Forest Service CROP Review

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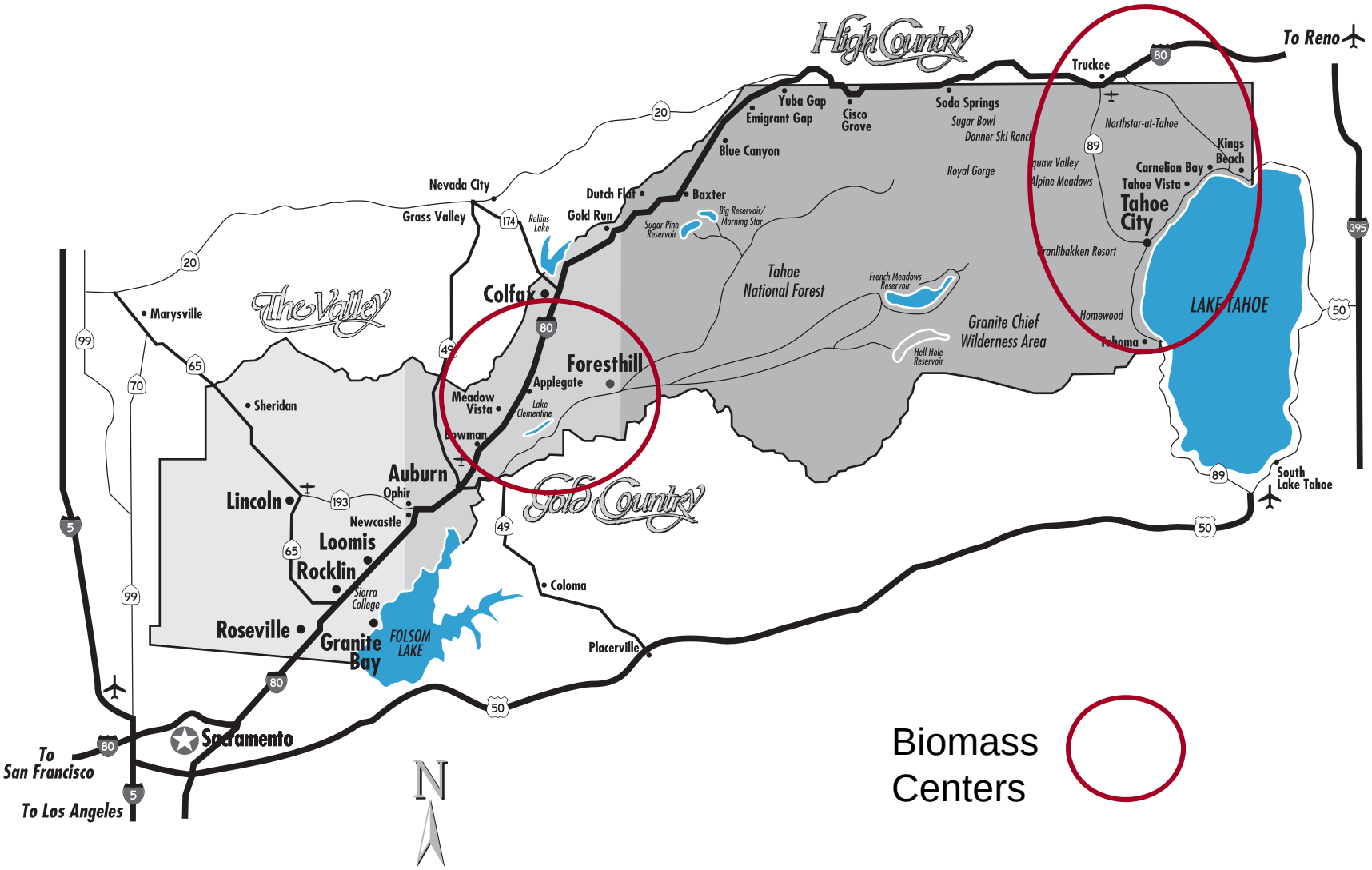
Placer County California



Placer County Promotes Biomass Utilization

Comprehensive Vision – Board of Supervisors
Discretionary county, state & federal funding on-going

Local/State/Federal Government collaboration

Rapid growth/high property values

Large Forested areas (549,00 acres) – Lots of Fuel!
Major fires since 2001 (Gap, Ponderosa, Star, Ralston – 30,000 acres)

Poor Air Quality (Ozone Non-Attainment Area – except Tahoe Basin)

Implementing Strategic Plan for research, program definition, partnerships, technology demonstrations, funding solutions

Plans aligned with President's and Governor's Energy Policy

Placer County Accomplishments To Date

Strategic Plan implementation

On the ground Programs
- **Biomass Removal**

Analyses
- **CROP**

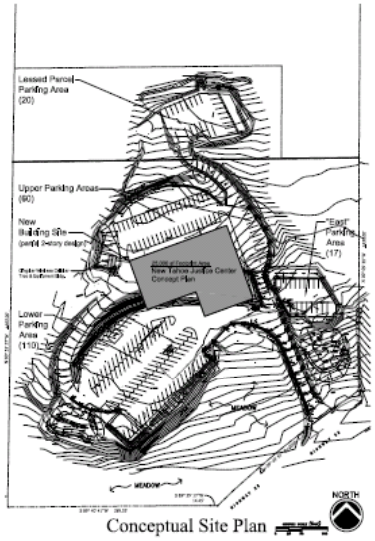
Facility proposals
- **Combined Heat & Power in Lake Tahoe**
- **Transportation fuels in Foresthill**
- **Fuels @ our Landfill**

Working group participation

Partnerships
- **USFS/DOI**
- **CDF/Biomass Collaborative/Conservancy/UC System**
- **APCD**
- **SPI/SPP**

Investors

New Tahoe Justice Center



Conceptual Site Plan

Tahoe Region CROP Study Results

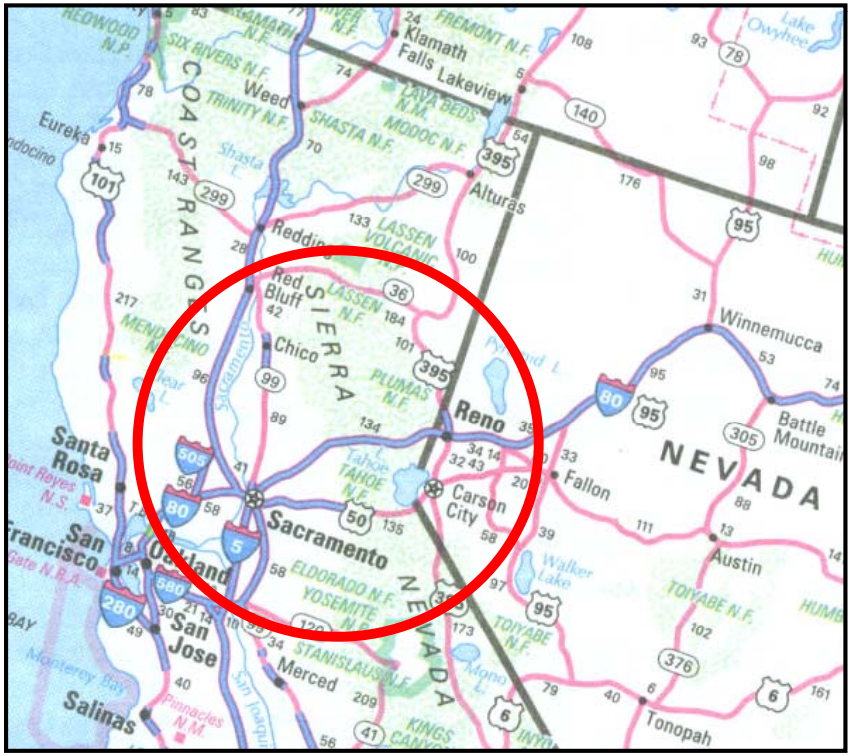
A Summary of CROP Landscape Analyses Results

Catherine M. Mater, President — Mater Engineering

<u>Tahoe Region CROP</u>:

Centerpoint: Nevada City, CA
100-mi. radius

- **7 National Forests**
- **1 Federal Management Unit**
- **22 Ranger Districts**
- **2 BLM Districts**
- **32 Counties**
- **State Lands**
- **Private Lands**



What was asked for:

- **Volume (by mmbf, green tons, ccf, etc.)**
- **Diameter sizes <4” 4”-7” 7”-9” 9”-12” >12”**

  biomass small log large log
- **Species (*17 species* evaluated for resource flow)**
- **Harvest “type”: fuel load reduction, timber sale, etc.**
- ***Location* of resource offering**

- **NEPA Phase**
- **Road accessibility**

} **Federal lands**

A Summary of CROP Landscape Analyses Results
Mater Engineering

Overall (next 5 years):

Year	Total Biomass (947,182.01 gT)	% of 5-yr volume
2007	182,872.4	19%
2008	193,527.4	21%
2009	183,502.4	19%
2010	203,127.4	22%
2011	184,152.4	19%

Biomass = 12%
(up to 7” dbh)

Total Small Log (687.516 mmbf)	% of 5-yr volume
140.948	21%
134.517	19%
130.721	19%
142.241	21%
139.086	20%

Small Logs = 45%
(>7” – 12” dbh)

Total Large Log (657.131 mmbf)	% of 5-yr volume
130.47	20%
135.416	21%
113.535	17%
138.100	21%
139.600	21%

Large Logs = 43%
(>12” dbh)

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Who's providing what?

Agency	*Biomass (gT)*	*Small Log (mmbf)*	*Large Log (mmbf)*	% of 5-yr total
Plumas NF	194,375	235.165	300.66	37%
Lassen NF	38,669	156.321	92.883	17%
El Dorado NF	359,494	96.805	30	13%
Stanislaus NF	170,000	60.87	82.58	12%
Tahoe NF	74,375	72	70.625	10%
Lake Tahoe BMU	56,650	39.75	36.41	6%

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Tahoe NF:

Ranger Districts	5-yr total (Biomass = gT)	5-yr total Small log (mmbf)	5-yr total Large log (mmbf)
Yuba River	26,875	22	25.12
American River	26,250	22	22.75
Sierraville	17,500	24	22.5
Truckee	3,750	4	.25

Lake Tahoe BMU:

5-yr total (Biomass = gT)	5-yr total Small log (mmbf)	5-yr total Large log (mmbf)
56,650	39.75	36.41

A Summary of CROP Landscape Analyses Results
Mater Engineering

Is there a change?

Yes! ***An increase of 523.82 mmbf from '02-'06 to '07-'11***

Agency	*'02-'06 (mmbf)*	*'07-'11 (mmbf)*
Plumas Nf	167.81	574.7
Lassen NF	256.93	256.93
Mendocino NF	15.61	35.05
Eldorado NF	251.68	198.70
Stanislaus NF	141.02	177.45
Humboldt-Toiyabe NF	18.37	15.42
Lake Tahoe BMU	9.44	87.49
Tahoe NF	118.56	157.5
Totals	979.42	1,503.24

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

- **Projected biomass volume of <u>~190,000 gT/yr</u> as a conservative baseline to be removed;**
- **76% of volume coming from the <u>Plumas, Eldorado, & Stanislaus NFs</u>;**
- **Volume of biomass appears sufficient to support a <u>13 MW power plant that would use ~160,000 gT/yr.</u> of biomass.**

Overall . . . *better coordination of resource, particularly in the white fir offering* for biomass & large log stratums, will likely be preferred to help:

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

A Summary of CROP Landscape Analyses Results
Mater Engineering

Potential additional wood biomass in Tahoe CROP landscape:

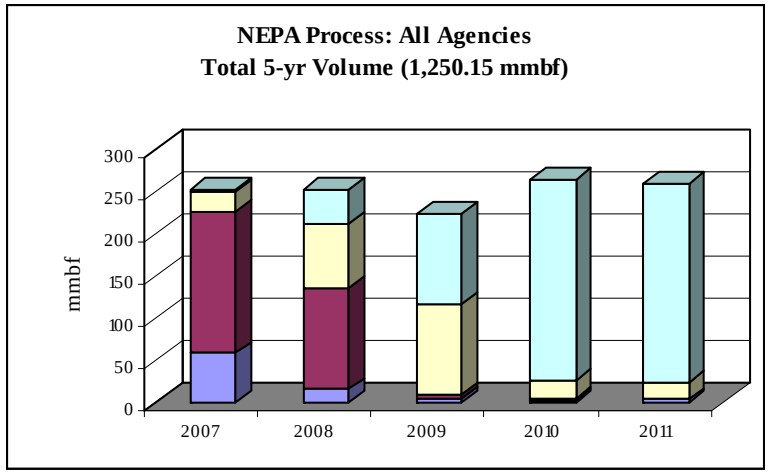
In CROP landscape	*# of counties in CROP*	*Acres in CROP*	*Estimated biomass prunings/yr (gT)*
Vineyards	**23**	**145,032**	**362,580**
Walnuts	**20**	**133,511**	**100,133**
Almonds	**16**	**157,020**	**unable to obtain**
Dried Plums	**14**	**59,047**	**unable to obtain**

A Summary of CROP Landscape Analyses Results
Mater Engineering

NEPA Picture for CROP Landscape

***All NF lands*:**
81% of 5-yr total = (1,250.15 mmbf; includes gT as mmbf)

	mmbf	*% of total*
Approved	**87.506**	**7%**
In process	**293.008**	**23%**
Just started	**249.337**	**20%**
Not started	**620.299**	**50%**



50% of CROP resource offering not started in the NEPA process! High risk scenario!

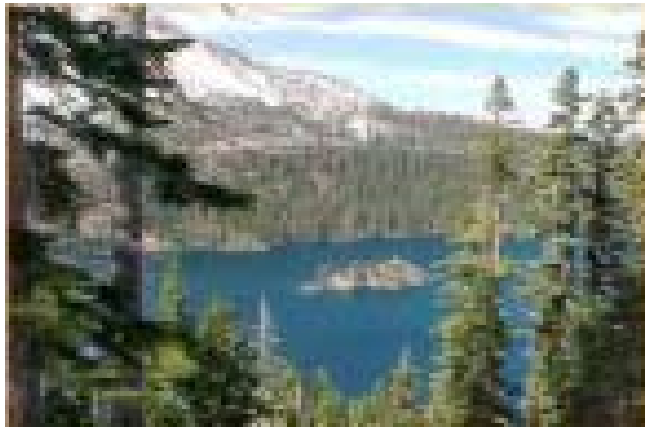
A Summary of CROP Landscape Analyses Results
Mater Engineering

NEPA Risk Rating Summary:

Tahoe NF	Total 5-yr volume	NEPA Risk Rating
Yuba River	52.5 mmbf	***high***
American River	50 mmbf	***high***
Sierraville	50 mmbf	***high***
Truckee	5 mmbf	***low***

Lake Tahoe BMU	Total 5-yr volume	NEPA Risk Rating
Lake Tahoe BMU	87.49 mmbf	***high***

Placer County Next Steps



- Health Benefits study
- Logistics analysis
- Emissions Offset/Credit analyses
- Biomass technology tradeoffs
- Fuel availability analysis – *Where we go from CROP*
  - Utilize CROP data area/sizing etc to focus harvest and facility placement
  - Work closer with Landowners to get NEPA process going
  - Assist of agencies in area to promote biomass utilization

Angora Fire

First Sightings

Angora Fire

Fire Locations

Angora Fire

Firefighter Conditions

Angora Fire

Devastation

Chronicle / Lance Iversen

Angora Fire

Causes

Questions/Comments