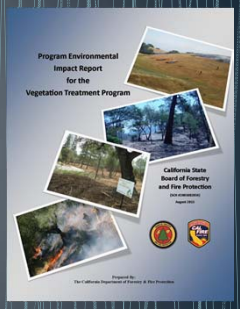
Vegetation Treatment Program PEIR

(VTPEIR)

August 26, 2015



Brief history -

2012 – draft VTPEIR was delivered to the Board of Forestry and Fire Protection.

2013 – the draft was open for public review.

- As a result of the various public & stakeholder concerns, the state legislature recommended that a third party review the draft VTPEIR.
- **Ca Fire Science Consortium (CFSC)** was identified for the third party review.

2014 – CFSC provided their results to the Board of Forestry & Fire Protection and CAL FIRE.

August 2014 – CAL FIRE established a VTPEIR Technical Team to address CFSC's recommendations.

Purpose of this presentation:

- Review the current structure of the VTPEIR and highlight the areas of changes from the previous draft.

Presentation Outline:

- Summary of Peer Review (CFSC)
- Overall Changes from Previous version
- VTP EIR Objectives
- VTP Organization (Chapter summary review)
- Monitoring and Communication Plan
- CAL FIRE Commitment – Sac, Region and Unit
- Summary

Summary of Peer Review

California Fire Science Consortium (CFSC)

CFSC Review Summary

- Needs to be a **science based** document
- Revise the goals/objectives (Ch. 2.2)
  - Previous draft goals were not achievable through the PEIR
- Revise the Alternatives – more realistic review (Ch. 3)
- Modify the Conceptual Framework
  - Evaluate CA within three vegetation types
    - **Tree, Grass,** and **Shrub** (Ch. 2.2.2)
- Organize program activities by treatment type
    - **WUI, Fuel Breaks,** and **Ecological Restoration** (Ch. 2.2.3, Ch. 4.1.4.2)

CFSC Review Summary (Continued)

- Address the complexities of the chaparral ecosystem (Ch. 4.1.3.3)
- Identify a clear process for project level evaluation:
  - Prioritization, vegetation communities, potential fire behavior, fire regime departure, and appropriateness of different fuel treatments (Ch. 2.4, & Ch. 7 PSA)
- Tie back into the State and Unit Fire Plans (Ch. 2.2.1)
- Stronger monitoring requirements (Appendix I)

CFSC Review Summary (Continued)

- VTP should support planning and collaborating efforts with private, local, state and federal stakeholders. (Ch. 2.4.2 and Ch. 7 PSA)
- Additional discussion on fire behavior and suppression effectiveness. (Ch. 4.1.3, 4.1.4.1, 4.1.4.3.1)
- More discussion on fuel reduction near communities. (Ch. 2.2.3, and Ch. 4.1.4.2+ 10 case studies of fuel treatment or planning within communities.)
- Increase public transparency. (Ch. 2.4, SPR Bio-5, & Appendix I)
- Executive Summary needs to reflect the whole document

Overall Changes from Previous Version

- New objectives, analysis, and alternatives
- Revised assessment of the Cumulative Effects
  - Result of the new analysis methodology proposed by CFSC
- Project Scale Analysis (PSA) incorporated into the document
  - Functions as the CEQA equivalent of an environmental checklist
- Stronger monitoring program
  - With the goal to build a formal adaptive management strategy when the Department's funding can support more rigorous monitoring
- More emphasis on the public's involvement in project design and location

PROPOSED VTP OBJECTIVES

Connected to the:

- **2010 Strategic Plan**
- **2012 Fire Plan**

5 VTP Objectives (Ch. 2.2.1)

1. Modify wildland fire behavior to help reduce losses to life, property, and natural resources.
2. Increase the opportunities for altering or influencing the size, intensity, shape, and direction of wildfires within the wildland urban interface.
3. Reduce the potential size and associated suppression costs of wildland fires by altering the continuity of wildland fuels.

5 VTP Objectives (Continued)

4. Reduce the potential for high severity fires by restoring a range of native, fire-adapted plant communities through periodic low intensity treatments within the appropriate vegetation types.
5. Provide a consistent, accountable, and transparent process for vegetation treatment that is responsive to the objectives, priorities, and concerns of landowners, local, state, and federal governments and other stakeholders.

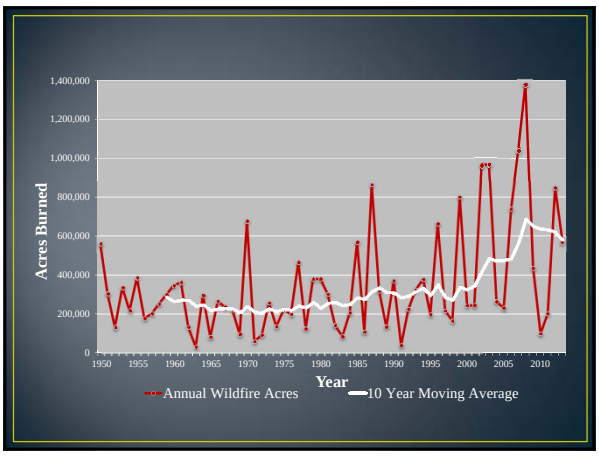
General organization-

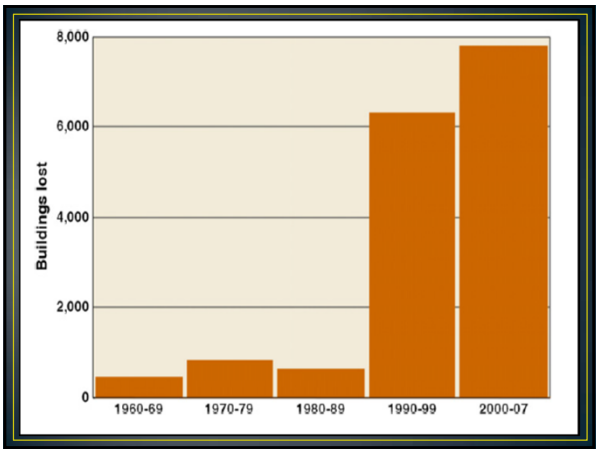
- Executive Summary
- Acronyms and Other Abbreviations
- Glossary
- Chapter 1 - Introduction
- Chapter 2 - Program Description
- Chapter 3 - Summary of Alternatives
- Chapter 4 - Affected Environment, Mitigation and Effects
- Chapter 5 - Cumulative Impacts
- Chapter 6 - Significant Effects and Growth Inducing Impacts
- Chapter 7 - Project Scale Analysis
- Chapter 8 - List of Preparers
- Chapter 9 - References/Work Cited
- Appendices

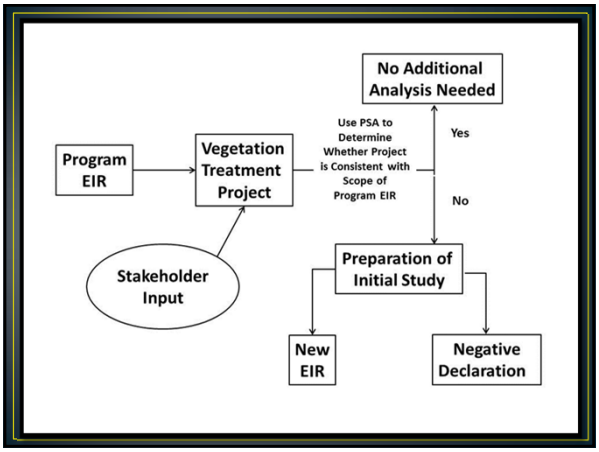
Chapter 1

Identifies the:

- Need for the Vegetation Treatment Program.
  - *Because of the **multiple CEQA processes** involved, there is currently a **lack of large-scale coordinated analysis** of a series of **closely related** and **reasonably predictable** vegetation treatment **projects** being undertaken throughout the State.*
- Difference between a Programmatic EIR & Project EIR.







Chapter 2

2.1 Program Overview
2.2 Conceptual Framework of the VTP

- **Major Revisions** covering the Scope of the PEIR
  - **80%** of requested changes are shared between **Chapter 2** and **Chapter 4.**
- Introduce the Objectives: Provide a brief description of their purpose
- Implementation Strategy
- Discuss the conceptual basis
- Outline the prioritization process for VTP projects

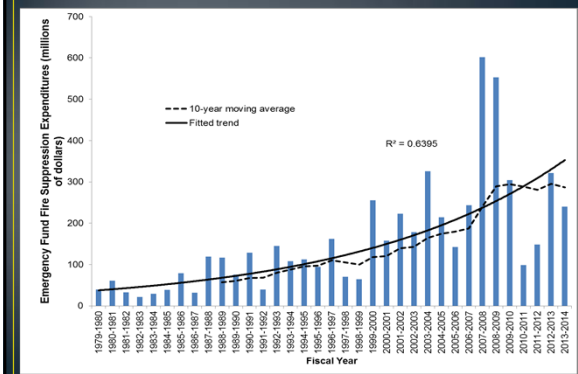
Bioregions:

Defined based on common **geophysical characteristics** and **existing plant communities.**

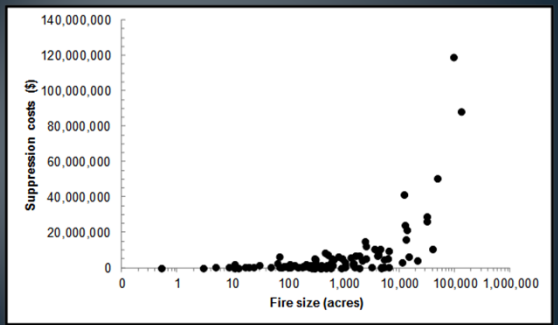
They are the primary stratification for analysis to help **describe common qualities,** sensitivities, species, and natural processes within a region for purposes of resources management and **environmental impact analysis.**

*Other stratifications were also use depending upon the resources of concern (hydro, WQ, air quality, etc.)

Emergency fund fire suppression expenditures from 1979 -2014



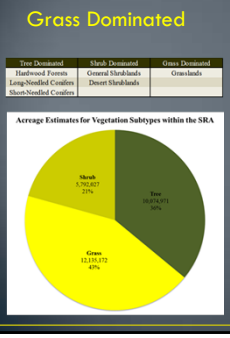
Suppression Cost and Fire Size on CAL FIRE incidents during the 2014 calendar year



2.2.2 Major Vegetation Formations

Tree Dominated
Shrub Dominated
Grass Dominated

Tree Dominated	Shrub Dominated	Grass Dominated
Hardwood Forests	General Shrublands	Grasslands
Long-Needled Conifers	Desert Shrublands	
Short-Needled Conifers		



2.2.3 Program Treatments:

These are delineated by the focus of the project or treatment

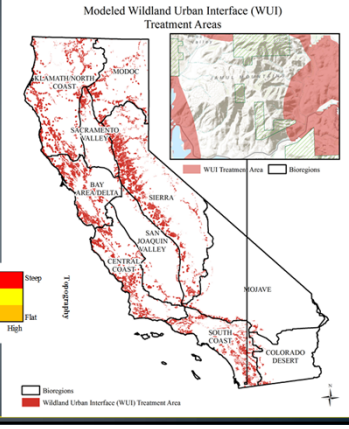
- **Wildland-Urban Interface (WUI)**
- **Ecological Restoration**
- **Fuel Breaks**

All project level applications must be part of a comprehensive strategy included in a local CAL FIRE Unit Fire Plan or Contract County Strategic Fire Plan

WUI:

The WUI is the geographical overlap of two diverse systems, wildland and structures. Treatments would focus on breaking up the horizontal and vertical continuity of fuels while also considering crown fire flame size, ignition sources, potential spread rate, and public and firefighter safety.

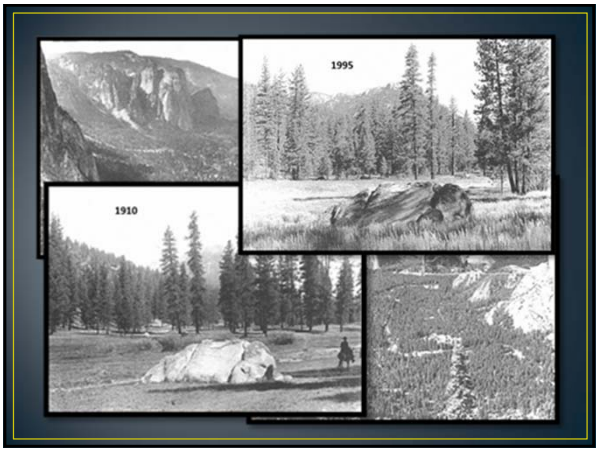
Modeling criteria:
- Wildland Fire Hazard
- Human Asset Exposure
- Proximity



Ecological Restoration:

Ecological Restoration is the re-establishing of the composition, structure, pattern, and ecological processes necessary to facilitate terrestrial and aquatic ecosystem sustainability, resilience, and health under current and future conditions.

Modeling Criteria:
- Condition Class: Departure from the natural fire regime. 3 levels = Low(1), Moderate(2) & High (3)
- The PEIR only focus on treating Moderate and High

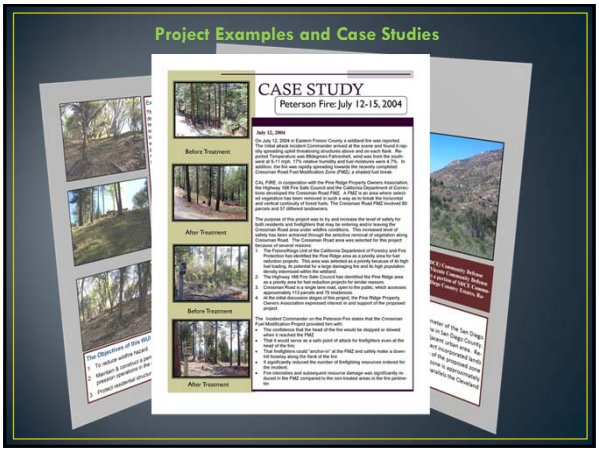


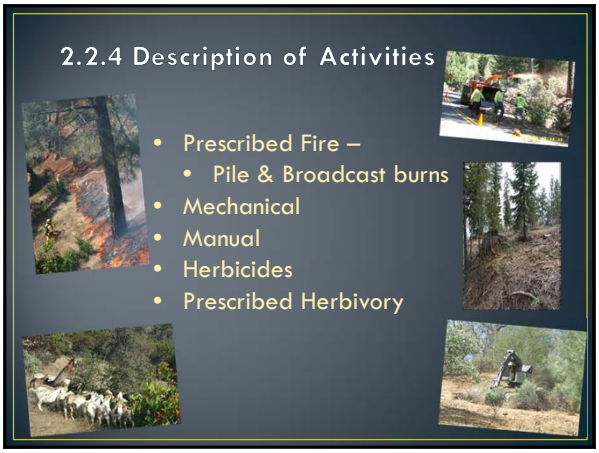
Fuel Break:

Fuel breaks are an area in which flammable vegetation has been modified to create a defensible space in an attempt to reduce fire spread to structures, natural resources, other values at risk and to provide a safer location to fight fire. These treatments can be a part of a series of fuel modifications strategically located along a landscape.

Modeling Criteria:
- Condition Class.
- 300' strips along ridgelines and roads.


Fuel Break outside WUI
Fuel Break in WUI setting


Project Examples and Case Studies
CASE STUDY
Peterson Fire: July 12-15, 2004
Before Treatment
After Treatment
Before Treatment
After Treatment

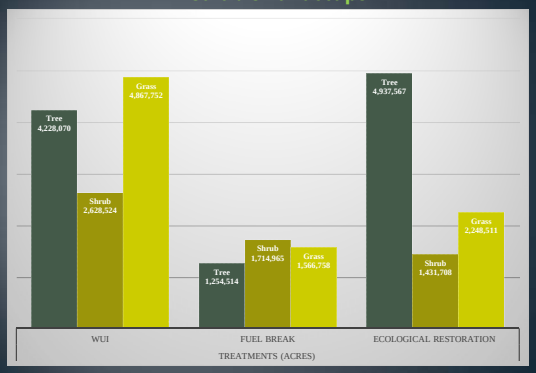

2.2.4 Description of Activities
• Prescribed Fire –
• Pile & Broadcast burns
• Mechanical
• Manual
• Herbicides
• Prescribed Herbivory

2.3 Scope of the VTP

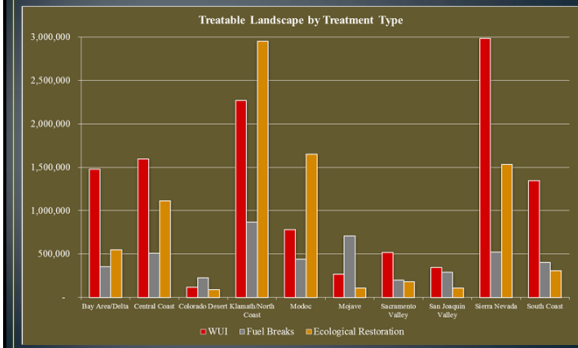
- Total acres in CA = 101,450,537
- SRA = 31,098,109 acres
- VTP area available for treatment under this PEIR = 24,878,369 acres

WUI	= 11,724,346 acres
Fuel Break	= 4,536,236 acres
Ecological Restoration	= 8,617,787 acres

Treatable Landscape

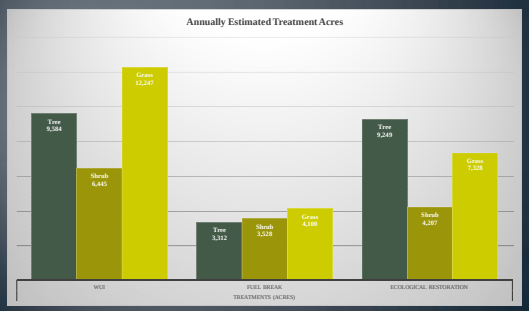


Treatable Landscape by Bioregion

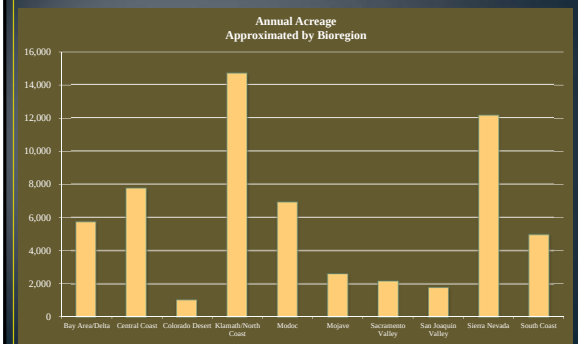


Projected annual scale of the VTP = 60,000 acres

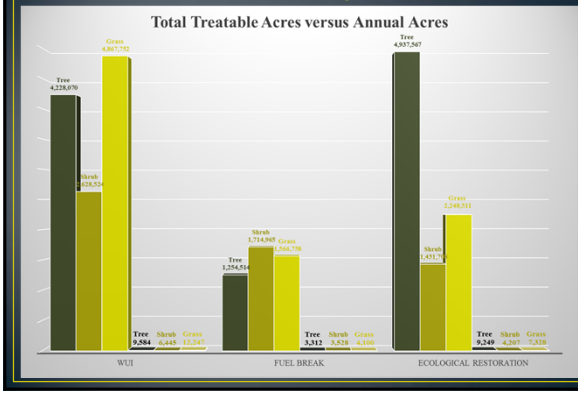
(2.41% of the landscape per decade)



Annual Treatable Landscape by Bioregion



Total Treatable Landscape vs Annual



Estimated number of projects each year by treatment type in each vegetation type

Vegitation Type	Treatments (projects)		
	WUI	Fuel Break	Ecological Restoration
Tree dominated	37	13	36
Shrub dominated	25	14	16
Grass dominated	47	16	28

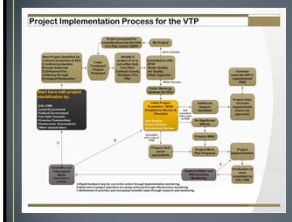
Estimate approximately 231* projects/year –

WUI = 109 treatments year
Fuel Break = 43 treatments year
Ecological Restoration = 80 treatments year

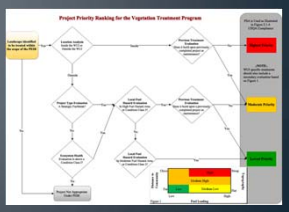
Tree dominated = 86
Shrub dominated = 55
Grass = 91

* Numbers may not add correctly due to rounding.

2.4 Implementation Framework

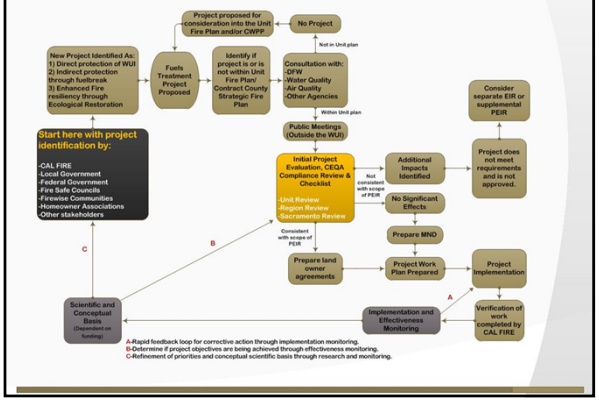


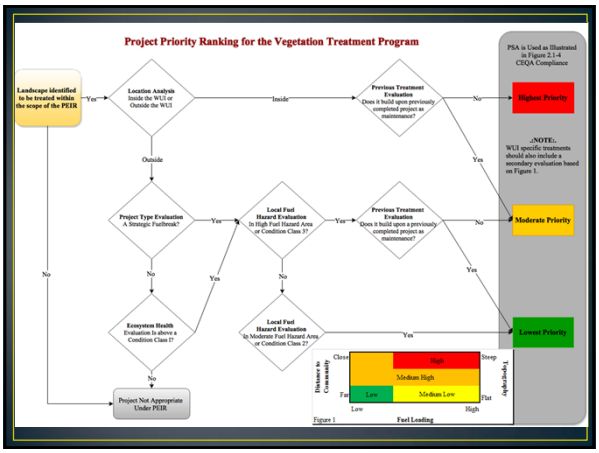
Implementation Process



Project Priority Ranking

Project Implementation Process for the VTP



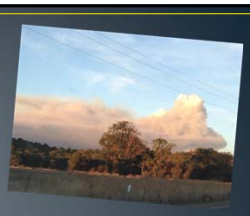


The Public and Transparency

- VTP is completely voluntary.
- Success of projects are dependent on the public's involvement.
  - All proposed projects must be incorporated in the local Unit Fire Plan.
    - Unit Fire Plans should include projects from CWPPs and other proposed projects from Fire Safe Councils and other similar groups.
- During the project planning phase, for projects outside of the WUI:
  - A public forum/workshop, advertised in a local newspaper, shall be provided describing the proposed project.
  - The workshop will be used to solicit stakeholder concerns and information on the potential for significant impacts.
- An **annual workshop** in each CAL FIRE Region to communicate Program implementation, effectiveness, and "lessons learned" to stakeholders.

2.5

Introduce the



Standard Project Requirements (SPRs)

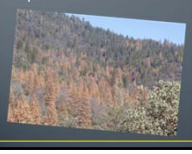
- **87 SPRs**

and

Project Specific Requirements (PSRs)

2.6 Areas of Controversy

- Impacts to air quality
- Impacts to chaparral communities
- Impacts to water quality, biological resources and human health
- Impacts to geological features and soils erosion
- Impacts from herbicide applications
- Spread of invasive plants
- Potential for loss of life, property and resource values due to escaped prescribed fire
- Increasing the amount of treated acres to help mitigate climate change
- Meeting the diversity and complex needs of the state
- Impacts to cultural resources.



Chapter 3 - Alternatives

No Project: This alternative represents the "No Project" alternative required by CEQA. Focus on using existing programs.

Proposed Program: WUI, Fuel Breaks, and Ecological Restoration

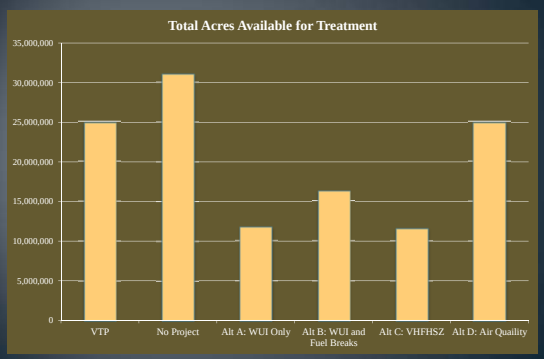
Alternative A: WUI Only- The WUI Only Alternative would focus vegetation treatments specifically in areas that would protect assets within the WUI.

Alternative B: WUI and Fuel Breaks- In addition to vegetation treatment efforts designed specifically to protect values within the WUI, fuel breaks would also be maintained or installed in favorable topographic locations to aid in wildland fire control efforts outside of the WUI.

Alternative C: Very High Fire Hazard Severity Zone- CAL FIRE is mandated by Public Resources Code 4201-4204 and Government Code 51175-89 to identify fire hazard severity zones statewide. To reduce the wildland fire threat in high hazard areas, fuel treatments under Alternative C would focus specifically on areas that are classified as a "Very High Fire Hazard Severity Zone."

Alternative D: Treatments that Minimize Potential Impacts to Air Quality- Limiting prescribed fire.

Alternatives Analysis Comparisons



Comparison of the objectives between the Program and the Alternatives

Objectives**	Summary of Objective Achievement*					
	Program	No Project	Alternative A	Alternative B	Alternative C	Alternative D
Objective 1- Modify wildland fire behavior	+	+	+	+	+	+
Objective 2 - Alter size, intensity, shape within WUI	+	+	+	+	-	+
Objective 3 - Reduce fire size and associated cost	+	-	-	+	-	-
Objective 4 - Restore range of fire-adapted ecosystems	+	+	-	-	-	-
Objective 5 - Provide consistent, transparent process	+	-	+	+	+	+

Alternatives considered but eliminated from detail analysis -

- **REDUCED ACREAGE TO 30,000 ALTERNATIVE**
  - Provide insufficient acreage to address the objectives of the program.
- **COMBINATION OF WUI AND VHFHSZ ALTERNATIVE**
  - This would build upon the insufficiencies of alternative A and C. Consequently it would have been unsuccessful at meeting the objectives of the program
- **FOCUSING TREATMENTS ON AREAS OF THE STATE WITH HIGH INCIDENCE OF WILDFIRE (I.E. IGNITION SOURCES)**
  - This option would have placed the majority of treatments within the south coast and sierra bioregions and left the majority of the state without the option to use this program.
- **TREAT 10% OF THE WUI LANDSCAPE OVER A 10 YEAR TIME FRAME ALTERNATIVE**
  - This would treat approximately 117,000 a year which is not reasonable as identified through the proposed program.
- **FOCUSING ON AREAS OF THE STATE THAT ROUTINELY PRACTICE VEGETATION MANAGEMENT.**
  - This would imply that portions of CA are not eligible because they have not shown historical application of fuel treatments. This is simply not reasonable with a large scale drought impacted mortality in confers and other vegetation escalating through CA
- **1,000' WUI AND MAINTAINING EXISTING FUEL BREAK ALTERNATIVE**
  - Lacks a scientific reasoning that the proposes program model of WUI incorporates.
  - Maintaining existing fuel breaks may not allow a community to react to opportunities for altering or influencing fuel as the continuing drought impacts and fuel loading changes occur.
- **USING FIRE RETURN INTERVAL DEPARTURE ONLY**
  - Unless the FRI is met, fuel treatments could not be initiated. Delaying the opportunity to address critical fuel conditions until an specific point in time has been reached ignores the immediate threat to life and property.

Chapter 4 – Affected Environment, Effects, and Mitigations

What is covered under the analysis –

Discussion of:

- Affected Environment (legal driving force and general current condition)
- Environment effects (environmental impact analysis of the proposed program on various resources)
  - Follows CEQA Appendix G
    - **Significance criteria** we are required to address
    - Identify **Thresholds** that are applicable to analyzing the significance criteria.

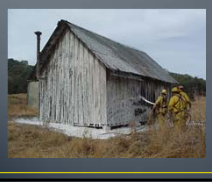
Chapter 5 – Cumulative Effects Analysis

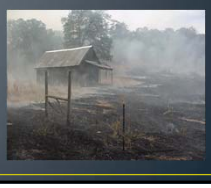
Summary of Significant Cumulative Effects Potential for the Proposed Program

	Proposed Program		
Resource Area	Yes after mitigation	No after mitigation	No reasonably potential significant impacts
Biological Resources			x
Geology, Hydrology, and Soils			x
Hazardous Materials			x
Water Quality			x
Archeological, Cultural and Historic Resources			x
Noise			x
Recreation			x
Utilities and Energy			x
Transportation and Traffic			x
Population, Employment, Housing, & Socio-economic Wellbeing			x
Air Quality		x	
Aesthetics and Visual Resources			x
Climate Change			x

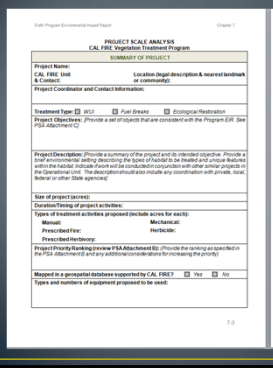
Chapter 6 - Significant Effects and Growth Inducing Impacts

The VTP is projected to treat **0.2%** of SRA/year & **2%** within a 10-year planning horizon.





Chapter 7 – PSA, Project Scale Analysis



PROJECT SCALE ANALYSIS
CAL FIRE Vegetation Treatment Program

SUMMARY OF PROJECT

Project Name:

CAL FIRE Unit & Contact:

Location (legal description & nearest landmark or community):

Project Coordinator and Contact Information:

Treatment Type: ☐ WUI ☐ Fuel Breaks ☐ Ecological Restoration

Project Objectives: (Provide a set of objects that are consistent with the Program EIR. See PSA Attachment C)

Project Description: (Provide a summary of the project and its intended objective. Provide a brief environmental setting describing the types of habitat to be treated and unique features within the habitat. Indicate if work will be conducted in conjunction with other similar projects in the Operational Unit. The description should also include any coordination with private, local, federal or other State agencies)

Size of project (acres):

Duration/Timing of project activities:

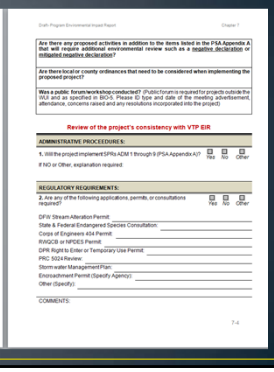
Types of treatment activities proposed (include acres for each):
Manual: Mechanical:
Prescribed Fire: Herbicide:
Prescribed Herbivory:

Project Priority Ranking/review PSA Attachment B): (Provide the ranking as specified in the PSA Attachment B and any additional considerations for increasing the priority)

Mapped in a geospatial database supported by CAL FIRE? ☐ Yes ☐ No

Types and numbers of equipment proposed to be used:

7-3



Are there any proposed activities in addition to the items listed in the PSA Appendix A that will require additional environmental review such as a negative declaration or mitigated negative declaration?

Are there local or county ordinances that need to be considered when implementing the proposed project?

Was a public forum/workshop conducted? (Public forum is required for projects outside the WUI and as specified in BKS. Please ID type and date of the meeting advertisement, attendance, concerns raised and any resolutions incorporated into the project)

Review of the project's consistency with VTP EIR

ADMINISTRATIVE PROCEEDURE S:

1. Will the project implement SPRs ADM 1 through 9 (PSA Appendix A)? ☐ Yes ☐ No ☐ Other

If NO or Other, explanation required:

REGULATORY REQUIREMENTS:

2. Are any of the following applications, permits, or consultations required? ☐ Yes ☐ No ☐ Other

DFW Stream Alteration Permit:
State & Federal Endangered Species Consultation:
Corps of Engineers 404 Permit:
RWQCB or NPDES Permit:
DPR Right to Enter or Temporary Use Permit:
PRC 5024 Review:
Storm water Management Plan:
Encroachment Permit (Specify Agency):
Other (Specify):

COMMENTS:

7-4

Chapter 8 – List of Preparers

Chapter 9 – References

Appendices

A. Analysis Assumption and Methods
B. Biological Resources
C. Geology, Hydrology, and Soils
D. Hazardous Materials
E. Archaeology and Cultural Resources
F. Noise
G. Recreation
H. Air Quality and Greenhouse Gas Emission Calculations
I. Monitoring and Communication Plan
J. Project Scale Analysis Burn Planning

Monitoring & Communication Plan

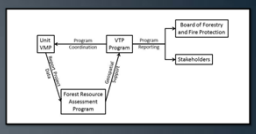
Monitoring & Communication Plan

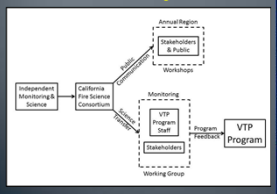
The MCP includes the following basic components:

- A mechanism for **introducing independent science** into the VTP;
- A requirement to geospatially track project implementation over time;
- **Implementation monitoring** to provide a rapid feedback loop for corrective action at the project scale;
- Qualitative project effectiveness monitoring to communicate **"lessons learned"** during VTP implementation;
- **Post-incident effectiveness monitoring**;
- An **annual workshop** in each CAL FIRE Region to communicate Program implementation, effectiveness, and "lessons learned" to stakeholders;
- A **goal to implement "active" adaptive management** by securing dedicated funding for research effectiveness and validation monitoring.

Resource monitoring is generally broken into the following categories:

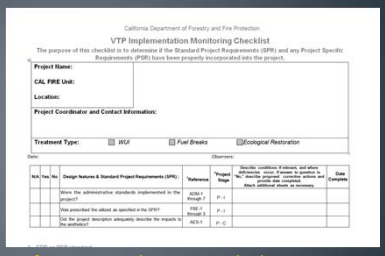
- Program Trend Monitoring
- Implementation Monitoring
- Photo-Point Effectiveness Monitoring
- Post-Incident Effectiveness Monitoring





VTP Treatment Example (Prop 40 funds):
Musick Creek Fuel Treatment Project
(Fresno County near Shaver Lake)

Implementation Checklist -



California Department of Forestry and Fire Protection

VTP Implementation Monitoring Checklist

The purpose of this checklist is to determine if the Standard Project Requirements (SPR) and any Project Specific Requirements (PSR) have been properly incorporated into the project.

Project Name:

CAL FIRE Unit:

Location:

Project Coordinator and Contact Information:

Treatment Type: WUI Fuel Breaks Ecological Restoration

Date: Observers:

N/A	Yes	No	Design features & Standard Project Requirements (SPR):	Reference	Project Stage	Describe conditions if relevant, and where deficiencies occur. If answer to question is "No", describe corrective actions and provide date completed. Attach additional sheets as necessary.	Date Complete
			Were the administrative standards implemented in the project?	ADM-1 through 7	P - I		
			Was prescribed fire utilized as specified in the SPR?	FIRE-1 through 5	P - I		
			Did the project description adequately describe the impacts to the aesthetics?	AES-1	P - C		

This type of monitoring determines whether management actions were carried out as planned.

PHOTO-POINT EFFECTIVENESS MONITORING

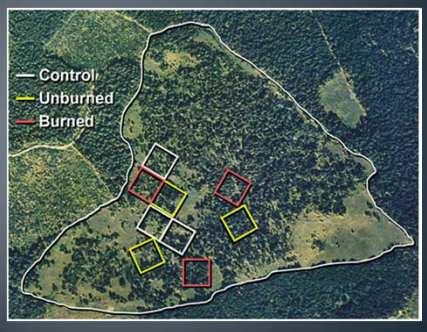
Photo-point monitoring is a standardized procedure for documenting rates of change, and is an effective communication tool for education and public outreach.

All projects under the VTP will require at least two pre- and post-treatment photos for each activity type (e.g., prescribed fire, mechanical, etc) in the project.

POST-INCIDENT EFFECTIVENESS MONITORING

- Option 1: An additional element of reporting will be added to the post incident action summary (PIAS) to detail if and how existing fuel treatments are used in fire suppression activities.
- Option 2: Unit SRA/VMP Foresters and Pre-Fire Engineers (PFEs) will report to VTP administrators when fuels treatments are used in fire suppression activities.

Commitment to Pursue Funding for Formal Adaptive Management



Communication

- PROJECT NOTIFICATION AND PUBLIC MEETINGS FOR PROJECTS OUTSIDE THE WUI
- PROJECT IMPLEMENTATION NOTIFICATION FOR PRESCRIBED BURNS
- ANNUAL REGION WORKSHOPS
- VTP MONITORING WORKING GROUP
  - Stakeholder driven process to identify critical questions to answer through adaptive management

CAL FIRE Commitment – Sac, Region and Unit

Commitments under this proposed program

- Unit Level
  - First level of project review (SRA/VMP Forester, Unit Chief)
  - Project development (SRA/VMP Forester)
  - Unit Fire Plan updates (Unit Chief, PFE)
  - GIS data entry and updates (SRA/VMP Forester or PFE)
  - Implementation monitoring (SRA/VMP Forester)
  - Project Notification & Public Meeting (SRA/VMP Forester)
  - PIAS Fuels Treatment Report
- Region Level
  - Second level of project review
  - Work with Sacramento on annual regional workshops
- Sacramento Level
  - Third level of review
  - Program oversight
  - Work with Region on annual regional workshops
  - VTP Monitoring Working Group

Summary

- Revised objectives
- More realistic set of Alternatives
- Redesigned Conceptual Framework
  - Built upon the vegetation typing and treatment/project types (WUI, Fuel Break and Ecological Restoration)
- The program is tied into the State and Unit Fire Plans
- Program supports planning and collaboration with all stakeholders
- Built upon increasing public transparency
  - Comprehensive Implementation process, priority ranking and public outreach.
- Comprehensive Project Scale Analysis.
- Stronger monitoring requirements

Every project must be part of a comprehensive and strategic plan accounted for in a CAL FIRE Unit Fire Plan or Contract County Fire Plan

Questions?