

# **Chapter 1: Introduction**

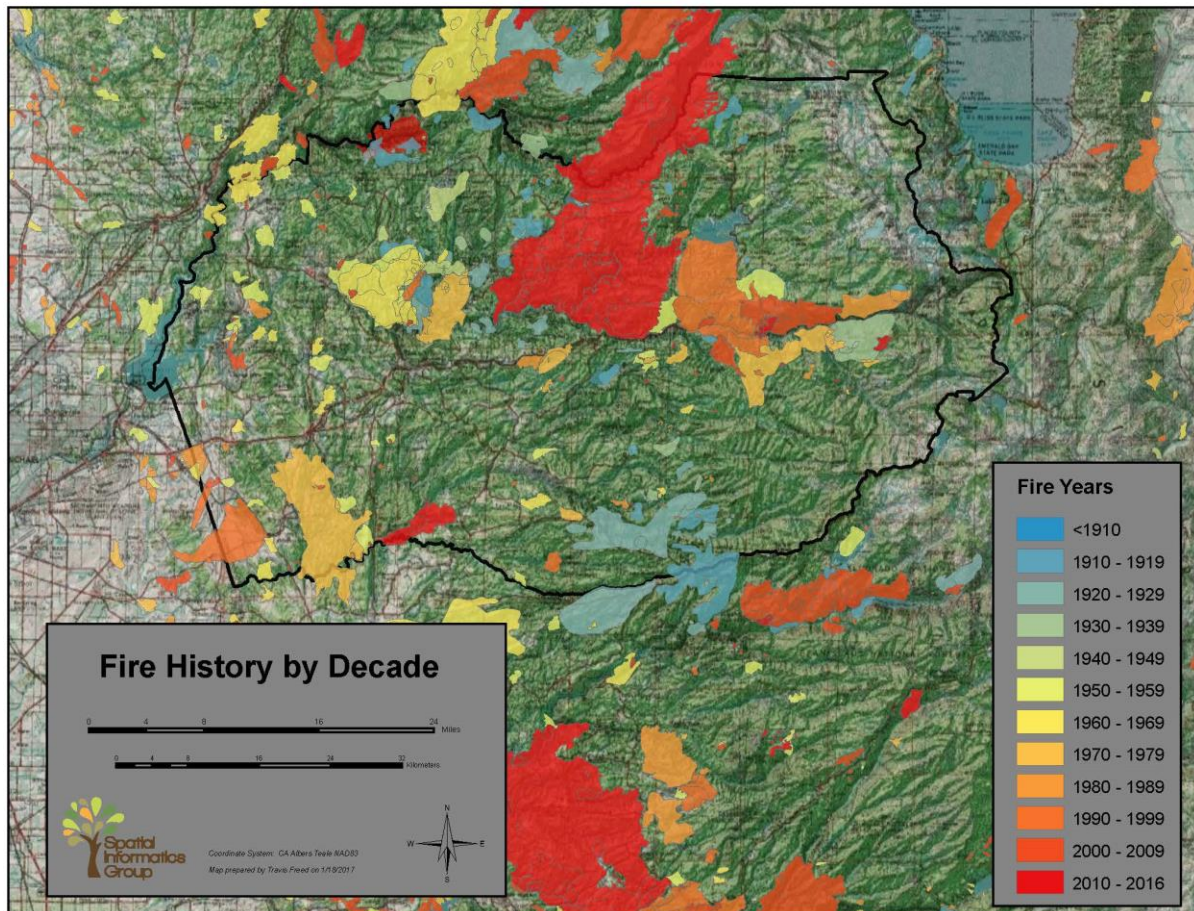
The El Dorado County Wildfire Protection Plan provides an overview of local fire history, fire risks, hazards, and past strategies. The Plan identifies specific fire protection problems and issues, lists Plan Goals and Strategic Action Plan Recommendations, identifies and lists communities for Fire Safe Planning, provides for formation of local community Fire Safe Councils, adopts a standard outline for Community Wildfire Protection Plans (CWPP), identifies the El Dorado County Fire Safe Council as a focal point for bringing citizens and protection agencies together to plan and accomplish fire safe measures, and establishes a public education role for the EDCFSC. The plan has been developed to be consistent with the approach outlined in the document Preparing Wildfire Community Protection Plan: A Handbook for Wildland–Urban Interface Communities (SAF 2004).

## **Background**

El Dorado County has extensive cover of coniferous and hardwood forests as well as grasslands and shrub dominated vegetation types. In many areas, this vegetation is dense and has accumulated, in some cases, for decades, resulting in high dead fuel loadings and extensive ladder fuels--both conducive to supporting high severity crown fires under summer dry conditions. Across the Central and Southern Sierra Nevada, recent drought-induced mortality has resulted in over 102 million dead trees scattered individually, in large groups across the region (El Dorado County 2016). These dead trees are found intermixed in neighborhoods in the wildland-urban interface, exacerbating an already high wildfire risk, as well as posing a direct hazard to residents and emergency personnel working on fires, a potential risk to key community ingress and egress routes, and a general potential increased difficulty for fire control. The tree mortality issue has been recognized by the Governor's Office as a critical public safety issue, leading to a Proclamation of a State of Emergency (Brown 2015). This Proclamation provides agency guidance and funding authority, which are being utilized to help begin mitigation of the problem.

El Dorado County has a Mediterranean-type climate which features hot, dry summers and cool moist winters. These conditions have made wildfire common across the county (Figure 1) over the past 150 years. The largest fires recorded in El Dorado County have burned since 2010. Prior to the early 1900s, fires ignited by lightning, Native Americans, and other persons, typically burned on an average of every 5-8 years in mid-elevation coniferous forests such as those seen in the Georgetown area (Stephens and Collins 2004). This frequency of fire has been recorded across similar elevations and forest vegetation types of the Sierra Nevada Range (Vaillant and Stephens 2009).

**Figure 1.** Perimeters for fires greater than 10 acres, by decade for El Dorado County and nearby areas for the period from 1878 through July, 2015 (FRAP 2016).



The June – October dry season produces ideal conditions for wildfires. Annual plants die and perennial plants lose moisture and become highly flammable. Fires burning toward the end of the dry season and during other periods of extreme fire weather are intense, resist suppression efforts, and threaten lives, property and resources. Drought conditions intensify the wildfire danger. Two additional climatic conditions aggravate this already serious wildfire problem. Almost every year the Pacific High Pressure System moves eastward over California and brings very hot, dry weather with low humidity. This “heat wave” can occur at any time during the dry season and wildfires can start easily and are difficult to extinguish. The other extreme weather condition, thankfully less frequent, usually occurs in the fall and sometimes in early winter, when north or east strong, dry winds subside from the Great Basin High (Foehn Winds). Under these conditions, a wildfire can quickly escape and create great damage before the winds stop blowing. The Oakland Hills Fire of 1991, which destroyed 3810 homes, burned under these conditions.

Drought conditions and resulting bark beetle infestations have caused pervasive tree mortality across the Central and Southern Sierra Nevada Mountains. It is estimated that there are over 102 million dead trees and this number continues to grow on a daily basis. El Dorado County is not immune to this epidemic as there are thousands of dead and dying trees threatening public safety

and infrastructure. In 2016, El Dorado County was designated a “High Priority County” as it contained extensive mortality, including substantial areas of “Tier 1 High Hazard Zones”, where mortality directly coincided with critical infrastructure, posing a direct threat to public safety (TMTF 2016). The El Dorado County Board of Supervisors has proclaimed a Local State of Emergency and approved the County’s Tree Mortality Hazard Tree Removal Program. The State of California has also proclaimed a State of Emergency. This proclamation recognizes and addresses the need for the removal of dead and dying trees throughout the State and authorizes California Disaster Assistant Act (CDAA) funding, which provides 75% reimbursement for all eligible costs related to the removal of hazard trees that threaten public infrastructure (EDC 2016).

The focus of this report is to provide a wildfire protection plan for communities within the Wildland Urban Interface in Western El Dorado County. The Wildland Urban Interface (WUI) is defined as the area where communities or structures are directly adjacent to wildland fuels or where individual structures are scattered throughout wildland areas. The WUI can also include structures within a city that abut an island of wildland fuels, such as a park or other open space. There are 3 general categories of WUI (Federal Register 2001):

### ***Category 1. Interface Community***

The Interface Community exists where structures directly abut wildland fuels. There is a clear line of demarcation between residential, business, and public structures and wildland fuels. Wildland fuels do not generally continue into the developed area. The development density for an interface community is usually three or more structures per acre, with shared municipal services. Fire protection is generally provided by a local government fire department with the responsibility to protect the structure from both an interior fire and an advancing wildland fire. An alternative definition of the interface community emphasizes a population density of 250 or more people per square mile. This includes communities such as El Dorado Hills and Auburn Lake Trails.

### ***Category 2. Intermix Community***

The Intermix Community exists where structures are scattered throughout a wildland area. There is no clear line of demarcation; wildland fuels are continuous outside of and within the developed area. The development density in the intermix ranges from structures very close together to one structure per 40 acres. Fire protection districts funded by various taxing authorities normally provide life and property fire protection and may also have wildland fire protection responsibilities. An alternative definition of intermix community emphasizes a population density of 28-250 people per square mile. This includes communities such as Georgetown, Pollock Pines, and Grizzly Flats.

### ***Category 3. Occluded Community***

The Occluded Community generally exists in a situation, often within a city, where structures abut an island of wildland fuels (e.g., a park or open space). There is a clear line of demarcation between structures and wildland fuels. The development density for

an occluded community is usually similar to those found in the interface community, but the occluded area is usually less than 1,000 acres in size. Fire protection is normally provided by local government fire departments.

Over 640,000 homes in California are at extreme or high wildfire risk (Botts et al., 2016). Each year, dozens and even hundreds of homes are destroyed or damaged by fires occurring in or moving through WUI areas across the Western United States. El Dorado County is no exception from wildfire losses. In 1985 the Eight Mile Fire destroyed 14 homes and in 1992 the Cleveland Fire destroyed more than 40 homes and claimed the lives of two aircraft pilots. More recently, the King Fire in 2014, destroyed 80 structures, burned over 97,000 acres, and led to the rapid evacuation of hundreds of residences. People who live in, or plan to move into, an area where homes are intermixed with brush, grass, woodlands, or forests may be in jeopardy and their property may be at risk.

Unfortunately, the control of wildfires is not an exact science and the best efforts by emergency personnel can be hampered by limited resources, sudden changes in weather, a complex WUI fire environment, and the need to simultaneously evacuate residents during fast-moving fire events. A wildfire responds to the weather, topography, and fuels in its environment. Under extreme burning conditions, the behavior of a wildfire can be so powerful and unpredictable that fire protection agencies may need to wait until conditions moderate before direct suppression actions can be taken; during this period wildfire can burn freely, destroying entire neighborhoods or burning watershed lands with high severity.

For these reasons, a Community Wildfire Protection Plan (CWPP) is crucial not only to engage and educate communities about wildfire risks, but also to create pathways for beneficial actions and projects that create the environmental and infrastructure conditions that best mitigate wildfire danger.

The El Dorado County Community Wildfire Protection Plan (“CWPP”) was prepared by members of the El Dorado County Fire Safe Council (EDCFSC) and Spatial Informatics Group, LLC, with input from local stakeholders, members of the public, local fire protection districts, the California Department of Forestry and Fire Protection (CAL FIRE), and the Eldorado National Forest. Funding was provided by the El Dorado County Fire Safe Council and the State Responsibility Area Fire Prevention Fund (SRAFPF) Grant Program. This Plan is not a legal document, although the

### **Minimum CWPP Requirements**

*The minimum requirements for a CWPP as described in the HFRA are:*

**(1) Collaboration:** A CWPP must be collaboratively developed by local and state government representatives, in consultation with federal agencies and other interested parties.

**(2) Prioritized Fuel Reduction:** A CWPP must identify and prioritize areas for hazardous fuel reduction treatments and recommend the types and methods of treatment that will protect one or more at-risk communities and essential infrastructure.

**(3) Treatment of Structural Ignitability:** A CWPP must recommend measures that homeowners and communities can take to reduce the ignitability of structures throughout the area addressed by the plan.

*Source: SAF, 2004*

recommendations contained within the Plan carefully conform to the spirit and the letter of the National Fire Plan, Healthy Forests Restoration Act, the State of California Fire Safe Plan, and the El Dorado County General Plan, adopted July 2004.

## **1.2 Plan Objectives**

The purpose of this document is to provide a comprehensive, scientifically-based assessment of the wildfire hazards and risks within the El Dorado County CWPP assessment area. This assessment estimates the hazards associated with wildland fire in proximity to communities. The hazard information, in conjunction with values-at-risk information, defines "areas of concern" for the community and allows prioritization of mitigation efforts. The content of this assessment will aid stakeholders in developing short-term and long-term strategies for:

- Hazardous fuel treatment projects and priorities for those projects. Specifically, this plan will set up a 10-year program of work that may be used by the El Dorado County Fire Safe Council and community-level Fire Safe Councils to guide future fuel reduction projects.
- Community wildfire safety education opportunities
- Assisting public agencies in making valid and timely decisions for wildfires and evacuations
- Providing communities with tools and information to help make a potential difference in wildfire losses and to facilitate preparation for evacuations if ever needed

### *Plan Development Strategy*

Severe wildfires in recent years prompted several communities and Fire Safe Councils to independently craft plans for addressing wildfire risk in their immediate vicinity. Similar planning efforts were spurred on by language in Title I of the Healthy Forests Restoration Act (HFRA) of 2003, which defined Community Wildfire Protection Plans (CWPP) and granted priority to fund hazardous fuel reduction projects in areas where a CWPP was in place. However, the format and process for creating a CWPP remained vague.

Therefore, the Society of American Foresters, the National Association of State Foresters, Communities Committee, Western Governors' Association, and the National Association of Counties combined their expertise to write and distribute a straightforward guide on how to create and implement CWPPs that are HFRA-compliant. "Preparing a Community Wildfire Protection Plan: A Handbook for Wildland-Urban Interface Communities," dated March 2004, has been used as a guide in preparing CWPPs for the El Dorado County Fire Safe Council (SAF 2004). Please see the references section for a link to this document. The general approach described in this document is summarized below:

*Step One: Convene Decision Makers:* Form a core team made up of representatives from the appropriate local governments, local fire authorities, and state and federal agencies responsible for management.

*Step Two: Involve Local, State, and Federal Agencies:* Identify and engage local representatives of the Eldorado National Forest, California Department of Forestry and Fire Protection (CAL FIRE) , Bureau of Land Management, US Forest Service, and other management agencies as appropriate.

*Step Three: Engage Interested Parties:* Contact and encourage active involvement in plan development from a broad range of interested organizations and stakeholders.

*Step Four: Establish a Community Base Map:* Work with partners to establish a baseline map of the community that defines the Community Wildland Urban Interface (WUI) and displays inhabited areas at risk, forested areas that contain critical human infrastructure, and forested areas at risk for large scale fire disturbances.

*Step Five: Develop a Community Risk and Hazard Assessment:* Use modeling and input from local partners to:

- A. Describe the overall risk of wildfire occurrence using historical data and local knowledge
- B. Describe the potential for fire spread, flame length, and fire type (e.g., crown fire, surface fire) which are functions of the fuel complex within individual communities and essential infrastructure using LANDFIRE model inputs and FLAMMAP
- C. Work with partners to develop a community risk assessment that considers the risk of fire ignitions, homes, businesses, and essential infrastructure at risk, local preparedness capability, and adequacy of community ingress and egress routes, staging areas, and firefighter safety
- D. Describe current protection capabilities, access, fire support infrastructure, and the potential for urban conflagration
- E. Describe other community values at risk as identified by the community and local Fire Safe Councils

*Step Six: Establish Community Priorities and Recommendations:* Use the base map and community risk assessment to facilitate a collaborative community discussion that leads to the identification of local priorities for fuel treatment, reducing structural ignitability, and other issues of interest, such as improving fire response.

*Step Seven: Develop an Action Plan and Assessment Strategy:* Develop a detailed implementation strategy to accompany the Plan as well as a monitoring plan that will ensure its long-term success and maintenance.

*Step Eight: Finalize Community CWPP:* Finalize the CWPP and communicate the results to community and key partners.



In keeping with the call to engage with local, state, and federal agencies, Sections 1.21 – 1.23 of this CWPP outline compliance to relevant legislative acts, policies, and plans of each jurisdiction.

### ***1.21 CWPP Consistency with Federal Guidelines***

The CWPP is required to be consistent with and tiered to the following documents, federal acts, and policies.

The two acts most associated with fuels reduction policy include:

1. The Healthy Forest Restoration Act (HFRA) of 2003
2. The 2010 Federal Land Assistance Management and Enhancement (FLAME) Act (U.S House of Representatives and Senate, 2009). FLAME is the most recent congressional act and can be located at [http://www.wflccenter.org/news\\_pdf/344\\_pdf](http://www.wflccenter.org/news_pdf/344_pdf).

The Healthy Forest Restoration Act (U.S. Congress, 2003) defines CWPPs, which allow communities to identify fuel-reduction projects, to receive priority for funding requests from the California State Clearinghouse (HFRA sec 103 [d1]). Federal agencies shall consider recommendations identified in CWPPs (HFRA sec. 103[b]) and implement those projects on federal lands (HFRA sec. 102[a]).

For more information on CWPPs and Firewise Planning, visit the following websites

<http://www.cafirealliance.org/cwpp>

<http://www.firesafecouncil.org/>

<http://www.firewise.org/>

The FLAME Act effort has spawned collaborative consideration and examination of wide-ranging but pertinent elements in creating a concerted move forward. The report has two parts:

- Part I addresses the specific elements requested by Congress in the FLAME Act.
- Part II expands upon those elements and goes further in providing a roadmap for the future—Cohesive Wildland Fire Management Strategy. As a living document, Part II provides a foundation from which to build local and regional actions and direction.

Together, the two parts of the FLAME Act address the elements requested by Congress and represent the next stage in an evolving world of wildland fire management, all with the goal of achieving even safer, more efficient, cost-effective, and achievable public and resource protection and more resilient landscapes.

There are two primary policy documents that federal agencies use to implement the two acts: (1) the *10 Year Implementation Plan for HFRA* and (2) the *Cohesive Strategy*. These are a national collaborative effort between wildland fire organizations; land managers; policy-making officials representing federal, state, and local governments; tribal interests; and non-governmental organizations that will address the nation's wildfire problems.

### *Fire-Adapted Communities*

One approach to assessing and countering the threat of wildfire is the concept of “fire-adapted communities,” one of the three primary elements of the *Cohesive Strategy*.

A fire-adapted community is one consisting of informed and prepared citizens collaboratively taking action to safely co-exist with wildland fire. An inherent part of becoming a fire-adapted community is to assess the community and the threat posed to it by wildland fire. A fire-adapted community generally has achieved or is working toward the following:

- Implementing “Firewise” principles to safeguard homes and “Ready, Set, Go!” principles to prepare for fire and evacuation
- Developing adequate local fire suppression capacity to meet community protection needs
- Designing, constructing, retrofitting, and maintaining structures and landscaping in a manner that is resistant to ignition
- Adopting and enforcing local codes that require fire-resistant home design and building materials
- Raising the awareness of and creating incentives for growth planning and management that reduces, rather than increases, fire-prone development
- Properly spacing, sequencing and maintaining fuel treatments across the landscape
- Developing and implementing a CWPP or equivalent
- Establishing interagency mutual aid agreements
- Designating internal safety zones

### ***1.22 CWPP Consistency with State of California Guidelines***

The CWPP is also consistent with and tiered to the following state plans and policies.

#### *2010 Forest and Range Assessment of California*

This analysis and the findings of the El Dorado County CWPP are consistent and supported by the findings in the *2010 Forest and Range Assessment of California* (California Department of Forestry and Fire Protection, Fire and Resource Assessment Program, 2010).

#### **Current Status and Trends:**

- California’s long history of wildfire and population growth has led to a set of state laws, regulations, and programs that address community wildfire safety. These include state and local planning laws, Fire Hazard Severity Zones and related building standards, defensible space requirements, various fuel reduction programs, the California Fire Plan and CAL FIRE Amador, El Dorado Unit Fire Plans, and the State Hazard Mitigation Plan.
- Community fire protection is also addressed by federal laws and programs such as the Disaster Mitigation Act, National Fire Plan, Healthy Forests Restoration Act, and Firewise Communities Program.



- Local agencies and non-profits play a key role in community fire protection planning. This is accomplished through county fire plans, county general plan safety elements, and through involvement of local fire districts, Fire Safe Councils, and the California Fire Alliance.
- Community planning is a collaborative effort that typically includes various federal, state, and local agencies, Resource Conservation Districts, local fire districts, and private organizations.

### *2010 Strategic Fire Plan for California*

The 2010 Strategic Fire Plan for California (State Board of Forestry and Fire Protection 2010) states the following vision:

“...a natural environment that is more resilient and man-made assets which are more resistant to the occurrence and effects of wildland fire through local, state, federal and private partnerships.”

The California Fire Plan is the state’s road map for reducing the risk of wildfire. By placing the emphasis on what needs to be done long before a fire starts, the plan looks to reduce firefighting costs and property losses, increase firefighter safety, and contribute to ecosystem health. The plan was a cooperative effort between the State Board of Forestry and the California Department of Forestry and Fire Protection (CAL FIRE). The basic principles of the fire plan are as follows:

- Encourage community involvement to ensure that fire protection solutions meet individual community needs.
- Assess community risk by identifying community assets at risk of wildfire damage.
- Define community assets at risk as public and private resources (natural and manmade) that could be damaged by wildfire.
- Develop pre-fire management solutions and implement cooperative projects to reduce a community’s potential wildfire losses.

### ***1.23 Community Wildfire Protection Plans (CWPPs) and Local Jurisdictions***

On the local level, CWPPs are a product of a collaborative process among local stakeholders to prepare for and deal successfully with a wildland fire emergency. CWPPs provide a specific risk assessment to a community, identify areas needing specific treatments, and include roles and responsibilities, community ingress and egress routes, resources, and other pertinent information a community needs in times of emergency. CWPPs are comprehensive wildfire planning tools for a community or a county.

CWPPs also include the opportunity to educate homeowners; target, prioritize, and schedule fuels treatments; and build response capability. Working together to create a CWPP is an important first step in bringing the awareness of shared wildfire risk home to the community. Local authorities such as fire departments, fire protection associations, county planning and zoning departments, and other authorities conduct risk assessments that help them determine their local needs for fuel treatments, equipment, personnel, training, mitigation needs, local ordinances or code adoption, and enforcement. Local assessments also can identify which mitigation programs

are best for a given community, such as NFPA's "Firewise" and the International Association of Fire Chief's "Ready, Set, Go!" program.

Regulation through codes and ordinances and subsequent enforcement are a major challenge for communities-at-risk since most of those communities are small. Even if they have authority to adopt codes, many communities do not have the resources to enforce them.

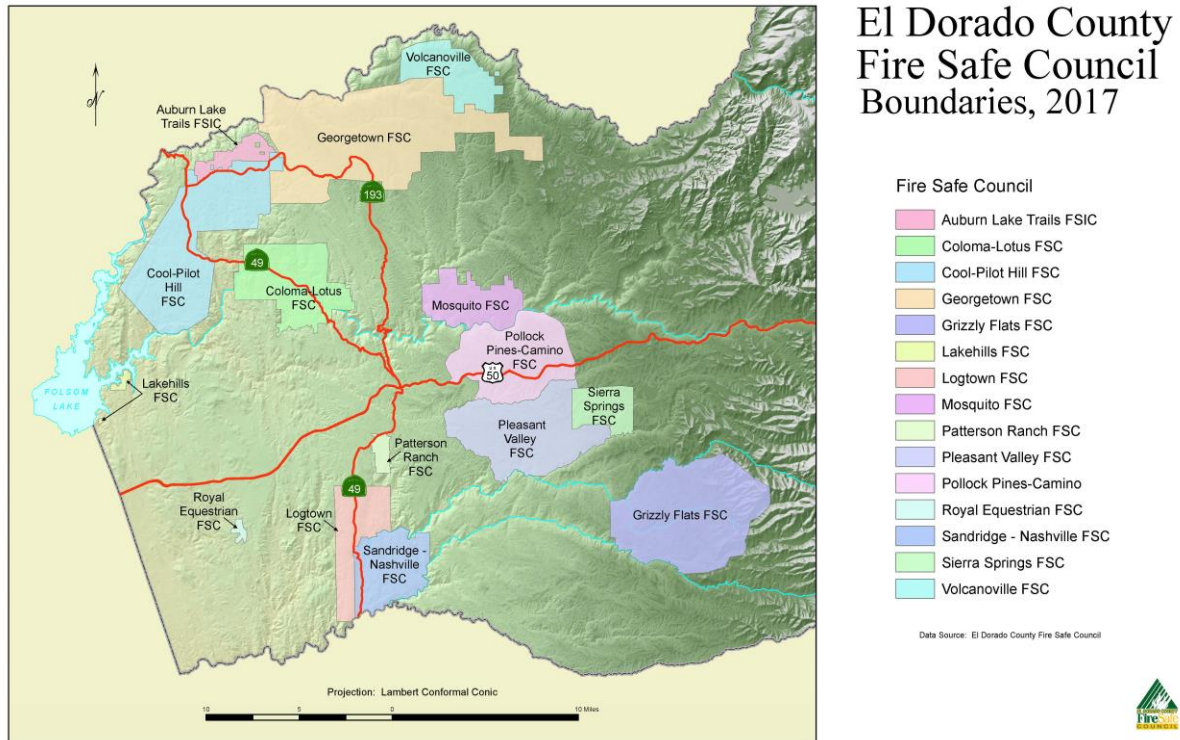
Traditionally, many communities were served by Volunteer Fire Departments (VFD's). Today, most, if not all, local fire protection districts have transitioned from primarily volunteer departments to professionally staffed stations. This was due to increasing OSHA training requirements, liability issues, and corresponding cost increases, which are part of a larger trend statewide. Unfortunately the budgets of many districts have not been able to keep up with the costs associated with these changes and several districts have closed "volunteer" stations and concentrated human resources in one or two stations. That said, there is a robust mutual aid agreement among the districts that puts all resources available to a centralized dispatch. In addition, there is also a Joint Powers Agreement (JPA) for medical response that covers the entire county.

The CWPP is only a plan—it will not reduce the threat of a wildfire or increase protection for any community. Reducing the threat of a wildfire to a community will only be achieved by the local residents of that community. Federal, state, and local agencies may provide assistance, but ultimately, actions that modify fire behavior or increase structural resistance to a wildfire are the responsibility of the local residents.

### **1.3 CWPP Planning Area Boundaries**

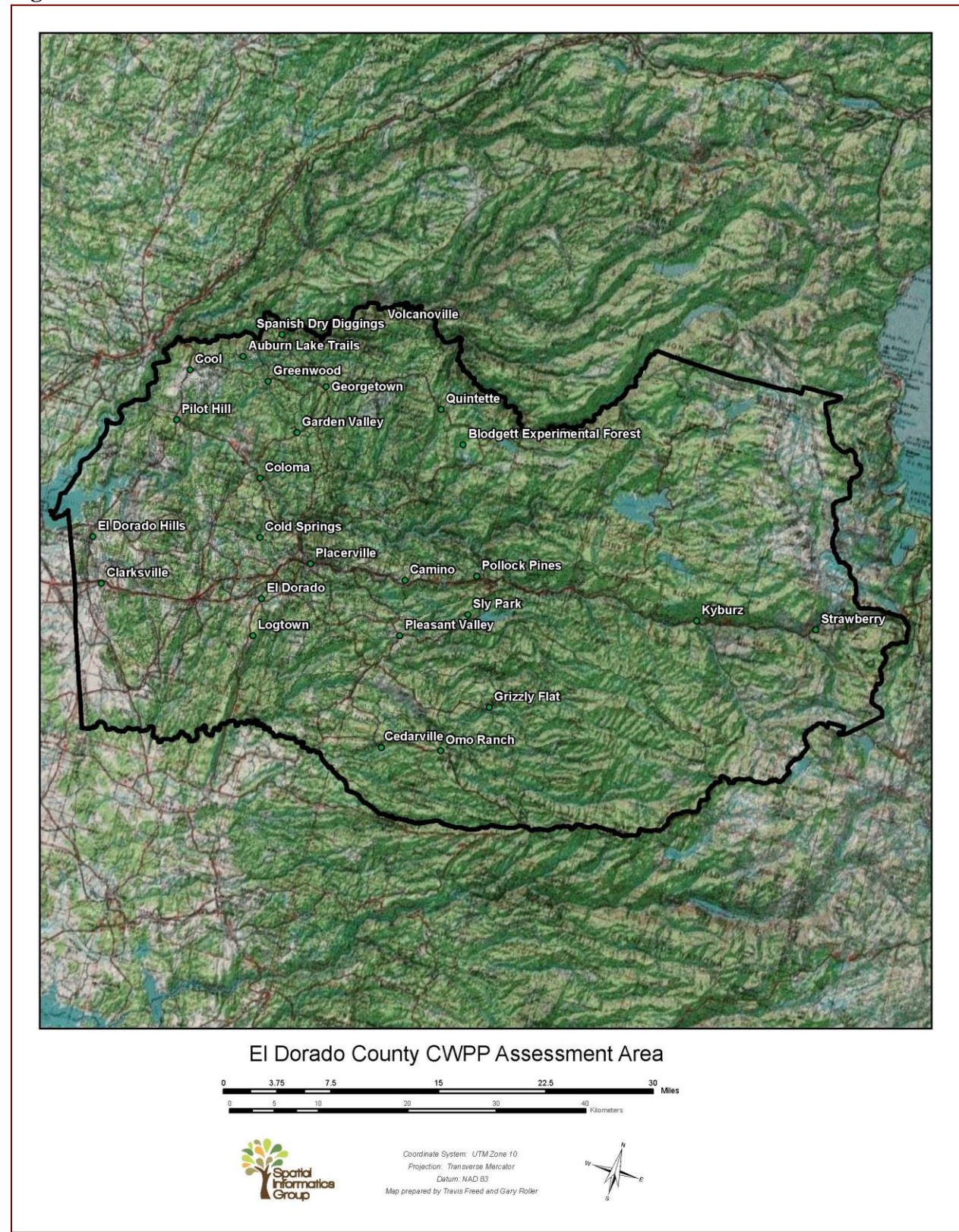
The El Dorado County CWPP is divided into several planning zones organized by Fire Safe Council. Each fire safe council should be considered a "planning zone" with input from CAL FIRE and the local fire districts (Figure 2). There are areas of the county that are not represented and do not have planned projects in this CWPP. The fire hazard and risk analysis was completed for the area depicted in Figure 3.

**Figure 2.** El Dorado County Fire Safe Councils for the West Slope Region of the county





**Figure 3.** El Dorado CWPP fire hazard and risk assessment area



## 1.4 Core CWPP Planning Team

The core CWPP planning team is composed of members of the El Dorado County Fire Safe Council, CALFIRE, and Spatial Informatics Group (SIG) (Table 1). This team is responsible for all aspects of developing the CWPP document, with a particular emphasis on gathering community and stakeholder information and concerns via meetings, surveys, and local knowledge, and incorporating that information into the final CWPP.

**Table 1.** CWPP Planning Team

<b>Name</b>	<b>Title</b>	<b>Organization</b>
Pat Dwyer	Chairperson	El Dorado Fire Safe Council
Steve Willis	Vice Chair	El Dorado Fire Safe Council
Barry Callenberger	Consultant	Wildland Rx.
Darin McFarlin	Captain	CALFIRE
Gary Roller	Project Manager and Registered Professional Forester	Spatial Informatics Group
Jason Moghaddas	Fire Ecologist and Registered Professional Forester	Spatial Informatics Group
Shane Romsos	Research Scientist	Spatial Informatics Group
Dr. Richard Harris	Registered Professional Forester	Spatial Informatics Group

## 1.5 Community and Agency Involvement

Communities and agencies across El Dorado County have been directly informed of, participated in, and given input used in the development of the CWPP via newspaper articles, direct public meetings, and an online community survey.

This CWPP is not intended to nor should be used to assess fire risk or prescribe treatments on federal lands. The process for wildfire risk planning on USFS lands is the “Northern Sierra Wildfire Risk Assessment” (NSWRA), the Eldorado National Forest Cohesive Wildland Fire Management Strategy, which will inform the Eldorado National Forest (ENF) Land Management Plan Revisions, as well as the Eldorado National Forest Fire Management Plan. In addition, the South Fork America River Watershed (SOFAR) has had several projects planned and funded independently from this CWPP. The following are websites with more information about the NSWRA (<http://www.fs.usda.gov/detail/eldorado/news-events/?cid=STELPRD3813466>) and SOFAR (<http://www.fs.usda.gov/detail/eldorado/news-events/?cid=FSEPRD495223>).

### *1.51 Public Meetings and Other Outreach*

Since May 2015, there have been nearly 40 meetings reaching over 400 people (Appendix 1). These meetings have involved all aspects of the CWPP development, including determining the initial scope of the project, informing the public and stakeholders about the CWPP process, and soliciting direct public and agency input on wildfire concerns, evacuation concerns, and potential treatment areas. In addition, the presentation materials have been made available via YouTube,

allowing persons who cannot attend the meeting to view a summary of the CWPP at their own convenience. The number of meetings, the variety of venues and times, frequent notifications, and on-line availability have helped ensure that the community has had the opportunity to provide input directly into the planning process. In addition, a general narrated presentation describing the CWPP process was made available to the public via YouTube; as of June 10, 2016 this online presentation had over 40 views ([https://www.youtube.com/playlist?list=PLiEp-2s05SCyPxxgSa3VMQSDYobIM\\_gPT7](https://www.youtube.com/playlist?list=PLiEp-2s05SCyPxxgSa3VMQSDYobIM_gPT7)).

### ***1.53 Community Priority Survey***

In collaboration with the El Dorado County Fire Safe Council, a community survey was prepared and distributed online and in print. With more than 400 responses, the survey helped meet several goals of the CWPP, including:

- Providing a platform to directly engage and involve members of the public, agencies, and decision makers in the CWPP process, even when they could not attend the in-person meetings
- Allowing a systematic assessment of concerns regarding perceived fire risks, evacuation issues, and treatment priorities
- Helping to inform Local Fire Safe Councils of potential community concerns and providing contact information for one-on-one follow up with community members who chose to share that information
- Summarizing the spatial information in the survey, including potential fuel treatment locations and community ingress and egress route concerns, into maps, which were further reviewed and refined by the CWPP planning team to integrate additional Stakeholder input

The survey had a range of questions (Appendix 2) allowing people to identify which communities they lived and worked in, the resources they believed warranted the greatest priority for fuel reduction, community ingress and egress routes and related concerns, whether or not they were able to manage their defensible space, and whether or not they wanted follow-up contact from the FSC on specific programs (Senior or Disabled Assistance, Evacuation Planning, Green Waste, and others).

The survey was distributed digitally via the online survey service, Survey Monkey (<https://www.surveymonkey.com/>), between October 14, 2015 and March 31, 2016. Links to the survey were distributed via email, on the FSC website, via newspaper (Mountain Democrat), and at the public meetings described above. For persons not having Internet access or preferring a paper survey, print copies were available by mail or in person, which were then transcribed into Survey Monkey manually. Over the survey period, there were a total of 403 responses, with only 1 of those being a paper-based response.



### ***1.54 Community Priority Survey –Key Findings***

Full summaries of the survey data can be found in Appendix 2. Just over 400 surveys were completed by individuals representing 32 different communities in the CWPP area. Of those surveys completed, 188 individuals (47%) requested additional direct follow-up from their local Fire Safe Council for information on existing programs. This list of information requests was sent to all 13 local Fire Safe councils, allowing them to follow up locally on an on-going basis via direct contact and community meetings.

In some cases, communities were small towns and in others, specific subdivisions or private in-holdings within the Eldorado National Forest. The vast majority of respondents (79%) were not affiliated with organizations responsible for fire protection or fire management, an indication that the survey reached and was taken by local landowners and the general public. For those respondents who were affiliated with fire protection or management organizations, 55% were representatives of local Fire Safe Councils.

#### ***Community Priorities for Fuel Treatment***

A critical intent of the survey was to gather community-based input on treatment priorities to help inform the layout and prioritization of forest and fuel treatments over the next decade. Respondents were asked to prioritize different resources for fuel treatment work by high (begin work within 1-3 years of CWPP completion), moderate (begin work within 3-5 years of CWPP completion), or low priority (begin work within 5-10 years of CWPP completion). There was clear agreement on several high priorities as shown in Table 3 below. The survey responses were summarized graphically (Appendix 2).

Survey respondents resoundingly identified community ingress and egress routes out of their communities and along major roads and highways as the top priority for fuel treatments. This was supported by extensive written comments (Questions 5-7) about potential treatment areas and community ingress and egress route concerns. Respondents also noted that private residences were a high priority compared with nearly all other resources. The next set of high priorities for treatments focused primarily on other infrastructure, including infrastructure for power generation and transmission, communications, and water conveyance, as well as watershed lands, schools, and hospitals. Vacant lands overall were mentioned numerous times as a concern across communities.

In terms of projects identified as moderate priorities, the emphasis shifted to places of worship, parks, community buildings, airports, and continued focus on water conveyance infrastructure. In the moderate category of priorities, the survey results did not show overwhelming agreement about which priorities were most important, as was seen for high priority projects.

Responses about lower priority projects emphasized parks, cemeteries, and places of worship. There were numerous “other” treatment areas mentioned, including public lands and CALTRANS right of ways, smaller roads, and vacant lands adjacent to developed parcels. The detailed prioritization approach, which integrates the community survey results and other key factors, is described in section 4.32.

**Table 3.** Summary of treatment priorities for different facilities and resources by percent response for high, moderate, and low priorities.

	Highest Priority (Begin Implementation within 3 Years of CWPP Completion)	Rank for Highest Priority	Moderate Priority (Begin Implementation within 3-5 Years of CWPP Completion)	Rank for Moderate Priority	Lowest Priority (Begin Implementation within 5-10 Years of CWPP Completion)	Rank for Lowest Priority	Response Count
Evacuation Routes Out of the Community	90%	<i>1</i>	9%	<i>19</i>	1%	<i>20</i>	<i>320</i>
Private Residences	78%	<i>2</i>	18%	<i>18</i>	5%	<i>19</i>	<i>330</i>
Major Roads and Highways	67%	<i>3</i>	26%	<i>15</i>	6%	<i>17</i>	<i>293</i>
Power Production and Transmission Infrastructure	65%	<i>4</i>	29%	<i>13</i>	6%	<i>18</i>	<i>269</i>
Communication Infrastructure	60%	<i>5</i>	32%	<i>11</i>	7%	<i>16</i>	<i>269</i>
Vacant (undeveloped) Parcels	59%	<i>6</i>	22%	<i>17</i>	19%	<i>9</i>	<i>320</i>
Domestic Use Water Distribution Ditches, Flumes, and Pipelines	59%	<i>7</i>	32%	<i>12</i>	10%	<i>15</i>	<i>273</i>
Hospitals	57%	<i>8</i>	27%	<i>14</i>	17%	<i>10</i>	<i>260</i>
Watershed Lands Associated with Local Reservoirs	51%	<i>9</i>	36%	<i>9</i>	13%	<i>14</i>	<i>280</i>
Reservoirs and Associated Infrastructure	51%	<i>10</i>	36%	<i>7</i>	13%	<i>13</i>	<i>269</i>
Schools	50%	<i>11</i>	35%	<i>10</i>	15%	<i>12</i>	<i>266</i>

	<b>Highest Priority (Begin Implementat ion within 3 Years of CWPP Completion)</b>	<i>Rank for Highest Priority</i>	<b>Moderate Priority (Be gin Implementa tion within 3-5 Years of CWPP Completion)</b>	<i>Rank for Moderate Priority</i>	<b>Lowest Priority (Be gin Implementa tion within 5-10 Years of CWPP Completion )</b>	<i>Rank for Lowest Priority</i>	<i>Response Count</i>
Other Community or Public Buildings (e.g. Fire Stations, Post Offices, Community Centers)	40%	12	44%	5	16%	11	265
Threatened and Endangered Wildlife Habitat	32%	13	36%	8	32%	5	275
Agricultural Use Water Distribution Ditches, Flumes, and Pipelines	31%	14	46%	2	24%	8	265
Airports and/or Heliports	30%	15	43%	6	27%	7	258
Private Businesses	25%	16	44%	4	31%	6	258
Places of Worship (Including accessory buildings and infrastructure)	14%	17	46%	1	40%	4	258
Parks	12%	18	44%	3	43%	3	263
Cemetery	6%	19	26%	16	69%	2	250
Other (please specify)	0%	20	0%	20	100%	1	30

### *Survey Responses Regarding Maintenance of Defensible Space*

Eighty-five percent of survey respondents noted that they had maintained their defensible space within the last year. Factors affecting people's ability to regularly maintain defensible space were overwhelmingly time and cost, with many respondents mentioning age and physical condition as an "other" factor. In addition, several respondents mentioned their defensible space (by distance) was on an adjacent landowners' (both private and public) property and was not properly maintained by that owner. Several others mentioned the difficulty in disposing of cleared vegetation as well as a desire to maintain privacy screening and shading.

Firewise home construction and landscaping guidelines (Appendix 3) were implemented on properties for about 46% of those surveyed, with cost, time, physical ability, and neighbors' lack of vegetation management being important factors limiting Firewise implementation.

Nearly 40% of respondents requested follow-up from Fire Safe Council representatives for a range of programs including Senior/Disabled Assistance, Chipper and Green Waste Programs, Evacuation Planning, and Ember Awareness. The contact information for these individuals was forwarded to the appropriate Fire Safe Council for follow-up consultations.