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## 9. Facilitating Lake County Fire Safety in the Long Term

A Community Wildfire Protection Plan (CWPP) is only as effective as the community charged with implementing it. Lake County is fortunate to have many people and resources committed to fire safety over the long term. Creating fire-safe communities is a continuing commitment.

“Communities across the country have invested countless hours and significant funds to develop CWPPs. Communities now have an opportunity to consider how these plans have helped reduce their wildfire risk, while also meeting state and national goals for wildfire risk reduction. Effective monitoring and evaluation of wildfire planning efforts at the local, state, and national level will provide important opportunities to evaluate the overall strategy of CWPPs in reducing wildfire risk and improving planning processes...

A CWPP does not end when it is adopted; a thorough process should involve a continuous cycle of collaborative planning, implementation, monitoring, and adapting strategies based on lessons learned. As communities learn from successes and challenges during the development and implementation of their CWPP, stakeholders may identify new actions, propose a shift in how decisions are made or actions are accomplished, and evaluate the resources necessary for successful CWPP implementation.”<sup>1</sup>

### 9.1. Monitoring

Monitoring the success of CWPP-identified actions is important to the ongoing success of these fire safety and prevention efforts. This CWPP is based on the collective experience of participants, Lake County knowledge, lessons learned from Fire Safe Councils statewide, and the best available science. However, community fuel reduction and fire safety is an evolving field. Restoring landscapes to be more fire adaptive is a long-term process. Mistakes will be made; they are part of re-learning how to live in balance with wildfire, rather than trying to control and suppress it regardless of the cost. Monitoring successes and failures will help in better understanding wildfire ecology and achieving responsible stewardship of fire-adapted ecosystems. Hence, it is important to monitor actions identified in this CWPP to comprehend the actual impact they are having meeting its objectives: to minimize ignitions, decrease intensity, decrease damage, increase permeability, and increase resiliency.

As stated in the quote above, CWPPs are monitored on a national scale to evaluate their effectiveness in addressing wildfire issues. A standardized format for participating in the national-level evaluation can be found at: [http://ri.uoregon.edu/documents%20and%20pdfs/eval\\_9-8-08\\_web.pdf](http://ri.uoregon.edu/documents%20and%20pdfs/eval_9-8-08_web.pdf).

Resources are also becoming available for community-scale monitoring. A valuable online source can be found at the Partnership Resource Center: [www.partnershipresourcecenter.org/resources/monitoring-evaluation](http://www.partnershipresourcecenter.org/resources/monitoring-evaluation).

#### 9.1.1. Project Monitoring

There are many types of monitoring. Two of the most applicable to CWPPs are project monitoring and ecological monitoring. Project monitoring, as it implies, is for tracking projects through their completion.

“What Goes into Monitoring and Evaluating a CWPP Locally?”

- Only monitor what matters! (Communities may lack resources to engage in a long or complex monitoring process.) Community partners should identify key goals and objectives, and make decisions to monitor what is most important to the long-term sustainability of their CWPP.
- Track accomplishments and identify the extent to which CWPP goals have been met.
- Examine collaborative relationships and their contributions to CWPP implementation, including existing participants and potential new partners.<sup>2</sup>

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<sup>1</sup> Community Wildfire Protection Plan (CWPP) Task Force and Wildland Fire Leadership Council. *Community Guide to Preparing and Implementing a Community Wildfire Protection Plan*. August 2008. p. 18. [www.forestsandangelands.gov/communities/documents/CWPP\\_Report\\_Aug2008.pdf](http://www.forestsandangelands.gov/communities/documents/CWPP_Report_Aug2008.pdf).

<sup>2</sup> For more information on collaboration resources, see the Red Lodge Clearinghouse, <http://rlch.org/content/section/4/27>.

- Identify actions and priority fuels reduction projects that have not been implemented, and why; set a course for future actions and update the plan.”<sup>3</sup>

Table 9-1 at the end of this chapter provides a format for the Lake County Fire Safe Council and others to track project progress. It is based on a matrix developed by the El Dorado Fire Safe Council, and can be reproduced in Excel to effectively track projects over time.

Another simple project-monitoring method is photo point monitoring. This is the monitoring required with most California Fire Safe Council Clearinghouse grants. Photos are taken of a given place before, during, and after treatments and then compared, providing a basic physical comparison.

Finally, a true test of fire-safety projects is how they affect wildfire behavior. This means comparing areas after a wildfire that have had treatments with those that haven't, and documenting the change. Photo points are an excellent method to document this difference.

### 9.1.2. Ecological Monitoring

In addition to how successful projects are to reduce fuels and the impact of fire, monitoring also refers to tracking how projects affect ecological process and function. From the outset, projects need to be designed to have minimal adverse ecological impact.<sup>4</sup> The Conservation Principles identified in Chapter 1 provide guidance in how to minimize such impacts. However, this is an evolving field. No one is clear yet regarding the long-term ecological impacts of fire-safety actions. It is important to be aware of potential negative environmental impacts. Ecological monitoring is the most effective way to understand these impacts.

“A critical outcome related to CWPPs is related to the change in fire behavior, as affected by the number and type of fuels treatments that occur as a result of priorities identified within the CWPP. The HFRA\* (Section 102(g)(5)) instructs the USFS and DOI to establish a collaborative multiparty monitoring, evaluation, and accountability process when significant interest is expressed in such an approach. (The Healthy Forests Initiative and Healthy Forests Restoration Act Interim Field Guide [www.fs.fed.us/projects/hfi/field-guide/web/page16.php](http://www.fs.fed.us/projects/hfi/field-guide/web/page16.php).)

Multiparty monitoring gives communities an opportunity to assess environmental, social, and economic outcomes related to fuels reduction projects. Multiparty monitoring also builds trust and provides an opportunity for residents to learn about fire-adapted ecology. The USFS Collaborative Forest Restoration Program [CFRP] in the Southwest offers a set of guidelines for monitoring community-based forest restoration. Communities engaged in ecological monitoring of hazardous fuels reduction projects can use these guidelines. They provide an overview of the multiparty monitoring process, ecological and socioeconomic goals and indicators, and examples of measures, data sources, and tools that can be used in conducting this kind of monitoring. The CFRP program also developed a series of handbooks to help communities conduct this monitoring. These resources can be downloaded directly at [www.fs.fed.us/r3/spf/cfrp/monitoring/index.shtml](http://www.fs.fed.us/r3/spf/cfrp/monitoring/index.shtml).

There are also tools used by state and federal agencies to conduct ecological monitoring and monitor maintenance of treated areas. One such program is the Fire Effects Monitoring and Inventory Protocol (FIREMON). FIREMON is an agency-independent plot-level sampling system designed to characterize changes in ecosystem attributes over time ([http://frames.nbii.gov/portal/server.pt?open=512&objID=286&&PageID=495&mode=2&in\\_hi\\_userid=2&cached=true](http://frames.nbii.gov/portal/server.pt?open=512&objID=286&&PageID=495&mode=2&in_hi_userid=2&cached=true)).

Other methods for conducting ecological monitoring for fuels reduction projects may include using photo points, modeling changes in fire behavior, and measuring change in fire regime and condition class. There are a wide range of approaches to ecological monitoring; FIREMON and

<sup>3</sup> CWPP Task Force et al. 2008. p. 18.

<sup>4</sup> In addition to the Conservation Principles in Chapter 1, several communities are now developing Best Management Practices for fuel treatments. See [www.myfirecommunity.net/Neighborhood.aspx?ID=666](http://www.myfirecommunity.net/Neighborhood.aspx?ID=666) for more information.

\* Healthy Forests Restoration Act.

other modeling systems are mostly within federal purview, but community organizations and citizens have many monitoring options available and simple methods like comparing photo points and conducting vegetation surveys that are valuable and important.”<sup>5</sup>

The Lake County Fire Safe Council has both project and ecological-monitoring expertise in its partner organizations, including the Mendocino National Forest, Bureau of Land Management, Natural Resources Conservation Service, and the local Resource Conservation Districts. These organizations can help to develop a monitoring strategy to track the long-term success of both the projects identified herein, and ultimately this CWPP. Additional resources can be found online, such as the Ecosystem Management Initiative of the University of Michigan: [www.snre.umich.edu/ecomgt/evaluation/tools.htm](http://www.snre.umich.edu/ecomgt/evaluation/tools.htm).

## **9.2. Project Maintenance**

Project maintenance strategies are most effective when designed into projects from the beginning. This is true for both the maintenance activities and the resources to support them.

In terms of large-scale fuel-reduction projects, one of the most effective and economical long-term maintenance strategies for programs in Northern California is prescribed fire (AKA controlled burning). Once fuels are reduced to levels where “cool” fires can be safely introduced, this strategy should be explored and, when appropriate, implemented. Lake County is fortunate to have both a population that supports the use of prescribed fire, and local expertise in using it. The controlled-burning efforts of the Hendricks family in Scotts Valley over the last several generations is an excellent example of how to use fire over time to maintain and enhance ecosystem conditions while improving community fire safety.

The Action Plan in Chapter 8 identifies an “Adopt a Fuel Break” strategy that can be used to maintain fuel treatments around neighborhoods and communities. It will be the responsibility of land management agencies leading a project, as well as the Lake County Fire Safe Council, to ensure that long-term project maintenance is included (and budgeted for) in all project implementation. The Strategic Planning Matrix at the end of this document can help facilitate monitoring of maintenance needs.

## **9.3. Updating This Plan**

No plan is ever permanent. This CWPP was written in 2009 based on current conditions and best available information. The field of fire safety is rapidly changing. It is likely that new developments will occur in the coming years. Therefore, it will be important to review this CWPP at least every five years and update it as needed. The Strategic Planning Matrix in this chapter can be used between CWPP updates by the FSC to document implementation progress. Copies of this CWPP will be available for public review at the Lake County Administrative Office (Courthouse), public libraries, and other locations throughout the county.

## **9.4. Resources Needed to Support Ongoing Efforts**

The Lake County Fire Safe Council will be the principal organization charged with implementing this CWPP. The recent efforts and actions of the FSC and its leadership have shown it to be capable of successfully facilitating both the CWPP’s implementation and leading fire-safety efforts in Lake County over time.

To ensure the FSC’s success, and the CWPP’s effectiveness, the Lake County FSC will need to develop a structure for plan implementation. A coordinator was hired in 2009 with county funding. It will be critical to maintain and augment this funding source over time to ensure CWPP and project continuity. A strategic plan for the Council needs to be developed to identify a successful long-term management structure that maximizes both resident and agency participation, and a long-term funding strategy to ensure its survival.

Finally, the success of the FSC will also depend on the ability of participating organizations to contribute resources to the Council and its projects. The will to succeed and the *social capital* exist now within Lake County for the effective implementation of this CWPP. Plan authors and cooperating stakeholders are confident that Lake County is quickly becoming a positive example for fire safety throughout California.

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<sup>5</sup> CWPP Task Force et al. 2008. p. 22.

Figure 9-1. Strategic Planning Matrix<sup>6</sup>

Project # or Code	Start Year	Project Title & Description	Estimated Resources Required	Proposed Funding Source	Current Status (Date)	Current Funding Required & Potential Source	Year 1 Project Status & Update	Year 2 Project Status & Update	Project Completed Date	Long-Term Maintenance Required? Responsible Party	Funding Source(s)

<sup>6</sup> Adopted from El Dorado County Fire Safe Council Strategic Planning Project Matrix. [www.edcfiresafe.org/documents/edc\\_wpp\\_appendix\\_m\\_2006-08-23.pdf](http://www.edcfiresafe.org/documents/edc_wpp_appendix_m_2006-08-23.pdf).