

**Southern Oregon/Northern California CROP**  
***A Summary of CROP Landscape Analyses Results***

**Presented by**  
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## Oregon/California CROP: Lakeview, OR (centerpoint)



- *3 States*
- *4 National Forests*
- *10 Ranger Districts*
- *8 BLM Districts*
- *9 Counties*
- *State Lands*
- *Private Lands*

# Southern Oregon/Northern California CROP

Species	California (mmbf)	Oregon (mmbf)	
	Private lands (NIPF and Industrial) (37%)	NIPF Lands (2 %)	Forest Industry (61%)
<b>Douglas fir (1%)</b> 5-yr = 19.397 mmbf	19.39	0	0
<b>Ponderosa pine (41%)</b> 5-yr = 520.40 mmbf	111.88	13.19	395.33
<b>Hemlock/fir (~8%)</b> 5-yr = 100.18 mmbf	100.18	0	0
<b>White fir (16%)</b> 5-yr = 206.24 mmbf	0	7.16	199.07
<b>Sugar pine (~1%)</b> 5-yr = 13.675 mmbf	0	.40	13.26
<b>Lodgepole pine (13%)</b> 5-yr = 158.94 mmbf	0	5.87	153.06
<b>Port orford cedar (&lt;1%)</b> 5-yr = .00114 mmbf	.001	0	0
<b>Other conifers (17%)</b> 5-yr = 220.27 mmbf	218	.134	2.14
<b>Incense cedar (&lt;1%)</b> 5-yr = 20.27 mmbf	12.3	.27	7.7
<b>Other hardwoods (&lt;1%)</b> 5-yr = 1.757 mmbf	1.757	0	0

## Historical Performance

*Private lands 2001 – 2005  
(in CROP landscape)*

**Total 5-yr = 1,261 mmbf**

**OR = 63%**

**CA = 37%**

**National Forests: 10 Ranger Districts**

• **Fremont-Winema NF:**

Chemult, Chiloquin/Klamath,  
Lakeview/Bly, Silver Lake/Paisley

• **Shasta-Trinity NF:**

Mt. Shasta/McCloud

• **Modoc NF:**

Warner Mt., Devils Garden, Big  
Valley, Doublehead

• **Klamath NF:**

Goosenest

*8 BLM Districts*

**OR:** Burns, Lakeview, Prineville

**CA:** Alturas, Redding, Eagle  
Lake, Surprise

**NV:** Winnemucca

*9 Counties:*

**OR:** Klamath, Lake, Harney

**CA:** Modoc, Lassen, Siskiyou,  
Shasta

**NV:** Washoe, Humboldt

*What was asked for ( 5-yr. Period):*

- *Volume* (by mmbf; green/dry tons; ccf ) w/conversions
- *Diameter sizes* <4” 4”-7” 7”-9” 9”-12” >12”
- *Species* (10 species evaluated for resource flow)
- *Harvest “type”*: fuel load reduction, timber sales, PCT, post and pole
- *Location* of resource offering
- *NEPA phase* for each resource offering
- *Road accessibility* for each resource offering

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



## Overall:

Year	Total Biomass (1,179,924.7 gT)	% of 5-yr volume
2006	285,125	24%
2007	220,737	19%
2008	270,861	23%
2009	215,030	18%
2010	188,170	16%

*Biomass = 29%*  
*(up to 7" dbh)*

Total Small Log (284.317 mmbf)	% of 5-yr volume
64.29	23%
57.27	20%
58.48	20%
54.33	19%
49.93	18%

*Small Logs = 35%*  
*(>7" – 12" dbh)*

Total Large Log (283.949 mmbf)	% of 5-yr volume
66.64	23%
55.62	20%
55.78	20%
59.22	21%
46.69	16%

*Large Logs = 35%*  
*(>12" dbh)*

## 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
CA-BLM	5,150.7	5.607	2.842	1%
OR-BLM	79,270	29.534	16.884	8%
Fremont-Winema NF	555,953	141.945	74.051	41%
Shasta-Trinity NF	48,750	40	85	17%
Modoc NF	436,700	21.845	45.901	19%
Klamath NF	53,750	36.15	16.8	8%
OR DSL	126	3.324	15.289	2%
OR DOF	224	5.91	27.181	4%

Is there a change? *Yes!*

<b>Winema-Fremont NF</b>	<b>'01-'05 (mmbf)</b>	<b>Thru '09 (mmbf includes gT)</b>
<i>White fir</i>	27.9	62.8
<i>Incense cedar</i>	7.07	0
<i>Ponderosa pine</i>	43.1	198.9
<i>White pine</i>	.229	0
<i>Other conifers</i>	7.9	0
<i>Lodgepole pine</i>	12.3	65.4
<b>Total</b>	<b>93.4</b>	<b>327.1</b>

**Fremont-Winema NF:** (gT= 555,953; Small log = 141.94 mmbf; Large log = 74.051 mmbf)

Ranger Districts	5-yr total (Biomass = gT)	5-yr total Small log (mmbf)	5-yr total Large log (mmbf)
SE Zone (Lakeview-Bly)	165,120	20.56	37.44
NE Zone (Silver Lake-Paisley)	95,606	39.69	9.96
SW Zone (Chiloquin-Klamath)	125,360	42.9	13
NW Zone (Chemult)	169,866	38.79	13.65

**Klamath NF:** (gT= 53,750; Small log = 36.15 mmbf; Large log = 16.8 mmbf)

Ranger Districts	5-yr total (Biomass = gT)	5-yr total Small log (mmbf)	5-yr total Large log (mmbf)
Goosenest	53,750	36.15	16.8

**Shasta-Trinity NF:** (gT= 48,750; Small log = 40 mmbf; Large log = 85 mmbf)

Ranger Districts	5-yr total (Biomass = gT)	5-yr total Small log (mmbf)	5-yr total Large log (mmbf)
Mt Shasta McCloud Mgmt. Unit	48,750	40	85

**Modoc NF:** (gT= 436,700; Small log = 21.85 mmbf; Large log = 45.901 mmbf)

Ranger Districts	5-yr total (Biomass = gT)	5-yr total Small log (mmbf)	5-yr total Large log (mmbf)
Warner Mtn.	134,000	7.26	15.68
Devils Garden	96,700	5.33	11.17
Big Valley	183,000	6.35	13.55
Doublehead	23,000	2.9	5.49

**OR BLM:** (gT= 79,270; Small log = 29.53 mmbf; Large log = 16.88 mmbf)

Field Offices	5-yr total (Biomass = gT)	5-yr total Small log (mmbf)	5-yr total Large log (mmbf)
Burns	10,512	2.65	.629
Lakeview	68,758	26.88	16.25

**CA BLM:** (gT= 5,150.7; Small log = 5.61 mmbf; Large log = 2.842 mmbf)

Field Offices	5-yr total (Biomass = gT)	5-yr total Small log (mmbf)	5-yr total Large log (mmbf)
Eagles Lake	2,145	2.73	.0741
Alturas	2,740	2.59	1.96
Surprise	265.6	.29	.145

<i>By Species</i>		5-yr total (Biomass = gT)	5-yr total Small log (mmbf)	5-yr total Large log (mmbf)
<b>Ponderosa pine</b>	(50% of 5-yr. total)	647,880	149.47	123.67
<b>White fir</b>	(25% of 5-yr. total)	262,355	58.06	89.045
<b>Jeffrey pine</b>	(1% of 5-yr. total)	33,309	2.06	3.114
<b>Juniper</b>	(5% of 5-yr. total)	38,350	19.88	12.77
<b>Douglas fir</b>	(1% of 5-yr. total)	12,953	3.89	2.13
<b>Lodgepole pine</b>	(14% of 5-yr. total)	173,325	42.37	38.125
<b>Incense cedar</b>	(1% of 5-yr. total)	2,500	1.36	2.495
<b>Knobcone pine</b>	(1% of 5-yr. Total)	2,500	1.75	2.5
<b>Sugar pine</b>	(<1% of 5-yr. Total)	2,500	1.025	.505
<b>Other conifers</b>	(2% of 5-yr. Total)	4,250	4.45	9.6

A very good picture for small log processing with largest percentage of flow to be in the >9"-12" strata, and with an annual volume of ~ 57 mmbf.

(% of total volume)	4"-7"	>7"-9"	>9"-12"	<4"
<i>Ponderosa pine</i>	22%	9%	28%	11%
<i>White fir</i>	17%	8%	21%	9%
<i>Jeffrey pine</i>	42%	3%	14%	14%
<i>Juniper</i>	13%	18%	31%	6%
<i>Douglas fir</i>	23%	17%	28%	7%
<i>Lodgepole pine</i>	21%	12%	25%	9%
<i>Incense cedar</i>	11%	12%	19%	0%
<i>Knobcone pine</i>	11%	16%	21%	0%
<i>Sugar pine</i>	25%	25%	26%	0%
<i>Other conifers</i>	6%	7%	23%	0%



## 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**

*Let's look at Ponderosa Pine  
as an example . . .*

# Southern Oregon/Northern California CROP

Oregon: *Ponderosa Pine* CROP offering '06 – '10  
(gT = 647,880 / S = 149.47 mmbf / L = 123.67 mmbf)

ROM # PP 1.1

PP= *ponderosa pine*

## BLM:

- A *Eagle Lake District (CA)\**
- B *Alturas District (CA)*
- C *Surprise District (CA)*
- D *Burns District (OR)*
- E *Lakeview District (OR)*

## OR - DOF:

- F *DOF*

## Fremont-Winema NF:

- G *SE Zone–Lakeview/Bly RDs*
- H *NE Zone –Silver Lake/Paisley RDs*
- I *SW Zone–Chiloquin/Klamath RDs*
- J *NW Zone–Chemult RD*

## Shasta-Trinity NF:

- K *Mt. Shasta-McCloud Mgt. Unit*

## Modoc NF:

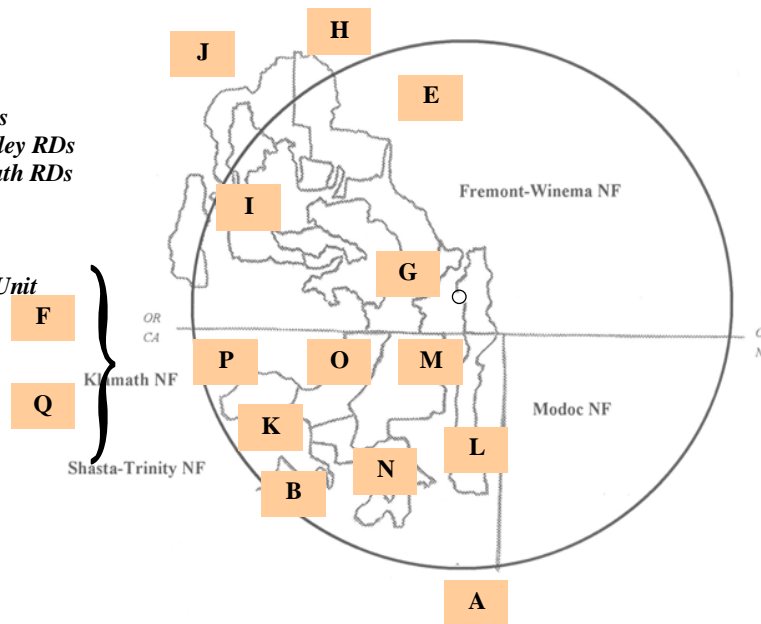
- L *Warner Mtn. RD*
- M *Devils Garden RD*
- N *Big Valley RD*
- O *Doublehead RD*

## Klamath NF:

- P *Goosenest RD*

## OR - DSL:

- Q *DSL*



*Locator Map*

\*italics/bold = species offering in CROP

# Southern Oregon/Northern California CROP

## Summary Sheet

**Oregon: Ponderosa Pine CROP offering/removal '06 - '10**  
 (gT = 647,880 / S = 149.47 mmbf / L = 123.67 mmbf)

ROM # PP 1

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

**Fremont-Winema NF: 4 Zones - 49%**  
 (gT = 275,342 / S = 96.2 / L = 47.63)

**Klamath NF: 1 RD - 10%**  
 (gT = 38,787 / S = 21.86 / L = 8.645)

**Shasta-Trinity NF: 1 RD - 11%**  
 (gT = 13,875 / S = 12.175 / L = 29.4)

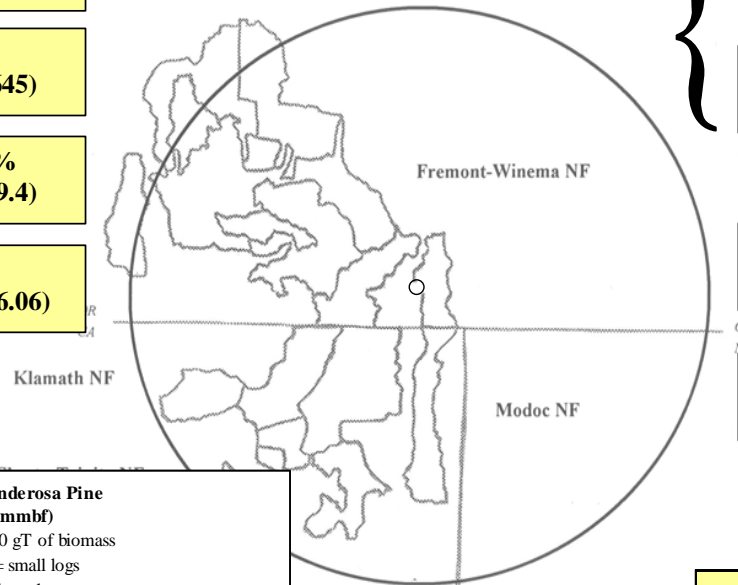
**Modoc NF: 4 RDs - 24%**  
 (gT = 293,994 / S = 11.168 / L = 26.06)

**CA-BLM: 2 districts - <1%**  
 (gT = 854.6 / S = .944 / L = .641)

**OR-BLM: 1 district - 3%**  
 (gT = 24,852 / S = 4.014 / L = 2.334)

**OR-DSL: 1%**  
 (gT = 63 / S = 1.118 / L = 3.224)

**OR-DOF: 2%**  
 (gT = 112 / S = 1.987 / L = 5.731)

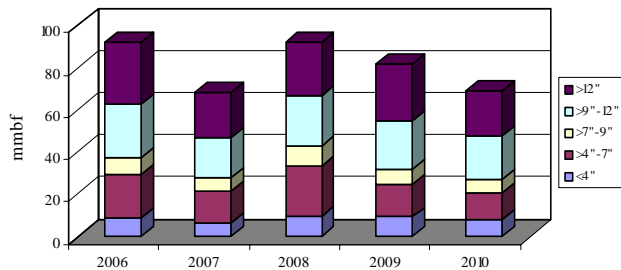


**Oregon- All Agencies: Ponderosa Pine**  
 (5-yr total = 402,714 mmbf)

129,576 mmbf is <7" = 647,880 gT of biomass

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

123.67 mmbf is >12" = large logs



	gT	mmbf	
	Biomass	Small Log	Large Log
2006	145109.6253	33.562701	29.22803
2007	107579.185	25.608053	21.359494
2008	168476.42	33.019984	25.493404
2009	123149.516	30.273234	26.465154
2010	103565.516	27.006234	21.122154
Totals	647880.2623	149.470206	123.668236
%	32%	37%	31%
mmbf	129.5760525		

402.7144945

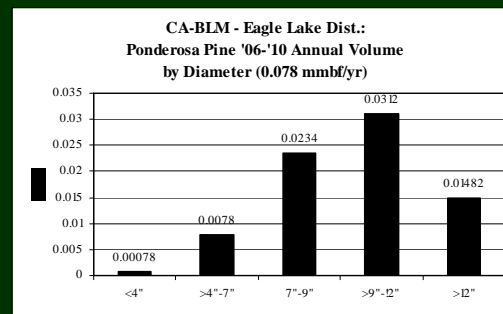
# Detailed Breakout by Supplier Northern California CROP

**Ponderosa Pine CROP offering '06 – '10**  
(by agency)

ROM # PP 1.2

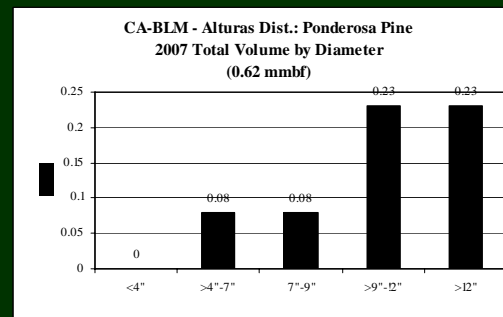
gT = green tons (up to 7" dbh)  
S = small log mmbf (>7"-12" dbh)  
L = large log mmbf (>12" dbh)

<b>Ponderosa Pine CA-BLM: Eagle Lake Dist.</b>	<b>5-yr = .39 mmbf; 0.078 mmbf/yr</b>
	<ul style="list-style-type: none"> <li>Level supply from year to year</li> </ul>
gT = 2,145	<ul style="list-style-type: none"> <li>&lt;4" = 1% (.0039 mmbf)</li> <li>&gt;4"-7" = 10% (.039 mmbf)</li> </ul>
S = .273	<ul style="list-style-type: none"> <li>&gt;7"-9" = 30% (.117 mmbf)</li> <li>&gt;9"-12" = 40% (.156 mmbf)</li> </ul>
L = .0741	<ul style="list-style-type: none"> <li>&gt;12" = 19% (.0741 mmbf)</li> </ul>

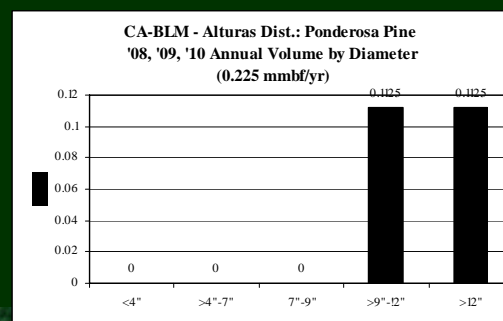
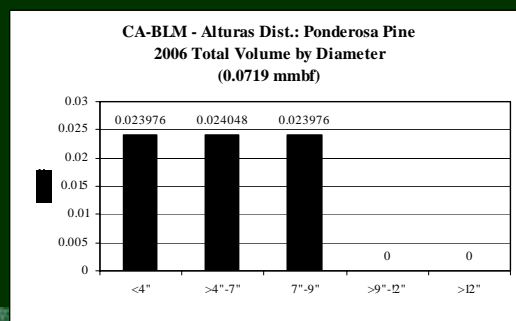


'06 – '10

<b>Ponderosa Pine CA-BLM: Alturas Dist.</b>	<b>5-yr = 1.367 mmbf</b>
	<ul style="list-style-type: none"> <li>Unlevel supply until 2008</li> </ul>
gT = 640	<ul style="list-style-type: none"> <li>&lt;4" = 2% (.024 mmbf)</li> <li>&gt;4"-7" = 7% (.104 mmbf)</li> </ul>
S = .671	<ul style="list-style-type: none"> <li>&gt;7"-9" = 7% (.104 mmbf)</li> <li>&gt;9"-12" = 42% (.567 mmbf)</li> </ul>
L = 5.67	<ul style="list-style-type: none"> <li>&gt;12" = 42% (.567 mmbf)</li> </ul>



'06 – '10



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 .

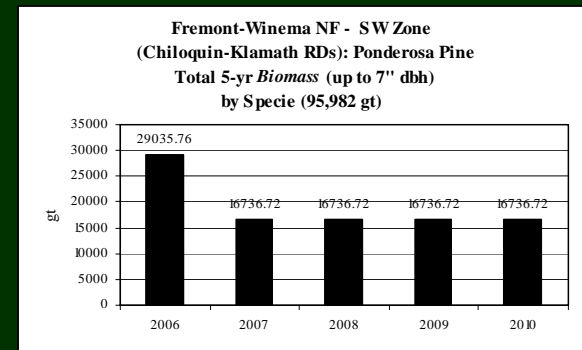
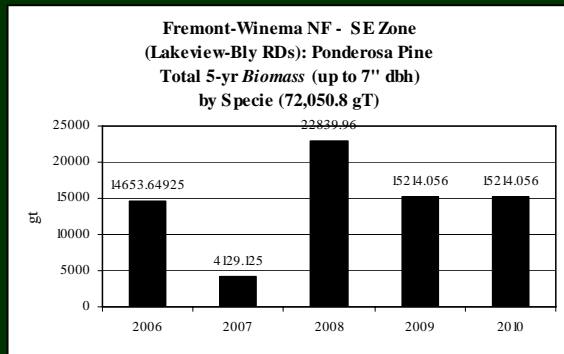
*Let's take a look ...*

## Ponderosa Pine: Fremont-Winema - NF 4 RDs - *biomass offerings*

(% of NF offering of 275,312 gT)

**SE Zone (Lakeview-Bly RDs) - 26%**

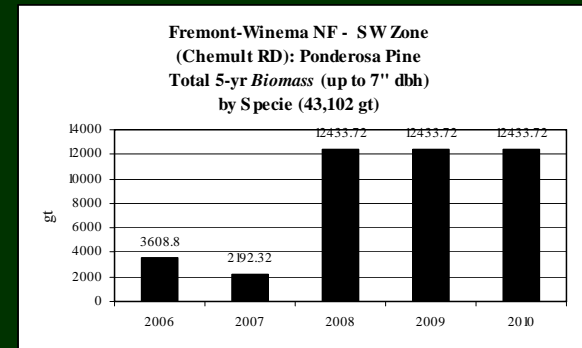
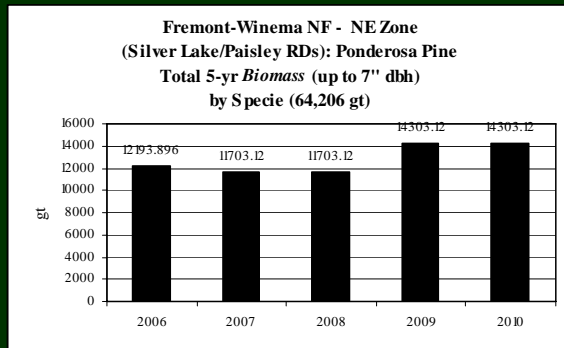
**SW Zone (Chiloquin-Klamath RDs) - 35%**



**Unlevelized supply in 2 of 4 RDs**

**NE Zone (Silver Lake-Paisley RDs) - 23%**

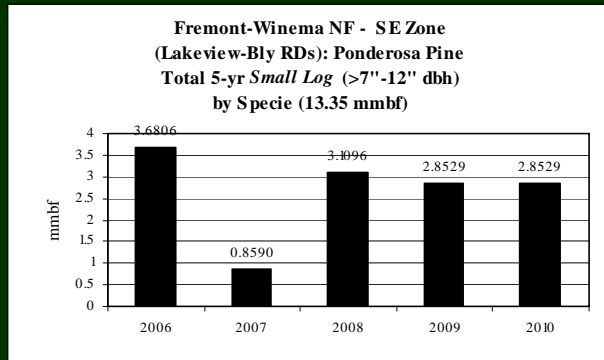
**NW Zone (Chemult RD) - 16%**



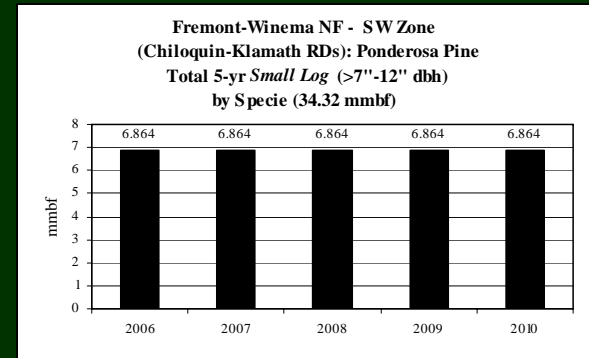
# Southern Oregon/Northern California CROP

## Ponderosa Pine: Fremont-Winema - NF 4 RDs – small log offerings (% of NF offering of 96 mmbf)

**SE Zone (Lakeview-Bly RDs) - 14%**

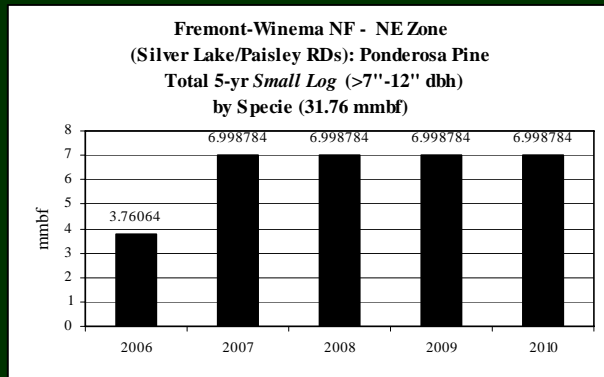


**SW Zone (Chiloquin-Klamath RDs) - 36%**

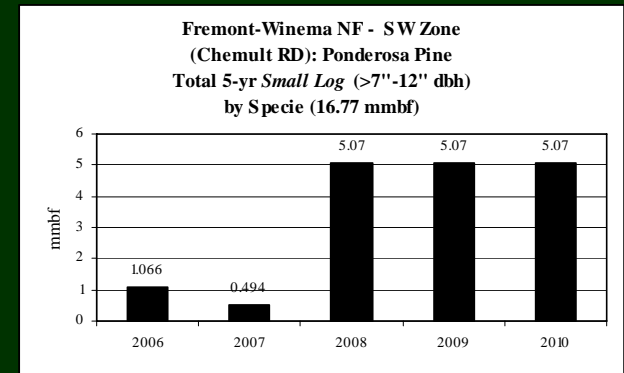


**Unleveled supply  
in 2 of 4 RDs**

**NE Zone (Silver Lake-Paisley RDs) - 33%**



**NW Zone (Chemult RD) - 17%**

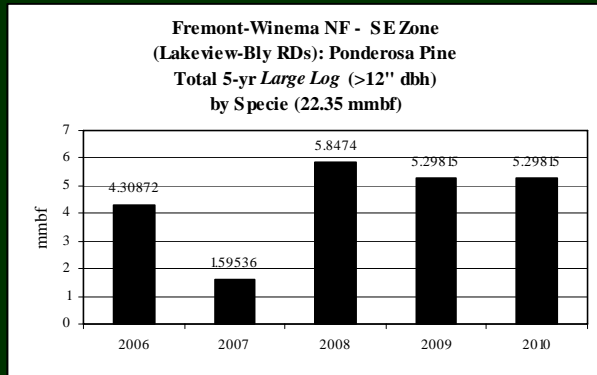




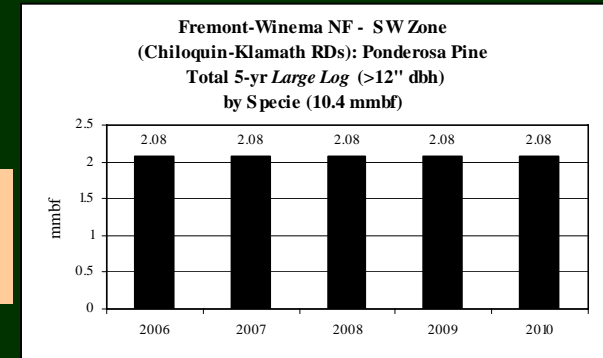
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## Ponderosa Pine: Fremont-Winema - NF 4 RDs – large log offerings (% of NF offering of 47.63 mmbf)

**SE Zone (Lakeview-Bly RDs) - 47%**

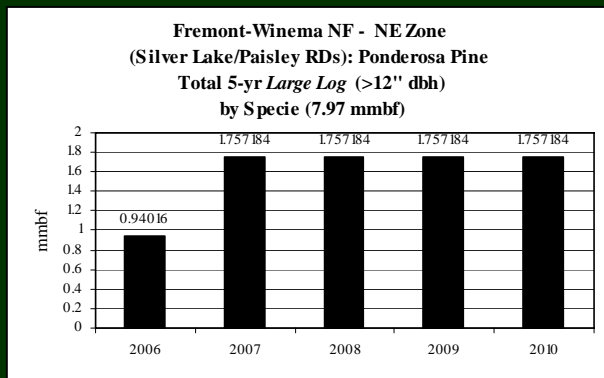


**SW Zone (Chiloquin-Klamath RDs) - 22%**

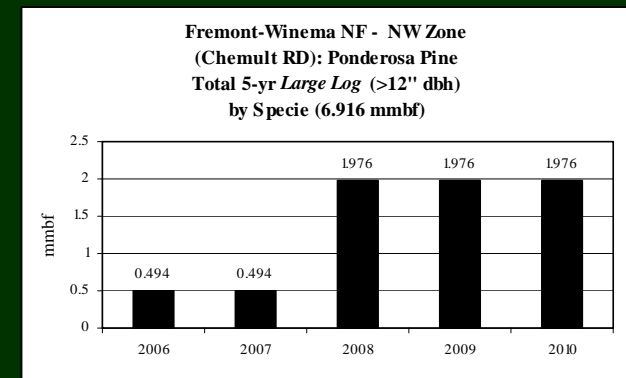


**Fairly level supply  
 in 3 of 4 RDs**

**NE Zone (Silver Lake-Paisley RDs) - 17%**



**NW Zone (Chemult RD) - 14%**





*Let's look at species Summary Sheets for  
other top Oregon CROP species . . .*

# Southern Oregon/Northern California CROP

**Oregon: White Fir CROP offering '06 - '10**  
 (gT = 262,355 / S = 58.058 mmbf / L = 89.045 mmbf)

ROM # WF 1

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

**Fremont-Winema NF: 4 Zones - 32%**  
 (gT = 120,586 / S = 20.575 / L = 18.173)

**Klamath NF: 1 RD - 11%**  
 (gT = 8,762 / S = 13.047 / L = 7.735)

**Shasta-Trinity NF: 1 RD - 11%**  
 (gT = 7,500 / S = 5.5 / L = 15)

**OR-DOF: 9%**  
 (gT = 0 / S = .9 / L = 17.91)

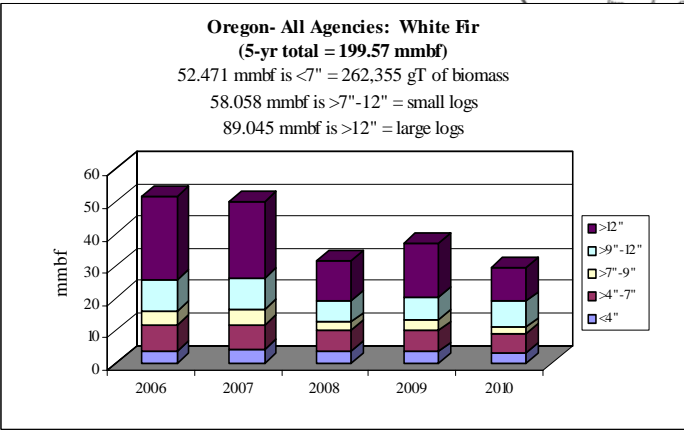


**CA-BLM: 1 district - <1%**  
 (gT = 0 / S = .862 / L = .862)

**OR-BLM: 1 district - 14%**  
 (gT = 27,466 / S = 12.832 / L = 10.34)

**OR-DSL: 5%**  
 (gT = 0 / S = .506 / L = 10.075)

**Modoc NF: 4 RDs - 16%**  
 (gT = 98,040 / S = 3.835 / L = 8.949)



	gT	mmbf	
	Biomass	Small Log	Large Log
2006	59448.7167	13.930394	25.66149
2007	58095.99	14.585182	23.740662
2008	51041.11	9.130172	12.278572
2009	49064.862	10.422272	16.903472
2010	44704.862	9.989772	10.460972
Totals	262355.5407	58.057792	89.045168
%	26%	29%	45%
mmbf	52.47110814		

199.5740681

# Southern Oregon/Northern California CROP

Oregon **Lodgepole Pine** CROP offering '06 - '10  
 (gT = 173,325 / S = 42.37 mmbf / L = 38.125 mmbf)

ROM # LP 1

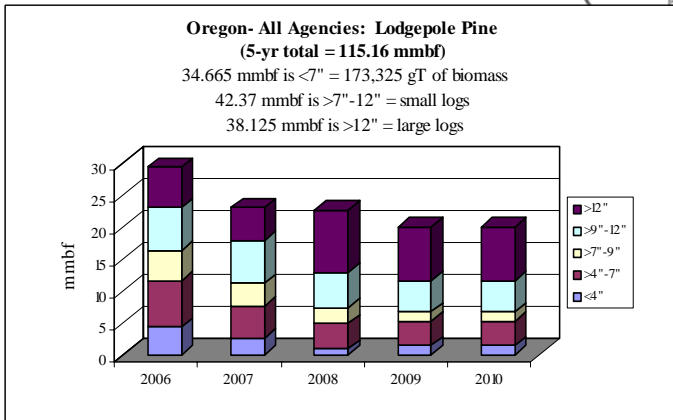
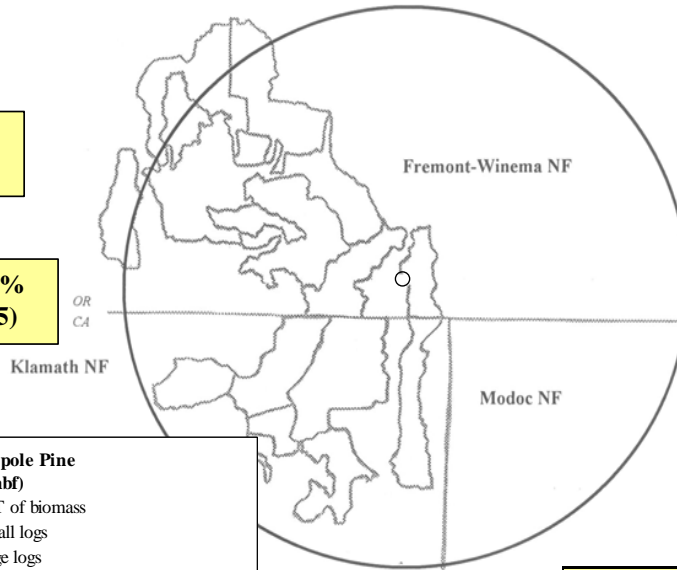
gT = green tons (up to 7" dbh)  
 S = small log mmbf (>7"-12" dbh)  
 L = large log mmbf (>12" dbh)

Shasta-Trinity NF: 1 RD - 37%  
 (gT = 13,125 / S = 12.875 / L = 26.5)

Fremont-Winema NF: 4 Zones - 57%  
 (gT = 160,025 / S = 25.17 / L = 8.245)

OR-DSL: 2%  
 (gT = 63 / S = 1.557 / L = 1.217)

OR-DOF: 4%  
 (gT = 112 / S = 2.768 / L = 2.163)



	gT	mmbf	
	Biomass	Small Log	Large Log
2006	58279.4068	11.413520	6.32408
2007	38092.2185	10.287424	5.151824
2008	24265.9185	7.994424	9.779824
2009	26343.7785	6.337369	8.434579
2010	26343.7785	6.337369	8.434579
Totals	173325.1008	42.370106	38.124886
%	30%	37%	33%
mmbf	34.66502016		

115.1600122



*How levelized will the supply be?*

*Let's take a look . . .*

## Levelized supply for five years?

(R = relatively; NA = Not applicable)

	gT Biomass		Small Logs		Large Logs	
	yes	no	yes	no	yes	no
<i>Ponderosa pine</i>		✓	R		R	
<i>White fir</i>		✓	✓			✓
<i>Jeffrey pine</i>		✓	✓		✓	
<i>Juniper</i>		✓		✓	R	
<i>Douglas fir</i>		✓		✓		✓
<i>Lodgepole pine</i>		✓		✓	R	
<i>Incense cedar</i>		✓		✓		✓
<i>Knobcone pine</i>		✓		✓		✓
<i>Sugar pine</i>		✓		✓	✓	
<i>Other conifers</i>		✓		✓		✓

Looking at the *Ponderosa pine*. . .

- ✓ There will be a *unlevelized supply of green tonnage biomass in this specie offering* over the next five years. Variations range from 20,000 to 40,000 gT per year.
- ✓ This will impact 55% of the total biomass volume to be offered in the CROP landscape.
- ✓ There will be a *relatively levelized supply of small and large log volume in this specie offering* in the CROP landscape that will affect 53% of the total small log volume and 44% of the total large log volume.

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

***Ponderosa Pine***  
(402.714 mmbf; includes gT)

		<i>Biomass</i>	<i>Small log</i>	<i>Large log</i>
<b>CA-BLM</b>	(<1% of 5-yr vol.) Eagle Lake	Y	Y	Y
	Alturas	N	N	N
<b>OR-BLM</b>	(3% of 5-yr vol.) Lakeview	N	N	N
	<b>Fremont-Winema NF</b>	(49% of 5-yr vol.) Lakeview/Bly	N	N
Silver Lake/Paisley		R	Y	R
Chiloquin/Klamath		R	Y	Y
Chemult		N	N	R
<b>Shasta-Trinity NF</b>	(11% of 5-yr vol.) Mt. Shasta-McCloud	N	N	N
	<b>Modoc NF</b>	(24% of 5-yr vol.) Warner Mtn.	N	N
Devil's Garden		N	N	N
Big Valley		N	R	R
Doublehead		N	N	N
<b>Klamath NF</b>	(10% of 5-yr vol.) Goosenest	N	N	N
	<b>OR DOF</b>	(2% of 5-yr vol.)	Y	Y
<b>OR DSL</b>	(1% of 5-yr vol.)	Y	Y	Y

## Levelized Annual Supply?

(Total 5-yr volume)

*Y = yes*

*N = no*

*R = relatively*



## Levelized Supply? Ponderosa Pine – biomass (647,880 gT)

R = relatively

NS = no supply offering

	yes	no	Comments
<b>Overall</b>		✓	from 20,000-40,000 gT/yr
<b>CA BLM</b>			
Eagle Lake	✓		.0086 mmbf/yr
Alturas		✓	only offered in '06 & '07
Surprise	NS		
<b>OR BLM</b>			
Lakeview		✓	from 1,200-13,000 gT/yr
Burns	NS		
<b>OR DOF</b>	✓		.004 gT/yr
<b>Fremont-Winema</b>			
Lakeview/Bly		✓	from 4,000-23,000 gT/yr
Silver Lake/Paisley	R		from 12,000-14,000 gT/yr
Chiloquin/Klamath	✓		17,000 gT/yr
Chemult		✓	from 3,600-12,400 gT/yr

	yes	no	Comments
<b>Shasta-Trinity NF</b>			
Shasta-McCloud		✓	from 1,500-5,000 gT/yr
<b>Modoc NF</b>			
Warner Mt.		✓	from .0-25,000 gT/yr
Devil's Garden		✓	only offered in '06 & '07
Big Valley		✓	from 28,000-36,000 gT/yr
Doublehead		✓	only offered in '10
<b>Klamath NF</b>			
Goosenest		✓	from 2,500-24,000 gT/yr
<b>OR: DSL</b>	✓		.12.6 gT/yr

## Levelized Supply? Ponderosa Pine – small log (149.47 mmbf)

R = relatively

NS = no supply offering

	yes	no	Comments
<b>Overall</b>		✓	from 25-33 mmbf variations/yr
<b>CA BLM</b>			
Eagle Lake	✓		.054 mmbf/yr
Alturas		✓	unlevel supply in '06 & '07
Surprise	NS		
<b>OR BLM</b>			
Lakeview		✓	.6 mmbf to 1.1 mmbf/yr
Burns	NS		
<b>OR DOF</b>	✓		.397 mmbf/yr
<b>Fremont-Winema</b>			
Lakeview/Bly		✓	from .859 mmbf to 3.6 mmbf/yr
Silver Lake/Paisley	✓		6.99 mmbf/yr
Chiloquin/Klamath	✓		6.84 mmbf/yr
Chemult		✓	unlevel supply in '06 & '07

	yes	no	Comments
<b>Shasta-Trinity NF</b>			
Shasta-McCloud		✓	from 3 mmbf to 1.6 mmbf/yr
<b>Modoc NF</b>			
Warner Mt.		✓	from .756 mmbf to 1.4 mmbf/yr
Devil's Garden		✓	only offered in '06 & '07
Big Valley		✓	from 0 mmbf to 1 mmbf/yr
Doublehead		✓	only offered in '06, '07 & '10
<b>Klamath NF</b>			
Goosenest		✓	from .762 mmbf to 11 mmbf/yr
<b>OR: DSL</b>	✓		.22 mmbf/yr

## Levelized Supply? Ponderosa Pine – large log (283.949 mmbf)

R = relatively

NS = no supply offering

	yes	no	Comments
<b>Overall</b>		✓	from 21-29 mmbf variations/yr
<b>CA BLM</b>			
Eagle Lake	✓		.014 mmbf/yr
Alturas	R		~1,100 mmbf/yr
Surprise	NS		
<b>OR BLM</b>			
Lakeview		✓	from 0 mmbf to 2.1 mmbf/yr
Burns	NS		
<b>OR DOF</b>	✓		1.14 mmbf/yr
<b>Fremont-Winema</b>			
Lakeview/Bly		✓	from 1.5 mmbf to 5.2 mmbf/yr
Silver Lake/Paisley	✓		1.75 mmbf/yr
Chiloquin/Klamath	✓		2.08 mmbf/yr
Chemult		✓	from .49 mmbf to 1.9 mmbf/yr

	yes	no	Comments
<b>Shasta-Trinity NF</b>			
Shasta-McCloud		✓	from 5.1 mmbf to 9.6 mmbf/yr
<b>Modoc NF</b>			
Warner Mt.		✓	from .275 mmbf to 3.3 mmbf/yr
Devil's Garden		✓	only offered in '06 & '07
Big Valley		✓	from 1.2 mmbf to 2.2 mmbf/yr
Doublehead		✓	no volume in '08 & '09
<b>Klamath NF</b>			
Goosenest		✓	from 1.6 mmbf to 4.1 mmbf/yr
<b>OR: DSL</b>	✓		1.146 mmbf/yr

Looking at the top three species that will provide 90% of the total 5 year volume (biomass, small log, large log)  
(ponderosa pine, white fir, lodgepole pine) . . .

. . . over 90% of 5-yr total biomass volume will come from these species that fall in an “unlevelized” resource offering category!

***Opportunity for better coordination!***

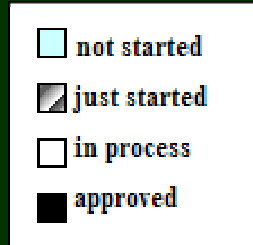
**What about NEPA?**  
**It's important to know!**

*... here's how it looks*

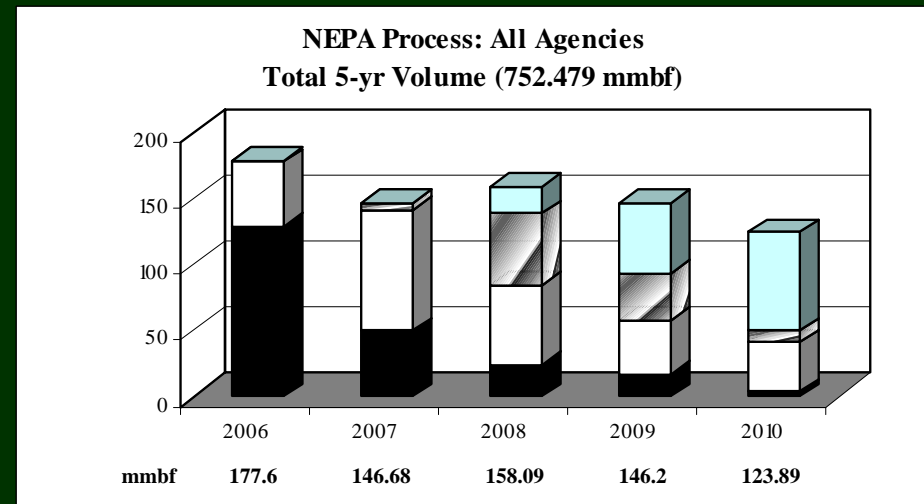
## NEPA Picture for CROP Landscape

All NF & BLM lands:

94% of 5-yr total = (752.49 mmbf includes gT as mmbf)



	<i>mmbf</i>	<i>% of total</i>
<i>Approved</i>	<b>222.39</b>	<b>30%</b>
<i>In process</i>	<b>278.7</b>	<b>37%</b>
<i>Just started</i>	<b>103.57</b>	<b>14%</b>
<i>Not started</i>	<b>147.81</b>	<b>19%</b>



*Almost 70% of CROP resource offering either NEPA approved or in-process*

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

*Let's look at the Fremont-Winema NF as an example . . .*

## NEPA Risk Rating

<b>1</b> Lowest	<b>2</b> Low	<b>3</b> Medium	<b>4</b> High	<b>5</b> Highest
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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*.

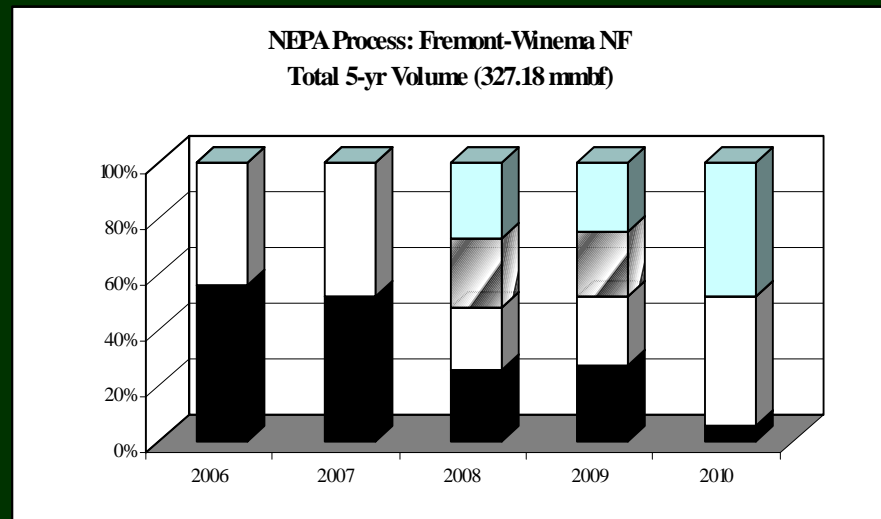


## NEPA Phase

Fremont-Winema NF: Total 5-yr volume (327.18 mmbf includes gT as mmbf)



	<i>mmbf</i>	<i>% of total</i>
<i>Approved</i>	<b>111.16</b>	<b>34%</b>
<i>In process</i>	<b>122.24</b>	<b>37%</b>
<i>Just started</i>	<b>30.25</b>	<b>9%</b>
<i>Not started</i>	<b>63.53</b>	<b>19%</b>



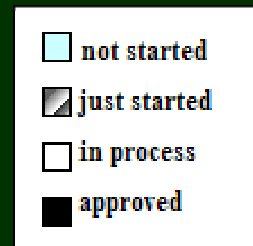
## NEPA Risk Rating

**Agencies:** Ranger Districts in the Fremont-Winema NF

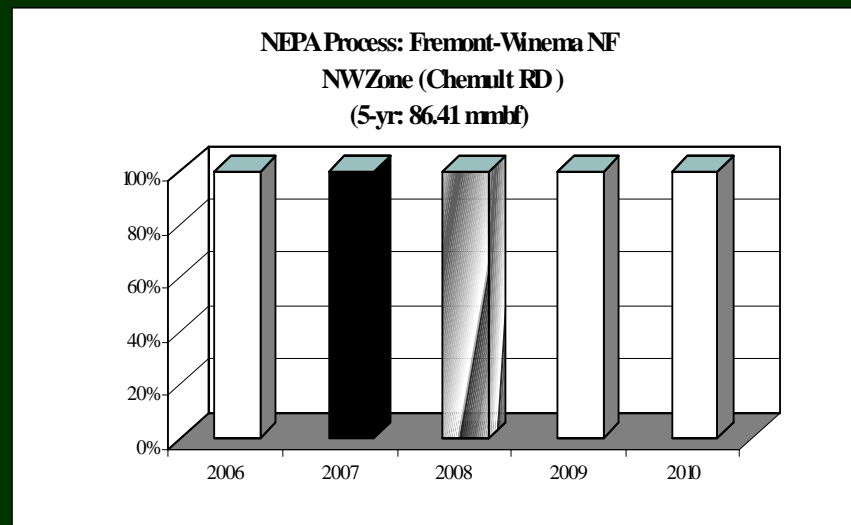
(includes gT as mmbf)	1 Lowest	2 Low	3 Medium	4 High	5 Highest	Comments
Chemult (86.41 mmbf)			✓			Dramatic gaps first 3 years.
Chiloquin/Klamath (80.97 mmbf)	✓					Excellent outlook all 5 years.
Lakeview/Bly (91.02 mmbf)				✓		Years 3-5 not started.
Silver Lake/Paisley (68.77 mmbf)				✓		None approved all 5 years. Last 2 years not started or just started.

## NEPA Phase

Chemult RD: (86.42 mmbf includes gT as mmbf)



	<i>mmbf</i>	<i>% of total</i>
<i>Approved</i>	<b>17.85</b>	<b>21%</b>
<i>In process</i>	<b>52.76</b>	<b>61%</b>
<i>Just started</i>	<b>15.81</b>	<b>18%</b>
<i>Not started</i>	<b>0</b>	<b>0%</b>

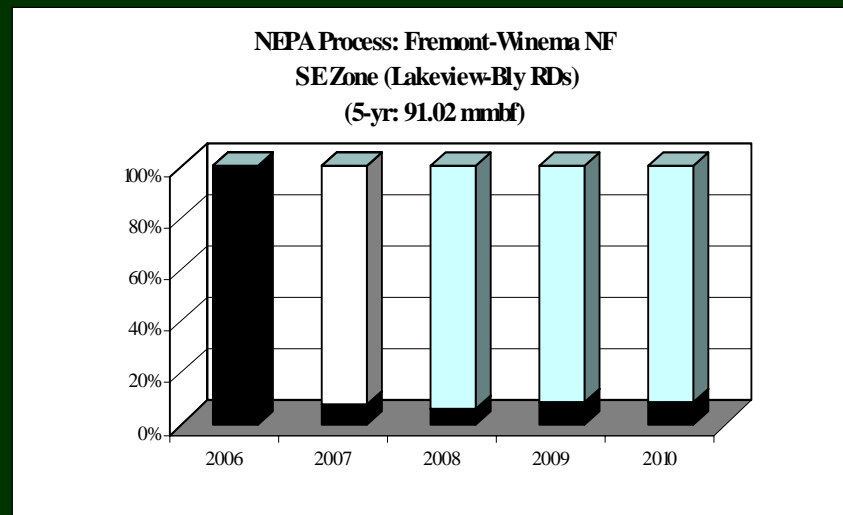


## NEPA Phase

- not started
- just started
- in process
- approved

Lakeview/Bly RD: (91.02 mmbf includes gT as mmbf)

	<i>mmbf</i>	<i>% of total</i>
<i>Approved</i>	<b>26.1</b>	<b>29%</b>
<i>In process</i>	<b>17.29</b>	<b>19%</b>
<i>Just started</i>	<b>0</b>	<b>0%</b>
<i>Not started</i>	<b>47.63</b>	<b>52%</b>

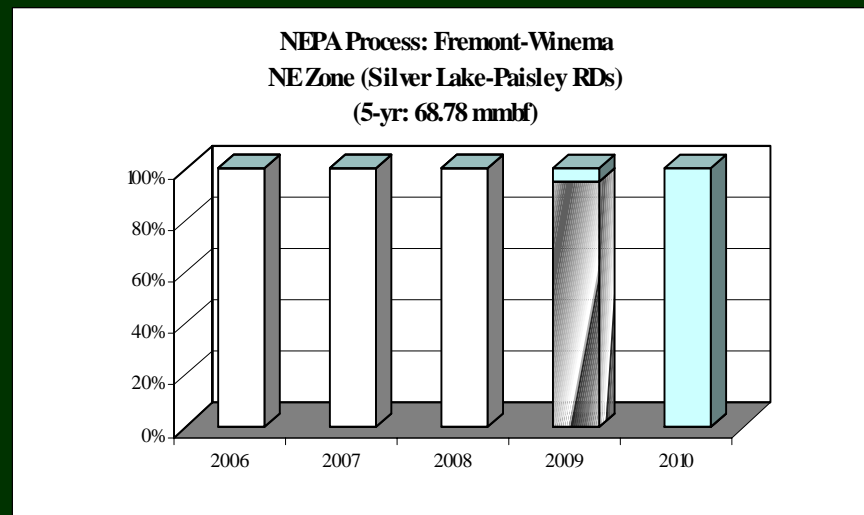


## NEPA Phase

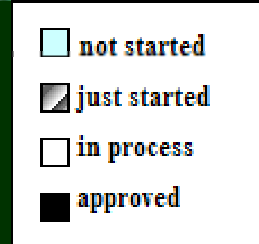
- not started
- just started
- in process
- approved

Silver Lake/Paisley RD: (68.78 mmbf includes gT as mmbf)

	<i>mmbf</i>	<i>% of total</i>
<i>Approved</i>	<b>0</b>	<b>0%</b>
<i>In process</i>	<b>38.42</b>	<b>56%</b>
<i>Just started</i>	<b>14.45</b>	<b>21%</b>
<i>Not started</i>	<b>15.91</b>	<b>23%</b>

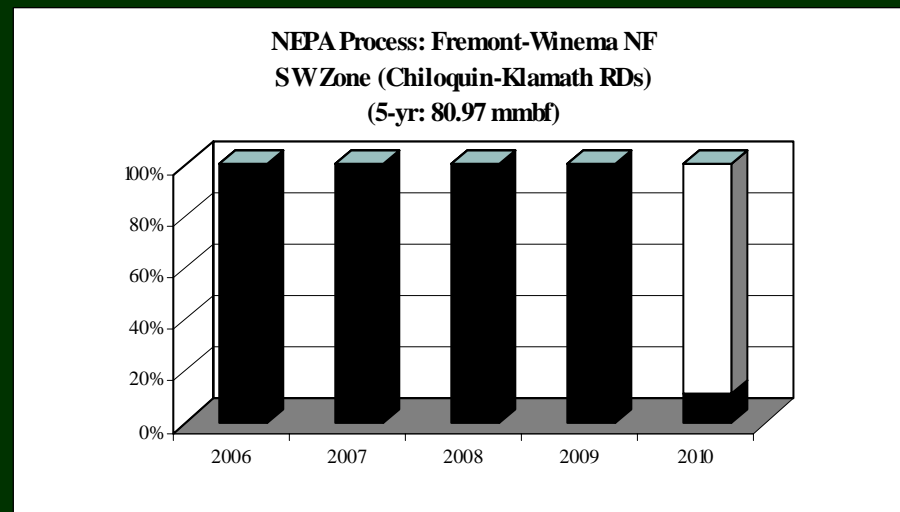


## NEPA Phase



Chiloquin/Klamath RD: (80.97 mmbf includes gT as mmbf)

	<i>mmbf</i>	<i>% of total</i>
<i>Approved</i>	<b>67.2</b>	<b>83%</b>
<i>In process</i>	<b>13.77</b>	<b>17%</b>
<i>Just started</i>	<b>0</b>	<b>0%</b>
<i>Not started</i>	<b>0</b>	<b>0%</b>





*Here's how the other agencies rank . . .*

## NEPA Risk Rating

**Agencies: Ranger Districts in the Mondoc NF**

(gT included as mmbf)	1 Lowest	2 Low	3 Medium	4 High	5 Highest	Comments
Devil's Garden (35.84 mmbf)		✓				Approved for years 1 & 2. In process for years 3-5.
Big Valley (56.5 mmbf)			✓			Year 4 not started.
DoubleHead (12.99 mmbf)				✓		No approval; last year not started.
Warner Mtn. (49.75 mmbf)			✓			Partial approval years 1 & 2. Last year not stated.



## NEPA Risk Rating

Agency: Ranger District in the Shasta NF

(gT included as mmbf)	1 Lowest	2 Low	3 Medium	4 High	5 Highest	Comments
Mt. Shasta/McCloud (134.75 mmbf)				✓		Years 3-5 just started or not started.

Agency: Ranger District in the Klamath NF

(gT included as mmbf)	1 Lowest	2 Low	3 Medium	4 High	5 Highest	Comments
Goosenest (63.7 mmbf)				✓		Years 1-3 ok. Variations in years 4 & 5.

## NEPA Risk Rating

*Agencies: OR BLM Field Offices*

(gT included as mmbf)	1 Lowest	2 Low	3 Medium	4 High	5 Highest	Comments
Lakeview (56.89 mmbf)			✓			Gaps in yrs 1-3. Significant just started.
Burns (5.38 mmbf)					✓	No volume yrs 1-2. Not started yrs 3-5.

*Agencies: CA BLM Field Offices*

(gT included as mmbf)	1 Lowest	2 Low	3 Medium	4 High	5 Highest	Comments
Eagle Lake (3.9 mmbf)				✓		All in process; none approved.
Surprise (.488 mmbf)		✓				Equal distribution across 5-yr period.
Alturas (5.09 mmbf)					✓	None approved; last 3 years not started.

What about road access to supply?    *No problem here . . .*

Agency	5-yr total volume	Affected by No Current Road Access
	mmbf	% of total volume for agency with no road access
CA BLM	9.478	0%
OR BLM	62.273	8%
Fremont-Winema NF	327.187	0%
Klamath NF	63.7	0%
Shasta-Trinity NF	134.75	0%
Modoc NF	155.086	0%
OR-DOF	33.136	0%
OR-DSL	18.639	0%
<b>Total</b>	<b>804.249</b>	<b>&lt;1%</b>

*Conclusions for Oregon CROP*

*Not a bad picture. . .*

✓ Total annual volume may be sufficient to *invite investment in small log processing* and create viable options for 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* – especially for ponderosa pine and white fir.

*For more information:*

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