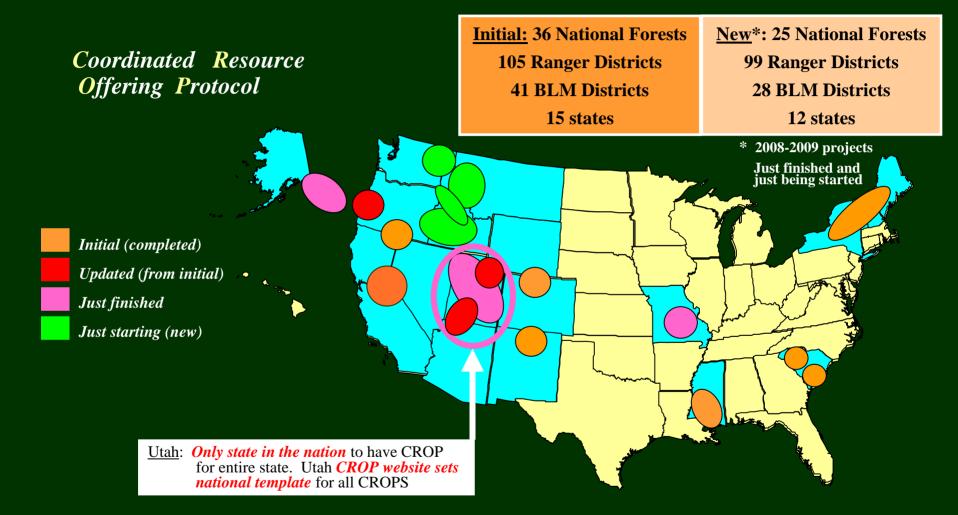
Coordinated Resource Offering Protocol (CROP) Update

Presented by:

Catherine M. Mater President – Mater Ltd. Senior Fellow — The Pinchot Institute Corvallis, Oregon; Washington, DC tel: (541) 753-7335 fax: (541) 752-2952; cell: (541) 760-5526 *E-mail: catherine@mater.com*

June 2009

Mater Ltd.



June 2009

Mater Ltd.

What's done . . .

CROP Landscape	Biomass removal years	NF acres	BLM acres
Colorado	'06-'10	5,270,121	661,859
Mississippi	' 07- ' 11	808,320	0
Missouri	·09-·13	1,490,949	0
New Mexico	'06-'10	3,432,225	1,441,386
Northeastern	'06-'10	515,224	0
South Carolina 1	'06-'10	257,789	0
South Carolina 2	'06-'10	433,419	0
Southeast Alaska	'08-'12	16,800,000	0
Southern OR/ Northern CA	ʻ06-ʻ10	3,347,829	203,000
Southwest Oregon (Cow Creek)	ʻ07-ʻ11	2,206,119	780,395
State of Utah	'08-'12	8,573,759	6,263,414
Tahoe Region	' 07- ' 11	3,872,425	5,000
Western Oregon	'08-'12	2,819,300	1,257,325
	Total acres USFS	~50 million or 26% of all US NF's	
	Total acres BLM		~10.6 million or 4% of all BLM lands

Table 1: 13 CROP landscapes completed

June 2009

Mater Ltd.

CROP results and biomass supply . . .

... <u>right-sizing</u> projects to match supply.

* Values do <u>not</u> include small log (+7"-12") and large log (+12") removal volumes

	Biomass offering	
CROP	Avg. annual gT (<7") *	<u>Enough</u> <u>supply</u> <u>for a 15 MW</u> <u>plant?</u>
Colorado	54,745	
Mississippi	45,525	
Missouri	191,015	✓
New Mexico	208,194	✓
Northeastern	16,319	
South Carolina 1	86,724	combined ✓
South Carolina 2	70,800	combined •
Southeast Alaska	369,563	✓
Southern OR/Northern CA	235,985	✓
Southwest Oregon (Cow Creek)	236,099	✓
State of Utah	86,572	
Tahoe Region	189,436	✓
Western Oregon	223,252	✓

June 2009

Mater Ltd.

USFS National CROP websites

Static website:

www.forestandrangelands.gov/Woody_Biomass/resources/shtml

Interactive CROP website:

www.crop-usa.com



Mater Ltd.

Catherine M. Mater

5

Woody RIIG June 2009 Utah CROP

(Coordinated Resource Offering Protocol)

Search by Species: Aspen - Blue Spr

National

Ashley NF: 2 RDs ~ 3%

(gT = 1,921 / S = 0.829 / L = 0.049)

Dixie NE: 2 RDs ~ 12%

(aT = 0 / S = 3.716 / L = 1.950)

Fishlake NF: 2 Zones ~ 29%

(aT = 18.185 / S = 8.040 / L = 1.835)

Kaibab NF: 1 RD ~ 1%

(aT = 120 / S = 0.072 / L = 0.144)

Other Conifer

Last Updated 2008-08-01 00:00:00

ce - Dougras Fir - Enger <mark>hann Spruce - Gambel Oak - Lodgepole Pine</mark> Pinyon Pine/Juniper - onderosa Pine - Subalpine Fir - White Fir

State of Utah CROP: Aspen offering/removal 2009-2013

 $(aT = 22.056 / S = \overline{37.316} \text{ mmbf} / L = 5.588 \text{ mmbf})$

(47.32 total mmbf)

aT = areentons (up to 7"dbh)S = small log mmbf (>7"-12"dbh) L = large log mmbf (>12"dbh)

How to Use this Site/FAQ

Location Map Utah CROP Information **NEPA Overview Resource Offering Overview Diameter Size Overview** Utah All Agencies Overview

BLM:

- Arizona Strip FO (AZ)
- В. Little Snake FO (CO) C
- White River FO (CO) Cedar City FO (UT)
- F Fillmore FO (UT)
- GSENM FO (UT)
- Kanab FO (UT) G
- Moab FO (UT) H.
- Monticello FO (UT)
- Price FO (UT)
- K. Richfield FO (UT)
- Salt Lake FO (UT) L.
- Μ. St. George FO (UT)
- N. Kemmerer FO (WY)
- Pinedale FO (WY) 0.
- Ρ. Rock Springs FO (WY)

Ashley NF:

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

Divie NE:

- Cedar City RD
- V. Pine Valley RD W. Powell RD

June 2009

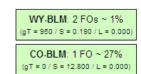
Fishlake NF:

- East Zone-Fremont/Richfield RD Х.
- West Zone-Beaver/Fillmore RD Υ.

Forest Ranger Districts and Utal	n Trust Lands
	Utah State Trust Land (gT = 880 / S = 8.624 / L =
	Manti-La Sal NF: 2 RE (gT = 0 / S = 0.500 / L = (
	Uinta NF: 1 RD ~ (gT = 0 / S = 1.020 / L = (
	Wasatch-Cache NF: 3 F (gT = 0 / S = 1.525 / L = (
BLM Field Offices	
	WY-BLM: 2 FOs ~ (gT = 950 / S = 0.190 / L = CO-BLM: 1 FO ~ 2
2 28 to 🐔	CO-BLM: TFO ~ 2

Utah State Trust Lands: 19% (gT = 880 / S = 8.624 / L = 0.000) Manti-La Sal NF: 2 RDs ~ 3% (aT = 0 / S = 0.500 / L = 0.850)Uinta NF: 1 RD ~ 4% (aT = 0 / S = 1.020 / L = 0.660) Wasatch-Cache NF: 3 RDs ~ 3% (gT = 0 / S = 1.525 / L = 0.100)

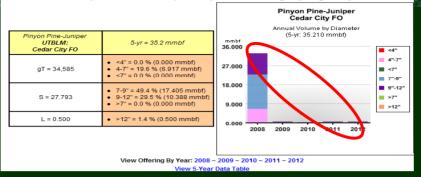
6



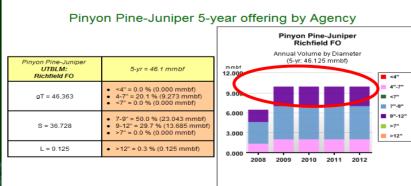
Catherine M. Mater

Mater Ltd.

Pinyon Pine-Juniper 5-year offering by Agency





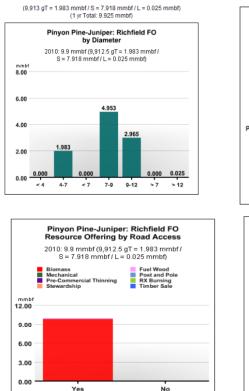


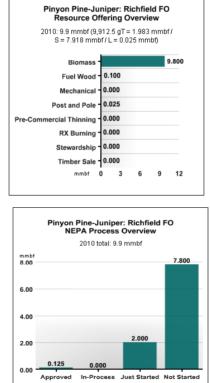
June 2009

View Offering By Year: 2008 ~ 2009 ~ 2010 ~ 2011 ~ 2012 View 5-Year Data Table Removal by multiple agencies within the CROP landscape

... how levelized?

Richfield FO: Pinyon Pine-Juniper for 2010



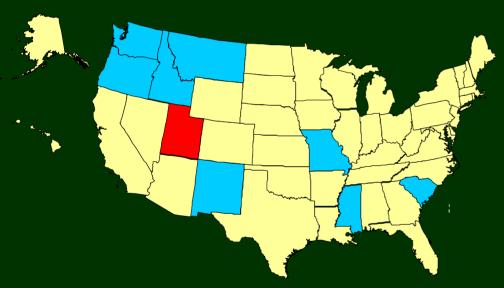


... and detail breakout by specific agency per year

June 2009

Mater Ltd.

Nine (9) additional CROP results in eight states to be transferred to the <u>interactive</u> website within the <u>next three months</u>



Supply data years
Just finishing '09-'13
'06-'10
'06-'10
'09-'13
'08-'12
'07-'11

June 2009

Mater Ltd.



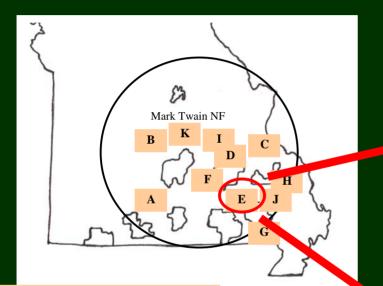
- Transfer and update all existing CROP project data to interactive website within next year.
- Complete CROP analysis across remainder NF lands in US in next year for inclusion in interactive website.
- Add interactive CROP web link to <u>DataBasin</u> (<u>www.databasin.org</u>) "landing" for state-of-art conservation update per biomass supplier in critical areas (rare species, T&E, protected lands, fire predictability, WUI lands, critical habitat).

June 2009

Mater Ltd.

Using the <u>Missouri CROP</u> as an example:

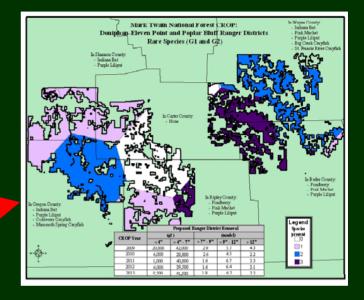
(Doniphan/Eleven Pt/Poplar Blf RD)



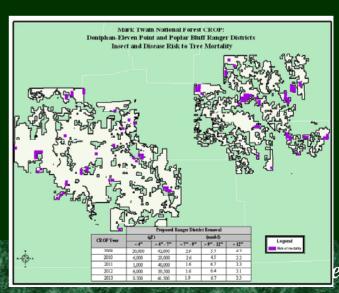
CROP and DataBasin

Rare Species

Insect/Disease Risk to Tree Mortality



<u>í</u>



June 2009

Mater Ltd.

Proposed Next Steps for Woody BUG:

- For public lands: establish *stronger alliance between biomass inventory-based estimates and real-time performance-based estimates*. CROP and FIA should be working hand-in-hand to help `right-size' projects across US.
- For private lands: actively support *inclusion of private land biomass data within CROP landscapes*. Public lands hold unique responsibility to help facilitate responsible, sustainable biomass removal from private forestlands.
- *Expand CROP modeling to include agricultural biomass within same landscapes*. Woody biomass can no longer work in isolation of other feedstocks in same landscapes that must be combined in technology use to achieve federal fuel and energy mandates.



Mater Ltd.

Catherine M. Mater

12