1

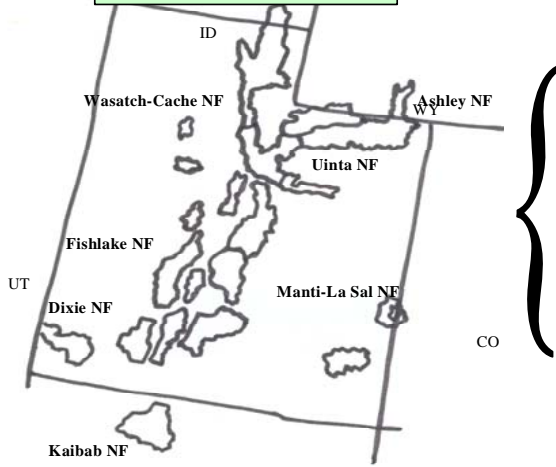
gT = green tons (up to 7" dbh)  
 S = small log mmbf (>7"-12" dbh)  
 L = large log mmbf (>12" dbh)

**\*Ashley NF: 2RDs - 2%**  
 (gT = 7,311 / S = .056 / L = 0)  
 \*some volume not currently accessible by roads

**Dixie NF: 3 RDs - 21%**  
 (gT = 22,500 / S = 4.45 / L = 4.15)

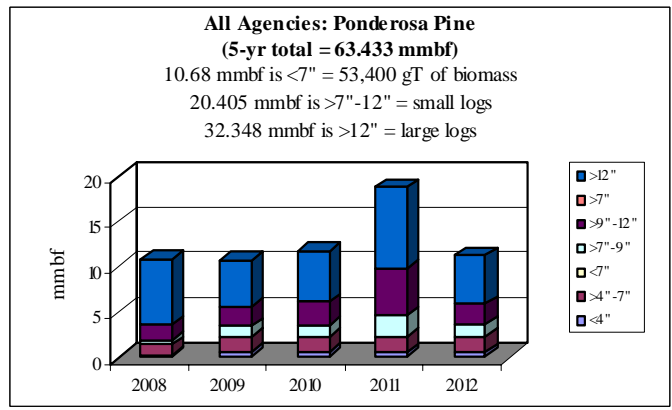
**Kaibab NF: 1 RD - 64%**  
 (gT = 20,177 / S = 11.34 / L = 25.125)

**Manti-La Sal NF: 2 RDs - 9%**  
 (gT = 0 / S = 2.75 / L = 2.76)



**AZ-BLM: 1 FO - 4%**  
 (gT = 2,812 / S = 1.62 / L = .31)

**UT-BLM: 1 FO - <1%**  
 (gT = 600 / S = .18 / L = 0)



Ponderosa pine	gT	mmbf	
	Biomass	Small Log	Large Log
2008	7105.5	2.2367	7.227
2009	11382	3.2871	5.1303
2010	11738.25	3.79335	5.6303
2011	11587.5	7.5442	8.9803
2012	11587.5	3.5442	5.3803
Totals	53400.75	20.40555	32.3482
%		32%	51%
mmbf	10.68015		

63.4339

*How levelized will the supply be for all species?*

*Let's take a look . . .*

## Levelized supply for five years?

(R = relatively)

	gT Biomass		Small Logs		Large Logs	
	yes	no	yes	no	yes	no
<i>Pinyon Pine/Juniper</i>		✓		✓		✓
<i>Engelmann Spruce</i>	✓			✓		✓
<i>Ponderosa Pine</i>	R		R			✓
<i>Aspen</i>	✓			✓		✓
<i>Lodgepole Pine</i>		✓		✓	R	
<i>Douglas Fir</i>		✓		✓		✓
<i>SubAlpine Fir</i>		✓	R			✓
<i>White Fir</i>	R			✓		✓
<i>Mixed Firs</i>	✓			✓	R	
<i>Hardwoods</i>	✓		✓		✓	

Looking at the *Pinyon Pine/Juniper* . . .

- ✓ There will be an *unlevelized & declining supply of green tonnage biomass* that will impact 47% of the total biomass volume over the next 5 years.
- ✓ There will be an *unlevelized & declining supply of small logs in this specie* that will impact ~40% of the total CROP small log supply.
- ✓ Similarly, there will be an *unlevelized supply of large logs*, but this will impact ~10% of the total 5-yr volume.

*Here's how it looks on an agency-by-agency basis . . .*



# State of Utah CROP (entire state)

Levelized annual supply for  
pinyon pine/juniper?  
(Total 5-yr volume)

*For national forests  
where volume offered,  
fairly levelized supply!*

<i>R = relatively</i>		<i>Pinyon Pine/Juniper</i> (Total all NFs and BLM = 170.85 mmbf; includes gT)		
		<i>yes</i>	<i>no</i>	<i>Comments</i>
<i>Ashley NF</i>	(<1% of 5-yr vol.)			
	Vernal & Flaming Gorge			No volume offered in '08-'12
	Roosevelt/Duchesne	✓		~.15 mmbf/yr
<i>Dixie NF</i>	(1% of 5-yr vol.)			
	Powell, Escalante, & Cedar City			No volume offered in '08-'12
	Pine Valley	✓		Average ~ .4 mmbf/yr
<i>Fishlake NF</i>	(3% of 5-yr vol.)			
	East Zone	R		From .47 mmbf to .57 mmbf/yr
	West Zone	R		From .45 mmbf to .435 mmbf/yr
<i>Kaibab NF</i>	(<1% of 5-yr vol.)			
	North Kaibab	R		From .266 mmbf to .119 mmbf/yr for last four years
<i>Manti-La Sal NF</i>	(<1% of 5-yr vol.)			
	Sanpete, Monticello, & Moab			No volume offered in '08-'12
	Ferron/Price		✓	No offering in '08 & '10
<i>Uinta NF</i>	(1% of 5-yr vol.)			
	Heber		✓	2.23 mmbf ; only offered in 2010
<i>Wasatch-Cache NF</i>	(0% of 5-yr vol.)			No volume offered in all RDs

# State of Utah CROP (entire state)

**Levelized annual supply for  
pinyon pine/juniper?**  
(Total 5-yr volume)

***For BLM, primarily  
levelized supply!***

		<b><i>Pinyon Pine/Juniper</i></b> (Total all NFs and BLM = 170.85 mmbf; includes gT)		
<i>R = relatively</i>		<i>yes</i>	<i>no</i>	<i>Comments</i>
<b><i>Utah BLM</i></b>	(90% of 5-yr vol.)			
	Salt Lake		✓	From 13 mmbf/yr to 1.1 mmbf/yr
	Price	✓		~ 1.6 mmbf/yr
	Fillmore	R		~ 1.5 mmbf/yr
	Monticello		✓	From 8.5 mmbf/yr to 1.6 mmbf/yr
	Moab	R		~ 2 mmbf/yr
	Cedar City		✓	From 32 mmbf/yr to .75 mmbf/yr
	GSENM	✓		~ .4 mmbf/yr
	Richfield	R		~ 10 mmbf/yr
	St. George	✓		75,000 bf/yr
	Kanab	✓		75,000 bf/yr
<b><i>Arizona BLM</i></b>	(3% of 5-yr vol.)			
	Arizona Strip & GCPNM	R		From 1.3 mmbf/yr to .8 mmbf/yr
<b><i>Wyoming BLM</i></b>	(<1% of 5-yr vol.)	✓		5,000 bf/yr
<b><i>Colorado BLM</i></b>	(1% of 5-yr vol.)			
	Little Snake	✓		56,000 by/yr
	White River	✓		.14 mmbf/yr

Overall . . . *better coordination* of resource offering in *pinyon pine/juniper, Douglas fir, and white fir* likely preferred to help:

- **Reduce investor risk**
- **Increase purchaser confidence**
- **Achieve fuel load reduction goals**
- **Achieve forest restoration goals**

**What about NEPA?**  
**It's important to know!**

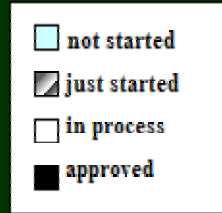
*... here's how it looks*

## NEPA Picture for CROP Landscape

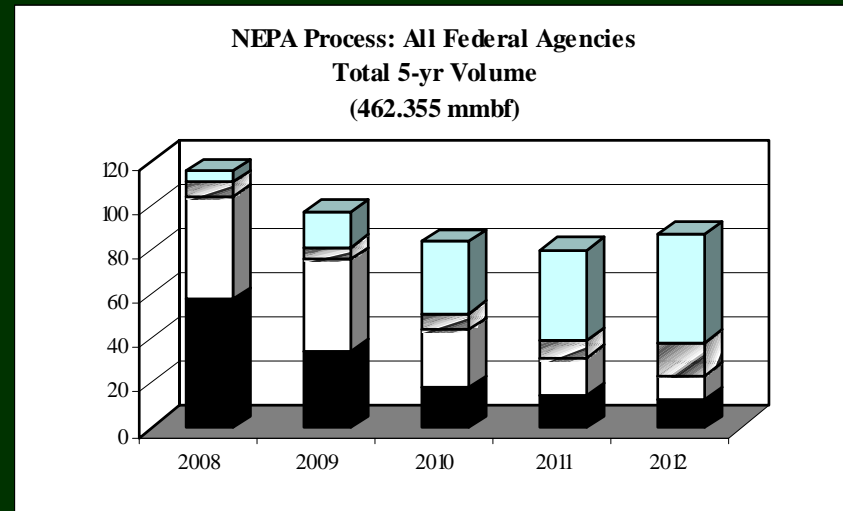
### All NF & BLM lands:

89% of 5-yr total = (462.35 mmbf; includes gT as mmbf)

(Note: no NEPA information available for Wyoming BLM & Colorado BLM)



	<i>mmbf</i>	<i>% of total</i>
<i>Approved</i>	135.3	29%
<i>In process</i>	142.54	31%
<i>Just started</i>	42.08	9%
<i>Not started</i>	142.43	31%



60% of CROP resource offering either NEPA approved or in-process; but little approved in 2007 & 2008 & significant volume just starting NEPA process.



*. . . but story best told on agency-by-agency basis.*

## NEPA Risk Rating

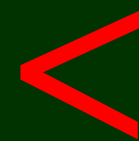
<b>1</b> Lowest	<b>2</b> Low	<b>3</b> Medium	<b>4</b> <i>High</i>	<b>5</b> <i>Highest</i>
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### For low risk rating, 3 key desired attributes:

- ✓ Volume *approved* in first 2 years, followed by *in-process*.
- ✓ Consistency in supply; no dramatic gaps from year to year (eg: *approved/not started/in-process*).
- ✓ Overall – no major emphasis on *just started* or *not started*.

*NEPA Risk Rating Summary:*

	<b>mmbf affected</b>	<b>% of 5-yr total</b>
<b>lowest</b>	82.6	18%
<b>low</b>	61	13%
<b>medium</b>	13.8	28%
<b>high</b>	99.3	22%
<b>highest</b>	89.7	19%



*Over 41% in high risk designation*



# State of Utah CROP (entire state)

## NEPA Risk Rating Summary:

<b>Ashley F</b>	<b>Total 5-yr volume</b>	<b>NEPA Risk Rating</b>
Flaming Gorge	16.75 mmbf	<b>5</b>
Roosevelt/Duchesne	9.16 mmbf	<b>4</b>
Vernal	34.63 mmbf	3

<b>Fishlake NF</b>	<b>Total 5-yr volume</b>	<b>NEPA Risk Rating</b>
East Zone	38.2 mmbf	3
West Zone	9.64 mmbf	1

<b>Dixie NF</b>	<b>Total 5-yr volume</b>	<b>NEPA Risk Rating</b>
Cedar City	34.3 mmbf	<b>4</b>
Escalante	30.95 mmbf	<b>4</b>
Pine Valley	2 mmbf	1
Powell	17 mmbf	2

<b>Kaibab NF</b>	<b>Total 5-yr volume</b>	<b>NEPA Risk Rating</b>
North Kaibab	45.05 mmbf	3

**NEPA Risk Rating Summary**  
**(cont.):**

<b>Manti-La Sal NF</b>	<b>Total 5-yr volume</b>	<b>NEPA Risk Rating</b>
Ferron/Price	15.05 mmbf	<b>5</b>
Moab	1.16 mmbf	<b>4</b>
Monticello	4.35 mmbf	<b>5</b>
Sanpete	1.5 mmbf	<b>5</b>

<b>Wasatch-Cache NF</b>	<b>Total 5-yr volume</b>	<b>NEPA Risk Rating</b>
Kamas	1.66 mmbf	<b>5</b>
Logan	1.96 mmbf	<b>5</b>
Ogden	10.32 mmbf	<b>4</b>
Mountain View/Evanston	13.41 mmbf	<b>4</b>

<b>Uinta NF</b>	<b>Total 5-yr volume</b>	<b>NEPA Risk Rating</b>
Heber	11.94 mmbf	<b>3</b>

## NEPA Risk Rating Summary

(cont.):

Utah BLM	Total 5-yr volume	NEPA Risk Rating
Cedar City	36.81 mmbf	1
Fillmore	9.17 mmbf	2
GSENM	2 mmbf	5
Kanab	.037 mmbf	1
Moab	10.6 mmbf	1
Monticello	22.7 mmbf	1
Price	.78 mmbf	1
Richfield	46.425 mmbf	5
Salt Lake	26.85 mmbf	2
St. George	.037 mmbf	1

Arizona BLM	Total 5-yr volume	NEPA Risk Rating
Arizona Strip & GCPNM	8 mmbf	2

# State of Utah CROP (entire state)

What about road access to supply? Here's how it looks . . .

Agency	5-yr total volume	Affected by No Current Road Access		
	mmbf	mmbf	% of total volume with no road access	Species affected
Ashley NF	60.547	22.787	38%	DF, PP, ASP,LP, SaF
Dixie NF	84.25	10	12%	ES, SaF
Fishlake NF	47.838	4.2	9%	ES, Pp/J, SaF, ASP
Kailbab NF	45.05	0	0%	
Manti-La Sal NF	22.058	0	0%	
Uinta NF	11.94	.09	1%	ES, ASP,LP, SaF
Wasatch-Cache NF	27.36	0	0%	
Arizona BLM	8	0	0%	
CO BLM	45	0	0%	
Utah BLM	155.31	.01	<1%	Pp/J
WY BLM	2.87	0	0%	
Utah Trust Lands	11.8	3.86	33%	DF, ASP
<b>Total</b>	<b>522.027</b>	<b>40.948</b>	<b>8%</b>	

*Conclusions for Utah CROP . . .*

*Not a bad picture . . .*

✓ Total annual volume (~ 53 mmbf/yr) may be sufficient to ***invite investment in small log processing*** and create viable options for smaller-scale biomass to energy use.

✓ ***Sufficient volume already NEPA approved or in-process*** to reduce investor risk and increase purchaser confidence.

*but . . .*

✓ ***Levelizing of supply between agencies from year to year is needed.***

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