

Evaluation Guide for Community Wildfire Protection Plans

Draft

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Prepared by Resource Innovations, Institute for a
Sustainable Environment, University of Oregon

<http://ri.uoregon.edu>



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Request for Comments and Participation:

This evaluation guide is being developed by Resource Innovations, an organization based in the University of Oregon's Institute for a Sustainable Environment. Comments on this paper can be submitted to Kathy Lynn at kathy@uoregon.edu or by fax at 541-346-2040 until May 1, 2008. The final paper will be completed by June 2008 and posted to the Resource Innovations website: <http://ri.uoregon.edu/programs/CCE.html>.

Additionally, we are interested in monitoring efforts to use this evaluation guide. If you plan to use the guide to evaluate your CWPP and would like to share your results, please email kathy@uoregon.edu or call 541-346-0687 with comments or questions.

We look forward to hearing from you!

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Draft Table of Contents

I. Introduction.....	1
Purpose and Benefits of the Guide.....	2
Policy Background	2
Why Monitor and Evaluate a CWPP?.....	3
Challenges to Consider	3
How often should a plan be evaluated?	4
II. Evaluating Fire Planning Efforts Nationally.....	5
III. How to Complete a CWPP Evaluation	7
1. Identify Goals and Objectives.....	7
2. Identify Changes in the Community and Wildfire Risk.....	7
3. Review Action Items	8
3.A. Action Item Review Form.....	8
4. Evaluate CWPP Outcomes.....	8
5. Update the CWPP	9
6. Report on accomplishments	10
Case Studies	11
IV. Workbook: Evaluating CWPP Outcomes	12
Appendix A – Additional Resources	20
Appendix B. Action Item Review Form.....	21
Appendix C – Survey Examples.....	22
C.1. Evaluating collaboration among CWPP partners	22
C.2. Evaluating increased public awareness and action	23

I. Introduction

Wildfire threatens many communities across the United States, particularly among those located in the wildland-urban interface (WUI). Southern California faced widespread fires in 2003 when 742,000 acres burned in San Bernardino, San Diego, Los Angeles, and Ventura counties. These fires resulted in the deaths of 26 people and destruction of 3,361 homes.¹ In 2002, the Biscuit Fire burned nearly 500,000 acres in Josephine County, Oregon while threatening thousands of residents and costing \$150 million. Also in 2002, Arizona's Rodeo-Chediski wildfires burned more than 460,000 acres and destroyed 426 structures. Most recently, eleven people died during the spring of 2006 as wildfires burned over 691,000 acres in Texas' panhandle and southern plains. Such events have led at-risk communities to assess wildfire hazards and other catastrophes by identifying strategies to decrease their losses and prepare for future events. Under the guidance of the federal Healthy Forests Restoration Act (HFRA), a growing number of municipalities and counties across the United States have developed community wildfire protection plans (CWPPs) to reduce the threat of wildfire.

The Council of Western State Foresters analyzed states' progress for identifying and protecting communities at risk of wildfire. The Council found that, as of March 2006, 329 CWPPs in western states met the guidelines set by HFRA,² although many more communities have similar plans in place. The report indicated that each state had a varying number of communities at risk and employed different strategies to develop CWPPs. It also showed that CWPPs were adapted to fit needs as determined by local communities or regions. Developing such a plan, however, does not automatically result in decreased wildfire risk. Project partners must enact long-term implementation strategies with monitoring and evaluation guidelines to know whether the plan is meeting a community's intended goals.

Numerous agencies and associations have been engaged in developing planning resources for community wildfire protection plans, including:

- Communities Committee
- International Association of Fire Chiefs
- National Association of Counties
- National Association of State Foresters
- Society of American Foresters
- The Wilderness Society
- USFS National Fire Plan Office
- Western Forestry Leadership Coalition

References to the resources developed by these agencies and organizations can be found in *Appendix A*. Finally, a recent Joint Fire Sciences research project is analyzing the extent to which CWPP planning efforts have been collaborative, and the impacts of collaboration on the

Preparing a Community Wildfire Protection Plan: A Handbook for Wildland-Urban Interface Areas
illustrates eight steps for creating a CWPP:

1. Convene decision-makers
2. Involve federal agencies
3. Engage interested parties
4. Establish community map
5. Develop a community risk-assessment
6. Establish community hazard reduction priorities and recommendations to reduce structural ignitability
7. Develop an action plan and assessment strategy
8. Finalize CWPP

<http://www.safnet.org/policyandpress/cwpphandbook.pdf>

¹ Keeley, J.E., Forthingham, C.J., & Moritz, M.A. (2004). *Lessons Learned from the October 2003 Wildfires in Southern California*. *Journal of American Forestry* 102(7): 26-31.

² Council of Western State Foresters (2006). *Community Wildfire Protection in the West: A Status Report*.

planning process. This three-year study began in spring 2005 and focuses on collaborative efforts in plans in California, Colorado, Florida, Minnesota, and Oregon.

Purpose and Benefits of the Guide

The purpose of this guide is to assist communities in monitoring and evaluating their CWPPs to strengthen future implementation. The steps in this guide outline an effective process for evaluating how well communities have addressed the goals and objectives of their CWPPs and updating their plans. The Guide recommends collaborative strategies to bring together project partners to conduct the evaluation, gather relevant data, and write the evaluation report.

This evaluation will draw out the experiences and lessons learned in collaborative efforts among community members, local government, municipalities, land management, and state agencies, thereby pinpointing the key accomplishments and challenges facing the community in implementing their fire plan. Benefits of an evaluation may also include identifying strategies that help communities to plan for and reduce the risks of other natural disasters.

At a local level, objectives of a CWPP monitoring and evaluation process can include:

- Tracking accomplishments and identify the extent to which CWPP goals have been met.
- Examining collaborative relationships and how they have contributed to CWPP implementation.
- Identifying actions and priority fuels reduction projects that have not been implemented; set a course for future actions and update the plan.
- Evaluating the resources necessary for successful CWPP implementation;

Broader objectives for CWPP monitoring and evaluation can include:

- Identifying local, state, regional and national policies and programs that could better support that process.
- Evaluating CWPP contributions to reducing wildfire risk on a local, regional and national level.

Policy Background

In 2001, the National Fire Plan legislation brought renewed focus to engaging communities in federal wildfire mitigation efforts. Passed in 2003, HFRA aims to minimize destructive impacts of wildfire by allowing communities to shape their own plans for such disasters and to protect local resources. Developing a CWPP is a central piece of this legislation. The CWPP can reflect values and priorities for increasing community capacity, reducing hazardous fuels, and creating awareness about disaster issues.

The Healthy Forests Restoration Act grants communities flexibility to define the wildland-urban interface areas. It requires that the development of a CWPP involves local government authorities, local fire departments, and state forestry agency. Additionally, “HFRA also gives priority to projects and treatment areas identified in a CWPP by directing federal agencies to

give specific consideration to fuel reduction projects that implement those plans.”³ Many communities initiated development of CWPPs because of the prospect of state or federal funding for fuels reduction projects. However, there is not enough federal funding to adequately and effectively address the significant wildfire hazard and need for fuels reduction illustrated in CWPPs across the country.

A CWPP provides a baseline of information and potentially a cadre of shared resources that can make local implementation of a plan successful without relying on federal grant funds. A plan should represent a community’s preferences for emergency management, education and outreach, and fuels reduction activities to effectively lower its wildfire risk. If the goals and objectives are unattainable or require significant funding increases, successful implementation of the plan may prove to be difficult.

Healthy Forests Restoration Act legislation lists three main areas for communities to address and helps policy makers monitor CWPP efforts nationally.

- **Collaboration:** Local government officials, fire agencies, and the state forestry agency must work together with interested parties and applicable federal land management agency (Forest Service or Bureau of Land Management) to create a CWPP;
- **Prioritized fuel reduction:** Identifies and prioritizes areas for hazardous fuel reduction treatments and recommends the types and methods of treatment on federal and non-federal land that will protect one or more at-risk communities and essential infrastructure;
- **Treatment of structural ignitability:** Recommends measures to reduce ignitability of homes, businesses, and other structures throughout the at-risk community.

The community may attend to other issues beyond these criteria, including public education efforts, economic development through stewardship contracting or biomass utilization, and emergency management.

Why Monitor and Evaluate a CWPP?

A community develops and implements a fire plan to reduce its risk from wildfire. Given the time, effort, and money dedicated to a CWPP, it is critical to monitor and evaluate plan outcomes. Over time, communities grow and change, as do the forests around them. The risk of wildfire to communities will change as they do, and so must the plans and strategies to reduce risk. An effort to monitor and evaluate CWPPs will provide insights to a community and identify whether or not the plan is on the right track or if there are changes that should be made to the implementation process. The evaluation should closely examine collaborative relationships, fire-related policies, and the plan’s ability to achieve intended goals and objectives.

Challenges to Consider

Many communities may lack the capacity to complete an evaluation of their CWPP. If there are no paid staff members responsible for implementation or oversight of the plan, then resources to conduct an evaluation may be scarce. Local, state, and federal agencies can and should support a community’s evaluation of a fire plan by sharing resources and responsibility.

³ From “Preparing a Community Wildfire Protection Plan: A Handbook for Wildland-Urban Interface Areas,” (2004), Society of American Foresters.

Leaders Guide for Developing a Community Wildfire Protection Plan

The International Association of Fire Chiefs, National Association of State Foresters, and The Wilderness Society developed the Leaders Guide to supplement the CWPP Handbook and provide detailed strategies for CWPP development. The Leaders Guide specifically references evaluation, and describes strategies to track progress and update the CWPP. "A plan stays alive when it's evaluated and updated to meet the reality of the implementation days." The Guide describes three specific tasks:

- Describe accomplishments to date and review the 8 Step CWPP planning process to pick up loose ends and new areas of concern.
- Convene a CWPP meeting to celebrate success, upgrade existing plans and to plan for the future
- Plan future meetings to track and update the planned activities

To download the Leaders Guide, visit:

http://csfs.colostate.edu/library/pdfs/cwpp/CWPP_LG.pdf

Involvement of project partners in the evaluation is critical in communities that have limited capacity. Partners can provide the necessary expertise for evaluating project outcomes and compliance with goals and objectives. Local contacts and familiarity with wildfire and emergency management issues will help in identifying areas where the CWPP needs to be updated. Putting together a citizen advisory committee, conducting focus groups with local residents, or administering wildfire surveys at community events during the evaluation process can help build an understanding of how effectively the plan is reaching the general public.

It is critical to review what has been accomplished and where a plan is going, even if the evaluation is not on a large-scale. Asking a few key questions can identify strategies to help the community more effectively implement their plan. This Guide provides a range of indicators and strategies to evaluate plans with, but ultimately, you can adapt and abbreviate the evaluation process to best meet your own needs.

How often should a plan be evaluated?

HFRA does not include any specific requirements for evaluating and revising CWPPs. However, establishing a clear schedule for monitoring accomplishments and evaluating outcomes will ensure a plan that is dynamic and responding to the needs of the community.

Creating an annual progress report is one way to ensure that accomplishments and challenges are captured throughout the implementation process. A full evaluation may be conducted on a more periodic basis. One consideration is that the Federal Emergency Management Agency requires updates of Natural Hazard Mitigation Plans every five years. Because a CWPP often plays a role in natural hazard mitigation plan, timing the evaluation and updates of the two plans at the same time can be beneficial and an efficient use of resources for the community.

Opportunities! Firewise Communities

Many communities across the U.S. have engaged in the Firewise program and have developed and implemented Firewise strategies in their communities, neighborhoods, and homeowners associations. This evaluation can be adapted to evaluate the impacts and benefits of the Firewise program, particularly in the defensible space and structural vulnerability sections.

For more information on Firewise, visit:
<http://www.firewise.org/>

II. Evaluating Fire Planning Efforts Nationally

CWPP's are part of a larger national effort to improve the health of our nation's forests and reduce wildfire risk to communities. Federal investments of time and money must show results in a way that justifies that investment. Federal decision makers are not often able to see the local successes gained from a CWPP and its projects. Monitoring and evaluation results that can be consolidated across localities to inform progress at a national level helps to ensure that funding and agency efforts are geared toward successful approaches.

Common elements of monitoring information are needed in each CWPP in order to synthesize similar information into a national level evaluation. National level guidance for these monitoring and evaluation measures can be found in the Revised Ten Year Comprehensive Strategy (December 2006), which includes specific performance measures that are applicable to CWPPs. These performance measures are provided in Table 1.

These existing performance measurements may or may not be sufficient to effectively evaluate the outcomes from CWPP's. Measurement strategies are needed from local efforts to determine the most effective interface between local monitoring needs and national information needs. Like local planning processes, national monitoring and evaluation strategies can and should be adapted and improved as we learn from wildfire planning efforts. Table 1 also includes suggestions for additional performance measures that might be useful, as well as data sources that could be used to collect data and evaluate the measure during local evaluation processes.

Table 1. CWPP Related Performance Measures in the 10-Year Strategy

10-Year Strategy Performance Measure	Data to collect at a local level	Partners
Goal 4.a) Number and percent of communities at risk with a CWPP	<ul style="list-style-type: none"> Is the community a Firewise Community? Has the community enacted a fire related ordinance? If so, county, state, or local? # of and % of acres on public and private land in the WUI treated for hazardous fuels based on the CWPP priorities 	Local, state, and federal agencies
Goal 4.b) % of at risk communities who report increased local suppression capacity as evidenced by:	<ul style="list-style-type: none"> Increasing # of trained and/or certified fire fighters and crews Upgraded or new fire suppression equipment Formation or expansion of fire department involved in wildland fire 	Local, state, and federal agencies and fire districts
Goal 4.c) # of green tons and/or volume of woody biomass from fuel reduction and restoration made available for utilization through permits, contracts, grants, agreements, or equivalent.	<ul style="list-style-type: none"> # of CWPPs that address biomass utilization 	Local, state, and federal agencies

CWPP leaders, land management agencies, or a team of project partners can collect data that will help policy makers measure effectiveness of programs and evaluate whether or not goals and objectives within HFRA and NFP are being met. The goal of effective monitoring and evaluation will be to learn from successes and failures and target resources and efforts strategically to maximize risk reduction and forest restoration. Local level monitoring and evaluation efforts are the key to improving processes at each scale, from their own local efforts to the national level.

HFRA recommends three areas of a CWPP: Collaboration, priority fuels projects, and reducing structural ignitability. As a community develops and implements their CWPP, there are key questions that can be monitored to help determine the effectiveness of these plans. These questions are the most critical to monitor and report on a local and national scale.

1. Collaboration

- a. How has the collaborative process assisted in implementing the CWPP?
- b. Have partners involved in the planning process remained engaged in implementation? Have new partners become involved?

2. High Priority Fuels Reduction Projects

- a. How many acres have been treated for hazardous fuels reduction on public and private land that were identified as high priority projects in the CWPP? What percentage of total acres treated does this constitute?
- b. What is the number of residents that have participated in projects and completed defensible space on their land?

3. Reducing Structural Ignitability

- a. What is the availability and capacity of local fire agencies to respond to wildland and structural fire?
- b. What is the level of interest shown and action taken by local community members to increase the resilience of their structure to fire?

III. How to Complete a CWPP Evaluation

A review of key goals, objectives and action items, along with appropriate related program data, can help illustrate the strengths and weaknesses of a CWPP. The plan's evaluation can also be designed to illustrate the extent to which HFRA and other state and local policies have been addressed through plan implementation.

This section provides examples of information that can be used to conduct a CWPP evaluation. The step-by-step process is intended to provide a framework for a community to review the existing CWPP, choose appropriate indicators, and obtain information to evaluate programs, document the evaluation, and update the plan. The individual steps listed are:

1. Identify Goals and Objectives
2. Identify Changes in the Community and its Wildfire Risk
3. Review Action Items
4. Evaluate CWPP Outcomes
5. Update the CWPP
6. Report on key accomplishments locally, regionally, and nationally

1. Identify Goals and Objectives

A community can provide a framework to minimize wildfire risks by first establishing goals and objectives and then identifying action items to implement them. These goals and objectives can then serve as the baseline for evaluating the plan's performance.

Does the plan identify goals and objectives related to the following? If so, how?

What types of issues are addressed through the goals and objectives?

- Partnership and Collaboration
- Risk Assessment
- Fuels Reduction
- Reducing Structural Ignitability
- Emergency Management
- Education and Outreach
- Others?

2. Identify Changes in the Community and Wildfire Risk

A CWPP should describe the local population's characteristics so that it is clear who is at risk and who the plan is intended to serve. U.S. census data is readily available and can help describe a community's demographics, which tend to change over time. Reviewing the community profile and determining how it has changed since the plan's implementation may reveal issues that should be addressed in a plan update, such as a growing population or increased development in high hazard areas. Additionally, an inventory of project partners may provide opportunities to improve existing or build new relationships to assist community capacity efforts.

3. Review Action Items

In general, CWPPs include a list of prioritized actions related to fuels reduction, public education, and structural ignitability, as well as other potential issues identified through the planning process. A simple step in the evaluation process is to review all action items in the plan, identify accomplishments, challenges, partners, and next steps. Do they reflect the plan’s goals and objectives? An example of an action item review form is included below. (A full worksheet is available in Appendix B.) Partners involved with the CWPP can use this form to review the action items in their CWPPs, evaluate whether or not new actions are needed, re-prioritize existing actions, and identify significant accomplishments or challenges since plan implementation.

3.A. Action Item Review Form

Action Item	Priority	Goal Addressed	Status <i>(completed, in progress, not yet initiated)</i>	Accomplishments	Challenges	Partners Involved	Follow-up <i>(are new actions needed? Funding changes? Policy issues?)</i>

4. Evaluate CWPP Outcomes

A CWPP evaluation may reveal a variety of outcomes, some anticipated and others that may have been unexpected in the initial planning process. The indicator evaluation processes in the Guide are intended to help a community gauge the outcomes that have resulted from its CWPP, particularly for the key elements of partnership and collaboration, fuels reduction, and reducing structural ignitability. Use these forms as a starting point to define which indicators are appropriate to assess for your CWPP.

These indicators provide an example of important areas to review and tools for attaining program data, a community may choose other measures to reflect its own goals and objectives. Evaluating a CWPP may involve gathering information on the number of homes with evacuation plans, acres of defensible space, and partner satisfaction with collaborative efforts. While the general community’s safety must be a priority, planning and implementation efforts should also account for underserved populations. This may include outreach to low-income residents or special assistance for elderly and disabled residents.

The information needed to evaluate a CWPP may come from many sources. Information may come from emergency management records, community and economic development organizations, land management agencies, and CWPP leaders. Surveys (see examples in

Appendix C), interviews, focus groups, public meetings, and stakeholder meetings can also be effective tools to evaluate outcomes such as public awareness or community partnerships. A community can use these resources to review project outcomes and assess compliance with the goals and objectives identified in their plans. Table 2 provides a summary of the questions that can be used during the evaluation process. The next chapter of this Guide goes into detail about each question, indicators for the evaluation, and potential data sources.

Table 2. Evaluating CWPP Outcomes

Goal	Monitoring and Evaluation Questions
1. Partnerships and Collaboration	1.1 Who has been involved with CWPP development and implementation? How have relationships grown or changed through implementation? What resources did they bring to the table?
	1.2 How did the fire planning process influence CWPP implementation?
	1.3 How has the CWPP increased the capacity of the community to reduce wildfire risk?
	1.4 Core CWPP Accomplishments?
2. Risk Assessment	2.1 How has the community changed over time? (Demographics, residential and commercial development, etc.)
	2.2 Are there new or updated data sources that may change the risk assessment and influence fuels priorities?
	2.3 How is the risk assessment being used to make decisions about fuels priorities?
3. Reducing Hazardous Fuels	3.1 Public Land Treatment
	3.2 Private Land Treatment
	3.3 Structures under protection
	3.4 Economic development resulting from fuels reduction
	3.5 How many local jobs have resulted because of fuels reduction or restoration activities?
4. Reducing Structural Ignitability	4.1 Resource losses (household, cultural, economic, community, etc.)
	4.2 Risk to fire damage (compare to before CWPP implementation)
	4.3 Planning and development: Are the current codes and regulations for wildfire hazard adequate? If not, are there efforts to change or update them
5. Education and Outreach	5.1 What kind of public involvement has there been during CWPP implementation?
	5.2 What kind of change in public awareness about wildfire has resulted from the plan?
	5.3 What kinds of activities have citizens taken to reduce wildfire risk?
6. Emergency Management	6.1 Is the CWPP integrated within the county or municipal Emergency Operations Plan?
	6.2 Does the CWPP include an evacuation plan? If yes, has it been tested or implemented since the CWPP adoption?
	6.3 Is the CWPP aligned with other hazard mitigation efforts?

5. Update the CWPP

The outcomes monitored in the evaluation’s previous step are essential for analyzing the CWPP. Reviewing program information with committee members and stakeholders can help identify how to more effectively increase wildfire protection and meet CWPP goals and objectives. This information may indicate successes and weaknesses, and identify gaps that have not been addressed by the plan and in turn result in new goals and objectives.

Leadership from the CWPP must play a central role in coordinating meetings and ensuring that stakeholders have an opportunity to share their views about wildfire issues. Suggestions for improving emergency preparedness efforts can come from CWPP leaders, as well as feedback

from project partners and community members. Partner surveys may prove useful for refining strategies to strengthen collaborative relationships and wildfire preparedness. This network can also use its relationships to identify funding opportunities and engage in future projects.

Project stakeholders must maintain focus on the plan's ability to prepare citizens for natural disasters. Inviting community response is critical for understanding the public's awareness about wildfire and emergency issues. Local citizens can measure their level of information about fuels reduction activities, disaster preparedness, and programs available to people with special needs.

By working with local fire agencies, CWPP leaders can monitor its strategies for minimizing structural ignitability. Representatives from fire departments, county agencies, the state forestry agency, the Bureau of Land Management and Forest Service possess expertise for prioritizing areas that require wildfire protection, improving response efforts, and eliminating gaps in disaster protection. These groups can also assess the progress of hazardous fuels reduction activities on federal and nonfederal land through the provision of technical knowledge and program data. There is an acknowledged national need to include hazardous fuels work on private lands in these data bases.

After the respective groups meet to review program strengths and weaknesses, amendments can be made to the CWPP. Project partners must work together to identify action items that need to be changed, those that have been completed, and new ones that should be added. The final step in this process involves presenting the updated goals and actions to the public and all project partners.

6. Report on accomplishments

- Locally
 - Publish annual reports and updated action plans
 - Share with community members and all CWPP stakeholders
 - Celebrate successes! Invite media to attend CWPP events, and gather partners to acknowledge hard work and accomplishments
- Regionally
 - Talk with state and regional officials about successes and challenges to highlight accomplishments and identify additional resources
 - Contribute to knowledge about how wildfire risk is being reduced throughout the region.
- Nationally
 - Work with federal agency partners to report on actions that have been taken to reduce wildfire risk. Use existing performance measures and data where possible so that data collected locally can be used at a national level as well.

Case Studies

Josephine County Integrated Fire Plan

After the 2002 Biscuit Fire, which burned close to 500,000 acres in Southwest Oregon and Northern California, public and private agencies and organizations throughout Josephine County, Oregon recognized the critical need to better coordinate resources, identify high risk areas, and develop a strategic action plan to reduce risk throughout the county. Partners came together to develop the Josephine County Integrated Fire Plan, which was adopted in November 2004. A year later, partners developed a process for conducting an annual review, which has resulted in annual reports and updated action plans for 2005, 2006, and 2007. The annual reports highlight accomplishments, challenges, and priorities for the upcoming year from each of the planning committees, including fuels reduction and risk assessment, education and outreach, emergency management, stewardship contracting, and vulnerable populations.

A unique aspect of the monitoring and evaluation process has been an annual evaluation of collaboration among partners involved with the fire plan. Results from these partner surveys have led to increased participation from new stakeholder groups and focus on strategic issues in a particular year such as evacuation or funding for fuels reduction projects for vulnerable populations. Most importantly, the collaboration survey provides a time for all fire plan partners to reflect on the role of their agency or organization in implementing the plan and the common goals that partners are trying to accomplish. The annual reports are available online at <http://co.josephine.or.us/SectionIndex.asp?SectionID=158>.

Apache Sitgreaves CWPP

The Sitgreaves Communities Wildfire Protection Plan (SCWPP), borne out of the ashes of the Rodeo-Chediski Fire, was finalized and signed by 18 signatories in 2004. The SCWPP identifies needed fuels reduction forest treatments across jurisdictional boundaries of private lands, the Apache-Sitgreaves National Forests and White Mountain Apache tribal lands. These seamless treatments—comprised of thinning overstory components of the forest structure, breaking up the continuity of the understory fuels, and removing slash and excess vegetation—provide cumulative improvements in fire risk mitigation. Burning slash and ground fuels is done in a prescribed manner on government agency-managed lands and by permit on private lands.

Each year, the SCWPP partners develop an annual progress report to evaluate progress, document accomplishments and identify needs for the future. For example, as of 2006, within the CWPP area, 40,964 acres of fuel treatment work have been completed (Approximately 13% of the high risk acres identified in the plan). The annual report focuses on key issues that remain to be addressed through plan implementation. To review the full annual report, visit:

http://ci.pinetop-lakeside.az.us/whatsnew/2006_SCWPPUpdate_general.pdf.

IV. Workbook: Evaluating CWPP Outcomes

This evaluation process is intended to provide suggestions for evaluating a CWPP. In conducting an evaluation, a community should think critically about what kind of information they have access to and what is most important to evaluate. It is important to note that some data may be hard to attain. For example, the number of homes in a community with evacuation plans provides important insight into the level of preparedness among the general public, but may be difficult to obtain. This evaluation process provides strategies to evaluate six elements of a CWPP.

The format of this section is designed to provide communities with examples and a place to fill in your own work. However, it is important to adapt the evaluation process for the needs of your own community.

1. Partnerships and Collaboration
2. Risk Assessment
3. Fuels Reduction
4. Reducing Structural Ignitability
5. Education and Outreach
6. Emergency Management

1. Partnerships and Collaboration

1.1. Who has been involved with CWPP development and implementation?

Evaluation Questions/Information	Fill in your findings/information here
# of local, state, and federal partners	
Types of organizations	
Number of residents involved with CWPP activities	
Types of activities residents are involved in?	
Outcomes and changes in collaborative partnerships?	
Accomplishments and challenges	
Other:	

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1.2. How did the fire planning process influence CWPP implementation?

Evaluation Questions/Information	Fill in your findings/information here
Partner roles and responsibilities:	
Have these roles and responsibilities been met?	
What is the process for setting priorities?	
How has that process been used?	
What is the timeline for CWPP implementation?	
How often do core team members meet?	
What is the timeline for CWPP evaluation?	
Outcomes and changes from previous year:	
Accomplishments and challenges	
Other:	

1.3. How has the CWPP increased the capacity of the community to reduce wildfire risk?

Evaluation Questions/Information	Fill in your findings/information here
Increased partnerships?	
Increased financial resources?	
Increased agency fuels reduction programs in the WUI?	
Accomplishments and challenges	
Other:	

1.4. Core CWPP Accomplishments?

Evaluation Questions/Information	Fill in your findings/information here
Goals and objectives accomplished:	
Assistance to low-income and underserved residents:	
Diversity of participating organizations:	
Information exchanged:	
Shared resources:	
Influences on other programs (planning, natural hazards, etc.):	

2. Risk Assessment

2.1. How has the community changed over time?

Evaluation Questions/Information	Fill in your findings/information here
Population size:	
Age Range	
Percentage of youth:	
Percentage of elderly:	
Number of housing units:	
Percentage of owner occupied:	
Percentage of renter occupied:	
Percentage of people in the labor force:	
Percentage of families below the federal poverty line:	
Unemployment rate:	

2.2. Are there new or updated data sources that may change the risk assessment and influence fuels priorities?

Evaluation Questions/Information	Fill in your findings/information here
Hazards:	
Risks:	
Protection and response capabilities:	
Structural vulnerabilities:	
Community values and resources:	
Low-income and vulnerable populations:	

2.3 How is the risk assessment being used to make decisions about fuels priorities on public and private land?

Evaluation Questions/Information	Fill in your findings/information here
Partners involved with identification of fuels priorities:	
Process used to identify fuels priorities:	
Outcomes and changes from previous year:	
Accomplishments and challenges:	
Other:	

3. Hazardous Fuels Reduction

3.1 Public Land Treatment

Evaluation Questions/Information	Fill in your findings/information here
Total number of acres treated for fuels reduction:	
Number and percentage treated within WUI:	
Number and percentage treated within CWPP priority areas:	
Treatment type:	
Outcomes and changes from previous year:	
Accomplishments and challenges:	
Other:	

3.2 Private Land Treatment

Evaluation Questions/Information	Fill in your findings/information here
Number of acres treated for defensible space and fuels reduction within WUI:	
Percentage of homes with defensible space in CAR or WUI:	
Number and percentage of acres treated within CWPP priority areas:	
Treatment type:	
Percentage of acres treated for low income/special needs residents:	
Outcomes and changes from previous year:	
Accomplishments and challenges:	
Other:	

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3.3. Structural Protection

Evaluation Questions/Information	Fill in your findings/information here
Number and percentages of homes protected by a fire district by CAR or WUI:	
Number of economic assets:	
Number of roads and other infrastructures:	
Outcomes and changes from previous year:	
Accomplishments and challenges:	
Other:	

3.4. Economic development resulting from fuels reduction

Evaluation Questions/Information	Fill in your findings/information here
Biomass available for utilization:	
Increased jobs for local contractors:	
Stewardship contracting:	
Outcomes and changes from previous year:	
Accomplishments and challenges:	
Other:	

3.5. How many local jobs have been created by fuels reduction or restoration work?

Evaluation Questions/Information	Fill in your findings/information here
Number of part-time and full-time jobs:	
Percentage comprised of local labor:	
Outcomes and changes from previous year:	
Accomplishments and challenges:	
Other:	

4. Reducing Structural Ignitability

4.1 What are losses that have occurred in your community in the last year?

Evaluation Questions/Information	Fill in your findings/information here
Number of human-caused fires:	
Number of lighting-caused fires:	
Number of homes lost to wildfire:	
Number of fire starts within community at-risk boundaries:	
Number of fire starts outside of at-risk boundaries:	
Outcomes and changes from previous year:	
Accomplishments and challenges:	
Other:	

4.2 Home Wildfire Risk

Evaluation Questions/Information	Fill in your findings/information here
Number of homes with defensible space in at-risk community:	
Number of families with fire or home insurance:	
Number and percentage of homes included in a fire district:	
Number of households with evacuation plans:	

4.3. Planning and development: Are the current codes and regulations for wildfire hazard adequate? If not, are there efforts to change or update them?

Evaluation Questions/Information	Fill in your findings/information here
Are codes municipal, county or state?	
Do codes apply to all residential or just forest areas?	
Are there codes regarding building materials, such as roof type, windows, etc.?	
How is growth increasing in WUI/high risk areas?	
How does the CWPP address: <ul style="list-style-type: none"> • Zoning Regulations • Development Standards • Building Codes • Fire Prevention Codes • Fire Response 	

5. Education and Outreach

5.1. What kind of public involvement has there been during CWPP implementation?

Evaluation Questions/Information	Fill in your findings/information here
Public meetings:	
Field Trips:	
Youth engagement:	
Community events:	
Outcomes and changes from previous year:	
Accomplishments and challenges:	
What other activities have citizens taken to reduce wildfire risk?	

5.2 What kind of change has occurred in home wildfire risk?

Evaluation Questions/Information	Fill in your findings/information here
Change in the number and type of human-caused wildfires:	
Wildfire risk and knowledge of wildfire policies and regulations:	
Awareness of local projects and events to increase emergency preparedness:	
Outreach efforts directed to low-income and special needs populations:	
Outcomes and changes from previous year:	
Accomplishments and challenges:	
Other:	

5.3 What kind of change in public actions have resulted from the plan?

Evaluation Questions/Information	Fill in your findings/information here
Defensible space:	
Fuel reduction:	
Household emergency plans:	
Woody debris disposal:	
Outcomes and changes from previous year:	
Accomplishments and challenges:	
Other:	

6. Emergency Management

6.1. Is the CWPP integrated within the county or municipal Emergency Operations Plan?

Evaluation Questions/Information	Fill in your findings/information here
National Incident Management System?	
Incident Command training?	
Animal and Livestock preparedness?	

6.2. Evacuation planning

Evaluation Questions/Information	Fill in your findings/information here
Are there local neighborhood evaluation plans? Have they been tested?	
Are there safety zones?	
Plans for residential evacuation?	
Plans for special needs evaluation?	
What is the plan for the communication systems?	
Are there resource lists?	
What are the plans for animal/livestock evaluation?	

6.3. CWPP alignment with other natural hazard mitigation plans

Evaluation Questions/Information	Fill in your findings/information here
What is the relationship of CWPP to other hazard mitigation efforts?	
Does the CWPP meet FEMA requirements for natural hazard mitigation plans?	
Do CWPP partners work together to address other hazard issues?	

Appendix A – Additional Resources

Joint Fire Sciences Project. *Community Wildfire Protection Plans: Enhancing Collaboration and Building Community Capacity*. <http://jfsp.fortlewis.edu>⁴

Western Forestry Leadership Coalition. *Community Wildfire Protection Planning in the West: A Status Report*. <http://www.wflcenter.org/infomaterials/reports.php>

International Association of Fire Chiefs, National Association of State Foresters, Wilderness Society. *Community Wildfire Protection Plan - Leaders Guide*. May 2005.

http://www.iafc.org/associations/4685/files/CWPP_LG.pdf

International Association of Fire Chiefs, National Association of State Foresters, Wilderness Society. *Community Wildfire Protection Plan - Leaders Guide Supplement*. May 2005.

http://www.iafc.org/associations/4685/files/CWPP_rev062005.pdf

National Association of State Foresters, International Association of Fire Chiefs, The Wilderness Society. *Leaders Guide for developing a Community Wildfire Protection Plan*. (May 2005).

http://csfs.colostate.edu/library/pdfs/cwpp/CWPP_LG.pdf

National Association of State Foresters, International Association of Fire Chiefs, National Association of Counties, Society of American Foresters, Communities Committee. *Preparing a Community Wildfire Protection Plan: A Handbook for Wildland-Urban Interface Communities*.

(March 2004). <http://www.safnet.org/policyandpress/cwpphandbook.pdf>

Resource Innovations. *Framework for Community Fire Plans*. (October 2004).

<http://ri.uoregon.edu/programs/CCE/communityfireplanning.html>

Resource Innovations. *2006 Josephine County Integrated Fire Plan Annual Report and Updated Action Plan*. (October 2006). <http://ri.uoregon.edu/programs/CCE/josephine.html>

⁴ Upon completion, the Joint Fire Sciences study hopes to: 1) locate strategies and tools that will improve collaborative and reduce the risks of wildfire and 2) enhance long-term community efforts to understand how CWPP activities overcome barriers and/or expand opportunities for fuel reduction projects. The outcomes from this research study may provide important information and guidance for evaluating collaboration during plan implementation.

Appendix B. Action Item Review Form

Partners involved with the CWPP can use this form to review the action items in their CWPPs, evaluate whether or not new actions are needed, re-prioritize existing actions, and identify significant accomplishments or challenges since plan implementation.

Action Item	Priority	Goal Addressed	Status <i>(completed, in progress, not yet initiated)</i>	Accomplishments	Challenges	Partners Involved	Follow-up <i>(new actions needed? Funding changes? Policy issues?)</i>

Appendix C – Survey Examples

C.1. Evaluating collaboration among CWPP partners

This survey is an example of what could be used to evaluate the level of collaboration and changes over time among CWPP partners.

1. Has your participation with the community wildfire protection plan (CWPP) increased or decreased since the plan's adoption?

- Increased Stayed the same Decreased

2. What type of organization/agency do you work with?

- Citizen group Federal government State government Local government
 Fire district Nonprofit org. Community group
 Environmental group Other (please list) _____

3. How active is your organization within the current CWPP activities?

- Very active Somewhat active Not active

4. How often do you communicate with CWPP partners?

- Daily Weekly Monthly Yearly Never

5. What is your primary means of communication with CWPP partners?

- Email Phone Meetings

6. How has your involvement changed with the following CWPP activities?

a. Risk Assessment

- Increased Stayed the same Decreased N/A

b. Fuels Reduction and Restoring Ecosystems

- Increased Stayed the same Decreased N/A

c. Reducing Resource Losses and Structural Vulnerability

- Increased Stayed the same Decreased N/A

7. How would you rank your experience working with CWPP partners?

- Excellent Good Average Poor Very Poor

8. Describe what you've gained from working with new partners through this process.

9. To what extent are CWPP goals and objectives being met?

- Very great extent To some extent

10. Are social service agencies involved in CWPP efforts?

- Very great extent To some extent No

11. Have your relationships grown and changed as a result of CWPP development and implementation? Please describe:

12. Have you encountered significant project obstacles? If so, please describe:

13. How does the CWPP address citizens with special needs?

14. Do you have any recommendations for improving the CWPP?

C.2. Evaluating increased public awareness and action

This survey is an example of what could be used to establish a baseline understanding of public awareness within a community, and to evaluate changes in awareness and action among the public in relationship to wildfire.

1. Do you consider your home to be at risk from a wildfire?

- Yes No

2.a. Do you have adequate information about local wildfire risk, fuel hazard reduction work, and burning regulations?

- Yes No

2.b. Where do you generally get this information?

- Internet Forest Service Library Local fire agency
 Neighbors Newspaper/radio/television Other

3. Are you aware of fire/fuels planning efforts in your neighborhood?

- Yes No

4. Are you aware of emergency communication efforts in your neighborhood?

- Yes No

5. Do you have evacuation plans and routes in place for emergency situations?

- Yes No

6. Do you have fire insurance?

- Yes No

7. What kinds of fire protection activities have you completed?

- Created a defensible space
 Landscaped with fire-resistant plants
 Pruned/removed trees
 Regularly cut down weeds and grass
 Removed dry vegetation from around the house
 Safely disposed of woody vegetation
 Used fire-resistant building materials

8. What suggestions do you have for improving the community's level of awareness regarding wildfire planning and emergency preparedness?

9. How can the community become more active in wildfire planning efforts?

