

**THE BOARD OF FORESTRY**  
**AND FIRE PROTECTION**



**THE 1996 FIRE PLAN REVIEW**  
**AND**  
**FIRE PLAN STEERING COMMITTEE CHARTER**

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*The Board's Mission:*

*To lead California in developing policies and programs that serve the public interest in environmentally, economically, and socially sustainable management of forest and rangelands and a fire protection system that protects and serves the people of the state.*

# 1996 California Fire Plan Review

May 19, 2008

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## **Section I. Summary of the 1996 Fire Plan Review**

**Background:** From January 2005 to May 2007, the Board of Forestry and Fire Protection Resource Protection Committee (RPC) reviewed implementation of the 1996 California Fire Plan. The goal of the review was to determine “*How have we done, and what can be done better to reduce future costs and losses*”. The RPC has reviewed the *Findings and Recommendations* of the three main elements of the 1996 Fire Plan (Level of Service –LOS, Wildfire Fiscal, and Pre Fire management).

Contributions to the review included the April 05 Workgroup Assessment (Hoffman Team); CDF Firefighter’s Union (Rissmiller) assessment dated 12/05; and RPC discussion from CAL FIRE Staff (Chief Wayne Mitchell, CFO Tom Lutzenberger, Deputy Chief Ken McLean, AEU Unit Staff) and various members of the public.

### **1996 Fire Plan Review Findings:**

#### **1996 Fire Plan established a visionary framework, but full implementation is uncertain**

- The 1996 Plan focused on creating a framework for information and assessment tools.
- The 1996 Plan included broad solutions to the wildfire issue including a new focus on prefire management.
- The 1996 Plan represented a conscious shift from wildlands fuel management to high value asset protection highlighting the wildland/urban interface.
- Full implementation of the 1996 Fire Plan at the Unit level of every Unit was not achieved.

#### **Achievement of the broad goal “... reduce total costs and losses from wildland fire...” was partially met.**

- Total acreage of wildfire is increasing, although total number of fires is decreasing. This may indicate effective initial attack suppression efforts, but an increasing number of large damaging fires, perhaps due to the change in philosophy which enabled a lessening of projects to reduce fuels on a landscape level as well as the inherent reduction in harvesting and management in forested landscapes.

- CAL FIRE resources (number of engines, staffing levels, etc) have remained stable over last ten years while demand for services is increasing due to factors out of their control. However, salary related costs have risen significantly over the last ten years contributing to increasing suppression costs.
- Achievement of a reduction in costs appears uncertain. Empirical information indicates continuation or increasing emergency fund expenditures, and rising general fund costs. Substantial increases over last ten years in emergency fund expenditures have occurred.
- Wildland fuel conditions are driving increasing cost and losses and have a direct affect on level of service. Continuing population expansion and fuel conditions are factors driving fire suppression costs.

**1996 Plan lacks performance measures and program reporting to determine levels of success**

- The 1996 Plan did not include accomplishment measures for monitoring progress and results. The 1996 Plan envisioned a rating mechanism that would allow for comparisons and measures, this mechanism was never put into place and utilized as a means for analysis and review.
- In general, lack of clear and assimilated data on the implementation of the measurement metrics and other components of the plan, both on the unit and the statewide level, inhibited evaluation by the Board of Forestry and Fire Protection of the 1996 California Fire Plan findings and recommendations.

## **Section 2. Board Strategic Program, Incorporation of Review Elements**

This section outlines the strategic program of the Board. This program incorporates the findings in Section 1 of this document.

### *The Forest and Range 2003 Assessment*

The Forest and Range 2003 Assessment provides a systematic overview of the status, trends, and challenges to California's forest and rangeland resources. The Assessment is not a plan; it summarizes current knowledge, projects future conditions, and underscores potential problems and opportunities. The 2003 Assessment can be accessed at: <http://frap.cdf.ca.gov/>

The Assessment comprises a comprehensive series of on-line technical reports on over 30 topics relevant to environmental, economic, and social conditions that are the foundation of resource sustainability. The Assessment flagship product, "The Changing California: Forest and Range 2003 Assessment," summarizes information from these technical reports. It focuses on status, trends, and factors affecting sustainability, while framing policy issues and options for consideration by the State Board of Forestry and Fire Protection as well as other policy makers.

### *The Montréal Process*

For the Assessment, FRAP followed the Montréal Process framework that is a set of criteria and indicators used to measure sustainable forest management for nontropical forests. It was designed under the auspices of the United Nations and is now used by the U.S. Forest Service, the state of Oregon, and a number of other entities (USFS RPA, 2002; ODF, 2003; USFS, 1997). The Montréal Process was the result of initial efforts by the 1992 United Nations Conference on Environment and Development and led to the 1994 formation of the Working Group on Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests in Geneva.

The criteria and indicators cover broad topics relevant to sustainable management. They recognize the interdependence of environmental, economic, and social goals. The seven criteria identified by the Montréal Process include vital functions and attributes (biological diversity, productivity, forest health, the carbon cycle, and soil and water protection), socio-economic benefits (timber, recreation, water, forage, and cultural values), and the laws and regulations that constitute the forest policy framework. Within these criteria are 67 indicators that measure the status and trends of forest conditions and help focus attention on factors affecting sustainability. The 2003 Assessment uses the Montréal Process indicators but also adapts and expands them to meet the many different conditions within the State. To address this need, FRAP has used or modified the Montréal Process indicators as well as crafted descriptive, qualitative statements

addressing conditions specific to California. These qualitative descriptors are used in cases where FRAP does not have enough information to make a definitive assessment or show established trends.

### The 2007 Policy Statement and Policy Program

The Board is responsible for developing the general forest policy of the State, for determining the guidance policies of the Department (CalFire), for development of the Fire Plan; and for representing the State's interest in Federal land in California. Together, the Board and the Department work to carry out the California Legislature's mandate to protect and enhance the State's unique forest and wildland resources.

As mentioned above, a policy statement is prepared following a comprehensive assessment by the California Department of Forestry and Fire Protection's (CalFire) Fire and Resource Assessment Program (FRAP).

The strategic planning process defines and communicates the Board's guiding values and priorities. This planning directs resources and efforts on the most important issues. It also defines both the Board's and Department's desired future outcomes, and how performance is measured and reported. This reporting, in turn, provides for an improvement cycle that allows the Board and the Department to make informed and timely changes.

This Strategic Plan is only one step in a process that will lead to further development of specific work plans, refinement of the indices that will define progress, and ongoing adaptation through a public process to ensure that the Board's vision is achieved.

The framework utilized for the Policy Statement is the same as the Assessment: the Montreal Process. This framework allows for the Board to utilize internationally recognized criteria and indicators to evaluate all of its actions.

A criterion is:

- A category of conditions or processes by which sustainable forest management may be assessed.
- A Criterion is characterized by a set of related indicators which are monitored periodically to assess change.

An indicator is:

A measure (measurement) of an aspect of the criterion. A quantitative or qualitative variable which can be measured or described and which, when observed periodically, demonstrates trends.



These, in turn can form the basis of the above mentioned work plans, or strategic plans, such as the Fire Plan.

Below is Criterion #3 “Forest and Range Ecosystem Health”. Within this criterion, the Board incorporated the input received from the 1996 Fire Plan review (summarized in Section 1), and outlined the strategic vision for the 2008 Update of the Fire Plan. Those excerpts are provided herein.

### **Criterion 3. Forest and Range Ecosystem Health**

#### **Goal:**

**Protect, maintain, and enhance the health of California’s forest and rangeland ecosystems within the context of natural disturbance and active management.**

#### **Objectives:**

- 1. Reduce the occurrence of catastrophic wildfires and reduce life, property and natural resource losses through the implementation of effective and efficient fire prevention, fire protection planning and suppression, financial management, and firefighter/public safety strategies.**
- 2. Improve the natural resiliency of forests and rangelands**
- 3. Reduce the occurrence of catastrophic mortality to pest and disease outbreaks**
- 4. Reduce and control non-native invasive species**
- 5. Reduce impacts related to poor air quality**

#### **Potential Indices:**

15) Area and percent of forest and rangeland affected by processes or agents beyond the range of historic variation;

16) Area and percent of forest and rangeland subjected to levels of specific air pollutants or ultraviolet B that may cause negative impacts on the forest ecosystem;

17) Area and percent of forest and rangeland with diminished biological components indicative of changes in fundamental ecological processes or ecological continuity

**Strategies:****Planning**

- A. Complete a comprehensive review of the Board's Fire Plan and revise as necessary. Fully develop and implement Board/CDF Unit Fire Plans that focus fire protection hazard reduction strategies based on level of hazard and assets at risk. Review Department Strategic plan, Department annual work plans, Community Wildfire Protection Plans, National Fire Plan, Unit/County Fire plans, Fire Safe Councils and Local Hazard Mitigation Plans for consistency with Board's Fire Plan.
- B. Develop comprehensive fire prevention and land use planning strategies. Strategies should include local entities general plan reviews, relationships to local fire plans, and wildfire hazard mapping.
- C. Develop monitoring and reporting systems for legislative reporting requirements.

**Fire Prevention**

- W. Implement defensible space strategies pursuant to PRC 4290, 4291 and the parallel Government codes for non SRA. Develop defensible space regulatory effectiveness/compliance monitoring/reporting program. Develop strategies to address hazardous fire protection situation in established neighborhoods/WUI areas that have substandard protection characteristics.
- X. Review and fully implement CDF Resource Management and Fire Protection vegetation management programs. Work with various regulatory agencies that affect vegetation management related hazard reduction (e.g. air quality, water quality, wildlife habitat, etc.) to accomplish vegetation management goals while meeting other agency mandates.
- Y. Develop public education programs that continue to address fire protection responsibilities and increase public understanding of changes to forest health with human action or inaction.
- Z. Expand and support the biomass industry as a tool for reducing hazardous fuels in including ensuring sustainable long term fuel supplies from federal lands, and research for utilization of small logs, urban green waste, and biofuels.

- AA. Review and revise as necessary wildfire design and engineering standards that support effective wildfire protection for areas where occupied properties interface with wildland areas.

**Fire Protection and Suppression**

- BB. Determine and establish a fire suppression level of service for personnel and equipment consistent with well defined standards and goals.
- CC. Determine and establish capital structure needs to support well defined fire protection.
- DD. Determine and establish aviation needs to support well defined fire protection.
- EE. Determine appropriate equipment replacements needs to supports levels of service goals and fire fighter safety needs.

**Financial Management**

- FF. Determine through business management, fire planning and protection information systems situations where funding does not match levels of service.
- GG. Support funding to correspond to statutory responsibilities and that match the levels of service and performance goals established by the Board.
- HH. Develop and implement cooperative agreements among local and federal partners that efficiently meet well defined fire protection standards and goals.
- II. Address personnel succession planning and wage/classification disparities.
- JJ. Ensure SRA designations are consistently applied and amended as necessary to reflect of State fiscal responsibilities.
- KK. Ensure mutual aid programs accurately reflect reciprocal financial cooperation.
- LL. Determine the optimal mix of wildfire prevention and suppression levels to minimize fiscal cost and reduce damages.
- MM. Develop oversight policies and use of information and planning tools for analysis of cost containment alternatives, staffing, and accountability for state spending.

**Firefighter and Public Safety**

- NN. Ensure all firefighters are trained and equipped to safety conduction efficient and effective operations.
- OO. Develop fire safety planning information/incident intelligence to prevent fatalities and serious injures to the firefighters and the public.
- PP. Develop interoperable communications needs of fire and emergency personnel.

[http://www.fire.ca.gov/CDFBOFDB/PDFS/PolicyProgram\\_050107.pdf](http://www.fire.ca.gov/CDFBOFDB/PDFS/PolicyProgram_050107.pdf)

### **Section 3. Update of the Fire Plan**

This section deals with creation of a committee consisting of a targeted group of professionals that will serve for a specific purpose for a finite time period that will assist the Resource Protection Committee (RPC) and the Board of Forestry and Fire Protection (board) to update the Fire Plan, definition of desired elements in the completed project, and projection of work timelines.

#### **Charter of the Fire Plan Steering Committee (FPSC)**

##### **Necessity:**

The Board has statutory responsibility for a comprehensive set of Forest Practice Rules (PRC §§ 4130, 4131, 4114, and 4111, et al) that govern planning and conduct of wildland fire protection planning and operations in the State.

The Board has established a Fire Plan Steering Committee to:

- A. To utilize the Board's 1996 Fire Plan Assessment/review as a basis for the Board's 2008 Fire Plan Update;
- B. Provide science-based recommendations and technical information to advise and assist the Board in making its determinations on fire policy and regulations;
- C. Coordinate with the Research and Science Committee on its mission.

Best available science is considered to be relevant science from all credible sources, including peer-reviewed government and university research, other published studies, and Committee generated research products. Applicable historic information and unpublished data may have value and are to be considered if they can be assessed for accuracy and credibility.

The Fire Plan Steering Committee (FPSC) includes members drawn from the experts in fire management, the legislature, local groups, other State and Federal agencies, universities, and other educational institutions as may be appropriate. The Board appoints the members and designates the Chairman.

The FPSC may enter into arrangements with other agencies or advisory committees of the Board to assist in obtaining information and in conducting such analyses as are required for it to fulfill its functions. The Director, to the extent feasible, provides necessary staff support and funds to assist the Committee in its work. The Plan shall provide a clear system for accountability in the delivery of the fire protection services (1 through 4) below.

**Purpose:**

The FPSC will provide recommendations and advise the Resource Protection Committee of the Board of Forestry and Fire Protection on policies to fulfill the update of the Fire Plan.

That update should: Create a Fire Plan that provides a logical allocation of resources based on wildfire risk, and promotes the goal of reducing total costs and losses from wildfire.

The Plan shall analyze all elements of fire protection services in the areas of:

1. fire planning and prevention (Pre Fire Management)
2. fire protection organization and operations (Level of Service)
3. financial management (Wildfire Fiscal Management)
4. firefighter/public safety (Safety)

By this charter, the Board establishes a Fire Plan Steering Committee to impose accountability and formality of process for developing an update to the California State Fire Plan. Members will use their independent judgment. Although the Committee members will be appointed by the Board, this will not preclude others from participating in and contributing to the Committee process or its subcommittees.

**Values:**

Those that serve on the committee agree to the values listed below. The following values shall inform all of the committee's decisions.

- A. Objectively serve the Board and the public's interest, with recognition of the need for a balanced evaluation of relevant information.
- B. Support presentation of the full spectrum of findings, with every effort to provide consensus findings and recommendations.
- C. The FPSC is a highly qualified group of professionals representing a wide variety of disciplines, who will work together in a collegial manner.

**Composition:**

The FPSC is a team of highly qualified professionals that will be appointed and serve at the direction of the Board. The FPSC will be comprised of members with expertise in fire sciences and any other disciplines the Board deems necessary. It will be composed of approximately seven members. One member shall be the Executive Officer of the Board, who shall provide staffing and act as a liaison to the Board. The (FPSC) may call upon, with approval by the Board, other experts to provide subject matter expertise.

The Chair of the FPSC will be designated by the board. The Chair will be responsible for facilitation of activities and formal communications from the Committee to the Board. The FPSC Chair will coordinate meetings, provide leadership, ensure progress of the Committee toward timely completion of its tasks, and coordinate reports to the Board.

The FPSC (or the FPSC Chair) may, as it deems appropriate and subject to financial constraints, obtain assistance from other qualified professionals for the purpose of providing unique expertise related to specific subject matter.

There will be no financial compensation for services provided to FPSC members from the Board. FPSC members will be reimbursed for their expenses in attending meetings.

**Meetings:**

The FPSC will meet periodically as needed to complete its tasks. Meetings will be convened for the entire FPSC. The meetings of the FPSC will be duly noticed meetings that will be open to the public [pursuant to the Bagley-Keene State Open Meeting Act]. The public will be invited to comment by the Committee Chair at specified times during a meeting. The meetings will be conducted in person, with provision for telephonic attendance as may be necessary and appropriate.

The Committee Chair may be responsible for determining meeting format, location, and duration. The FPSC Chair may assign individual tasks to subcommittees between meetings. In order to ensure progress and allow public access to the meetings, the Committee Chair will establish a schedule of formal FPSC meetings.

**FPSC Actions:**

All actions and recommendations presented to the RPC then to the Board or otherwise made by the FPSC shall be subject to standard parliamentary procedures. Quorums are required for any actions (minimum of four members in attendance with a simple majority of votes). Meetings may be held in absence of a quorum where no action is taken.



**Key Elements to be addressed by the Update:**

**Strategic Policies:**

- Defensible space
  - Fuels Treatment to achieve Desired Future Condition for catastrophic wildfire resistance across all landscapes
  - Fire Safe Development Standards
- Land Use Planning for Fire Protection
  - Timberland Conversion
  - SRA Classifications
  - General Plan Review
- Ignition Resistant Construction
  - Building Standards
- Fire Suppression
  - Deploy on a basis of Desired Future Condition Ranking
  - Levels of Service based on hazard /risk rating
- Landowner responsibilities
- Public and Fire Fighter Safety

**Implementation of the Plan Utilizing:**

- Mapping, GIS for SRA, LRA and FRA
  - Weather Tracking, Strategic Planning
- Unit Fire Plans
- Cooperative Efforts, Federal, local fire safe councils, other cooperators
- Statewide Budgeting and Staffing
  - Blue Book, Grey Book
- Regulatory, statutory changes, BOF Policy/CAL FIRE Handbook revisions

**Format the Update Using the Following Categories:**

- Policy
- Action
- Monitoring/Measurement/Accountability
- Adaptation

**Flow Chart, Fire Plan Review and Update Process**

RPC requests CAL FIRE expert assistance for enhanced review of 96 Fire Plan Elements Wildfire Fiscal and Prefire	3/07
RPC drafts final conclusions of 96 Fire Plan Element LOS	4/07
RPC drafts specific questions for enhanced review of 96 Fire Plan elements Wildfire Fiscal and Prefire	4/07
RPC finishes enhanced review of 96 Fire Plan elements Wildfire Fiscal and Prefire	9/07
RPC drafts final conclusions of 96 Fire Plan review elements Wildfire Fiscal and Prefire	11/07
RPC takes/considers public comment on 96 Fire Plan review element conclusions	11/07-6/08
RPC Subcommittee/SFM discuss Policy Considerations for the Fire Plan Update	5/08-8/08
RPC forms Fire Plan Strategic Committee to formulate Fire Plan Update	6/08
RPC submits final conclusions, on 1996 Fire Plan Review to full Board	8/08
RPC drafts outlines recommendations for a new Fire Plan update	8-9/08
RPC submits final outline for updating the Fire Plan to full Board	10/08
RPC takes/considers public comment on Fire Plan Update	5/08-12/08
RPC appoints entity to write Fire plan Update	10/08
Draft Fire Plan Update submitted to full Board	7/09
Full Board /RPC take public comment on Fire Plan Update	7/09-9/09
Board revises Fire Plan Update based on public comment	10/09-11/09
Board adopts and publishes Fire Plan Update	1/10

## **Appendices**

**Appendix I. April 05-06 Workgroup Assessment (Hoffman Team)**

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**An Assessment of the  
1996 California Fire Plan:  
A Framework for Minimizing Costs  
and Losses from Wildland Fires**

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**Final Report to the Board of Forestry  
and Fire Protection**



**Prepared by:  
Fire Plan Update Advisory Committee  
April 2006**

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Appendix A:

Summary of Chapter 1 Findings and Recommendations  
    Levels of Wildland Fire Protections Services  
    Wildland Fire Protection Issues  
    Prefire Mgmt Program to Reduce Wildfire Costs & Losses

Appendix B: Assessment of Chapters 2, 3, and 5

    Chapter 2: Fiscal Framework:  
    Chapter 3: Fire Plan Framework  
    Chapter 5: Prefire Management Initiative

Appendix C: Fire Plan Update Advisory Committee Members

**Executive Summary of April 05 -06 Fire Plan Review****Background**

The California Fire Plan of 1996 (1996 Plan), is the California State Board of Forestry and Fire Protection (Board) plan for wildland fire protection in California. The overall goal of the 1996 Fire Plan was “*to reduce total costs and losses from wildland fire in California by protecting assets at risk through prefire management prescriptions and increasing initial attack success.*” The 1996 Plan included many findings and recommendations categorized by three topic areas that are relevant to the above goal:

- Level of service for wildland fire protection services (LOS);
- Wildland fire protection fiscal issues;
- Prefire management program.

**Board Direction for Review**

In 2005, the Board commissioned the Fire Plan Update Committee (Committee) to review the 1996 Plan and prepare an Assessment Report (Assessment) for the Board that contained three assessment tasks:

**Assessment Task #1: *Review each findings and recommendations in the Plan and determine whether each finding or recommendation was achieved.***

**Assessment Task #2: *Whether the findings and recommendation are still current, accurate and relevant; and***

**Assessment Task #3: *Based on the Assessment, what should be included in the Fire Plan Update for 2007 (Update).***

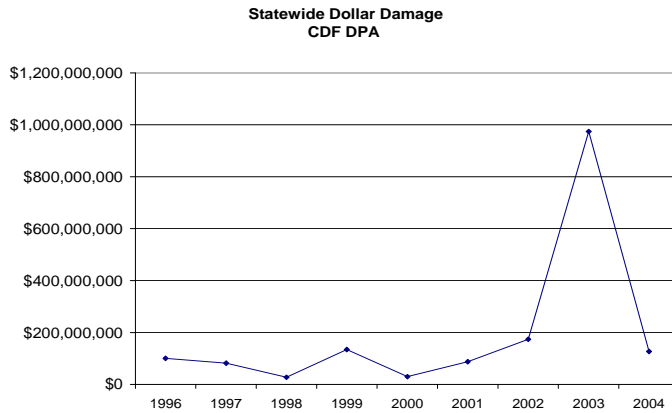
**Key Results of April 05 to – 06 Fire Plan review:**

The following are the Assessment report tasks and results:

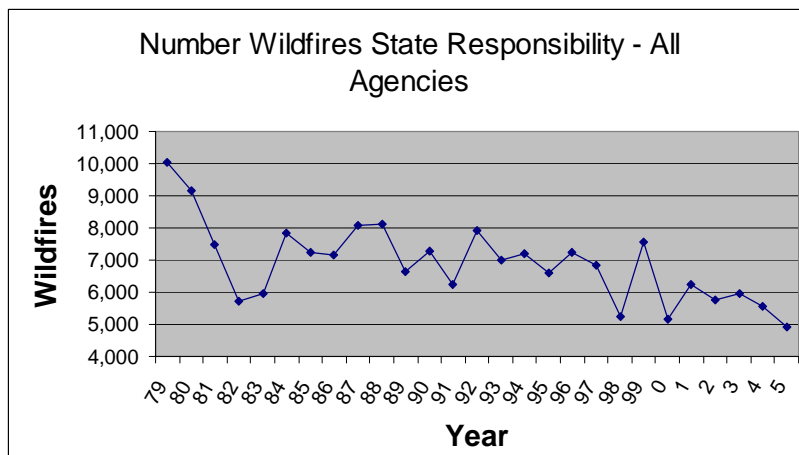
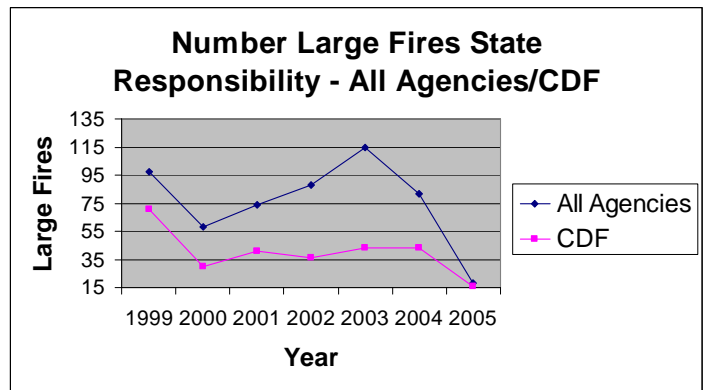
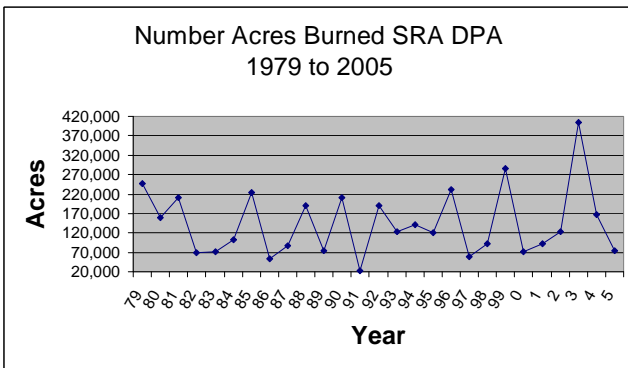
**Assessment Task #1: *Review each findings and recommendations in the Plan and determine whether each finding or recommendation was achieved.***

**1996 Fire Plan established a visionary framework, but full implementation is uncertain**

- The 1996 Plan established excellent vision and goals which are still valid today.
- The 1996 Plan focused on creating a framework for information and assessment tools.
- The 1996 Plan focused on broad solutions to the wildfire issue including a new focus on prefire management.
- The 1996 Plan represented a conscious shift from wildlands fuel management to high value asset protection.
- Focused on land use setting highlighting the wildland/urban interface. Was the first step towards focusing on land use as it relates to fire protection.
- The 1996 Plan focused on stakeholder involvement and planning.
- Various levels of progress in implementing the majority of findings and recommendations have likely occurred, but that few could be considered “complete.”
- Full implementation of the 1996 Fire Plan at the Unit level of every Unit was not likely.
- Achievement of broad goal “... *reduces total costs and losses from wildland fire...*” *partially met.*
- Achievement of a reduction in losses uncertain. Empirical information indicates continuation or increase in structure losses and dollar damage.



- Total acreage of wildfire is increasing, although total number of fires is decreasing. This may indicate effective initial attack suppression efforts, but increasing large damaging fires.

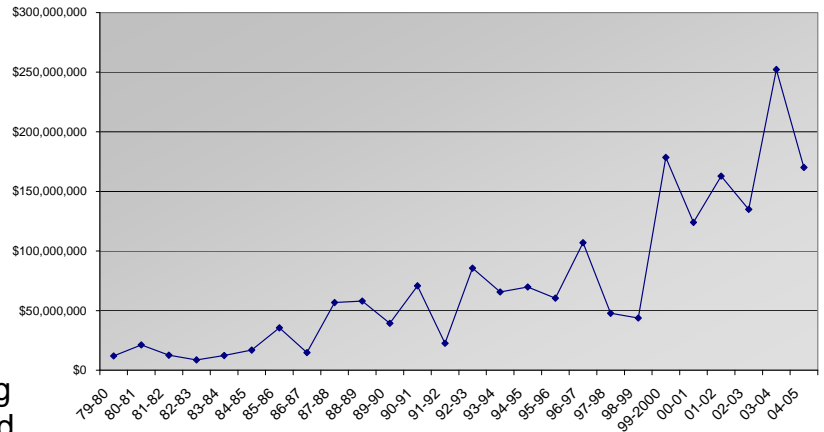


- CDF resources have remained stable over last ten years while demand for services is increasing. Recent developments from 2003 fire siege and Governor’s Blue Ribbon Fire commission resulted in increased resources.



- Achievement of a reduction costs appears uncertain.

**Statewide Emergency Fund Fire Suppression Expenditures**



- Empirical information indicates continuation or increasing emergency fund expenditures, and rising general find costs. Substantial increases over last ten years in emergency fund expenditures have occurred.
- Wildland conditions are driving increasing cost and losses and have a direct affect on levels of service. Continuing population expansion is one factor driving fire suppression costs.
- Salary related costs have risen significantly over the last ten years, contributing to increasing suppression costs.
- **1996 Plan lack performance measures and program reporting to determine levels of success**
- The 1996 Plan did not include accomplishment measures for monitoring progress and results.
- Substantial Board and CDF staff time will be necessary to validate expert opinion and calculate trend information to validate findings and recommendations.
- In general lack of data inhibited evaluation of the findings and recommendations.

**Assessment Task #2: Whether the findings and recommendation are still current, accurate and relevant; and**

- The Committee determined most of the findings and recommendation remained valid, although the original intent or goal of each was not always clear.
- Most findings and recommendations are valid should but needed rewording to make them clearer or to bring them in line with current conditions.
- The Committee noted two complementary but often competing issues that need to be reconciled: fire suppression vs. fuel management.

**Assessment Task #3: Based on the Assessment, what should be included in the Fire Plan Update for 2007 (Update).**

Components of the 2007 Update should include:

- Development of a **Strategic Plan** establishing goals, objectives, performance standards and action plans.
- Strategic plan should include:
  - focus on implementation of laws and regulations to encourage compliance with wildfire protection practices;
  - Collaborative approach with land use planners is necessary;
  - Need to engage the public in an ongoing manner;
  - Information for decision support.

## Introduction

The California Fire Plan of 1996 (Plan), is the California State Board of Forestry and Fire Protection (Board) plan for wildland fire protection in California. The overall goal of the 1996 Fire Plan was “*to reduce total costs and losses from wildland fire in California by protecting assets at risk through prefire management prescriptions and increasing initial attack success.*” The Plan included:

- An analytical framework, or planning process, to define a level of service for wildland fire protection of services
  - An evaluation of wildland fire protection fiscal issues; and
  - A prefire management program to achieve the goal of reducing cost and losses from wildfire.
- 
- In 2004, the Board commissioned the Fire Plan Update Committee (Committee) to review the 1996 Fire Plan and prepare an Assessment Report (Assessment) for the Board. The Board asked the committee to:
  - Review each findings and recommendations in the Plan and determine whether each finding or recommendation was achieved;
  - Whether the findings and recommendation are still current, accurate and relevant; and
  - Based on the Assessment, what should be included in the Fire Plan Update for 2007 (2007 Update).

## Methods

An Update Date Advisory Committee (Committee) was convened in March 2005 to assess the 1996 Fire Plan. Members are listed in Appendix C. The committee focused its review primary on the first two tasks requested by the Board: “Were the Findings and Recommendations Achieved?”, and “Are the Findings and Recommendation are still current, accurate and relevant?”

To answer these questions, the Committee performed a detailed review of Chapter 1 of the 1996 Fire Plan (Appendix A), then did a more general assessment of Chapters 2, 3, and 5 (Appendix B). The Committee did not evaluate Chapter 4 or the Appendices of the 1996 Plan.

Each Finding and Recommendation listed in Chapter 1 of the 1996 Plan was assessed in the following format:

*Assessment Summary Statement* - A summary of the review team’s evaluation and assessment.

Performance Measure- Identification of the information used to evaluate the Findings and Recommendations.

Suggestions for 2007 Update- Suggestions to improve future findings and recommendations relevance or accuracy, and identify important components of the 2007 Update.

## Results

The Committee found many favorable features in the Plan and significant achievement of the 1996 finds and recommendations. Members noted the approach was a ground-breaking document and resulted in a positive impact on how the fire community addressed California issues. Particular accomplishment the Committee identified includes:

***Task #1: Review each findings and recommendation and determine whether each finding or recommendation was achieved***

### Established Vision and Goals

- The Plan outlined many problems and issues of wildfire as a state issue and as a compounding problem.
- One of the goals of the Plan is still relevant today – to reduce costs and losses.

### Achievement of a reduction of costs and losses uncertain

- The Committee believes that while the Plan did not achieve a reduction of costs and losses, it likely did reduce the increase in costs and losses, although this fact is not substantiated beyond expert opinion. Analytical data to substantiate the Committee's claim is not readily available. This is because a fundamental part of the 1996 Plan was to create an analysis framework, collect data and transform data it into useful information to assist in determining the scope of the problem. The Plan did not include accomplishment measures for monitoring progress and results.
- Information systems for evaluating accomplishments of the fire plan goals are partially in place within the California Department of Forestry and Fire Protection (CDF). Analysis of fire statistics (EARS), Ignition Work Load Analysis, damage assessments, suppression force levels (Blue Book), and line item budget information trends currently collected by CDF as separate efforts from the fire plan would be valuable information to help assess performance accomplishment. The Committee determined that

additional CDF staff time would have to be allocated to this assessment to make factual statements regarding level of accomplishment.

### **Focused on Broad Solutions to the Wildfire issue**

- The Plan represented a major new focus on prefire management while continuing to address fire suppression solutions.
- The Plan represented a conscious shift from wildlands fuel management to high value asset protection.

### **Focused on Stakeholder Involvement and Planning**

- The Plan was developed using a very inclusionary process that involved extensive stakeholder and community input.
- The Plan represented the beginning of a call-to-action to engage stakeholders.
- The improved governmental and organizational architecture to address fire that has evolved as a result of the Plan (such as the growth of Fire Safe Councils) is very positive.
- The Plan was the first step in the development of Community Wildfire Protection Plans.
- The Plan served as a catalyst to action and as a source for federal funding.

### **Focused on Information and Assessment Tools**

- One of the greatest and enduring accomplishments of the 1996 Plan was creation of an analytical framework for assessing the wildfire situation and assets at risk in each CDF unit. This framework included processes for collaborate local stakeholder input and identification of strategic targets for practices for hazard reduction. The Unit Fire Plans have been effective for identifying high risk/high value projects and recent 2004 funding for fire hazard reduction in the Sierra Nevada (proposition 40) have used the Plan projects for funding allocations. Today the fire plans are operational at each CDF Unit, and have been recognized by the 2004 Governor's Blue Ribbon Fire Commission to serve as the comprehensive interagency wildland vegetation management and wildfire protection plan for California.

- The overall framework for the Plan is good: focus on a systematic information decision support system that focuses on allocation of resources, prefire project prioritization and fiscal optimization.
- The Plan was designed to collect data and determine the scope of the problem. Extensive data collection has allowed for modeling (e.g. fire risk).
- The Plan represented the beginnings of a strong assessment process and the ability to quantify fire issues using GIS.

### **Focused on land use setting**

- The Plan highlighted the wildland/urban interface issue in a way that had not been done before.
- The Plan was the first step towards focusing on land use as it relates to fire protection.

### **Level of Service Results**

- Findings regarding trends increasing for increasing risk and threats from wildfire still relevant.
- Extent and frequency of large damaging fires needs to be validated, as this one of the major drivers of cost and losses and the resultant level of service to prevent them.
- Mutual aid systems to provide fire protection are in place although existing systems are complex and numerous. Such volume of contracts and variation between contracts could result in oversight and financial burden.
- Depth of forces to response to fires remains vital to the Fire Plan goal. Trends in CDF forces for fire protection services have moderately increased over the 1996 to 2007 period.
- 1996 Plan framework for strategically calculating LOS based on fire hazard and asset risk has been effectively created although consistent implication of the framework varies across the Units.
- Clear, analytical and routine information on ways to reduce large damaging fires has only partially been provided to the Board.
- Excellent accomplishments have been achieved towards using the fire plan to identify assets through community stakeholder involvement.
- The Board's Resource Protection Committee (RPC) has not been routinely involved in federal fire protection coordination. The Department however has been routinely involved and could act in the future as a workgroup that reports to the Board at important decision-making points.

## Wildfire Fiscal Issues Results

- Achievement of a reduction costs appears uncertain. Empirical information indicates continuation or increasing emergency fund expenditures, and rising general find costs. Substantial increases over last ten years in emergency fund expenditures have occurred.

## Prefire Management Results

- One of the greatest and enduring accomplishments of the 1996 Plan was creation of an analytical framework for assessing the wildfire situation and assets at risk in each CDF unit.

**Task #2: *Are Findings and recommendations still current, accurate and relevant?***

## Findings and Recommendations are mostly still valid

- The Committee determined most of the findings and recommendation remained valid, although the original intent or goal each was not always clear. There was not always an apparent linkage between the findings and recommendations for action.

## Reconciling fire suppression vs. fuel management

- The Committee noted two complementary but often competing issues that need to be reconciled: fire suppression vs. fuel management. California's wildland fire suppression forces and efforts are considered to the most highly skilled and effective resources in the world. While these resources will always be essential and necessary due to the burgeoning human expansion into California's wildland and the public demand for these services, these resources are best used for immediate response and often costly solutions to the 1996 Plan goal. Fuel management is regarded as a long-term solution towards the fire plan goal. Fuel management activities will take substantial time, education, and budget to achieve fire plan goals. The Committee recognizes the need for an emphasis on fire suppression while long term solutions of fuel management are being sought. Together, these two programs can better meet the goal of reducing wildfire suppression cost and losses, than anyone one program alone.

**Task #3: *Based on the Assessment, what should be included in the Fire Plan Update for 2007 (2007 Update)***

**Develop a *Strategic Plan***

- The 2007 Update should develop a *Strategic Plan*, nested under the CDF Strategic Plan. The strategic plan will establish goals, objectives, performance standards and action plans, all aimed at providing continuous improvement to the CDF Fire Protection programs.
- The Strategic Plan will be used for integrating and implementing CDF fire protection resources and programs (see below).
- Strategic plan should focus on three or four major program components:
  - fire suppression services;
  - land use planning;
  - building construction standards;
  - prefire vegetation management.
- The Strategic Plan should incorporate standards, metrics and a monitoring component to assess progress towards compliance.
- The Strategic Plan should document the goal of each recommendation (e.g. trends). This would allow future update committees to understand the objective of each recommendation.
- The Strategic Plan should have an implementable framework to allow for easy translation of recommendations to on-the-ground actions.
- The Strategic Plan should define the update process.
- The Strategic Plan should be more aggressive in seeking compliance to effect change; there are currently incentives, but no mandates requiring compliance. Consideration must be given to Plan enforcement through codes and regulations.
- Land Use Planning must be an integral part of the Strategic Plan. There should be a tighter nexus to land use planning agencies.
- The Strategic Plan must be user-friendly.

**Implementation rules and regulations to encourage compliance with wildfire protection practices**



- While adequate laws, policies, regulations, guidelines, and procedures are in place for CDF, there are several gaps that need to be addressed. Also, commitment, support and full implementation of CDF's related laws and polices is needed.

**Need for a more collaborative approach with land use planners**

- Land use planners need to become partners with CDF to enforce good land stewardship and help protect valuable assets. In the absence of effective land use planning and local enforcement of codes, and citizen involvement, rules and regulations will likely be needed to encourage compliance.

**Need to engage the public in an ongoing manner.**

- The needs of stakeholders as well the capacities and constraints of different public entities, market entities, and individuals must be addressed in future strategic fire planning.
- The Plan should include all of California – including federal lands.
- The federal agencies should be involved in development of the Update.
- The Plan needs to engage the public on an ongoing basis and encourage land stewardship among home and landowners.

**Information for decision support:**

- Fire planning tools must remain an integrate part of the solution for strategic fire planning. While the 1996 set a new standard of information to support decision making, the new fire plan must encourage the development and use of information systems (and other tools) that are realistic, quick, widely available, inexpensive and support the challenges and problems experienced in the field. The information should focus on all aspects of fire protection including pre fire management asset protection, level of service planning, and real time incident cost containment analysis.

**Appendix A  
Assessment of Chapter 1  
Findings and Recommendations**

**Levels of Wildland Fire Protection Services (LOS)  
Findings**

**LOS-F1.** *“The history of California wildfires indicates that the following trends will continue.”*

- *F1.1 Risk from wildfire to life, property, natural resources, and firefighter safety is increasing.*
- *F1.2 Population will grow and more people will live and use wildland areas, especially in the Central Sierra and in the Southern California counties of Riverside, San Bernardino and San Diego.*
- *F1.3 Topography and climate support ecosystems where large wildfires can be expected.*
- *F1.4 Drought and fuel moisture conditions will be unpredictable but almost always dangerous in fire season.*
- *F1.5 More structures will be constructed in areas that are very susceptible to wildfire.*
- *F1.6 Historical legacy of narrow roads, difficult entrance, insufficient water supplies, flammable building construction and location that make many communities and homes wildfire-prone still exists.*
- *F1.7 Public demand for wildland fire protection and other services will increase”.*

Assessment Summary Statement: The findings detailed in this section are, for the most part, still accurate.

Performance Measures: The combination of collective professional opinions, information routinely collected by CDF Fire Protection, and statistics generated by FRAP 2003 Forest and Rangeland Assessment; provide the basis of for validation of the finding. The following statistics could be used as performance measures.

- Trend information on structure losses from CDF Wildland Fire Statistics 1996 to 2004 shows substantial number of structural losses over the last 10 year period.
- FRAP assessment on county population growth rates shows forest and range counties growing at double digit growth rates over 1990 to 2000 periods with Department of Finance projection indicating continuing growth over the next 40 years.

- Drought related catastrophic fire conditions are anecdotally demonstrated by the catastrophic drought evident in southern California, 2003. Also, USFS pest mortality projects indicate 25% of state's conifer forests at risk.
- FRAP analysis of US Census 2000 block data 1990-2000 on housing units in WUI with significant fire threat provide information that significant number of houses in SRA (over 3.2 million continue to have significant fire threat.
- Fire services demand: No information was generated to validate the trend in emergency responses, but such information is likely available from CDF Fire Protection and could be generated upon special request.

Suggestions for 2007 Update:

- Plan references to centers of population growth need to be updated.
- While controversial, the effects of climate change, as a trend, must be included in the Update. Scientists are mostly in agreement that global warming is a fact; although there is some disagreement on how global warming will affect the environment.

**LOS-F2.** *“Deteriorating forest health, increasing fuel loads and other factors have led to more intense, destructive wildfires; unabated this pattern will continue”.*

Assessment Summary Statement: The statement is still accurate, but understates the issue.

Forests are more vulnerable due to overstocking, lack of management, past over harvesting in some counties, invasive species, and atmospheric/pollution/climate stresses.

Performance Measures:

- Anecdotal catastrophic wildfire evident of 2003 in southern California.
- Anecdotal catastrophic drought evident in southern California, 2003; USFS pest mortality projects indicate 25% of state's conifer forests at risk.

Suggestions for 2007 Update: This bullet should be included in the Update's problem statement.

**LOS-F3.** *“Assets at risk will increase, especially watershed assets, because of the rapid rise in the demand for water to supply more people. Based on population projections, the potential for accelerating loss of protected assets, especially life and property, will be greater from disastrous wildfires.”*

Assessment Summary Statement: The Committee believes that the statement is accurate,

Performance Measures:

- Trend information on structure losses from CDF Wildland Fire Statistics 1996 to 2004 shows substantial number of structural losses over the last 10 year period.
- FRAP assessment on county population growth rates shows forest and range counties growing at double digit growth rates over 1990 to 200 period with Department of Finance projection indicating continuing growth over the next 40 years.

Suggestions for 2007 Update: The Update should address all assets at risk and not single out one specific asset and be included in the Update’s problem statement.

**LOS-F4.** *“Large wildfires do not respect political or property boundaries. Historically, strength of California’s firefighting agencies is found within a concept of mutual cooperation at the federal, state, and local levels of government. Day-to-day assistance for initial attack, through the statewide mutual-aid system and the California Fire Assistance Agreement, are the basis of this cooperation and coordination for fire disasters. The ability to rapidly mobilize, effectively deploy and support large numbers of specialized firefighting resources is essential to cope with large multiple fires. Hence, CDF, in cooperation with other fire agencies, must maintain infrastructure, including communications and capital improvements necessary to facilitate such a response.”*

Assessment Summary Statement: The finding includes a variety of statements, and the intent is unclear. Some of the phrases are too detailed. Focus on maintaining mutual aid systems and CDF infrastructure remains a vital issue for disaster response. Supporting information identified streamlining of mutual aid systems as a necessary component towards fiscal improvements.

Performance Measures:

- Trends infrastructure/fire protection resources number from blue books
- Governor’s Blue ribbon recommendations about communications
- CDF capital improvements funding trends

- Level of participation of entities and adequacy of mutual aid agreements.
- Completeness and ability to annually perform Unit Fire Prevention Plans and Ignition management Analysis as outline CDF handbook 9050.
- Measurements of performance results of Unit Fire Plans (to be identified on a unit by unit review).

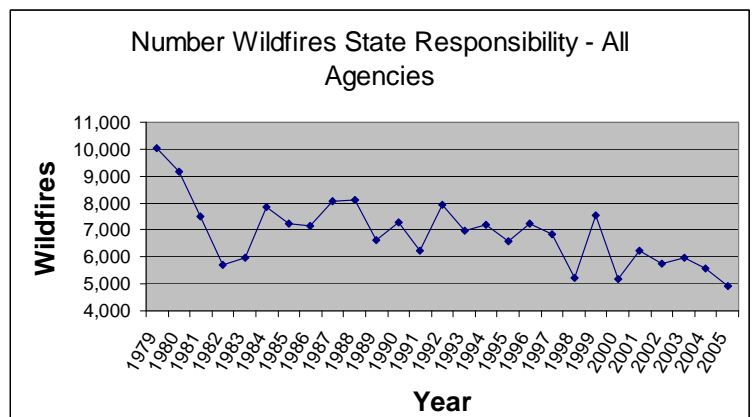
Suggestions for 2007 Update The Update should identify the objective of this finding and focus assessment and strategic planning for CDF resource depth and mutual aid agreements. Analysis of the effectiveness of the implementation of the Unit Plans must be included in the update. Identifying and establishing performance measure for Unit Fire Plan success is essential.

**LOS-F5.** *“Fire protection forces in California must have sufficient depth to respond to large, multiple wildfires and still prevent other small fires from becoming large damaging fires. CDF plays a key role in supplying and coordinating such forces; it should maintain and enhance this ability. The 1985 Fire Plan includes a model to provide adequate depth of resources that show CDF needing 96 additional engines and 825 personnel for managing large fires using the Incident Command System. There is a greater need today as reflected in the California Fire Plan”.*

Assessment Summary Statement: The Committee agreed that the following finding should reference either maintaining fire protection forces or enhancing forces, but not both: Also, local agencies as well as CDF should be factored in. Further, this finding is too specific in terms of equipment and personnel. Trends in increases in resources have not been validated.

Performance Measures:

- Trends infrastructure/fire protection resources number from blue book.
- CDF capital improvements funding trends.
- Trends of level of resources per allocated to fires.



Suggestions for 2007 Update:

Determining an optimum level and, if necessary, new allocation of fire protection resources will be an essential task for the 2007 Update. This resource allocation assessment will be likely tied to the goals of the Unit Fire Plans, reviewed in a state wide or regional context,

and supported by analysis of the California Fire Economic Simulator program.

<b>Levels of Wildland Fire Protection Services Recommendations</b>
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**LOS- R1.** *“The Board of Forestry directs CDF to further develop and implement a new Fire Plan framework that includes:”*

- *R 1.1 Level of service (LOS) initial attack success and major fire failure rates.*
- *R1.2 Identification and assessment of assets protected, covering both commodity (economic) and non-commodity assets.*
- *R1.3 History of wildfires by intensity levels, size and vegetation types. Identification and rankings of high-value/high-risk wildland areas for use by local, state, and federal agencies and the private sector for allocating prefire management and suppression resources.*
- *R1.4 Severe fire weather rankings to relate probability that large damaging fires will occur by local area.*
- *R1.5 History and projections of changes in total costs and losses of California’s wildland fire protection system that can result from potential increases or decreases in local, state, and federal agency expenditures and private-sector investments. “*

Assessment Summary Statement: (LOS R1.1): The committee felt that that recommendation asking CDF to develop a Fire Plan framework that includes Level of Service (LOS) initial attack success and major fire failure rates is being met for SRA’s through an assessment process that is constantly being updated.

Performance Measures:

- EARS; LOS software program;
- CFES;
- Ignitions workload assessment
- Blue book staffing trends;

Suggestions for 2007 Update: The Update should include metrics to analyze LOS. Also, other levels of government should be included in the Update.

Assessment Summary Statement: (LOS R1.2): The recommendation that CDF include in the Fire Plan framework an identification and assessment of assets protected, covering both commodity (economic) and non-commodity assets, was determined by the review committee to be partially

completed. The inventory is done, but the assessment of all 16 assets is not completed. The extent of completion will be known by 7/1/05 when all the units submit their Fire Plan.

Performance Measures:

- Unit Fire Plan data

Suggestions for 2007 Update: Other levels of government should be included in the Update. Additional asset should be identified including climate change (GHG emissions from wildfire)

Assessment Summary Statement: (LOS R1.3): The Committee that *a history of wildfires; rankings of high-value/high-risk wildland areas* is being done, and includes the historical data. Data framework has been well developed and is in a maintenance mode.

Performance Measures:

- Fuel rank 'fire threat;
- pilot on hazard severity zoning updates;
- intensity data is not highly documented for historical fires;

Suggestions for 2007 Update: (Note: the previous series of recommendations regarding the Fire Plan framework were viewed as key by the Committee; as such, the committee suggested that special attention should be given to the support needed to address these issues. Personnel support is necessary to achieve this recommendation.

Assessment Summary Statement: (LOS R1.4): Have methodology, but not operational

Performance Measures: Weather station data.

Suggestions for 2007 Update: No Information.

Assessment Summary Statement: (LOS R1.5): Changes in total costs and losses are documented, but not in relation to changes in expenditure and investment. However, inclusion of losses used in the EARS data may not be comprehensive. Needs to review to determine what should be included in losses.

Performance Measures: No Information.

Suggestions for 2007 Update: Update should include reach on this topic and emphasis for evaluation.

**LOS-R2.** “CDF should identify options to expand its suppression force to meet the multiple, large fire scenario (such as the 1985 Fire Plan’s proposal to retain, in a reserve fleet, 96 engines that were being replaced) and determine a cost-effective way to staff these engines with trained personnel in severe fire weather in targeted areas identified in the California Fire Plan assessment framework. The number of reserve engines should be increased to 100 for the California Fire Plan. This [new engines] allotment would:

- R2.1 Allow better management of SRA fires by minimizing CDF’s dependence on the reduced federal agencies resources.
- R2.2 keep cost under control because of reduced ordering through the Office of Emergency Services, 2.3 thereby better controlling emergency fund expenditures.
- R2.3 help limit the need to exceed maximum drawdown when there are large multiple fires, as now occurs.

Assessment (LOS R2.1): No Information.

Performance Measures: No Information.

Suggestions for 2007 Update: The recommendation should be updated consistent with the findings of the Blue Ribbon Commission.

Assessment (LOS R2.2): The committee felt that that recommendation asking CDF to develop a Fire Plan framework that includes Level of Service (LOS) initial attack success and major fire failure rates is being met for SRA’s through an assessment process that is constantly being updated. The committee felt the last recommendation involving OES should not be included in the Update.

Performance Measures: LOS analysis being done and implemented. Components include: that we implemented: EARS; LOS software program; CFIS; ignitions workload assessment (See San Bernardino Unit Fire Plan, 2005, write up; Blue book staffing trends.

Suggestions for 2007 Update: The Update should include metrics to analyze LOS. Also, other levels of government should be included in the Update.

Assessment Summary Statement: (LOS R2.3): have methodology, but not operational

Performance Measures: No Information.

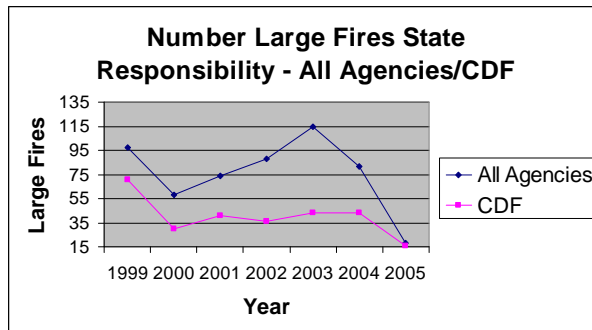
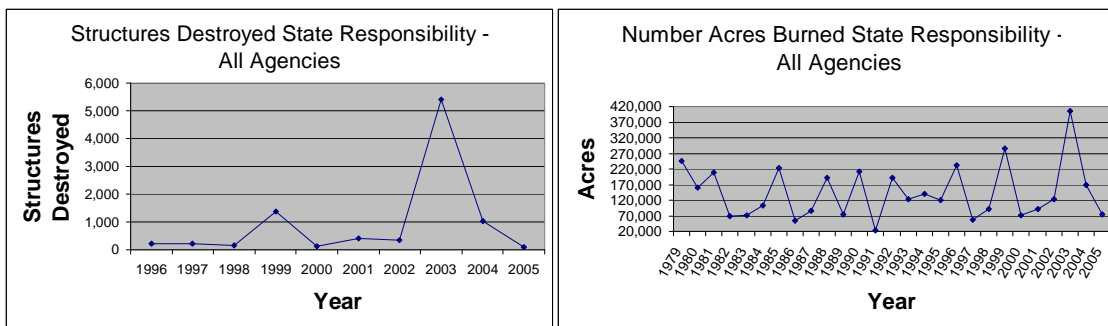


Suggestions for 2007 Update: No Information.

**LOS-R3.** “CDF should assess and report back to the Board annually on what can be done during the next five years to reduce the impact in numbers and damage of large, disastrous fires in California annually”

Assessment Summary Statement (LOS R3) the review committee identified that this recommendation was implemented by two previous reports to the Board.

Performance Measures: See Graphs



Suggestions for 2007 Update: This recommendation should be included in the Update and a report format should be developed to provide consistent data to the Board.

**LOS-R4.** “CDF should use the new fire plan assessment framework at the ranger units and for creating local forums to obtain expertise and other input from citizens, community groups, local agencies and other stakeholders on assets protected. The questions of wildland resource assets and structure protection can be better addressed at the ranger unit community levels, in terms of level of service, benefits and financial responsibilities.”

Assessment Summary Statement (LOS-R4): This is still valid and is the subject of ongoing implementation. It has been partially accomplished through the Fire Alliance. Other examples include Fire Safe Councils. Collaborative relationships may not have been fully embraced by the public.

Performance Measures: No Information.

Suggestions for 2007 Update: This recommendation should be carried over to new Fire Plan but move to the Prefire Management section. The Update should clarify that this refers only to CDF lands and contracted areas.

**LOS-R5.** *“The new fire plan assessment framework also should be applied to federal wildlands. The Board of Forestry has assigned its Resource Protection Committee to work with federal agencies that are primary participants in California’s wildland fire protection system. The focus would be the complementary relationships of changes in federal agencies’ budgets and policies that could affect California’s total costs and losses from wildfires on federal, state, and local responsibility lands. Agencies, such as the USDA Forest Service, Bureau of Land Management, Bureau of Indian Affairs, National Park Service, US Fish and Wildlife Service, Environmental Protection Agency and Federal Emergency Management Agency should be invited to participate.”*

Assessment Summary Statement: The review committee felt the following recommendation is still a valid issue that has not been fully implemented due to the lack of ignition data available in the format required. CDF has taken steps to resolve this issue.

Performance Measures: No Information.

Suggestions for 2007 Update: It should carry over to next Fire Plan but move to the Pre-Fire Management section:

<b>Wildland Fire Protection Fiscal Issues (Fiscal) FINDINGS</b>
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**General Assessment:** The findings in this section are largely applicable to today's issues and require only minor clarification in some areas. For instance, it is still true that the increasing number of structures and people in the wildland area—coupled with the ever-increasing importance of natural resources—creates a growing demand for fire protection services. Providing these needed services is the overall goal, whether by increasing funding as outlined previously or addressing the need through other actions.

**Fiscal –F1.** *“Multi-year fiscal problems are occurring at all governmental levels, constraining the availability of funding to address the increasing workload, costs and losses of the California wildland fire protection system.”*

Assessment Summary Statement: No Information.

Performance Measures: No Information.

Suggestions for 2007 Update: No Information.

**Fiscal –F2.** *“The increasing number of structures and people in California wildlands and the growing importance of the state’s natural resources create a growing demand to fund additional wildland fire protection services for both the structures and the wildland resource assets.”*

Assessment Summary Statement: No Information.

Performance Measures: No Information.

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Suggestions for 2007 Update:

**Fiscal- F3.** *“The primary fiscal responsibilities for the initial attack responsibilities: 1) for federal wildland fire protection are the federal taxpayers, 2) for privately owned wildland fire protection are the state taxpayers, and 3) for structure fire protection in wildland areas are the local taxpayers. However, during the annual fire season, the state and federal taxpayers provide a minimum level of structural fire protection that is incidental to their primary missions of wildland fire protection. Similarly, in most wildland areas, local taxpayers provide year-round wildland fire protection*

*on both state and federal responsibility areas that is incidental to the local government primary mission of structural fire protection.”*

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**Assessment Summary Statement:** The fiscal wording that follows is still accurate and should be repeated in the next Plan, but expanded to describe inequities and problems:

**Performance Measures:** No Information.

**Suggestions for 2007 Update:** The new plan should also change the reference from “federal taxpayers” to “federal tax dollars” to be consistent. Along with expansion of this section to be more comprehensive, it should be noted that since 1996, funding structures have changed. The Update should further analyze and clarify FRA and SRA responsibilities.

**Fiscal-F4.** *“Over the last decade, part of the increased costs for additional initial attack wildland resource protection and structural protection have been funded by local taxpayers through property taxes, fire district fees and volunteer firefighters. However, when a wildland fire overwhelms local resources and reaches a major fire status, both the state and the federal taxpayers pay for the costs of wildfires, structure protection, and the resulting disaster relief. “*

**Assessment Summary Statement:** The general wording in the '96 Plan that addresses the mechanisms that ultimately fund initial attack and major fire response activity is still true today; however, more research into the question of whether these costs have indeed increased for additional initial attack protection will require additional data for the new plan.

**Performance Measures:** No Information.

**Suggestions for 2007 Update:** No Information.

**Fiscal-F5.** *“For the local taxpayers, the following continue to increase: (1) the structural values and number of people being protected on wildlands, (2) the costs of wildland and structure initial attack fire suppression funded at the local levels, and (3) the losses from the extended attack and larger fires.”*

**Assessment Summary Statement:** Similarly, the point made in '96 that, for the local taxpayers, the costs of wildland and structure initial attack fire suppression funded at the local levels *continue to increase* also needs an evaluation and clarification for the updated Plan.

**Performance Measures:** No Information.

Suggestions for 2007 Update: No Information.

**Fiscal-F6.** *“For state and federal taxpayers, the following will continue to increase: (1) extended and large fire emergency fund expenditures for wildland fires, (2) protecting structures during initial attack and extended attack fires, and (3) state and federal agency disaster expenditures for damages to wildland resources and structures. “*

Assessment Summary Statement: No Information.

Performance Measures: No Information.

Suggestions for 2007 Update: No Information.

**Fiscal-F7.** *“Health and Safety Code Section 13009 allows for recovery of fire suppression costs which, when obtained, be placed back into the state’s general fund rather than invested in a prefire management program.”*

Assessment Summary Statement: is accurate, but the general fund element has not been implemented. The referenced code section also does not specify that funds go to the general fund.

Performance Measures: No Information.

Suggestions for 2007 Update: No Information.

**Fiscal –F8.** *“There is a direct relationship between reduced expenditures for prefire management and suppression and increased emergency fund expenditures, disaster funding, and private taxpayer’s expenditures and losses. Reduction of prefire management or suppression resources allows more fires to become major disastrous fires. Major fires create additional suppression and disaster relief costs at all levels of government and increase citizen and business losses.”*

Assessment Summary Statement: The finding from '96 pertaining to the relationship between costs spent on prefire management and costs resulting from emergency response activities require additional consideration. Although emergency fund expenditures would probably be higher if it were not for prefire efforts, it is challenging to link these clearly as cause and effect, other than through specific examples of 'success stories'. This analysis is made even more complicated with the fact that funding for both prefire activity and emergency fund use has risen.

Performance Measures: No Information.

Suggestions for 2007 Update: No Information.

**Fiscal-F9.** *“According to representatives of the insurance industry that insures structures in California wildland areas, (1) the insurer average costs and losses are about \$1.09 for each \$1.00 received in premiums, and (2) the urban dwellers are subsidizing the wildland homeowner through service-wide rating schedules.”*

Assessment Summary Statement: No Information.

Performance Measures: No Information.

Suggestions for 2007 Update: needs to be updated using current insurance industry data. Also, the Update should identify a role for the insurance industry to encourage land / home owners to purchase fire insurance.

<b>Wildland Fire Protection Fiscal Issues (Fiscal)</b>
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<b>RECOMMENDATIONS</b>
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**Fiscal –R1.** *“To better evaluate future public policy changes, CDF should annually refine and update its comprehensive wildland fire protection fiscal framework to allow a more systematic assessment of the future costs and losses to California taxpayers. This fiscal framework should continue to include summaries of annual expenditures by local, state, and federal agencies; economic losses of the state’s resources; and private-sector costs and losses.”*

Assessment Summary Statement: This is still a valid recommendation that has not been fully implemented. CDF is now becoming able to link fiscal and incident databases.

Performance Measures: No Information.

Suggestions for 2007 Update: The Update needs to better determine measurement needs and how the data will be integrated into the decision-making process. Also, this recommendation should be reevaluated to determine the need and value of a fiscal framework. While it has not yet been established, the Committee raises the question as to whether the value of the data is worth the cost to collect it. In addition, an annual review may not be realistic; a 5-year review may be a more viable option.

**Fiscal-R2.** *“To reduce the future total costs and losses to California taxpayers, the following actions and ideas should be considered to support a major new state prefire management initiative:*

- **Fiscal-R2-1.** *Continue to implement the new CDF prefire initiative and the new Fire Plan assessment framework by September 1998.*
- **Fiscal-R2-2.** *Redirect fire cost recovery money from the General Fund to support an investment in reducing wildland fire hazards.*
- **Fiscal-R2-3.** *Provide a tax credit, as part of the governor’s proposed tax-cut program, for private taxpayer investments in reducing wildland fire hazards in areas that have been identified under this fire plan framework that will reduce the state taxpayer’s future suppression costs.*

Assessment Summary Statement: As part of a continued strategy to reduce the future total costs and losses to California taxpayers, the review committee felt that the recommendation to continue implementing the new CDF prefire initiative and the new Fire Plan assessment framework by

September 1998 is still a valid recommendation and has been successfully rolled out to all units.

The review Committee, however, felt that two complex recommendations from '96 have not been implemented. The first—*Redirect fire cost recovery money from the General Fund to support an investment in reducing wildland fire hazards*—is still a valid recommendation, but would require an agreement with the Department of Finance and possibly legislation to implement. The second—*Provide a tax credit, as part of the governor's proposed tax-cut program, for private taxpayer investments in reducing wildland fire hazards in areas that have been identified under this fire plan framework that will reduce the state taxpayer's future suppression cost*—is a significant policy issue that may not be feasible and therefore may not need to be included in the next Fire Plan.

Performance Measures: No Information.

Suggestions for 2007 Update: The 2007 Fire Plan Update should include a new prefire management initiative. Proposition 40 funding sources should be explored as an option to fund the new initiative.

**Fiscal-R3.** *“Get the insurance industry to develop an approach to reduce taxpayer and insurance underwriting losses”.*

Assessment Summary Statement: still a valid recommendation that is slowly being implemented. The review committee felt that more work with insurers was needed to determine if new opportunities are available that might not have been in existence in 1996.

Performance Measures: No Information.

Suggestions for 2007 Update: No Information.

**Fiscal-R4.** *“Ensure a major federal prefire management initiative on federal wildlands in California. The purpose is to reduce total federal taxpayer costs for wildland fire protection”*

Assessment Summary Statement: has been implemented in the form of the National Fire Plan.

Performance Measures: No Information.

Suggestions for 2007 Update: No Information.



**Prefire Management (Pre)  
FINDINGS**

**Pre-F1.** *“Suppression of fire in California’s Mediterranean climate has significantly altered the ecosystem and increased losses from major fires and fire protection costs. Historical fire suppression has increased: periods between fires; volumes of fuel per acre; fire intensities; fire damage and losses; fire suppression difficulties, and total taxpayer costs and losses.”*

**Pre-F2.** *“With continued fire suppression in wildland areas, fuel volumes per acre will continue to increase, unless a substantial long-term program of fuel reduction is implemented.”*

Assessment Summary Statement: Both findings are still accurate but needs refinement. It focuses on suppression as the only variable that has altered the ecosystem. Further, this impact is still not generally understood by the public.

Performance Measures: Trends in fire frequency; fuel loading; *fire* intensities; fire damage and losses; and total taxpayer costs and losses.

Suggestions for 2007 Update: No Information.

**Pre-F3.** *“Fuel loading problems are occurring on federal and state responsibility areas, as well as in wildlands within city limits, which are local responsibility areas”*

Assessment Summary Statement: Still accurate but needs to be reworded for clarity.

Performance Measures: Trends in fuel loading.

Suggestions for 2007 Update: Recognition that LRA wildlands exist outside the city limits needs to be added.

**Pre-F4.** *“California’s eight straight years of drought increased the dead and dying vegetation, the volumes of drier fuel per acre, and the acres with vegetation fuel ladders, all of which contribute to increased size and severity of fires resulting in greater costs and losses”*

Assessment Summary Statement: Still accurate but needs to be reworded to recognize the cyclical nature of draught.

Performance Measures: Weather monitoring data

Suggestions for 2007 Update: No Information.

**Pre-F6.** *“Prefire management can serve as a tool to reduce the overall emissions caused by wildland fires. Based on the annual average acres burned by wildfire from 1985-1994, wildfire is causing the emission of almost 600,000 tons of air pollutants per year”*

Assessment Summary Statement: Still accurate but the statistics need updating.

Performance Measures: Trends in wildfire emissions.

Suggestions for 2007 Update: The Update should recognize that emissions vary depending on the season (e.g. less in the spring / fall) and create BMPs to manage.

**Pre-F7.** *“There are tradeoffs between taxpayer investments in prefire management and the related state and federal emergency fund (fire disaster) expenditures, ecological and natural resource losses, private citizen losses, and safety problems for civilians and firefighters during wildland fires.”*

Assessment Summary Statement: Finding may still be accurate, but is generally not understood. By rewording it in the update its meaning will be captured more easily by the readers.

Performance Measures: Investment calculation that indicates payoff received due to investments in pre fire.

Suggestions for 2007 Update: No Information.

**Pre-F8.** *“With continued population-driven increases of people and structures in the wildlands, there are more life and property assets at risk in wildland areas, and increasing risks to ecological, economic and natural resource assets. This increases the values of wildland homes and other structures, as well as the number of wildland fires caused by people”.*

Assessment Summary Statement: The Committee felt that the following statement is accurate but should be reworded in the Update for clarity. Undoubtedly this statement is true and remains true for the update.

Performance Measures: No Information.

Suggestions for 2007 Update: No Information.

**Pre-F9.** *“To reduce the wildland fire protection costs to taxpayers, development of wildfire protection zones and fire hazard mitigation measures (including*

*ignition-resistant building standards) are needed as part of the local government planning and land-use decisions on permitting developments in wildland areas within incorporated cities and unincorporated areas.”*

Assessment Summary Statement: No Information.

Performance Measures: No Information.

Suggestions for 2007 Update: Land use planning and fire resistant building codes are two of the four major fire protection service components needing focus on the update other two are fire suppression services and prefire hazard reduction). Critical to further achieving the goals of reducing costs and losses due to wildfire is optimizing resource allocations among these programs to better achieve goals.

**Pre-F10.** *“A prefire management database is needed to provide more definitive risk assessment information to the public and the insurance industry, code officials, building industry and local fire jurisdictions. The objectives are to establish comprehensive minimums for wildfire protection zones, develop ignition-resistant building construction for improved reduction of fire hazards around wildland structures, and provide insurers and homeowners with information on reducing risks and support more equitable insurance rating for wildland structures. “*

Assessment Summary Statement: Still accurate.

Performance Measures: No Information.

Suggestions for 2007 Update: No Information.

**Pre-F11.** *“The public doesn’t sufficiently understand the risks and impacts of wildfires on natural resource assets, structures and people living and recreating in California wildlands. Agencies have not adequately communicated those risks. There is a false sense of security among wildland homeowners that they are not at risk if there are fire protection organizations, insurance policies for fire coverage, and the minimum fire prevention prescriptions are met.”*

Assessment Summary Statement: statement is still accurate, but makes general assumptions about homeowners that should be clarified in the new plan

Performance Measures: No Information.

Suggestions for 2007 Update: No Information.

<b>PREFIRE MANAGEMENT (RECOMMENDATIONS)</b>
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**Preamble** *“CDF should develop a prefire management program for state responsibility areas and provide technical assistance to help local governments develop prefire management programs on local responsibility areas. The Board will encourage federal agencies to increase their funding for efforts on their lands and joint efforts in the wildland intermix.*

Assessment Summary Statement: Both creation/implementation of the Unit Fire Plan, County Fire Plans, and more recent Community Fire Protection Plan have all contributed to helping local government create prefire programs. Federal funding for CWPP has been allocated from the National Fire Plan since 2000, but trend information was not researched.

Performance Measures:

- Trends in planning funding
- # number CWPPs

Suggestions for 2007 Update: No Information.

**Pre-R1.** *“CDF will develop prefire management data that will: (Pre-R1.1) Support state, local and federal agencies’ efforts to implement a coordinated prefire management program on California wildlands.”*

Assessment Summary Statement: Remains a valid recommendation that is the subject of ongoing implementation. Examples include Unit Fire Plans and coordination with CWPP.

Performance Measures: No Information.

Suggestions for 2007 Update: No Information.

**Pre- R1.2** *“Provide the insurance industry with better fire hazard risk assessment data for underwriting, rating and pricing fire protection policies in wildland areas. These are incentives to homeowners to invest in fire hazard reduction efforts”*

Assessment Summary Statement: CDF is in the process of providing data to the insurance industry. Data, taken alone, does not help homeowners;

reduced premiums that may result from incorporating data findings into insurance policies benefit homeowners.

Performance Measures: No Information.

Suggestions for 2007 Update: needs additional consideration and re-wording for the 2005 Plan Update. However, this recommendation should be rewritten with more clarity and focus. The Plan should include a reinvigorated process to include the insurance industry and encourage them to provide incentives for homeowners to abide by the 100' clearance, and practice good fuel management

**Pre-R2.** *“To increase the market alternatives for using biomass materials removed from wildlands and to reduce future dependence on prescribed fire and vegetation management burns, CDF, in conjunction with other state agencies, should develop an assessment of future biomass marketing opportunities for California. It should include projections of potential market uses and actions local, CAL FIRE and federal governments could take to expand those markets.”*

Assessment Summary Statement: still valid and is being implemented on an ongoing basis.

Performance Measures: Examples of implementation underway include CDF support of biomass private sector efforts, involvement in biomass collaboration, and government biomass co-generation.

Suggestions for 2007 Update: No Information.

**Pre-R3.** *“The fire prevention education programs of local, state and federal agencies and private industry should be communicating the level of risk to the people who live in wildland areas. An evaluation should be made to determine the correct message to influence people to modify their behavior. That message should incorporate the standards for both vegetation management and ignition resistant building construction, as well as what citizens and businesses can do to reduce wildfire risks.”*

Assessment Summary Statement: still valid and is also the subject of ongoing implementation.

Performance Measures: Implementation examples include the hiring of a consultant to work with community groups and the production of a video to help with education efforts.

Suggestions for 2007 Update: No Information.

**Pre-R4.** *“The Board of Forestry supports examining legislation that would condition state disaster relief on the development and implementation of prefire management programs on wildlands. The Board recommends that federal disaster relief be similarly conditioned.”*

Assessment Summary Statement: The review Committee determined the following recommendation from '96 was not implemented and is no longer valid; the Disaster Management Plan Act of 2000 proactively addresses this issue.

Performance Measures: No Information.

Suggestions for 2007 Update: This topic should not carry over to next Fire Plan.

**Pre-R5** *“To provide state funding for prefire management projects, legislation should be sponsored to provide that fire cost recovery funds collected by CDF be returned to CDF’s budget for implementing the projects, as a means of reducing wildfire costs and losses.”*

Assessment Summary Statement: It remains a valid recommendation, but is not feasible. It makes a policy recommendation outside the purview CDF.

Performance Measures: Implementation of this recommendation was attempted, but was unsuccessful.

Suggestions for 2007 Update: Committee also felt that the following recommendation should not be carried over to the next Fire Plan

**Pre-R6.** *“Legislation should be sought to authorize local government to create special service districts for prefire management projects. CDF will prepare recommendations as part of its in-depth plan”*

Assessment Summary Statement: Uncertain if this is possible under current special districts law. If so, it does not need to be carried over to the next Fire Plan.

Performance Measures: No Information.

Suggestions for 2007 Update: No Information.

**Pre-R7.** *“To remove a major obstacle to increased vegetation management burns, with their potential for reducing wildfire costs and losses, liability limits should be examined for conducting such burns in high-risk/high-value wildlands. The state’s worker compensation program may be a model for needed changes”*

Assessment Summary Statement: Determined by the review Committee to no longer be valid and should not be carried over to the new Fire Plan. Nonetheless, liability is still an issue for managed burns and the new Plan Update should address this issue.

Performance Measures: No Information.

Suggestions for 2007 Update: No Information.

**Pre-R8.** *Given the potential for prefire management to reduce the total level of air pollutant emissions from wildfire, the state, federal, and local wildfire protection and air quality agencies should jointly develop policies for reducing air pollutant emissions from California wildfires. “*

Assessment Summary Statement: Still a valid recommendation that is the subject of ongoing implementation. Three different committees have been convened to address this issue: the Interagency Smoke Committee; within the USFS; and the ARB Implemented Smoke Management Program.

Performance Measures: No Information.

Suggestions for 2007 Update: The Update should also acknowledge that emissions are not reduced – only managed. The goal of the Plan should be emission avoidance.

**APPENDIX B: ASSESSMENT OF CHAPTERS 2, 3, AND 5**

In assessing Chapters 2, 3, and 5 of the 1996 Fire Plan, the Fire Plan Update Advisory Committee addressed two general questions:

1. Looking at the last plan, what should be taken forward into the new plan? What should be left behind?
2. What are some of the unclear policy issues that will need to be resolved as we move forward?

**Chapter 2: Fiscal Framework:**

Responses to Question 1:

- It may be a good idea to move the whole chapter to an appendix, or possibly delete it entirely.
- The chapter needs a historical chart showing escalating costs.
- We need a way to determine different costs for fighting fire in different parts of the state or in different fire environments.
  - The fiscal framework needs to be tied to a review of general plans.
  - Responses to Question 2:
    - How and what do we measure in terms of costs and losses?
    - We need to spend time figuring out what data to collect and what fiscal and economic questions need to be asked and answered.
    - If we had good data on what and where our losses are, how do we determine money allocation among building standards, suppression, and prefire management?
    - How much of fire suppression costs that result from poor local land use planning should be borne by state or federal government?
    - How far do we go to address the issue of spending government dollars versus having property owners accept some responsibility for prefire management?

**Chapter 3: Fire Plan Framework**

Responses to Question 1:

- Leave behind the Test Unit process and associated timeline (on page 17 of 1996 Plan).
- Consider leaving out the frequency of severe fire weather. Does it really add to or clarify any decisions? If it is carried over to the new Plan, change it to reflect local weather-driven fire corridors (such as wind tunnels).
- Carry the current assessments forward.



- Keep the stakeholder forum and revise to reflect the current stakeholder process.
- Add in fiscal data.
- Add in CFES (project the future).

#### Responses to Question 2:

- How do we define “successful initial attack” for each “planning belt”?
- How do we define the Board of Forestry’s “weighting factors” for combining the assets at risk?
- The assessment contains no real projection of workload. Are new models needed (e.g. CFES)?
- How do we move forward with combining our data sets with those from federal and local agencies?

### **Chapter 5: Prefire Management Initiative**

#### Responses to Question 1:

- Needs to be both updated and shortened. Make it generic about cycles (e.g. bug kills, drought, snow) to keep it more timely.
- Emphasize the complexity of land/ownership patterns.
- Re-evaluate high-risk, high-value assessment. Unsure if the methodology was correct in assessing fuels, weather, slope, and fire history.
- Emphasize the personal responsibility of all property owners.
- Is the term “fire management analysis zone” still in use? If not, remove references to it.
- Also not sure about the term “wildfire safety and protection zones.” If it’s not commonly used, delete references to it.
- Update and check for accuracy the references to the number of acres per year that have burned.
- Look into alternatives for fuel reduction under “vegetation management.” Alternatives include biomass, chipping, mechanical, timber harvesting, chemical treatment, etc.
- Attention to fire-safe and land use planning is good, but it needs an emphasis on working with local government.

#### Responses to Question 2:

- Air quality management/Board burning policy is a big issue. We need to talk to ARB about the need for more prescribed burns. Air quality may be a problem, but what are the tradeoffs if we don’t do a prescribed burn and then a huge fire breaks out?
- What is/should be CDF’s involvement in land use planning with local government?
- How do we implement the new 100-foot clearance law?
- The issue of forest health—not necessarily due to fire suppression.
- Can budgets support plans that are created?

### **Appendix C**

**Membership of 1996 Fire Plan Assessment Advisory Committee**

- Tom Hoffman, California Department of Forestry and Fire Prevention (CDF)
- Warren Alford, Sierra-Nevada Forest Protection Campaign
- Chris Brown, Mendocino County Air Quality Management District
- George Gentry, California Board of Forestry
- John Hoffman, Regional Council of Rural Counties
- Dick Hayes, CDF
- Lewis Blumberg, Nature Conservancy
- Tony Clarabut, CDF
- Chris Zimny, California Board of Forestry, CDF
- Bill Holmes: CDF
- Jeff Harder, CDF
- Mike Staley, OES
- Rose Conroy Davis Fire Department
- Liz Wright, U.S. Forest Service
- Warren Wilkes, California Fire Districts Association
- Lisa Beutler, Center for Collaborative Policy (CCP)
- Jodie Monaghan, CCP

## II. CDF Firefighter's (Rissemiller) letter/comments dated 12/05 on 96 Fire Plan Assessment

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# MEMORANDUM

**DATE:** December 5, 2005

**TO:** Tom Hoffman  
Lisa Beutler

**FROM:** Jim Rissemiller

**SUBJECT:** 1996 Fire Plan Assessment

Following our discussion on November 30<sup>th</sup>, I went back and reviewed the 1996 Fire Plan and have attempted to quantify those findings and recommendations that I believe worked, as well as those that did not work. I have also included my personal editorial comments, which are found below, on why I believe they did, or did not, work.

### **A. Findings - Levels of Wildland Fire Protection Services**

1. **The history of California wildfires indicates that the following trends will continue.**
  - i. **Risk from wildfire to life, property, natural resources, and firefighter safety is increasing.**

It can be demonstrated that this finding is valid by using the statistics from the firestorms of October and November of 2003. If I recall correctly, those 14 fires burned just over 750,000 acres, destroyed about 3,700 homes and resulted in the deaths of 25 people, including one firefighter (Steven Rucker). The statistical data

should be readily available to confirm the actual numbers.

Additionally, in 2004 another firefighter (Eva Schicke) was killed while fighting a fire in the Tuolumne River Canyon. I'm not positive about the spelling of the name or the location of the fire, but those facts shouldn't be difficult to obtain/confirm.

**ii. Population will grow and more people will live and use wildland areas, especially in the Central Sierra and in the Southern California counties of Riverside, San Bernardino and San Diego.**

I believe this is also true, but may not be apparent in statistical data because of changes to State Responsibility Area (SRA) boundaries. It shouldn't be too difficult to obtain population estimates for the SRA areas of California. If those numbers do not validate this as a true statement, it may take some additional work to research any areas that were detached from SRA because of being annexed to cities. It may depend on how up-to-date the SRA population figures are.

**iii. Topography and climate support ecosystems where large wildfires can be expected.**

Again, I believe this statement to be true, however I do not have the expertise to provide factual data to support that claim. Perhaps FRAP, the National Weather Service, and/or the US Geological Survey can provide factual data on topographical and climatic conditions and trends.

**iv. Drought and fuel moisture conditions will be unpredictable but almost always dangerous in fire season.**

Same response as in item iii above.

**v. More structures will be constructed in areas that are very susceptible to wildfire.**

I believe this is a true finding and can be demonstrated with statistical data from FRAP.

**vi. Historical legacy of narrow roads, difficult entrance, insufficient water supplies, flammable building construction and location that make many communities and homes wildfire-prone still exists.**

This is a true finding and can be illustrated by the findings in the report from the Governor's Blue Ribbon Fire Commission that was convened following the 2003 firestorms.

Additionally, during the Old Fire in October 2003, over 300 homes were lost in the City of San Bernardino. Many of those homes were constructed years ago and had wood siding and/or shake shingle roofing. However, many of the homes that burned were not what would typically be considered in the urban-wildland interface – some were more than a mile from the nearest hillside.

During this same fire the entire community of Hook Creek (Again, I'm not positive I have the name right, but it was a residential area with narrow roads, one point of access, with an inadequate water supply, homes constructed of wood-siding and roofs in the Lake Arrowhead area of the San Bernardino National Forest) was virtually destroyed. Hook Creek is the "poster child" for a community that meets each item in the finding.

**vii. Public demand for wildland fire protection and other services will increase.**

I believe this is also a true finding that can be demonstrated by the public outcry in San Diego following the Cedar Fire – where firefighters were cursed by residents for not doing enough to save homes and where politicians criticized CDF for not requesting federal assistance (e.g. aircraft) quickly enough. I believe these are documented in the Blue Ribbon Fire Commission's report. If not, I am sure that Chuck Maner (or virtually anyone else in San Diego) can provide first-hand reports.

**2. Deteriorating forest health, increasing fuel loads and other factors have led to more intense, destructive wildfires; unabated this pattern will continue.**

I believe this is also a true finding and can be demonstrated using a comparison of the size, intensity and damage caused by

wildfires in recent years – in comparison to previous years. The enormity of the 2003 firestorms could also be a useful tool in demonstrating this finding is true.

- 3. Assets at risk will increase, especially watershed assets, because of the rapid rise in the demand for water to supply more people. Based on population projections, the potential for accelerating loss of protected assets, especially life and property, will be greater from disastrous wildfires.**

I believe this to be a true finding that may be validated by information from the post-fire assessments that were completed following the Old and Grand Prix Fires in San Bernardino. A source of information for this could be Glenn Barley in the San Bernardino Unit. I know Glenn worked on post-fire assessments following those fires – including an assessment of the potential for mud and debris flows to cause additional damage. If Glenn does not have the information, I suspect he would know where to go to get it. There has also been work done by the San Bernardino County Flood Control and a variety of other state and federal agencies. This information could (and I suspect would) provide statistical validation of the claim.

The Department of Water Resources should be able to provide validated information about the increase in water demand. If not, I have a friend who is a member of the Board of Directors for the San Bernardino Valley Municipal Water District who can probably provide a source to validate the water demand issue.

FRAP should be able to provide data to validate the population and values at risk.

If I recall correctly, the damage caused by the 2003 firestorms was statistically significant. I think it was around \$1 billion – and whatever it was, I believe it was substantially higher than anything experienced in previous years.

- 4. Large wildfires do not respect political or property boundaries. Historically, a strength of California's firefighting agencies is found within a concept of mutual cooperation at the federal, state, and local levels of government. Day-to-day mutual aid for initial attack, as well as a statewide mutual-aid system for fire disasters, is the basis of this cooperation and coordination. The ability to rapidly mobilize, effectively deploy and support large**

**numbers of specialized firefighting resources is essential to cope with large multiple fires. Hence, CDF, in cooperation with other fire agencies, must maintain infrastructure, including communications and capital improvements necessary to facilitate such a response.**

I believe this finding is true and, at least in part, can be validated with the results from the Blue Ribbon Fire Commission report. There is a section in that report that deals with the need for improvement to communications systems.

This may also be a place to discuss the mutual aid issues that have arisen over who pays for resources to fight wildland fires. Without going into great depth, the primary issue is that CDF and the federal fire agencies have taken the position that protection of structures is not their financial responsibility. Rather, that is the responsibility of whatever local agency receives tax revenue from the structures. This has resulted in CDF and federal agencies refusing to pay for resources if/when those resources were used primarily for structural protection and not perimeter control. The result of this disagreement has caused some local agencies to reconsider whether they will participate in the mutual aid agreements. Some have threatened not to participate unless they are reimbursed. There are valid arguments on both sides of the issue, but it is one that perhaps the Board of Forestry & Fire Protection should consider.

- 5. Fire protection forces in California must have sufficient depth to respond to large, multiple wildfires and still prevent other small fires from becoming large damaging fires. CDF plays a key role in supplying and coordinating such forces; it should maintain and enhance this ability. The 1985 "Fire Plan includes a model to provide adequate depth of resources that show CDF needing 96 additional engines and 825 personnel for managing large fires using the Incident Command System. There is a greater need today as reflected in the California Fire Plan.**

This is a true finding and can be validated through recommendations from the Blue Ribbon Fire Commission report. Particularly, the Commission recommended purchase of additional fire engines and increased staffing levels (to a minimum of 4 personnel per engine, including engines that respond as part of an OES deployment) on fire engines responding to wildland fires.

**B. Recommendations – Levels of Wildland Fire Protection Services****1. The Board of Forestry directs CDF to further develop and implement a new Fire Plan framework that includes:****i. Level of service (LOS) initial attack success and major fire failure rates.**

Although I suspect this has been accomplished at some level, I am not aware that the information has been shared down to the “field level” – which to me means the personnel responsible for providing initial attack services (stations, camps and Battalion Chiefs). If the information has been developed, I would suggest that it be shared with the personnel who provide initial attack services to gather their input. The best plan in the world is useless if those who are responsible for implementation do not know what it is. And, similarly, if the plan is such that it cannot be implemented – for whatever reason – then it is equally useless.

**ii. Identification and assessment of assets protected, covering both commodity (economic) and non-commodity assets.**

Some Units have accomplished some level of identification and assessment, but I do not believe every Unit has done so. Even for the Units that have worked on identification and assessment, I believe it is unlikely that every area within those Units have been done. Perhaps CDF should consider use of the RHAVE program (which is used by some local fire agencies to determine the Risk, Hazard and Value of particular assets) or adapting the basic tenets of that program to make it applicable to wildland fire protection.

**iii. History of wildfires by intensity levels, size and vegetation types. Identification and rankings of high-value/high-risk wildland areas for use by local, state, and federal agencies and the private sector for allocating prefire management and suppression resources.**

Again, while I suspect this has been done, I do not believe it has been shared with personnel at the field level. My personal experience has been that it is usually



left up to the personnel working in a particular area to determine high-value and/or high-risk areas within their area of responsibility. Several Units have developed their own systems to identify these, but the systems used are not consistent throughout the department – and the information is not shared throughout the department.

**iv. Severe fire weather rankings to relate probability that large damaging fires will occur by local area.**

It is not clear to me what this statement really means. CDF has utilized fire weather and fire danger ratings to relate probability that fires will occur and to establish dispatch levels each day – but my experience has been that during fire season, the fire danger is always high to extreme and the dispatch level is always high. This may be a particular phenomenon specific to the area I work, but I suspect it is more widespread. Even in the winter time, fire danger is typically identified as “moderate” and dispatch levels are typically “medium”. In fact, I cannot recall the last time I heard of a fire danger or dispatch level of “low” – even during the rainstorms of winter. I am not certain if this means the rating system is not used, or not properly used; or if it means the system itself is flawed.

In spite of the above concerns, I believe if properly developed and utilized, a rating system is a necessary and useful tool.

This may also be the appropriate place to comment on a growing concern we have had for the past several years. That is, the increased use of “select call” and “special” staffing patterns on a frequent and regular basis, rather than only in extraordinary circumstances. It seems, to us, that staffing patterns are being used in place of seeking additional staffing and resources.

**v. History and projections of changes in total costs and losses of California’s wildland fire protection system that can result from potential increases or decreases in local, state, and federal agency expenditures and private-sector investments.**

That I am aware of, this has not been done, although admittedly it may have been done at some level but not

shared with field level personnel. I believe it could be a useful tool in the decision-making process, but it would only be useful if it were reviewed and kept up to date. Outdated information would be useless.

That said, it would be a very labor-intensive endeavor to monitor potential increases and/or decreases in the fire protection systems for local agencies. Indeed, it may not be realistic to expect this level of analysis – particularly if it is anticipated that changes would be monitored on an annual basis down to the individual city and/or fire district level. It may be more realistic to stop at the county level for local government analysis.

- 2. CDF should identify options to expand its suppression force to meet the multiple, large fire scenario (such as the 1985 Fire Plan's proposal to retain, in a reserve fleet, 96 engines that were being replaced) and determine a cost-effective way to staff these engines with trained personnel in severe fire weather in targeted areas identified in the California Fire Plan assessment framework. The number of reserve engines should be increased to 100 for the California Fire Plan. This allotment would:**
  - i. Allow better management of SRA fires by minimizing CDF's dependence on the reduced federal agencies resources.**

This recommendation seems valid and may be done. However, my experience has been that CDF does not adjust its staffing or resources to adapt to changes in federal resources. For example, the bark beetle infestation in the San Bernardino National Forest resulted in the USFS increasing its available resources over the past several years. At the same time, and even though it was not CDF's direct protection area, CDF increased its available resources in those same areas with augmentation funding. This lack of coordination caused issues between CDF and USFS field level personnel. Had the communication been better, CDF could have used its augmented engines to better protect SRA areas – perhaps even making additional federal resources available for the area directly impacted by the bark beetle infestation. Unfortunately, it appeared to me that the efforts of CDF and USFS were disjointed and uncoordinated.

All this said, and as much as I agree with the recommendation that CDF should have additional engines available to augment its forces during periods of severe fire weather, I do not believe there is any plan to accomplish this. For example, where would the additional 288-384 personnel come from to staff the 96 engines (depending on whether they are staffed with 3 or 4 personnel per engine)? To what level would these personnel be trained? Where would CDF house the engines and personnel? How much would it cost to keep these engines ready to respond?

The idea of identifying options to expand CDF's suppression force is valid and should be pursued. To my knowledge, it has not yet been done.

**ii. Keep cost under control because of reduced ordering through the Office of Emergency Services, thereby better controlling emergency fund expenditures.**

Local government resources (which are the ones typically ordered through the Office of Emergency Services) are typically more expensive than CDF or federal resources. Absent a workable plan to obtain additional resources internally, CDF has few options that provide timely response of additional resources other than ordering through the OES system. While I think this is an admirable goal, I do not believe it is realistically achievable.

Each incident is different and resource needs are driven by the size, intensity and assets at risk during that particular incident. I do not believe the public would accept CDF failing to use available resources because they are too expensive.

That said, it may be worthwhile to conduct an analysis of the costs for use of local government resources on fires and compare those costs to what it would have cost CDF to staff additional resources. If the costs for local government resources is similar to what it would have cost CDF to staff additional resources – and those resources would have been immediately available, perhaps a case can be made to use our own personnel

to augment our available resources instead of using more expensive local government (OES) resources.

It may be more appropriate to change this recommendation to frequently reconsider the use of (OES) resources and replace them with CDF or federal resources as quickly as possible.

**iii. Help limit the need to exceed maximum drawdown when there are large multiple fires, as now occurs.**

Absent CDF having additional resources available on a routine basis – which means CDF adding resources throughout the state – this recommendation seems to be one that cannot be implemented.

For example, as discussed above, each incident generates a need for a particular number and type of resources at a given time. To avoid use of CDF resources and minimize exceeding the maximum drawdown is inconsistent with the recommendation immediately above – to not use OES resources. What is needed, and when it is needed, is beyond the control of CDF.

It seems that this recommendation can only be successfully met by expanding the forces of CDF. That seems unrealistic absent sound statistical data to support the cost-effectiveness of such a move.

**3. CDF should assess and report back to the Board annually on what can be done during the next five years to reduce the impact in numbers and damage of large, disastrous fires in California annually.**

Although on its face this seems to be an admirable goal, I do not believe it is realistic to expect a statewide analysis to be completed on an annual basis; at least not if we expect the results to be based on sound reasoning, logic and well-researched facts. I believe to perform a thorough, statewide analysis would take at least a year to successfully complete. In fact, conducting such an annual assessment may result in false information based on one particular year of experience – and seems it could have significant potential to ignore long-term planning in favor of an immediate reaction to the immediate past.

It seems more reasonable to review, assess and report on a bi-annual basis – to avoid development of a long-term plan that is based on short-term information.

- 4. CDF should use the new fire plan assessment framework at the ranger units and for creating local forums to obtain expertise and other input from citizens, community groups, local agencies and other stakeholders on assets protected. The questions of wildland resource assets and structure protection can be better addressed at the ranger unit community levels, in terms of level of service, benefits and financial responsibilities.**

I believe this is a valid recommendation and it is imperative that each Unit create its own assessment of assets at risk. It is also important that those discussions involve input from the myriad stakeholder groups in each area. I have never seen the fire plan assessment framework for accomplishing this, so I cannot comment on the value of that framework. However, whether that framework is utilized, or some other format, the end product would be beneficial to CDF, its initial attack incident commanders, and the Board of Forestry & Fire Protection in making decisions.

I am not certain, but I do not believe every Unit has conducted the assessment outlined in this recommendation. I do believe this is a valuable tool and CDF should insure that this is done in every Unit. I will avoid the temptation to recommend specific corrective actions to achieve compliance, but there must be some enforcement mechanism to insure this is accomplished.

- 5. The new fire plan assessment framework also should be applied to federal wildlands. The Board of Forestry has assigned its Resource Protection Committee to work with federal agencies that are primary participants in California's wildland fire protection system. The focus would be the complementary relationships of changes in federal agencies' budgets and policies that could affect California's total costs and losses from wildfires on federal, state, and local responsibility lands. Agencies, such as the USDA Forest Service, Bureau of Land Management, Bureau of Indian Affairs, National Park Service, US Fish and Wildlife Service, Environmental Protection Agency and Federal Emergency Management Agency should be invited to participate.**

Again, I believe this could be a valuable asset if properly implemented. And, again, I am not familiar with the specific fire plan assessment framework, so I cannot comment on how valuable that particular tool would be. Nonetheless, the concept of coordinating CDF's actions with adjoining, and in some cases intermingled, federal lands only makes sense.

A specific example of the successes of a coordinated approach is the Balancing of Acres project that is accomplished by CDF and the federal agencies. Unfortunately, my personal experience with suggesting changes to these boundaries is less than desirable.

I met with my counterparts from the USFS in San Bernardino to develop a comprehensive plan for response to fires on state and federal lands. Generally, we reviewed direct protection boundaries, available resources, command structures, etc., and developed a plan to adjust boundaries to use landmarks that were easily and rapidly identifiable on the ground; to develop a coordinated response criteria using the resources of both agencies; to develop trigger points for establishment of unified command; to predetermine a transition into and out of unified command; and to predetermine mutual radio frequencies. Unfortunately, even after we submitted the plan and it was accepted by both agencies, it took over 2 years to gain final approval.

I tell the above story only to point out what is possible when cooperation exists between CDF and its federal counterparts, and to identify what can be implemented at the field level. I would caution against developing "boiler-plate" or "cookie cutter" documents at the statewide level and expecting those to be implemented in all instances.

Perhaps it would be better to identify basic concepts that are desirable – such as coordination of radio frequency use, designation of logical and easily identifiable geographic boundaries, and development of response plans based on the closest resource concept – for use by Units to develop plans for all state and federal lands where those lands are in proximity to each other.

## **C. Findings – Wildland Fire Protection Fiscal Issues**

### **1. Multi-year fiscal problems are occurring at all governmental**

**levels, constraining the availability of funding to address the increasing workload, costs and losses of the California wildland fire protection system.**

While we may perceive fiscal issues as problems, I am slightly concerned about the perception and statement that they are “problems”. Admittedly, we would always like more money to do more things. And, in that context, I suppose it is true to state that they are fiscal problems. However, the legislature and other governing bodies (e.g. Congress, County Boards of Supervisors, City Councils, etc.) may not agree that they are fiscal problems.

I would suggest rewording this finding to simply state that available funding is probably never going to match what we would like to have to fully address the issues presented by the wildland fire protection system – or some other similar statement.

**2. The increasing number of structures and people in California wildlands and the growing importance of the state’s natural resources create a growing demand to fund additional wildland fire protection services for both the structures and the wildland resource assets.**

While I believe this statement to be true, I believe it only addresses a portion of the issue. It is true that more structures are being built in wildland areas and the addition of structures results in an increase in the number of people in those areas.

The portion that is not addressed is the service level expectation of the people who are moving from more urban areas into wildland areas. Typically, I believe their expectation of service level does not change. Put more succinctly, if someone moved from a city to the wildland and that person had become accustomed to receiving fire protection and paramedic services within 5-minutes of a request; I believe they bring with them the expectation of receiving that same level of service.

This presents CDF, as well as all other fire service providers, with an interesting dilemma. That is, do we develop a program to dispel the level of service expectations, do we increase service to meet the level of expectation, or do we do some combination of both.

Perhaps the issue of service level expectation is a finding that could be incorporated into the new Fire Plan and recommendations can be developed to address it.

I am slightly troubled by the references throughout the Fire Plan to 'wildland fire protection services'. I do not believe the public shares our view that there is a distinction between wildland fire protection and any other type of fire protection.

I realize addressing this issue may be unpopular, but I believe it needs to be addressed.

- 3. The primary fiscal responsibilities for the initial attack responsibilities: (1) for federal wildland fire protection are the federal taxpayers, (2) for privately owned wildland fire protection are the state taxpayers, and (3) for structure fire protection in wildland areas are the local taxpayers. However, during the annual fire season, the state and federal taxpayers provide a minimum level of structural fire protection that is incidental to their primary missions of wildland fire protection. Similarly, in most wildland areas, local taxpayers provide year-round wildland fire protection on both state and federal responsibility areas that is incidental to the local government primary mission of structural fire protection.**

I could not disagree more with this finding.

While I understand the ramifications of fiscal responsibility, I believe CDF has failed to keep up with the changing expectations of the public and continues to propagate the belief that there is a difference between who provides a particular type of fire protection. I also believe this attitude is no longer acceptable.

This type of division of responsibility was, by and large, cast aside in the late 1800's when insurance stickers were no longer used on buildings, announcing who was responsible for putting out fires in that building.

The view that specific taxpayers pay for specific types of services and that if you don't pay for our service you can't have our resources – is, I believe, asinine. A local taxpayer in California is also a state and federal taxpayer.



I also fail to see the logic in how CDF is financially responsible to protect state responsibility areas – but only during the summertime.

I think CDF has spent considerable time and effort over the years trying to differentiate between the specific levels of who pays for what, and at what time of the year. I do not believe the public shares – or would even tolerate – our division of responsibilities.

Enough of my ranting, I believe you get the point.

- 4. Over the last decade, part of the increased costs for additional initial attack wildland resource protection and structural protection have been funded by local taxpayers through property taxes, fire district fees and volunteer firefighters. However, when a wildland fire overwhelms local resources and reaches a major fire status, both the state and the federal taxpayers pay for the costs of wildfires, structure protection and the resulting disaster relief.**

Although I do believe this finding is a true statement, it does seem inconsistent with the statement above that defines financial responsibility for each respective governmental level. Perhaps this could be reconciled with the above statement, or clarified to mean state and federal taxpayers pay for the disaster costs, rather than leaving the possibility for misinterpretation that the state and federal taxpayers pay for something that isn't our declared responsibility to pay for in the first place.

- 5. For the local taxpayers, the following continue to increase: (1) the structural values and number of people being protected on wildlands, (2) the costs of wildland and structure initial attack fire suppression funded at the local levels, and (3) the losses from the extended attack and larger fires.**

The specific identified items are not just limited to costs for local taxpayers. These costs are true for local, state and federal taxpayers.

- 6. For state and federal taxpayers, the following will continue to increase: (1) extended and large fire emergency fund expenditures for wildland fires, (2) protecting structures during initial attack and extended attack fires, and (3) state**

**and federal agency disaster expenditures for damages to wildland resources and structures.**

See the statement above for #5 – it is also applicable here. Perhaps all three jurisdictional levels should be combined into a single finding that costs will increase. These statements all fail to identify that costs typically aren't reduced unless the demand for service is reduced. This may be a way to justify expenditures for prefire planning and fire suppression – by an offset of the costs to suppress and recover from large and damaging fires.

**7. Health and Safety Code Section 13009 allows for recovery of fire suppression costs which, when obtained, be placed back into the state's general fund rather than invested in a prefire management program.**

This statement is partially true, which also makes it partially false. That is, Health & Safety Code Section 13009 does allow for recovery of fire suppression costs. However, I cannot find where this section specifies that any recovered funds be placed back into the state's General Fund. Instead, I believe that is simply the state's policy, not necessarily the law. I would be apprehensive about including a statement that could be misinterpreted as misrepresenting the provisions of the law.

As a side note, since CDF is primarily funded from the General Fund, I do not see the direct link to using funds recovered from fire suppression to fund prefire management programs. If prefire management programs are important and can be justified, they should be funded even without fire suppression cost recovery. To make that link seems akin to the old adage that CHP writes more tickets just so they can get a pay raise.

**8. There is a direct relationship between reduced expenditures for prefire management and suppression and increased emergency fund expenditures, disaster funding, and private taxpayer's expenditures and losses. Reduction of prefire management or suppression resources allows more fires to become major disastrous fires. Major fires create additional suppression and disaster relief costs at all levels of government and increase citizen and business losses.**

Although I believe this to be a true statement, I do not believe the Fire Plan contains the factual data to support it as a finding.

- 9. According to representatives of the insurance industry that insures structures in California wildland areas, (1) the insurer average costs and losses are about \$1.09 for each \$1.00 received in premiums, and (2) the urban dwellers are subsidizing the wildland homeowner through service-wide rating schedules.**

I am not convinced that this finding is appropriate for inclusion in CDF's Fire Plan. Instead, this seems to be more appropriate for an internal document to the insurance industry.

#### **D. Recommendations – Wildland Fire Protection Fiscal Issues**

- 1. To better evaluate future public policy changes, CDF should annually refine and update its comprehensive wildland fire protection fiscal framework to allow a more systematic assessment of the future costs and losses to California taxpayers. This fiscal framework should continue to include summaries of annual expenditures by local, state, and federal agencies; economic losses of the state's resources; and private-sector costs and losses.**

I believe this recommendation is overly broad and, as written, would be cumbersome and time consuming to implement. First, I disagree that the need for this data is "to better evaluate future public policy changes." It is just good business to refine, update and analyze the costs and losses caused by fires and fire suppression actions. However, it should not be solely limited to those. For example, why not also analyze the impact of prefire activities on fire suppression costs? I am reasonably confident that this information could be available, even if only from some limited areas of the state. Why not also analyze the impacts of different fire protection resource deployment or staffing levels on the costs to suppress fire and the damage caused by them. These types of analyses can be useful tools in justifying future funding requests and can be used to demonstrate the need for and benefit from, proposed changes. Conversely, the analysis could demonstrate that certain expenditures do not produce the desired return on investment. Either way, the analysis itself would provide a useful tool for budget and resource deployment planning.

- 2. To reduce the future total costs and losses to California taxpayers, the following actions and ideas should be considered to support a major new state prefire management initiative:**

- i. Continue to implement the new CDF prefire initiative and the new Fire Plan assessment framework by September 1998.**
- ii. Redirect fire cost recovery money from the General Fund to support an investment in reducing wildland fire hazards.**
- iii. Provide a tax credit, as part of the governor's proposed tax-cut program, for private taxpayer investments in reducing wildland fire hazards in areas that have been identified under this fire plan framework that will reduce the state taxpayer's future suppression costs.**

It seems to me that these recommendations are not supported by facts presented in the Fire Plan. To be blunt, it seems that the recommendations are someone's wish list, rather than conclusions based on sound logic, verifiable facts and data.

The recommendations also seem inconsistent with each other. For example, the initial statement discusses support for a major new state prefire management initiative; yet the following bullet point refers to implementing the new prefire initiative and the new Fire Plan. Moreover, the second bullet point returns to the topic of redirecting fire cost recovery funds from the General Fund to "reducing wildland fire hazards" (which I presume is the aforementioned prefire initiative). I also fail to see the logic in developing a tax-cut incentive program for people to invest in compliance with the law. In other words, if it is important enough to require a law to be passed (e.g. fire-safe building standards or vegetation clearance requirements) then the incentive to comply should not be from incentives such as tax credits. After all, we don't get a "bonus" for driving the speed limit – it is the law and we are expected to comply with it. The same is true for fire safe standards.

- 3. Get the insurance industry to develop an approach to reduce taxpayer and insurance underwriting costs.**

Although I do not have adequate knowledge to provide input on this recommendation, it seems inappropriate to include such a statement in CDF's Fire Plan. I do not see the connection between CDF's plan to deal with fires and the insurance industry's underwriting costs.

- 4. Ensure a major federal prefire management initiative on federal wildlands in California. The purpose is to reduce**

**total federal taxpayer costs for wildland fire protection.**

Again, I believe this recommendation is inappropriate for inclusion in CDF's Fire Plan, particularly as it is worded. It is not CDF's responsibility to "ensure a major federal prefire management initiative". That is the responsibility of the federal government.

If, on the other hand, CDF wishes to encourage and cooperate with federal wildfire agencies in developing a coordinated prefire management initiative – I don't see a problem with that.

**E. Findings – Prefire Management Program to Reduce Wildfire Costs and Losses**

- 1. Suppression of fire in California's Mediterranean climate has significantly altered the ecosystem and increased losses from major fires and fire protection costs. Historical fire suppression has increased:**
  - i. Periods between fires**
  - ii. Volumes of fuel per acre**
  - iii. Fire intensities**
  - iv. Fire damage and losses**
  - v. Fire suppression difficulties, and**
  - vi. Total taxpayer costs and losses**

At the risk of being overly repetitive, I do not believe the Fire Plan contains factual data to support this finding. That said, I do believe fire suppression efforts over the years has contributed to the buildup of fuels that has resulted in increased fire intensity. I do not believe that is the sole reason for increasing each of the items listed, as the statement seems to imply by failing to address other contributing factors (such as the increase in population and number of structures in the wildland areas).

- 2. With continued fire suppression in wildland areas, fuel volumes per acre will continue to increase, unless a substantial long-term program of fuel reduction is implemented.**

Again, I do not believe the factual data in the Fire Plan adequately supports this statement. As written, it seems to say that if fire suppression is halted, then fuel volumes will no longer increase. For a particular location, that may be true, but I have serious doubts that it is an accurate statement over a statewide application.

I am troubled by the feeling that the author(s) of the previous Fire Plan felt the only answer to California's future fire problem was implementation of a prefire fuel reduction program. Although admittedly this is a critical component, focusing all efforts on one facet of the fire problem remains foolish – whether that is fire suppression or prefire fuel management. An effective Fire Plan must contain a balance of the many aspects that make up California's fire problem.

**3. Fuel loading problems are occurring on federal and state responsibility areas, as well as in wildlands within city limits, which are local responsibility areas.**

While this is probably a true statement, I do not believe the facts in the Fire Plan supply adequate data to make this conclusion and make it applicable across the broad spectrum of areas throughout California. It would be a true statement to say that fuel loading problems do not recognize artificial boundaries established to determine what level of government is fiscally responsible to suppressing fires.

**4. Similarly, California's eight straight years of drought increased the dead and dying vegetation, the volumes of drier fuel per acre, and the acres with vegetation fuel ladders, all of which contribute to increased size and severity of fires resulting in greater costs and losses.**

After last years' record rainfall amounts, I doubt this finding is accurate anymore – at least as presented. In fact, I'm not entirely certain it was accurate when it was written. However, I do think it would be accurate to state that California's climate with years of drought followed by years of above-average rainfall creates the potential for increased fuel loads. My concern is this finding (and the other findings) ignore the potential for large volume fuel loading of annual grasses from years with increased rainfall. Lighter fuels, such as annual grasses, have the potential to result in faster and hotter burning fires than those in heavier fuels.

Another option would be to identify that annual rainfall (or lack thereof) is one contributing factor to fuel loads. I do not believe it is accurate to portray rainfall as the sole cause for increased fuel loads.

**5. To address the long-term trends of fuel loading increases**

**and population growth, CDF is implementing a prefire management initiative is needed that combines the existing vegetation management, fire prevention and engineering programs into a coordinated effort with the objectives of reducing fire hazards, improving the effectiveness of ignition management, and reducing losses and costs to California's Wildland Fire Protection System.**

While I agree with the general concept of making a prefire management program part of the overall fire prevention program, I must question the appropriateness of including this as a finding. It seems more appropriate to include as a recommendation that the Board could adopt, providing guidance to CDF to integrate the prefire management into the overall fire prevention program – than it does to have the board make a finding that CDF is implementing a prefire management initiative.

- 6. Prefire management can serve as a tool to reduce the overall emissions caused by wildland fires. Based on the annual average acres burned by wildfire from 1985-1994, wildfire is causing the emission of almost 600,000 tons of air pollutants per year.**

I agree with the first sentence of this finding. The second sentence seems to infer that an effective prefire management program will completely eliminate emissions from wildland fires. Put simply, that is not a true statement.

In order to make this finding true, I believe will require additional statistical data that includes the potential for increased emissions from vegetation management burns – which may reduce the emissions in a particular year, or may simply add to them. To imply that annual emissions will be reduced if we do more prefire management – unless we anticipate not utilizing fire for any of our prefire management – seems misleading.

- 7. There are tradeoffs between taxpayer investments in prefire management and the related state and federal emergency fund (fire disaster) expenditures, ecological and natural resource losses, private citizen losses, and safety problems for civilians and firefighters during wildland fires.**

Again, I believe the finding is probably accurate, but I do not believe the data in the report supports such a claim. If additional data can be obtained and provided, then I wouldn't

have a problem keeping it in the new fire plan. However, if factual data cannot be provided to support the finding, it needs to be removed.

- 8. With continued population-driven increases of people and structures in the wildlands, there are more life and property assets at risk in wildland areas, and increasing risks to ecological, economic and natural resource assets. This increases the values of wildland homes and other structures, as well as the number of wildland fires caused by people.**

I believe the first statement is generally correct, but again, I question that the information in the plan adequately supports such a broad statement. For example, how do more people and structures in wildland areas increase the risk to economic assets? I do not believe the report provides data to support this claim.

- 9. To reduce the wildland fire protection costs to taxpayers, development of wildfire protection zones and fire hazard mitigation measures (including ignition-resistant building standards) are needed as part of the local government planning and land-use decisions on permitting developments in wildland areas within incorporated cities and unincorporated areas.**

I believe this is a true statement that can be proven by documented facts. As I referenced briefly in our discussion on November 30<sup>th</sup>, the City I work with (the City of Highland) is immediately adjacent to the City of San Bernardino and abuts the San Bernardino National Forest. During the Old Fire, the City of San Bernardino suffered tremendous loss of homes from the fire, while the City of Highland did not lose a single structure. I attribute a significant amount of the credit for this to newer construction and development standards that have been adopted by the City of Highland. For example, new development in the foothill areas of Highland are required to have perimeter roads and fuel modification zones that provide a buffer between the wildland area and the homes. All homes constructed in the two high fire hazard areas within Highland are required to incorporate fire resistive construction methods and materials, such as attic vents are limited to the side that faces away from the hillsides, windows must be dual-pane, eaves and undersides of decks must be enclosed, roofs are noncombustible materials, and all homes must be equipped with



automatic fire sprinklers. The combination of these requirements, together with time to acquire and deploy fire suppression resources, greatly enhanced the ability to protect the homes in Highland from the fire. If you would like a copy of the specific building standards for these areas, I would be happy to provide one.

**10. A prefire management database is needed to provide more definitive risk assessment information to the public and the insurance industry, code officials, building industry and local fire jurisdictions. The objectives are to establish comprehensive minimums for wildfire protection zones, develop ignition-resistant building construction for improved reduction of fire hazards around wildland structures, and provide insurers and homeowners with information on reducing risks and support more equitable insurance rating for wildland structures.**

I am not certain if this finding is accurate or not. I suspect each local fire protection jurisdiction has some sort of database, even if it is limited to use by weed abatement officials. And, the database used by each agency may meet the needs of that agency. Is it really important that the data from one area be useful or known to another area? I'm not convinced that it is, but I am also not certain that it wouldn't be beneficial.

I believe enough is already known about the reasons that structures (homes and businesses) catch fire from wildland fires. With that existing knowledge, it should not be difficult to develop standards for wildfire protection zones and fire resistive building construction.

Much similar to the standards to determine disaster preparedness, these standards must be applicable to the particular jurisdiction that is considering them. For example, while coastal communities should be concerned with tsunamis, it is a little ridiculous for communities on the eastern side of the Sierra Nevada Mountains to develop a plan for a tsunami.

All disasters begin as local events. Some jurisdictions are prepared to deal with every type of disaster, and some are not. This was evidenced in the failures witnessed in the response to Hurricane Katrina. For local communities to invest time, effort and funds in preparation for disasters, they must be convinced it can happen to them. If a database helps convince them it can happen, then it could be considered a valuable tool. However,

absent convincing evidence that a particular type of disaster can happen in a particular community, or even in a portion of a particular community, I do not believe we will have support for establishing minimum standards.

- 11. The public doesn't sufficiently understand the risks and impacts of wildfires on natural resource assets, structures and people living and recreating in California wildlands. Agencies have not adequately communicated those risks. There is a false sense of security among wildland homeowners that they are not at risk if there are fire protection organizations, insurance policies for fire coverage, and the minimum fire prevention prescriptions are met.**

While I generally agree that this finding is correct, I do not believe the data in the Fire Plan supports it as a conclusion.

Perhaps this is simply an educational issue – which CDF and other fire protection agencies have failed miserably in implementing. Perhaps it is just human nature to presume that “it can't happen to me.” Either way, I believe a series of focused educational programs would be greatly beneficial to overcome this perception and to enhance the understanding of risks.

**F. Recommendations – Prefire Management Program to Reduce Wildfire Costs and Losses**

**CDF should develop a prefire management program for state responsibility areas and provide technical assistance to help local governments develop prefire management programs on local responsibility areas. The Board will encourage federal agencies to increase their funding for efforts on their lands and joint efforts in the wildland intermix.**

I agree that CDF should develop a prefire management program and provide assistance to local governments in developing their own programs within their jurisdictions. I disagree that CDF can realistically develop a prefire management program for all state responsibility areas, particularly if it does not include direct involvement from the local fire protection provider that is responsible for providing fire protection year-round. Absent support from the local agencies, particularly those that overlay state responsibility areas, I believe any program developed by CDF will fail.

- 1. CDF will develop prefire management data that will:**

**i. Support state, local and federal agencies' efforts to implement a coordinated prefire management program on California wildlands.**

I am uncertain what prefire management data CDF envisions it could develop that would support local and federal agencies' efforts to implement a coordinated prefire management program.

**ii. Provide the insurance industry with better fire hazard risk assessment data for underwriting, rating and pricing fire protection policies in wildland areas. These are incentives to homeowners to invest in fire hazard reduction efforts.**

Again, I fail to see how providing the insurance industry with fire hazard risk assessment data will be beneficial to solving California's wildland fire problem. It seems, to me, that this would simply help the insurance industry to adjust its rates for fire insurance in certain areas. A key component missing from this recommendation, if it has any chance of being successful, is the education of homeowners that the "incentives" exist and how to earn them. Presumably, this education program would be left up to individual insurance companies to develop and share. I am not confident that the information would be widely shared with homeowners.

**2. To increase the market alternatives for using biomass materials removed from wildlands and to reduce future dependence on prescribed fire and vegetation management burns, CDF, in conjunction with other state agencies, should develop an assessment of future biomass marketing opportunities for California. It should include projections of potential market uses and actions local, state and federal governments could take to expand those markets.**

Although I agree with the concept of this recommendation, I do not believe the need for it is supported by the facts within the Fire Plan.

Perhaps a recommendation could be to find alternative means of disposing of dead vegetation (other than burning), rather than limiting it to biomass marketing opportunities. At least without

the direct link to the marketing opportunities, it leaves open other methods to achieve the same end goal.

- 3. The fire prevention education programs of local, state and federal agencies and private industry should be communicating the level of risk to the people who live in wildland areas. An evaluation should be made to determine the correct message to influence people to modify their behavior. That message should incorporate the standards for both vegetation management and ignition resistant building construction, as well as what citizens and businesses can do to reduce wildfire risks.**

While I agree this is an admirable goal, I think we have failed to realize that wildland fires are not paramount in the minds of most local fire protection agencies and elected officials. Most local fire protection agencies focus on preventing fires in homes and businesses – where loss of life is a real possibility. Competition for funding for these types of educational programs with other programs they deliver (e.g. in-home fire prevention, emergency medical services, etc.) I do not think it is realistic to expect local agencies to actively participate in such a program. That said, I think it is realistic to select certain target communities – those with a high probability of suffering a catastrophic wildland fire – and gaining more support from them than communities without that threat. I think it could also be realistic if CDF developed the programs (or develops them in cooperation with federal agencies and certain local jurisdictions who have large areas of wildland fire threat and, once developed, to provide those programs to other agencies (those with lesser interest and concern over wildland fire threats) for their use.

I am also not certain what standards for vegetation management are anticipated in the recommendation.

- 4. The Board of Forestry supports examining legislation that would condition state disaster relief on the development and implementation of prefire management programs on wildlands. The Board recommends that federal disaster relief be similarly conditioned.**

The Federal Emergency Management Agency (FEMA) has grappled with this slippery-slope issue for a number of years. Every time there is a large disaster, someone says ‘we shouldn’t let them build there again’. To my knowledge, not a single local,

state, or federal agency has yet been able to implement this type of recommendation and the public rebuilds in the same area. Unless we are simply trying to 'bang our heads against the wall', or are just trying to create a controversial topic – I do not understand the rationale for including this as a recommendation.

5. **To provide state funding for prefire management projects, legislation should be sponsored to provide that fire cost recovery funds collected by CDF be returned to CDF's budget for implementing the projects, as a means of reducing wildfire costs and losses.**

This has been discussed in detail previously. I do not believe CDF would ever be successful in gaining legislative approval for this. Moreover, I am concerned that such an arrangement could provide wildly fluctuating funding for a program that must be measured and consistent. This seems to be a 'design for disaster'. A stable funding source is necessary to implement the program.

6. **Legislation should be sought to authorize local government to create special service districts for prefire management projects. CDF will prepare recommendations as part of its in-depth plan.**

Existing law allows the creation of special districts or imposition of benefit assessments for prefire management projects. Legislation is not necessary for these powers to exist. Government Code Section 50078.1(c) defines the term "fire suppression" for the purpose of benefit assessments as "Fire Suppression" includes firefighting and fire prevention, including, but not limited to, vegetation removal or management undertaken, in whole or in part, for the reduction of a fire hazard." Government Code Section 61600(d) provides that a Community Services District may have the power to provide "Protection against fire."

Based on the above, I do not believe this recommendation is valid.

7. **To remove a major obstacle to increased vegetation management burns, with their potential for reducing wildfire costs and losses, liability limits should be examined for conducting such burns in high-risk/high-value wildlands. The state's worker compensation program**

**may be a model for needed changes.**

I fail to see the rationale to justify this limitation on liability. It seems the Fire Plan recommended that CDF not be liable for damages caused if a vegetation management burn escaped control and damaged high-risk or high-value property. If my understanding is correct, I think we need our head examined for even suggesting such a limitation on liability.

- 8. Given the potential for prefire management to reduce the total level of air pollutant emissions from wildfire, the state, federal, and local wildfire protection and air quality agencies should jointly develop policies for reducing air pollutant emissions from California wildfires.**

I do not believe this recommendation is supported by factual data in the Fire Plan.

In summary, as we discussed on November 30<sup>th</sup>, 1996 Fire Plan fails to address critical issues to CDF's ability to prevent large and damaging fires. We agree that one issue the new Fire Plan must address is prefire management. However, that cannot be the sole focus of the overall document. Equal consideration must be given to fire suppression and post-fire recovery.

We hope this information is helpful and that we did not miss the mark too badly.

If you have any questions about any of this, please do not hesitate to contact us at any time.

### **III. RPC Dialogue and Comments on the 1996 Fire Plan Review, June 2006 to February 2007**

#### **June 2006 RPC Fire Plan discussions:**

**Mark Bosetti (MB):** Any fire plan update should incorporate review and consideration of strategic goals along with guiding values and principles.

**MB:** Need to reassemble workgroup for completing strategic goals and objectives.

**MB:** Primary agenda is review of 1996 findings and continue determining results of 1996 recommendations.

#### **July 2006 RPC Fire Plan discussions:**

**MB:** Check statutory requirements for fire plan.

RPC comments on new goals or focus:

- Other private and public agencies have a great affect on consequences to CDF. The new plan should emphasize issues such as insurance and subsidizing for people moving into wildlands. Should focus on polices and regs that do not encourage people moving in to wildlands without paying their way.
- Broad landscapes have had a disincentive to be treated due to regulatory impediments such as air quality, disincentives to escape burns, regulatory permitting for vegetation treatment. Professional liability of government employees at risk to liability from controlled burning is a disincentive.
- Get an understanding of the transparency of fire protection planning.
- What were the gaps or holes in the fire plan implementation?
- Is information collection worthwhile to help define needs for new fire plan?
- Get categories from red book on large fires.
- Have fire plan response stages high, medium, low
- Update graph on number of large demanding fires

**Public:** Potential metrics –number of houses protected.

**Wayne Mitchell (WM):** Program Arc—pull by incident all costs associated with fire

**WM:** California fire alliance strategic plan –contact them to get Federal wildland fire plan.

**MB:** Schedule with Ruben Grijalva, Director on presentation of CDF strategy relative to Board fire plan

### **August 2006 RPC Fire Plan discussions:**

**WM:** Level of Service can be measured using the Department's measurement of success for each unit for ignition suppression maintained at a specified size for a specified situation.

- Website shows levels of success for each unit, with overall results in the greater than 90% ranges.

**MB:** overall goal is unchanged and still valid. Guidance and direction is needed to have plan implemented in a fiscally responsible way and needs to be tracked in a displayable manor

Multiple cooperators are involved in the fire plan.

**LOS Finding 1.1:** Goal of 2007 update should be wildland fire protection services. Note that the SRA boundary may be shrinking and the expanding boundaries of the (Local Responsibility Area) LRA. This affects the fiscal framework.

**LOS Finding 1.2:** The expansion of population is not only related to southern California expansion.

- Climate is now a controversial issue that has taken central attention.

**MB:** Islands in State Responsibility Area (SRA) that are set aside for different purposes and under mission of other agency. These listed areas are managed inconsistently with CDF suppression goals.

**LOS Finding 1.4:** Droughts in all regions, not just Southern California situations only.



**Los Finding 1.5:**

- Location of new development is critical to new decision making and related issues are building construction and 4290.
- Certain land use planning factors will be necessary.
- Fire plan commentary should add conflicts of land use planning.

RPC Direction to Staff:

- Revise work plan
- Letter to Director his vision of this fire plan relative to other CDF or fire alliance plans.
- O'Mera: establish scope of fire plan
- ID and allocate staff who can answer 96 findings.

**January 2007 RPC Fire Plan discussions:**

**MB:** Future on fire plan: Finish Hoffman's assessment; fill in with public input; draft final assessment and recommendations for a new plan.

- 1) Have CDF assessment of proposed Resource Protection Committee (RPC) questions to evaluate '96 plan.
- 2) After completing CDF answers to questions, RPC will draft recommendations to full board for movement forward of next phase on new fire plan. Closing the loop on the review process.
- 3) Forum would then be done for new fire would be used as we did in the old fire plan.

**Joe Ratzler (JR):** 1996 plan is in the context for the review; 25% of fires are not included in the 1996 plan level of success. '96 plan looks at SRA laws and not federal laws that are lacking. Concerned that topics outside the '96 plan are not included as part of the assessment. There is a different paradigm not framed in the '96 plan that should be in a new plan.

**Chris Zimny (CZ):** Diagram review and new plan going forward.

**John Hoffman (JH):** On LOS, there had been a shift from wildland to structure protection. The press and legislators are critical that homeowners are benefiting with out appropriate fees. Next plan should be specific and would assets be protected and (homes or wildlands).

**CZ:** Get forest service Government Accounting Office (GAO) report on United States Forest Service (USFS) LOS.

**Kevin O'Meara (KOM):** There are greater requirement for engines for structure protection in building wildlands

Should have to determine if this is a fire plan for all the state and agencies or an SRA fire plan.

**JR:** Initial attack level of success does not reflect the 3% of fires that do the major damage. LOS should also be looked at in the pre-fire prevention level of service. Want the engine crews to be responsible for presuppression work.

**JH:** Need information on where the fire started to evaluate success of LOS.

**JR:** Need a strategy for priorities and investment that connects 4291, to Wildland Urban Interface (WUI) to wildlands and integrate communities' wildfire protection plan. Should focus on projects where it is doable: landowners, stakeholders, and regulators all in connection.

**MB:** Agreement that the plan be "bottom up" concept with multi-stakeholder being supportive.

**JH:** Must be "bottom up" and all federal and private landowners must be included in the plan.

**KOM:** Individual years of engine and personnel augmentation needs to be connected to each locations annual loss.

**JR McCallister (JR):** We know that the USFS is not up to the level of CDF in terms of structures, inspections and 24 -7 coverage.

### **February 2006 RPC Fire Plan discussions:**

#### **Follow-up Discussion on 2/5/07 for LOS Fire Plan Update**

**MB:** Can system measure the range of SRA services with Feds responsibilities. Can there be change to make the level of service evaluate by feds on SRA lands with fed DPA.

**WM:** Federal fire preparation information is needed to make this evaluation happen. The federal **FORS** federal fire system reporting is a federal database that is being assessed so federal agencies can use the same fire reporting system. **NFIRS** administered by national fire system is the one CDF uses and feels should be the common system. California All Incident Reporting System (CAIRS) transfers into NFIRS

**Weather Data:** New 30 meter weather modeling for Southern California gives past 20 years of weather modeling

**Remote Automated Weather System (RAWS):** All agencies send data to Boise computer. Some factors could be improved upon for data collection

**Station Needs:** Move up and cover analysis are the primary application of station need. Better weather prediction service is helping get more engines precisely to hazardous weather areas.

Year round preparedness varies by season, year round staffing engines and the most useful place for that staffing must be analyzed.

**MB:** Page 41 and 42 of 1996 Plan. Can this be accomplished?

**WM:** Yes it can, likely not being fully implemented.

**Local Government:** California Fire Economic Simulator (CFES) is needed to provide information. Feds do not use the Level of Service (LOS) models. Maybe 1/3 of locals use it. Primary decision for use of LOS system is for SRA decisions. Schedule a locally funded state engine that was found to contribute to wildlands State Responsibility Area (SRA) service

Can FMAZ be colored?

**WM:** Yes

Can scores be used to assess additional fire needs?

**MB, WM:** Yes. Examples are lookout towers.

**In summary:**

- It is now the RPC's turn to make summary recommendations for a new fire plan.
- Wants a discussion on the outcome of the LOS review.
- Primary focus should be an outcome that focuses results at the unit level and the use of info with stakeholders.
- Issues are lack of implementation at units on a consistent basis. Is that staff or training?
- RPC Future direction: should committee have discussion of understandable form.

Combine, in one indexed document, the four RPC driven responses to the 1996 fire plan review:

- Hoffman Team 4/06 Assessment
- CDF enhanced responses to 1996 Fire Plan LOS Findings and Recommendations at RPC meetings from 4-06 to 11-06.
- Chief Mitchell's responses to specific RPC LOS questions during 12/06 and 2/07 meetings
- CDF Firefighter's (Rissmiller) letter/comments dated 4/06.

## **IV. Responses to RPC Questions from Chief Mitchell on LOS recommendations from the 1996 fire plan.**

12/5/06

**Question 1.** (from Mark Bossetti (MB)) **What elements are missing that prevent CDF from producing a LOS rating for SRA lands as envisioned in the 96 CA Fire Plan?**

**WM:** Mentions that fire reporting and mapping between agencies is not adequate, for example geographical locations are way off. The information from agencies is still not available today; but a design for their fire reporting (feds) is underway. The new CDF CAIRS reports to a national database system managed by the US Fire Administration. If the federal wildland agencies report to the same national system, then their information would be available to California.

Duplication of reporting of fires is a problem. Both reporting at state and feds are duplicated, forcing reconciling to avoid duplication. This is true only for non state DPA area and federal land and also in some mutual protection boundaries.

All other LOS systems are in place. The LOS analysis still works if LRA fires are included as long as these fires are not duplicated by CDF fire reports.

**CFES:** Discussion that the system uses historical fire performance. Seven units have the system for LOS scenario modeling. Basic building blocks are there, it needs to be staffed out.

At this time, Units do not do the CFES /success model for each annual operation plan.

Strategies for reducing costs and losses vary. In areas with an already high success rate, cost loss reductions will likely be achieved through fuels management rather than through increased suppression capability. In areas with a low LOS success rate may benefit from a strategy of increased suppression capability.

**MB:** Does HQ have input on allocating resources?

**WM:** Should have HQ analysis and request for funding in low success areas.

Current policy is ten acres or less and containing in two hours as committed resources increases. Need to consider changing this goal in some

vegetation belts where fire is not being contained or where larger containment is OK because assets at risk are not as “valuable”.

**Public:** BOF should focus on LOS for the few failures that cause the mass losses. The state fire plan should focus on the 4% of failures and how those are contained; likely using non suppression methods.

**Summary (MB) :** Good LOS RATING AT THE UNIT LEVEL ; given lack of education and some local cost data for wildland, should the Board continue to expect that use of the LOS process for an individual funding source. Also cannot do this for fed DPA or mutual protection zones.

**CZ:** One additional item is to ensure standardized application and solution of LOS analysis at each unit.

**WM:** All units have plans and Unit Annual Operating plans but conclusion for solutions are variable.

- Access for information for budgets towards wildland or consistent fed data is not readily available.
- Board committee finds the existing system is useful, with holes in fed and local and application by unit inconsistent.
- Needed to have awareness where the protection service varies with feds.

## **Question 2. How do fire agencies measure Levels of Service?**

**WM:** 1995 federal fire policy calling for wildland fire use means of CDF suppression goals with feds not clear/consistent.

**MB:** Need federal discussion of trends. Issue is our expectations of LOS the same as the feds for State DPA requirements.

**WM:** Still do not know success rates using our info systems because of above data inconsistency. USFS gave a success measure for Region 5 (California national forests), but no information was given for planning belts, or any other entity.

## **Questions 3. Has the assessment of assets been completed? :**

**WM:** Indicated yes.

**Question 4. What has kept the severe fire weather ranking system from being operational?**

**WM:** Likely done, but better viewed at a state level. Scale is not very applicable to a county. Remote Automatic Weather Stations (RAWS) are fully integrated. 1996 plan accomplished, but new weather systems are being worked on, and needs to be improved.

**Public:** Suggest that for coastal regime, existing systems do not take into account normal conditions, is not threatened but under unique/rare weather conditions fire hazard situations is very hazardous.

**MB (summary):** Weather system is operational, but needs to be improved.

**Question 5. How does department evaluate need for new stations and enhanced staffing?**

**WM:** Mostly in a defensible and maintenance mode; mostly replacement of existing resources and some adjustments; some case studies for moving stations using the CFES analyses and the changes in LOS. Also done elsewhere. Usually done at time of need to rebuild a station.

Year round staffing was a blue ribbon recommendation. Aircraft replacement based on needs. Main driver is equipment old and needing replacement. Sometimes better site are selected. Big driver for station location is sewage and water issues. Local resources with cooperators are also considered.

**MB:** Seems like usual decisions based on type of equipment but not necessarily where need is.

## **V. RPC summary of Level Of Service review March 2007**

### **May 2, 2007, 1300 hrs Resources Building Auditorium**

Resource Protection Committee (RPC) review of the Assessment of the Findings and Recommendations of the 1995 Fire Plan prepared by the Fire Plan Update Advisory Committee (FPUAC) related to Levels of Wildland Fire Protection Service.

This review is intended to confirm, refute or identify areas of needed improvement specific to the Findings and status of implementation of the Recommendations endorsed by the BOF in the Levels of Wildland Fire Protection Service element of the 1995 Fire Plan. This review utilizes the review and recommendations contained in FPUAC Report to the BOF as well as additional comment and clarification provided to the Board's Resource Protection Committee by Department Staff, the Public and CDF Firefighter's Union.

In order to maintain a level of consistency, this review will address this topic in the order presented by the FPUAC Report.

#### **Findings:**

- LOS-F1:** The RPC concurs with the conclusions reached by the FPUAC. With regard to the recommendation to incorporate a finding that reflects the current state of knowledge and public sentiment regarding the effect of Global Climate Change, the RPC recommends that that finding be incorporated in LOS-F2.
- LOS-F2:** The RPC recommends restatement of the finding to include the issue identified in LOS-1 and inclusion of the impact of past fire suppression efforts on the elements contained in this finding.
- LOS-F3:** The RPC concurs with the conclusions reached by the FPUAC.
- LOS-F4:** The RPC concurs with the conclusions reached by the FPUAC. Clarify this finding by breaking it into a subset of findings regarding the coordinated response model.
- LOS-F5:** The RPC concurs with the conclusions reached by the FPUAC. RPC recommends that the finding be modified to strike the clause in the second sentence and last sentence entirely.



**Recommendations:**

**LOS-R1.1:** The RPC finds that implementation of this recommendation has not been achieved to the extent envisioned in the 1996 Fire Plan. There is not currently consistent and department wide use of the Level of Service Rating System as contemplated by the BOF in the 1996 Fire Plan. The 1996 Fire Plan indicated, “by 1998 the LOS procedure will produce a score of the level of wildland fire protection service with the following characteristics:

- A LOS score to compare service levels in similar vegetation areas in California to help identify areas that are not receiving an equal level of service to lands of similar type.

Department staff indicates that such a score can be produced for SRA land in which CDF is the DPA, but not for SRA land in which USFS has the DPA, FRA land which USFS has the DPA and some mutual threat zones. The reason given for this is that fire reporting and mapping between the two agencies is done differently and the information reported by the federal agencies is not available in a format that is compatible with the system used by the Department. There was an indication that there was inconsistency in how the CDF Units are reporting fires. The LOS score in conjunction with the California Fire Economics Simulator – Initial Attack Model (CFES-IAM) would be used to model a ranger unit’s fire workload. It was indicated that only about a third of the Units were using CFES-IAM.

- A LOS score that can be used to compare service levels in different vegetation areas in California to help set priorities for pre-fire management project funding.

Response for this was the same as above.

- The process can discern which level of government is providing the service.

The 1996 Fire Plan suggested that the LOS rating would be used to define a matrix for the appropriate level of service for the regional vegetation zone, which in turn would define inputs into the CFES-IAM. CFES-IAM would then be used to calculate a level service by funding source.

The 1996 Fire Plan envisioned that the LOS rating system would help explain the Department’s initial attack fire protection system by allowing comparison of delivery of service between FMAZ, production of maps that show level of service

at the unit, region or state level and identifying areas needing additional pre-fire management attention.

**LOS-R1.2:** The RPC acknowledged the FPUAC assessment that the identification and assessment of assets was incomplete and raised this question to the Department Staff on 12-4-06. The Department indicated at the assessment of assets had been completed.

**LOS-R1.3:** The RPC concurs with the conclusions reached by the FPUAC.

**LOS-R1.4:** The RPC concurs with the conclusions reached by the FPUAC.

**LOS-R1.5:** The RPC concurs with the conclusions reached by the FPUAC.

**LOS-R2.1:** Need work on this by RPC.

**LOS-R2.2:** Need work on this by RPC.

**LOS-R3:** The RPC concurs with the conclusions reached by the FPUAC.

**LOS-R4:** The RPC concurs with the conclusions reached by the FPUAC. Recommendation that the Department work to ensure a more complete and consistent implementation of the elements of the 1996 Fire Plan Framework across the units.

**LOS-R5:** The RPC concurs with the conclusions reached by the FPUAC.

## VI. RPC questions and CAL FIRE responses (Tom Lutzenberger, CFO CAL FIRE) to Wildfire Fiscal Questions, May 2007

### Committee Questions for RPC Agenda Item: Review of California Fire Plan, Wildfire Fiscal Finding and Recommendations.

- Please bring a copy of the staffing “blue book” and explain to us how it is developed and how staffing levels are determined?
  - CAL FIRE Response: Refer to Program Manager
- Can we have an update to Chart 1 on pg 13 of the Fire Plan for the most current dollars spent?
  - Response: Not possible since the database that constructed this does not exist anymore.
- Can you explain the third phase “Disaster Relief” and add more clarity beyond the explanation offered on pg 14 of the Fire Plan?
  - CAL FIRE Response: Refer to Program Manager
- Can you provide the number of fire departments for each: local, state, feds? Can you provide approximately the acreage/scope/area that they each have the direct responsibility for? Can you provide the acreage/scope/area that are classed initially as local, state, fed?
  - CAL FIRE Response: Refer to Program Manager
- Can you provide current data for Chart 2 on pg 16 of the Fire Plan? Please explain how the costs are nested inside the losses (or if). Does this mean that losses are greater than all the costs to control the fire, but there is a portion not recaptured by the entity that sustained the loss or that the agency is not fully reimbursed or funded for their cost?
  - Response: Not possible since the database that constructed this does not exist anymore.
- Under the committee’s review, the committee had NO RESULTS for the Wildfire Fiscal component?
  - Response: Not understanding the question. What is being asked here?
- Is there a gap between the DPA for any responsible agency (local, state, fed) and who pays for the protection? (Possible clarification: Is each entity fulfilling their obligation?)
  - CAL FIRE Response: Refer to Program Manager
- Can you provide current insurance industry data for losses due to structural fires in wildland and urban settings? (I tend to agree with Jim Rismiller's comments that these aren't necessarily appropriate to be in the Fire Plan, however I do think the information is instructive to us.)
  - CAL FIRE Response: Refer to Program Manager
- Fiscal R1: Can CDF provide the information referred to regarding annual expenditures by each entity and link it to losses incurred?
  - Response: CDF can provide it's own expenditure reports but we have no mechanism to link it to a loss. Fire Protection may have a formula.

- Fiscal R2: Explain the successful rollout of the “new” prefire initiative and the new Fire Plan assessment.
  - CAL FIRE Response: Refer to Program Manager
- Fiscal R3: Explain the work that the insurance industry has done to reduce underwriting losses.
  - CAL FIRE Response: Refer to Program Manager
- Fiscal R4: Has the national fire plan succeeded in creation and implementation of a federal prefire management initiative (and action)? (Again, I agree with Jim Rismiller's comments that the CA Fire Plan shouldn't tell the feds to do anything, however, any information on what they've done or are doing is instructive).
  - CAL FIRE Response: Refer to Program Manager
- Jim Rismiller's Comments, pg 12: Jim's comment # 3 is intriguing. I tend to agree with his point, however we need to know what dollars are being spent, by whom, and if they match their level of responsibility.
  - Response: We can provide dollar amounts and by which program. Level of responsibility is determined by the program, not fiscal.
- Jim Rismiller's Comments, pg 14, # D1: Could CDF analyze the differing types of deployment and initial attack strategy and compare that to the costs/success rate? (If so, it may help lead to a more unified strategy between feds, state and local).
  - CAL FIRE Response: Refer to Program Manager