

**STEWARDSHIP AND FIRESHED
ASSESSMENT**

STANISLAUS NATIONAL FOREST

**FIVE-YEAR INTEGRATED VEGETATION
MANAGEMENT PROGRAM OF WORK**

(2007-2011)

OCTOBER 17, 2005

Stanislaus National Forest Supervisor
Stanislaus National Forest Deputy Forest Supervisor



Steps Used in Stewardship and Fireshed Assessment Process

1. Firesheds delineated (March 4, 2004), based on:
 - Major watersheds; and
 - Fire regime.
2. Firesheds prioritized for treatment (March 30, 2004), using:
 - Wildland/Urban Interface (WUI);
 - Condition class; and
 - Fire hazard.
3. Possible treatment areas drawn across landscape (April 13-14, 2004), based on:
 - Finney pattern;
 - Land ownership;
 - Vegetation;
 - Topography;
 - Land allocations;
 - Forest infrastructure; and
 - Knowledge of ground.
 - Acreage of treatment areas = 116,000
4. HUX6 watersheds grouped into planning units.
5. Planning units prioritized for treatment (January 20, 2005), using:
 - WUI;
 - Condition Class;
 - Fire hazard; and
 - Risk of tree mortality from insects and disease.
6. Public meeting held to discuss possible scenarios (August 9-11, 2005).
7. Forest defines parameters for Forest scenario, based on:
 - Location: Emphasis on treating WUI; and
 - Intensity: Prescriptions.
8. Forest refines treatment areas, partly as result of first public meeting, looking at:
 - WUI not previously included in treatment areas;
 - Large treatment areas; and
 - Gaps in pattern
9. Regional Cadre completes initial computer runs on scenarios.
10. Second public meeting held to present results of scenario runs and get feedback (September 15, 2005).
11. Cadre continues to run scenarios, as modified by Forest and public.
12. Forest selects Forest proposed scenario/schedule (October 5, 2005).
13. Forest presents proposed scenario to Regional Forester (October 11, 2005).
14. Regional Forester provides feed back on proposed scenario.
15. Final adjustments made to Forest scenario.
16. Forest submits Forest scenario to Regional Forester (October 14, 2005) (submittal letter attached).
17. Forest presents approved program to public (October 17, 2005).

Next Steps

1. Forest and District staffs prepare Work Plans for program (October/November).
2. Forest and District staffs meet to coordinate resources to achieve FY2006 Program of Work (POW) (including planning for FY2007 POW) (November).
3. SFA process documented (November/December/January).
4. Forest and District staff meet to continue coordination of resources for FY2006, refine schedule for next couple of years, and identify FY2012 scheduling units (January/February 2006).

Prescriptions—Forest Plan (as amended by the 2004 Sierra Nevada Framework) Standards and Guidelines

<ul style="list-style-type: none"> • Retain at least 50% canopy <ul style="list-style-type: none"> → Outside Defense Zone → Outside California spotted owl Home Range Core Areas (HCRA) → Where canopy cover is 50% or greater 	<ul style="list-style-type: none"> • Exceptions are to: <ul style="list-style-type: none"> → Adequately reduce ladder fuels; → Provide sufficient spacing for equipment operations; → Minimize re-entry; → Design cost-efficient treatments and/or → Significantly reduce stand density. • Then, retain at least 40%.
<ul style="list-style-type: none"> • Retain at least 50% canopy cover <ul style="list-style-type: none"> → Outside Defense Zone → Within California spotted owl HCRAs → Where canopy cover is 50% or greater 	<ul style="list-style-type: none"> • Exceptions are to: <ul style="list-style-type: none"> → Adequately reduce ladder fuels → Provide sufficient spacing for equipment operations, and/or → Minimize re-entry • Then, retain at least 40%.

Forest Prescriptions

Modeling Assumptions

- Same prescriptions as modeled for 2004 Sierra Nevada Forest Plan Amendment Final Supplemental Environmental Impact Statement.
- Exception (for modeling purposes) reduces canopy cover to 40% and thins from middle in certain locations.
- Actual prescriptions will depend on site-specific conditions.

Location of Exception

- Applies to 21,000 acres of the 116,000 acres in treatment areas.
- Outside Defense Zone.
- Where canopy cover exceeds 50%.
- In General Forest and Old Forest Emphasis Areas (outside Home Range Core Areas).
- Outside Riparian Conservation Areas (RCAs) for perennial and intermittent streams.

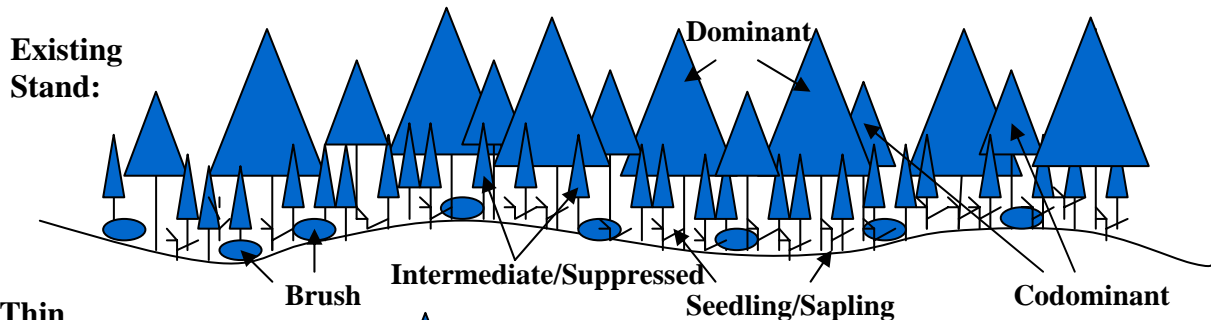
Reasoning

- Higher volume/acre
- Returns help pay for other treatments

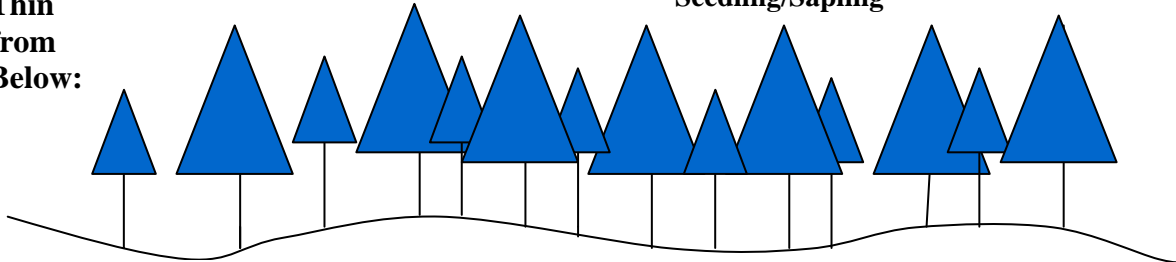
Diagram of Thin from below versus Thin From the Middle

Assumptions:

- Fuels objectives are met under both prescriptions.
- All dominants are above maximum diameter limit.
- All intermediate/suppressed and codominants are under maximum diameter limit and of merchantable size.

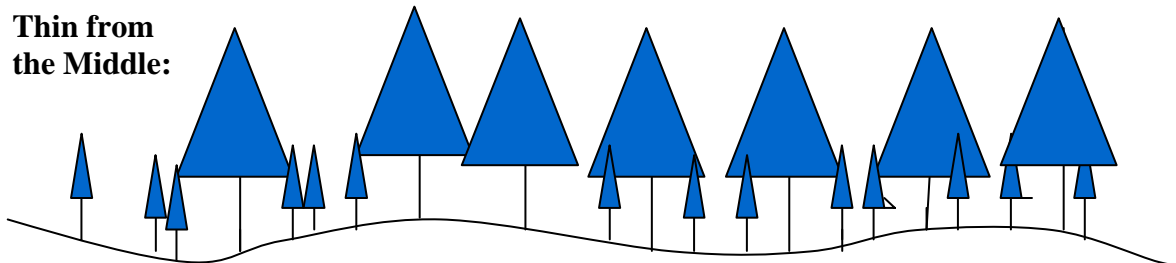


Thin from Below:



Thin from below: take small material until canopy cover limit reached.

Thin from the Middle:



Thin from the middle: after meeting fuels objectives, take trees from maximum diameter down until canopy cover limit reached.

Criteria for Forest Stand Scenario

1. Initially specified 8,000 acres treated/year.
2. Planning unit priorities emphasized.
3. Weight given to:
 - Scheduling at least one project on each District per year; and
 - Maximizing total treated acres;
4. Gradual increase in acres and volume, then level off; and
5. Computer run modified by District Rangers and staff, based on:
 - Desired mix of maintenance, planning, and implementation;
 - Fireshed priorities;
 - Spatial, temporal, fiscal, and political considerations;
 - Refined estimates of product utilization and timber volume;
 - Collaborative efforts with fire safe councils, home owner associations, etc.;
 - Public input;
 - Future treatments (planning started);
 - Existing stand conditions;
 - More even distribution of projects across districts; and
 - Recognition of scheduling units with more immediate need of treatment.

Summary of Modeled Outputs of Forest Scenario

Numbers are averaged over first five years (2007-2011).

Acres Initially Treated	11,200/year
WUI Acres Initially Treated	5,000/year
Volume	33MMBF/Year
Maintenance & Follow-up Treatment Acres	4,000/Year
Years to Complete Treatment Areas	12 Years

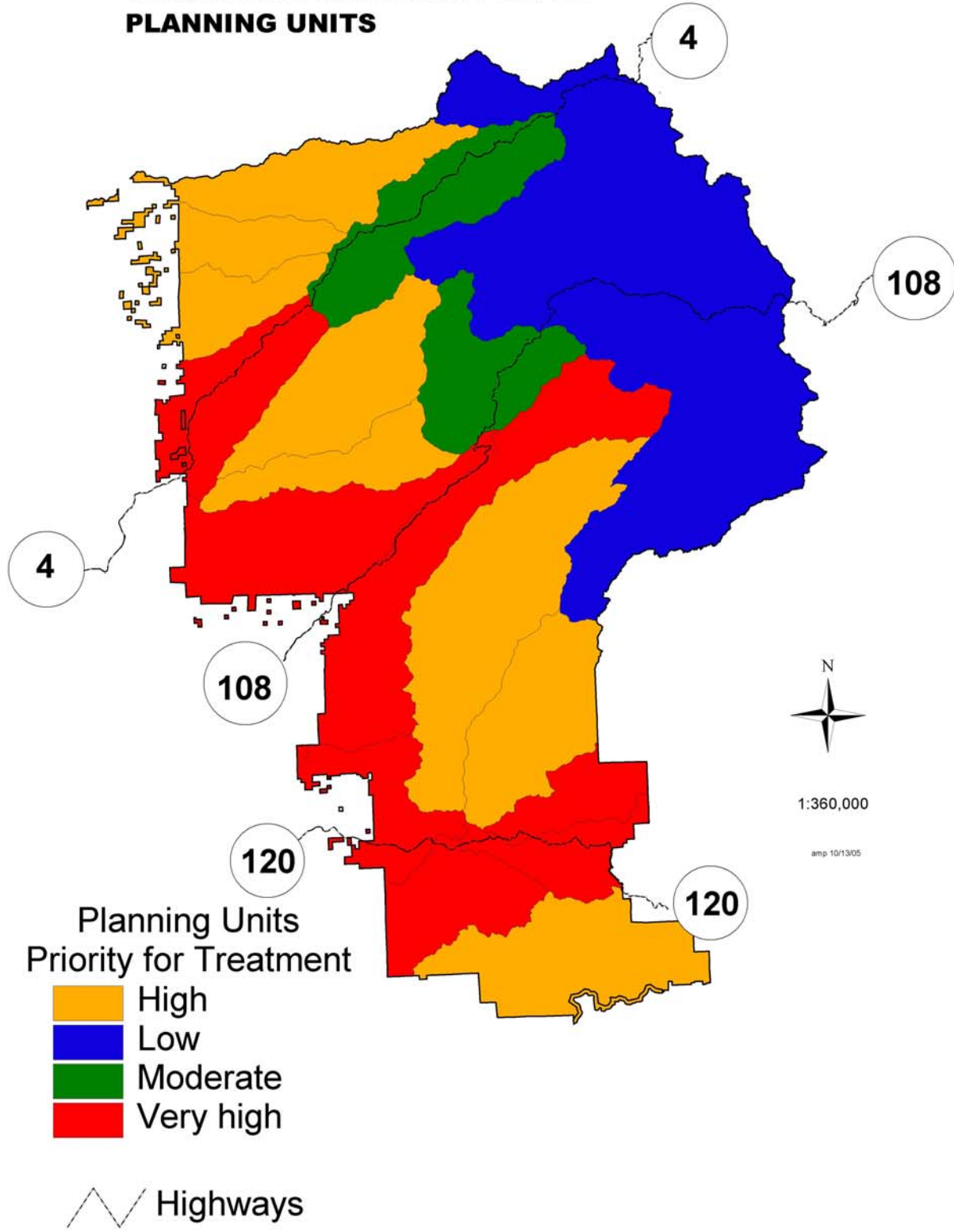
Emphasis Given to Planning Unit Priorities in Forest Scenario

1. Planning units based on watershed boundaries
2. Planning units prioritized for treatment, based on:
 - Fire hazard of majority of planning unit;
 - Condition class of majority of planning unit;
 - % acreage at risk of tree mortality due to insects and/or disease; and
 - % acreage in WUI.

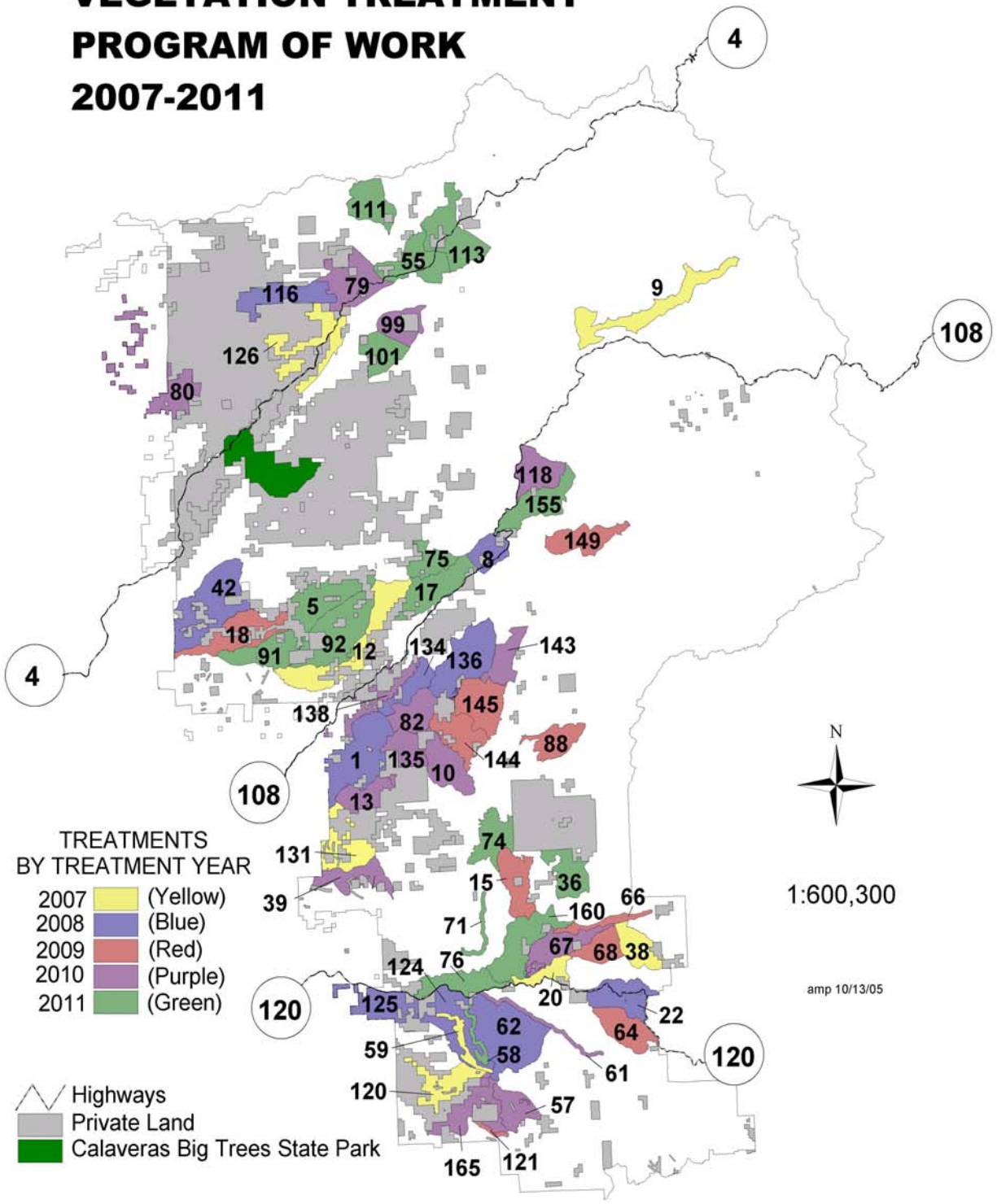
The following table shows the results of the prioritization process. As can be seen, the Forest identified 17 planning units. Priorities range from 7, for the lowest priority for treatment, to 12, for the highest priority for treatment.

PLANNING UNIT	PRIORITY
South Tuolumne	12
Middle Tuolumne	12
Calaveras	12
North Merced	11
Don Pedro	11
North Tuolumne	11
Lyons	11
Middle Tuolumne	10
Merced	9
Cherry	9
Clavey	9
Sandbar	9
Griswold	9
South Mokelumne	9
North Mokelumne	9
Beardsley	7
North Stanislaus	7

STANISLAUS NATIONAL FOREST PLANNING UNITS



STANISLAUS NATIONAL FOREST VEGETATION TREATMENT PROGRAM OF WORK 2007-2011

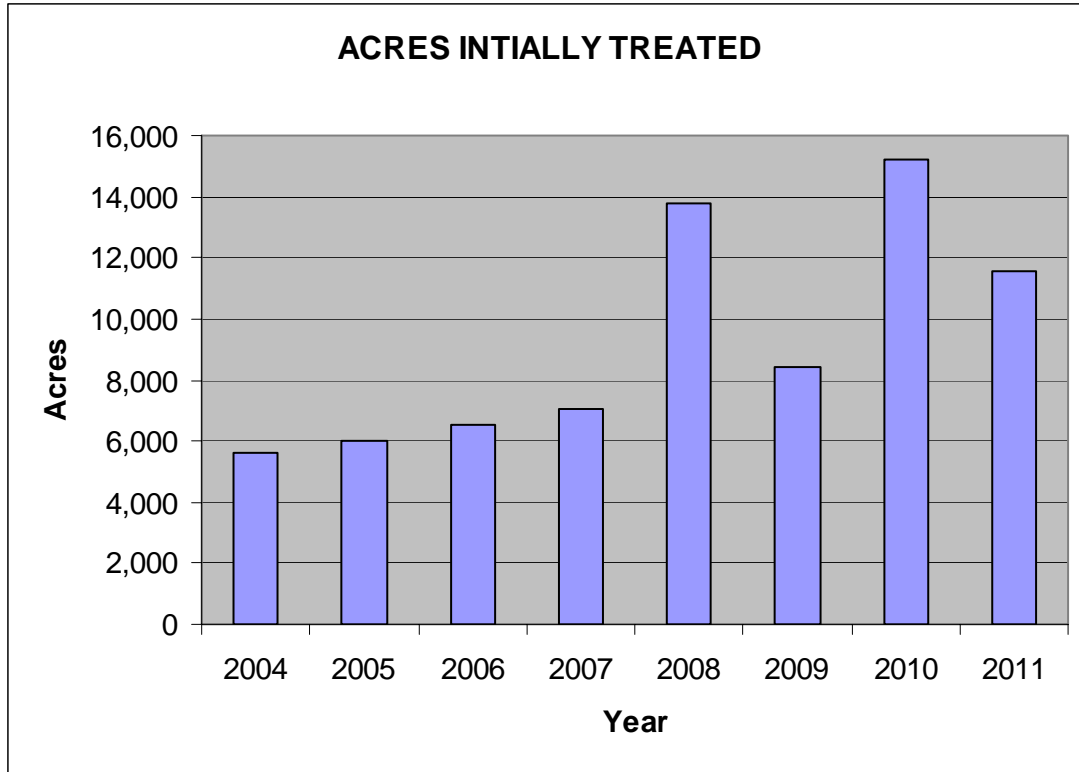


These tables show the year of treatment, the volume, the acres of initial treatment, and the WUI acres of initial treatment that were modeled by scheduling unit. The scheduling unit is the approximation of a project area. The number of each scheduling unit in the five-year program is shown on the map on the previous page.

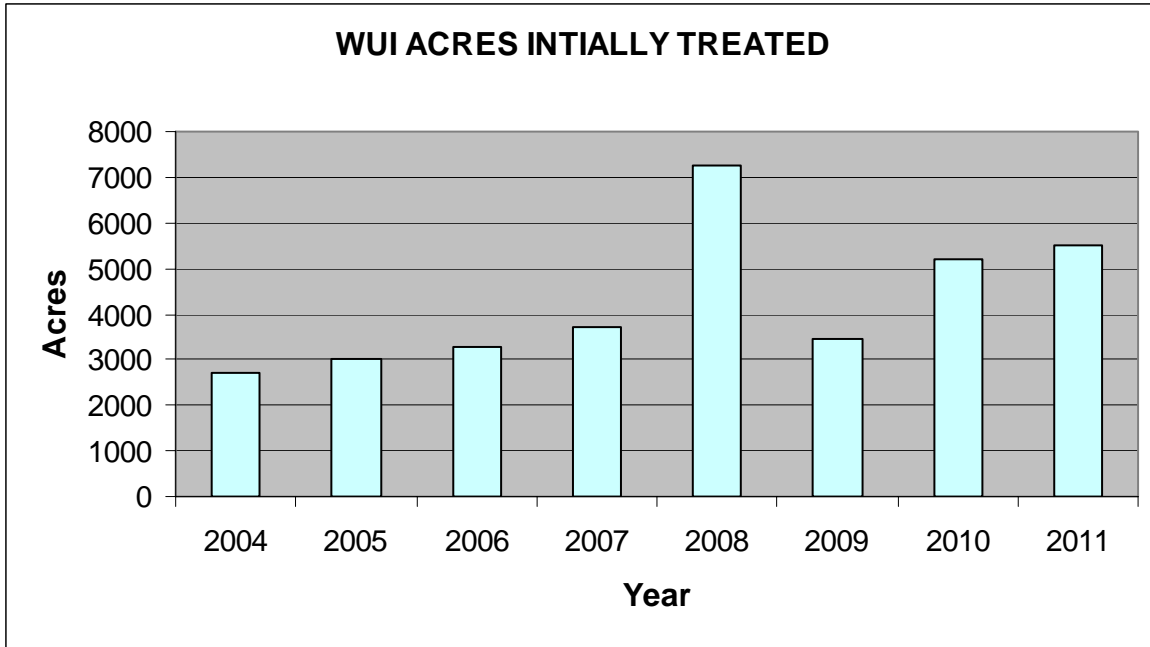
YEAR	SCHEDULING UNIT	VOLUME	ACRES	WUI ACRES
2007	9	5620	808	0
2007	12	1863	960	589
2007	20	1810	416	416
2007	38	196	49	33
2007	59	273	717	709
2007	120	4793	2562	1762
2007	126	11002	1548	220
Total		25557	7060	3729
2008	1	2072	885	885
2008	8	1000	200	22
2008	22	2333	45	334
2008	42	104	742	667
2008	62	385	2707	498
2008	116	8383	1477	0
2008	124	244	1687	58
2008	125	8420	2900	2673
2008	134	562	588	588
2008	136	7692	2140	1556
Total		31195	13783	7251
2009	15	1209	892	5
2009	18	1250	957	956
2009	64	1877	1066	401
2009	66	1209	417	236
2009	68	303	99	99
2009	88	2007	1134	0
2009	121	154	207	204
2009	144	7237	982	32
2009	145	1331	1851	916
2009	149	5319	822	592
Total		34296	8427	3441
2010	10	5499	1537	0
2010	13	808	836	835
2010	39	37	927	93
2010	57	29	254	0
2010	61	1153	783	179
2010	67	1498	652	652
2010	7	5292	1396	187
210	80	8549	2186	942

YEAR	SCHEDULING UNIT	VOLUME	ACRES	WUI ACRES
2010	82	324	1441	76
2010	99	6118	1202	631
2010	118	1186	384	0
2010	131	305	1150	826
2010	135	534	469	123
2010	138	232	144	90
2010	143	4431	575	34
210	165	1136	1292	534
Total		37131	15228	5202
2011	5	907	732	421
2011	17	920	431	429
2011	36	181	381	13
2011	55	9019	1145	974
2011	58	327	638	338
2011	71	106	171	0
2011	74	3596	859	0
2011	75	3789	564	563
2011	76	167	854	854
2011	91	137	196	196
2011	92	266	1221	433
2011	101	8468	1534	0
2011	111	6	695	0
2011	113	6888	975	791
2011	155	2658	749	92
2011	160	636	391	391
Total		38071	11536	5495

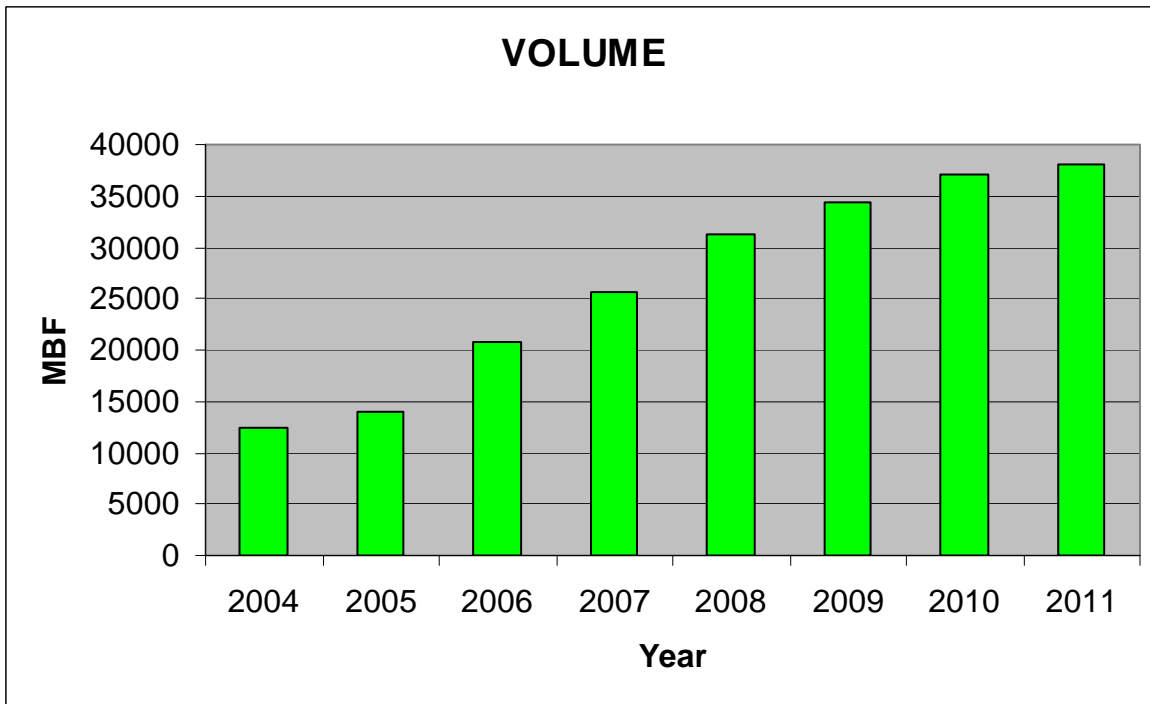
Modeled Outputs of Forest Scenario:



It is anticipated that the number of acres to be treated per year will increase from approximately 5,100 acres in Fiscal Year (FY) 2004 to more than 13,000 acres in FY2008. Overall it is expected that an average of 11,200 acres/year will be treated between FY2007 and FY2011. This represents only initial treatments; it does not consider the necessary follow-up and maintenance acres that will be treated. The large increase in total acres treated in FY2008 and FY2010 is due partly to an increase in WUI acres treated, and partly to the goal of maintaining a gradual increase in the amount of volume produced.



The number of WUI acres to be treated over the implementation period will be about 5,000 acres/year. In most years, the acreage of WUI treated will be 50% or greater of the total acreage treated. In 2009 and 2010 it will be less than 50% of the total acreage treated. Over the five-year period it is anticipated that a total of 25,000 acres of WUI will be treated. This represents about 45% of the total acres to be treated over the five-year period (56,000 acres).



The above chart represents the timber offered in FY2004 and FY2005, and the proposed timber offer in FY2006 through FY2011. It should be recognized that this is a significant increase from

FY2003, when volume offered was approximately 8 MMBF. The Forest offered 14.1 MMBF in FY2005, and plans to offer 21 MMBF in FY2006.

In order to increase acres treated and volume offered more personnel are needed. Therefore, the funding for the Stanislaus must increase. This increase in the Stanislaus' hazardous fuels and timber funding will come at the expense of other budgets in Region 5 (the Pacific Southwest Region), since no increase in the Region's budget is anticipated. The budget and resource staff will continue to work with the Regional Office staff to finalize the budget for FY2006. The Forest has already undertaken significant strides to begin filling numerous positions and will continue these efforts to meet the goals outlined in the five-year program of work.

Cumulative Effects of Forest Program of Work:

A thorough analysis of cumulative effects will be undertaken at the project-level basis. At the program-of-work scale, a cumulative effects analysis is necessarily broad. Two categories of effects are considered at this broad scale: wildlife habitat effects and cumulative watershed effects (CWEs).

Wildlife Habitat Effects

California Spotted Owl:

Total PAC ¹ Acreage	58,378
Total Acreage of PACs Treated	2,459
Acreage of PACs Treated in WUI	1,742
% Acreage of PACs Treated	4%
Total HRCA ² Acreage	136,983
Total Acreage of HRCAs Treated	17,627
Acreage of HRCAs Treated in WUI	6,375
% Acreage of HRCA Treated	13%

¹PAC = Protected Activity Center

HRCA = Home Range Core Area

A California Spotted Owl PAC is an area of suitable habitat, 300 acres in size, drawn around known locations of spotted owls. An HRCA is an area of suitable habitat, 1,000 acres in size, drawn around known locations of spotted owls. It includes the 300 acres of PAC. PACs do not overlap; HRCAs may overlap.

As can be seen from the table, approximately 4% of the acreage in California Spotted Owl PACs would be treated over the 12 years it would take to treat all the treatment areas. Of the PAC acres treated, about 70% would be in the WUI. Roughly 13% of the HRCAs would be treated. Of those treated, 36% would be WUI acres.

Northern Goshawk:

Total PAC ¹ Acreage	9,292
Total Acreage of PACs Treated	738
Acreage of PACs Treated in WUI	589
% Acreage of PACs Treated	8%

¹PAC = Protected Activity Center

A Northern Goshawk PAC is an area of suitable habitat, 200 acres in size, drawn around known locations of goshawks.

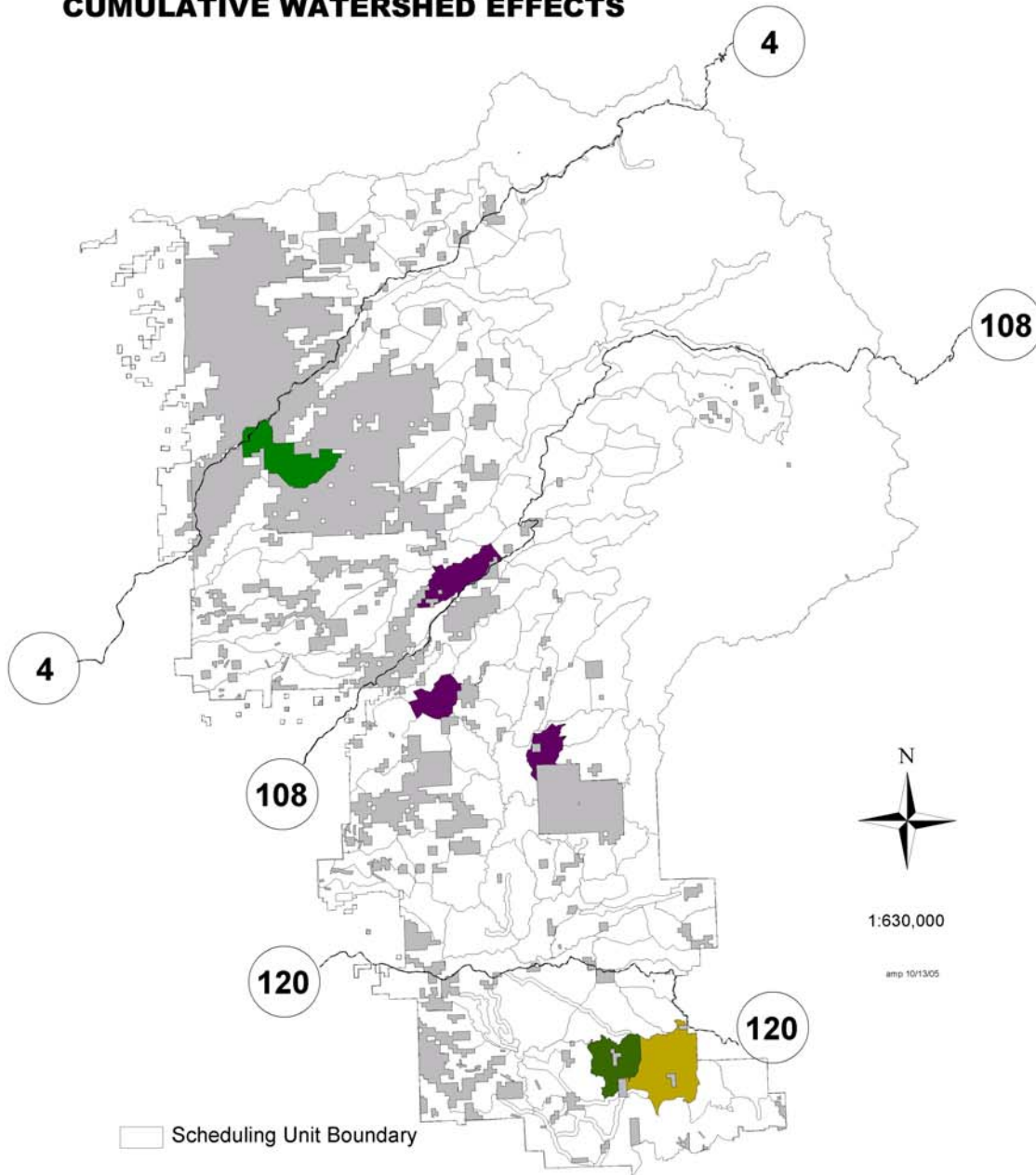
The table shows that about 8% of the acreage in Northern Goshawk PACs would be treated over the 12 years of the program. An estimated 80% of the treated acres would be in the WUI.

Cumulative Watershed Effects

The map on the next page shows the scheduling units within which the Equivalent Roded Acres (ERAs) are such that the treatment of these units must be deferred until the year shown. ERAs are a measure of the amount of ground disturbed within a watershed. When a certain level of disturbance is reached (the Threshold of Concern), and recognized measures are not sufficient to mitigate the effects of further activities, activities are deferred.

Five scheduling units would require deferment of treatments. Of these, two are scheduled to be treated in the five-year period covered by the Forest's scenario (2007-2011). Initial analysis indicates that, barring adequate mitigation measures, both of these should not be treated until 2009. Both are scheduled to be treated in 2010. So, at the broad scale, cumulative watershed effects are not a concern. At the project-level scale, these types of effects may become a concern.

STANISLAUS NATIONAL FOREST CUMULATIVE WATERSHED EFFECTS



□ Scheduling Unit Boundary

Year To Which Treatments Must
Be Deferred Due To
Cumulative Watershed Effects



△ Highways
 □ Private Land
 ■ Calaveras Big Trees State Park