

**PACIFIC SOUTHWEST REGION
FIRE & AVIATION MANAGEMENT
HAZARDOUS FUELS ACCOMPLISHMENTS
2004**

Fuels Treatment

The Pacific Southwest Region fire and fuels managers are in their 4th year of successful implementation of National Fire Plan (NFP) activities. The NFP was initiated in August 2000, following a landmark wildland fire season, with the intent of actively responding to severe wildland fires and their impacts to communities while assuring sufficient firefighting capacity for the future. The NFP addresses five key elements: Firefighting, Rehabilitation, Hazardous Fuels Reduction, Community Assistance, and Accountability.

In 2004, fire and fuels managers in the Pacific Southwest Region successfully completed hazardous fuels treatment on 74,935 acres in the wildland urban interface (WUI) and 39,180 acres of hazardous fuels treatment in areas outside of the WUI. Managers utilized various fuel treatment methods to accomplish this work including prescribed burning and mechanical treatment.

Hazardous fuels accomplishments by Forest:

<u>Forest</u>	<u>Total Acres</u>
Angeles NF	6,297
Cleveland NF	3,709
Eldorado NF	6,424
Inyo NF	2,778
Klamath NF	6,330
Lake Tahoe Basin	1,729
Lassen NF	20,394
Los Padres NF	4,595
Mendocino NF	5,724
Modoc NF	12,984
Plumas NF	16,742
San Bernardino NF	6,226
Sequoia NF	2,748
Shasta Trinity NF	4,606
Sierra NF	2,600
Six Rivers NF	586
Stanislaus NF	5,613
Tahoe NF	4,030
Total	114,115



Monitoring 2004

Prescribed Fire & Fuel Treatment Effectiveness & Effects

Since the fall of 2000, the Pacific Southwest Region Fire and Aviation Management conducted systematic monitoring of fire effects and effectiveness of fuel treatments across the region.

Forty-three projects on every national forest in California have been monitored as of fall 2004. This includes a variety of prescribed fire and mechanical fuel treatment projects in chaparral, forested, and mixed shrub/forested ecosystems.

The objectives of the monitoring include: collecting baseline information on fuels, wildlife habitat, and vegetation composition and structure before treatments; gathering and assessing changes in fuels, wildlife habitat and vegetation after treatment; and development of a cost-effective approach to address common questions on effectiveness of fuel treatments, appropriate fuel models for post-treatment conditions, and improved tree mortality projections.

To date data from 179 plots have been collected pre-treatment, 51 plots first year post-treatment, and 25 plots second year post treatment. Analysis is currently underway on data collected this summer and will greatly expand the ability to compare pre- and post-treatments. A report on the latest findings is expected next spring.

Photographs taken before and after fuels treatments on one of the plots.



For additional information contact Jo Ann Fites-Kaufman Ph.D. with Adaptive Management Services Enterprise Team at 530-478-6151.

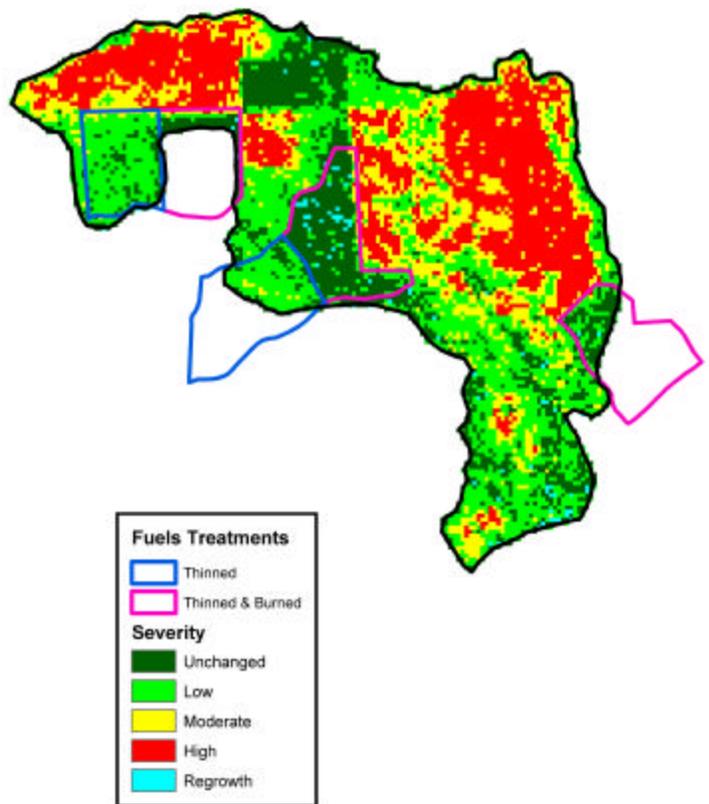
Fire Severity

In 2000, the Pacific Southwest Region Fire and Aviation Management developed a landscape level fire monitoring program. This program monitors large wildland fires using Landsat TM satellite imagery by mapping burn severity. This data is being used to quantify current fire regimes in Sierra Nevada vegetation types.

In addition, the burn severity data can be used to monitor fuel treatment effectiveness at a landscape level. This allows the Pacific Southwest Region to correlate fuel treatment types with fire severity effects at a landscape level, giving a view of how fire effects are changing due to strategically placed area treatments. Since the start of the program, over 70 large fires have been mapped for fire severity on National Park Service (NPS) and National Forest (NF) lands.

An example of the severity monitoring is shown on the Cone Fire Burn Severity Map below. The Cone fire started September 25, 2002 and burned through several experimental fuels treatments in Blacks Mountain Experimental Forest on the Lassen National Forest. The correlation of the fuels treatments to burn severity is clearly seen on the map.

Cone Fire – September 25, 2002



In addition, data has been collected from over 1,080 field plots on NF lands and over 180 plots on NPS

land. This data will be used to help with calibration of the satellite imagery.

One of the field plots.



This is a cooperative project with the United States Geological Survey Burn Severity Mapping Program and Yosemite and Sequoia-Kings Canyon National Parks.

For additional information contact Andrea Thode at 916-640-1064 or Neil Sugihara at 916-640-1054



Fuels Review

It was identified that there was a need to determine how best the Pacific Southwest Region would be able to meet current expectations in accelerating accomplishment of the National Fire Plan and implementing the new Healthy Forest Restoration Act. Fire and fuels managers wanted to ensure the most efficient and effective means were being used to treat hazardous fuels and restore healthy forests.

The objectives of the review were to:

1. Evaluate fuels/vegetation management programs: successes and barriers to meeting or expanding fuels targets.
2. Evaluate how integration across multiple resource areas is occurring and how it relates to the ability to meet expanding

fuels targets or increased efficiency in meeting targets.

The primary approach was information gathering and synthesis rather than evaluating and providing recommendations. Evaluation and recommendations will be a separate task.

Information was gathered by two different means. First there was a questionnaire and second there were site visits to eight individual national forests by interdisciplinary teams.

Four interdisciplinary teams visited eight national forests across all provinces. Interviews were conducted with a cross-section of employees from districts and supervisor's offices in various staffs and levels. On some units, stakeholders that work directly with the Forest Service on Fire Safe Councils or Resource Advisory Committees were also interviewed.

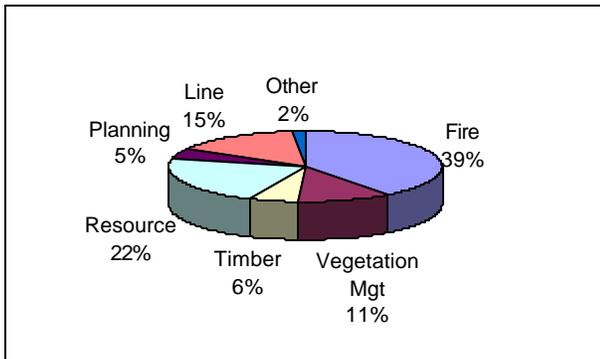
A diverse set of topics were addressed including:

- Resource management objectives
 - Relationship to national policy and initiatives
 - Adequacy of current LRMP and Fire Management Plans
- Budget process
- Organization skill mix/training/qualifications
- Planning & implementation
- Collaboration/grants/joint planning
- Oversight (direction/assistance)
- Integration
- Efficiency

Over 300 employees from Ranger Districts and Supervisors Offices responded to the questionnaire or were interviewed on the site visits. An exact number is not available, since the surveys were anonymous and there was some overlap between survey respondents and those interviewed in person but the group received approximately 245 questionnaires.

The respondents included a cross-section of functional areas and line officers, with fire, vegetation management and timber, and resource staff as the primary respondents.

Chart shows distribution of respondents.



The findings were presented in two different sections in the report. First was the overall summary of the questionnaire and on-site interviews. Second were the detailed responses to the questionnaire. A comprehensive list of suggestions and comments that were made throughout the interviews were also compiled in a less edited form.

Several actions were immediately taken as a result of the review.

- A special working group coordinated by Natural Resources Management and Fire and Aviation Management set up a web-site and coordinated “on-the-ground” assistance to southern California forests.
- Fire and Aviation Management developed a “fuels coaching” service, including phone support, site visits and virtual training.
- FIRESHED training and field visits by an interdisciplinary team were organized and implemented.
- The Regional budget staffs worked on implementation of a new performance based budget system to replace BFES.
- An integrated Regional committee developed findings, made recommendations, and prepared an action plan (attached) based on the review.

A letter from Regional Forester Jack Blackwell, dated December 6, 2004, demonstrates his commitment for implementation of the resultant action plan that included 38 action items with expectations of the same commitment from Directors and Forest Supervisors. He outlined four

additional strategic actions for Forest Supervisors to take:

- 1) Set clear expectations and provide consistent direction that fuels and restoration management are a priority.
- 2) Develop a 5-year fuels and restoration treatment schedule for each Forest that reflects our Regional vision of increasing fuels accomplishments that integrate the different vegetation management programs available to us.
- 3) Plan to adjust organizations so that they efficiently deliver the 5-year program of work.
- 4) Support resource specialists’ attendance at training sessions and encourage them to participate in a broad range of fuels and vegetation treatment activities.

For additional information contact Jo Ann Fites-Kaufman Ph.D. with Adaptive Management Services Enterprise Team at 530-478-6151.



Looking forward

Fuel treatment plans for prescribed burning and mechanical treatments are ready to go and work has begun in many areas of California in 2005. The Region’s fire and fuels managers are working with other Federal, State, Tribal and local partners in a collaborative approach to treating hazardous fuels. There’s a strong commitment by the Region and our partners to accomplish community protection and ecosystem maintenance and restoration.



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