### Cow Creek (Oregon) CROP

A Summary of CROP Landscape Analyses Results for the

Cow Creek Band of Umpqua Tribe of Indians

Presented by
Catherine M. Mater
President—Mater Ltd.
Corvallis, Oregon 97333
Tel: 541-753-7335 Fx: 541-752-2952

E-mail: catherine@mater.com

# Cow Creek CROP: Myrtle Creek, OR (centerpoint) (40 miles N; 70 miles S; 60 miles E; 80 miles W)



- 2 National Forests
- 8 Ranger Districts
- 4 BLM Districts
- 3 Counties
- State Lands
- Private Lands

# Cow Creek (Oregon) CROP

		mi	nbf
		Industry	NIPF
Species		(89%)	1-
<b>Douglas fir:</b> 5-yr = 2,761.19 mmbf	(65%)	2,450.99	310.2
Incense Cean. 5 yr – 46 59 mmbf	(1%)	41	2.27
<b>Lodgepole pine:</b> 5-yr = 13.23 mmbf	(<1%)	12.91	.32
<b>Maple</b> : 5-yr = 7.68 mmbf	(<1%)	6.93	.75
<b>Noble fir:</b> 5-yr = .13 mmbf	(<1%)	.12	.01
<b>Oak:</b> 5-yr = .09 mmbf	(<1%)	.08	.01
Other conifers: $5-yr = 286.28 \text{ mmbf}$	(7%)	253.69	32.59
<b>Other hardwoods:</b> 5-yr = 96.97 mmbf	(2%)	86.44	10.53
<b>Port Orford cedar</b> : 5-yr = 26.63 mmbf	(<1%)	23.96	2.67
<b>Ponderosa pine</b> : 5-yr = 96.77 mmbf	(2%)	87.66	9.11
<b>Alder</b> : 5-yr = 171.66 mmbf	(4%)	152.54	19.12
Sitka spruce: 5-yr = 68.67 mmbf	(2%)	61.94	6.73
<b>Sugar pine</b> : 5-yr = 31.75 mmbf	(<1%)	25.2	6.55
White fir: $5$ -yr = $253$ mmbf	(6%)	225.9	27.1
Western hemlock: 5-yr = 309.58 mmbf	(7%)	277.29	32.29
<b>Western red cedar</b> : 5-yr = 47.95 mmbf	(1%)	43.27	4.68
White pine: 5-yr = .09 mmbf	(<1%)	.08	.01
Tanoak: 5-yr = 27.7 mmbf	(<1%)	23.03	4.67
	Totals	3,773.03	472.93

## **Historical Performance**

Private lands 2001 – 2005 (in CROP landscape)

Total 5-yr = 4,295.96 mmbf

## National Forests: 8 Ranger Districts

### • Rogue River/Siskiyou NF:

<u>Cascade Zone</u>: Prospect/Butte Falls RDs <u>Siskiyou Zone</u>: Ashland/Applegate RDs <u>Two Rivers Zone</u>: Galice/Illinois Valley RDs Pacific Zone: Chetco/Gold Beach RDs

Powers RD

## • <u>Umpqua NF</u>:

Diamond Lake RD North Umpqua RD Tiller RD

# 4 BLM Districts:

- Eugene
- Coos Bay
- Roseburg
- Medford

# 3 Counties:

- Douglas
- Coos
- Josephine

# 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

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

# **Overall:**

Year	Total Riomass	% of 5-yr
	(1,180,497 gT)	volume
2007	217,891	18%
2008	240,068	20%
2009	236,526	20%
2010	245,814	21%
2011	240,198	20%

Total Small Log	% of 5-yr
(637.63 mmbf)	volume
137.12	21%
119.15	19%
120.73	19%
130.76	20%
129.84	20%

Total Large Log (713.4 mmbf)	% of 5-yr volume
137.1	19%
127.4	18%
156.95	22%
153.07	21%
138.84	19%

# Who's providing what?

Agency	5-yr total Biomass (gT)	5-yr total Small Log (mmbf)	5-yr total  Large Log (mmbf)	% of 5-yr total
OR-BLM	894,300	457.84	320.144	60%
Umpqua NF	28,706.5	50.05	85.48	9%
Rogue River/Siskiyou NF	227,450	75	175	19%
OR Counties	11,250	20.916	44.98	4%
ODOT	0	0	.09	<1%
OR DSL	18,228	32.8	85	8%
OR DOF	562.5	1.02	2.63	<1%

# Is there a change?

Rogue River/Siskiyou NF

... a slight reduction (<1%) in planned volume removal.

	'01-'05 (mmbf)	'07-'11 (mmbf; includes gT)
Incense cedar	.00639	0
Port Orford cedar	.26363	0
Western red cedar	2.43277	0
Other conifers	33.17786	0
Douglas fir	97.72054	295.49
Noble fir	.96536	0
Shasta fir	11.58568	0
White fir	.10971	0
Mtn. hemlock	.035	0
Western hemlock	.0054	0
Western larch	2.59779	0
Pine	1.40218	0
Lodgepole pine	2.44608	0
Ponderosa pine	.002	0
Ponderosa pine/juniper	115.9724	0
Sugar pine	36.77801	0
Total	305.5008	295.49

# Is there a change? Yes!

## Umpqua NF

... a more impactful change for the Umpqua NF (almost 200% change in planned volume removal).

	'01-'05	'07-'11
	(mmbf)	(mmbf; includes gT)
Incense cedar	1.363	2.78
Western red cedar	.02397	3.03
Other conifers	6.27807	1.1
Douglas fir	34.79916	105.15
Shasta fir	0	3.23895
True fir	.23499	0
White fir	.00083	0
Mtn. hemlock	2.6	0
Western hemlock	1.56041	12.37
Lodgepole pine	.12539	6
Ponderosa pine	0	3.48
Sugar pine	.92	2.8
White pine	0	1.3296
Total	47.90582	141.28

## **Rogue River/Siskiyou NF**: (gT=227,450; Small log = 75 mmbf; Large log = 175 mmbf)

Ranger Districts	5-yr total (Biomass = gT)	5-yr total Small log (mmbf)	5-yr total Large log (mmbf)
Cascade Zone (Prospect/Butte Falls)	58,750	26.4	61.6
Siskiyou Zone (Ashland/Applegate)	50,250	9.3	21.7
Two Rivers Zone (Galice/Illinois Valley)	47,750	7.5	17.5
Pacific Zone (Chetco/Gold Beach)	51,950	22.5	52.5
Power	18,750	9.3	21.7

Umpqua NF: (gT=28,706; Small log = 50.05 mmbf; Large log = 85.48 mmbf)

Ranger Districts	5-yr total (Biomass = gT)	5-yr total Small log (mmbf)	5-yr total Large log (mmbf)
Diamond Lake	5,485	18.84	21
North Umpqua	8,301.44	15.74	11.08
Tiller	14,920	15.46	53.4

**OR BLM:** (gT= 894,300; Small log = 457.84 mmbf; Large log = 320.14 mmbf)

	5-yr total	5-yr total	5-yr total
Field Offices	(Biomass = gT)	Small log (mmbf)	Large log (mmbf)
Eugene	3,000	3.5	1
Coos Bay	3,000	149.62	49.87
Roseburg	23,000	128.08	58.46
Medford	865,300	176.63	210.80

# OR Counties: (gT=11,250; Small log = 20.91 mmbf; Large log = 44.98 mmbf)

	5-yr total	5-yr total	5-yr total
Counties	(Biomass = gT)	Small log (mmbf)	Large log (mmbf)
Douglas	0	0	7.5
Coos	11,250	15.75	27
Josephine	0	5.16	10.48

## **OR Agencies:** (gT= 18,790.7; Small log = 33.82 mmbf; Large log = 87.78 mmbf)

	5-yr total	5-yr total	5-yr total
Agency	(Biomass = gT)	Small log (mmbf)	Large log (mmbf)
ODOT	0	0	.0975
DSL	18,228.25	32.81	85.06
ODF	562.5	1.012	2.625

# Cow Creek (Oregon) CROP

	By Species*		5-yr total (Biomass = gT)	5-yr total Small log (mmbf)	5-yr total Large log (mmbf)
D	ouglas fir	(81% of 5-yr. total)	792,115.47	529.3	604.83
V	Vhite fir	(4% of 5-yr. total)	52,856.8	25.64	30.46
W	Vestern hemlock	(3% of 5-yr. total)	5,844	25.09	20.16
M	<b>Iadrone</b>	(3% of 5-yr. total)	124,692	9.84	6.02
P	ine species	(2% of 5-yr. total)	40,764	8.2	11.579
P	onderosa pine	(1% of 5-yr. total)	45,623	6.41	5.171
R	ked Alder	(1% of 5-yr. total)	876	6.42	5.73
Si	itka spruce	(1% of 5-yr. total)	2,812.5	3.93	7.68
Ir	ncense cedar	(1% of 5-yr. total)	13,629	3.01	3.0
T	'anoak	(1% of 5-yr. total)	50,673	6.17	4.35
C	Chinkapin	(1% of 5-yr. total)	27,537.87	1.961	1.779

\*22 species analyzed in CROP, but only half comprise 99% of the total 5-yr volume

## So ... What does all this mean?

1) Necessary value-add component looks quite favorable to help finance access to biomass;

. . . and

2) Biomass volume looks equally compelling for energy investment projects in this CROP landscape.

### **Value-added processing:**

- A fairly good picture for small log processing emerges as sufficient volume/yr of ~130 mmbf of <u>small</u> <u>logs</u> (>7"-12" dbh) is planned for removal during the next 5-yrs and <u>72% of that volume is coming from</u> BLM lands.
- ➤ A sufficient volume (~143 mmbf/yr) of <u>large logs</u> (>12") is planned for removal during the next 5-yrs to support existing milling operations in the area. As with small logs, ~50% of the total large log volume will also be supplied from BLM lands.

	(sma	ıll log)	(large log)
(% of total species volume)	>7"-9"	>9"-12"	>12"
Douglas fir	11%	30%	47%
White fir	10%	28%	46%
Western hemlock	7%	47%	43%
Madrone	14%	10%	15%
Pine species	14%	15%	41%
Ponderosa pine	13%	18%	25%
Red alder	0%	52%	46%
Sitka spruce	9%	23%	63%
Incense cedar	13%	21%	34%
Tanoak	10%	20%	21%
Chinkapin	13%	8%	19%

# Biomass removal volume sufficient to invite new investment interest to the area:

- ➤ Projected biomass volume of ~236,000 gT/yr as a conservative baseline to be removed;
- > 76% of volume coming from the Medford BLM office;
- ➤ Volume of biomass more than sufficient to support a <u>13 MW power plant that would use ~160,000 gT/yr.</u> of biomass.

# 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 <u>levelized over</u> <u>time</u> to invite purchase and investment?

# For each species:

- ✓ <u>Locator map</u> per specific supplier
- ✓ Summary sheet
- ✓ <u>Detailed supply breakouts</u> by volume, diameter, and year

Let's look at Douglas Fir as an example . . .

# Cow Creek (Oregon) CROP

Cow Creek: <u>Douglas Fir</u> CROP offering/removal '07 - '11 (gT = 792.115 / S = 529.305 mmbf / L = 604.83 mmbf)

**ROM # DF 1.1** 

DF = Douglas fir

#### Rogue River-Siskiyou NF:

- A Cascade Zone: Prospect/Butte Falls RDs
- B Siskiyou Zone: Ashland/Applegate RDs
- C Two Rivers Zone: Galice/Illinois Valley RDs

M

Q

R

- D Pacific Zone: Chetco/Gold Beach RDs
- E Powers RD

#### Umpqua NF:

- F Diamond Lake RD
- G North Umpqua RD
- H Tiller RD

#### **OR-BLM:**

- I Eugene FO
- J Coos Bay FO
- K Roseburg FO
- L Medford FO

#### DSL:

M DSL

#### **OR-Counties**:

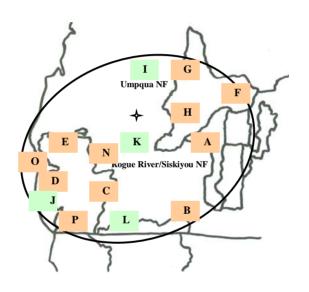
- N Douglas Co.
- O Coos Co.
- P Josephine Co.

#### ODF:

O ODF

#### ODOT:

R ODOT



Locater Map

<sup>\*</sup>italics/bold = species offering in CROP

# Cow Creek (Oregon) CROP

### Summary Sheet

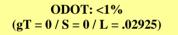
Cow Creek: <u>Douglas Fir</u> CROP offering/removal '07 – '11 (gT = 792,115 / S = 529.305 mmbf / L = 604.83 mmbf)

ROM # DF 1

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

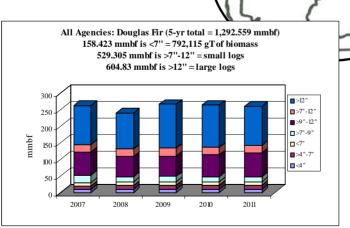
Umpqua NF

Rogue River/Siskivou



OR-Counties: 3 Counties 3% (gT = 5,625 / S = 12.78 / L = 29.089)

DSL: 8% (gT = 16,510 / S = 29,709 / L = 77.05)



Umpqua NF:3 RDs 8% (gT = 16,846 / S = 32.33 / L = 69.45)

Rogue River-Siskiyou NF: 23% (gT = 227,450 / S = 75 / L = 175)

ODF: <1% (gT = 506 / S = .911 / L = 2.362)

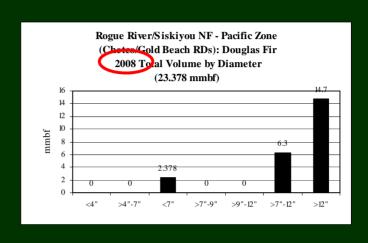
OR-BLM: 4 FOs 57% (gT = 525,177 / S = 378.56 / L = 251.85)

_			
	gT	n	mbf
	Biomass	Small Log	Large Log
2007	151215.205	115.4036448	116.3199892
2008	158076.38	99.33839479	108.8486692
2009	159659.255	101.4722448	133.4465192
2010	162557.78	103.6200948	127.9324692
2011	160606.855	109.4710948	118.2826692
Totals	792115.475	529.3054739	604.8303161
%	12%	41%	47%
mmhf	158 423095		

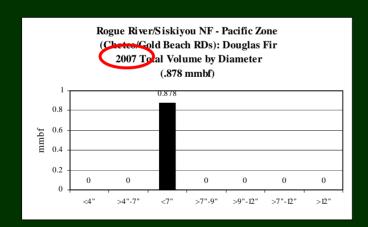
1292,558885

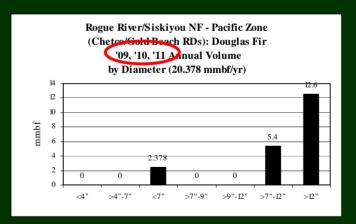
# Detailed Breakout by Supplier k (Oregon) CROP

Douglas Fir Rogue River/Siskiyou NF: Pacific Zone (Chetco/Gold Beach RDs)	5-yr = 85.39 mmbf
	• Unlevel supply in '07; fairly level '08-'11
gT = 51,950	<ul> <li>&lt;4" = 0% (0 mmbf)</li> <li>&gt;4"-7" = 0% (0 mmbf)</li> <li>&lt;7" = 12% (10.39 mmbf)</li> </ul>
S = .22.5	<ul> <li>&gt;7"-9" = 0% (0 mmbf)</li> <li>&gt;9"-12" = 0% (0 mmbf)</li> <li>&gt;7"-12" = 26% (22.5 mmbf)</li> </ul>
L = .52.5	• >12" = 61% (52.5 mmbf)



'07 – '11





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

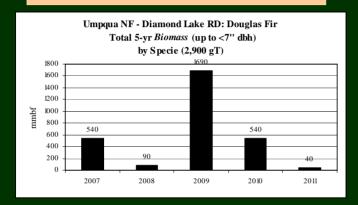
- *performance between different public agencies* to identify needed coordination of supply; <u>and</u>
- performance between ranger districts in a single NF to see where coordination of supply offering might be needed.

Let's take a look ...

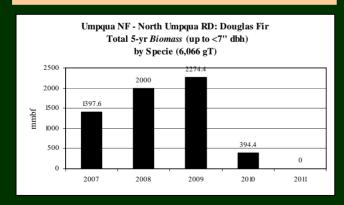
# **Douglas Fir:** Umpqua - NF 3 RFs – biomass offerings

(% of NF offering of 16,846.4 gT)

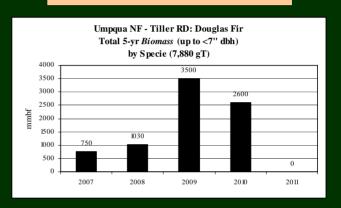
#### Diamond Lake RD - 17%



### North Umpqua RD - 36%



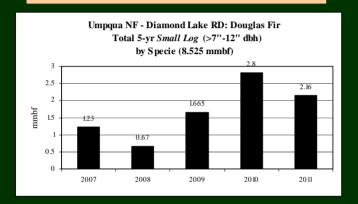
#### Tiller RD - 47%



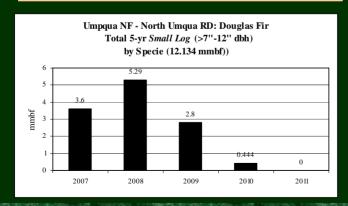
Unlevelized supply in all RDs

# **Douglas Fir:** Umpqua NF 3 RDs – <u>small log</u> offerings (% of NF offering of 32.33 mmbf)

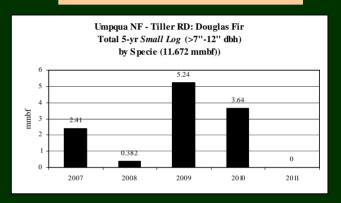
#### Diamond Lake RD - 26%



### North Umpqua RD - 38%



*Tiller RD - 36%* 



Again, unlevelized supply in all RDs

# **Douglas Fir:** Umpqua NF 3 RDs – <u>large log</u> offerings (% of NF offering of 69.45 mmbf)

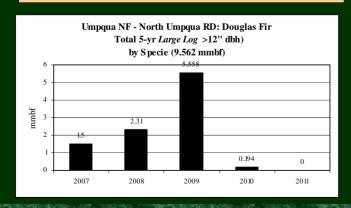
#### Diamond Lake RD - 25%

Umpqua NF - Diamond Lake RD: Douglas Fir
Total 5-yr Large Log >12" dbh)
by Specie (17.12 mmbf)

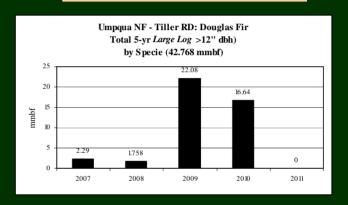
12.24

139
1.16
2.23
2007
2008
2009
2010
2011

### North Umpqua RD - 13%



Tiller RD - 62%



Unlevelized supply in all RDs also here

How levelized will the supply be for all suppliers of Douglas fir compared to other species offering?

Let's take a look . . .

### Levelized supply for five years?

(R = relatively)

	gT Biomass		Small Logs		Large Logs	
(% of total CROP vol.)	yes	no	yes	no	yes	no
Douglas fir (81%)	✓			✓		✓
White fir (4%)	R		✓		R	
Western hemlock (3%)		✓		✓		✓
Madrone (3%)		✓		✓		✓
Pine species (2%)		✓		✓		✓
Ponderosa pine (1%)		✓		✓	R	
Red alder (1%)	✓			✓	R	
Sitka spruce (1%)	✓		✓		R	
Incense cedar (1%)		✓		✓		✓
Tanoak (1%)	R		R		R	
Chinkapin (1%)	R		R			✓

# Looking at the *Douglas Fir.*...

- ✓ There will be a relatively <u>levelized supply of green tonnage</u> <u>biomass in this specie offering</u> over the next five years. Variations range from 151,000 to 162,000 gT per year.
- ✓ This will impact almost 60% of the total biomass volume for all species to be offered in the CROP landscape.
- ✓ There will be a <u>an unlevelized supply of small and large log</u> <u>volume in this specie offering</u> in the CROP landscape that will affect 65% of the total small log volume and 81% of the total large log volume.

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

# Cow Creek (Oregon) CROP

# **Levelized Annual Supply?**(Total 5-yr volume)

Y = yes N = no R = relatively O = no offering

C	Committee Commit	(1,292.	55 mmbf; incl	udes gT)
		Biomass	Small log	Large log
OR-BLM	(60% of 5-yr vol.)			
	Eugene	N	N	N
	Coos Bay	О	N	R
	Roseburg	Y	Y	Y
	Medford	R	R	N
Rogue River/Siskiyou NF	(19% of 5-yr vol.)			
	Cascade Zone	R	N	N
	Siskiyou Zone	R	N	N
	Two Rivers Zone	Y	Y	Y
	Pacific Zone	N	R	N
	Powers	Y	R	R
Umpqua NF	(9% of 5-yr vol.)			
	Diamond Lake	N	N	N
	North Umpqua	N	N	N
	Tiller	N	N	N
ODOT	(<1% of 5-yr vol.)	О	0	Y
OR DOF	(<1% of 5-yr vol.)	Y	Y	Y
OR DSL	(8% of 5-yr vol.)	Y	Y	Y
Counties	(4% of 5-yr vol.)			
	Douglas	О	О	N
	Coos	Y	Y	Y
	Josephine	О	Y	Y

Mater Ltd.

Catherine M. Mater

Douglas Fir

## Levelized Supply? Douglas Fir – biomass (792,115 gT)

	yes	no	Comments
Overall	<b>√</b>		from 151,000 - 162,000 gT/yr
OR BLM Eugene		✓	only offered 1 year
Coos Bay	NS		
Roseburg	✓		4,140 gT/yr
Medford	R		from 93,000 - 102,000 gT/yr
OR DOF	✓		101.25 gT/yr
Rogue River/Siskiyou NF Cascade Zone Siskiyou Zone	R R		from 10,000 - 15,000 gT/yr from 9,500 - 12,000 gT/yr
ш р: 77	✓		9,550 gT/yr
Two Rivers Zone	·		
Two Rivers Zone Pacific Zone	Í	✓	from 4,300 - 11,000 gT/yr

R = relatively

NS = no supply offering

	yes	no	Comments
UmpquaNF			
Diamond Lake		✓	from 90 - 1,690 gT/yr
North Umpqua		✓	from 394 - 2,200 gT/yr
Tiller		✓	from 0 - 3,500 gT/yr
ODOT			NS
OR: DSL	✓		3,302 gT/yr
Counties:			
Douglas			NS
Coos	✓	✓ .225 gT/yr	
Josephine			NS

### Levelized Supply? Douglas Fir – small log (529.3 mmbf)

	yes	no	Comments
Overall		✓	from 25 - 33 mmbf variations/yr
OR BLM			
Eugene		✓	.054 mmbf for 2011 only
Coos Bay		✓	from 21 mmbf/yr to 32 mmbf/yr
Roseburg	✓		23.45 mmbf/yr
Medford	R		from 22 mmbf to 33 mmbf/yr
OR DOF	<b>√</b>		.182 mmbf/yr
	1		.102 IIIII01/ y1
Rogue River/Siskiyou NF			.102 1111101/91
		<b>√</b>	from 3.9 mmbf to 9 mmbf/yr
Rogue River/Siskiyou NF		✓ ✓	·
Rogue River/Siskiyou NF Cascade Zone	✓		from 3.9 mmbf to 9 mmbf/yr
Rogue River/Siskiyou NF Cascade Zone Siskiyou Zone	✓ R		from 3.9 mmbf to 9 mmbf/yr from 1.5 mmbf to 3 mmbf/yr

R = relatively

NS = no supply offering

	yes no Comments		
UmpquaNF			
Diamond Lake		✓	from .67 mmbf to 2.16 mmbf/yr
North Umpqua		✓	from 0 mmbf to 5 mmbf/yr
Tiller		✓	from 0 mmbf to 5.24 mmbf/yr
ODOT			NS
OR: DSL	✓	✓ 5.94 mmbf/yr	
Counties:			
Douglas	NS		
Coos	✓	1.57 mmbf/yr	
Josephine	✓		.981 mmbf/yr

### Levelized Supply? Douglas Fir – large log (604.8 mmbf)

	yes	no	Comments	
Overall		✓	from 21-29 mmbf variations/yr	
OR BLM			014 mmhf for 2011 only	
Eugene		<b>√</b>	.014 mmbf for 2011 only	
Coos Bay	R		from 7 mmbf to 10 mmbf	
Roseburg	✓		10 mmbf/yr	
Medford		✓	from 29 mmbf/yr to 37 mmbf/yr	
OR DOF	✓		.675 mmbf/yr	
OR DOF  Rogue River/Siskiyou NF	✓		.675 mmbf/yr	
	✓	<b>√</b>	.675 mmbf/yr from 9 mmbf to 21 mmbf/yr	
Rogue River/Siskiyou NF	<b>√</b>	✓ ✓	,	
Rogue River/Siskiyou NF Cascade Zone	✓ ✓		from 9 mmbf to 21 mmbf/yr	
Rogue River/Siskiyou NF Cascade Zone Siskiyou Zone			from 9 mmbf to 21 mmbf/yr from 3.5 mmbf to 7 mmbf/yr	

R = relatively

NS = no supply offering

	yes	no	Comments
UmpquaNF			
Diamond Lake		✓	from .1 mmbf to 12.2 mmbf/yr
North Umpqua		✓	from 0 mmbf to 5.5 mmbf/yr
Tiller		✓	from 0 mmbf to 22 mmbf/yr
ODOT	✓		.005 mmbf/yr
OR: DSL	✓		15.4 mmbf/yr
Counties:			
Douglas		✓	from 0 mmbf to 1.8 mmbf/yr
Coos	✓		2.7 mmbf/yr
Josephine	✓		1.99 mmbf/yr

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

... here's how it looks

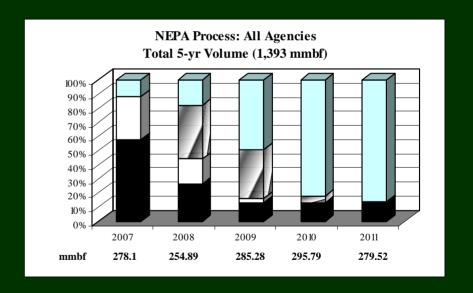
## NEPA Picture for CROP Landscape

#### All NF & BLM lands:

88% of 5-yr total = (1,393 mmbf; includes gT as mmbf)

not started
just started
in process
approved
approved

	mmbf	% of total
Approved	344.4	25%
In process	136.8	10%
Just started	209.2	15%
Not started	703.1	50%



Only 35% of CROP resource offering either NEPA approved or in-process

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

Let's look at the Oregon BLM as an example . . .

### NEPA Risk Rating

1 Lowest Low Medium High Highest

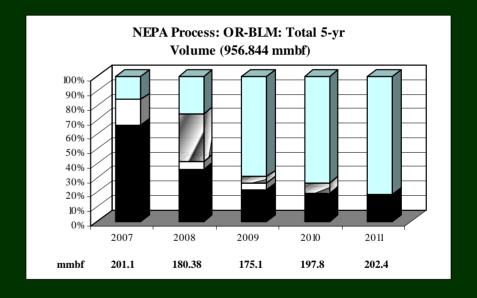
#### For low risk rating, 3 key desired attributes:

- ✓ 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*.

Oregon BLM: Total 5-yr volume (956.84 mmbf; includes gT as mmbf)

not started
🗾 just started
in process
approved

	mmbf	% of total
Approved	313.28	33%
In process	52.6	5%
Just started	82.76	9%
Not started	508.17	53%



#### **NEPA Risk Rating**

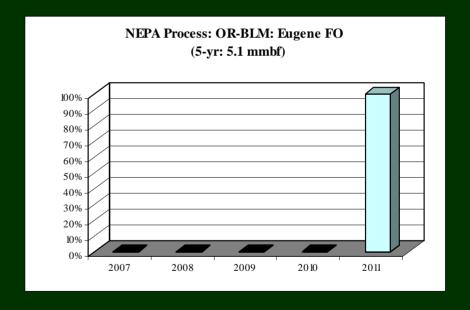
#### Agencies: Field Offices in the Oregon BLM

(includes gT as mmbf)	1 Lowest	2 Low	3 Medium	4 High	5 Highest	Comments
Eugene (5.1 mmbf)					<b>✓</b>	100% of 5-yr volume not started in NEPA process
Coos Bay (200 mmbf)			✓			Only 29% approved, but in 1st & 2nd years.
Roseburg (191.5 mmbf)	✓					Excellent outlook for all 5-yrs.
Medford (560.4 mmbf)					<b>√</b>	Over 70% not started throughout all 5-yrs.

**Eugene FO: (5.1 mmbf; includes gT as mmbf)** 

just started
in process
approved

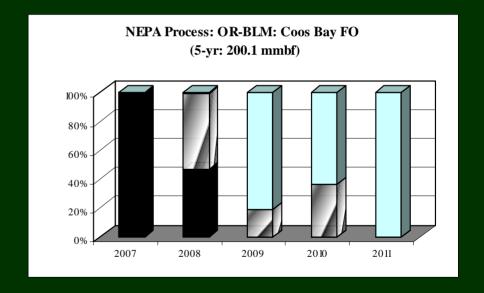
	mmbf	% of total
Approved	0	0%
In process	0	0%
Just started	0	0%
Not started	5.1	100%



□ not started
□ just started
□ in process
□ approved

Coos Bay FO: (200.1 mmbf; includes gT as mmbf)

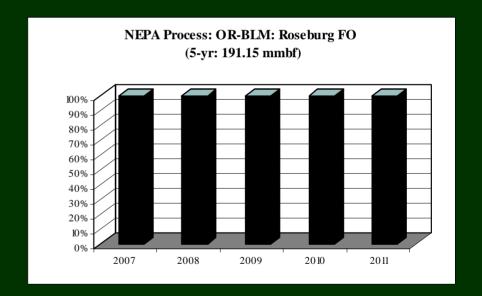
	mmbf	% of total
Approved	58.5	29%
In process	0	0%
Just started	38.25	19%
Not started	103.35	52%



□ not started
□ just started
□ in process
□ approved

Roseburg FO: (191.15 mmbf; includes gT as mmbf)

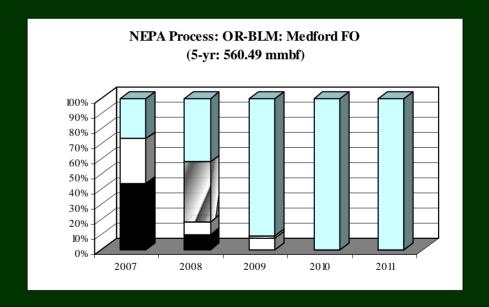
	mmbf	% of total
Approved	191.15	100%
In process	0	0%
Just started	0	0%
Not started	0	0%



Medford FO: (560.49 mmbf; includes gT as mmbf)

not started
🗾 just started
in process
approved

	mmbf	% of total
Approved	63.63	11%
In process	52.62	9%
Just started	44.5	8%
Not started	399.7	71%



## What about road access to supply? No serious problem here . . .

Aconom	5-yr total volume mmbf	Affected by No (	Current Road Access
Agency	(includes gT as mmbf)	% of total volume affected	species affected
OR BLM	956.844	2%	DF, WF
Rogue River/Siskiyou NF	295.49	0%	none
Umpqua NF	141.279	31%	DF, LPP, WRC, WH, PP, IC, ShF, WP, SP, OC
DOF	3.75	0%	none
DSL	121.521	0%	none
ODOT	.0975	0%	none
Counties	68.1545	0%	none
Total	1,587.136	4%	

## Conclusions for Cow Creek CROP

# Not a bad picture. . .

- ✓ Total annual volume is sufficient to *invite investment in* small log processing and create viable options for biomass-to-energy investment interest. However . . .
- ✓ *Only 35% of total volume NEPA approved or in-process.*Creates higher investor risk and reduces potential purchaser confidence.

#### and...

✓ Levelizing of supply between agencies from year to year is needed – especially for Douglas fir.

#### For more information:

#### **Catherine M. Mater:**

President – Mater Engineering Senior Fellow – The Pinchot Institute for Conservation Corvallis, Oregon; Washington, DC

tel: (541) 753-7335 fax: (541) 752-2952; cell: (541) 760-5526

E-mail: catherine@mater.com

#### Ms. Amy Amoroso:

Natural Resource Director Cow Creek Band of Umpqua Tribe of Indians Roseburg, OR

tel: (541) 677-5575 fax: (541) 677-5574

E-mail: aamoroso@cowcreek.com